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JOURNAL CONTENTS

Chemistry

2020



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Synlett

Synlett 2020, 31, 1–6
DOI: 10.1055/s-0039-1690748

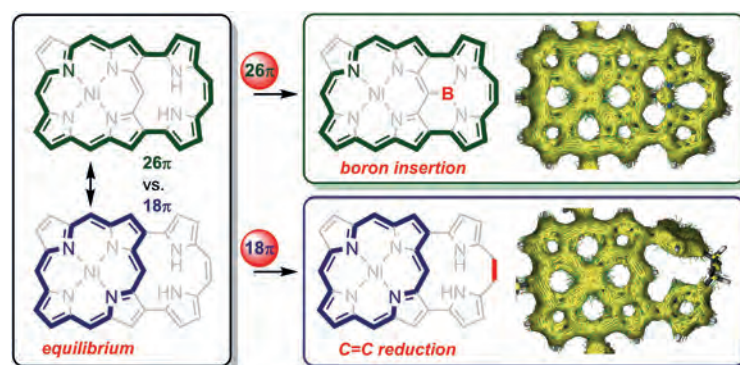
M. Pawlicki*

Uniwersytet Wrocławski, Poland

Multiple Coordination in Porphyrinoid Hybrid: Changing the Delocalization within the Extended π -System

Synfacts

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Synlett

Synlett 2020, 31, 7–12
DOI: 10.1055/s-0039-1690247

Y. Zhang

L. Zhang

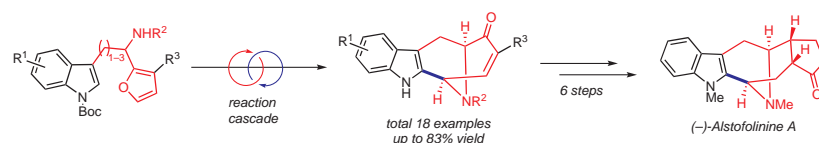
X. Qi*

Tsinghua University, P. R. of
China

Total Synthesis of (–)-Alstofoline A: Selected Furan Oxidation/ Cyclization Cascade

Synfacts

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Synlett

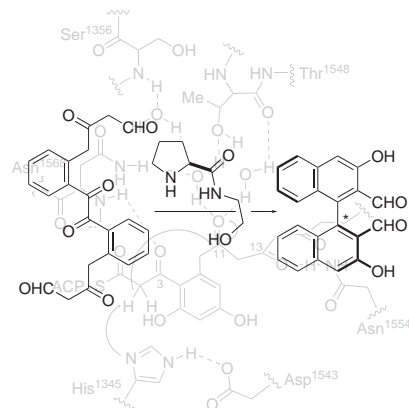
Synlett 2020, 31, 13–20
DOI: 10.1055/s-0039-1690215R. M. Witzig
C. Sparr*

University of Basel, Switzerland

Synthesis of Enantioenriched Tetra-ortho-3,3'-substituted Biaryls by Small-Molecule-Catalyzed Noncanonical Polyketide Cyclizations

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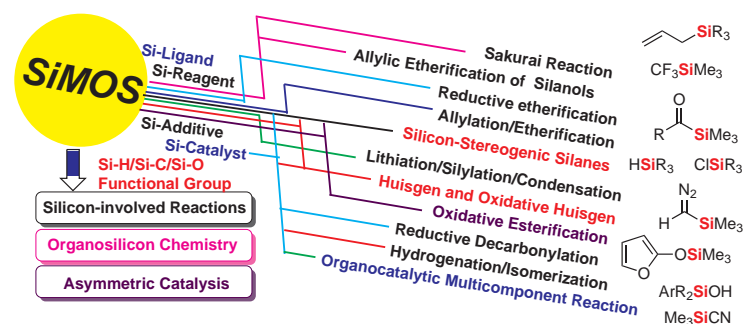
Synlett 2020, 31, 21–34
DOI: 10.1055/s-0039-1691496L. Li
Y.-L. Wei
L.-W. Xu*

Normal University, P. R. of China

Organosilicon-Mediated Organic Synthesis (SiMOS): A Personal Account

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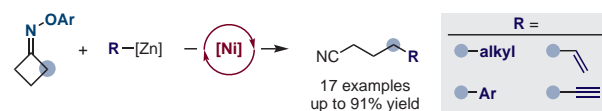
Synlett 2020, 31, 37–40
DOI: 10.1055/s-0039-1690690L. Angelini
L. Malet Sanz
D. Leonori*

University of Manchester, UK

Divergent Nickel-Catalysed Ring-Opening–Functionalisation of Cyclobutanone Oximes with Organozincs

Cluster

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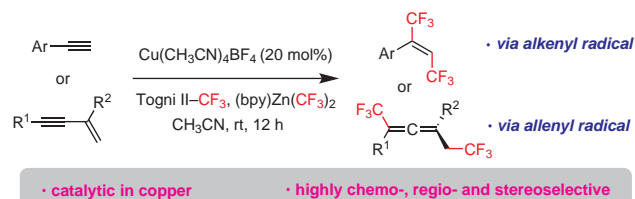


Synlett

Synlett 2020, 31, 41–44
DOI: 10.1055/s-0039-1690187H. Shen
H. Xiao
L. Zhu*
C. Li*Shanghai Institute of Organic
Chemistry, Chinese Academy of
Sciences, P. R. of China
Ningbo University of Technology,
P. R. of ChinaCopper-Catalyzed Radical Bis(trifluoromethylation) of Alkynes and
1,3-Enynes

Cluster

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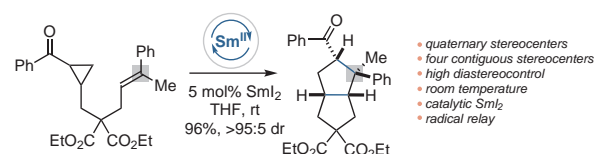
Synlett 2020, 31, 45–50
DOI: 10.1055/s-0039-1690196H.-M. Huang
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University of Manchester, UK

Samarium Diiodide Catalyzed Radical Cascade Cyclizations that Con-
struct Quaternary Stereocenters

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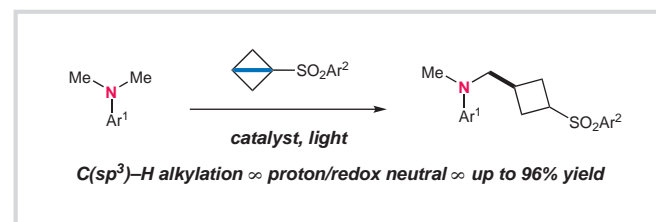
Synlett 2020, 31, 51–54
DOI: 10.1055/s-0039-1690197C. J. Pratt
R. A. Aycock
M. D. King
N. T. Jui*

Emory University, USA

Radical α -C–H Cyclobutylation of Aniline Derivatives

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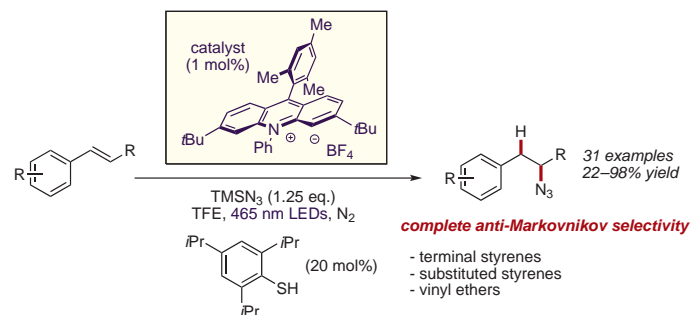
Synlett

Synlett 2020, 31, 55–59
DOI: 10.1055/s-0039-1690691N. P. R. Onuska
M. E. Schutzbach-Horton
J. L. Rosario Collazo
D. A. Nicewicz*The University of North Carolina
at Chapel Hill, USA

Anti-Markovnikov Hydroazidation of Activated Olefins via Organic Photoredox Catalysis

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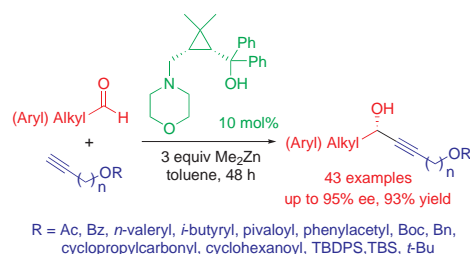
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Synlett 2020, 31, 60–64
DOI: 10.1055/s-0039-1690264Y. Zhou
L. Wang
S. Li
S. Ma
P. J. Walsh
Q. Bian
F. Li*
M. Wang
J. Zhong*China Agricultural University,
P. R. of China
Beijing Academy of Agriculture
and Forestry Sciences, P. R. of
China

Enantioselective Addition of Alkynyl Esters and Ethers to Aldehydes Catalyzed by a Cyclopropyl Amino Alcohol Based Zinc Catalyst

Letter

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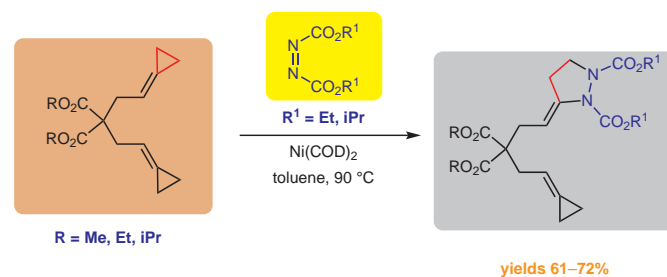
Synlett

Synlett 2020, 31, 65–68
DOI: 10.1055/s-0039-1691502B. Kuila
R. Naikoo
D. Mahajan
P. Singh
G. Bhargava*I. K. Gujral Punjab Technical
University, India

Nickel(0)-Catalyzed [3+2] Cycloadditions of Bis(alkylidenecyclopropanes) with Diazenes: A Facile Synthesis of Functionalized Pyrazolidine-1,2-dicarboxylates

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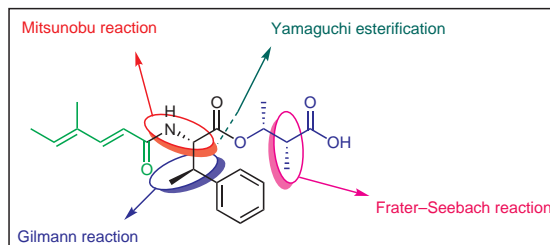
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First Total Synthesis of Jomthonic Acid A

Letter

Synlett 2020, 31, 69–72
DOI: 10.1055/s-0039-1691503

M. Dumpala
B. Srinivas
P. Radha Krishna*
CSIR-Indian Institute of Chemical
Technology, India



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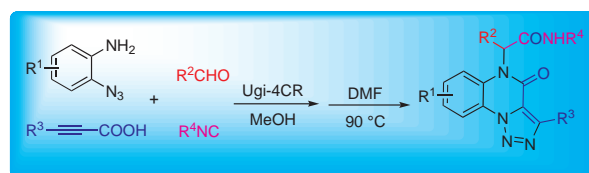
Synlett

One-Pot Synthesis of [1,2,3]Triazolo[1,5-a]quinoxalin-4(5H)-ones by a Metal-Free Sequential Ugi-4CR/Alkyne-Azide Cycloaddition Reaction

Letter

Synlett 2020, 31, 73–76
DOI: 10.1055/s-0037-1610737

Y.-M. Yan
H.-Y. Li
M. Zhang
R.-X. Wang
C.-G. Zhou
Z.-X. Ren*
M.-W. Ding*
Shanxi University, P. R. of China
Central China Normal University,
P. R. of China



✓ Metal-Free ✓ One-Pot Fashion
✓ High Atom Efficiency ✓ Mild Reaction Conditions

17 examples
50–92% overall yields

73

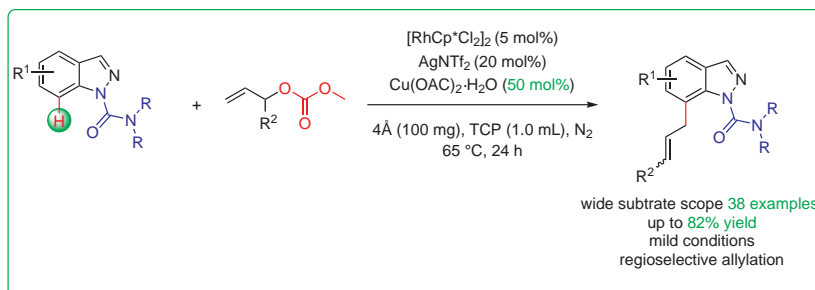
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Rhodium(III)-Catalyzed Regioselective C7-Allylation of Indazoles

Letter

Synlett 2020, 31, 77–82
DOI: 10.1055/s-0039-1691488

J. Huo
H. Yuan
L. Xu*
X. Pan*
Shanghai Institute of Technology,
P. R. of China



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Air-Induced Disulfenylation of Alkenes: Facile Synthesis of Vicinal Dithioethers

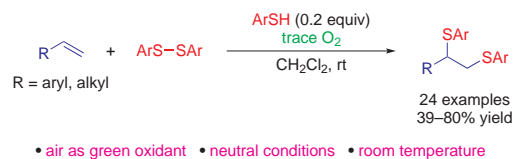
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Synlett 2020, 31, 83–86
DOI: 10.1055/s-0039-1691493

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G. Yu
Y. Ou
D. Chen
Y. Huang
Y. Yan
Q. Chen*

Guangdong University of Technology, P. R. of China



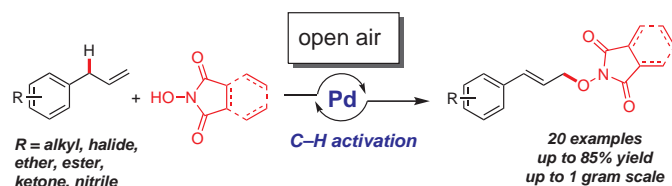
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Palladium-Catalyzed Oxidative Allylic Alkylation of *N*-Hydroxyimides

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Synlett 2020, 31, 87–91
DOI: 10.1055/s-0039-1691508

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N. Ayyagari
S. K. Sunnam
M. M. Ahire
M. Yang
K. Ngo
J. D. Belani*Thomas Jefferson University,
USA

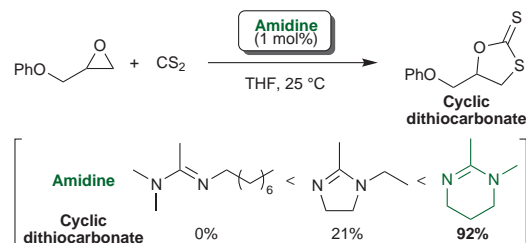
Synlett

Six-Membered Cyclic Amidines as Efficient Catalysts for the Synthesis of Cyclic Dithiocarbonates from Carbon Disulfide and Epoxides under Mild Conditions

Letter

Synlett 2020, 31, 92–96
DOI: 10.1055/s-0039-1690266

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N. Aoyagi
T. Endo*
Kindai University, Japan

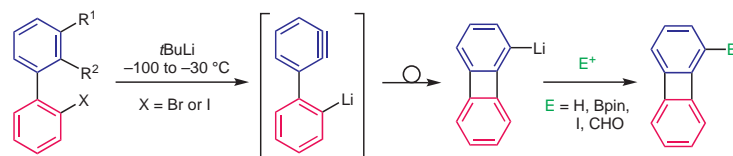
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Synthesis of Biphenylenes and Their π -Extended Derivatives

Synfacts

Synlett 2020, 31, 97–101
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M.-L. Pan
Y.-T. Wu*
National Cheng Kung University,
Taiwan



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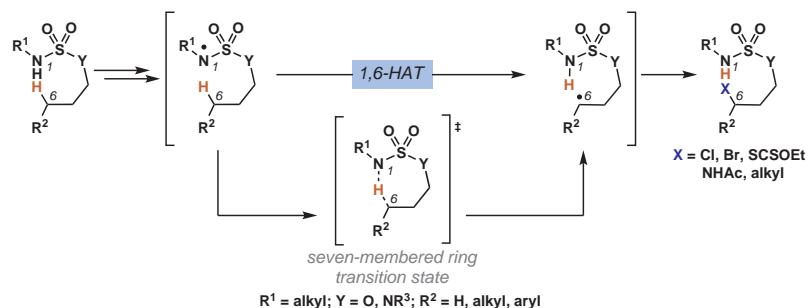
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Modifying Positional Selectivity in C–H Functionalization Reactions with Nitrogen-Centered Radicals: Generalizable Approaches to 1,6-Hydrogen-Atom Transfer Processes

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DOI: 10.1055/s-0039-1691501

M. A. Short
J. M. Blackburn
J. L. Roizen*
Duke University, USA



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K. R. Babu

X. He

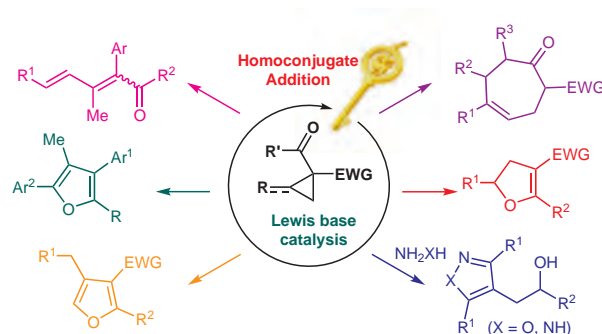
S. Xu*

Xi'an Jiaotong University, P. R. of China

Lewis Base Catalysis Based on Homoconjugate Addition: Rearrangement of Electron-Deficient Cyclopropanes and Their Derivatives

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N. J. Leon

H.-C. Yu

T. J. Mazzacano

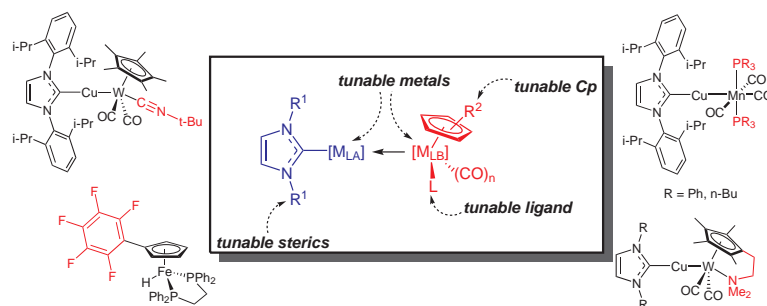
N. P. Mankad*

University of Illinois at Chicago, USA

Pursuit of C–H Borylation Reactions with Non-Precious Hetero-bimetallic Catalysts: Hypothesis-Driven Variations on a Design Theme

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Synlett 2020, 31, 133–146
DOI: 10.1055/s-0037-1611500

T. C. Stephens

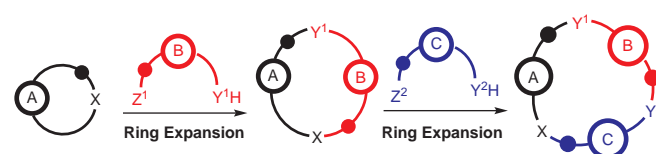
W. P. Unsworth*

University of York, UK

Consecutive Ring-Expansion Reactions for the Iterative Assembly of Medium-Sized Rings and Macrocycles

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Synlett 2020, 31, 147–152
DOI: 10.1055/s-0037-1611813

T. Osako*

J. Srisa

K. Torii

G. Hamasaka

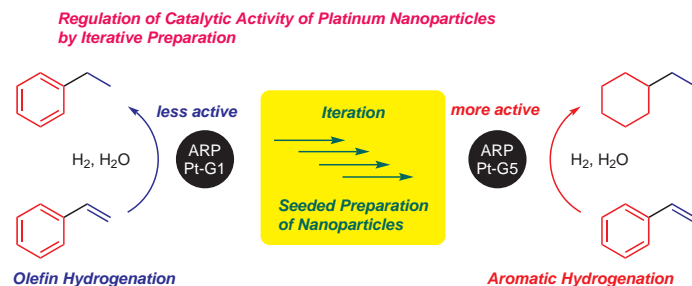
Y. Uozumi*

Institute for Molecular Science (IMS) and JST-ACCEL, Japan

Iterative Preparation of Platinum Nanoparticles in an Amphiphilic Polymer Matrix: Regulation of Catalytic Activity in Hydrogenation

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Synlett 2020, 31, 153–157
DOI: 10.1055/s-0037-1611767

T. Yanagi

K. Nogi

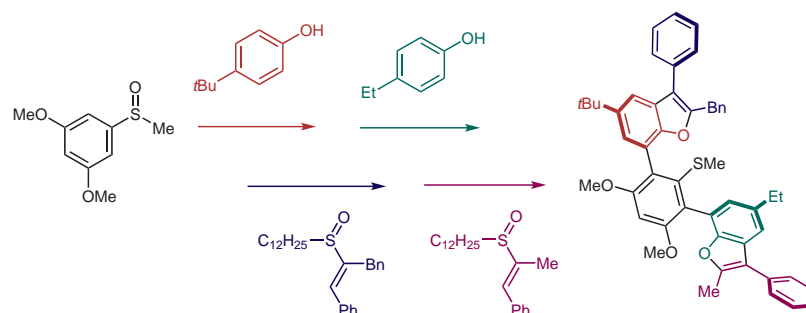
H. Yorimitsu*

Kyoto University, Japan

Sulfoxide-Directed Iterative Assembly into Oligoarenes

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Synlett 2020, 31, 158–164
DOI: 10.1055/s-0039-1691498

L. Chavelas-Hernández

J. R. Valdéz-Camacho

L. G. Hernández-Vázquez

B. E. Domínguez-Mendoza

M. G. Vasquez-Ríos

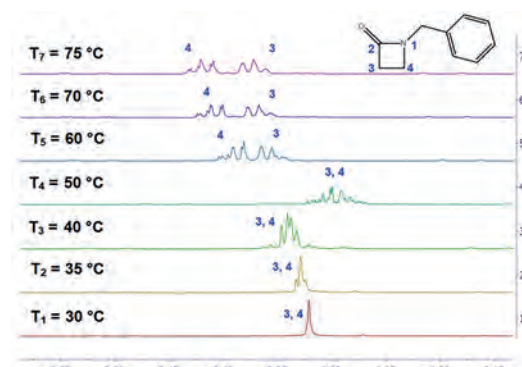
J. Escalante*

Universidad Autónoma del Estado de Morelos, México

A New Approach Using Aromatic-Solvent-Induced Shifts in NMR Spectroscopy to Analyze β -Lactams with Various Substitution Patterns

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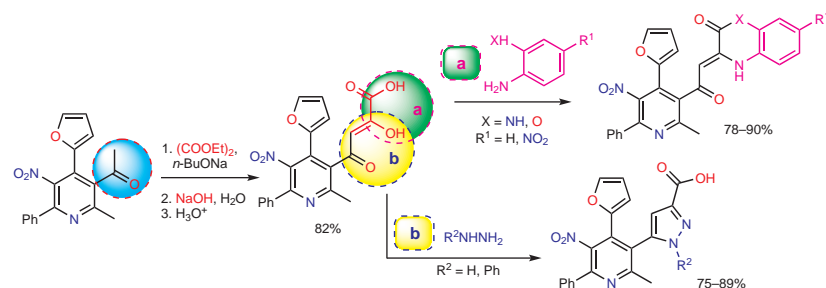
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Synlett 2020, 31, 165–170
DOI: 10.1055/s-0037-1610738A. L. Oleshchuk
Z. T. Shulgau
T. M. Seilkhanov
A. S. Vasilchenko
S. A. Talipov
I. V. Kulakov*Tyumen State University,
Russian Federation

Synthesis and Biological Activity of 4-(Pyridin-3-yl)-2-hydroxy-4-oxobut-2-enoic Acid Derivatives

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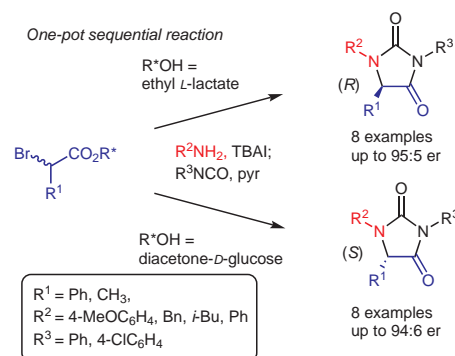
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Synlett 2020, 31, 171–174
DOI: 10.1055/s-0039-1691406G. H. Han
S. Y. Kim
H. R. Lee
J. S. Lee
Y. S. Park*Konkuk University, Republic of
Korea

A Convenient One-Pot Synthesis of Both Enantiomers of 1,3,5-Trisubstituted Hydantoin

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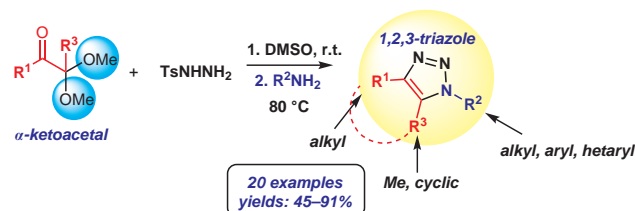
Synlett 2020, 31, 175–178
DOI: 10.1055/s-0039-1691526L. R. Zehnder
J. M. Hawkins
S. C. Sutton*

Pfizer Medicine Design, USA

One-Pot, Metal- and Azide-Free Synthesis of 1,2,3-Triazoles from α -Ketoacetals and Amines

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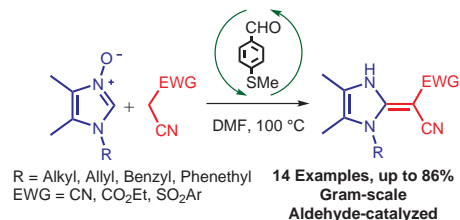
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Unexpected Aldehyde-Catalyzed Reaction of Imidazole *N*-Oxides with Ethyl Cyanoacetate

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A. V. Kutasevich
A. S. Efimova
M. N. Sizonenko
V. P. Perevalov
L. G. Kuz'mina
V. S. Mityanov*D. Mendeleev University of
Chemical Technology of Russia,
Russian Federation
N. D. Zelinsky Institute of Organ-
ic Chemistry, Russian Federation

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Efficient Conversion of Epoxides into Carbonates with CO₂ and a Single Organocatalyst: Laboratory and Kilogram-Scale Experiments

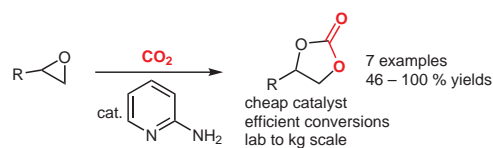
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R. Azzouz
V. Contreras Moreno
C. Herasme-Grullon
V. Levacher
L. Estel
A. Ledoux
S. Derrouiche
F. Marsais
L. Bischoff*

Normandie Université, France



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One-Pot Deprotonative Synthesis of Biarylazacyclooctynones

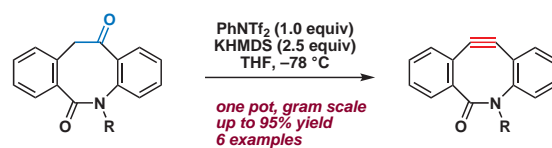
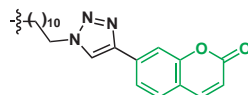
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Y. Hioki
M. Itoh
A. Mori
K. Okano*

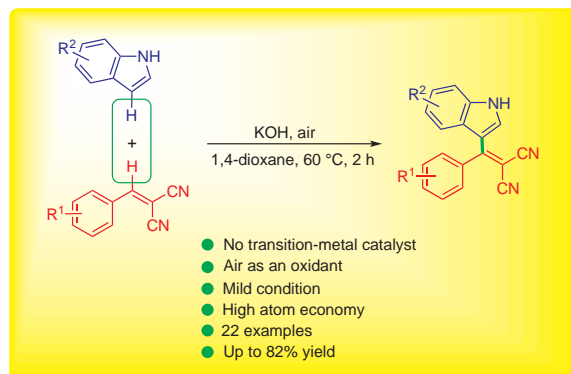
Kobe University, Japan

R = Me, *n*-Hex, homoallyl,
(CH₂)₃-OTIPS, (CH₂)₁₁-OTIPS,

A. Yang

Z. Li*

Northwest Normal University,
P. R. of China



Synlett

Synlett 2020, 31, 199–204
DOI: 10.1055/s-0039-1691495

Z. Bai
H. Wang*

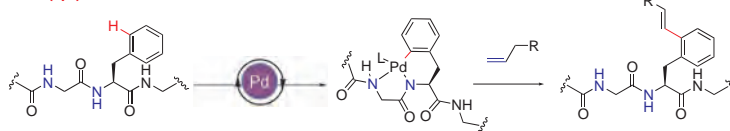
Nanjing University, P. R. of China

Backbone-Enabled Peptide Macrocyclization through Late-Stage Palladium-Catalyzed C–H Activation

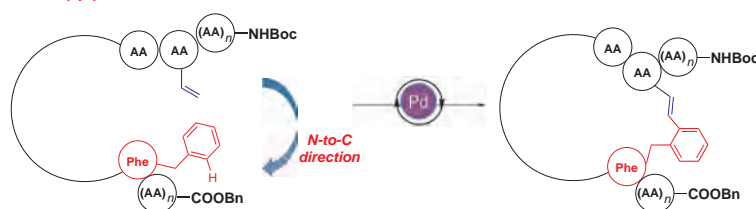
Synfacts

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Phe $\alpha(\text{sp}^2)$ -H olefination



Phe $\alpha(\text{sp}^2)$ -H olefination



- Late-stage cyclization to generate 15- to 26-membered macrocycles
- Macrocyclization proceeds strictly in the N-to-C direction
- Allow one-pot synthesis of bicyclic peptides

Synlett

Synlett 2020, 31, 205–210
DOI: 10.1055/s-0039-1690764

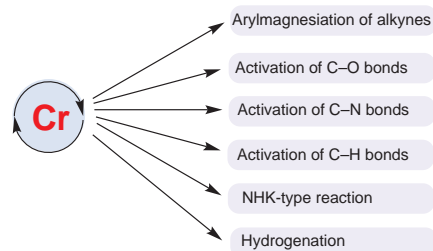
X. Zeng*

Sichuan University, P. R. of China

Recent Advances in Chromium-Catalyzed Organic Transformations

Account

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Synlett

Bottom-Up Synthesis of Nitrogen-Doped Polycyclic Aromatic Hydrocarbons

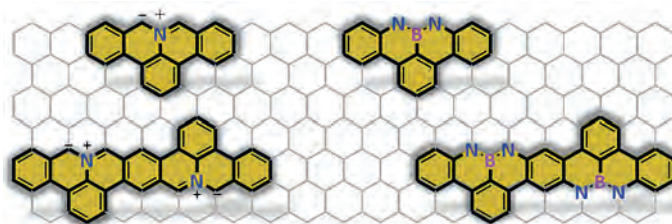
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Synlett 2020, 31, 211–222
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J. Liu*

X. Feng*

The University of Hong Kong,
P. R. of China
Technische Universität Dresden,
Germany

Synlett

Cluster Preface: Biocatalysis

Cluster

Synlett 2019, 30, 223
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T. K. Hyster*

Princeton University



Synlett

Selective Functionalization of Aliphatic Amines via Myoglobin-Catalyzed Carbene N–H Insertion

Cluster

Synlett 2020, 31, 224–229
DOI: 10.1055/s-0039-1690007

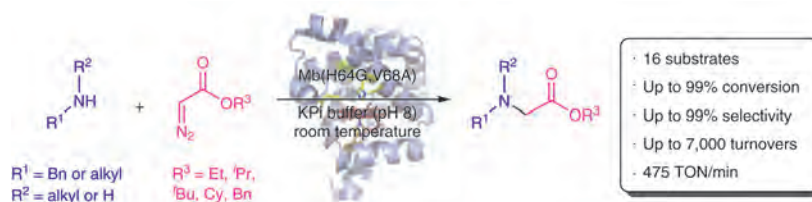
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V. Steck

G. Sreenilayam

R. Fasan*

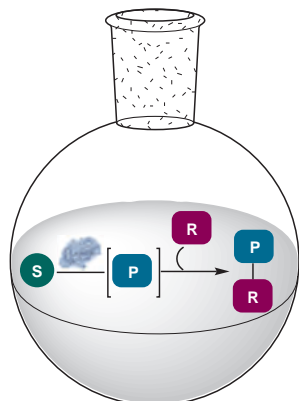
University of Rochester, USA



Synlett 2020, 31, 230–236
DOI: 10.1055/s-0037-1611848

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T. J. Doyon
A. R. H. Narayan*
University of Michigan, USA

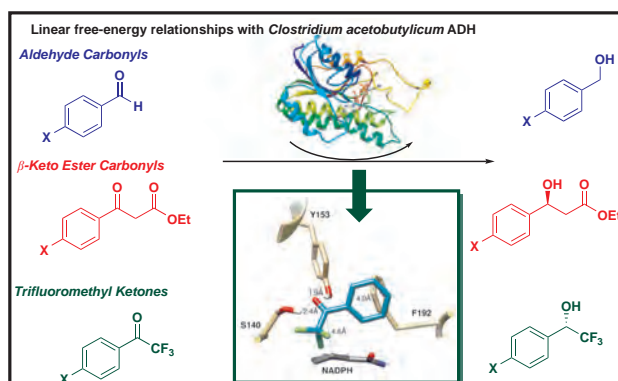


- ✓ One-pot chemoenzymatic reaction sequences
- ✓ Site-, stereo-, and chemoselective reactions
- ✓ Improved sustainability

Synlett 2020, 31, 237–247
DOI: 10.1055/s-0039-1691576

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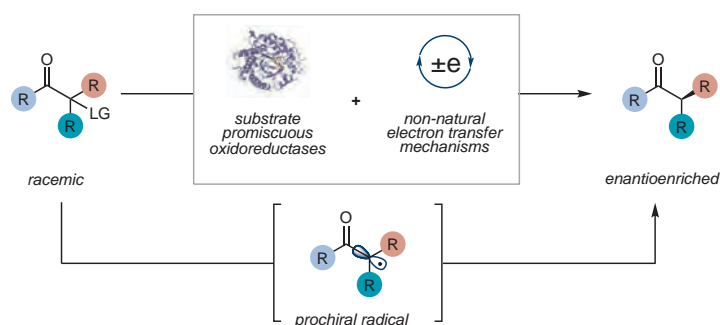
G. P. Kudalkar
V. K. Tiwari
J. D. Lee
D. B. Berkowitz*
University of Nebraska, USA



Synlett 2020, 31, 248–254
DOI: 10.1055/s-0037-1611818

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T. K. Hyster*
Princeton University, USA

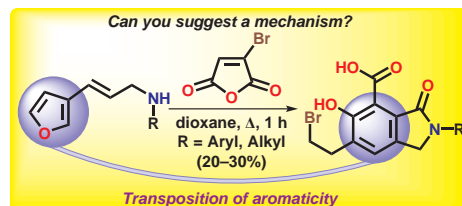


Synlett

Synlett 2020, 31, 255–260
DOI: 10.1055/s-0039-1690782K. A. Alekseeva
E. A. Kvyatkovskaya
E. V. Nikitina
V. P. Zaytsev
S. M. Eroshkina
K. S. Shikhaliev
H. H. Truong
V. N. Khrustalev
F. I. Zubkov*Peoples' Friendship University of
Russia (RUDN University), Rus-
sian FederationTransposition of Aromaticity from a Furan to a Cyclohexane Ring in
Furoisindoles During the Interaction of 3-(Furyl)allyl amines with
Bromomaleic Anhydride

Letter

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Synlett

Synlett 2020, 31, 261–266
DOI: 10.1055/s-0039-1691537Y. Wang
S. Wang
B. Chen
M. Li*
X. Hu
B. Hu
L. Jin
N. Sun
Z. Shen*Zhejiang University of Technolo-
gy, P. R. of ChinaVisible-Light-Induced Arene C(sp²)-H Lactonization Promoted by DDQ
and *tert*-Butyl Nitrite

Letter

261

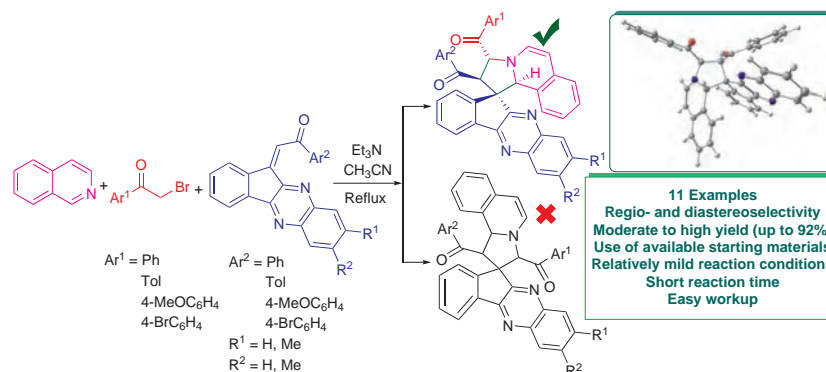


Synlett

Synlett 2020, 31, 267–271
DOI: 10.1055/s-0039-1690768F. M. Moghaddam*
A. Moafi
B. Jafari
A. Vilinger
P. Langer
University of Technology, IranRegio- and Diastereoselective Synthesis of Novel Polycyclic
Pyrrolo[2,1-*a*]isoquinolines Bearing Indeno[1,2-*b*]quinoxaline Moieties
by a Three-Component [3+2]-Cycloaddition Reaction

Letter

267

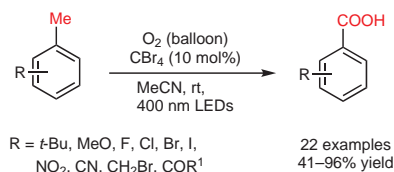


Synlett

Synlett 2020, 31, 272–274
DOI: 10.1055/s-0039-1691534K. Zheng
X. Yan
G. Zhang
X. Yan
X. Li*
X. Xu*Zhejiang University of Technology,
P. R. of ChinaPhotoinduced Carbon Tetrabromide Initiated Aerobic Oxidation of
Substituted Toluenes to Carboxylic Acids

Letter

272

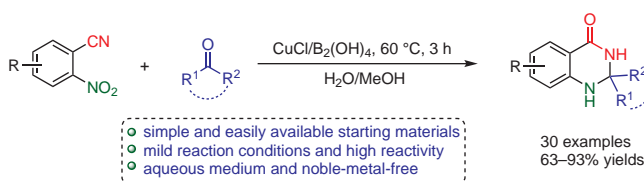


Synlett

Synlett 2020, 31, 275–279
DOI: 10.1055/s-0037-1610740Q. Liu
Y. Sui
Y. Zhang
K. Zhang
Y. Chen
H. Zhou*China Three Gorges University,
P. R. of ChinaCopper-Catalyzed One-Pot Synthesis of 2,3-Dihydroquinazolin-4(1*H*)-
ones from 2-Nitrobenzonitriles and Carbonyl Compounds Mediated by
Diboronic Acid in Methanol–Water

Letter

275

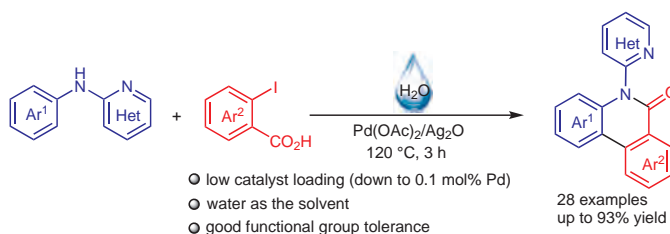


Synlett

Synlett 2020, 31, 280–284
DOI: 10.1055/s-0039-1691538X. Ding
L. Zhang
Y. Mao
B. Rong
N. Zhu
J. Duan*
K. Guo*Nanjing Tech University, P. R. of
ChinaSynthesis of Phenanthridinones by Palladium-Catalyzed Cyclization of
N-Aryl-2-aminopyridines with 2-Iodobenzoic Acids in Water

Letter

280



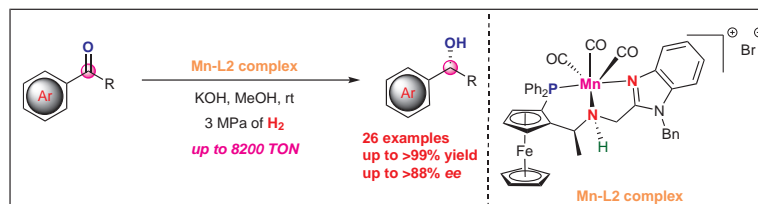
F. Ling
J. Chen
S. Nian
H. Hou
X. Yi
F. Wu
M. Xu
W. Zhong*

Zhejiang University of Technology,
P. R. of China

Manganese-Catalyzed Enantioselective Hydrogenation of Simple Ketones Using an Imidazole-Based Chiral PNN Tridentate Ligand

Letter

285

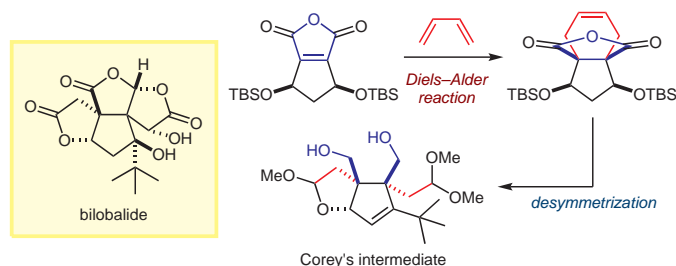


A. Shiogai
T. Toma
S. Yokoshima*
Nagoya University, Japan

Synthetic Studies on Bilobalide

Letter

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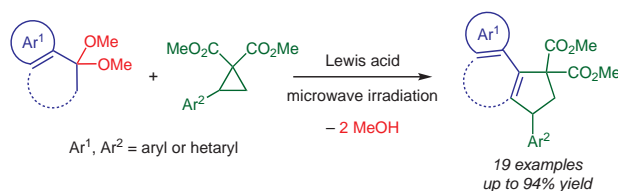
H. M. Nguyen
H. R. Chand
N. E. Golantsov*
I. V. Trushkov
L. G. Voskressensky*

Peoples' Friendship University of
Russia (RUDN University), Rus-
sian Federation

Cyclopentene Assembly by Microwave-Assisted Domino Reaction of Donor–Acceptor Cyclopropanes with Ketals

Letter

295

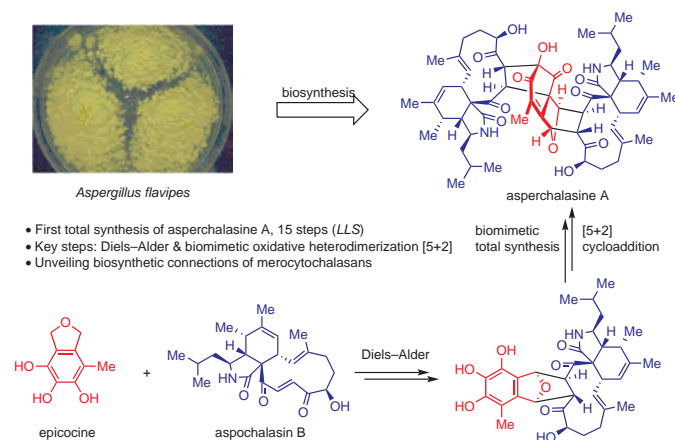


Synlett 2020, 31, 301–308
DOI: 10.1055/s-0039-1691500

X. Long
Y. Ding
H. Wu
J. Deng*

Kunming Institute of Botany,
P. R. of China

301



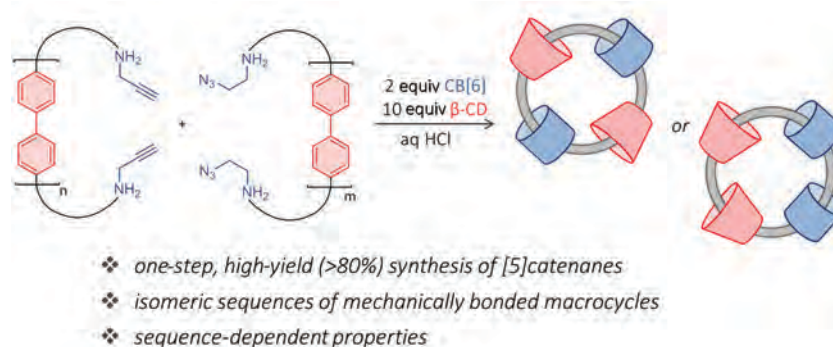
Synlett 2020, 31, 309–314
DOI: 10.1055/s-0039-1691573

H. Y. Au-Yeung*

A. W. H. Ng

The University of Hong Kong,
P. R. of China

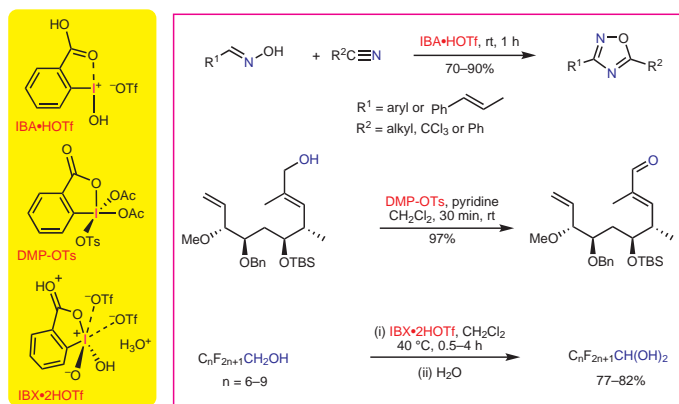
309



Synlett 2020, 31, 315–326
DOI: 10.1055/s-0039-1690761

315

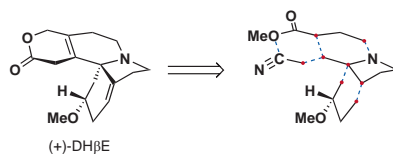
M. S. Yusubov
P. Postnikov
A. Yoshimura
V. V. Zhdankin*
University of Minnesota Duluth,
USA



Synlett 2020, 31, 327–333
DOI: 10.1055/s-0039-1690792

327

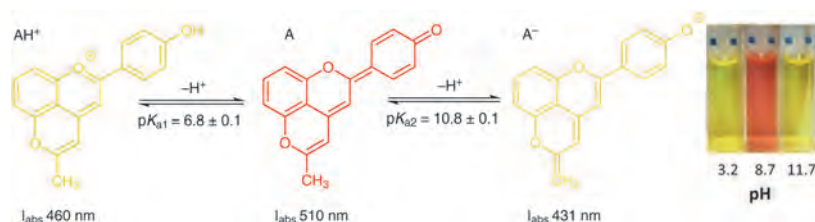
S. Clementson
M. Jessing
P. J. Vital
J. L. Kristensen*
University of Copenhagen,
Denmark



Synlett 2020, 31, 334–338
DOI: 10.1055/s-0039-1690744

334

V. Gomes
M. Guimarães
G. Gonçalves
V. de Freitas
L. Cruz*
University of Porto, Portugal



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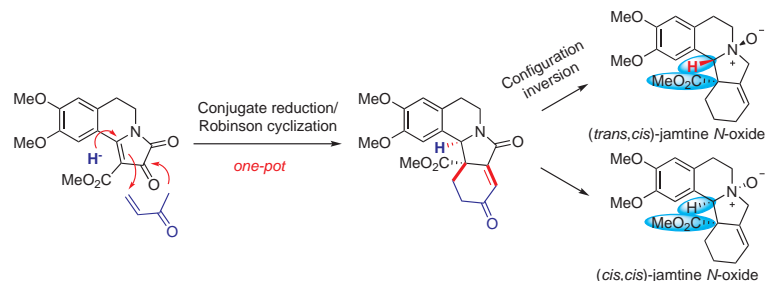
Synlett 2020, 31, 339–342
DOI: 10.1055/s-0037-1610745Z. Liu
Z. Wang
Y. Li
Q. Zhang
J.-M. Gao
H. Zheng*

Northwest A&F University, P. R. of China

Syntheses of *cis*- and *trans*-Jamtine and Their *N*-Oxides via a Benzyl Configuration-Inversion Approach

Letter

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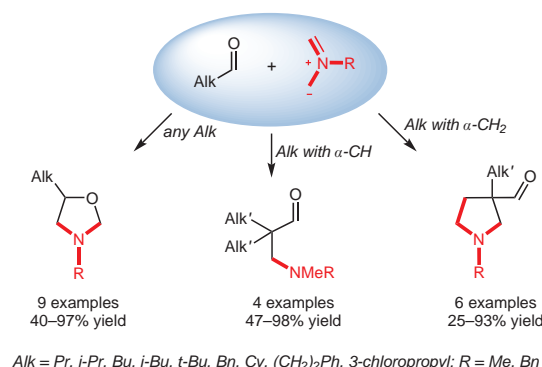
Synlett 2020, 31, 343–348
DOI: 10.1055/s-0039-1691562E. V. Gorbunova
E. M. Buev
V. S. Moshkin*
V. Y. Sosnovskikh

Ural Federal University, Russian Federation

Three Ways Aliphatic Aldehydes React with Nonstabilized Azomethine Ylides

Letter

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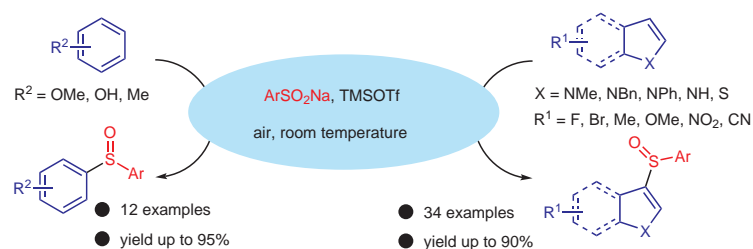
Synlett

Synlett 2020, 31, 349–354
DOI: 10.1055/s-0039-1691563Y.-Z. Ji
H.-J. Li*
H.-R. Yang
Z.-Y. Zhang
L.-J. Xie
Y.-C. Wu*Harbin Institute of Technology, P. R. of China
Weihai Institute of Marine Bio-medical Industrial Technology, P. R. of China

TMSOTf-Promoted Sulfonylation of Electron-Rich Aromatics with Sodium Arylsulfonates

Letter

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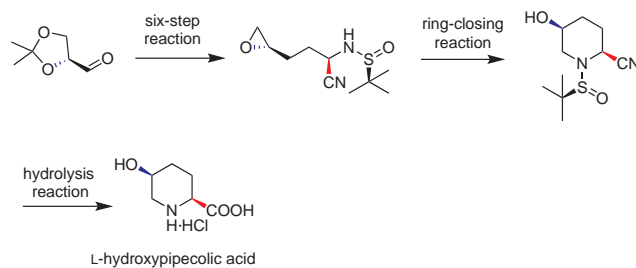
A New Synthesis of L-Hydroxy-pipecolic Acid

Letter

Synlett 2020, 31, 355–358
DOI: 10.1055/s-0039-1690771

Z. Zhang
Z. Sun*

Shanghai University of Engineering
Science, P. R. of China



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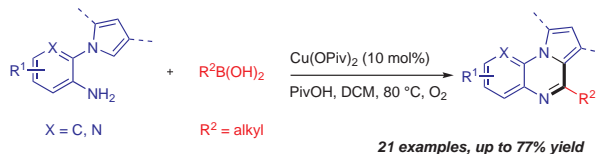
Copper-Catalyzed Synthesis of Alkyl-Substituted Pyrrolo[1,2-*a*]quinoxalines from 2-(1*H*-Pyrrol-1-yl)anilines and Alkylboronic Acids

Letter

Synlett 2020, 31, 359–362
DOI: 10.1055/s-0037-1610743

X. Guan
R. Yan*

Lanzhou University, P. R. of China



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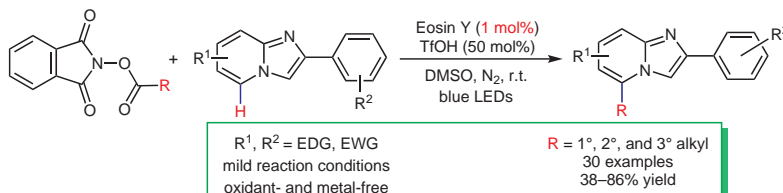
Metal-Free Regioselective Alkylation of Imidazo[1,2-*a*]pyridines with *N*-Hydroxyphthalimide Esters under Organic Photoredox Catalysis

Letter

Synlett 2020, 31, 363–368
DOI: 10.1055/s-0039-1691567

B. Sun
T. Xu
L. Zhang
R. Zhu
J. Yang
M. Xu
C. Jin*

Zhejiang University of Technology,
P. R. of China



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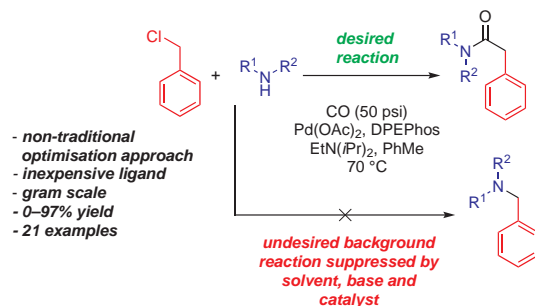
Synlett

Synlett 2020, 31, 369–372
DOI: 10.1055/s-0039-1690786E. Rilvin-Derrick
N. Oram
J. Richardson*
Eli Lilly and Company, UK

An Efficient Palladium-Catalysed Aminocarbonylation of Benzyl Chlorides

Letter

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Synlett

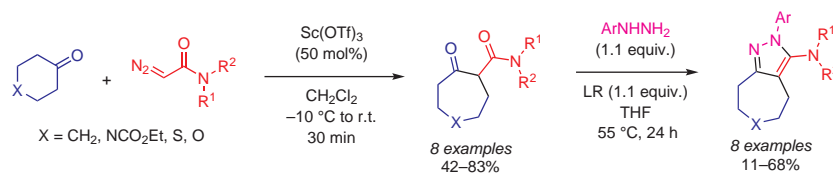
Synlett 2020, 31, 373–377
DOI: 10.1055/s-0039-1690047S. Chuprun
D. Dar'in
G. Kantin
P. Zhmurov
M. Krasavin*

Saint Petersburg State University, Russian Federation

 α -Diazoacetamides in Sc(OTf)₃-Catalyzed Tiffeneau–Demjanov Ring Expansion: Application towards the Synthesis of Rare Bicyclic Pyrazoles

Letter

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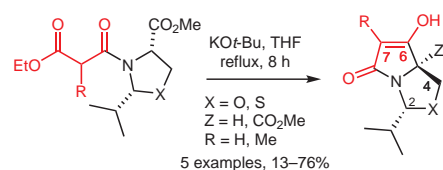
Synlett

Synlett 2020, 31, 378–382
DOI: 10.1055/s-0039-1691569H. Bagum
B. R. Shire
K. E. Christensen
M. Genov
A. Pretsch
D. Pretsch
M. G. Moloney*University of Oxford, UK
Oxford Suzhou Centre for Advanced Research, P. R. of China

Bicyclic Lactams Derived from Serine or Cysteine and 2-Methylpropanal

Letter

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Synlett

Synlett 2020, 31, 383–387
DOI: 10.1055/s-0039-1690790

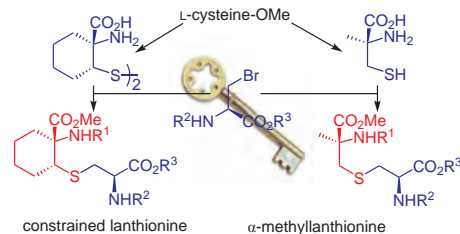
J. Gracia-Vitoria
Á. Carretero
I. Osante*
C. Cativiela*

CSIC-Universidad de Zaragoza,
Spain

Diastereopure Synthesis of Novel Cyclohexane-Ring-Based Constrained Lanthionine and α -Methylanthionine through an S_N2 Reaction with a β -Bromoalanine as a Key Step

Letter

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Synlett

Synlett 2020, 31, 388–392
DOI: 10.1055/s-0037-1610747

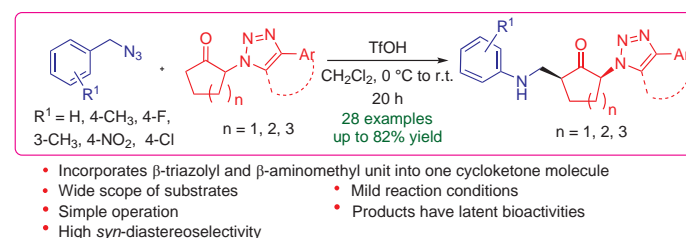
Y. Che
R. Wang
Y. Fu*
Z. Du*

Northwest Normal University,
P. R. of China

Acid-Mediated Denitrogenation/Rearrangement/Coupling of Benzyl Azides with Triazolyl-Substituted Cycloalkanones

Letter

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Synlett 2020, 31, 393–397
DOI: 10.1055/s-0039-1691568

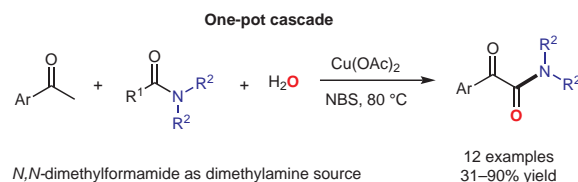
Y. Wei*
Y. Yan
X. Li

Nanjing University of Posts &
Telecommunications,
P. R. of China

Copper-Catalyzed Oxidative Synthesis of α -Ketoamides from Aryl Methyl Ketones and *N*-Bromobutanamide Using *N,N*-Dimethylformamide as Dimethylamine Source

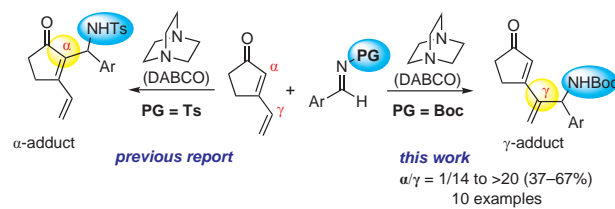
Letter

393



N. Gondo
Y. Tanigaki
Y. Ueda
T. Kawabata*

Kyoto University, Japan

 γ -Selective Vinylogous Aza-Morita–Baylis–Hillman Reaction with *N*-Carbamoylimines

Synlett 2020, 31, 403–420
DOI: 10.1055/s-0039-1690791

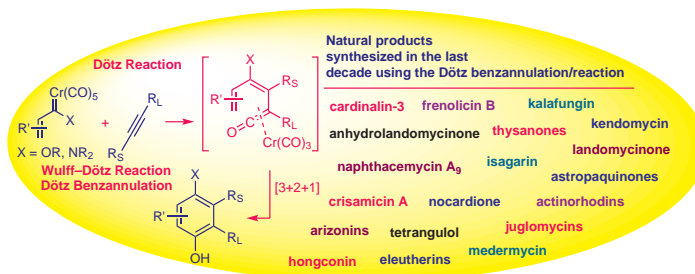
R. A. Fernandes*

A. Kumari

R. S. Pathare

Indian Institute of Technology
Bombay, India

403



Synlett 2020, 31, 421–433
DOI: 10.1055/s-0039-1691580

K.-i. Takao*

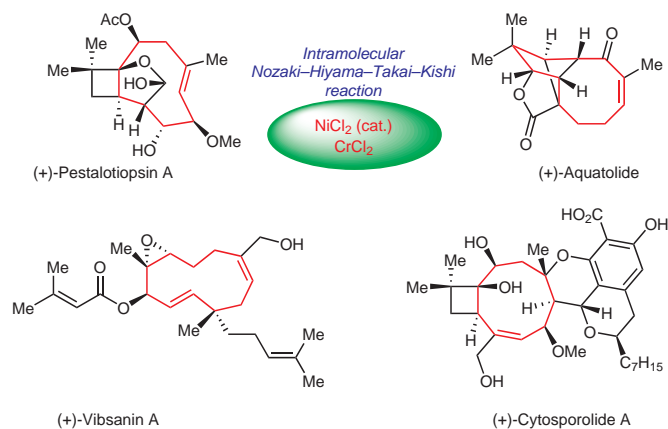
A. Ogura

K. Yoshida

S. Simizu

Keio University, Japan

421



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Self-Assembling L-D-L-Tripeptides Dance the Twist

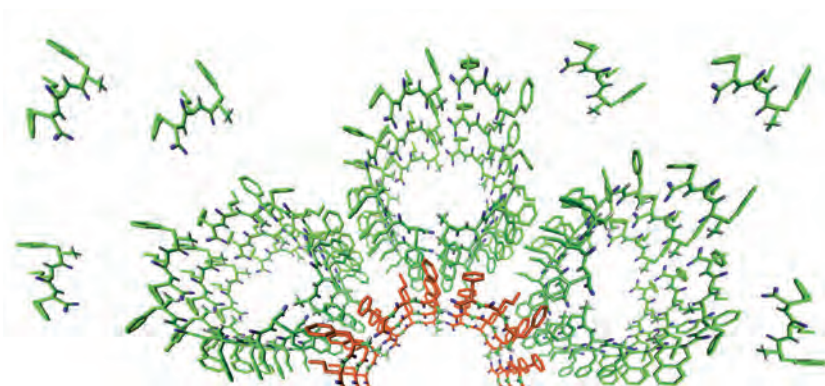
Synfacts

Synlett 2020, 31, 434–438
DOI: 10.1055/s-0039-1690776

434

M. C. Cringoli
O. Bellotto
R. De Zorzi*
A. V. Vargiu*
S. Marchesan*

University of Trieste, Italy
University of Cagliari, Cittadella
Universitaria, Italy



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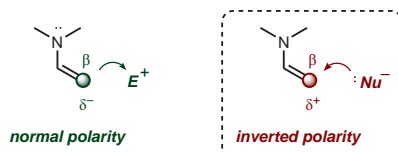
Umpolung of Enamines: An Overview on Strategies and Synthons

Synfacts

Synlett 2020, 31, 439–449
DOI: 10.1055/s-0037-1610741

439

A. Yu. Sukhorukov*
N. D. Zelinsky Institute of Organ-
ic Chemistry, Russian Federation



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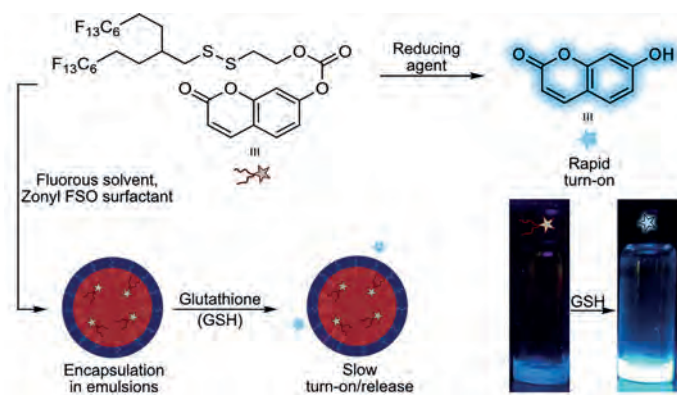
A Reduction-Sensitive Fluorous Fluorogenic Coumarin

Letter

Synlett 2020, 31, 450–454
DOI: 10.1055/s-0039-1690770

450

M. A. Miller
R. A. Day
D. A. Estabrook
E. M. Sletten*
University of California, USA



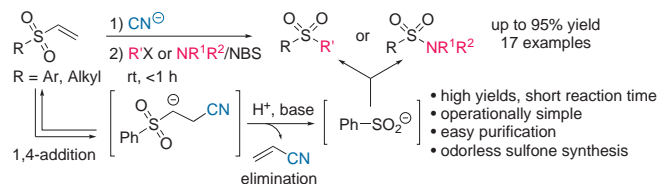
Synlett

Synlett 2020, 31, 455–458
DOI: 10.1055/s-0039-1690991T. Roy
J.-W. Lee*
University of Copenhagen,
Denmark

Cyanide-Mediated Synthesis of Sulfones and Sulfonamides from Vinyl Sulfones

Letter

455



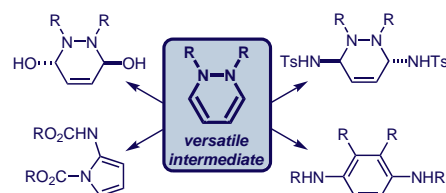
Synlett

Synlett 2020, 31, 459–462
DOI: 10.1055/s-0039-1690825T. K. Britten
P. D. Kemmitt
N. R. Halcovitch
S. C. Coote*
Lancaster University, UK

1,2-Dihydropyridazines as Versatile Synthetic Intermediates

Letter

459



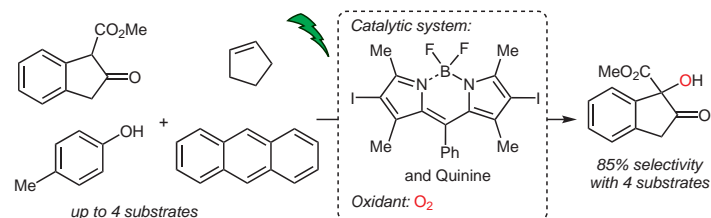
Synlett

Synlett 2020, 31, 463–468
DOI: 10.1055/s-0039-1690796J. Fischer
H. Serier-Brault
P. Nun
V. Coeffard*
Université de Nantes, CEISAM
UMR CNRS 6230, France

Substrate-Selectivity in Catalytic Photooxygenation Processes Using a Quinine-BODIPY System

Letter

463

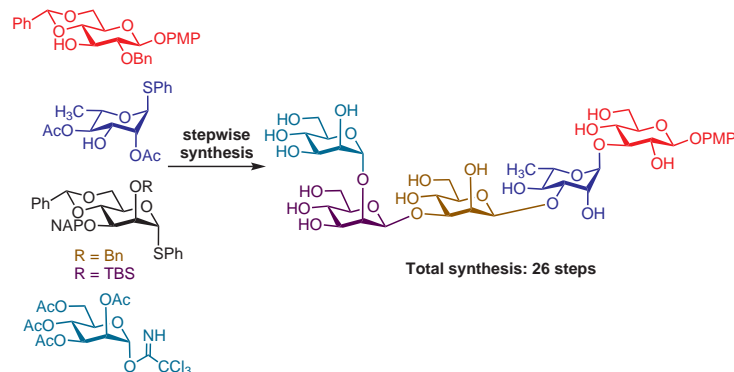


Synlett

Synlett 2020, 31, 469–474
DOI: 10.1055/s-0039-1690747F. Demeter
M. D.-T. Chang
Y.-C. Lee
A. Borbás*
M. Herczeg*
University of Debrecen, HungaryAn Efficient Synthesis of the Pentasaccharide Repeating Unit of *Pseudomonas aeruginosa* Psl Exopolysaccharide

Letter

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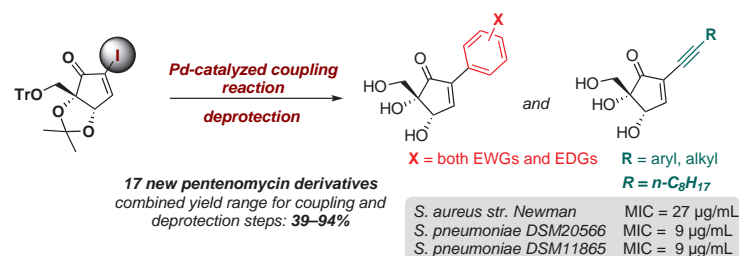
Synlett

Synlett 2020, 31, 475–481
DOI: 10.1055/s-0039-1690772S. A. Zisopoulou
S. Bousis
J. Hauptenthal
J. Herrmann
R. Müller
A. K. H. Hirsch*
D. Komiotis
J. K. Gallos
C. I. Stathakis*Aristotle University of
Thessaloniki, Greece
Helmholtz Centre for Infection
Research (HZI), Germany

Synthesis and Biological Evaluation of Novel 2-Substituted Analogues of (-)-Pentenomycin I

Letter

475

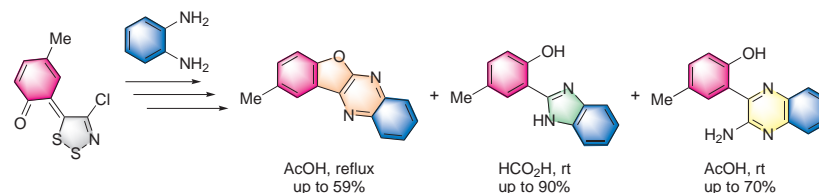


Synlett

Synlett 2020, 31, 482–486
DOI: 10.1055/s-0039-1690246M. Koyioni*
P. A. Koutentis
University of Cyprus, CyprusThe Reaction of 6-(4-Chloro-5*H*-1,2,3-dithiazol-5-ylidene)-4-methylcyclohexa-2,4-dien-1-one with Benzene-1,2-diamine: Synthesis and Chemistry of *N*-(2-Aminophenyl)-2-hydroxy-5-methylbenzimidoyl Cyanide

Letter

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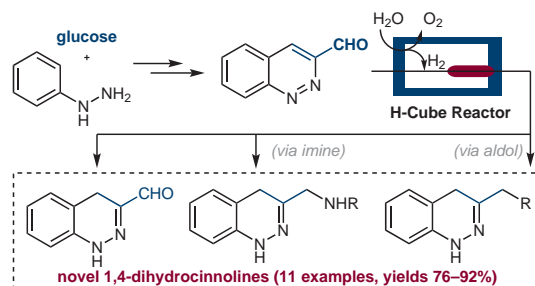
Synlett

Synlett 2020, 31, 487–491
DOI: 10.1055/s-0039-1690752J. Devlin
R. Clogher
M. Baumann*
University College Dublin, Ireland

Synthesis of Bioderived Cinnolines and Their Flow-Based Conversion into 1,4-Dihydrocinnoline Derivatives

Letter

487

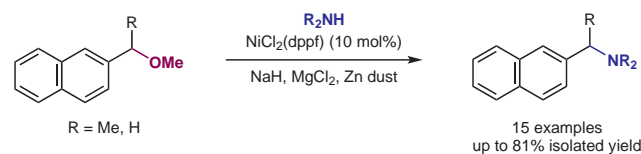


Synlett

Synlett 2020, 31, 492–496
DOI: 10.1055/s-0039-1690718P. Patel
S. A. Rousseaux*
University of Toronto, CanadaNickel-Catalyzed Amination of α -Aryl Methyl Ethers

Letter

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- Challenging C(sp³)–O oxidative addition
- Reversible C(sp³)–N reductive elimination

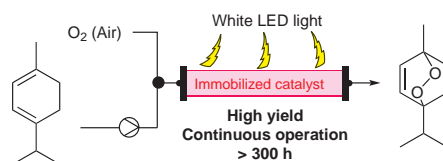
Synlett

Synlett 2020, 31, 497–501
DOI: 10.1055/s-0039-1691582K. Masuda
Y. Wang
S.-y. Onozawa*
S. Shimada
N. Koumura
K. Sato
S. Kobayashi*The University of Tokyo, Japan
National Institute of Advanced
Industrial Science and Technology
(AIST), Japan

Robust Organic Photosensitizers Immobilized on a Vinylimidazolium Functionalized Support for Singlet Oxygen Generation under Continuous-Flow Conditions

Letter

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Synlett

Synlett 2020, 52, 502–506
DOI: 10.1055/s-0039-1691578S. K. Bagal
M. S. Bodnarchuk
T. A. King
D. McKerrecher
X. Luo
P. Wang
O. R. Steward*
AstraZeneca, UK

Intramolecular Ring-Opening of Oxetanes: Access to Functionalised Hydroxymethyl 2,3-Dihydroimidazo[1,2-c]quinazolines

Letter

502

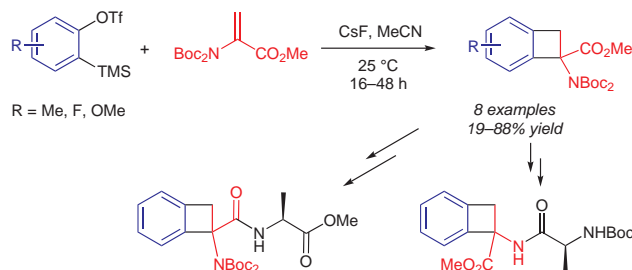


Synlett

Synlett 2019, 31, 507–511
DOI: 10.1055/s-0039-1691572A. Picard
S. Ciblat
Y. K. Ramtoul*
Paraza Pharma Inc., CanadaSynthesis of α,α -Disubstituted Benzocyclobutane Amino Acids through [2+2] Annulation of Benzyne with Dehydroalanine

Letter

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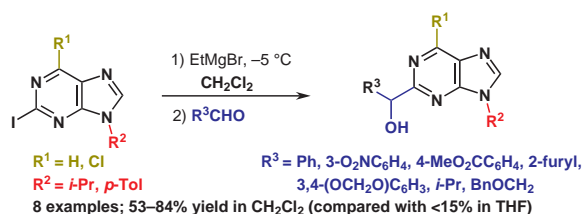
Synlett

Synlett 2020, 31, 512–516
DOI: 10.1055/s-0039-1690818S. Gazzola
M. R. Gordon
S. D. Lindell*
Bayer AG, Crop Science Division,
Germany

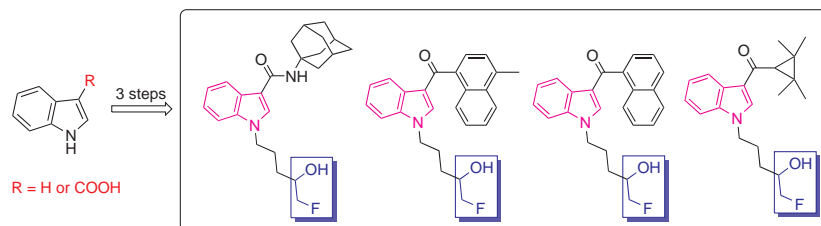
General Route to Purin-2-ylmagnesium Halides by Metal–Halogen Exchange in Dichloromethane

Letter

512



J. Wallgren
A. Rexander
E. Vestling
H. Liu
J. Dahlén
P. Konradsson
X. Wu*
Linköping University, Sweden



Synlett 2019, 30, 521–522
DOI: 10.1055/s-0040-1708008

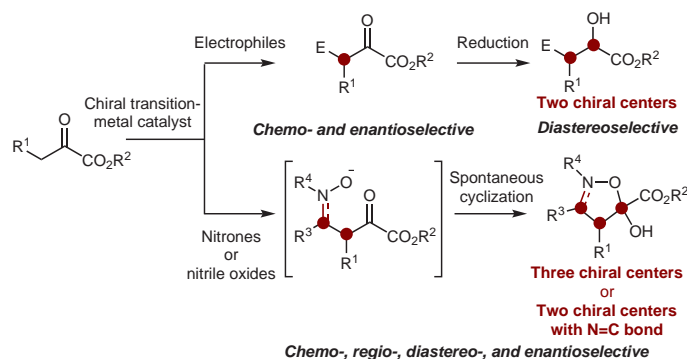
A. J. Burke*
University of Évora, Portugal



521

Synlett 2020, 31, 523–534
DOI: 10.1055/s-0039-1690722

Y. Sohtome*
M. Sodeoka*
RIKEN Cluster for Pioneering Re-
search, Japan



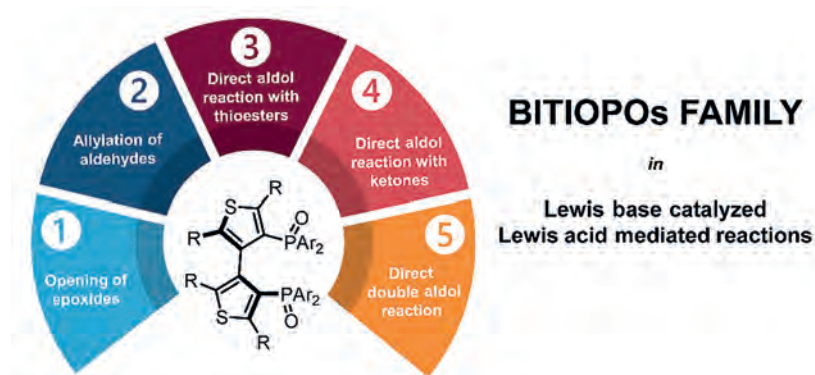
523

Synlett

Synlett 2020, 31, 535–546
DOI: 10.1055/s-0039-1690777S. Rossi*
T. Benincori
L. M. Raimondi
M. Benaglia*
Università degli Studi di Milano,
Italy3,3'-Bithiophene-Based Chiral Bisphosphine Oxides as Organocatalysts
in Silicon-Derived Lewis Acid Mediated Reactions

Account

535



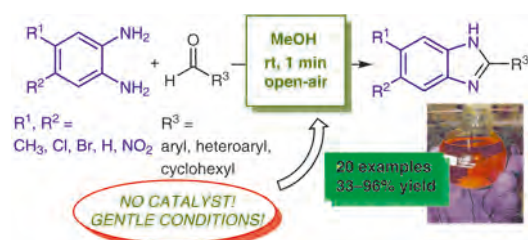
Synlett

Synlett 2020, 31, 547–552
DOI: 10.1055/s-0039-1690797V. Elumalai
J. H. Hansen*
UiT The Arctic University of Nor-
way, Norway

A Green, Scalable, One-Minute Synthesis of Benzimidazoles

Cluster

547



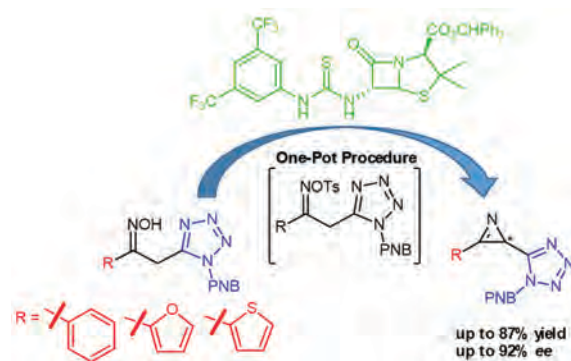
Synlett

Synlett 2020, 31, 553–558
DOI: 10.1055/s-0039-1691533C. Alves
C. Grosso
P. Barrulas
J. A. Paixão
A. L. Cardoso
A. J. Burke
A. Lemos
T. M. V. D. Pinho e Melo*
University of Coimbra, Portugal

Asymmetric Neber Reaction in the Synthesis of Chiral 2-(Tetrazol-5-yl)-2H-Azirines

Cluster

553

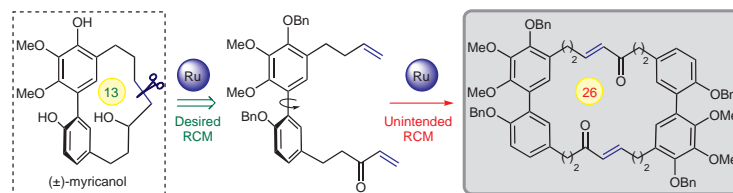


Synlett

Synlett 2020, 31, 559–564
DOI: 10.1055/s-0039-1691523P. Massé
S. Choppin*
L. Chiummiento*
G. Hanquet
F. ColobertUniversité de Strasbourg / Uni-
versité de Haute- Alsace, ECPM,
France
University of Basilicata, ItalyUnintended Formation of a 26-Membered Cycle in the Course of a
Novel Approach to Myricanol, a Strained [7,0]-Metacyclophane

Cluster

559

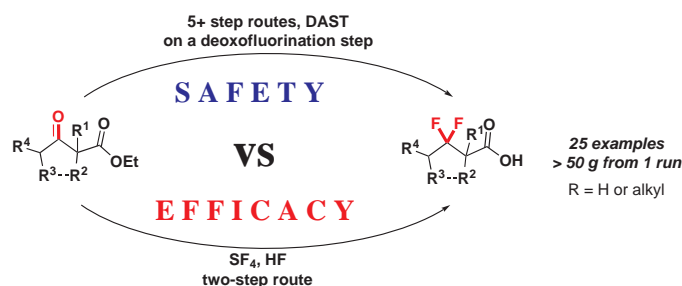


Synlett

Synlett 2020, 31, 565–574
DOI: 10.1055/s-0037-1610744S. A. Trofymchuk
D. V. Kliukovskiy
S. V. Semenov
A. R. Khairulin
V. O. Shevchenko
M. Y. Bugera
K. V. Tarasenko
D. M. Volochnyuk*
S. V. Ryabukhin*Enamine Ltd., Ukraine
National Academy of Sciences of
Ukraine, Ukraine
Taras Shevchenko National Uni-
versity of Kyiv, UkraineSemi-Industrial Fluorination of β -Keto Esters with SF_4 : Safety vs Efficacy

Cluster

565

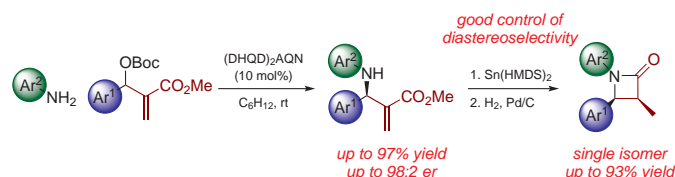


Synlett

Synlett 2020, 31, 575–580
DOI: 10.1055/s-0039-1691570Y. Zi
M. Lange
P. Schöler
S. Kriek
M. Westerhausen
I. Vilotijevic*Friedrich Schiller University Jena,
GermanySynthesis of β -Lactams via Enantioselective Allylation of Anilines with
Morita–Baylis–Hillman Carbonates

Cluster

575



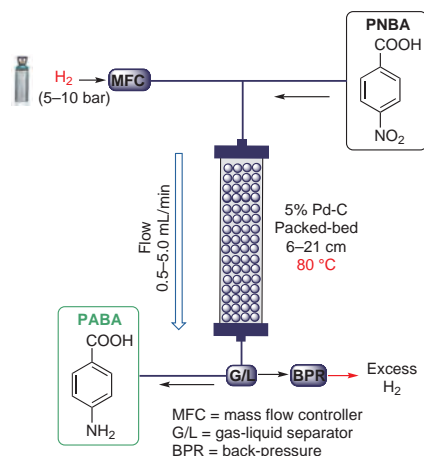
Synlett

FAST Hydrogenations as a Continuous Platform for Green Aromatic Nitroreductions

Cluster

Synlett 2020, 31, 581–586
DOI: 10.1055/s-0037-1610751

581

MD T. Rahman
S. Wharry
M. Smyth*
H. Manyar*
T. S. MoodyAlmac Sciences Ltd., UK
Queen's University Belfast, UK

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Rational Design of New Dihydrobenzoxophosphole-Based Lewis Base Organocatalysts

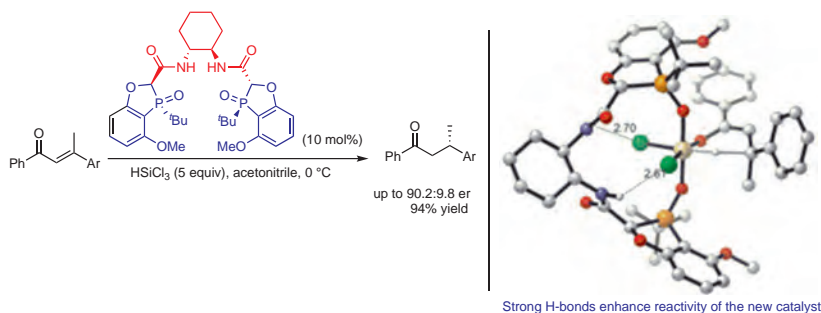
Cluster

Synlett 2020, 31, 587–591
DOI: 10.1055/s-0039-1690851

587

B. Qu*
L. P. Samankumara
A. Saha
M. G. Schumer
Z. S. Han
N. Haddad
C. A. Busacca
N. K. Yee
M. C. Kozlowski
J. J. Song
C. H. Senanayake

Boehringer Ingelheim Pharmaceuticals, Inc., USA



Strong H-bonds enhance reactivity of the new catalyst

Synlett

Aminoxylation of Thioalkynes through Radical-Polar Crossover

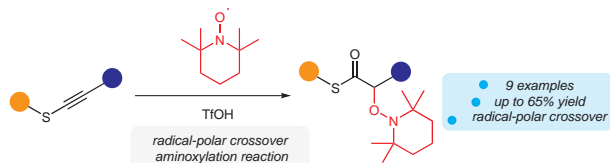
Cluster

Synlett 2020, 31, 592–594
DOI: 10.1055/s-0039-1689925

592

G. Di Mauro
M. Drescher
S. Tkaczyk
N. Maulide*

University of Vienna, Austria



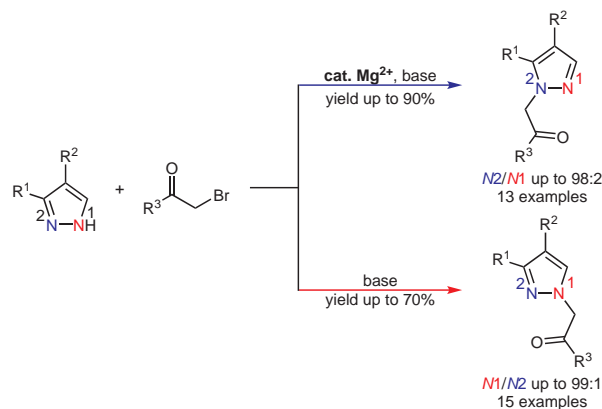
Synlett

Magnesium-Catalyzed *N*2-Regioselective Alkylation of 3-Substituted Pyrazoles

Cluster

Synlett 2020, 31, 595–599
DOI: 10.1055/s-0039-1690160

595

D. Xu*
L. Frank
T. Nguyen
A. Stumpf
D. Russell
R. Angelaud
F. Gosselin
Genentech Inc., USA

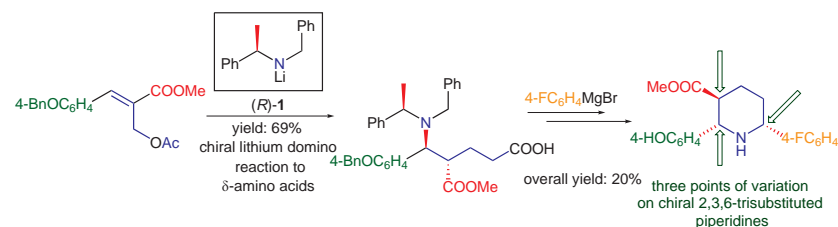
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Asymmetric Synthesis of 2,3,6-Trisubstituted Piperidines via Baylis–Hillman Adducts and Lithium Amide through Domino Reaction

Cluster

Synlett 2020, 31, 600–604
DOI: 10.1055/s-0039-1690990

600

M. M. Salgado
A. Manchado
C. T. Nieto
D. Díez
N. M. Garrido*
Universidad de Salamanca, Spain

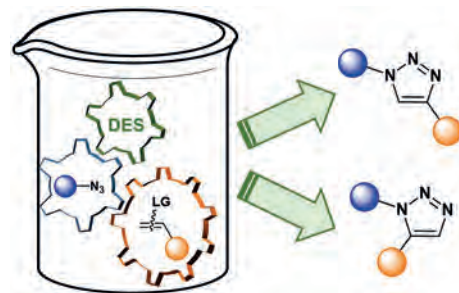
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Metal-Free 1,2,3-Triazole Synthesis in Deep Eutectic Solvents

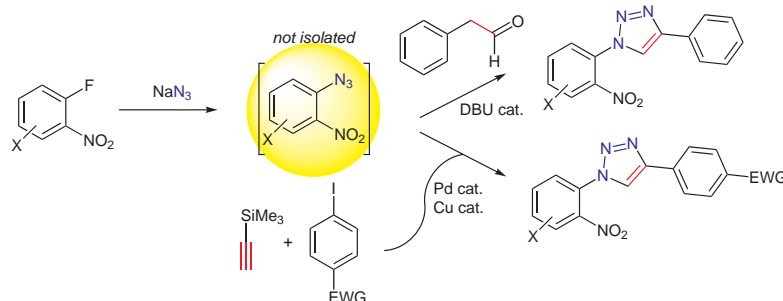
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DOI: 10.1055/s-0039-1690736

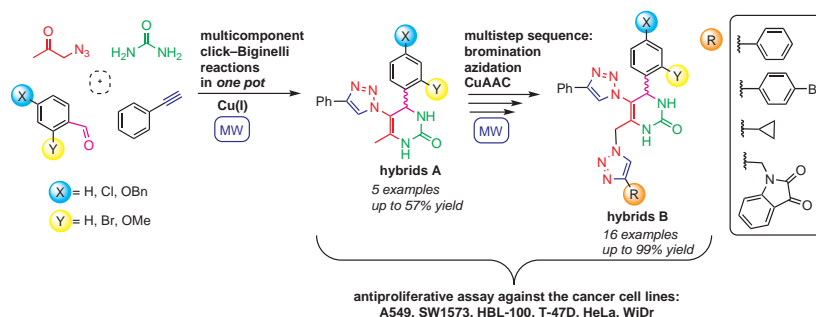
605

F. Sebest
S. Haselgrove
A. J. P. White
S. Díez-González*
Imperial College London, UK

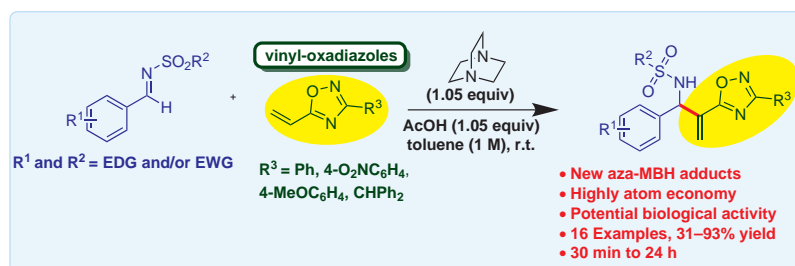
Click Variations on the Synthesis of 2-Nitrophenyl-4-aryl-1,2,3-triazoles without Isolation of 2-Nitrophenyl Azides



Synthesis of Novel 1,2,3-Triazole-Dihydropyrimidinone Hybrids Using Multicomponent 1,3-Dipolar Cycloaddition (Click)–Biginelli Reactions: Anticancer Activity



Aza-Morita–Baylis–Hillman Reaction with Vinyl-oxadiazoles: An Expedient Approach to Access New Heterocyclic Arrangements

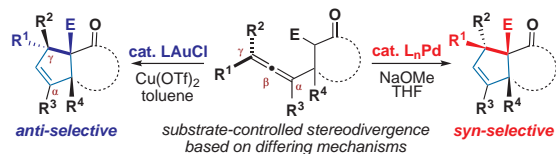


Synlett 2020, 31, 627–631
DOI: 10.1055/s-0037-1610746

R. D. Reeves
C. N. Kinkema
E. M. Landwehr
L. E. Vine
J. M. Schomaker*

University of Wisconsin, USA

627

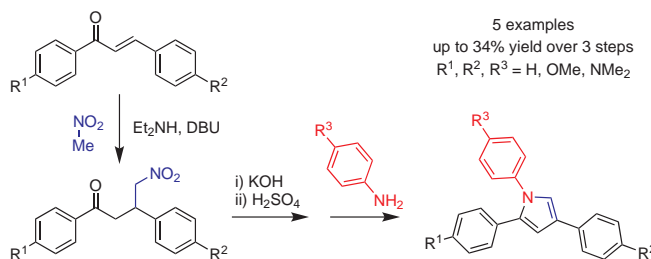


Synlett 2020, 31, 632–634
DOI: 10.1055/s-0039-1690828

J. R. M. Ferreira
R. Nunes da Silva
J. Rocha
A. M. S. Silva
S. Guieu*

University of Aveiro, Portugal

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Construction of C–C Bond via C–N and C–O Cleavage

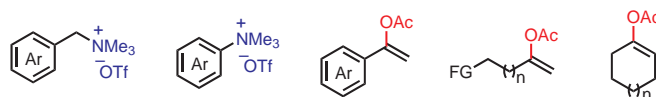
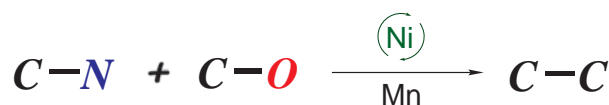
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635

Synlett 2020, 31, 635–640
DOI: 10.1055/s-0039-1691525

X. Pang
R.-D. He
X.-Z. Shu*

Lanzhou University, P. R. of China



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Ultrahigh-Molecular-Weight Poly(propylene oxide):
Preparation and Perspectives

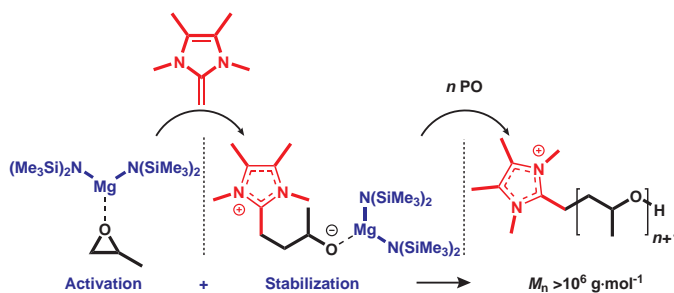
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641

Synlett 2020, 31, 641–647
DOI: 10.1055/s-0039-1690778

P. Walther
C. Vogler
S. Naumann*

University of Stuttgart, Germany



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Synlett 2020, 31, 648–656
DOI: 10.1055/s-0039-1690804

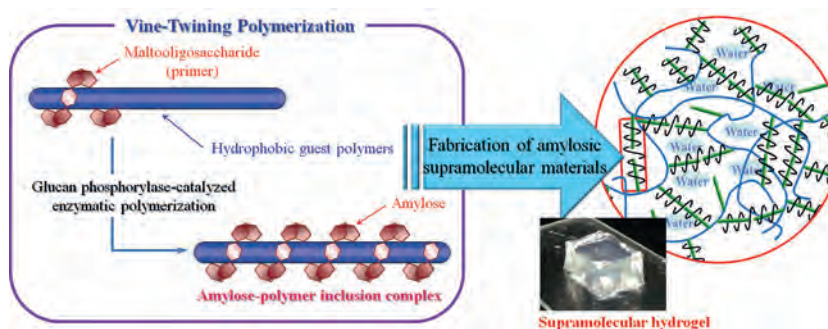
J.-i. Kadokawa*

Kagoshima University, Japan

Synthesis of Amylosic Supramolecular Materials by Glucan Phosphorylase-Catalyzed Enzymatic Polymerization According to the Vine-Twining Approach

Account

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Synlett 2020, 31, 657–671
DOI: 10.1055/s-0039-1691593

J. L. Freeman

F. F. Li

D. P. Furkert*

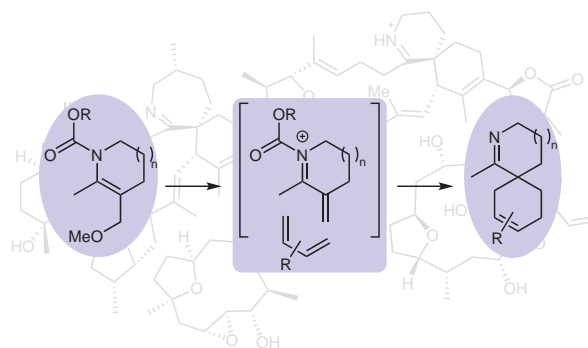
M. A. Brimble*

the University of Auckland, New Zealand

Synthetic Studies Towards Spirocyclic Imine Marine Toxins Using *N*-Acyl Iminium Ions as Dienophiles in Diels–Alder Reactions

Account

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Synlett 2020, 31, 672–676
DOI: 10.1055/s-0039-1691586

A. A. Titov*

M. S. Kobzev

T. N. Borisova

E. A. Sorokina

E. Van der Eycken

A. V. Varlamov

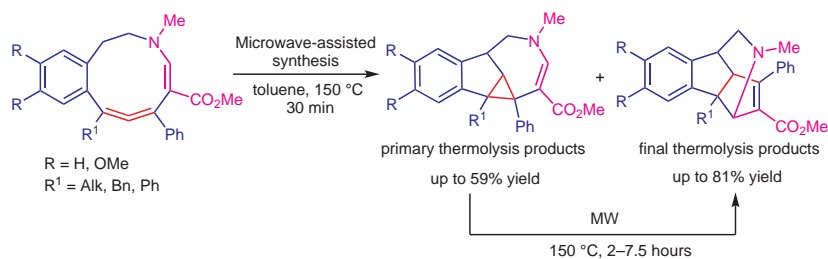
L. G. Voskressensky

Peoples' Friendship University of Russia (RUDN University), Russian Federation

Unusual Transformations of Cyclic Allenes with an Enamine Moiety into Complex Frameworks

Letter

672

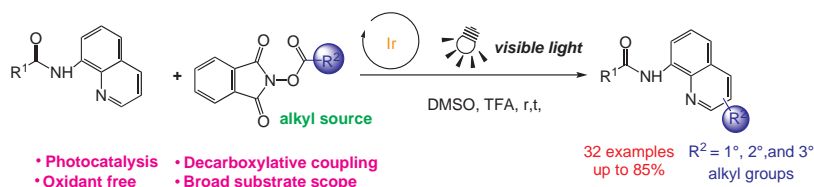


Synlett

Synlett 2020, 31, 677–682
DOI: 10.1055/s-0039-1691579B. Sun
D. Li
X. Zhuang
R. Zhu
A. Aisha
C. Jin*Zhejiang University of Technolo-
gy, P. R. of ChinaVisible-Light-Triggered Decarboxylative Alkylation of 8-Acylamino-quinoline with *N*-Hydroxyphthalimide Ester

Letter

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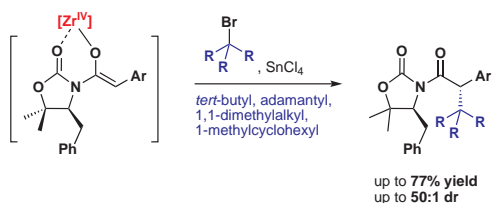
Synlett 2020, 31, 683–686
DOI: 10.1055/s-0039-1690793E. Shim
A. Zakarian*

University of California, USA

Stereoselective α -Tertiary Alkylation of *N*-(Arylacetyl)oxazolidinones

Letter

683

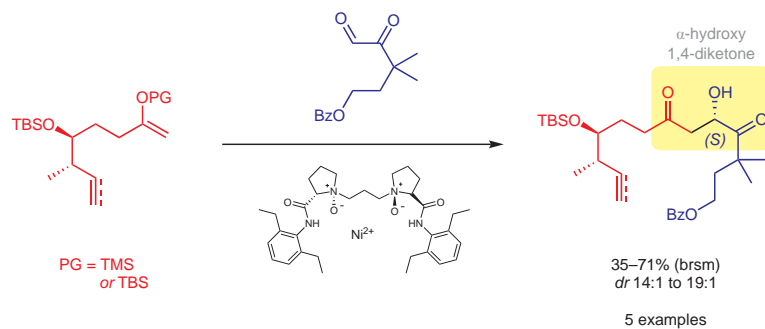


Synlett

Synlett 2020, 31, 687–690
DOI: 10.1055/s-0037-1610748H. R. M. Aitken
M. A. Brimble*
D. P. Furkert*The University of Auckland, New
ZealandA Catalytic Asymmetric Ene Reaction for Direct Preparation of α -Hydroxy 1,4-Diketones as Intermediates in Natural Product Synthesis

Letter

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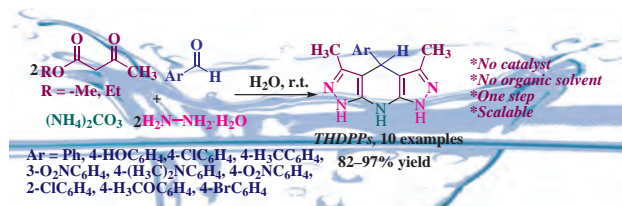
Synlett 2020, 31, 691–694
DOI: 10.1055/s-0039-1691600F. Tamaddon*
A. Khorram

Yazd University, Iran

Advanced Catalyst-Free Pseudo-Six-Component Synthesis of Tetrahydrodipyrzolo[1,5-a]pyridines in Water by Using Ammonium Carbonate as an Ecofriendly Source of Nitrogen

Letter

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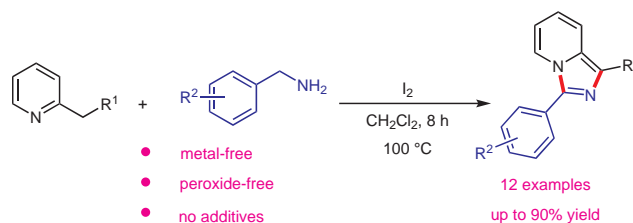
Synlett 2020, 31, 695–698
DOI: 10.1055/s-0039-1691587K. Su
M. Qin
Y. Chen
Y. Liu
Y. Tian
B. Chen*

Lanzhou University, P. R. of China

Diiodine-Mediated Oxidative Reaction for the Construction of Imidazo[1,5-a]pyridines under Metal-Free Conditions

Letter

695

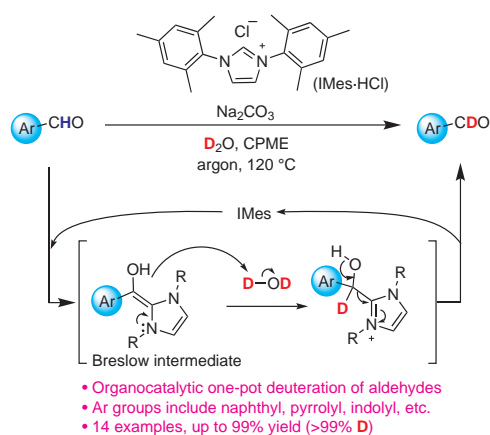


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Synlett 2020, 31, 699–702
DOI: 10.1055/s-0040-1707993Y. Sawama*
Y. Miki
H. Sajiki*Gifu Pharmaceutical University,
JapanN-Heterocyclic Carbene Catalyzed Deuteration of Aldehydes in D₂O

Letter

699



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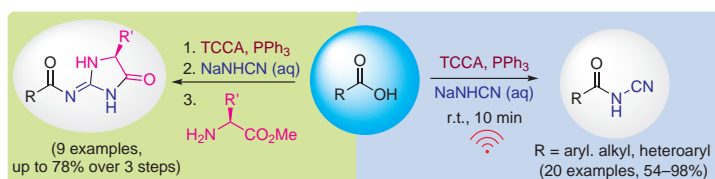
Synlett 2020, 31, 703–707
DOI: 10.1055/s-0039-1691583

W. Phakhodee
D. Yamano
M. Pattarawarapan*
Chiang Mai University, Thailand

Ultrasound-Assisted Synthesis of *N*-Acylcyanamides and *N*-Acyl-Substituted Imidazolones from Carboxylic Acids by Using Trichloroisocyanuric Acid/Triphenylphosphine

Letter

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Synlett 2020, 31, 708–712
DOI: 10.1055/s-0039-1691596

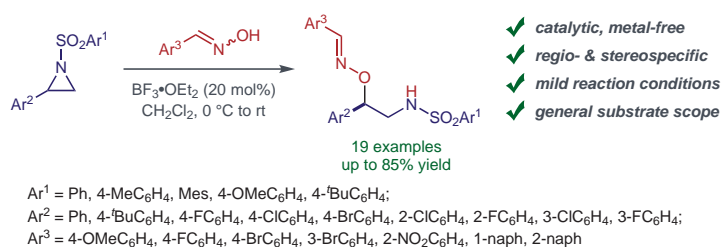
A. Bhattacharyya
S. Das
N. Chauhan
P. K. Biswas
M. K. Ghorai*

Indian Institute of Technology
Kanpur, India

Facile Synthesis of Oxime Amino Ethers via Lewis Acid Catalyzed S_N2 -Type Ring Opening of Activated Aziridines with Aryl Aldehyde Oximes

Letter

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Synlett 2020, 31, 713–717
DOI: 10.1055/s-0039-1691590

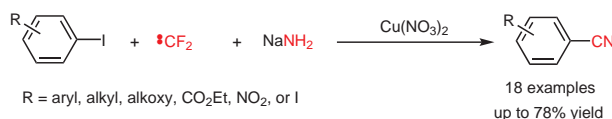
Y.-X. Zhang
X. Xiao
Z.-H. Fu
J.-H. Lin*
Y. Guo*
X. Yao*
Y.-C. Cao
R.-B. Du
X. Zheng*
J.-C. Xiao*

University of South China, P. R.
of China
University of Chinese Academy
of Sciences, P. R. of China

Difluorocarbene-Based Cyanation of Aryl Iodides

Letter

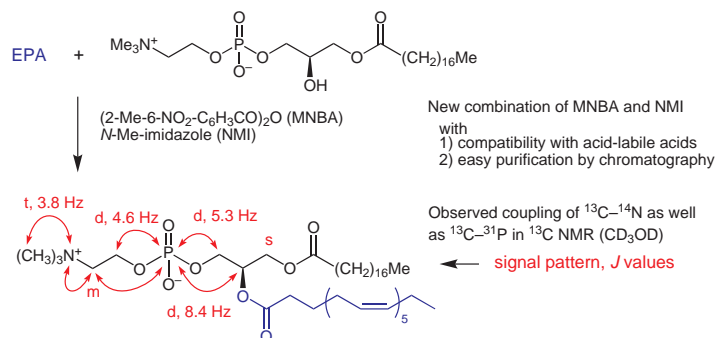
713



M. Morita
S. Saito
R. Shinohara
R. Aoyagi
M. Arita
Y. Kobayashi*

Tokyo Institute of Technology,
Japan

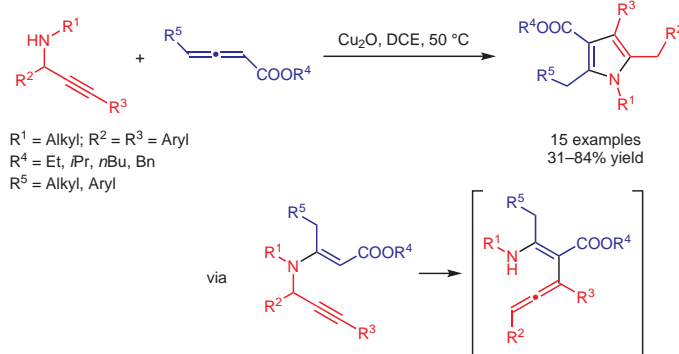
Synthesis of Phosphatidylcholines Possessing Functionalized Acids at *sn*-2, and ^{13}C - ^{14}N and ^{13}C - ^{31}P Couplings in Their ^{13}C NMR Spectra



H. Tan
X.-F. Jiang
L. Jiang
C. Yuan
X. Tang
M.-F. Li
S.-W. Liu
S. Liu
H.-L. Cui*

Chongqing University of Arts
and Sciences, P. R. of China

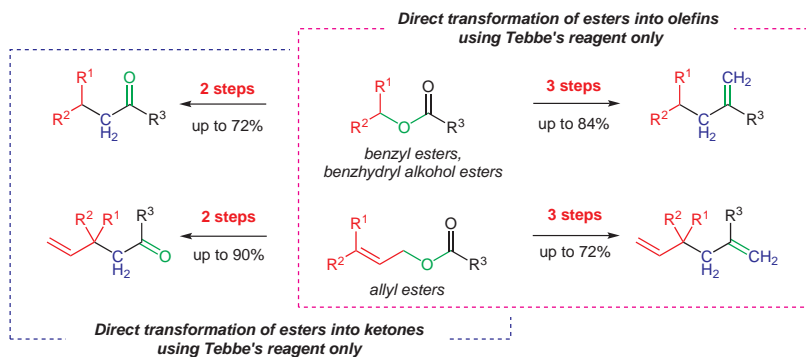
Synthesis of Fully Substituted Pyrroles through a Copper-Catalyzed Aza-Michael/Claisen Rearrangement/Cyclization Cascade



A. M. Domžalska-
Pieczkolan
B. Furman*

Polish Academy of Sciences,
Poland

Beyond the Tebbe Olefination: Direct Transformation of Esters into Ketones or Alkenes



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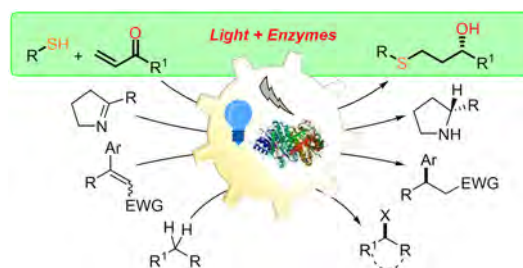
Synlett 2020, 31, 737–744
DOI: 10.1055/s-0039-1690784

K. Lauder
D. Castagnolo*
King's College London, UK

Photo-Biocatalytic Cascades for the Synthesis of Volatile Sulfur Compounds and Chemical Building Blocks

Synfacts

737



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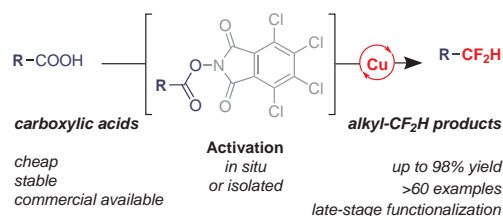
Synlett 2020, 31, 745–749
DOI: 10.1055/s-0039-1690798

W. Yan
M. Paeth
S. Zacate
X. Zeng
W. Liu*
Miami University, USA

Late-Stage Difluoromethylation of Aliphatic Carboxylic Acids with Copper Catalysis

Synfacts

745



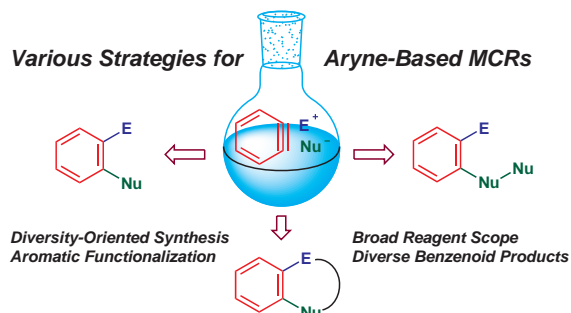
Synlett 2020, 31, 750–771
DOI: 10.1055/s-0039-1690824

S. Ghorai
D. Lee*

University of Illinois at Chicago,
USA

750

Various Strategies for Aryne-Based MCRs

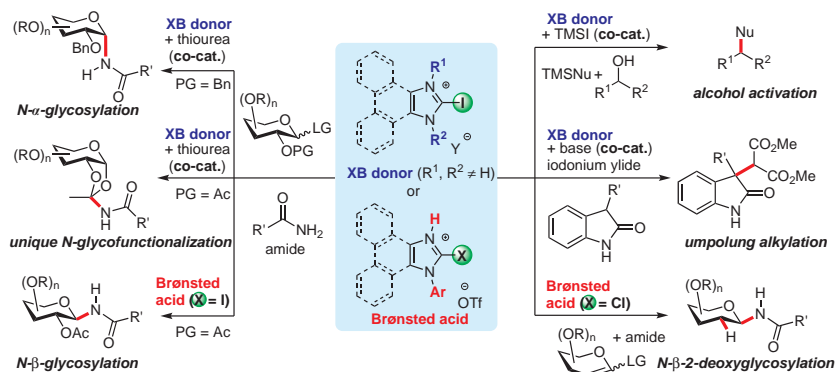


Synlett 2020, 31, 772–783
DOI: 10.1055/s-0039-1690815

Y. Kobayashi*
Y. Takemoto*

Kyoto University, Japan

772

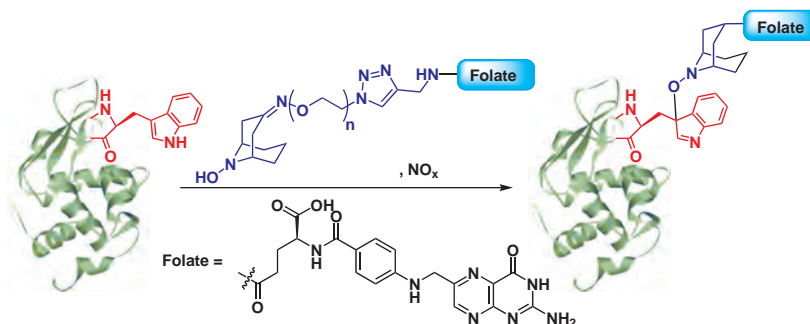


Synlett 2020, 31, 784–787
DOI: 10.1055/s-0039-1691735

K. Maruyama
K. J. Malawska
N. Konoue
K. Oisaki*
M. Kanai*

The University of Tokyo, Japan

784

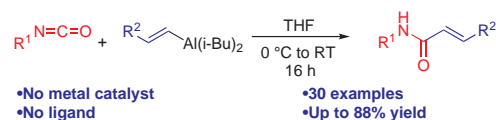


Synlett

Synlett 2020, 31, 788–792
DOI: 10.1055/s-0037-1610753B. Chen
X.-F. Wu*Zhejiang Sci-Tech University,
P. R. of ChinaSynthesis of Linear α,β -Unsaturated Amides from Isocyanates and Alkenylaluminum Reagents

Letter

788



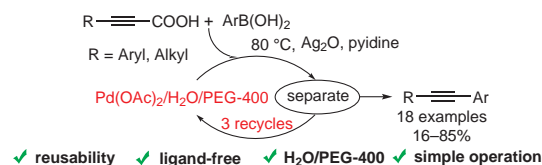
Synlett

Synlett 2020, 31, 793–796
DOI: 10.1055/s-0039-1691736B.-X. Tang
H. Zou
B.-X. Xie
H.-Q. Zhong
Y.-H. Wang
Y. Chen
M. Hu
Q.-Q. Wen
S.-Y. YangJinggangshan University, P. R. of
China

Ligand-Free and Recyclable Palladium(II) Acetate Catalyzes the Decarboxylative Cross-Coupling of Alkynyl Carboxylic Acids with Arylboronic Acids in Aqueous PEG-400

Letter

793



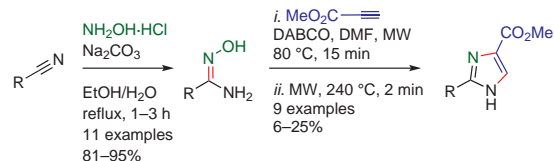
Synlett

Synlett 2020, 31, 797–800
DOI: 10.1055/s-0039-1690832D. A. Shabalin
J. J. Dunsford
S. Ngwerume
A. R. Saunders
D. M. Gill
J. E. Camp*University of Nottingham, UK
University of Huddersfield, UK
University of Bath, UK

Synthesis of 2,4-Disubstituted Imidazoles via Nucleophilic Catalysis

Letter

797



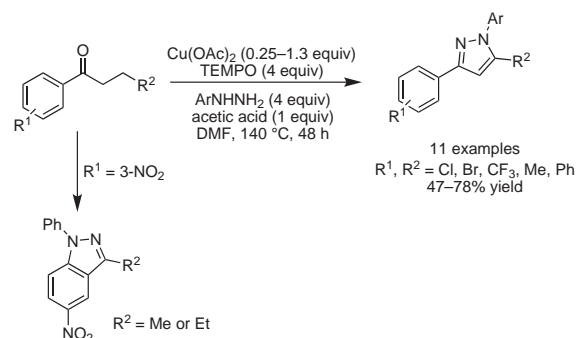
Synlett

Synlett 2020, 31, 801–804
DOI: 10.1055/s-0039-1690835T. L. D. Pham
T. M. Nguyen
K. A. Tran
H. V. Dang
N. T. S. Phan
H. V. Le*
T. T. Nguyen*HCMC University of Technology,
VNU-HCM, Vietnam

Copper-Promoted Coupling of Propiophenones and Arylhydrazines for the Synthesis of 1,3-Diarylpyrazoles

Letter

801



Synlett

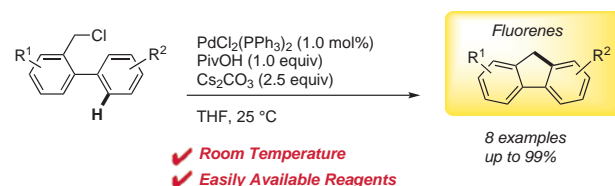
Synlett 2020, 31, 805–808
DOI: 10.1055/s-0039-1690812Y. Tanji
Y. Tsuji
T. Fujihara*

Kyoto University, Japan

Palladium-Catalyzed Synthesis of Fluorenes by Intramolecular C(sp²)-H Activation at Room Temperature

Letter

805

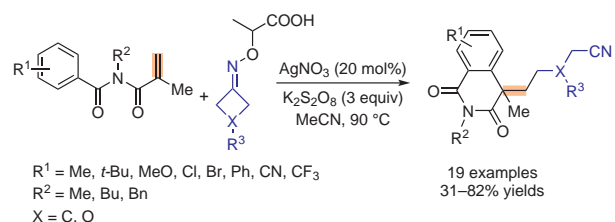


Synlett

Synlett 2020, 31, 809–812
DOI: 10.1055/s-0039-1691595Z. Wang
X. Yan
X. He
X. Yan
X. Li*
X. Xu*Zhejiang University of Technology,
P. R. of ChinaIminyl-Radical-Mediated Cyanoalkylation of Activated Alkenes Enabled by Silver-Catalyzed Decarboxylation of α -Imino Oxy Acids

Letter

809



Synlett

Synlett 2020, 31, 813–817
DOI: 10.1055/s-0039-1690836

Y. Nagao*

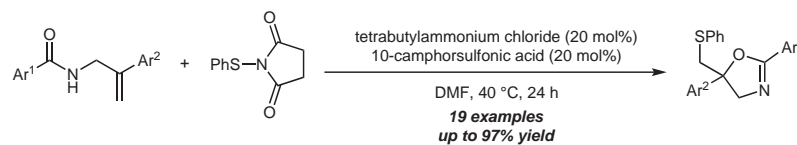
K. Hiroya

Musashino University, Japan

Improved Synthetic Method for 5-[(Phenylthio)methyl]oxazoline Derivatives: Electrophilic Cyclization of Allylic Amide Using a Brønsted Acid and Tetrabutylammonium Chloride under Mild Conditions

Letter

813



Synlett

Synlett 2020, 31, 818–822
DOI: 10.1055/s-0039-1691739

M. Sun

J. Song

L. Wang

W. Yin

M. Miao

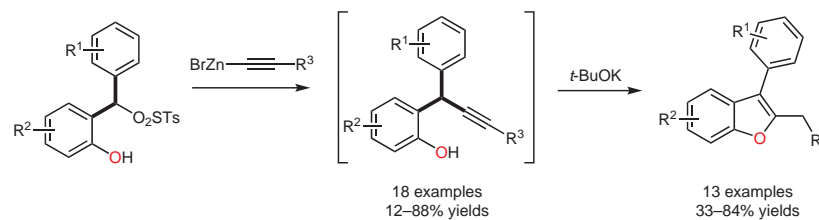
H. Ren*

Taizhou University, P. R. of China

Direct Propargylation of *ortho*-Quinone Methides with Alkynyl Zinc Reagents: An Application to the One-Pot Synthesis of 2,3-Disubstituted Benzofurans

Letter

818



Synlett

Organic-Photoacid-Catalyzed Glycosylation

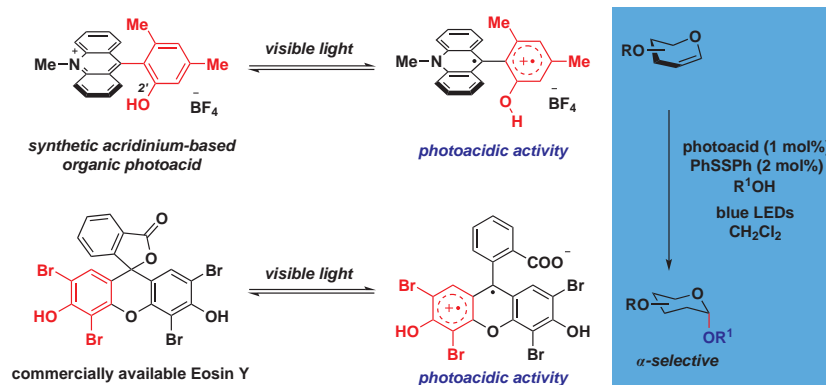
Synfacts

Synlett 2020, 31, 823–828
DOI: 10.1055/s-0039-1690773

J. Li
G. Zhao
T. Wang*

University at Albany, State Uni-
versity of New York, USA

823



Synlett

Epoxides as Dual-Functionalized Alkylating Reagents in Catellani Reactions for the Assembly of Heterocycles

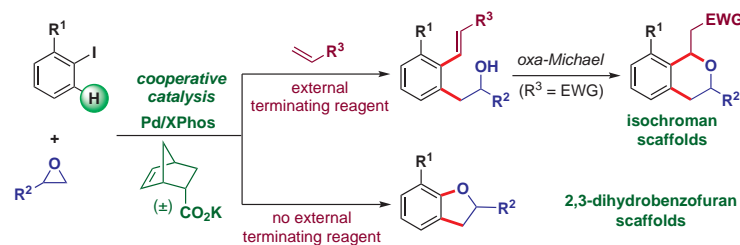
Synfacts

Synlett 2020, 31, 829–837
DOI: 10.1055/s-0039-1690779

C. Wu
H.-G. Cheng*
Q. Zhou*

Wuhan University, P. R. of China

829



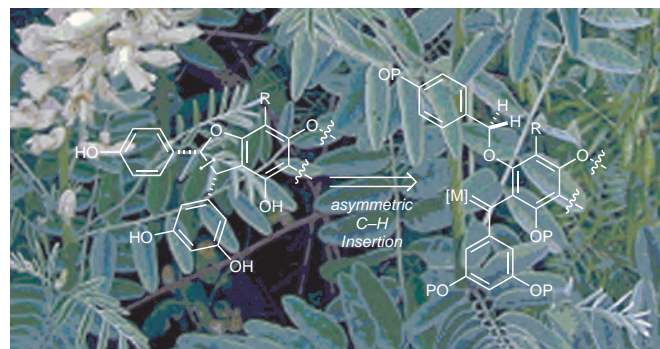
Synlett

Synlett 2020, 31, 838–844
DOI: 10.1055/s-0039-1691738J. T. Shaw*
University of California, USA

C–H Insertion Reactions of Donor/Donor Carbenes: Inception, Investigation, and Insights

Account

838



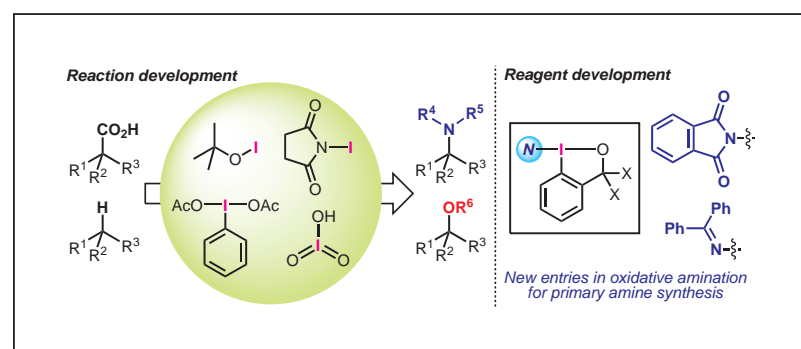
Synlett

Synlett 2020, 31, 845–855
DOI: 10.1055/s-0039-1690827K. Kiyokawa*
S. Minakata*
Osaka University, Japan

Iodine-Based Reagents in Oxidative Amination and Oxygenation

Account

845



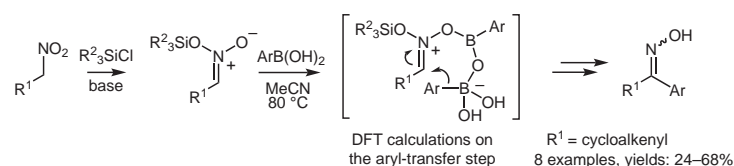
Synlett

Synlett 2020, 31, 856–860
DOI: 10.1055/s-0039-1690845M. D. Kerim
P. Boyode
J. Garrec
L. El Kaim*
Institut Polytechnique de Paris,
France

Metal-Free Addition of Boronic Acids to Silylnitronates

Letter

856



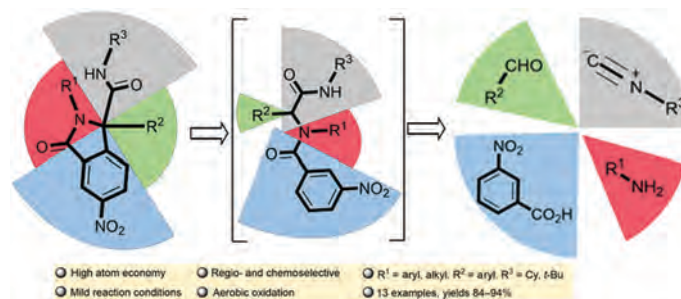
Synlett

Synlett 2020, 31, 861–865
DOI: 10.1055/s-0039-1691598K. Amiri
S. Balalaie*
M. U. Anwar
A. Al-Harrasi*K. N. Toosi University of Technology, Iran
Kermanshah University of Medical Sciences, Iran
Natural and Medical Sciences Research Center University of Nizwa, Sultanate of Oman

Synthesis of 3-Oxoisoindoline-1-carboxamides through Sequential Four-Component Ugi Reaction/Oxidative Nucleophilic Substitution of Hydrogen

Letter

861



Synlett

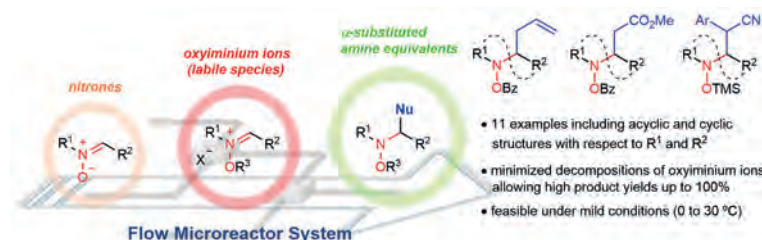
Synlett 2020, 31, 866–870
DOI: 10.1055/s-0039-1691601Y. Arakawa
S. Ueta
T. Okamoto
K. Minagawa
Y. Imada*

Tokushima University, Japan

Nucleophilic Addition to Nitrones Using a Flow Microreactor

Letter

866



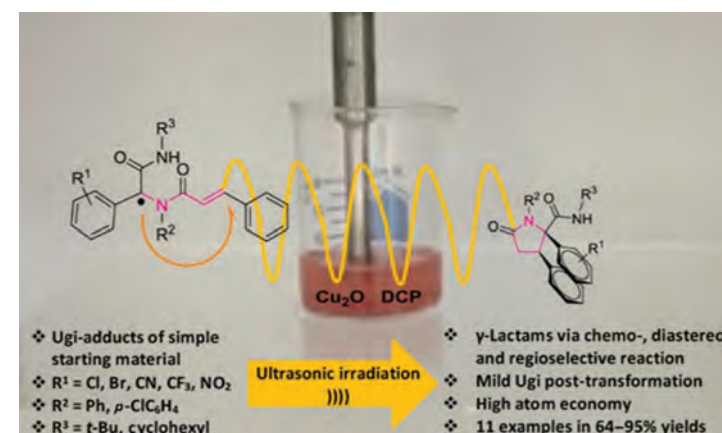
Synlett

Synlett 2020, 31, 871–877
DOI: 10.1055/s-0040-1707997A. N. Rahimi
H. J. Ghazvini
S. Balalaie*
F. Rominger
H. Z. Tejeneki
H. R. BijanzadehK. N. Toosi University of Technology, Iran
Kermanshah University of Medical Sciences, Iran

Ultrasound-Activated Atom-Economical Approach to the Synthesis of Highly Substituted Pyrrolidin-2-ones through a Four-Component Ugi/5-endo-trig Intramolecular Radical Cyclization Reaction

Letter

871

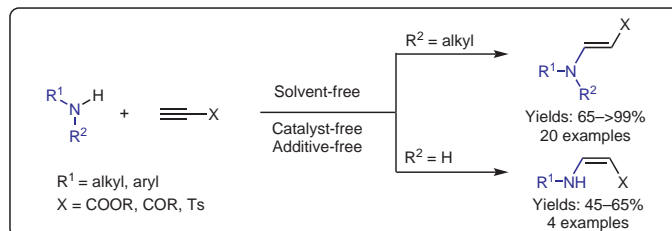


Synlett

Synlett 2020, 31, 878–882
DOI: 10.1055/s-0040-1707968X. Y. Chen*
L. Zhang
Y. Tang
S. Yuan
B. Zhu
G. Chen
X. ChengJiangsu University of Science and
Technology, P. R. of ChinaGreen H₂O-Promoted Solvent-Free Synthesis of Enaminocarbonyl
Compounds with High Stereoselectivity from Electron-Deficient
Terminal Alkynes

Letter

878



Synlett

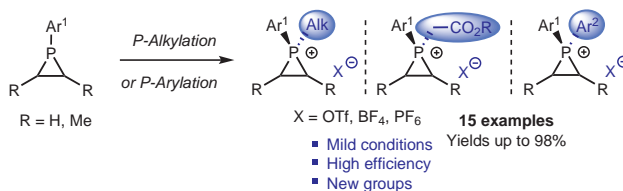
Synlett 2020, 31, 883–888
DOI: 10.1055/s-0040-1708000J. Gasnot
C. Botella
S. Comesse
S. Lakhdar
C. Alayrac
A.-C. Gaumont
V. Dalla*
C. Taillier*

Normandie Univ., France

Access to Stable Quaternary Phosphiranium Salts by P-Alkylation and
P-Arylation of Phosphiranes

Letter

883

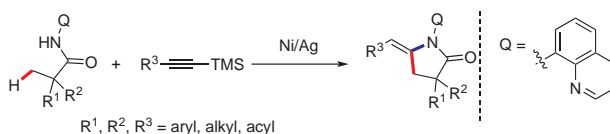


Synlett

Synlett 2020, 52, 889–894
DOI: 10.1055/s-0037-1610756C. Lin*
Y. Xu
Q. Teng
J. Lin
F. Gao
L. Shen*Jiangxi Science & Technology
Normal University, P. R. of ChinaNickel-Catalyzed Annulation of Aliphatic Amides with Alkynylsilanes:
An Expedient Approach to Five-Membered Lactams

Letter

889



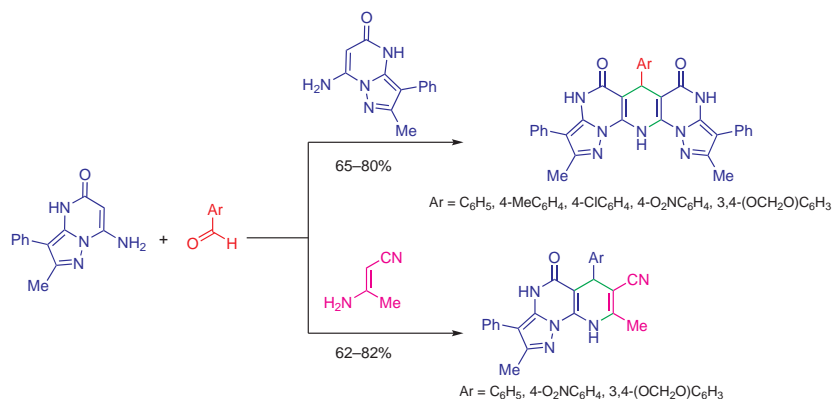
- E-configuration
- inexpensive Ni(II) as the catalyst
- aliphatic amides/alkynylsilanes = 1:1
- tolerance of various aliphatic amides and alkynylsilanes
- 23 examples, up to 99% yield

Synlett

Synlett 2020, 31, 895–898
DOI: 10.1055/s-0040-1708001A. M. Abdelmoniem
F. M. Sroor
M. A. Ramadan
S. A. S. Ghozlan
I. A. Abdelhamid*
Cairo University, EgyptHantzsch-Like One-Pot Three-Component Synthesis of Heptaazadicyclopenta[*a,j*]anthracenes: A New Ring System

Letter

895

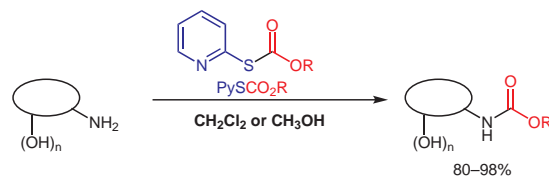


Synlett

Synlett 2020, 31, 899–902
DOI: 10.1055/s-0039-1690856T. Suzuki
K. Tanaka III
Y. Hashimoto
N. Morita
O. Tamura*Showa Pharmaceutical University,
JapanO-Alkyl *S*-(Pyridin-2-yl)carbonothiolates: Operationally Simple and Highly Nitrogen-Selective Reagents for Alkoxy Carbonylation of Amino Groups

Letter

899

PySCO₂R: PyS-Moc, PyS-Eoc, PyS-Fmoc, PyS-Troc, PyS-Teoc, PyS-Boc, PyS-Cbz

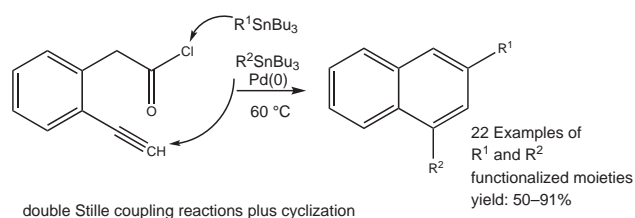
Synlett

Synlett 2020, 31, 903–906
DOI: 10.1055/s-0039-1690850S. Sbi
V. Mkpenie
K. Tanemura
T. Rohand*
University Cadi Ayyad, Morocco

Ligand-Free and Solvent-Free Synthesis of 1,3-Disubstituted Naphthalenes through Stille Coupling

Letter

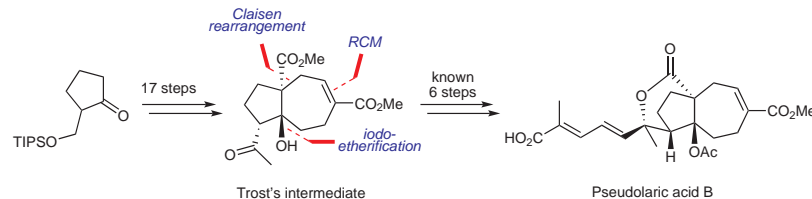
903



Synlett 2020, 31, 907–910
DOI: 10.1055/s-0039-1690829

N. Mori*

Research Foundation ITSUU Laboratory, Japan



907

Synlett 2020, 31, 911–915
DOI: 10.1055/s-0039-1691743

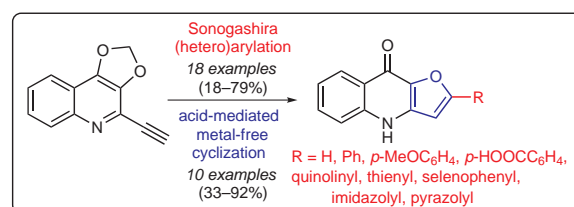
V. Králová*

M. Soral

R. Horák

P. Hradil

Palacký University,
Czech Republic



911

Synlett 2020, 31, 916–924
DOI: 10.1055/s-0040-1707995

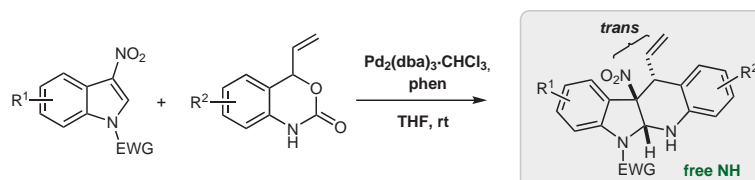
M. J. Bird

S. M. Wales

C. Richardson

C. J. T. Hyland*

University of Wollongong,
Australia



- *trans* selective
- protecting-group-free vinyl benzoxazinone
- economical and air-stable ligand
- highly functionalized tetrahydro-5*H*-indolo[2,3-*b*]quinolines

up to 94% yield and >98:2 *dr*

916

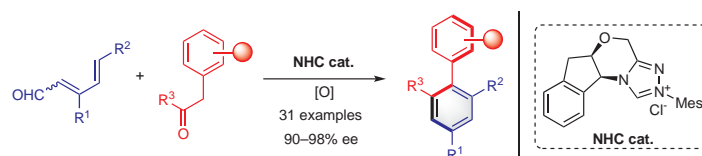
Synlett

Synlett 2020, 31, 925–932
DOI: 10.1055/s-0039-1690814

K. Xu
Z. Wang
T. Zhu*

Sun Yat-Sen University, P. R. of
China

N-Heterocyclic Carbene-Organocatalyzed Arene Formation: Application in Atroposelective Synthesis of Polysubstituted Benzenes



Synfacts

925

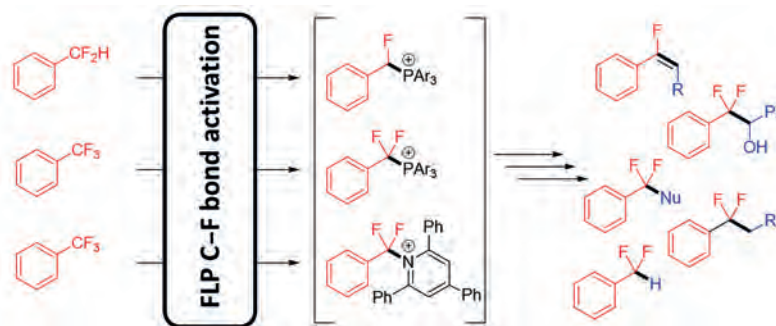
Synlett

Synlett 2020, 31, 933–937
DOI: 10.1055/s-0039-1690811

R. Gupta
A. K. Jaiswal
D. Mandal
R. D. Young*

Department of Chemistry, Sin-
gapore

A Frustrated Lewis Pair Solution to a Frustrating Problem: Mono-Selec- tive Functionalization of C–F Bonds in Di- and Trifluoromethyl Groups



Synfacts

933

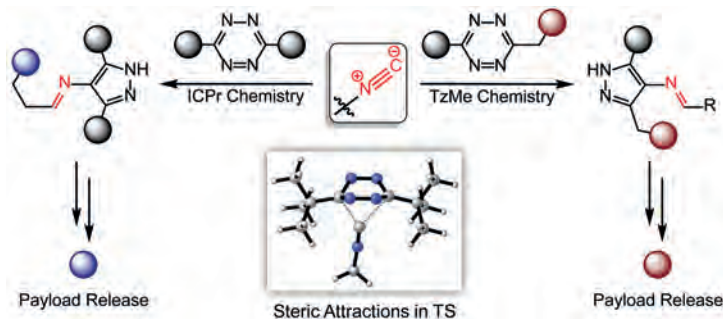
Synlett

The Unique Bioorthogonal Chemistry of Isonitriles

Account

Synlett 2020, 31, 938–944
DOI: 10.1055/s-0039-1690849

938

T. Deb
R. M. Franzini*
University of Utah, USA

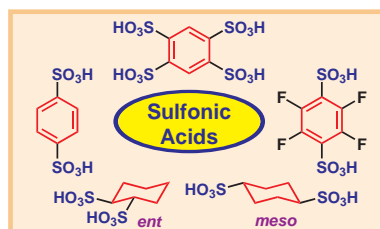
Synlett

Synthesis of Aromatic and Aliphatic Di-, Tri-, and Tetrasulfonic Acids

Account

Synlett 2020, 31, 945–952
DOI: 10.1055/s-0039-1691745

945

J. Christoffers*
M. S. Wickleder
Carl von Ossietzky Universität
Oldenburg, Germany

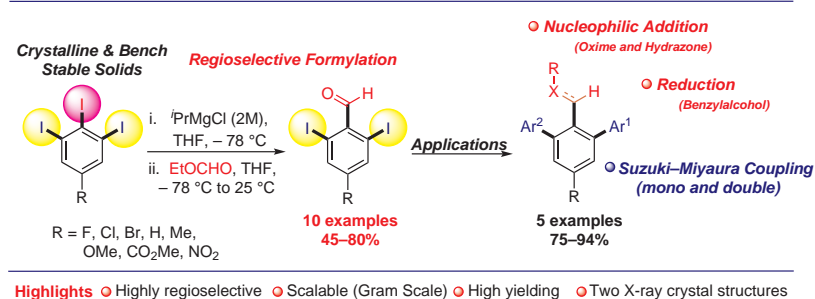
Synlett

Mild, Efficient, and Highly Regioselective Synthesis of 2,6-Diiodobenzaldehyde Derivatives

Letter

Synlett 2020, 31, 953–958
DOI: 10.1055/s-0040-1708004

953

R. M. Al-Zoubi*
K. T. Jaradat
W. K. Al-Jammal
R. McDonald
Jordan University of Science and
Technology, Jordan

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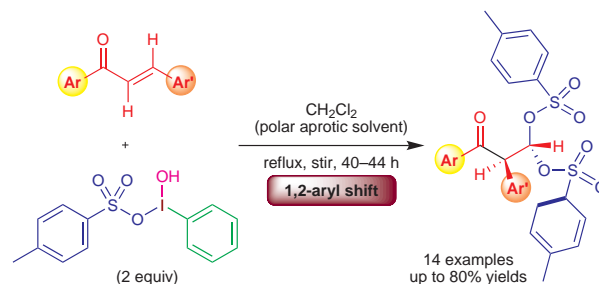
Synlett 2020, 31, 959–964
DOI: 10.1055/s-0040-1708010R. Kamal*
V. Kumar
R. Kumar
S. Saini
R. Kumar

Kurukshetra University, India

Oxidative Rearrangement via 1,2-Aryl Migration using Hydroxy-(tosyloxy)iodobenzene in a Polar Aprotic Solvent

Letter

959



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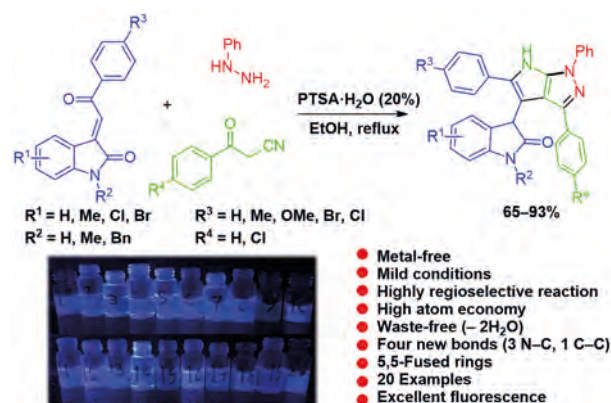
Synlett 2020, 31, 965–971
DOI: 10.1055/s-0039-1690887M. T. Nazeri
H. Farhid
S. Javanbakht
A. Shaabani*
B. Notash

Shahid Beheshti University, Iran

Highly Efficient Chemoselective Synthesis of Pyrrolo[2,3-c]pyrazole Bearing Oxindole via Sequential Condensation–Michael Addition–Intramolecular Cyclization Reactions

Letter

965



Synlett

Synlett 2020, 31, 972–976
DOI: 10.1055/s-0040-1708009J. Liu
V. Hürlimann
R. Emter
A. Natsch
C. Esposito
S. M. Linker
Y. Zou
L. Zhou
Q. Wang*
S. Riniker*
P. Kraft*Fudan University, P. R. of China
Givaudan Fragrances S&T, Swit-
zerland
ETH Zürich, Switzerland

A New Family of Rigid Dienone Musks Challenges the Perceptive Range of the Human Olfactory Receptor OR5AN1

Letter

972



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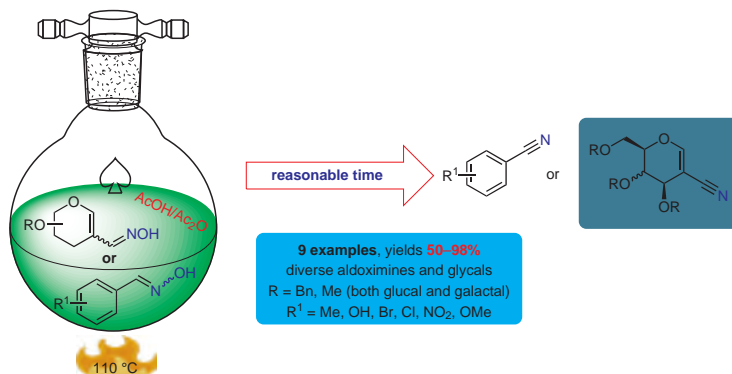
Synlett 2020, 31, 977–981
DOI: 10.1055/s-0040-1708007

T. F. Mabasa
J. Mabasa
M. Simelane
B. Vatsha
B. C. E. Makhubela
H. H. Kinfe*
University of Johannesburg,
South Africa

Acetic Anhydride–Acetic Acid as a New Dehydrating Agent of Aldoximes for the Preparation of Nitriles: Preparation of 2-Cyanoglycals

Letter

977



Synlett

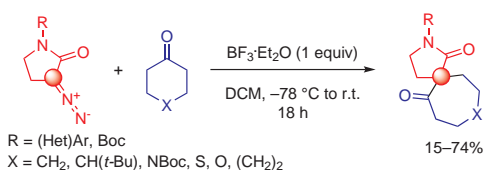
Synlett 2020, 31, 982–986
DOI: 10.1055/s-0040-1708011

M. Eremyeva
D. Zhukovsky
D. Dar'in
M. Krasavin*
Saint Petersburg State University,
Russian Federation

The Use of α -Diazo- γ -butyrolactams in the Büchner–Curtius–Schlotterbeck Reaction of Cyclic Ketones Opens New Entry to Spirocyclic Pyrrolidones

Letter

982



Synlett

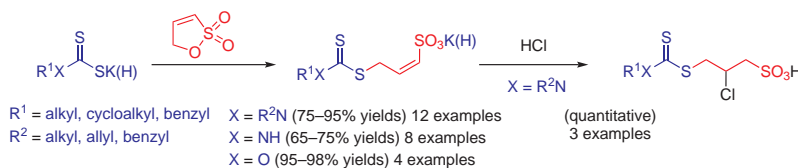
Synlett 2020, 31, 987–990
DOI: 10.1055/s-0040-1707970

M. Khalili Fomeshi
A. Ziyaei Halimehjani*
P. Beier*
Kharazmi University, Iran
Institute of Organic Chemistry
and Biochemistry of the Czech
Academy of Sciences, Czech
Republic

Synthesis of Novel α,β -Unsaturated Sulfonic Acid Derivatives Containing Dithiocarbamate/Xanthate Groups by Ring Opening of an α,β -Unsaturated γ -Sultone

Letter

987

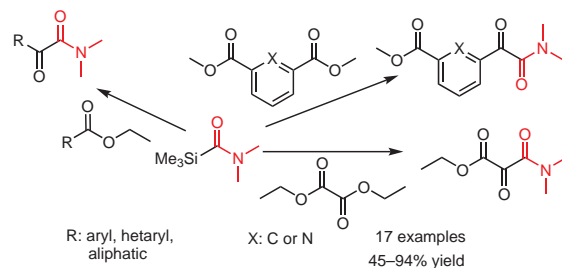


Synlett

Synlett 2020, 31, 991–996
DOI: 10.1055/s-0039-1691737Y. Han
S. Han
J. Ma
W. Li
J. Chen*Shanxi Normal University, P. R.
of ChinaPractical Approach for the Preparation of α -Keto Amides by Direct Aminocarbonylation of Carboxylic Esters with a Carbamoylsilane

Letter

991

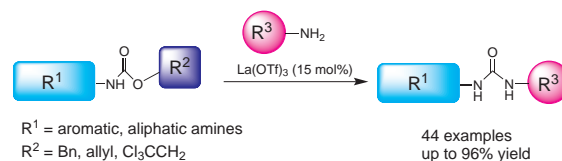


Synlett

Synlett 2020, 31, 997–1002
DOI: 10.1055/s-0040-1707991T. Bui
H.-K. Kim*Jeonbuk National University
Medical School and Hospital, Re-
public of KoreaLanthanum(III) Trifluoromethanesulfonate Catalyzed Direct Synthesis of Ureas from *N*-Benzyloxycarbonyl-, *N*-Allyloxycarbonyl-, and *N*-2,2,2-Trichloroethoxycarbonyl-Protected Amines

Letter

997

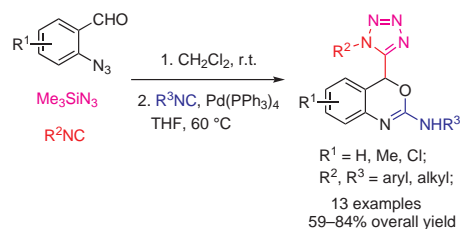


Synlett

Synlett 2020, 31, 1003–1006
DOI: 10.1055/s-0039-1690831Q.-X. Feng
Z.-Y. Mu
G. Yao
J.-A. Zhang
H.-T. He
Y.-L. Pang
J. Xiong*Hubei University of Science and
Technology, P. R. of ChinaEfficient Synthesis of 4*H*-3,1-Benzoxazine Derivatives via One-Pot Sequential Passerini-Azide/Palladium-Catalyzed Azide–Isocyanide Coupling/Cyclization Reaction

Letter

1003



Synlett

Synlett 2020, 31, 1007–1010
DOI: 10.1055/s-0037-1610757

K. Ota*

K. Kamaike

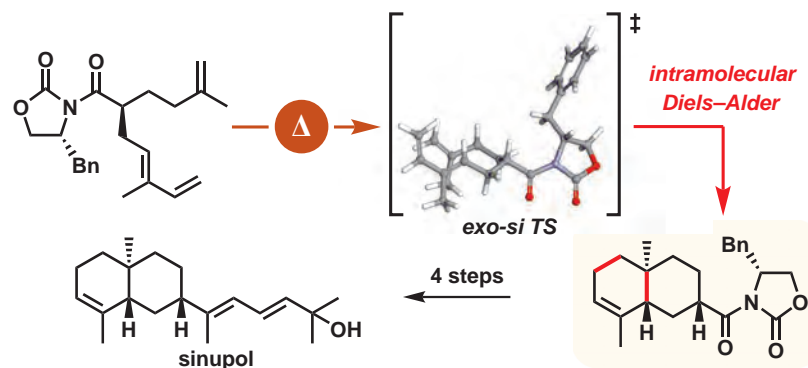
H. Miyaoka*

Tokyo University of Pharmacy
and Life Sciences, Japan

A Versatile, Diels–Alder Reaction-Based Approach to Prenyleudesmane Diterpenoids: A Concise Total Synthesis of Sinupol

Letter

1007



Synlett

Synlett 2020, 31, 1011–1014
DOI: 10.1055/s-0040-1707990

F. Liu

Y. Cui

Y. Dong

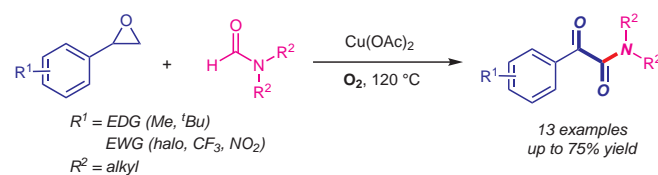
H. Xu*

Chinese Academy of Medical
Sciences and Peking Union
Medical College, P. R. of China

Copper-Mediated Synthesis of Aryl α -Keto Amides from Epoxide Derivatives

Letter

1011



Synlett

Synlett 2020, 31, 1015–1021
DOI: 10.1055/s-0040-1708003

S. Fripiat

A. Peresson

T. Perse

Y. Ramondenc

C. Schneider

O. Querolle

P. Angibaud

V. Poncellet

L. Meerpoel

V. Levacher

L. Bischoff

C. Baudequin*

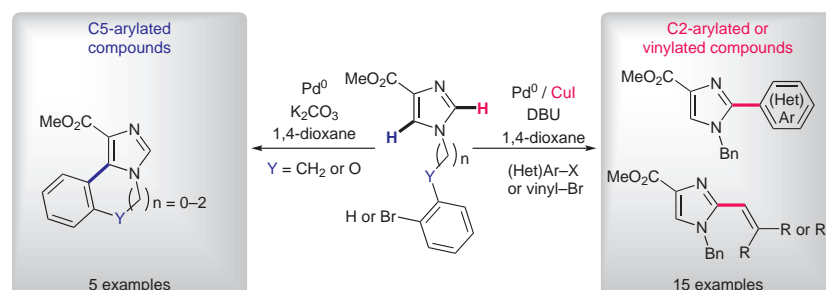
C. Hoarau*

Normandie Univ, INSA Rouen,
UNIROUEN, CNRS, France

Pd(0)-Catalyzed Direct Inter- and Intramolecular C–H Functionalization of 4-Carboximidazoles

Letter

1015

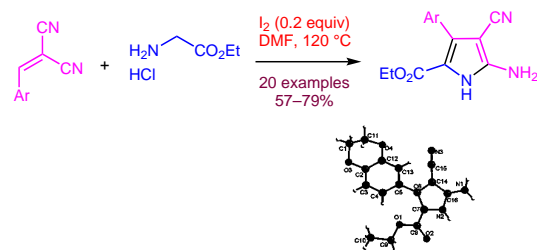


Z. Su

S. Wang

N. Luo

C. Wang*

Yangzhou University, P. R. of
China

Synlett

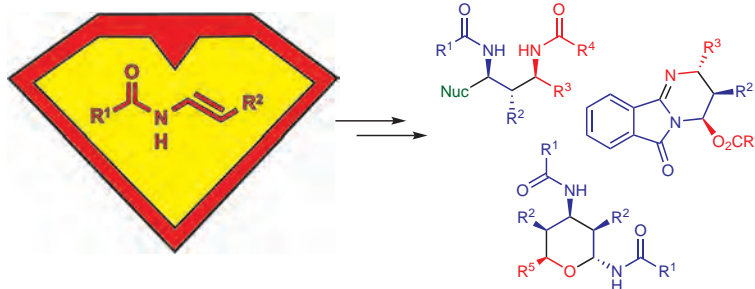
Rapid Assembly of Molecular Complexity from Simple Enamides

Synpacts

1027

Synlett 2020, 31, 1027–1032
DOI: 10.1055/s-0039-1690841

P. Kramer
G. Manolikakes*
TU Kaiserslautern, Germany



Synlett

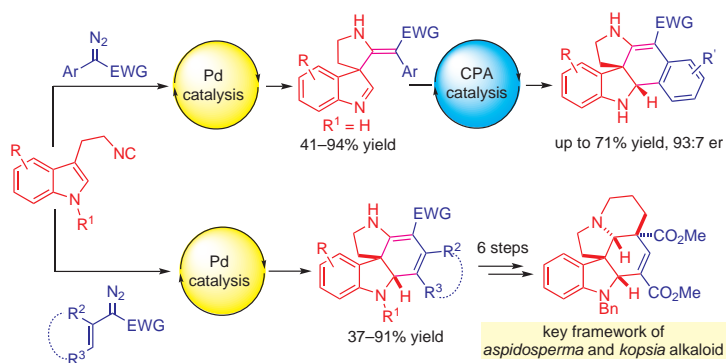
3-(2-Isocyanoethyl)indole: A Versatile Reagent for Polycyclic Spiroindoline Synthesis

Synpacts

1033

Synlett 2020, 31, 1033–1039
DOI: 10.1055/s-0039-1690853

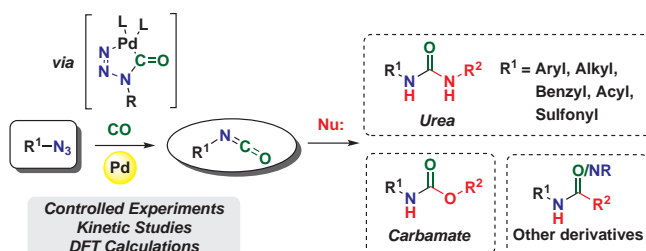
G.-S. Chen
X.-T. Lin
Y.-L. Liu*
Guangzhou University,
P. R. of China



Synlett 2020, 31, 1040–1049
DOI: 10.1055/s-0039-1690859

J. Feng
Z. Zhang
X. Li*

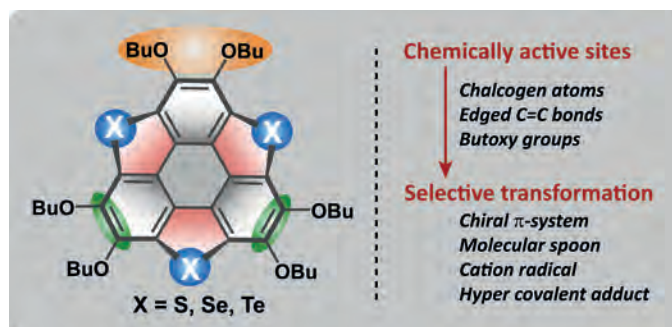
Z. Zhang*
China Agricultural University,
P. R. of China



Synlett 2020, 31, 1050–1063
DOI: 10.1055/s-0039-1690867

D. Li
X. Shao*

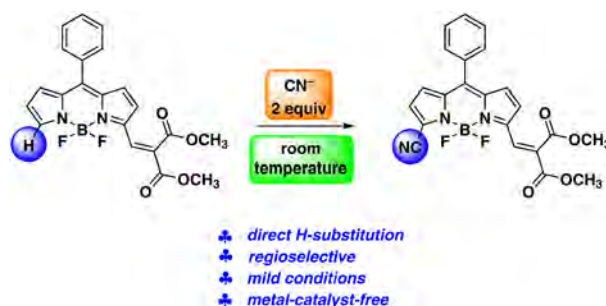
Lanzhou University, P. R. of China



Synlett 2020, 31, 1064–1066
DOI: 10.1055/s-0039-1690888

C. Gayretli
E. Teknikel
S. Cinar
C. Unaleroglu*

Hacettepe University, Turkey

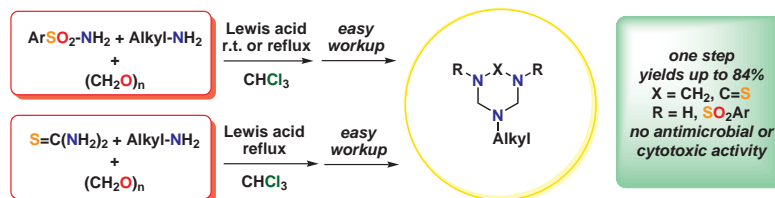


Synlett

Straightforward Three-Component Synthesis of *N*',*N*''-Disubstituted *N*-Alkyl-1,3,5-Triazinanes

Letter

1067

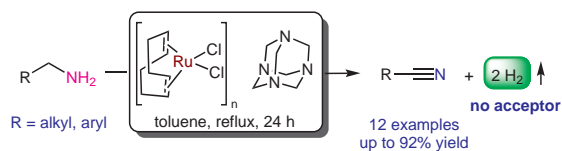
Synlett 2020, 31, 1067–1072
DOI: 10.1055/s-0039-1690900A. V. Kletskov*
A. Frontera
A. A. Sinelshchikova
M. S. Grigoriev
V. P. Zaytsev
M. V. Grudova
A. S. Bunev
S. Presnukhina
A. Shetnev
F. I. ZubkovPeoples' Friendship University of
Russia (RUDN University), Rus-
sian Federation

Synlett

Ruthenium(II)-Complex-Catalyzed Acceptorless Double Dehydrogenation of Primary Amines to Nitriles

Letter

1073

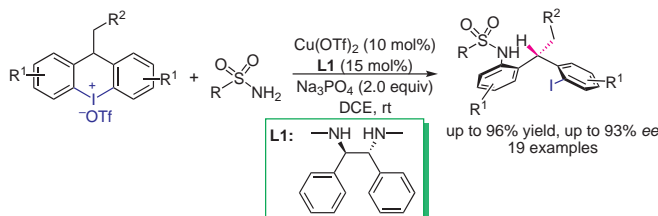
Synlett 2020, 31, 1073–1076
DOI: 10.1055/s-0040-1708016M. Kannan
S. Muthaiah*
National Institute of Technology
Kurukshetra, India

Synlett

Copper-Catalyzed Asymmetric Intermolecular *N*-Monoarylation of Unprotected Sulfonamides via Desymmetrization of Diaryliodonium Salts at Room Temperature

Letter

1077

Synlett 2020, 31, 1077–1082
DOI: 10.1055/s-0040-1707121Y.-L. Li
C. Zhang
X. Jin*
X.-L. Yu*
Z. Wang
H.-Z. Zhang
W.-Q. Yang*
Linyi University, P. R. of China

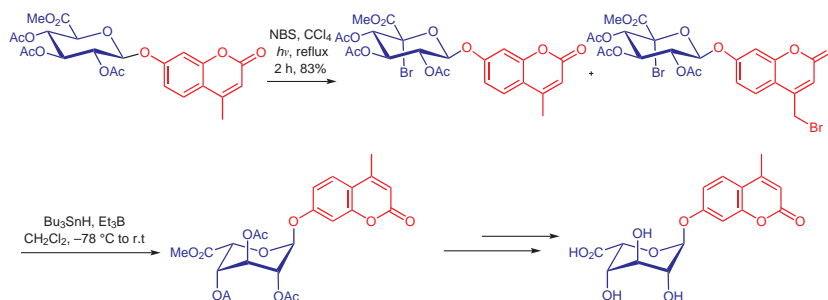
- ★ Intermolecular asymmetric aryl C–N cross-coupling reaction
- ★ At room temperature for *N*-arylation of sulfonamides

Synlett

Synlett 2020, 31, 1083–1086
DOI: 10.1055/s-0040-1708021J. Tian
W. Ouyang
Y. He
Q. Ning
J. Bai
H. Ding*
Q. Xiao*Jiangxi Science &
Technology Normal University,
P. R. of ChinaPractical Synthesis of the Fluorogenic Enzyme Substrate
4-Methylumbelliferyl α -L-Idopyranosiduronic Acid

Letter

1083



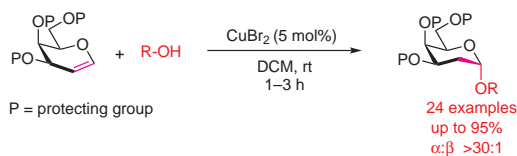
Synlett

Synlett 2020, 31, 1087–1093
DOI: 10.1055/s-0040-1707098Y. Dong
M. Yuma
Y. Mei
N. Jiang
G. Yang
Z. Wang
J. Zhang*East China Normal University,
P. R. of China

Copper-Catalyzed Stereoselective Synthesis of 2-Deoxygalactosides

Letter

1087



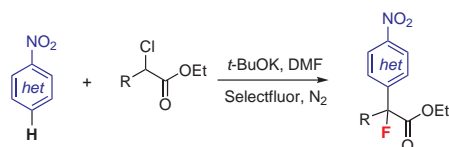
- First Cu-catalyzed synthesis of 2-deoxygalactosides
- Mild reaction conditions
- Affordable copper catalyst without additional ligand
- Broad substrate scope with high yields and excellent α -selectivity
- Gram scale and synthesis of trisaccharide

Synlett

Synlett 2020, 31, 1094–1096
DOI: 10.1055/s-0039-1690862F. Y. Al-Mkhaizim
M. F. Greaney*
University of Manchester, UK α -Fluorination of Nitrobenzenes and Nitropyridines via Vicarious Nucleophilic Substitution of Hydrogen

Letter

1094

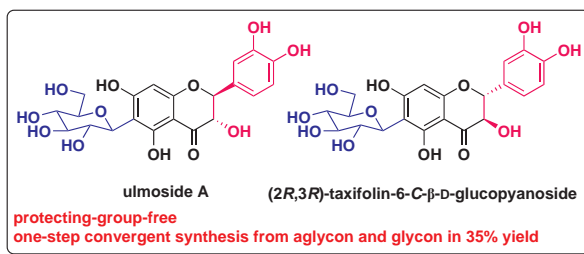


Synlett

Synlett 2020, 31, 1097–1101
DOI: 10.1055/s-0040-1707971L. Macha
A. R. Dorigundla
R. Gurrapu
U. S. Vanka
V. R. Batchu*CSIR-Indian Institute of Chemical
Technology, IndiaTotal Synthesis of the Natural Products Ulmoside A and (2*R*,3*R*)-Taxifolin-6-*C*- β -D-glucopyranoside

Letter

1097

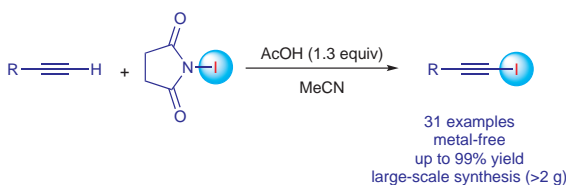


Synlett

Synlett 2020, 31, 1102–1106
DOI: 10.1055/s-0040-1708002M. Yao*
J. Zhang
S. Yang
E. Liu
H. Xiong*Jingchu University of Technol-
ogy, P. R. of ChinaAcetic Acid Promoted Direct Iodination of Terminal Alkynes with *N*-Iodosuccinimide: Efficient Preparation of 1-Iodoalkynes

Letter

1102



Synlett

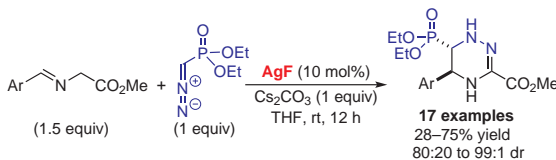
Synlett 2020, 31, 1107–1111
DOI: 10.1055/s-0039-1690894Y.-J. Huang
J. Nie
C. W. Cheung*
J.-A. Ma*

Tianjin University, P. R. of China

Silver-Catalyzed [3+3] Annulation of Glycine Imino Esters with Seyferth–Gilbert Reagent To Access Tetrahydro-1,2,4-triazinecarboxylate Esters

Letter

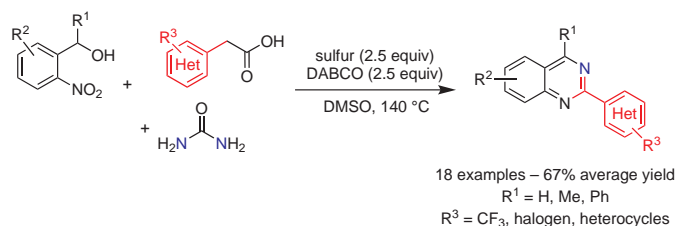
1107



Synlett 2020, 31, 1112–1116
DOI: 10.1055/s-0040-1707113

K. X. Nguyen
D. K. Nguyen
P. H. Pham
H. V. Le
T. T. Nguyen*
N. T. Phan*

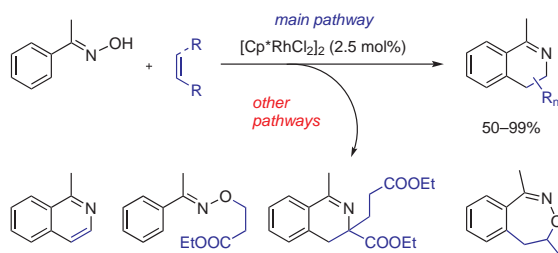
Ho Chi Minh City University of
Technology (HCMUT), Vietnam



Synlett 2020, 31, 1117–1120
DOI: 10.1055/s-0040-1707961

E. A. Trifonova
A. A. Komarova
D. Chusov
D. S. Perekalin*

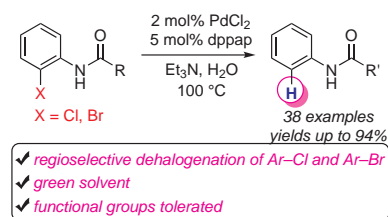
Russian Academy of Sciences,
Russian Federation



Synlett 2020, 31, 1124–1128
DOI: 10.1055/s-0040-1707116

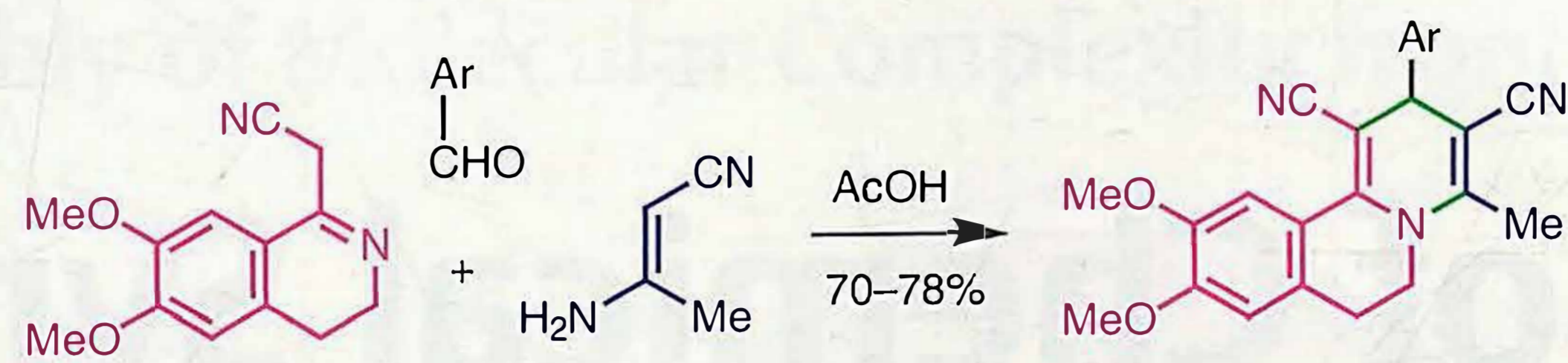
Y. Tang[◇]
M. Li[◇]
H. Gao
G. Rao
Z. Mao*

Yunnan University of Chinese
Medicine, P. R. of China



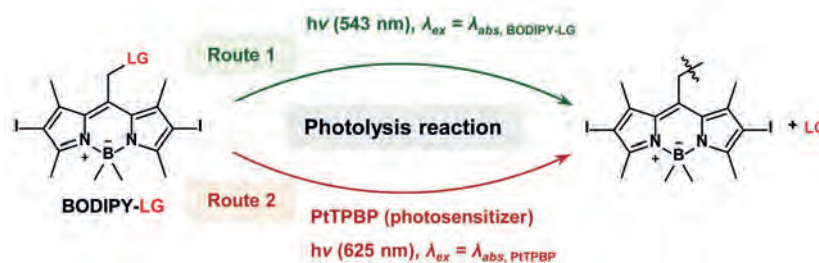
Synlett 2020, 31, 1126–1128
DOI: 10.1055/s-0039-1690902

F. M. Saleh
H. M. Hassaneen
I. A. Abdelhamid*
Cairo University, Egypt

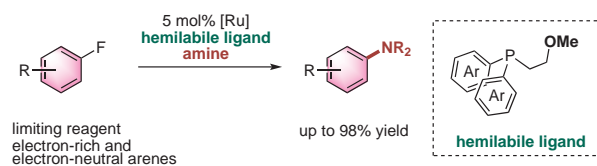


Ar = C₆H₅, 4-MeC₆H₄, 4-MeOC₆H₄, 2,4-(MeO)₂C₆H₃,
4-ClC₆H₄, 4-O₂NC₆H₄, 3,4-OCH₂OC₆H₃

One-Photon Upconversion-Like Photolysis: A New Strategy to Achieve Long-Wavelength Light-Excitable Photolysis



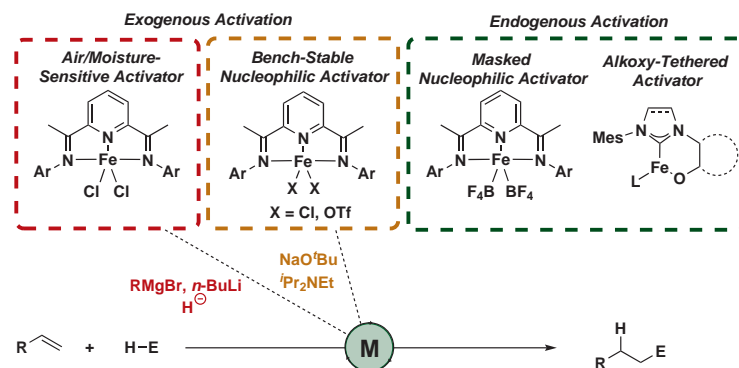
Transition-Metal-Catalyzed Amination of Aryl Fluorides



Synlett 2020, 31, 1140–1146
DOI: 10.1055/s-0039-1690873

J. Peng
S. P. Thomas*
University of Edinburgh, UK

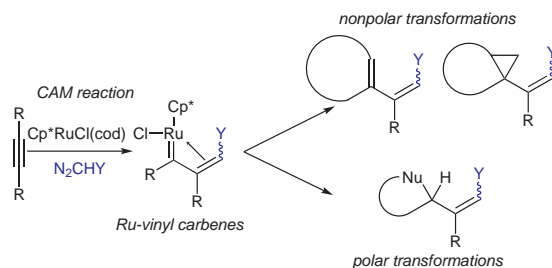
1140



Synlett 2020, 31, 1147–1157
DOI: 10.1055/s-0039-1690861

D. Padín
J. A. Varela
C. Saá*
Universidade de Santiago de Compostela, Spain

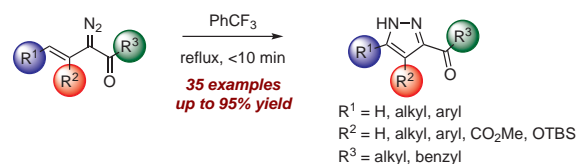
1147



Synlett 2020, 31, 1158–1162
DOI: 10.1055/s-0040-1707111

D. Drikermann
V. Kerndl
H. Görls
I. Vilotijevic*
Friedrich-Schiller-University
Jena, Germany

1158



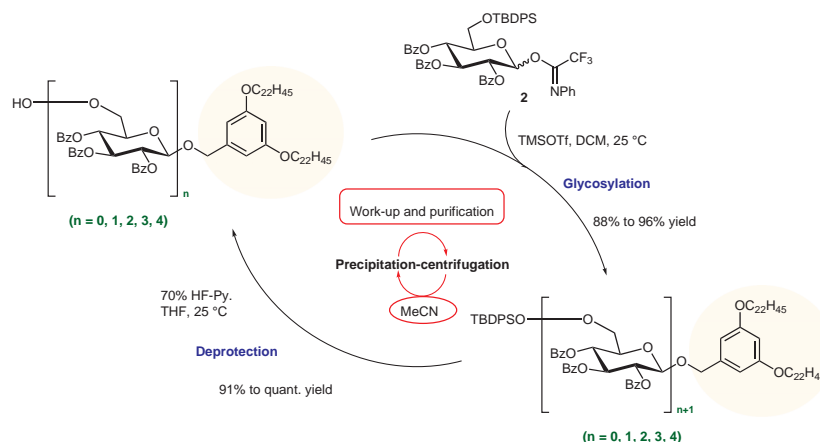
Synlett

Rapid Assembly of Oligosaccharides by Using a Hydrophobic Tag-Assisted Liquid-Phase Method

Letter

Synlett 2020, 31, 1163–1166
DOI: 10.1055/s-0040-1707965

1163

D. Lu
S. Wang
H. Yin
F. Chu*
Q. Wei*
P. Wang*Shanghai Jiao Tong University,
P. R. of China
Shanghai University of Medicine
& Health Sciences Affiliated
Sixth People's Hospital South
Campus, P. R. of China

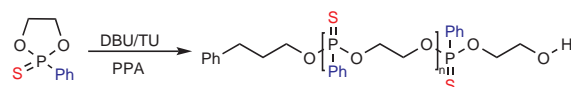
Synlett

Organocatalytic Ring-Opening Polymerization Strategies for Synthesis of Poly(phosphothioesters) with a Pendent Phenyl Group

Letter

Synlett 2020, 31, 1167–1171
DOI: 10.1055/s-0040-1707947

1167

H. Yan
G. Xu*
R. Yang
C. Lv
L. Zhou
X.-Q. Hao*
Q. Wang*Zhengzhou University, P. R. of
China
Qingdao Institute of Bioenergy
and Bioprocess Technology, P. R.
of ChinaOrganocatalytic ring-opening polymerization
Narrow molecular weight distributions (1.14–1.20)
High molecular weight (up to 45.2 kg/mol)

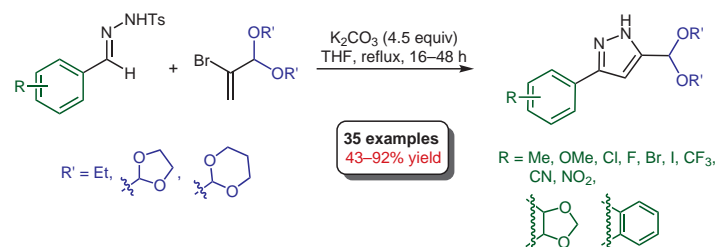
Synlett

Highly Regioselective Synthesis of 3,5-Substituted Pyrazoles from Bromovinyl Acetals and *N*-Tosylhydrazones

Letter

Synlett 2020, 31, 1172–1176
DOI: 10.1055/s-0039-1690885

1172

A. Westermeyer
Q. Llopis
G. Guillamot
P. Phansavath*
V. Ratovelomanana-
Vidal*
PSL University, France

Synlett

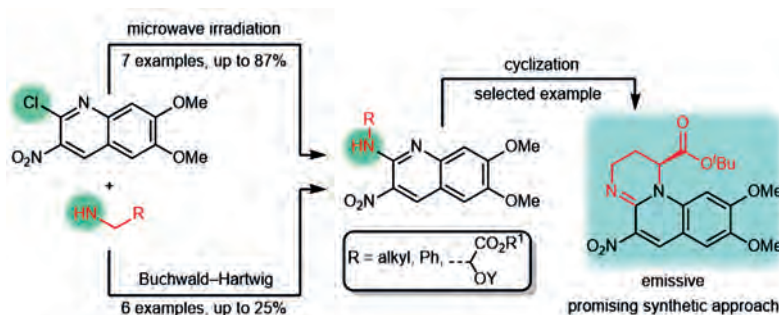
Synlett 2020, 31, 1177–1181
DOI: 10.1055/s-0040-1707810P. Seubert
M. Freund
R. Rudolf
Y. Lin
L. Altevogt
U. Bilitewski
A. Baro
S. Laschat*

Universität Stuttgart, Germany

Buchwald–Hartwig versus Microwave-Assisted Amination of Chloroquinolines: En Route to the Pyoverdinin Chromophore

Letter

1177



Synlett

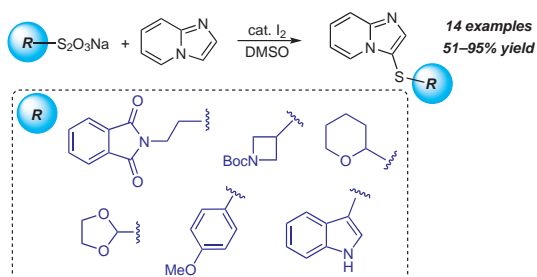
Synlett 2020, 31, 1182–1184
DOI: 10.1055/s-0040-1707108M. A. E. Al-Saedy
J. P. Harrity*

The University of Sheffield, UK

A Practical and Versatile Method for the C–H Sulfenylation of Imidazo[1,2-a]pyridines

Letter

1182



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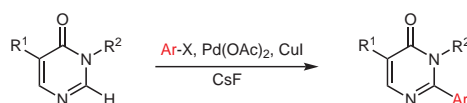
Synlett 2020, 31, 1185–1190
DOI: 10.1055/s-0040-1707523S. C. Ruiz
M. Muselli
S. Fripiat
T. M. Diallo
A. Mohamed-Cherif
V. Levacher
C. Baudequin*
L. Bischoff*
C. Hoarau*

University of Rouen, France

Ortho-Directed Palladium-Catalyzed Direct C–H Functionalization of 3-Picolinyl- and 3-(2-Cyanoethyl)pyrimidin-4(3H)-ones with Aryl Halides

Letter

1185

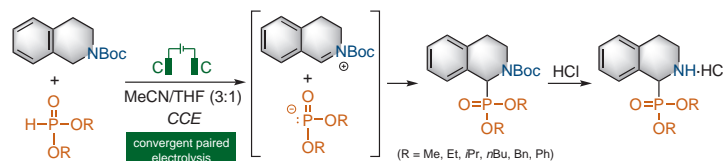
20 examples, $\text{R}^1 = \text{H, OMe or Ar group}$, $\text{R}^2 = \text{-(CH}_2\text{)}_2\text{-2-pyridyl or (CH}_2\text{)}_2\text{CN}$, (X = I, Br)
up to 75% yield; possible removal of 2-picolyl group

Synlett

Synlett 2020, 31, 1191–1196
DOI: 10.1055/s-0039-1690899A. Ollivier
S. Sengmany*
M. Rey
T. Martens*
E. LéonelUniversité Paris Est Créteil,
FranceDirect Phosphonylation of *N*-Carbamate-tetrahydroisoquinoline by Convergent Paired Electrolysis

Letter

1191

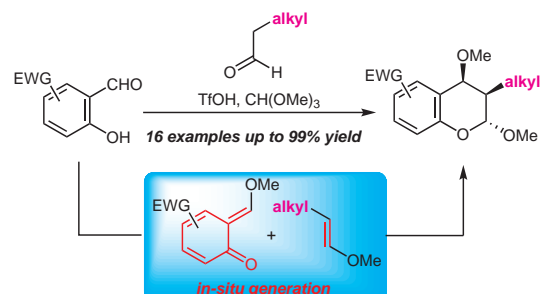


Synlett

Synlett 2020, 52, 1197–1200
DOI: 10.1055/s-0040-1707522K. Tanaka
K. Ueno
Y. Tanaka
N. Ohtsuka
Y. Asada
M. Kishimoto
S. Sunaga
Y. Hoshino*
K. Honda*Yokohama National University,
JapanDual In Situ Generation of Aliphatic Vinyl Ethers and Electron-Deficient *ortho*-Quinone Methides for Inverse-Electron-Demand [4+2] Cycloaddition: A Selective One-Pot Synthesis of 3-Alkylchromanes

Letter

1197



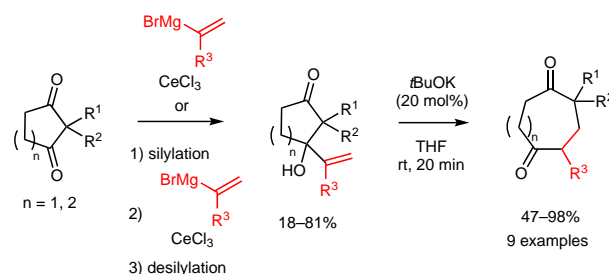
Synlett

Synlett 2020, 31, 1201–1204
DOI: 10.1055/s-0040-1707862S. Kanaya
Y. Asaji
T. Yoshimura
J.-i. Matsuo*
Kanazawa University, Japan

Two-Carbon Ring-Enlargement of Cyclic 1,3-Diketones to Cyclic 1,5-Diketones

Letter

1201



Synlett

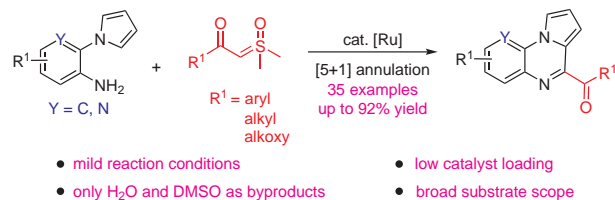
Synlett 2020, 31, 1205–1210
DOI: 10.1055/s-0040-1707119X.-F. Cui
F.-P. Hu
X.-Q. Zhou
Z.-Z. Zhan
G.-S. Huang*

Lanzhou University, P. R. of China

Ruthenium-Catalyzed Synthesis of Pyrrolo[1,2-*a*]quinoxaline Derivatives from 1-(2-Aminophenyl)pyrroles and Sulfoxonium Ylides

Letter

1205

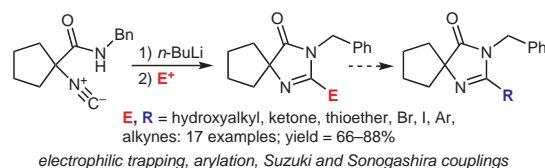


Synlett

Synlett 2020, 31, 1211–1215
DOI: 10.1055/s-0040-1708015S. Fripiat
C. Leterrier
C. Baudequin
C. Hoarau
L. Bischoff*Normandie University
University of Rouen, FranceFormation of Imidazolones by Ring Closure of α -Isocyanoamides: Exploring New Reactivities

Letter

1211



Synlett

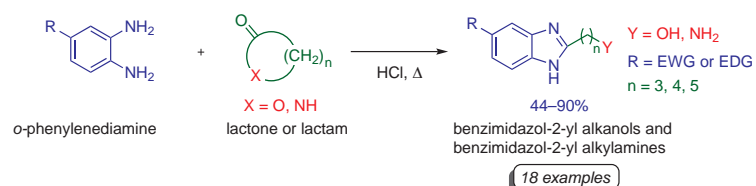
Synlett 2020, 31, 1216–1220
DOI: 10.1055/s-0040-1707112O. Castillo-Aguilera
P. Depreux
A. Ballée
F. Beaurain
P. B. Arimondo
L. Goossens*

Univ. Lille, France

Study of the Effect of Substituents of *ortho*-Phenylenediamines in the Opening of Lactones and Lactams for Access to Benzimidazol-2-yl Alkanols and Benzimidazol-2-yl Alkylamines

Letter

1216



Synlett

Synlett 2020, 31, 1221–1225
DOI: 10.1055/s-0040-1707946

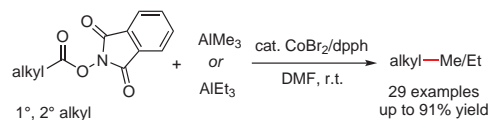
Z.-Z. Wang
G.-Z. Wang
B. Zhao
R. Shang*
Y. Fu*

University of Science and Technology of China, P. R. of China
The University of Tokyo, Japan

Cobalt-Catalyzed Decarboxylative Methylation and Ethylation of Aliphatic N-(Acyloxy)phthalimides with Organoaluminum Reagents

Letter

1221



Synlett

Synlett 2020, 31, 1226–1230
DOI: 10.1055/s-0040-1707131

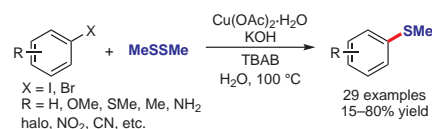
Y.-y. Wang
X.-m. Wu*
M.-h. Yang

Lishui University, P. R. of China

Copper-Catalyzed Methylthiolation of Aryl Iodides and Bromides with Dimethyl Disulfide in Water

Letter

1226



Synlett

Synlett 2020, 31, 1231–1236
DOI: 10.1055/s-0040-1707858

W. Zheng

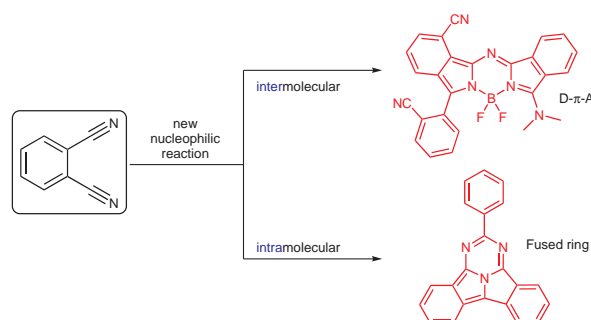
C.-H. Li*

Nanjing University, P. R. of China

New Organic Dyes from Phthalonitrile via Interesting Nucleophilic Reactions

Synfacts

1231



Synlett

Synlett 2020, 31, 1237–1243
DOI: 10.1055/s-0040-1707130

M. Lange

Y. Zi

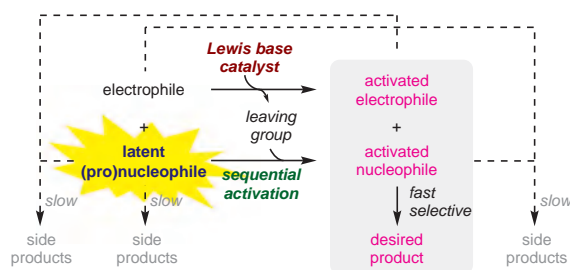
I. Vilotijevic*

Friedrich Schiller University Jena,
Germany

Latent (Pro)Nucleophiles in Enantioselective Lewis Base Catalyzed Allylic Substitutions

Synfacts

1237



Synlett

Synlett 2020, 31, 1244–1258
DOI: 10.1055/s-0039-1690904

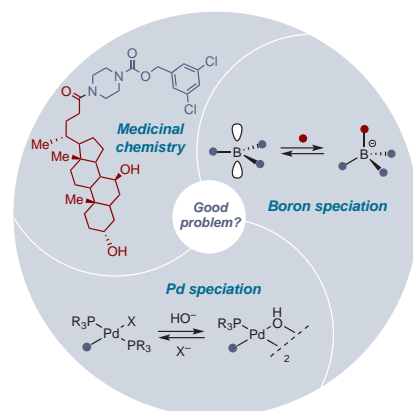
A. J. Watson*

University of St Andrews, UK

The Problem with Problems: Fundamental to Applied Research Using Palladium

Account

1244



Synlett

Synlett 2020, 31, 1259–1267
DOI: 10.1055/s-0040-1707962

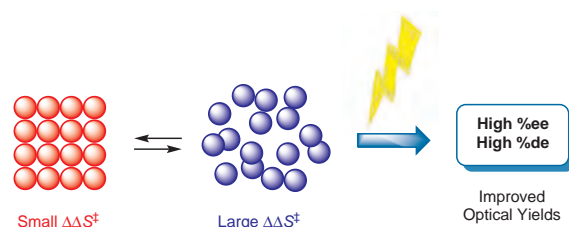
T. Mori*

Osaka University, Japan

Relevance of the Entropy Factor in Stereoselectivity Control of Asymmetric Photoreactions

Account

1259



Synlett

Synlett 2020, 31, 1268–1272
DOI: 10.1055/s-0040-1707822

S. K. Pandey

V. Gupta

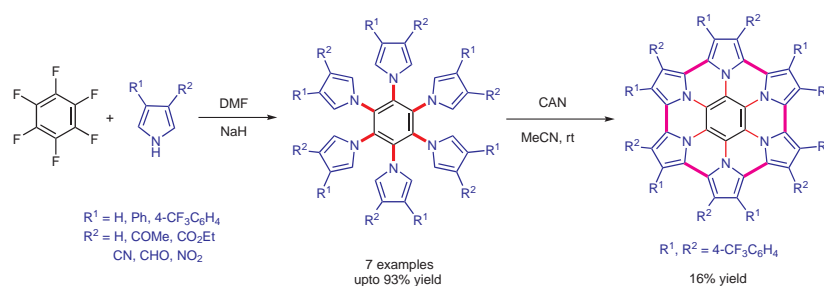
R. P. Singh*

Indian Institute of Technology
Delhi, India

CAN-Mediated Oxidative Cyclodehydrogenation of Hexapyrrolylbenzenes

Letter

1268



Synlett

Synlett 2020, 31, 1273–1276
DOI: 10.1055/s-0040-1707811

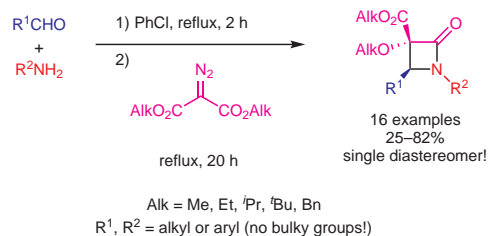
J. Synofzik
O. Bakulina
D. Dar'in
G. Kantin
M. Krasavin*

Saint Petersburg State University,
Russian Federation

Dialkyl Diazomalonates in Transition-Metal-Free, Thermally Promoted, Diastereoselective Wolff β -Lactam Synthesis

Letter

1273



Synlett

Synlett 2020, 31, 1277–1281
DOI: 10.1055/s-0040-1707138

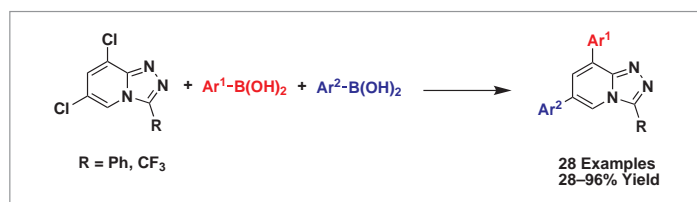
D. Kuhrt
P. Ehlers
A. Spannenberg
P. Langer*

Universität Rostock, Germany

Site-Selective Suzuki–Miyaura Reaction of 6,8-Dichloro-1,2,4-triazolo[4,3-*a*]pyridines

Letter

1277



Synlett

Synlett 2020, 31, 1282–1286
DOI: 10.1055/s-0040-1707467

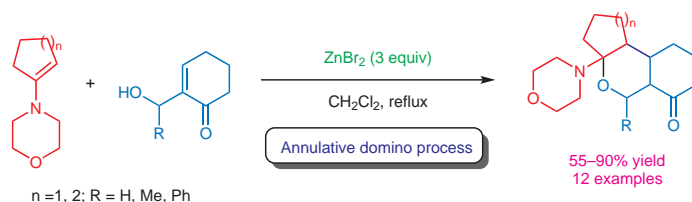
G. Bouhalleb
A. Meddeb
N. F. Bourguiba
J. Legros
G. Poli
F. Rezgui*

Université de Tunis El Manar,
Tunisia

First Zinc Bromide Promoted Annulative Domino Reactions between Enamines and Cyclic Morita–Baylis–Hillman Alcohols: Synthesis of *N,O*-Ketals

Letter

1282

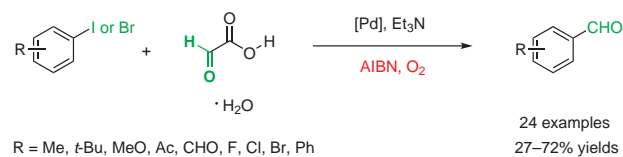


Synlett

Synlett 2020, 31, 1287–1290
DOI: 10.1055/s-0040-1707140H. Cao
W. Pu
J. Zhang
P. Yan
J. Zhang
S. Xu*East China University of Science
and Technology, P. R. of ChinaDecarboxylative Formylation of Aryl Halides with Glyoxylic Acid by
Palladium Catalysis under Oxygen

Letter

1287

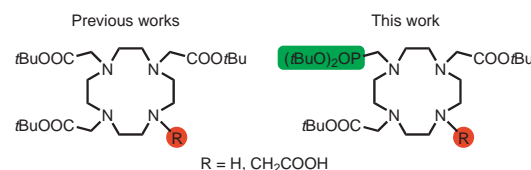


Synlett

Synlett 2020, 31, 1291–1294
DOI: 10.1055/s-0040-1707893F. Travaglini
L. Biondi
L. Lattuada*
G. B. Giovenzana*Università degli Studi del
Piemonte Orientale, Italy
Bracco SpA, Innovation Hub,
ItalySynthesis of Two Novel Mixed Bifunctional Chelating Agents:
DO2AP(*t*Bu)₄ and DO3AP(*t*Bu)₄

Letter

1291

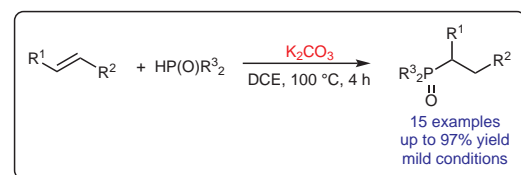


Synlett

Synlett 2020, 31, 1295–1297
DOI: 10.1055/s-0040-1707852Z. Huang
W. Liu
S. Li
Y. Yang
S. Guo*
H. CaiNanchang University, P. R. of
ChinaPotassium Carbonate Promoted Nucleophilic Addition of Alkenes with
Phosphites

Letter

1295



Synlett

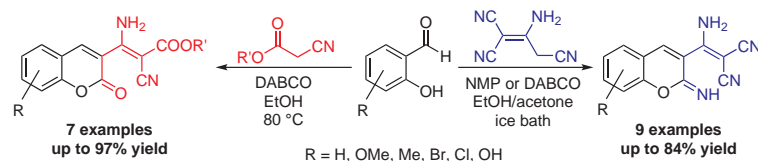
Synlett 2020, 31, 1298–1302
DOI: 10.1055/s-0039-1690880D. Lopes
M. Costa
J. Louçano
F. Proença*

University of Minho, Portugal

A Convenient One-pot Synthesis of Chromenyl Acrylates and Acrylonitriles

Letter

1298



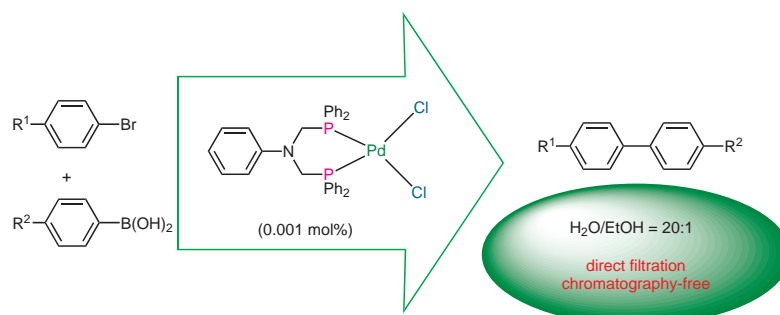
Synlett

Synlett 2020, 31, 1303–1307
DOI: 10.1055/s-0040-1707515W. Yang
W.-D. Xu
J.-J. Ning
Z.-G. Ren*
D. J. Young*Soochow University, P. R. of China
Charles Darwin University,
Australia

Aqueous Suzuki–Miyaura Coupling with Ultralow Palladium Loading and Simple Product Separation

Letter

1303



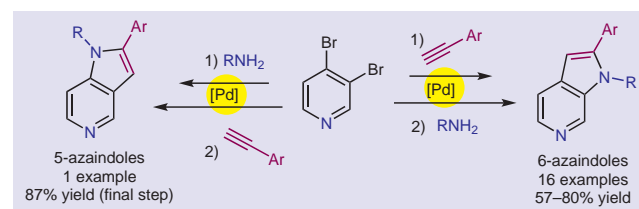
Synlett

Synlett 2020, 31, 1308–1312
DOI: 10.1055/s-0040-1707853N. T. Son
T. A. Tien
M. B. Ponce
P. Ehlers
N. T. Thuan
T. T. Dang*
P. Langer*Vietnam National University
(VNU), Vietnam
Universität Rostock, Germany

Synthesis of 5- and 6-Azaindoles by Sequential Site-Selective Palladium-Catalyzed C–C and C–N Coupling Reactions

Letter

1308



Synlett

Synlett 2020, 31, 1313–1317
DOI: 10.1055/s-0040-1707469

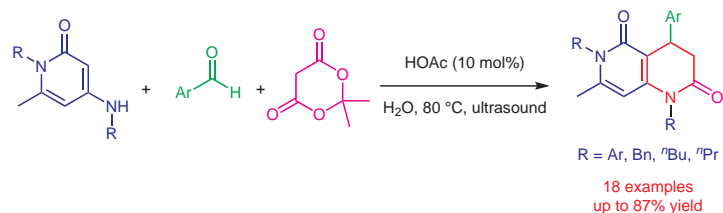
C. Li
C. Qi
F. Zhang*

Shaoxing University, P. R. of
China

An Efficient Strategy for the Synthesis of 1,6-Naphthyridine-2,5-dione Derivatives under Ultrasound Irradiation

Letter

1313



Synlett

Synlett 2020, 31, 1318–1322
DOI: 10.1055/s-0039-1690879

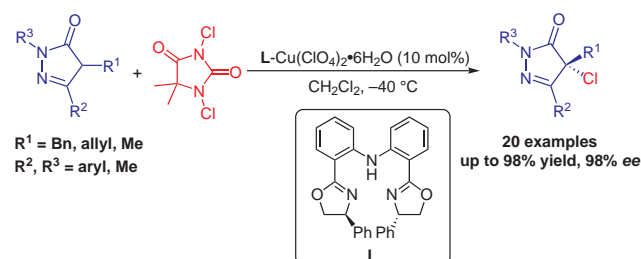
X.-Y. Chen
Z.-H. Jiang
W.-Z. Ju
H. Yin
S.-S. Qi
M.-M. Chu
Y.-F. Wang*

Zhejiang University of Technology,
P. R. of China

Asymmetric Chlorination of 4-Substituted Pyrazolones Catalyzed by Chiral Copper Complexes

Letter

1318



Synlett

Synlett 2020, 31, 1323–1327
DOI: 10.1055/s-0040-1707468

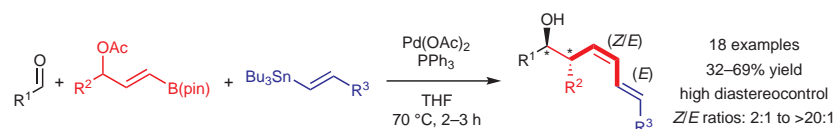
Y. Horino*
J. Sakamoto
M. Murakami
M. Sugata

University of Toyama, Japan

Synthesis of (Z)-Alkene-Containing Linear Conjugated Dienyl Homoallylic Alcohols by a Palladium-Catalyzed Three-Component Reaction

Letter

1323



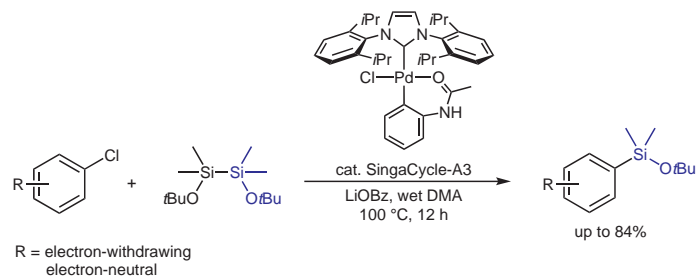
K. Fukui

H. Saito

J. Shimokawa*

H. Yorimitsu*

Kyoto University, Japan



Synlett

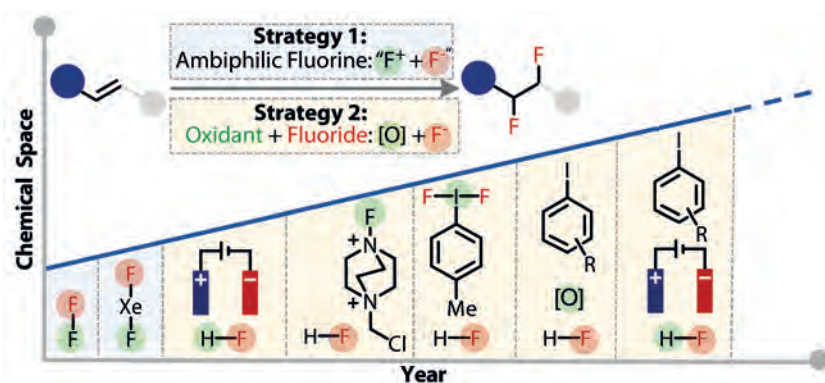
Synlett 2020, 31, 1333–1342
DOI: 10.1055/s-0040-1707143

S. Doobary
A. J. J. Lennox*
University of Bristol, UK

Alkene Vicinal Difluorination: From Fluorine Gas to More Favoured Conditions

Synfacts

1333



Synlett

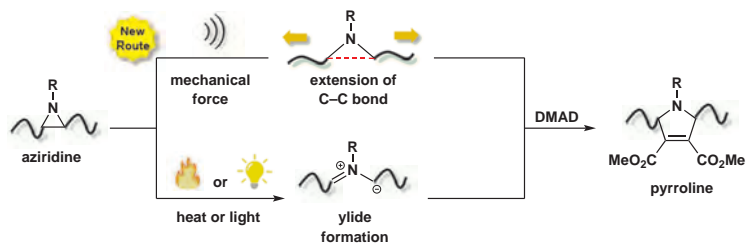
Synlett 2020, 31, 1343–1348
DOI: 10.1055/s-0040-1707145

S. Jung
S. Y. Kim
H. J. Yoon*
Korea University, South Korea

Force-Induced Cycloaddition of Aziridine: Can We Force a New Route?

Synfacts

1343



Synlett

Synlett 2020, 31, 1349–1360
DOI: 10.1055/s-0040-1707106

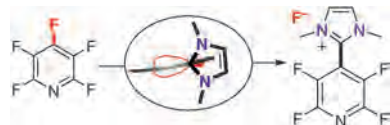
E. Pietrasiak
E. Lee*

Pohang University of Science
and Technology, South Korea

Activation of C–F, Si–F, and S–F Bonds by N-Heterocyclic Carbenes and Their Isoelectronic Analogues

Account

1349



Synlett

Synlett 2020, 31, 1361–1371
DOI: 10.1055/s-0040-1707107

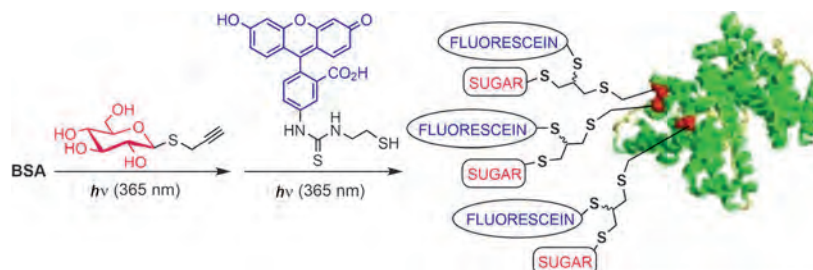
A. Dondoni*

University of Ferrara, Italy

Selected Research Topics of the Dondoni Group over the Last Two Decades (2000–2020)

Account

1361



Synlett

Synlett 2020, 31, 1372–1377
DOI: 10.1055/s-0040-1707150

S. Harada*
D. Matsuda
T. Morikawa
A. Nishida

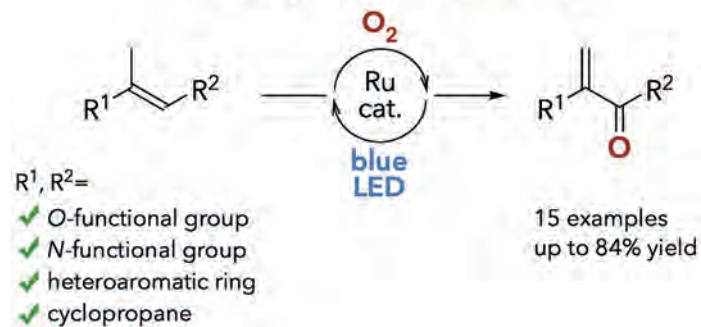
Chiba University, Japan

Direct Synthesis of Enones by Visible-Light-Promoted Oxygenation of Trisubstituted Olefins Using Molecular Oxygen

Letter

1372

One-Step Synthesis of Enones



Synlett

Synlett 2020, 31, 1378–1383
DOI: 10.1055/s-0040-1707117

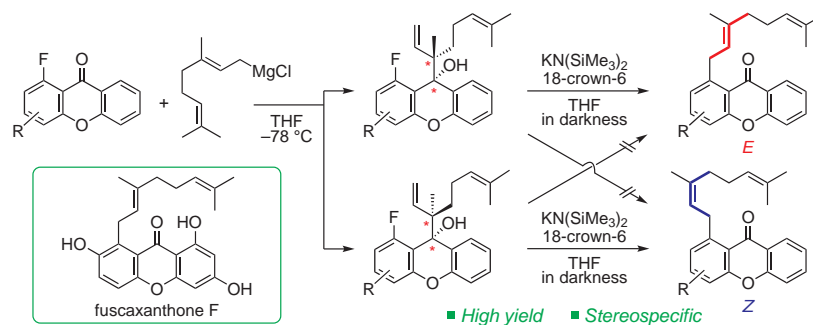
Y. Fujimoto
K. Takahashi
R. Kobayashi
H. Fukaya
H. Yanai
T. Matsumoto*

Tokyo University of Pharmacy
and Life Sciences, Japan

Anion-Accelerated Aromatic Oxy-Cope Rearrangement in Geranylation/Nerylation of Xanthone: Stereochemical Insights and Synthesis of Fuscaxanthone F

Letter

1378



Synlett

Synlett 2020, 31, 1384–1388
DOI: 10.1055/s-0040-1707163

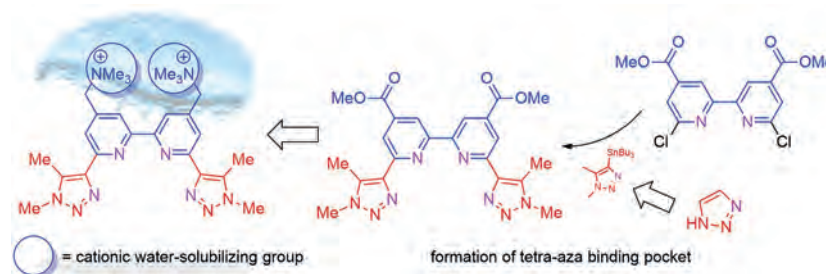
S. A. Labb
C. J. Masteran
S. G. Albright
B. Ali
H. A. Chapman
Y. Cheng
R. M. Cusic
N. B. Hartlove
A. N. Marr
M. Timmons
S. J. Friese*

Salisbury University, USA

Synthesis of a Water-Soluble, Soft N-Donor BTzBP Ligand Containing Only CHON

Letter

1384



Synlett

Synlett 2020, 31, 1389–1393
DOI: 10.1055/s-0040-1707812

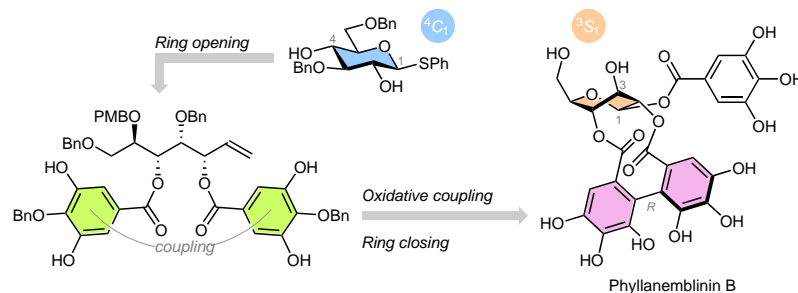
S. Matsumoto
K. Wakamori*
K. Nishii
T. Tanaka
H. Yamada

Kwansei Gakuin University, Japan

Total Synthesis of Phyllanemblinin B

Letter

1389

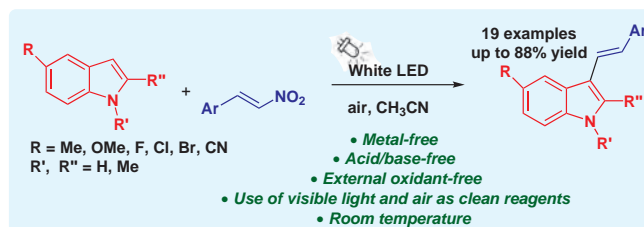


Synlett

Synlett 2020, 32, 1394–1399
DOI: 10.1055/s-0040-1707099R. Chawla
R. Kapoor
L. D. S. Yadav*Motilal Nehru National Institute
of Technology Allahabad, India
University of Allahabad, IndiaVisible-Light-Enabled Aerobic Denitrative C3-Alkenylation of
Indoles with β -Nitrostyrenes

Letter

1394

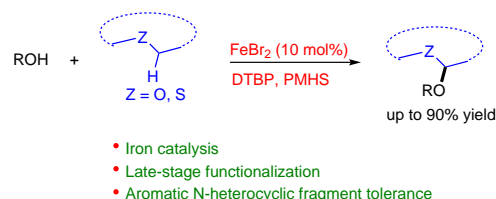


Synlett

Synlett 2020, 31, 1400–1403
DOI: 10.1055/s-0040-1707162W. Han*
L. Cheng
H. ZhaoNanjing Normal University,
P. R. of China
Jiangsu Collaborative Innovation
Center of Biomedical Functional
Materials, P. R. of ChinaIron-Catalyzed Direct Cross-Coupling of Ethers and Thioether with
Alcohols for the Synthesis of Mixed Acetals

Letter

1400

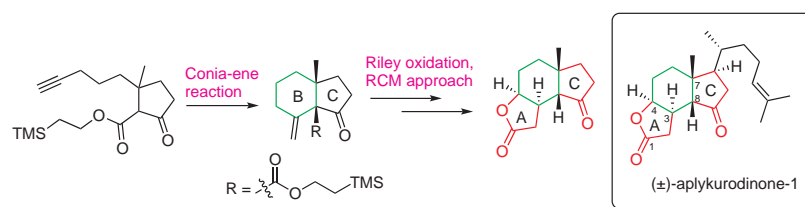


Synlett

Synlett 2020, 31, 1404–1408
DOI: 10.1055/s-0040-1707883X. Wang*
Y. Zhou
H. Xiao
W. Ou
Y. Pang
W. Li
L. Wang*
S. Huang*Jiangxi Science and Technology
Normal University, P. R. of China
Taiyuan University of Technolo-
gy, P. R. of China
Dongguan University of
Technology, P. R. of ChinaFormal Synthesis of (\pm)-Aplykurodinone-1 Based on the Indium-Cata-
lyzed Conia-Ene Reaction

Letter

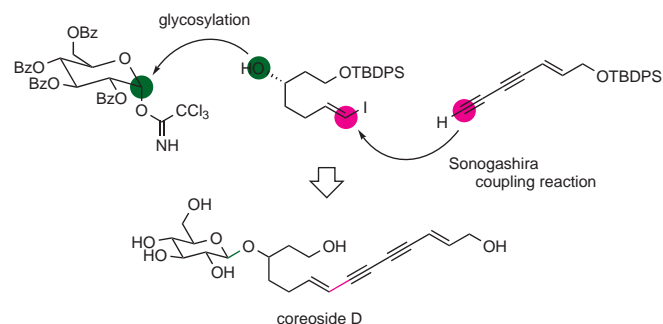
1404



Stereoselective Synthesis of Coreoside D and Determination of Its Absolute Configuration

Letter

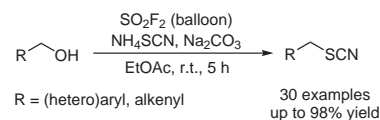
1409



Sulfuryl Fluoride Promoted Thiocyanation of Alcohols: A Practical Method for Preparing Thiocyanates

Letter

1413

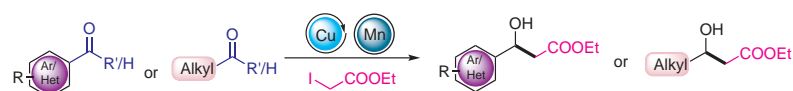


- Highly efficient protocol
- Good functional-group compatibility
- Mild conditions
- Up to gram scale

Access to β -Hydroxyl Esters via Copper-Catalyzed Reformatsky Reaction of Ketones and Aldehydes

Letter

1418



- High yield of most substrates (86–96% yield)
- Mild conditions and readily available reagents
- Scale-up to grams shows a practical applicability
- Excellent functional group tolerance (more than 31 examples)
- Aliphatic, aromatic, heterocyclic and sterically hindered ketones
- Aliphatic, aromatic, unsaturated, heterocyclic and natural-product-derived aldehydes

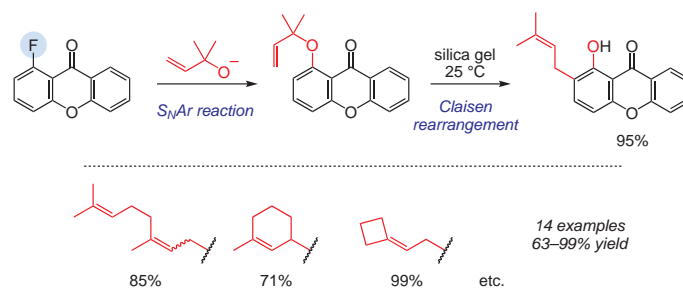
Synlett

Synlett 2020, 31, 1423–1429
DOI: 10.1055/s-0039-1690891Y. Fujimoto
C. Furukawa
K. Takahashi
M. Mochizuki
H. Yanai
T. Matsumoto*Tokyo University of Pharmacy
and Life Sciences, Japan

An Efficient Two-Step Protocol for the Isoprenylation of Xanثone at the C2 Position Starting from 1-Fluoroxanثone Derivative

Letter

1423

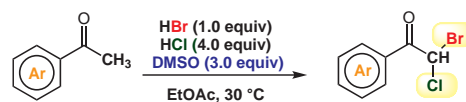


Synlett

Synlett 2020, 31, 1430–1434
DOI: 10.1055/s-0040-1707169J.-f. Zhou
D.-m. Tang
M. Bian*Shanghai Institute of Technology,
P. R. ChinaFacile Approach to Geminal Heterodihalogenation.
One-Pot Synthesis of α -Bromo- α -Chloro Ketones

Letter

1430



- Mild conditions, high efficiency, one-pot synthesis
- Ar groups include naphthyl and 2-thienyl
- 13 examples, up to 65–81% yield

Synlett

Synlett 2020, 31, 1435–1442
DOI: 10.1055/s-0040-1707180

S. J. Koehler

J. Hu

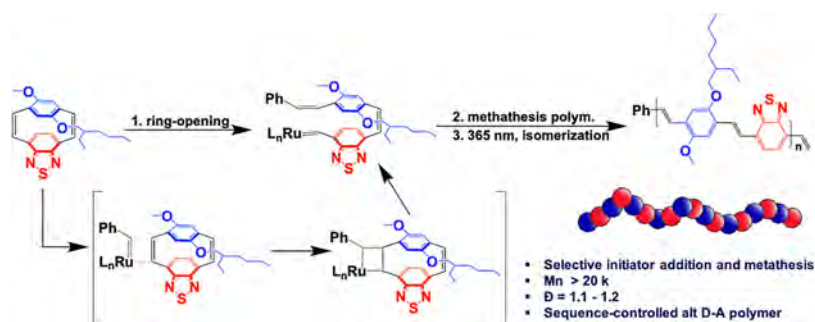
E. Elacqua*

The Pennsylvania State University, USA

Electronically Governed ROMP: Expanding Sequence Control for Donor–Acceptor Conjugated Polymers

Synfacts

1435



Synlett

Synlett 2020, 31, 1443–1447
DOI: 10.1055/s-0040-1707900

D. Anthony

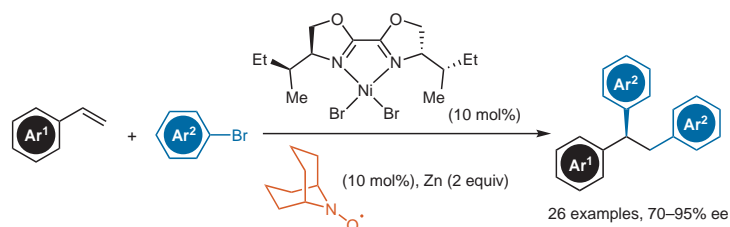
T. Diao*

New York University, USA

Asymmetric Reductive Dicarbofunctionalization of Alkenes via Nickel Catalysis

Synfacts

1443



Synlett

Synlett 2020, 31, 1448–1463
DOI: 10.1055/s-0040-1707125

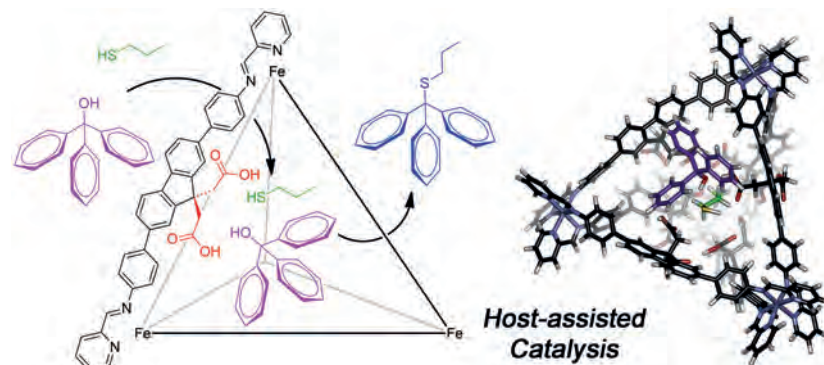
R. J. Hooley*

University of California-River-
side, USA

No, Not That Way, the Other Way: Creating Active Sites in Self-Assembled Host Molecules

Account

1448



Synlett

Synlett 2020, 31, 1464–1473
DOI: 10.1055/s-0040-1707126

Y. Wang

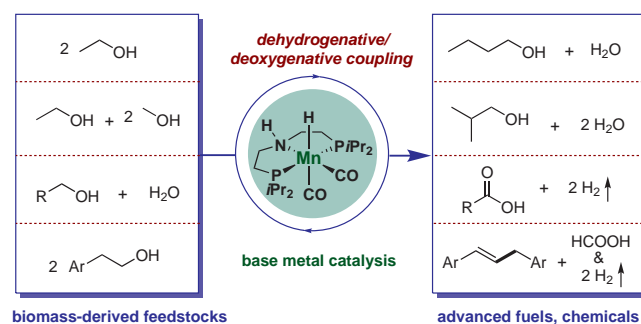
Q. Liu*

Tsinghua University, P. R. of
China

Manganese-Catalyzed Dehydrogenative/Deoxygenative Coupling of Alcohols

Account

1464



Synlett

Synlett 2020, 31, 1474–1478
DOI: 10.1055/s-0040-1707820

M. Bandyopadhyay

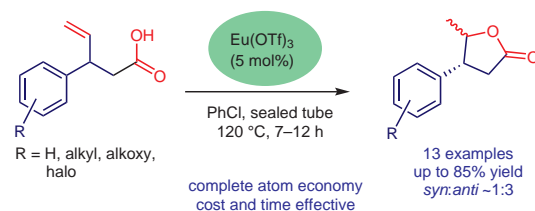
A. Nayak

M. K. Bera*

Indian Institute of Engineering
Science and Technology, IndiaEuropium-Catalyzed Intramolecular Addition of Carboxylic Acid to Nonactivated Alkenes: An Efficient Route to Aryl-Substituted γ -Butyrolactone

Letter

1474



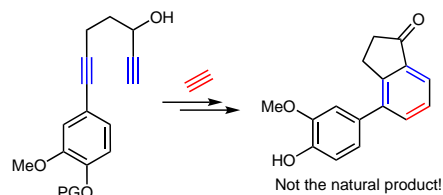
Synlett

Synthesis of the Proposed Structure of Afzeliindanone

Letter

Synlett 2020, 31, 1479–1481
DOI: 10.1055/s-0040-1707470

Rita
M. Husaini bin Abdul Rahman
S. S. M. Chong
R. W. Bates*
Nanyang Technological University, Singapore



1479

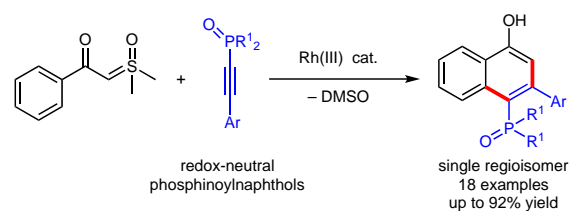
Synlett

Regioselective Synthesis of α -Phosphinoynaphthols through Rhodium-Catalyzed Annulation of 1-Alkynylphosphine Oxides with Sulfoxonium Ylides

Letter

Synlett 2020, 31, 1482–1486
DOI: 10.1055/s-0040-1707892

W. Xie*
B. Lin
X. Jian
Q. Lin
J. Shi*
Foshan University, P. R. of China



1482

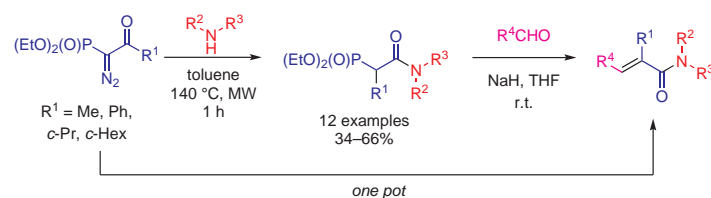
Synlett

A Novel Approach to Substituted α -Carbamoyl Phosphonates: Useful Reagents for the Horner–Wadsworth–Emmons Olefination

Letter

Synlett 2020, 31, 1487–1490
DOI: 10.1055/s-0040-1707200

A. Inytina
E. Chupakhin
D. Dar'in*
M. Krasavin*
Saint Petersburg State University, Russian Federation
Immanuel Kant Baltic Federal University, Russian Federation



1487

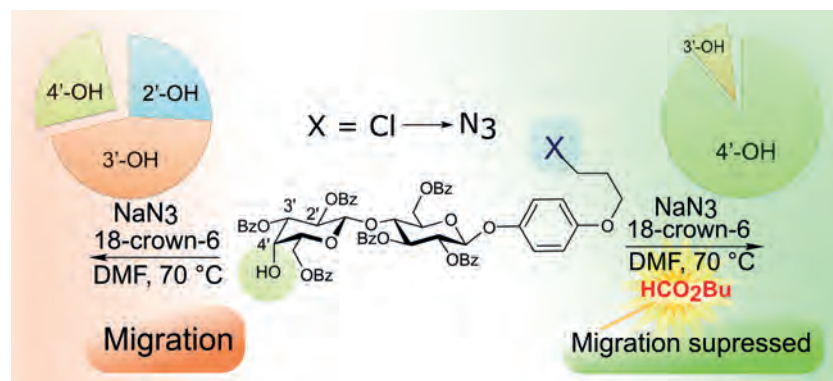
Synlett

Azidation of Partially Protected Carbohydrate Derivatives:
Efficient Suppression of Acyl Migration

Letter

Synlett 2020, 31, 1491–1496
DOI: 10.1055/s-0040-1707137

1491

E. V. Stepanova
A. I. Zinin
P. I. Abronina
A. O. Chizhov
L. O. Kononov*N.D. Zelinsky Institute of Organic Chemistry, Russian Federation
Moscow Institute of Physics and Technology (National Research University), Russian Federation

Synlett

Dearomatization of a 3-Hydroxypyridine Through an Unexpected Oxidative Deformylation Process: An Entry to Azacyclohexadienones

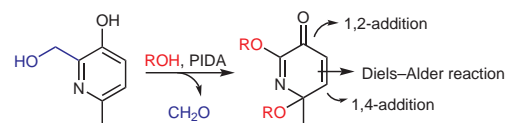
Letter

Synlett 2020, 31, 1497–1500
DOI: 10.1055/s-0040-1706870

1497

A. Mabrouki
P. Le Nahenec-Martel
A. Kriaa
A. Hedhli
P.-Y. Renard
C. Sabot*

Normandie Univ, France



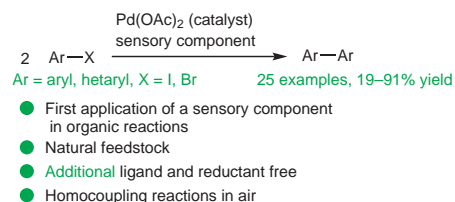
Synlett

Palladium/Sensory Component-Catalyzed Homocoupling Reactions of
Aryl Halides

Letter

Synlett 2020, 31, 1501–1506
DOI: 10.1055/s-0040-1707214

1501

F. Bao
Z. Liu
H. Bai
H. Zhang
P. Liu*
Q. Zhang
G. Chai*Henan Agricultural University,
P. R. of China
Zhengzhou Tobacco Research Institute, P. R. of China

Synlett

Synlett 2020, 31, 1507–1510
DOI: 10.1055/s-0040-1707080

V. V. Solomin

A. Seins

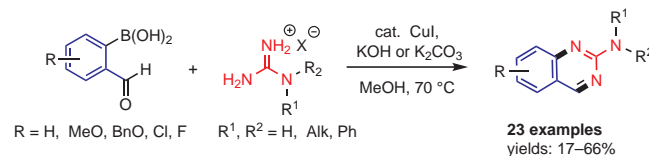
A. Jirgensons*

Latvian Institute of Organic Synthesis, Latvia
Riga Technical University, Latvia

2-Aminoquinazolines by Chan–Evans–Lam Coupling of Guanidines with (2-Formylphenyl)boronic Acids

Letter

1507



Synlett

Synlett 2020, 31, 1511–1516
DOI: 10.1055/s-0040-1707819

M. Mochizuki

Y. Fujimoto

H. Yanai

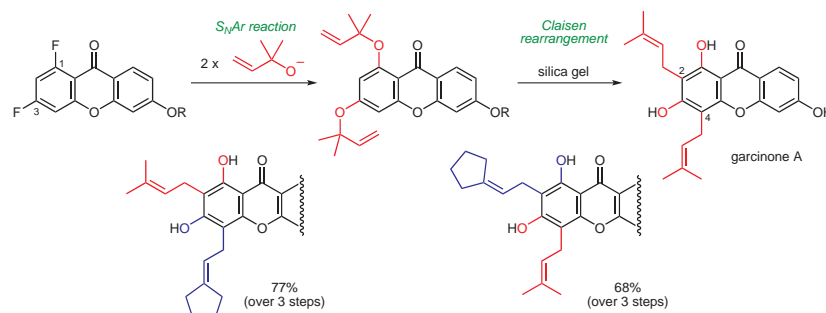
T. Matsumoto*

Tokyo University of Pharmacy and Life Sciences, Japan

S_NAr Reaction/Claisen Rearrangement Approach to 2,4-Diisoprenylx-anthones: Total Synthesis of Garcinone A

Letter

1511



Synlett

Synlett 2020, 31, 1517–1522
DOI: 10.1055/s-0040-1707891

C. Jin

J.-Y. He

Q.-F. Bai

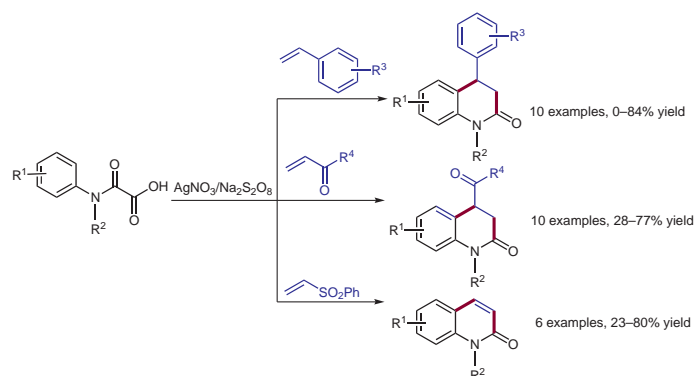
G. Feng*

Shaoxing University, P. R. of China

Silver-Catalyzed Decarboxylative Radical Addition/Cyclization of Oxamic Acids with Alkenes towards Quinolin-2-ones

Letter

1517



Synlett

Synlett 2020, 31, 1523–1526
DOI: 10.1055/s-0040-1707199

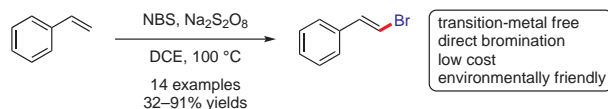
Y. Jing
Y. Gao
Q. Zhao
X. Chen*
Y.-N. Ma*

Henan Normal University, P. R. of China
Zhengzhou University, P. R. of China

Facile Synthesis of β -Bromostyrenes by Direct Bromination of Styrenes with *N*-Bromosuccinimide and Sodium Persulfate

Letter

1523



Synlett

Synlett 2020, 31, 1527–1531
DOI: 10.1055/s-0040-1706868

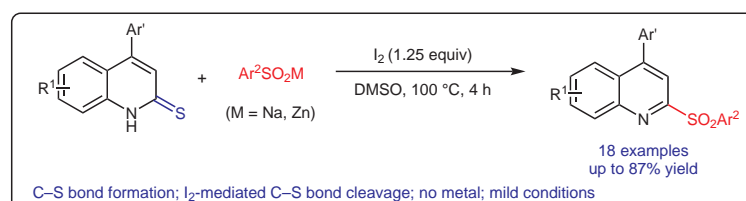
G.-C. Yang
X.-C. Wang
Z.-J. Quan*

Northwest Normal University,
P. R. of China

Iodine-Promoted Synthesis of 4-Aryl-2-(arylsulfonyl)quinolones by Desulfurative C–S Cross-Coupling Reaction of Quinoline-2-thiones with Sodium Sulfonates

Letter

1527



Synlett

Synlett 2020, 31, 1532–1536
DOI: 10.1055/s-0040-1707887

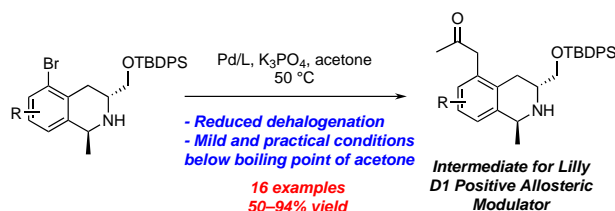
J. Richardson*
S. P. Mutton
F. M. Martin
L. Walton
A. J. Ledgard

Eli Lilly and Company, UK

An Efficient Palladium-Catalyzed α -Arylation of Acetone Below its Boiling Point

Letter

1532



Synlett

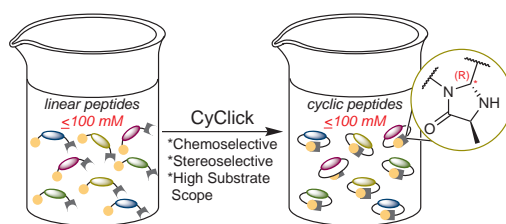
Peptide Cyclization at High Concentration

Synfacts

Synlett 2020, 31, 1537–1542
DOI: 10.1055/s-0040-1707165

R. D. Wills
V. T. Adebomi
M. Raj*
Auburn University Auburn, USA

1537



Synlett

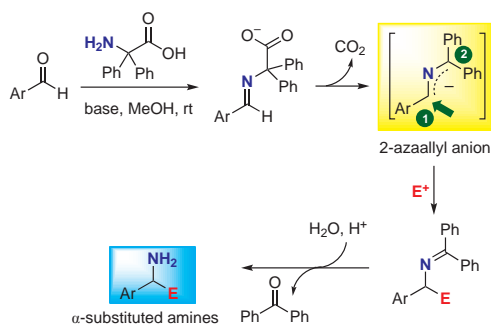
Decarboxylative Umpolung Synthesis of Amines from Carbonyl Compounds

Synfacts

Synlett 2020, 31, 1543–1550
DOI: 10.1055/s-0040-1707157

W.-W. Chen
B. Zhao*
Shanghai Normal University,
P. R. of China

1543

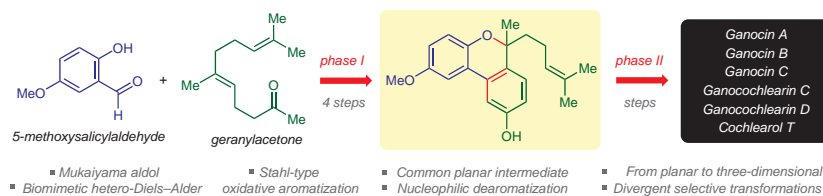


Synlett

Synlett 2020, 31, 1551–1554
DOI: 10.1055/s-0040-1707898F. Zhang
Y.-M. Zhao*Shaanxi Normal University, P. R.
of ChinaDivergent Total Syntheses of Six *Ganoderma* Meroterpenoids:
A Bioinspired Two-Phase Strategy

Synfacts

1551



Synlett

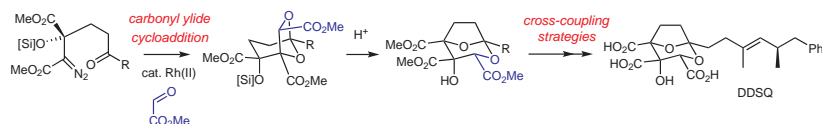
Synlett 2020, 31, 1555–1572
DOI: 10.1055/s-0040-1707127H. A. A. Almohseni
D. M. Hodgson*

University of Oxford, UK

Evolution of a Cycloaddition–Rearrangement Approach to the
Squalestatins: A Quarter-Century Odyssey

Account

1555



Synlett

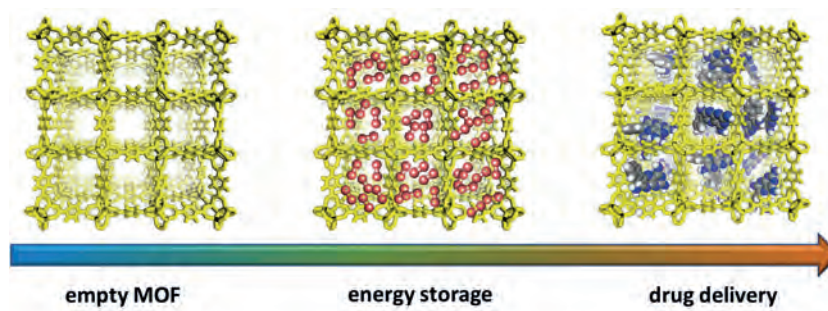
Synlett 2020, 31, 1573–1580
DOI: 10.1055/s-0040-1707139K. Suresh
V. López-Mejías
S. Roy
D. F. Camacho
A. J. Matzger*

University of Michigan, USA

Leveraging Framework Instability: A Journey from Energy Storage to
Drug Delivery

Account

1573



Synlett

Synlett 2020, 31, 1581–1586
DOI: 10.1055/s-0040-1707201

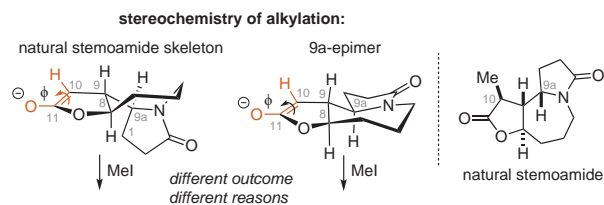
J. H. Siitonen
D. Csókás
I. Pápai*
P. M. Pihko*

University of Jyväskylä, Finland
Research Centre for Natural Sciences, Hungary

Total Synthesis of Stemoamide, 9a-*epi*-Stemoamide, and 9a,10-*epi*-Stemoamide: Divergent Stereochemistry of the Final Methylation Steps

Letter

1581



Synlett

Synlett 2020, 31, 1587–1592
DOI: 10.1055/s-0040-1707909

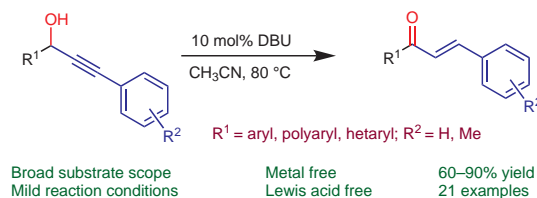
R. De
A. Savarimuthu
T. Ballav
P. Singh
J. Nanda
A. Hasija
D. Chopra
M. K. Bera*

Indian Institute of Engineering
Science and Technology (IIEST),
India

DBU-Catalyzed Rearrangement of Secondary Propargylic Alcohols: An Efficient and Cost-Effective Route to Chalcone Derivatives

Letter

1587



Synlett

Synlett 2020, 31, 1593–1597
DOI: 10.1055/s-0040-1707129

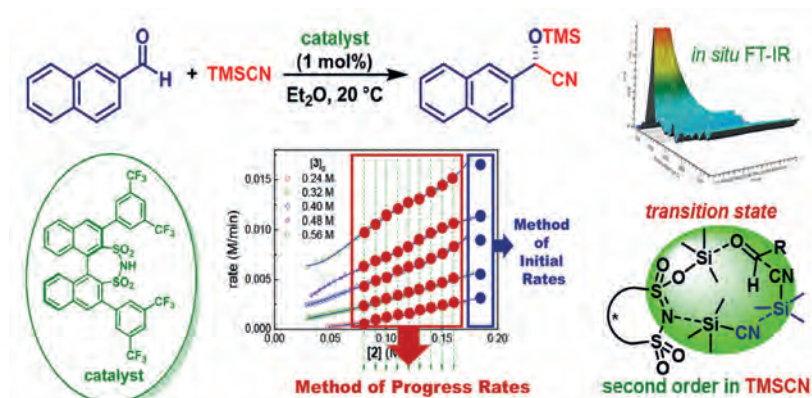
Z. Zhang*
M. Klussmann
B. List

East China University of Science
& Technology, P. R. of China
Max-Planck-Institut für Kohlen-
forschung, Germany

Kinetic Study of Disulfonimide-Catalyzed Cyanosilylation of Aldehydes by Using a Method of Progress Rates

Letter

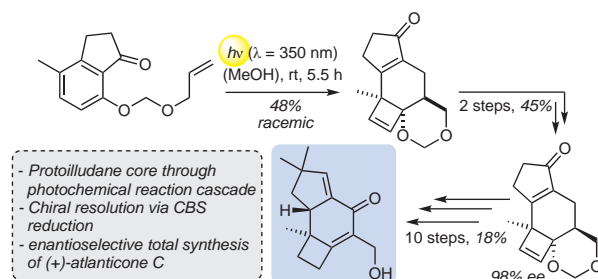
1593



Synlett 2020, 31, 1598–1602
DOI: 10.1055/s-0040-1707215

J. Proessdorf
A. Zech
C. Jandl
T. Bach*

Technische Universität
München, Germany

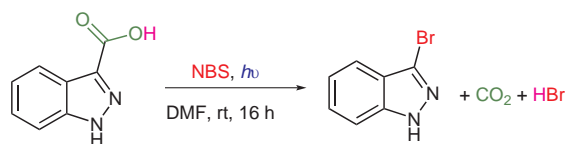


1598

Synlett 2020, 31, 1603–1607
DOI: 10.1055/s-0040-1707901

P. R. Patel
S. H. Henderson
M. S. Roe
M. A. Honey*

University of Greenwich, UK



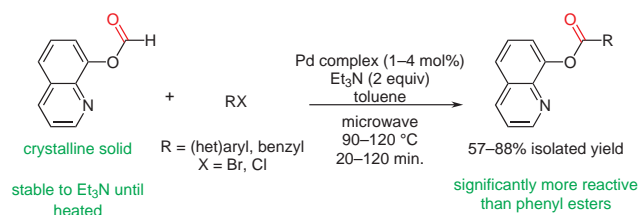
- substrate activation of NBS
- light sensitive
- potential radical pathway

1603

Synlett 2020, 31, 1608–1612
DOI: 10.1055/s-0040-1707187

C. J. Maddocks
S. V. Aathimanikandan
J. Richardson
J. C. Ruble*

Eli Lilly and Company, USA



1608

Synlett

Synlett 2020, 31, 1613–1618
DOI: 10.1055/s-0040-1707196

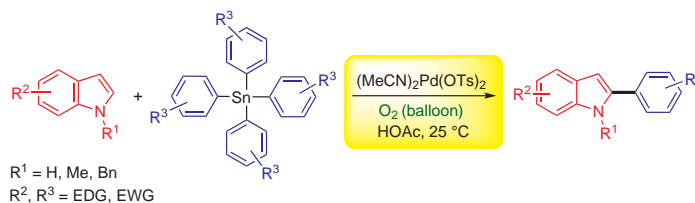
Y. Liu*
C. Wang
L. Huang
D. Xue*

Northwest University, P. R. of
China
Shaanxi Normal University, P. R.
of China

Room-Temperature Palladium(II)-Catalyzed Direct 2-Arylation of Indoles with Tetraarylstannanes

Letter

1613



Synlett

Synlett 2020, 31, 1619–1622
DOI: 10.1055/s-0040-1706408

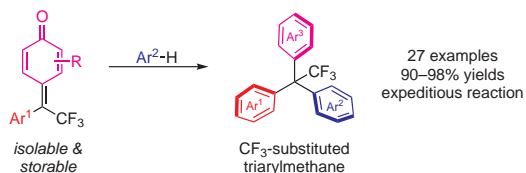
Y. Ma
J. Pang
X. Pan
S. Ma*
X. Liu*
L. Liu*

Shandong University, P. R. of
China

Synthesis of Unsymmetric Triarylmethanes Bearing CF_3 -Substituted All-Carbon Quaternary Stereocenters: 1,6-Arylation of δ -Trifluoromethyl Substituted *para*-Quinone Methides

Letter

1619



Synlett

Synlett 2020, 31, 1623–1628
DOI: 10.1055/s-0040-1707198

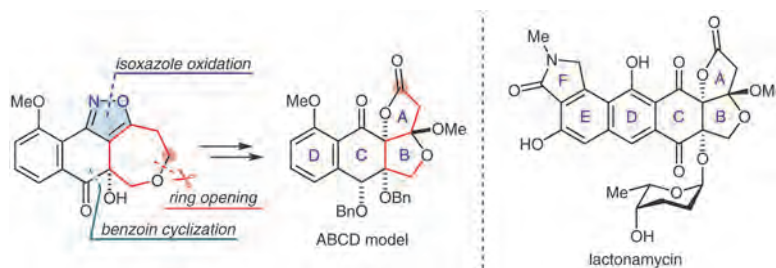
H. Takikawa
K. Murata
S. Sato
T. Kawada
H. Nakakohara
K. Ohmori
K. Suzuki*

Tokyo Institute of Technology,
Japan

Synthetic Study on Lactonamycins, Part 2: Stereoselective Access to ABCD-Ring System

Letter

1623



M. A. Rajendra

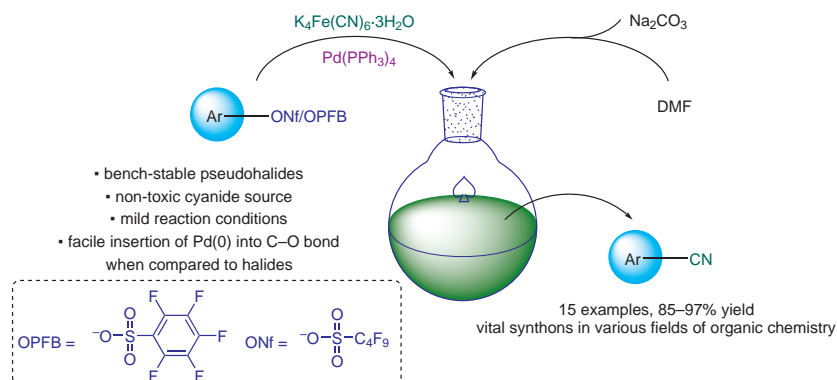
K. Sunil*

A. M. Sajith

M. N. Joy

V. A. Bakulev

K. R. Haridas

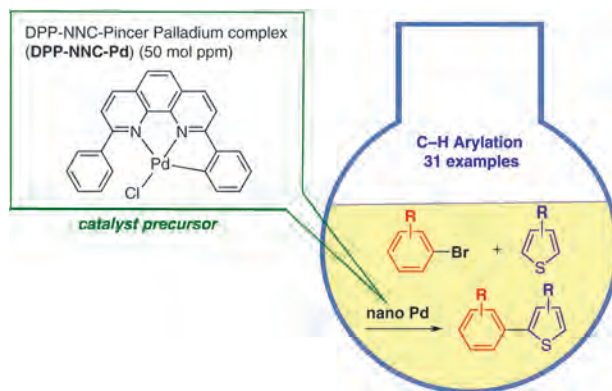
SSIT, Sri Siddhartha Academy of
Higher Education, IndiaPalladium-Catalyzed Cyanation under Mild Conditions: A Case Study to
Discover Appropriate Substrates among Halides and Pseudohalides

A. E. Purta

S. Ichii

A. Tazawa

Y. Uozumi*

Institute for Molecular Science
(IMS), Japan
The Graduate University for
Advanced Studies, SOKENDAI,
JapanC–H Arylation of Thiophenes with Aryl Bromides by a Parts-per-Million
Loading of a Palladium NNC-Pincer Complex

Synlett

Synlett 2020, 31, 1639–1648
DOI: 10.1055/s-0040-1707078

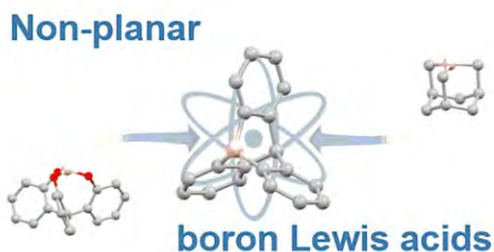
A. Chardon
A. Osi
D. Mahaut
A. B. Saida
G. Berionni*

University of Namur, Belgium

Non-planar Boron Lewis Acids Taking the Next Step: Development of Tunable Lewis Acids, Lewis Superacids and Bifunctional Catalysts

Synfacts

1639



Synlett

Synlett 2020, 31, 1649–1655
DOI: 10.1055/s-0040-1707172

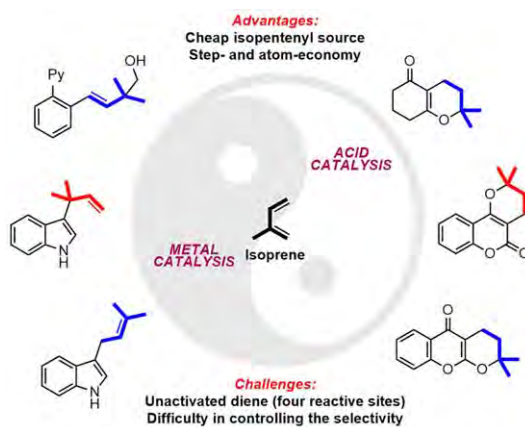
W.-S. Zhang
Y.-C. Hu
Q.-A. Chen*

Dalian Institute of Chemical
Physics, P. R. of China

Isoprene: A Promising Coupling Partner in C–H Functionalizations

Synfacts

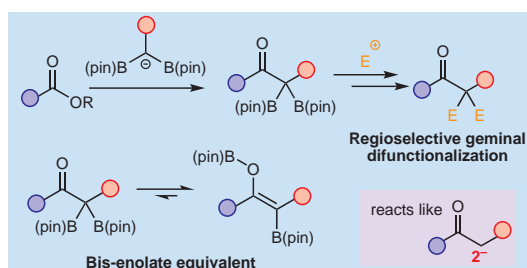
1649



Synlett 2020, 31, 1656–1662
DOI: 10.1055/s-0040-1707181

G. R. A. Garratt
G. Pattison*
University of Brighton, UK

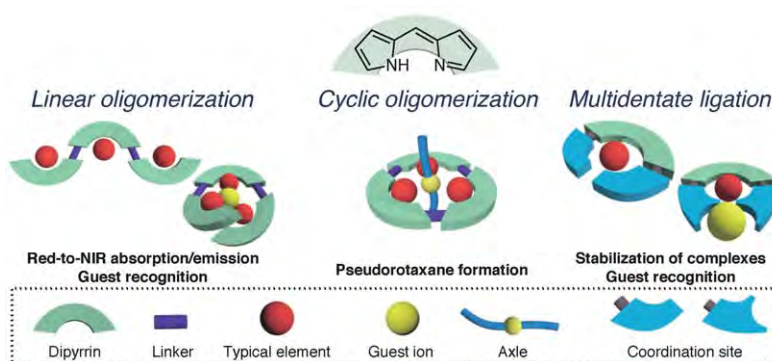
1656



Synlett 2020, 31, 1663–1680
DOI: 10.1055/s-0040-1707155

Y. Chiba
T. Nakamura
R. Matsuoka
T. Nabeshima*
University of Tsukuba, Japan

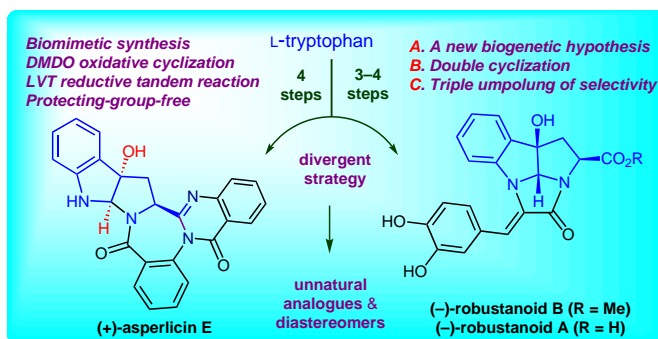
1663



Synlett 2020, 31, 1681–1690
DOI: 10.1055/s-0040-1707164

P.-Q. Huang*
Xiamen University, P. R. of China

1681



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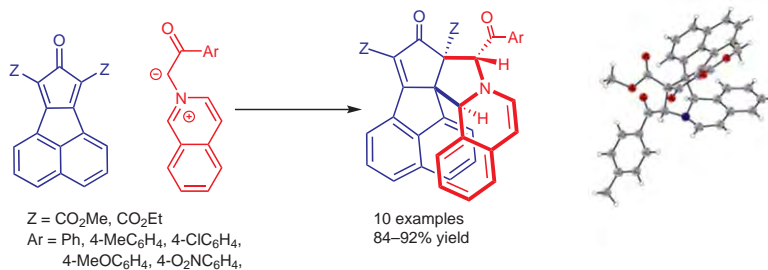
Synlett 2020, 31, 1691–1695
DOI: 10.1055/s-0040-1706750I. Yavari
P. Ravaghi
M. Safaei
J. Kayanian

Tarbiat Modares University, Iran

Regio- and Stereoselectivity in the 1,3-Dipolar Cycloaddition Reactions of Isoquinolinium Ylides with Cyclopenta[*a*]acenaphthylen-8-ones

Letter

1691



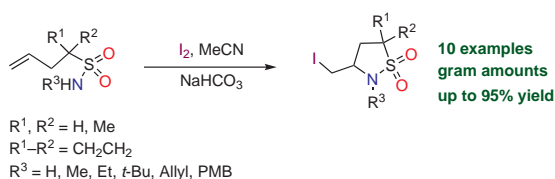
Synlett

Synlett 2020, 31, 1696–1700
DOI: 10.1055/s-0040-1707227S. L. Filimonchuk
K. Nazarenko
T. Shvydenko
K. Shvydenko
E. Rusanov
A. Tolmachev
A. Kostyuk*National Academy of Sciences of
Ukraine, Ukraine

Synthesis of 3-Iodomethyl Sultams

Letter

1696



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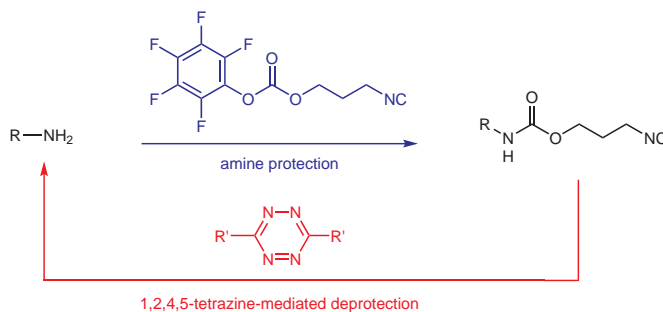
Synlett 2020, 31, 1701–1706
DOI: 10.1055/s-0040-1707220J. Tu
M. Xu
R. M. Franzini*

University of Utah, USA

A Stable Precursor for Bioorthogonally Removable 3-Isocyanopropyl-oxycarbonyl (ICPrC) Protecting Groups

Letter

1701



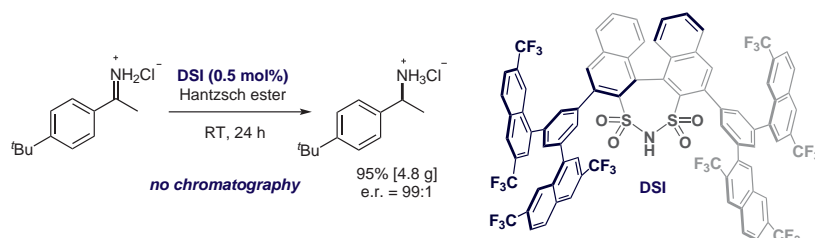
Synlett

Synlett 2020, 31, 1707–1712
DOI: 10.1055/s-0040-1706413V. N. Wakchaure
C. Obradors
B. List*Max-Planck-Institut für Kohlen-
forschung, Germany

Chiral Brønsted Acids Catalyze Asymmetric Additions to Substrates that Are Already Protonated: Highly Enantioselective Disulfonimide-Catalyzed Hantzsch Ester Reductions of NH–Imine Hydrochloride Salts

Letter

1707

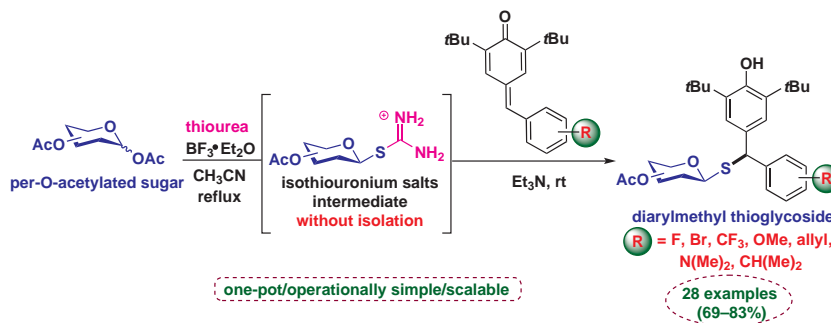


Synlett

Synlett 2020, 31, 1713–1719
DOI: 10.1055/s-0040-1707189A. Dubey
P. K. Mandal*CSIR-Central Drug Research In-
stitute, India
Academy of Scientific and Inno-
vative Research, IndiaAn Efficient One-Pot Protocol for Direct Access to Diarylmethyl Thioglycosides with *para*-Quinone Methides via *S*-Glycosyl Isothiouonium Salts

Letter

1713



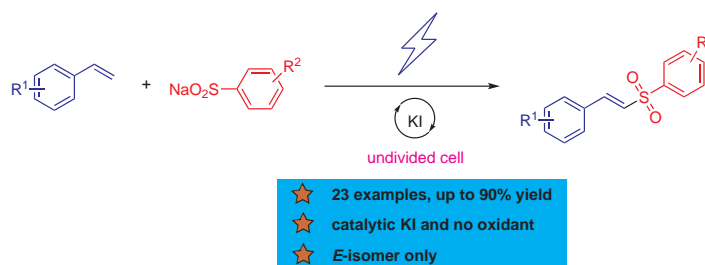
Synlett

Synlett 2020, 31, 1720–1724
DOI: 10.1055/s-0040-1707249P.-L. Wang
H. Gao*
Z.-S. Jiang
C. Li
Z.-A. Tian
P.-H. Li*Huaibei Normal University, P. R.
of China

Electrochemical Synthesis of Vinyl Sulfones by Sulfonation of Styrenes with a Catalytic Amount of Potassium Iodide

Letter

1720



Synlett

Synlett 2020, 31, 1725–1729
DOI: 10.1055/s-0040-1707224

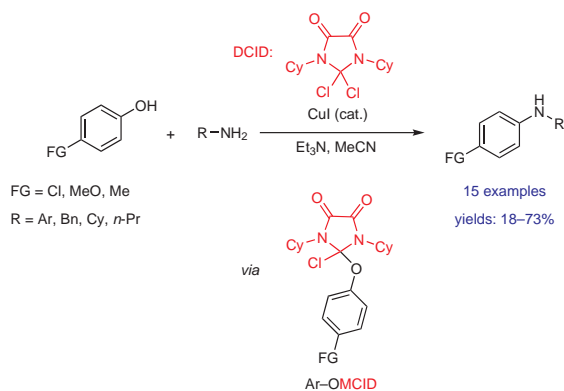
K. Madankar
J. Mokhtari*
Z. Mirjafary

Islamic Azad University, Iran

A Novel Modified Cross-Coupling of Phenols and Amines Using Dichloroimidazolidinedione (DCID)

Letter

1725



Synlett

Synlett 2020, 31, 1730–1734
DOI: 10.1055/s-0040-1706405

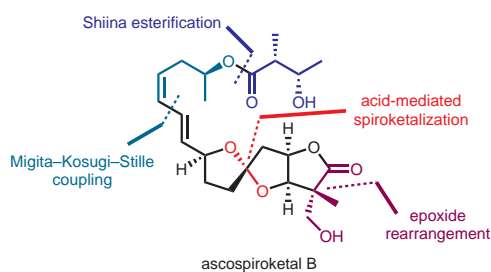
Y. Hara
K. Kamaike
K. Ota*
H. Miyaoka*

Tokyo University of Pharmacy
and Life Sciences, Japan

Total Synthesis of Ascospiroketal B

Letter

1730



Synlett

Synlett 2020, 31, 1735–1739
DOI: 10.1055/s-0040-1706415

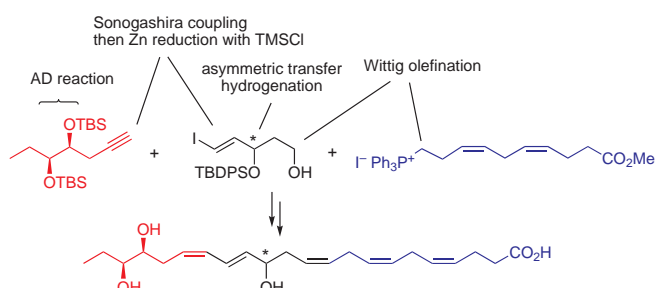
N. Ogawa*
S. Sone
S. Hong
Y. Lu
Y. Kobayashi

Meiji University, Japan

Synthesis of Two Stereoisomers of Potentially Bioactive 13,19,20-Trihydroxy Derivative of Docosahexaenoic Acid

Letter

1735



Synlett 2020, 31, 1740
DOI: 10.1055/s-0040-1707617

F. Bao*
Z. Liu
H. Bai
H. Zhang
P. Liu*
Q. Zhang
G. Chai*

Synlett 2020, 31, 1501

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Synlett 2020, 31, 1741–1746
DOI: 10.1055/s-0040-1707190

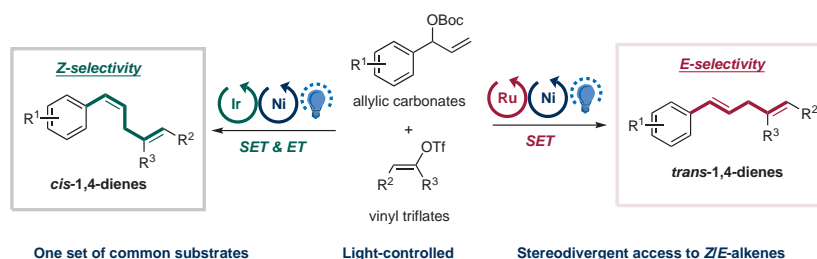
F. Wang
S. Zhu*
L. Chu*

Donghua University, P. R. of
China

Synergistic Catalysis for Stereodivergent Synthesis of *trans*- and *cis*-Skipped Dienes

Synfacts

1741



Synlett

Synlett 2020, 31, 1747–1752
DOI: 10.1055/s-0040-1707271

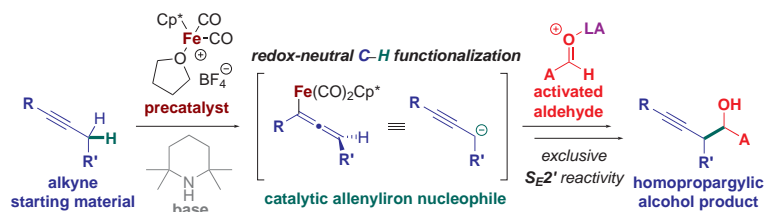
A. C. Durham
Y. Wang
Y.-M. Wang*

University of Pittsburgh, USA

Redox-Neutral Propargylic C–H Functionalization by Using Iron Catalysis

Synfacts

1747



Synlett

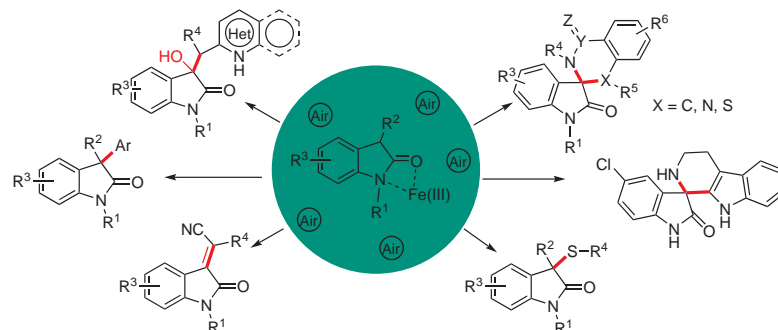
Synlett 2020, 31, 1753–1759
DOI: 10.1055/s-0040-1707195R.-M. Hu
Y.-H. Lai
D.-Z. Xu*

Nankai University, P. R. of China

Iron-Catalyzed Aerobic Oxidative Cross-Dehydrogenative C(sp³)-H/X-H (X = C, N, S) Coupling Reactions

Synfacts

1753



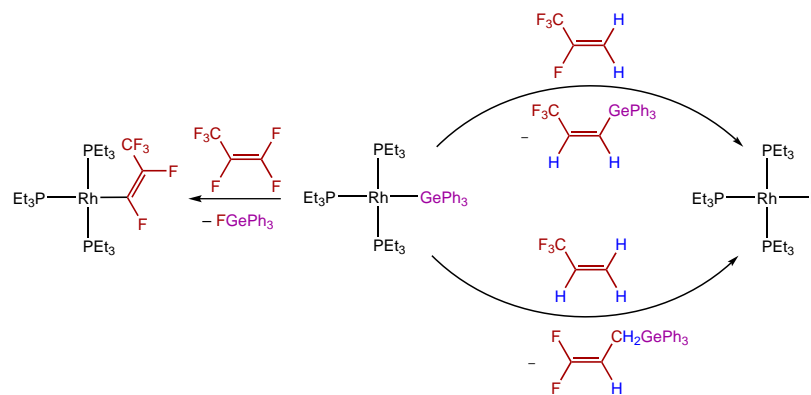
Synlett

Synlett 2020, 31, 1760–1774
DOI: 10.1055/s-0040-1707156M. Talavera
T. Braun*Humboldt-Universität zu Berlin,
Germany

Rhodium(I) Complexes as Useful Tools for the Activation of Fluoroolefins

Account

1760



Synlett

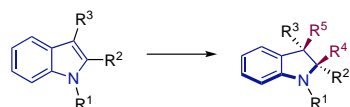
Synlett 2020, 31, 1775–1788
DOI: 10.1055/s-0040-1707152H. Abou-Hamdan
C. Kouklovsky
G. Vincent*

Université Paris-Saclay, CNRS, Institut de Chimie Moléculaire et des Matériaux d'Orsay (ICMMO), France

Dearomatization Reactions of Indoles to Access 3D Indoline Structures

Account

1775



Synlett

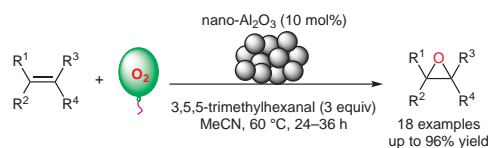
Synlett 2020, 31, 1789–1794
DOI: 10.1055/s-0040-1707264X. Zhou
Q. Wang
W. Xiong
L. Wang
R. Ye
G. Xiang
C. Qi*
J. Hu*

South China University of Technology, P. R. of China

Epoxidation of Alkenes with Molecular Oxygen as the Oxidant in the Presence of Nano- Al_2O_3

Letter

1789



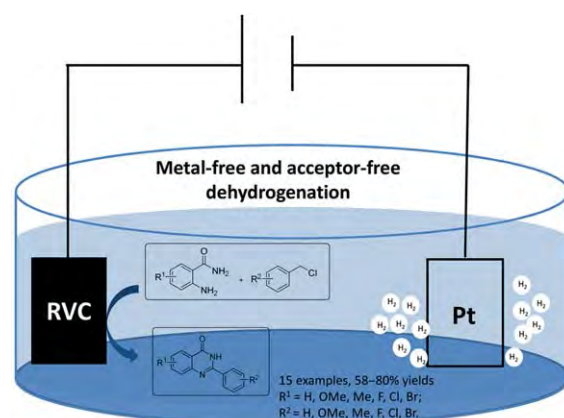
Synlett

Synlett 2020, 31, 1795–1799
DOI: 10.1055/s-0040-1707248Y. Yao
X.-J. Meng
Q.-H. Teng*
Y.-Y. Chen*Guangxi Normal University, P. R. of China
Guilin University of Technology, P. R. of China
Guilin Medical University, P. R. of China

Electrochemical Synthesis of Quinazolinones by the Metal-Free and Acceptor-Free Dehydrogenation of 2-Aminobenzamides

Letter

1795



Synlett

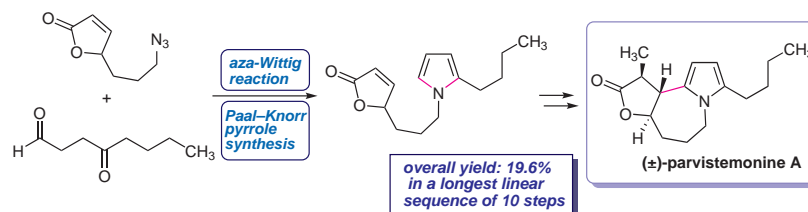
Synlett 2020, 31, 1800–1804
DOI: 10.1055/s-0040-1707283R. Matsuo
A. Miyashita
M. Kuwabara
S. Adachi
A. Matsuzawa
K. Sugita*

Hoshi University, Japan

Concise Diastereoselective Total Synthesis of (\pm)-Parvistemonine A

Letter

1800



Synlett

Synlett 2020, 31, 1805–1808
DOI: 10.1055/s-0040-1707300Z. Shen
W. Liu
X. Tian*
Z. Zhao
Y.-L. Ren*Henan Agricultural University,
P. R. of China

Iron-Promoted Decarboxylation of Arylacetic Acids for the Synthesis of Aromatic Nitriles with Sodium Nitrite as the Nitrogen Source

Letter

1805



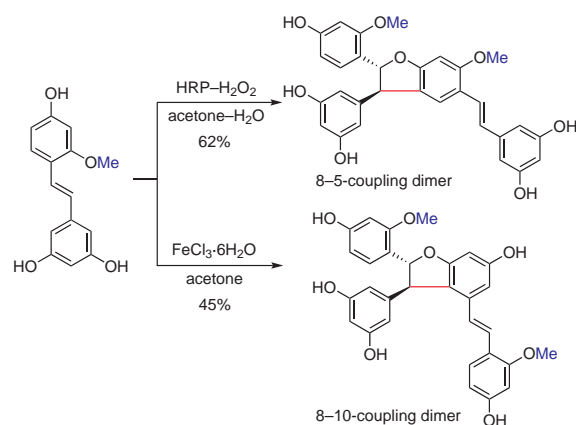
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Synlett 2020, 31, 1809–1812
DOI: 10.1055/s-0040-1707257L. Ran
H. Li
G. Chao
X. Kang
T. Lei
W. Li*Lanzhou Jiaotong University,
P. R. of China

Regioselective Biomimetic Synthesis of Dimeric Oxyresveratrol Derivatives

Letter

1809

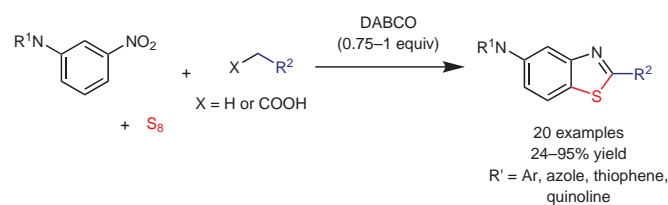


Synlett

Synlett 2020, 31, 1813–1816
DOI: 10.1055/s-0040-1706470H. T. Pham
T. H. Ho
D. Q. Do
K. L. H. Nguyen
T. T. Nguyen*
N. T. S. Phan*Ho Chi Minh City University
of Technology (HCMUT), Vietnam
Vietnam National University,
VietnamSynthesis of 2-Arylbenzothiazol-5-amines from *N,N*-Dialkyl-3-nitroanilines

Letter

1813

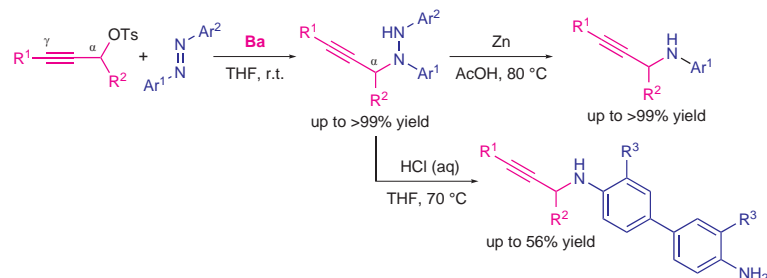


Synlett 2020, 31, 1817–1822
DOI: 10.1055/s-0040-1706414

A. Yanagisawa*
T. Heima
K. Watanabe
S. Haeno

Chiba University, Japan

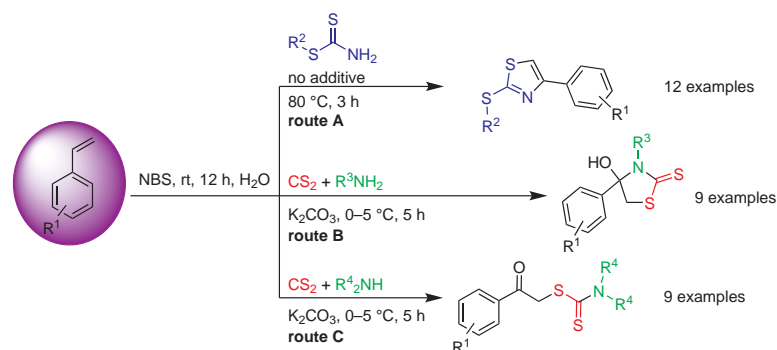
1817



Synlett 2020, 31, 1823–1827
DOI: 10.1055/s-0040-1707258

F. Matloubi Moghaddam*
M. Goudarzi
Sharif University of Technology,
Iran

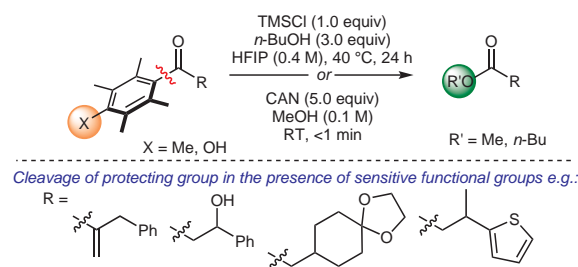
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Synlett 2020, 31, 1828–1832
DOI: 10.1055/s-0040-1707289

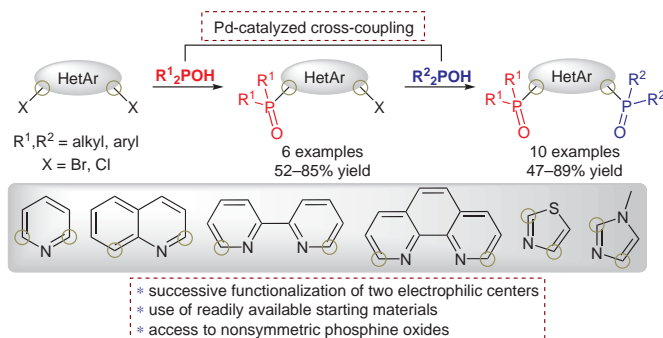
C. B. Cheong
J. R. Frost
T. J. Donohoe*
University of Oxford, UK

1828



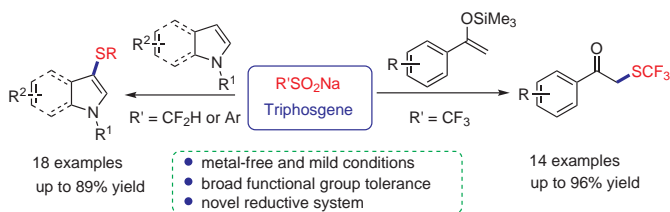
G. G. Zakirova*
D. Y. Mladentsev
N. N. BorisovaLomonosov Moscow State University,
Russian Federation

An Approach to Nonsymmetric Bis(tertiary phosphine oxides) Comprising Heterocyclic Fragments via the Pd-Catalyzed Phosphorylation

H.-j. Gao
Y.-x. Gu
Z.-f. Wang
Y.-q. Yuan*
Y. Wang
S.-r. Guo*

Lishui University, P. R. of China

Triphosgene/Sodium Organosulfinate System: A General and Efficient Electrophilic Thiolation of Silylenol Ethers and Electron-Rich Heteroaromatics



Synlett

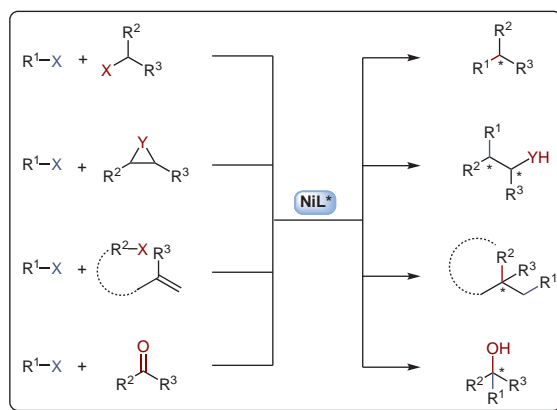
Nickel-Catalyzed Asymmetric Cross-Electrophile Coupling Reactions

Synfacts

Synlett 2020, 31, 1843–1850
DOI: 10.1055/s-0040-1707216

Y. Jin
C. Wang*

University of Science and Technology of China, P. R. of China



1843

Synlett

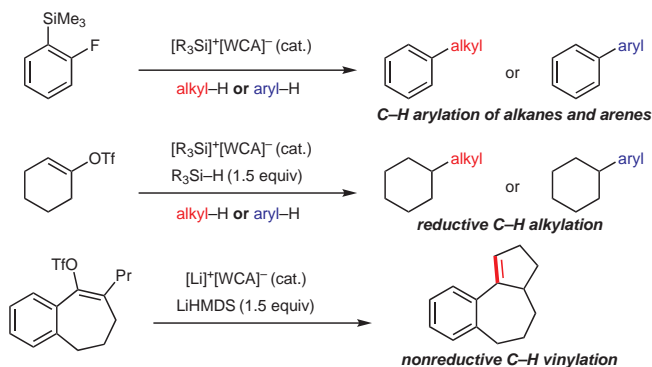
C–H Functionalization Reactions of Phenyl and Vinyl Carbocations Paired with Weakly Coordinating Anions

Synfacts

Synlett 2020, 31, 1851–1856
DOI: 10.1055/s-0040-1707908

S. Popov
B. Shao
A. L. Bagdasarian
B. Wigman
H. M. Nelson*

University of California, USA



1851

Synlett

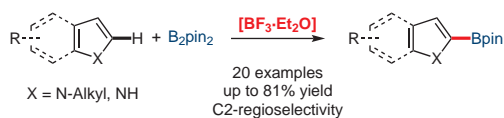
Metal-Free Catalytic Aromatic C–H Borylation

Synfacts

Synlett 2020, 31, 1857–1861
DOI: 10.1055/s-0040-1707241

H. Zhang*
L. Wang

Nanchang University, P. R. of
China



1857

Synlett

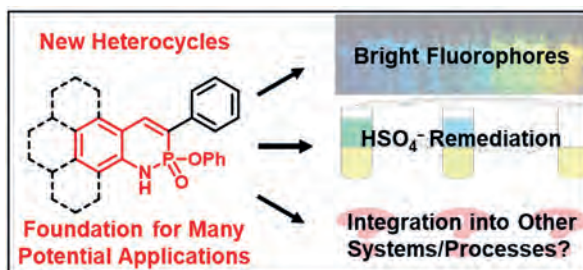
Bumpy Roads Lead to Beautiful Places: The Twists and Turns in Developing a New Class of PN-Heterocycles

Account

Synlett 2020, 31, 1862–1877
DOI: 10.1055/s-0040-1707168

J. P. Bard
D. W. Johnson*
M. M. Haley*

University of Oregon, USA



1862

Synlett

Cluster Preface: Integrated Synthesis Using Continuous-Flow Technologies

Cluster

Synlett 2020, 31, 1878–1879

S. Fuse*

Nagoya University, Japan

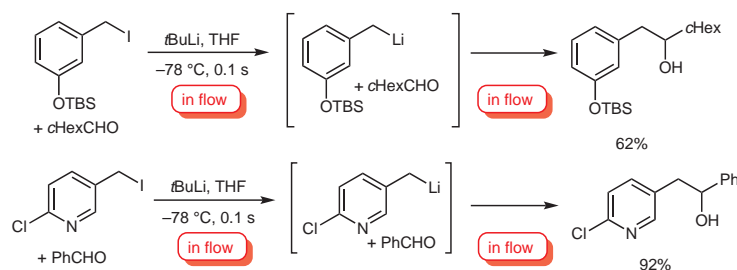


1878

Synlett

Continuous-Flow Reactions Mediated by Main Group Organometallics

Cluster

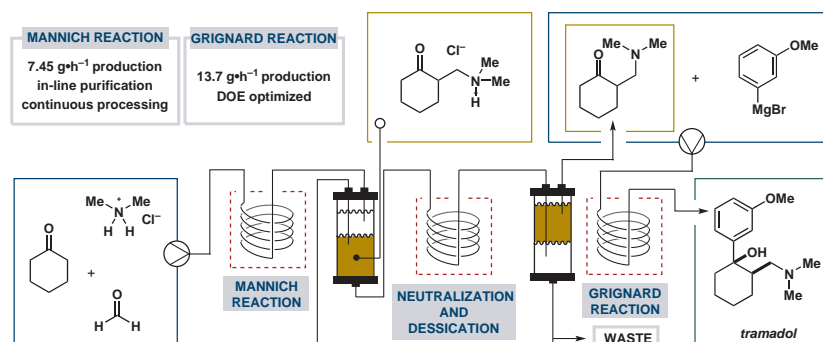
Synlett 2020, 31, 1880–1887
DOI: 10.1055/s-0040-1706536J. H. Harenberg
N. Weidmann
P. Knochel*Ludwig-Maximilians-Universität
München, Germany

1880

Synlett

Continuous-Flow Synthesis of Tramadol from Cyclohexanone

Cluster

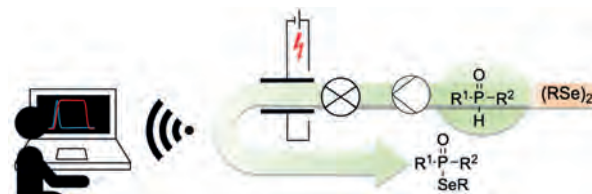
Synlett 2020, 31, 1888–1893
DOI: 10.1055/s-0039-1690884T. M. Monos
J. N. Jaworski
J. C. Stephens
T. F. Jamison*Massachusetts Institute of Tech-
nology, USA

1888

Synlett

Accelerating Electrochemical Synthesis through Automated Flow: Efficient Synthesis of Chalcogenophosphites

Cluster

Synlett 2020, 31, 1894–1898
DOI: 10.1055/s-0040-1707141N. Amri
T. Wirth*
Cardiff University, UK

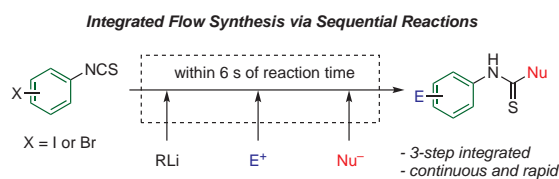
1894

Synlett

Integrated Synthesis Using Isothiocyanate-Substituted Aryllithiums by Flow Chemistry

Cluster

1899

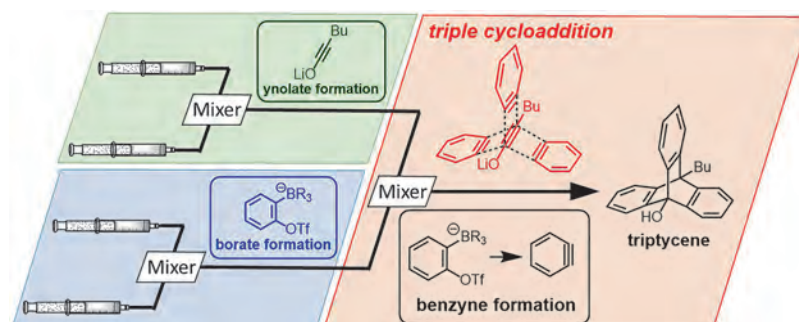
Synlett 2020, 31, 1899–1902
DOI: 10.1055/s-0040-1707251H.-J. Lee
D. Torii
Y. Jeon
J.-i. Yoshida*
H. Kim*University, Korea
Kyoto University, Japan

Synlett

Flow Synthesis of Triptycene via Triple Cycloaddition of Ynolate to Benzyne

Cluster

1903

Synlett 2020, 31, 1903–1906
DOI: 10.1055/s-0040-1706417T. Iwata
T. Yoshinaga
M. Shindo*
Kyushu University, Japan

Synlett

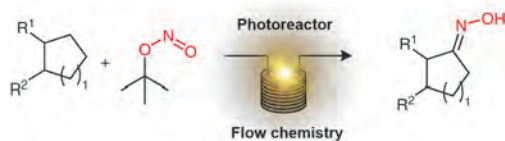
Photochemical Flow Oximation of Alkanes

Cluster

1907

Synlett 2020, 31, 1907–1912
DOI: 10.1055/s-0040-1707281O. M. Griffiths
M. Ruggeri
I. R. Baxendale*

University of Durham, UK

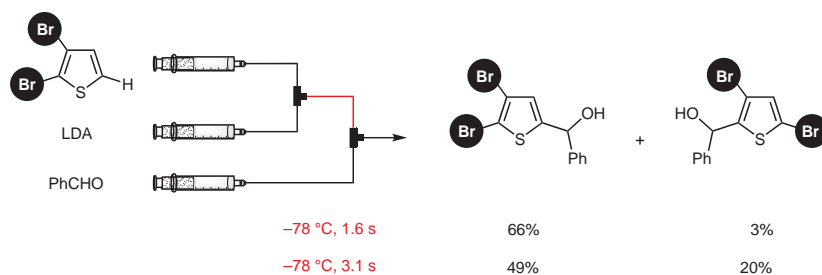


Synlett

Trapping of Transient Thienyllithiums Generated by Deprotonation of 2,3- or 2,5-Dibromothiophene in a Flow Microreactor

Cluster

1913

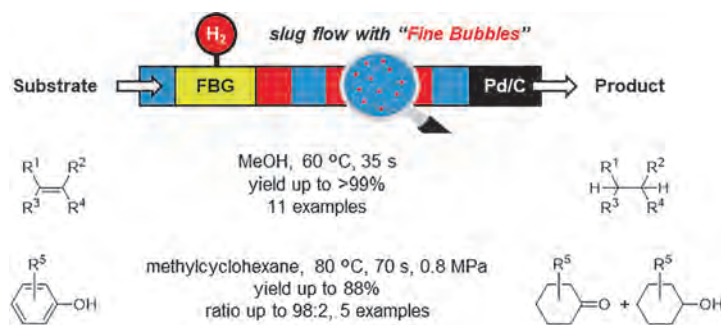
Synlett 2020, 31, 1913–1918
DOI: 10.1055/s-0040-1706479K. Okano*
Y. Yamane
A. Nagaki
A. Mori
Kobe University, Japan

Synlett

Fine-Bubble–Slug-Flow Hydrogenation of Multiple Bonds and Phenols

Cluster

1919

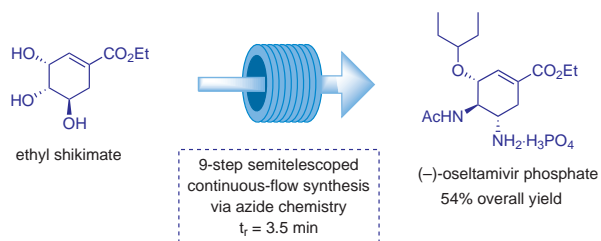
Synlett 2020, 31, 1919–1924
DOI: 10.1055/s-0040-1705948T. Iio
K. Nagai
T. Kozuka
A. M. Sammi
K. Sato
T. Narumi
N. Mase*
Shizuoka University, Japan

Synlett

Continuous-Flow Synthesis of (–)-Oseltamivir Phosphate (Tamiflu)

Cluster

1925

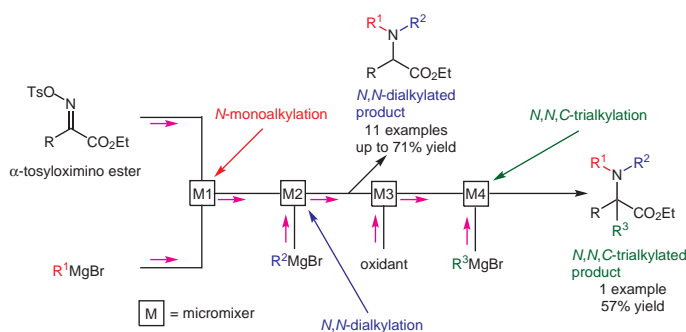
Synlett 2020, 31, 1925–1929
DOI: 10.1055/s-0039-1690878C. R. Sagandira
P. Watts*
Nelson Mandela University,
South Africa

Synlett 2020, 31, 1930–1936
DOI: 10.1055/s-0040-1707265

K. Ota
S. Fukumoto
T. Iwase
I. Mizota
M. Shimizu*
I. Hachiya*

Mie University, Japan
Nanjing Tech University, Japan

1930

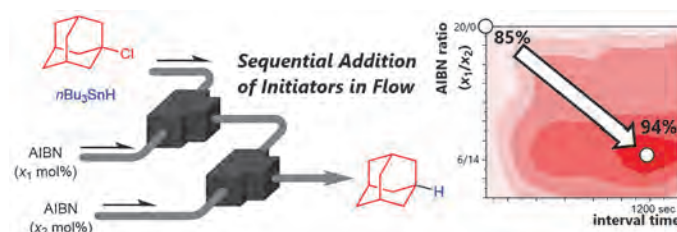


Synlett 2020, 31, 1937–1941
DOI: 10.1055/s-0040-1707307

Y. Jiang
Y. Ashikari
K. Guan
A. Nagaki*

Kyoto University, Japan

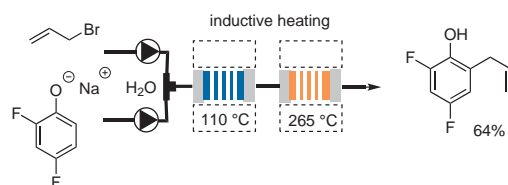
1937



Synlett 2020, 31, 1942–1946
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M. Oltmanns
A. Kirschning*
Leibniz Universität
Hannover, Germany

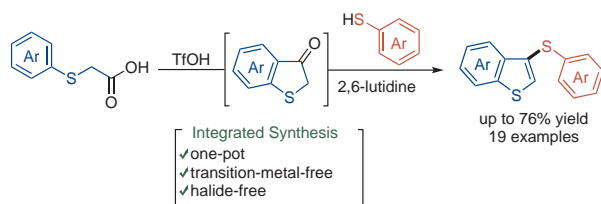
1942



Synlett 2020, 31, 1947–1952
DOI: 10.1055/s-0040-1707280

K. Mitsudo*
N. Habara
Y. Kobashi
Y. Kurimoto
H. Mandai
S. Suga*

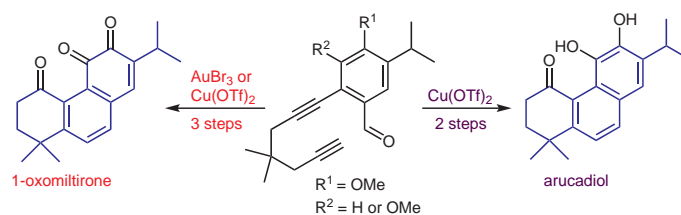
Okayama University, Japan



Synlett 2020, 31, 1953–1956
DOI: 10.1055/s-0039-1690743

C. Seong
J. Kang
U. Chai
D. H. Mac
C. H. Oh*

Hanyang University, Korea



Synlett

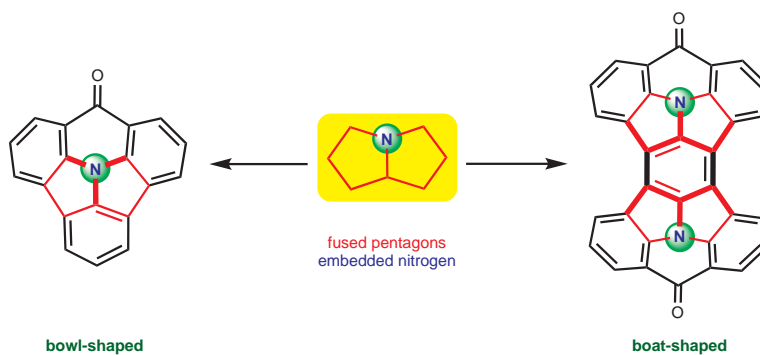
Embedding Heteroatoms and Adjacent Pentagons in Concave Molecules

Synfacts

Synlett 2020, 31, 1957–1961
DOI: 10.1055/s-0040-1706411

G. Zhang*
Nanjing Forestry University, P. R.
of China

1957



Synlett

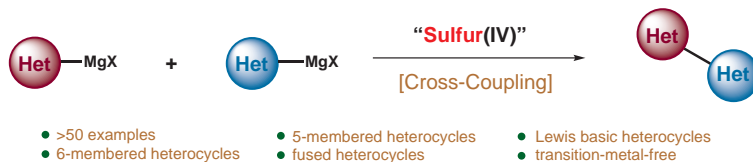
Unsymmetrical Heterocycle Cross-Couplings Enabled by Sulfur(IV) Reagents

Synfacts

Synlett 2020, 31, 1962–1966
DOI: 10.1055/s-0040-1706412

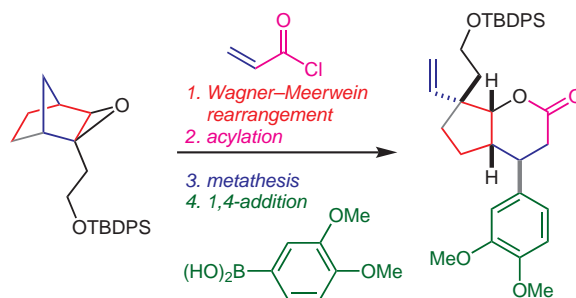
M. Zhou
J. Tsien
T. Qin*
The University of Texas South-
western Medical Center, USA

1962



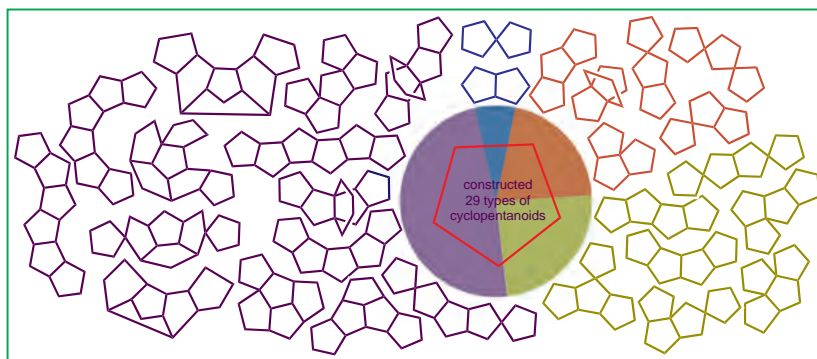
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DOI: 10.1055/s-0040-1707904

S. Yokoshima*
Nagoya University, Japan



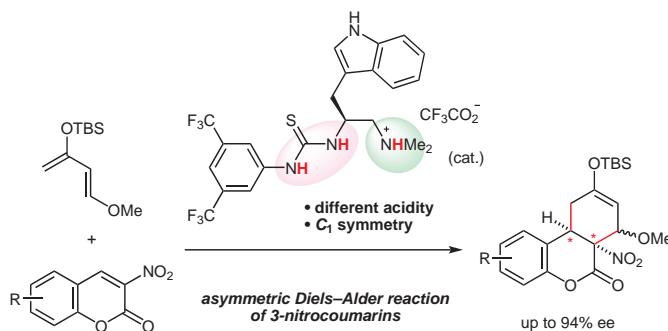
Synlett 2020, 31, 1976–2012
DOI: 10.1055/a-1288-8240

S. Kotha*
Y. Tangella
Indian Institute of Technology
Bombay, India



Synlett 2020, 31, 2013–2017
DOI: 10.1055/s-0040-1707302

Y. Fujii
R. Nakao
S. Sugihara
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Y. Araki
T. Kudoh
I. Hayakawa
H. Mizoguchi
A. Sakakura*
Okayama University, Japan



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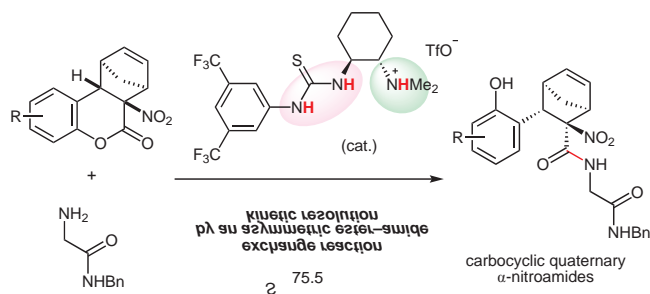
Synlett 2020, 31, 2018–2022
DOI: 10.1055/s-0040-1707303R. Nakao
Y. Fujii
I. Hayakawa
H. Mizoguchi
A. Sakakura*

Okayama University, Japan

Kinetic Resolution of α -Nitrolactones by Catalytic Asymmetric Hydrolysis or Ester–Amide Exchange Reaction

Letter

2018



Synlett

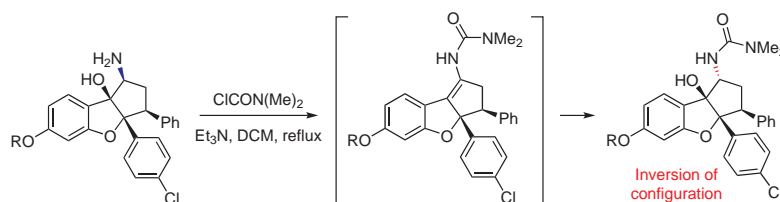
Synlett 2020, 31, 2023–2026
DOI: 10.1055/s-0040-1707277H. Abou-Hamdan
L. Désaubry*

University of Strasbourg, France

Unexpected Inversion of Configuration During the Carbamoylation of 1-Azaflavaglines

Letter

2023



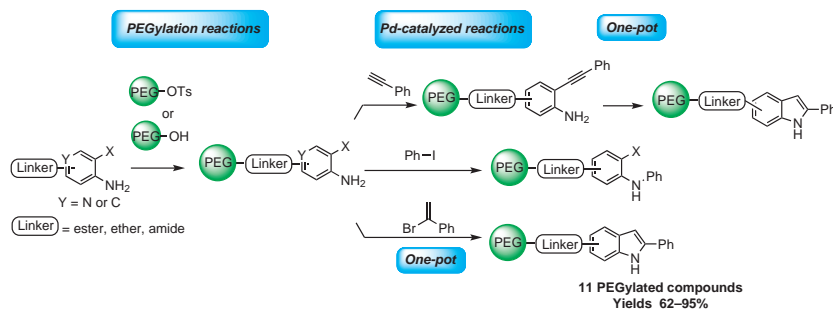
Synlett

Synlett 2020, 31, 2027–2034
DOI: 10.1055/s-0040-1707261A. S. Santos
M. M. B. Marques*Universidade Nova de Lisboa,
Portugal

Pd-Catalyzed Functionalization of Aryl Amines on a Soluble Polymer Support

Letter

2027

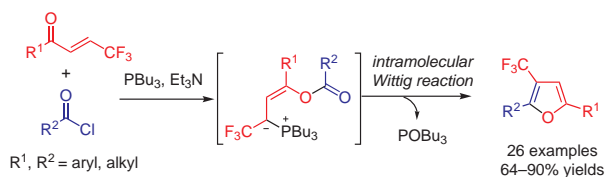


Synlett

Synlett 2020, 31, 2035–2038
DOI: 10.1055/s-0040-1707263M. Li
W. Zhou*
Jinan University, P. R. of ChinaTransition-Metal-Free Synthesis of Trifluoromethylated Furans via a Bu₃P-Mediated Tandem Acylation–Wittig Reaction

Letter

2035



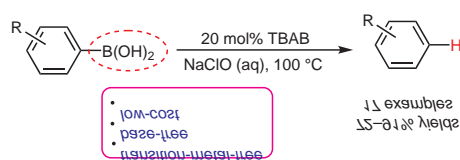
Synlett

Synlett 2020, 31, 2039–2042
DOI: 10.1055/s-0040-1706298M. Li
Y. Tang
J. Gao
G. Rao
Z. Mao*
Yunnan University of Chinese
Medicine, P. R. of China

Practical Transition-Metal-Free Protodeboronation of Arylboronic Acids in Aqueous Sodium Hypochlorite

Letter

2039



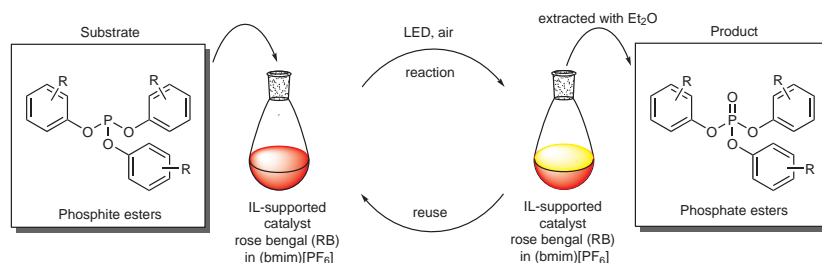
Synlett

Synlett 2020, 31, 2043–2045
DOI: 10.1055/s-0040-1706068A. Mihoya
Y. Shibuya
A. Ito
A. Toyoda
M. Oba
S. Koguchi*
Tokai University, Japan

Aerobic Oxidation of Phosphite Esters to Phosphate Esters by Using an Ionic-Liquid-Supported Organotelluride Reusable Catalyst

Letter

2043



Synlett

Synlett 2020, 31, 2046–2048
DOI: 10.1055/s-0040-1707291

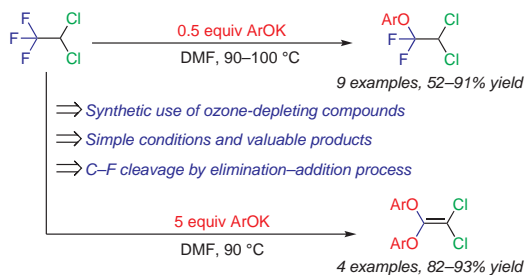
X.-J. Tang*
Q.-Y. Chen*

University of Chinese Academy
of Sciences, P. R. of China

Unexpected Substitution Reaction of 1,1-Dichloro-2,2,2-trifluoroethane (HCFC-123) with Phenolates

Letter

2046



Synlett

Synlett 2020, 31, 2049–2053
DOI: 10.1055/s-0039-1691574

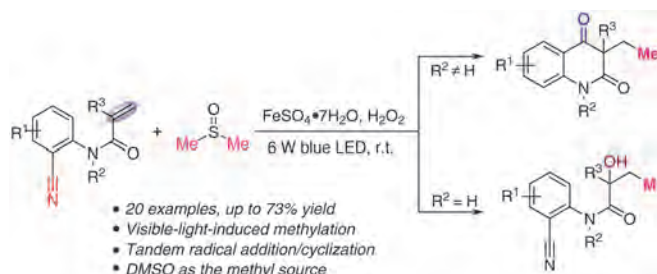
H. Sun
Y. Jiang
M.-K. Lu
Y.-Y. Li
L. Li
J.-K. Liu*

South-Central University for Na-
tionalities, P. R. of China

Iron-Catalyzed Tandem Radical Addition/Cyclization: Highly Efficient Access to Methylated Quinoline-2,4-diones

Letter

2049



Synlett

Synlett 2020, 31, 2054–2058
DOI: 10.1055/s-0040-1706477

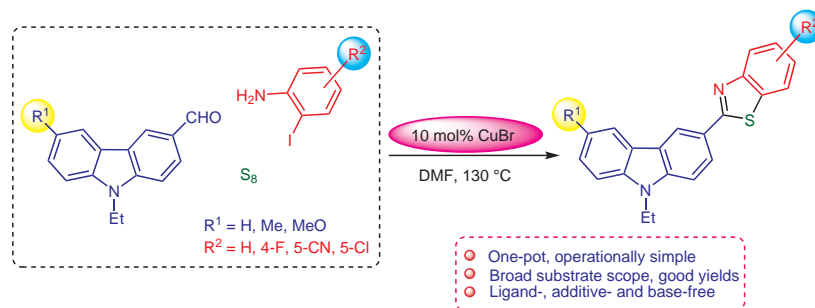
R. Meesala*
Y. K. Lee
A. S. M. Arshad
I. Abdullah
M. N. Mordi
N. Abd. Rahman

Universiti Malaya, Malaysia

CuBr-Catalyzed One-Pot Three-Component Synthesis of Novel 2-(Carbazolyl)benzothiazoles

Letter

2054



Synthesis

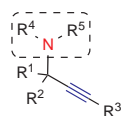
Recent Advances in Reactions of Propargylamines

Review

Synthesis **2020**, 52, 1–20
DOI: 10.1055/s-0039-1690684

X. Sheng
K. Chen
C. Shi
D. Huang*

Lishui University, P. R. of China



- (a) (as a leaving group)
- (b) hydrogenation
- (c) rearrangement
- (d) nucleophilic amines
- (e) nucleophilic carbons
- (f) electrophilic alkynes

1

Synthesis

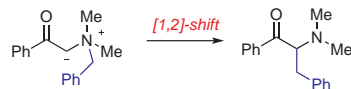
On the Mechanism of the Stevens Rearrangement

Short Review

Synthesis **2020**, 52, 21–26
DOI: 10.1055/s-0039-1690682

D. Baidilov*

Brock University, Canada



21

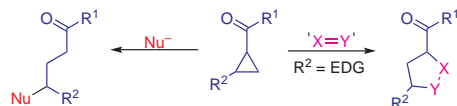
Synthesis

The Bonding and Reactivity of α -Carbonyl Cyclopropanes

Short Review

Synthesis **2020**, *52*, 27–39
DOI: 10.1055/s-0039-1690695

A. J. Craig*
B. C. Hawkins*
University of Otago,
New Zealand



27

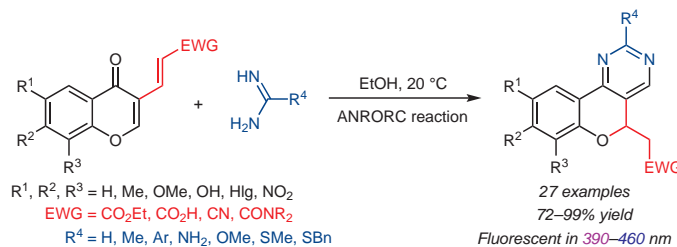
Synthesis

Convenient Synthesis of Fluorescent Chromeno[4,3-*d*]pyrimidines from Electron-Deficient 3-Vinylchromones

Feature

Synthesis **2020**, *52*, 40–50
DOI: 10.1055/s-0039-1690723

N. M. Chernov
R. V. Shutov*
A. E. Potapova
I. P. Yakovlev
Saint-Petersburg State Chemical
Pharmaceutical University,
Russian Federation



40

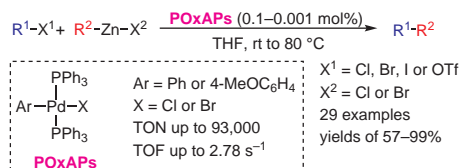
Synthesis

POxAP Precatalysts and the Negishi Cross-Coupling Reaction

Feature

Synthesis **2020**, *52*, 51–59
DOI: 10.1055/s-0039-1690728

S.-Q. Tang
M. Schmitt
F. Bihel*
Université de Strasbourg, France



51

Synthesis

Synthesis 2020, 52, 60–68
DOI: 10.1055/s-0039-1690725

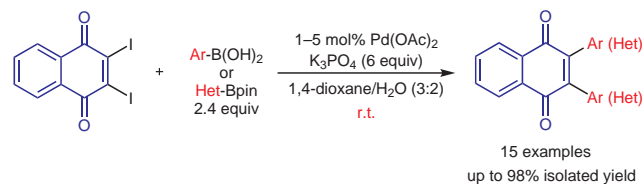
V. A. Migulin*

N. D. Zelinsky Institute of Organic Chemistry, Russian Federation

A New Synthetic Pathway to Symmetric Bisubstituted Naphthoquinones

Paper

60



Synthesis

Synthesis 2020, 52, 69–74
DOI: 10.1055/s-0039-1690712

Y.-Z. Ji

H.-J. Li*

Y. Liu

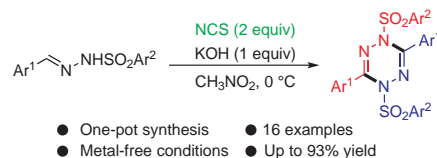
Y.-C. Wu*

Harbin Institute of Technology, P. R. of China
Weihai Institute of Marine Biomedical Industrial Technology, P. R. of China

Chlorination of Arylaldehyde-Derived Arylsulfonylhydrazones with N-Chlorosuccinimide Leading to 1,2,4,5-Tetrazine Derivatives

Paper

69



Synthesis

Synthesis 2020, 52, 75–84
DOI: 10.1055/s-0039-1690240

P. Sun

J. Yang

Z. Song

Y. Cai

Y. Liu

C. Chen*

X. Chen

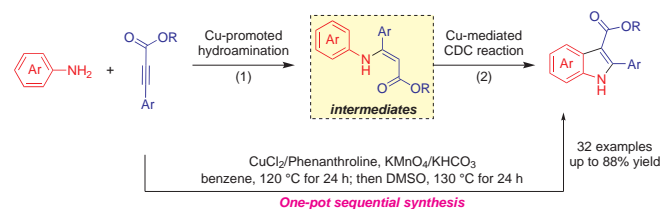
J. Peng*

Northeast Forestry University, P. R. of China

Copper-Mediated One-Pot Synthesis of Indoles through Sequential Hydroamination and Cross-Dehydrogenative Coupling Reaction

Paper

75



Synthesis

Synthesis 2020, 52, 85–97
DOI: 10.1055/s-0037-1610728

Q. D. Wei

Y.-M. Yao

S.-Q. Chang

W.-D. Yang

M.-Y. Tian

X.-L. Liu*

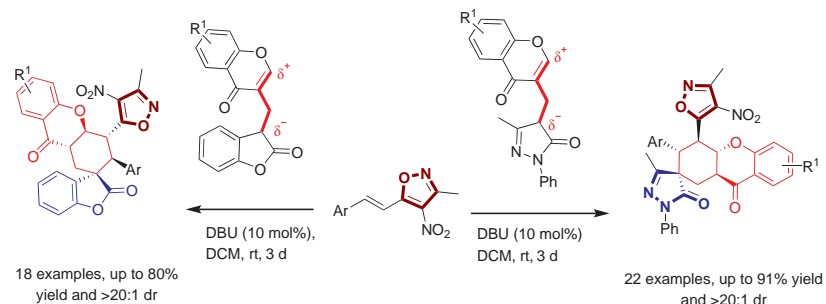
Y. Zhou

Guizhou University,
P. R. of China

DBU-Catalyzed Inter- and Intramolecular Double Michael Addition of Donor–Acceptor Chromone-Pyrazolone/Benzofuranone Synthons: Access to Spiro-Pyrazolone/Benzofuranone-Hexahydroxanthone Hybrids

Paper

85



diversity-oriented synthesis of spiro-pyrazolone/benzofuranone-hexahydroxanthone hybrids

Synthesis

Synthesis 2020, 52, 98–104
DOI: 10.1055/s-0039-1690230

A. S. Antonov*

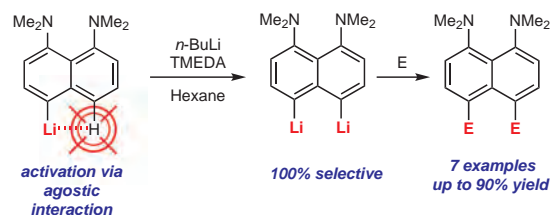
A. A. Yakubenko

St. Petersburg State University,
Russian Federation

Noncovalent Li...H Interaction in the Synthesis of *peri*-Disubstituted Naphthalene Proton Sponges

Paper

98



Synthesis

Synthesis 2020, 52, 105–118
DOI: 10.1055/s-0037-1610734

P. J. Lindsay-Scott*

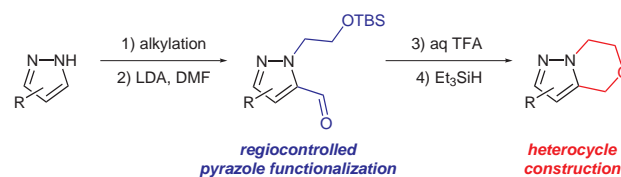
E. Rivlin-Derrick

Eli Lilly and Company Limited,
UK

Regiocontrolled Synthesis of 6,7-Dihydro-4*H*-pyrazolo-[5,1-*c*][1,4]oxazines

Paper

105



Synthesis

Synthesis 2020, 52, 119–126
DOI: 10.1055/s-0039-1690701

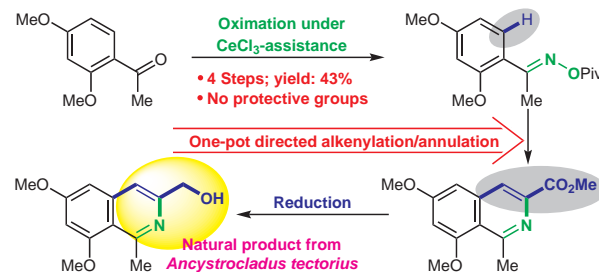
D. F. Vargas*
B. S. Romero
E. L. Larghi
T. S. Kaufman*

Instituto de Química Rosario
(IQUIR, CONICET-UNR),
Argentina
Universidad Nacional de Rosario,
Argentina

Rhodium(III)-Catalyzed C–H Activation-Based First Total Synthesis of 6-O-Methyl Ancistrochine, an Alkaloid Isolated from *Ancistrocladus tectorius*

Paper

119



Synthesis

Synthesis 2020, 52, 127–134
DOI: 10.1055/s-0037-1610731

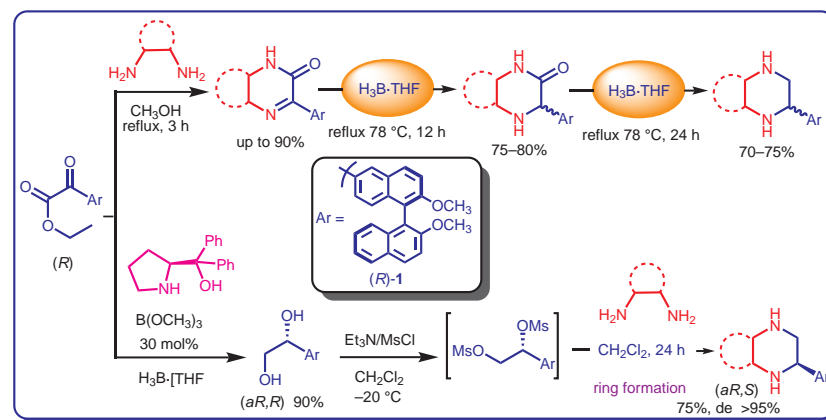
M. Periasamy*
B. Venkanna
M. Nagaraju
L. Mohan

University of Hyderabad, India

Methods for the Synthesis of Piperazine Derivatives Containing a Chiral Bi-2-naphthyl Moiety

Paper

127



Synthesis

Synthesis 2020, 52, 135–140
DOI: 10.1055/s-0039-1690214

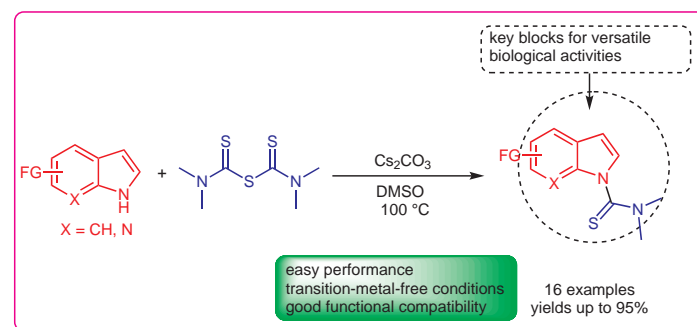
H.-Y. Peng
Y.-X. Wu
Z.-B. Dong*

Wuhan Institute of Technology,
P. R. of China
Hubei University, P. R. of China

 Cs_2CO_3 -Promoted $\text{C}(\text{sp}^2)\text{-N}$ Formation of Dimethyl Thiocarbamate-Protected Indoles Using Tetramethylthiuram Monosulfide (TMTM)

Paper

135



Synthesis

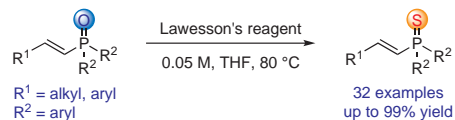
Synthesis of α,β -Unsaturated Phosphine Sulfides

Paper

Synthesis 2020, 52, 141–149
DOI: 10.1055/s-0039-1690685

X.-L. Wang
J.-X. Chen
X.-S. Jia*
L. Yin*

Shanghai University,
P. R. of China
Shanghai Institute of Organic
Chemistry, P. R. of China



141

Synthesis

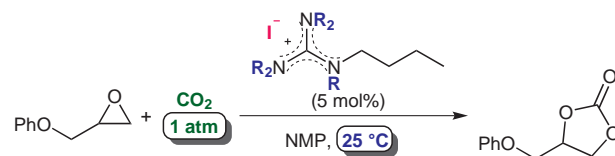
Efficient Catalysts of Acyclic Guanidinium Iodide for the Synthesis of Cyclic Carbonates from Carbon Dioxide and Epoxides under Mild Conditions

Paper

Synthesis 2020, 52, 150–158
DOI: 10.1055/s-0037-1610735

N. Aoyagi
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T. Endo*

Kindai University, Japan



Catalyst: TBAI \leq R = Me \ll R = H
Yield: 17% \leq 21% \ll 77% (>99% at 45 °C)

150

Synthesis

Synthesis 2020, 52, 159–188
DOI: 10.1055/s-0039-1690688

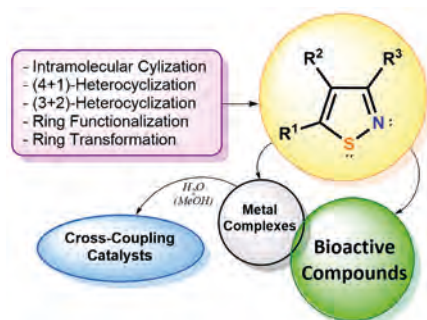
A. V. Kletskov*
N. A. Bumagin
F. I. Zubkov
D. G. Grudinin
V. I. Potkin

Peoples' Friendship University of
Russia (RUDN University),
Russian Federation

Isothiazoles in the Design and Synthesis of Biologically Active Substances and Ligands for Metal Complexes

Review

159



Synthesis

Synthesis 2020, 52, 189–196
DOI: 10.1055/s-0039-1690713

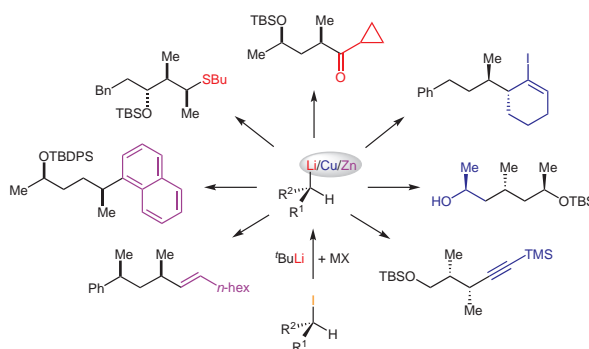
J. Skotnitzki
A. Kremsmair
P. Knochel*

Ludwig-Maximilians-Universität,
Germany

Stereoselective Preparation and Reactions of Chiral Secondary Alkylolithiums

Short Review

189



Synthesis

Recent Advances in Difluoromethylthiolation

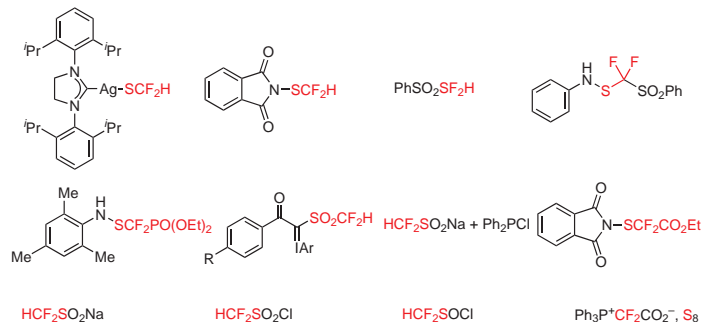
Short Review

Synthesis 2020, 52, 197–207
DOI: 10.1055/s-0039-1690714

197

X. Xiao
Z.-T. Zheng
T. Li
J.-L. Zheng
T. Tao
L.-M. Chen
J.-Y. Gu
X. Yao*
J.-H. Lin*
J.-C. Xiao*

University of South China, P. R. of China
Shanghai Institute of Organic Chemistry, P. R. of China



Synthesis

Direct Transformation of Propargylic Alcohols and *O,O*-Diethyl Phosphorothioic Acid into *S*-(2*H*-Chromen-4-yl) Phosphorothioates

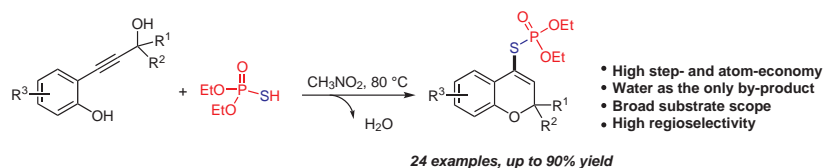
Feature

208

Synthesis 2020, 52, 208–218
DOI: 10.1055/s-0039-1690749

X.-R. Song
T. Yang
H. Ding
Q. Xiao*

Jiangxi Science & Technology Normal University, P. R. of China



Synthesis

Visible-Light-Promoted C2 Trifluoromethylation of Quinoline *N*-Oxides

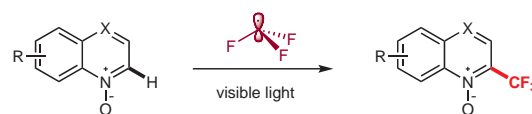
Paper

219

Synthesis 2020, 52, 219–226
DOI: 10.1055/s-0039-1690726

C. Liang
W.-T. Zhuo
Y.-N. Niu
G.-L. Gao*

Harbin Institute of Technology, P. R. of China



- simple operation
- mild reaction conditions
- 20 different examples
- broad substrate scope
- up to 60% yield

Synthesis

Synthesis 2020, 52, 227–238
DOI: 10.1055/s-0039-1690231

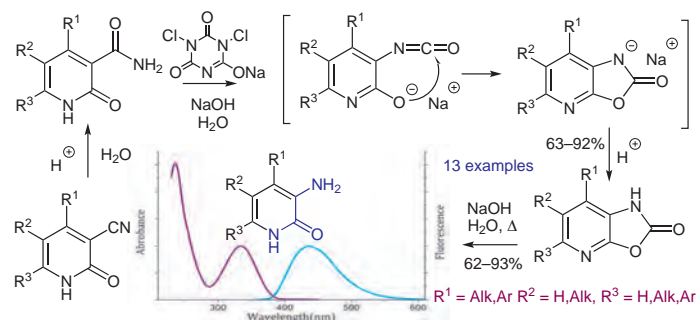
A. L. Shatsuskas
A. A. Abramov
S. A. Chernenko
A. S. Kostyuchenko
A. S. Fisyuk*

Omsk State Technical University,
Russian Federation

Synthesis and Photophysical Properties of 3-Amino-4-arylpyridin-2(1H)-ones

Paper

227



Synthesis

Synthesis 2020, 52, 239–245
DOI: 10.1055/s-0039-1690220

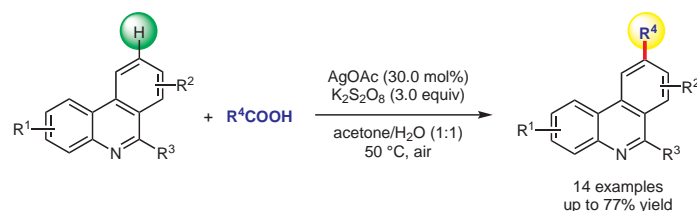
T. Huang
Y. Yu
H. Wang
Y. Lin
Y. Ma
H. Wang
C.-H. Ding*
J. Xiao*
B. Xu*

Shanghai University,
P. R. of China
Shanghai Institute of Organic
Chemistry, P. R. of China

Silver-Promoted Regioselective Oxidative Decarboxylative C–H Alkylation of Phenanthridines with Carboxylic Acids

Paper

239



Synthesis

Synthesis 2020, 52, 246–252
DOI: 10.1055/s-0039-1690208

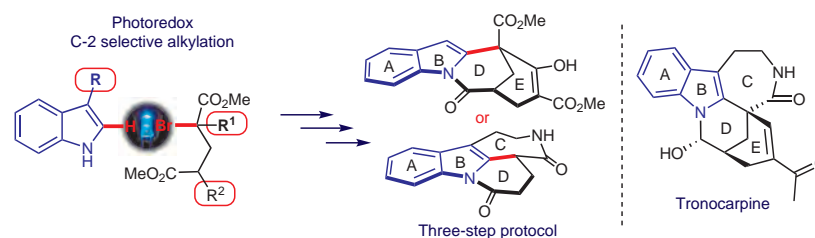
D. A. Contreras-Cruz
M. Castañón-García
E. Becerril-Rodríguez
L. D. Miranda*

Universidad Nacional Autónoma
de México, Ciudad Universitaria,
México

A Photoredox Catalysis Approach for the Synthesis of Both the ABDE and the ABCD Cores of Tronocarpine

Paper

246



Synthesis

Synthesis 2020, 52, 253–262
DOI: 10.1055/s-0039-1690709

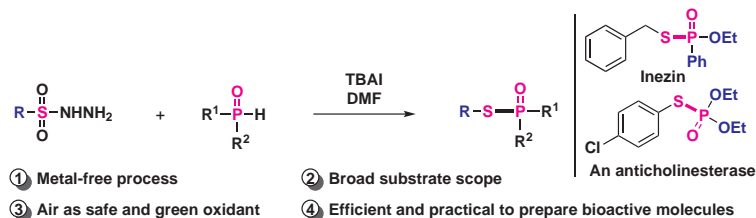
T. Liu*
Y. Zhang
R. Yu
J. Liu
F. Cheng*

Qujing Normal University,
P. R. of China

An Alternative Metal-Free Aerobic Oxidative Cross-Dehydrogenative Coupling of Sulfonyl Hydrazides with Secondary Phosphine Oxides

Paper

253



Synthesis

Synthesis 2020, 52, 263–272
DOI: 10.1055/s-0039-1690729

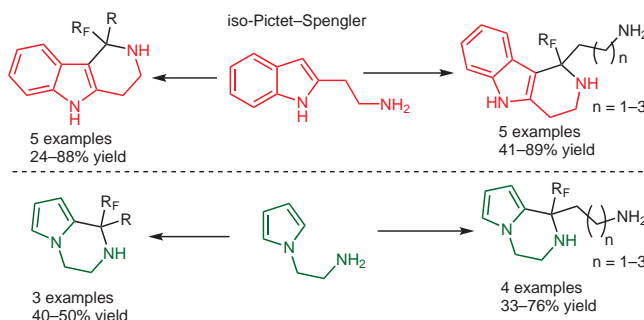
N. G. Voznesenskaia
O. I. Shmatova
V. G. Nenajdenko*

Moscow State University,
Russian Federation

Pictet–Spengler Synthesis of Perfluoroalkylated Tetrahydro- γ -carbolines and Tetrahydropyrrolopyrazines

Paper

263



Synthesis

Synthesis 2020, 52, 273–280
DOI: 10.1055/s-0039-1690248

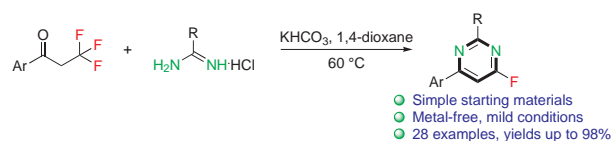
F. Liu
X. Zhang
Q. Qian*
C. Yang*

Shanghai University,
P. R. of China
Shanghai Institute of Materia
Medica, P. R. of China

A Concise and Efficient Approach to 2,6-Disubstituted 4-Fluoropyrimidines from α -CF₃ Aryl Ketones

Paper

273



Synthesis

Synthesis **2020**, *52*, 281–289
DOI: 10.1055/s-0039-1690731

Y. Kim

Y. I. Kwon

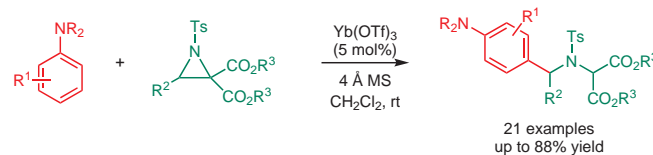
S.-G. Kim*

Kyonggi University,
Republic of Korea

Efficient Synthesis of Diarylmethylamines via Lewis Acid Catalyzed Friedel–Crafts Reactions of Donor–Acceptor Aziridines with *N,N*-Dialkylanilines

Paper

281



Synthesis

Synthesis **2020**, *52*, 290–296
DOI: 10.1055/s-0039-1690218

Y. Lu

L. Chen

X. Chen

M. Yao

Z. Luo*

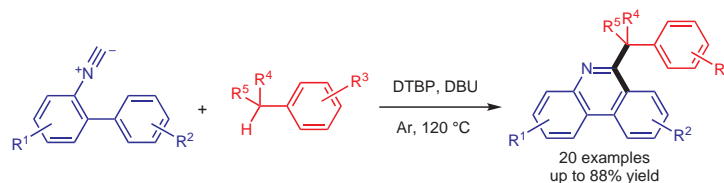
Y. Zhang*

Huazhong University of Science
and Technology, P. R. of China

Metal-Free Synthesis 6-Benzylphenanthridines via Radical Addition/Cyclization of 2-Isocyanobiphenyls

Paper

290



Synthesis

Synthesis **2020**, *52*, 297–303
DOI: 10.1055/s-0039-1690031

Y. Zhang

D. Zhou

Y. Ma*

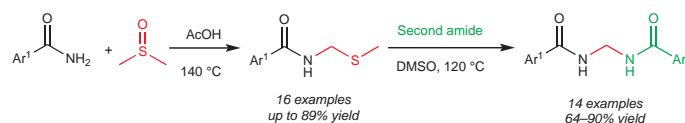
J. Chen*

Zhejiang Chinese Medical Uni-
versity, P. R. of China
Taizhou University, P. R. of China

DMSO-Mediated Synthesis of Methylene-Bridged Unsymmetrical Bisamides in the Presence of AcOH

Paper

297



- Unsymmetrical synthesis
- Broad substrate scope
- Transition-metal free
- Simple operations

Synthesis

Synthesis 2020, 52, 304–310
DOI: 10.1055/s-0039-1690716

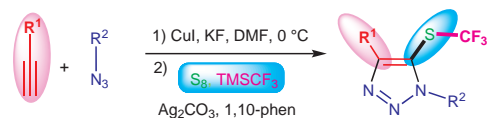
L.-L. Zhang
M.-T. Li
L.-L. Shen
Q.-P. Wu*

Beijing Institute of Technology,
P. R. of China

Efficient Synthesis of 5-Trifluoromethylthio-1,2,3-Triazoles: One-Pot Multicomponent Reaction from Elemental Sulfur and TMSCF₃

Paper

304



20 examples, up to 81% yield

Synthesis

Synthesis 2020, 52, 311–319
DOI: 10.1055/s-0039-1690717

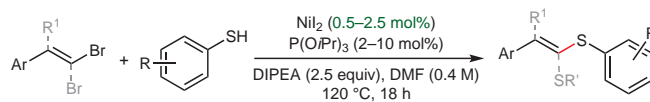
A. D. Marchese
B. Mirabi
E. M. Larin
M. Lautens*

University of Toronto, Canada

A Simplified Protocol for the Stereospecific Nickel-Catalyzed C–S Vinylation Using NiX₂ Salts and Alkyl Phosphites

Paper

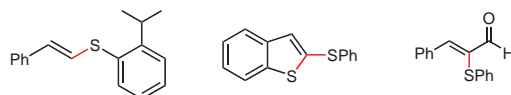
311



• 21 examples

• low catalyst load

• 22–92% yield



Synthesis

Synthesis 2020, 52, 320–326
DOI: 10.1055/s-0039-1690295

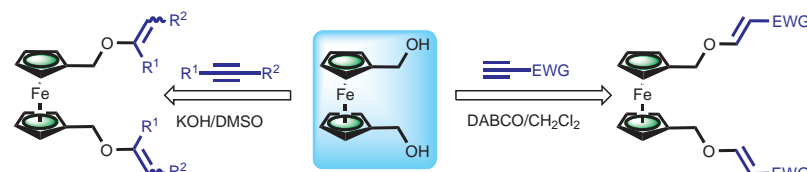
L. A. Oparina
N. A. Kolyvanov
O. A. Tarasova
A. I. Albanov
A. P. Tantsyrev
B. A. Trofimov*

A. E. Favorsky Irkutsk Institute of
Chemistry, Russian Federation

Nucleophilic Addition of 1,1'-Bis(hydroxymethyl)ferrocene to Alkynes: Synthesis of Ferrocene Diethenyl Ethers

Paper

320



3 examples

68–80% yield

R¹ = R² = H; R¹ = Me, R² = H;

R¹ = H, R² = Ph

4 examples

91–98% yield

EWG = CO₂Me, CO₂Et,
2-Furoyl, C(O)Ph



XI

Synthesis

Synthesis

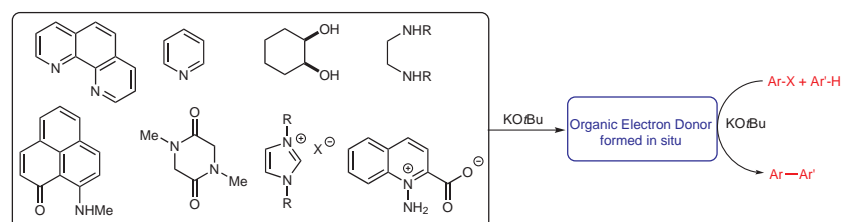
Synthesis 2020, 52, 327–336
DOI: 10.1055/s-0039-1690614

G. Nocera
J. A. Murphy*
University of Strathclyde, UK

Ground State Cross-Coupling of Haloarenes with Arenes Initiated by Organic Electron Donors, Formed in situ: An Overview

Short Review

327



Synthesis

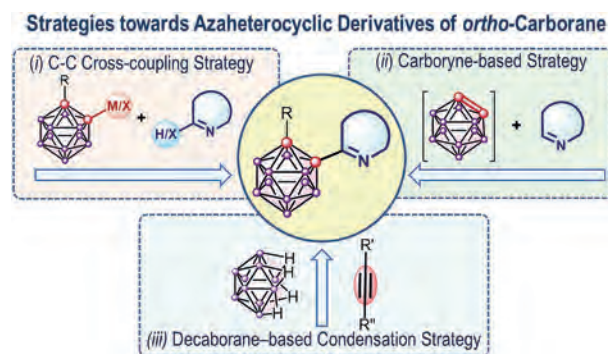
Synthesis 2020, 52, 337–352
DOI: 10.1055/s-0039-1690733

L. A. Smyshliaeva
M. V. Varaksin
V. N. Charushin
O. N. Chupakhin*
Ural Federal University,
Russian Federation

Azaheterocyclic Derivatives of *ortho*-Carborane: Synthetic Strategies and Application Opportunities

Short Review

337



Synthesis

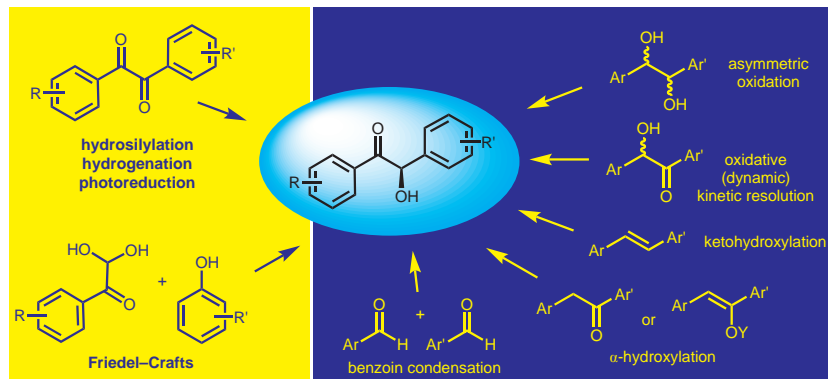
Synthesis 2020, 52, 353–364
DOI: 10.1055/s-0039-1691529

L. De Luca
A. Mezzetti*
ETH Zürich, Switzerland

Catalytic Strategies to Enantiopure Benzoin: Past and Future

Short Review

353



Synthesis

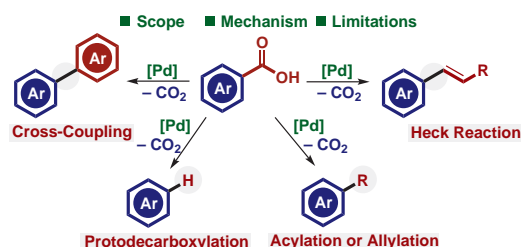
Synthesis 2020, 52, 365–377
DOI: 10.1055/s-0039-1690769

R. A. Daley
J. J. Topczewski*
University of Minnesota Twin
Cities, USA

Aryl-Decarboxylation Reactions Catalyzed by Palladium: Scope and Mechanism

Short Review

365



Synthesis

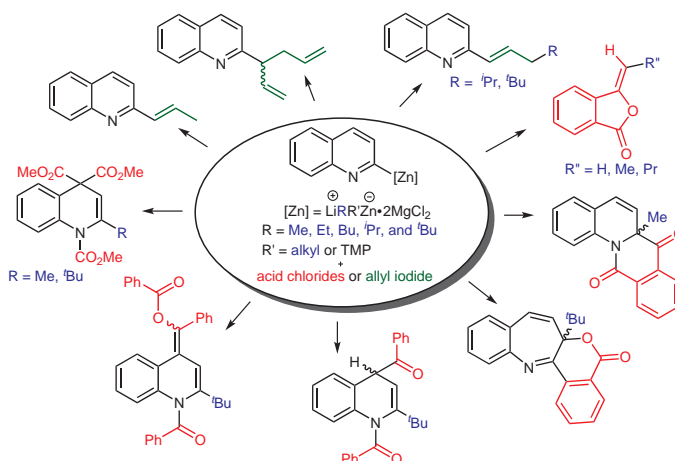
Synthesis 2020, 52, 378–392
DOI: 10.1055/s-0039-1690036

H. J. Jeong
S. Chae
K. Jeong
S. K. Namgoong*
Seoul Women's University,
South Korea

Diverse One-Pot Electrophilic Trapping Reactions of 2-Quinolylicates with Acyl Chlorides and Allyl Iodide

Feature

378



Synthesis

Synthesis 2020, 52, 393–398
DOI: 10.1055/s-0039-1690010

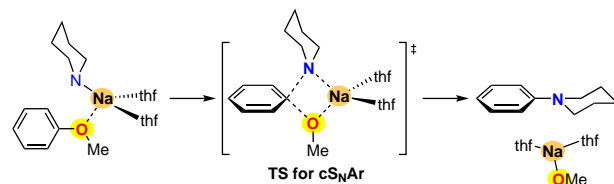
J. H. Pang
D. Y. Ong
K. Watanabe
R. Takita*
S. Chiba*

Nanyang Technological University, Singapore
The University of Tokyo, Japan

Leaving Group Ability in Nucleophilic Aromatic Amination by Sodium Hydride–Lithium Iodide Composite

Paper

393



Synthesis

Synthesis 2020, 52, 399–416
DOI: 10.1055/s-0039-1690727

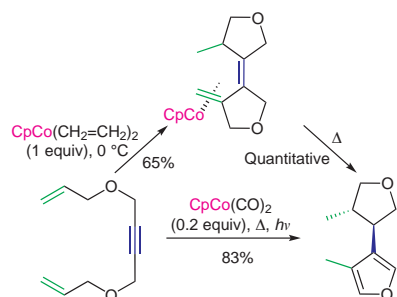
C.-A. Chang
S. Görtzgen
E. P. Johnson
K. P. C. Vollhardt*

University of California at Berkeley, USA

Stoichiometric and Catalytic (η^5 -Cyclopentadienyl)cobalt-Mediated Cycloisomerizations of Ene-Yne-Ene Type Allyl Propargyl Ethers

Paper

399



Synthesis

Synthesis 2020, 52, 417–423
DOI: 10.1055/s-0039-1690732

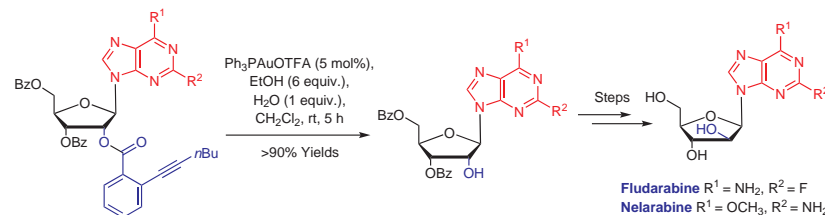
C. Shen
J. Liu
W. Ouyang
H. Ding*
J. Bai
Q. Xiao*

Jiangxi Science & Technology Normal University, P. R. of China

Practical Synthesis of Fludarabine and Nelarabine

Paper

417



Synthesis

Synthesis 2020, 52, 424–432
DOI: 10.1055/s-0039-1691490

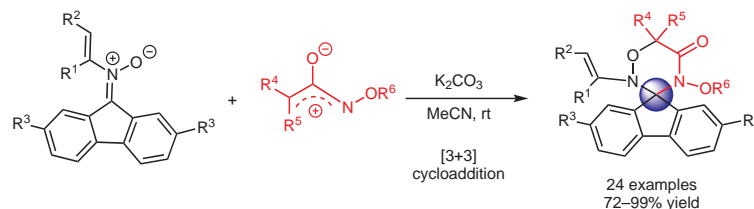
Y. Luo
C.-H. Chen
J.-Q. Zhang
C. Liang
D.-L. Mo*

Guangxi Normal University,
P. R. of China

Synthesis of Spirofluorenyl-1,2,4-oxadiazinan-5-ones through Metal-Free [3+3] Cycloaddition of *N*-Vinyl Fluorenone Nitrones with Aza-oxyallyl Cations

Paper

424



Synthesis

Synthesis 2020, 52, 433–440
DOI: 10.1055/s-0039-1690242

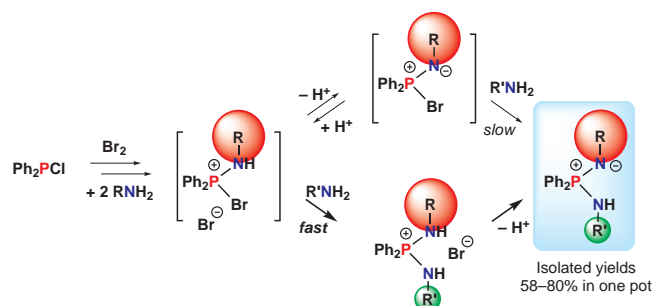
T. A. Peganova
A. M. Kalsin*

A. N. Nesmeyanov Institute of
Organoelement Compounds,
Russian Federation

Synthesis of Nonsymmetric Iminophosphonamines by Kirsanov Condensation

Paper

433



Synthesis

Synthesis 2020, 52, 441–449
DOI: 10.1055/s-0039-1690699

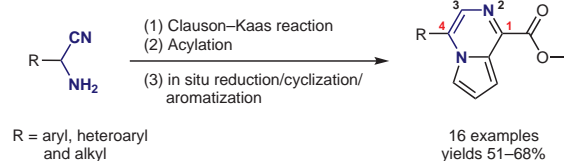
A. Karmakar
S. Ramalingam
M. Basha
G. K. Indasi
M. Belema
N. A. Meanwell
T. G. M. Dhar
R. Rampulla
A. Mathur
A. Gupta
A. K. Gupta*

Biocon Bristol Myers Squibb Re-
search Centre, India

Facile Access to 1,4-Disubstituted Pyrrolo[1,2-*a*]pyrazines from α -Aminoacetonitriles

Paper

441



R = aryl, heteroaryl
and alkyl

Synthesis

Synthesis 2020, 52, 450–458
DOI: 10.1055/s-0039-1690238

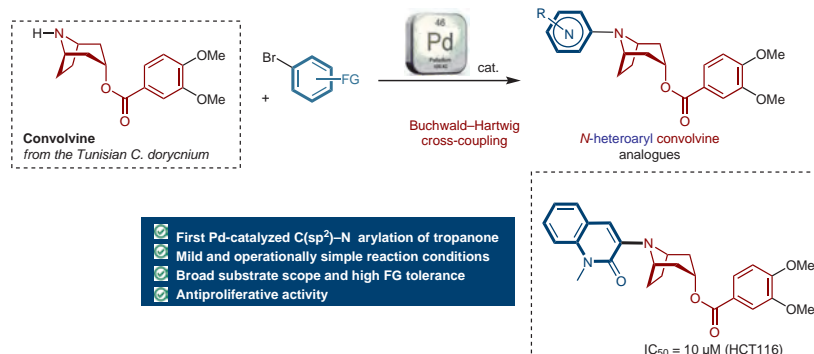
M. Hassine
H. B. Jannet*
N. Ghermani
M. Alami
S. Messaoudi*

University Paris-Saclay, France
University of Monastir, Tunisia

Synthesis of *N*-(Hetero)arylconvolvine Derivatives through a Palladium-Catalyzed Buchwald–Hartwig Cross-Coupling

Paper

450



Synthesis

Synthesis 2020, 52, 459–470
DOI: 10.1055/s-0039-1690229

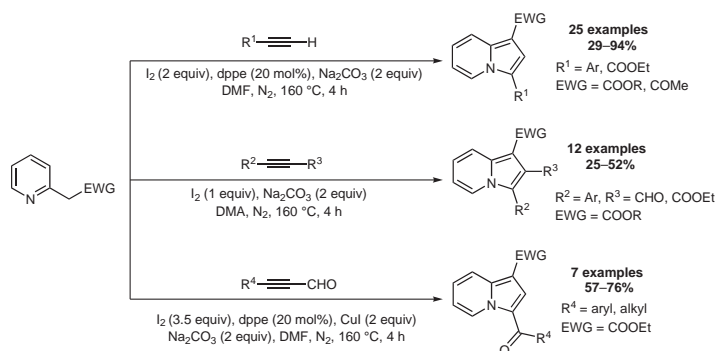
L. He
Y. Yang*
X. Liu
G. Liang
C. Li
D. Wang
W. Pan*

Guizhou Medical University,
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The Key Laboratory of Chemistry for Natural Products of Guizhou Province and Chinese Academy of Sciences, P. R. of China

Iodine-Mediated Oxidative Cyclization of 2-(Pyridin-2-yl)acetate Derivatives with Alkynes: Condition-Controlled Selective Synthesis of Multisubstituted Indolizines

Paper

459



Synthesis

Synthesis 2020, 52, 471–478
DOI: 10.1055/s-0039-1690213

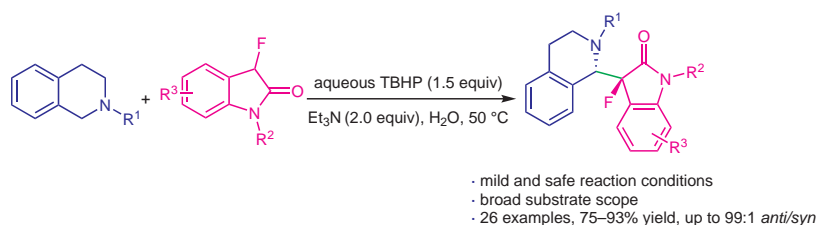
J. Ji
L.-Y. Chen*
Z.-B. Qiu
X. Ren
Y. Li*

Shanghai University of Engineering Science, P. R. of China

Metal-Free Oxidative Coupling of Tetrahydroisoquinolines and 3-Fluorooxindoles on Water

Paper

471



Synthesis

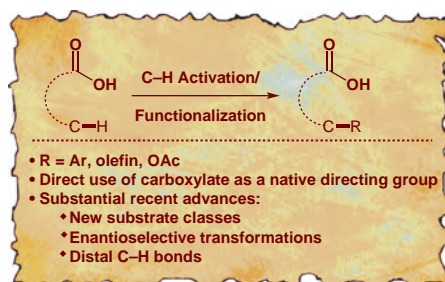
Direct C(sp³)-H Activation of Carboxylic Acids

Short Review

Synthesis **2020**, 52, 479–488
DOI: 10.1055/s-0039-1690720

A. Uttry
M. van Gemmeren*

Westfälische Wilhelms-Universität-Münster, Germany
Max-Planck-Institut für Chemische Energiekonversion, Germany



479

Synthesis

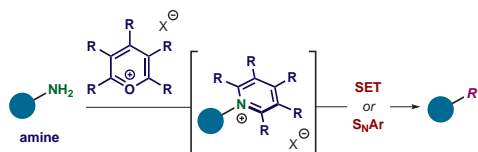
Pyrylium Salts: Selective Reagents for the Activation of Primary Amino Groups in Organic Synthesis

Short Review

Synthesis **2020**, 52, 489–503
DOI: 10.1055/s-0039-1690703

Y. Pang
D. Moser
J. Cornella*

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Synthesis

Synthesis 2020, 52, 504–520
DOI: 10.1055/s-0039-1691542

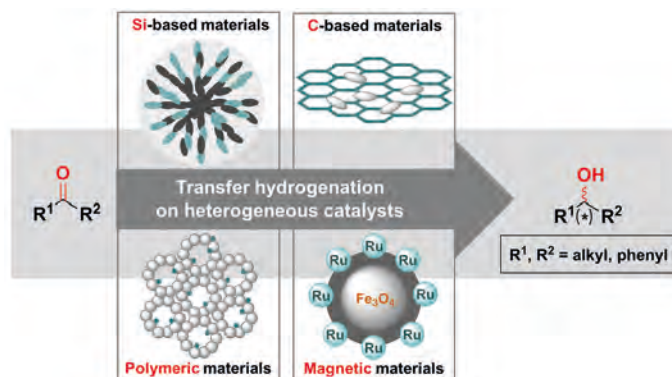
E. Baráth*

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München, Germany

Selective Reduction of Carbonyl Compounds via (Asymmetric) Transfer Hydrogenation on Heterogeneous Catalysts

Short Review

504



Synthesis

Synthesis 2020, 52, 521–528
DOI: 10.1055/s-0039-1690209

J. M. Hoffmann

A. K. Sadhoe

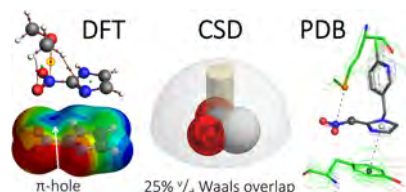
T. J. Mooibroek*

Universiteit van Amsterdam,
The Netherlands

π -Hole Interactions with Various Nitro Compounds Relevant for Medicine: DFT Calculations and Surveys of the Cambridge Structural Database (CSD) and the Protein Data Bank (PDB)

Paper

521



Synthesis

Synthesis 2020, 52, 529–536
DOI: 10.1055/s-0039-1690014

A. A. Almasalma

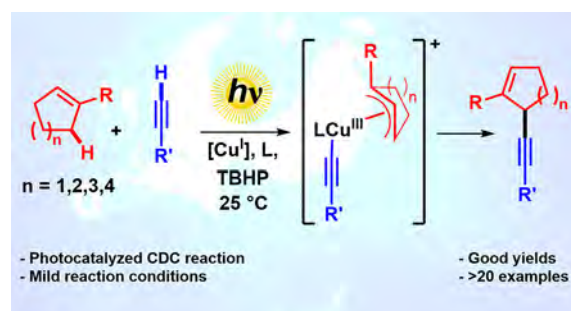
E. Mejía*

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Allylic C–H Alkynylation via Copper-Photocatalyzed Cross-Dehydrogenative Coupling

Paper

529



Synthesis

Synthesis 2020, 52, 537–543
DOI: 10.1055/s-0039-1690016

P. Cortón
P. Novo
V. López-Sobrado
M. D. García
C. Peinador*
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Solid-Phase Zincke Reaction for the Synthesis of Peptide-4,4'-bipyridinium Conjugates

Paper

537



Synthesis

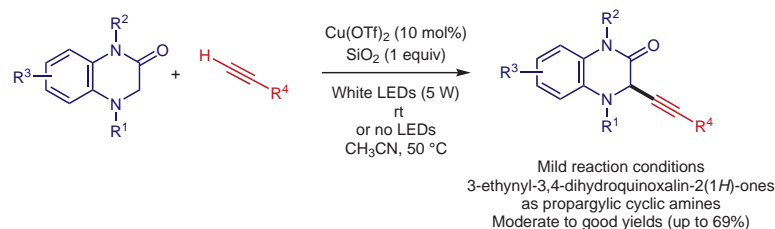
Synthesis 2020, 52, 544–552
DOI: 10.1055/s-0039-1690244

J. Rostoll-Berenguer
G. Blay
J. R. Pedro*
C. Vila*
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Copper-Catalyzed Aerobic Oxidative Alkynylation of 3,4-Dihydroquinoxalin-2-ones

Paper

544



Synthesis

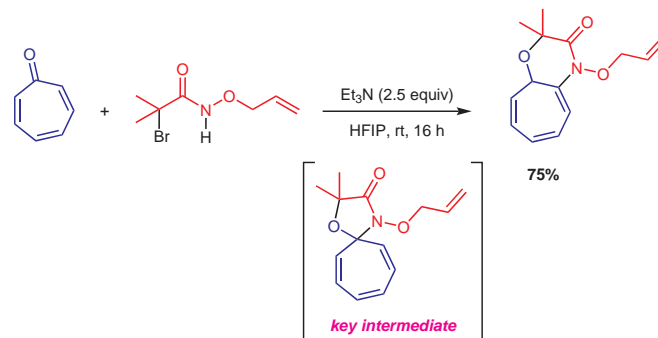
Synthesis 2020, 52, 553–564
DOI: 10.1055/s-0039-1690745

G. Force
A. Pérot
R. Guillot
V. Gandon*
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France

Formal [8+3]-Annulation between Azaoxyallyl Cations and Tropones

Paper

553



Synthesis

Synthesis 2020, 52, 565–573
DOI: 10.1055/s-0039-1690045

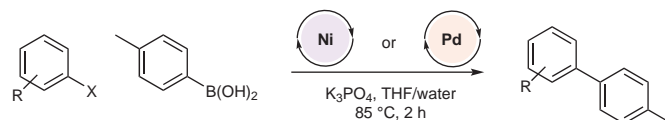
A. K. Cooper
P. M. Burton
D. J. Nelson*

University of Strathclyde,
Scotland

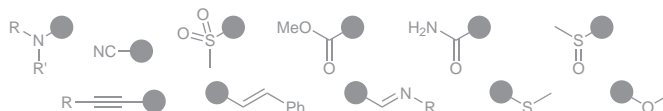
Nickel versus Palladium in Cross-Coupling Catalysis: On the Role of Substrate Coordination to Zerovalent Metal Complexes

Paper

565



How do functional groups affect selectivity or inhibit reactions?



Synthesis

Synthesis 2020, 52, 574–580
DOI: 10.1055/s-0039-1690048

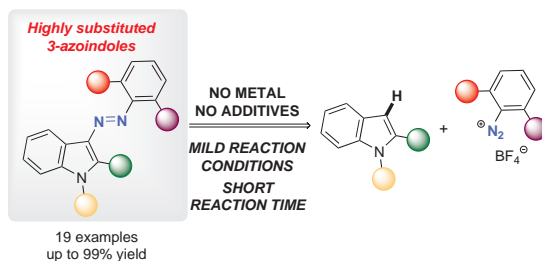
N. Jacob
L. Guillemard
J. Wencel-Delord*

Université de Strasbourg/Univer-
sité de Haute-Alsace, France

Highly Efficient Synthesis of Hindered 3-Azoindoles via Metal-Free C–H Functionalization of Indoles

Paper

574



Synthesis

Synthesis 2020, 52, 581–590
DOI: 10.1055/s-0039-1690265

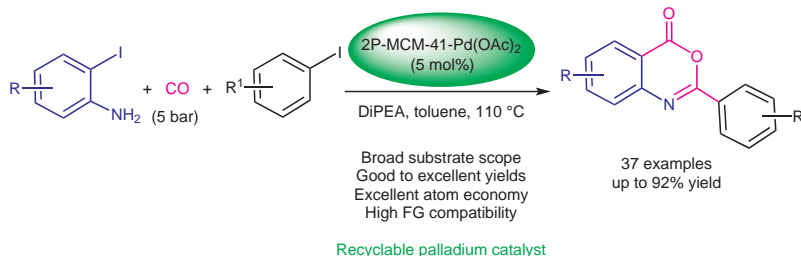
Z. Xu
B. Huang
Z. Zhou
M. Cai*

Jiangxi Normal University,
P. R. of China

Recyclable Heterogeneous Palladium-Catalyzed Carbonylative Cyclization of 2-Iodoanilines with Aryl Iodides Leading to 2-Arylbenzoxazinones

Paper

581



Synthesis

Synthesis 2020, 52, 591–601
DOI: 10.1055/s-0039-1690239

R. Mittal

A. Mishra

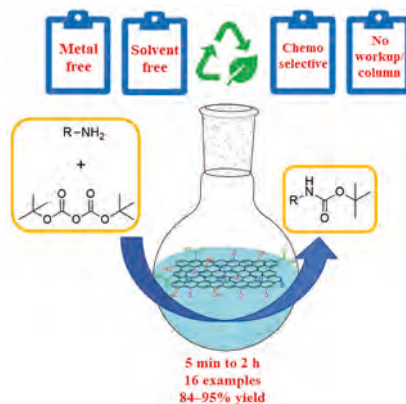
S. K. Awasthi*

University of Delhi, India

A Greener Approach for the Chemoselective Boc Protection of Amines Using Sulfonated Reduced Graphene Oxide as a Catalyst in Metal- and Solvent-Free Conditions

Paper

591



Synthesis

Synthesis 2020, 52, 602–608
DOI: 10.1055/s-0039-1690243

C. Xu

Y. Lu

K. Xu

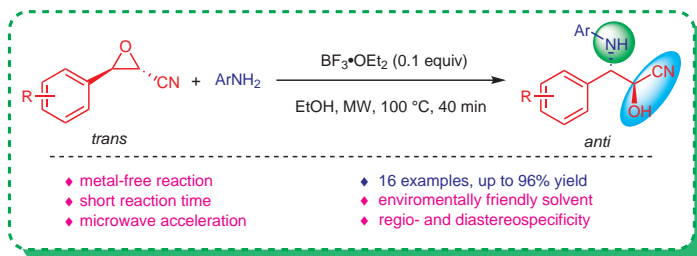
J. Xu*

Beijing University of Chemical
Technology, P. R. of China

BF₃·OEt₂-Catalyzed Synthesis of *anti*-β-(*N*-Arylamino)-α-hydroxynitriles by Regio- and Diastereospecific Ring Opening of 3-Aryloxirane-2-carbonitriles with Anilines

Paper

602



Synthesis

Synthesis 2020, 52, 609–618
DOI: 10.1055/s-0039-1690746

D. Chen*

J. Li

Y. Shan*

P. Cui

Y. Zhao

L. Tian

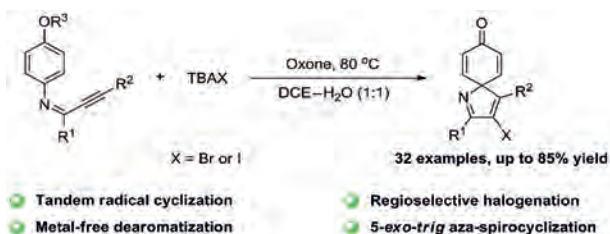
G. Qiu*

Qufu Normal University,
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Jiaxing University, P. R. of China

Halogen-Radical-Promoted Dearomative Aza-Spirocyclization of Alkynylimines: An Efficient Approach to 3-Halo-Spirocyclohexa-dienones

Paper

609



H. S. Steingruber

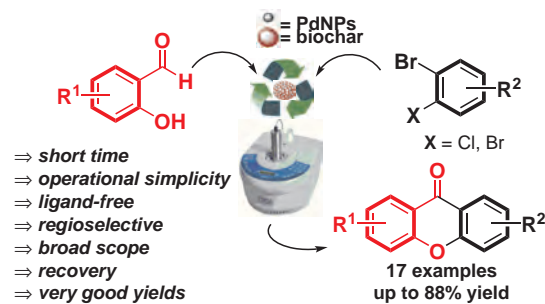
P. Mendioroz

A. S. Diez

D. C. Gerbino*

Universidad Nacional del Sur,
Argentina

A Green Nanopalladium-Supported Catalyst for the Microwave-Assisted Direct Synthesis of Xanthenes



Synthesis

Organo-*f*-Complexes for Efficient and Selective Hydroborations

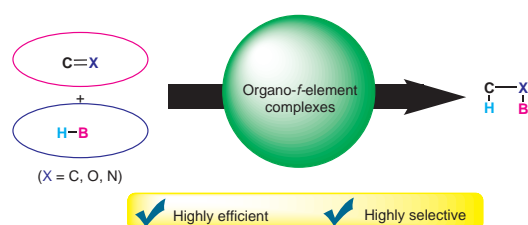
Review

Synthesis 2020, 52, 629–644
DOI: 10.1055/s-0039-1690762

H. Liu

M. S. Eisen*

Technion-Israel Institute of Technology, Israel



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Synthesis

Transition-Metal-Catalyzed Suzuki–Miyaura-Type Cross-Coupling Reactions of π -Activated Alcohols

Short Review

Synthesis 2020, 52, 645–659
DOI: 10.1055/s-0039-1690740

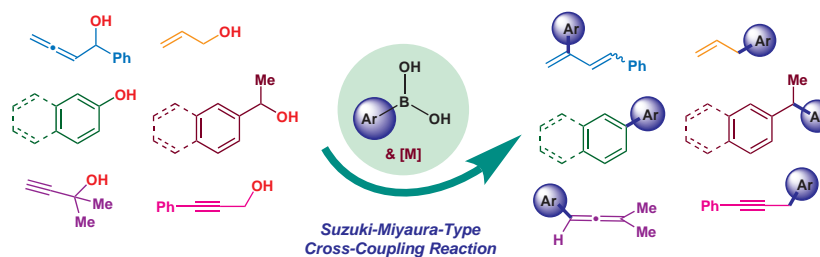
S. Akkarasamiyo

S. Ruchirawat*

P. Ploypradith*

J. S. M. Samec*

Stockholm University, Sweden
Chulabhorn Royal Academy,
Thailand
Chulabhorn Research Institute,
Thailand



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Synthesis

Synthesis 2020, 52, 660–672
DOI: 10.1055/s-0039-1690780

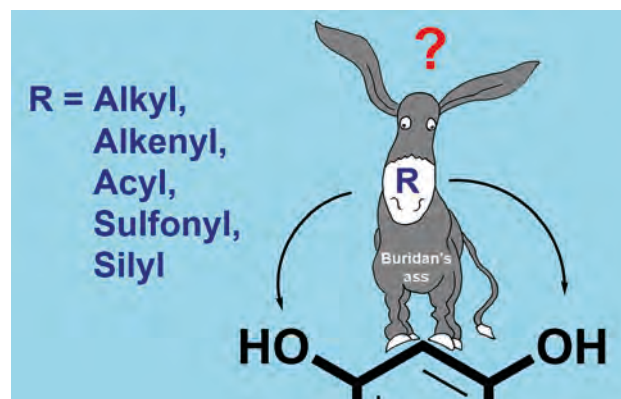
R. F. Fatykhov
O. N. Chupakhin
A. K. Inyutina
I. A. Khalymbadza*

Ural Federal University,
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Institute of Organic Synthesis,
Ural Branch of the Russian Acad-
emy of Sciences,
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Synthetic Approaches to Unsymmetrically Substituted 5,7-Dihydroxycoumarins

Short Review

660



Synthesis

Synthesis 2020, 52, 673–687
DOI: 10.1055/s-0039-1690038

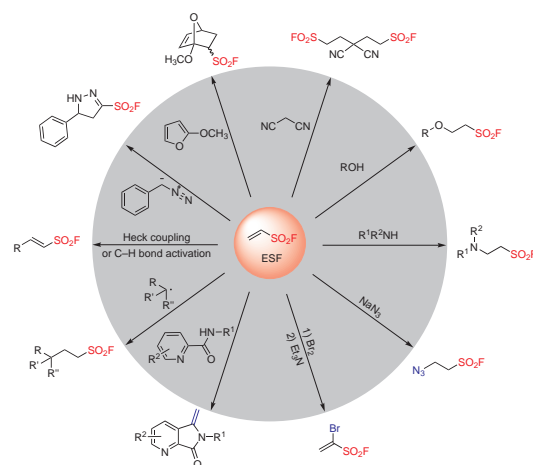
Y.-P. Meng
S.-M. Wang*
W.-Y. Fang
Z.-Z. Xie*
J. Leng
H. Alsulami
H.-L. Qin*

Wuhan University of Technol-
ogy, P. R. of China

Ethenesulfonyl Fluoride (ESF) and Its Derivatives in SuFEx Click Chemistry and More

Short Review

673



Synthesis

Synthesis 2020, 52, 688–694
DOI: 10.1055/s-0039-1691565

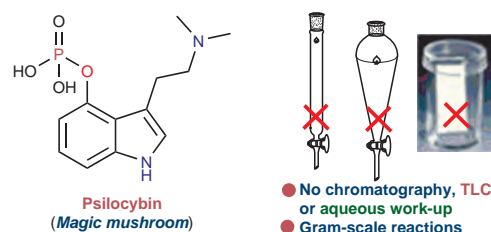
A. M. Sherwood
P. Meisenheimer
G. Tarpley
R. B. Kargbo*

Usona Institute, USA

An Improved, Practical, and Scalable Five-Step Synthesis of Psilocybin

PSP

688



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Synthesis

Synthesis of Sulfonylisoureas via Sulfo-Click Reactions

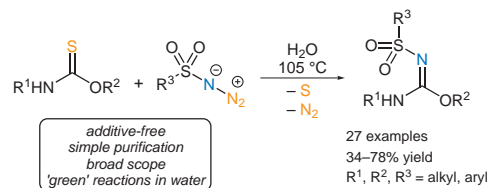
Paper

Synthesis 2020, 52, 695–702
DOI: 10.1055/s-0039-1691505

695

M. Ottenbruch
F. Mohr
S. F. Kirsch*

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Germany



Synthesis

Hydroalkylation of Unactivated Alkenes with Ketones and 5-Benzylfurfurals Enabled by Amine/Pd(II) Cooperative Catalysis

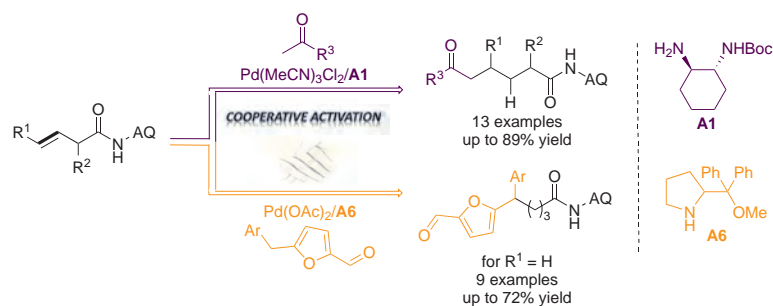
Paper

Synthesis 2020, 52, 703–710
DOI: 10.1055/s-0039-1690245

703

M. Sayed
H.-C. Shen
L. Zhang
L.-Z. Gong*

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Synthesis

Electrochemically Induced Thiocyanation of Enaminones: Synthesis of Functionalized Alkenes and Chromones

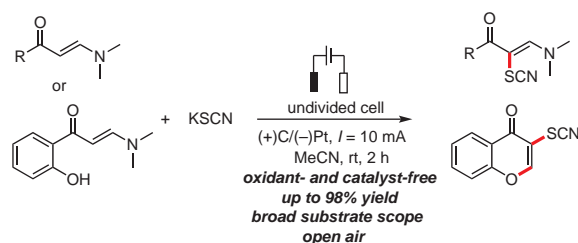
Paper

Synthesis 2020, 52, 711–718
DOI: 10.1055/s-0039-1691486

711

Z. Yang
Y. Wang
L. Hu
J. Yu
A. Li
L. Li
T. Yang*
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Synthesis

Synthesis 2020, 52, 719–726
DOI: 10.1055/s-0039-1691492

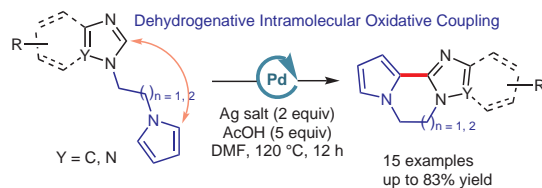
K. N. Tripathi
A. H. Bansode
R. P. Singh*

Indian Institute of Technology
Delhi, India

Palladium-Catalyzed Oxidative Annulation of Pyrrolylalkyl-1*H*-azoles: Towards the Synthesis of Polyheterocyclic Arenes

Paper

719



Synthesis

Synthesis 2020, 52, 727–734
DOI: 10.1055/s-0039-1690757

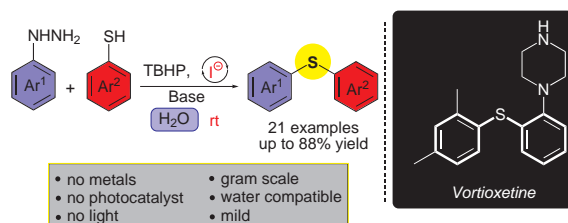
F. Jafarpour*
M. Asadpour
M. Azizzade
M. Ghasemi
S. Rajai-Daryasarei

University of Tehran, Iran

An Iodide-Mediated Transition-Metal-Free Strategy towards Unsymmetrical Diaryl Sulfides via Arylhydrazines and Thiols

Paper

727



Synthesis

Synthesis 2020, 52, 735–743
DOI: 10.1055/s-0039-1691494

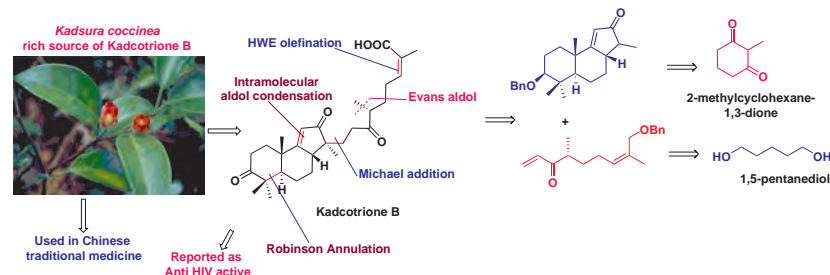
J. S. Reddy*
M. Gangababu
P. Manimala
A. Rammohan
J. S. Yadav

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Technology, India

Studies towards the Total Synthesis of Kadcotrione B

Paper

735



Synthesis

Synthesis **2020**, *52*, 744–754
DOI: 10.1055/s-0039-1691506

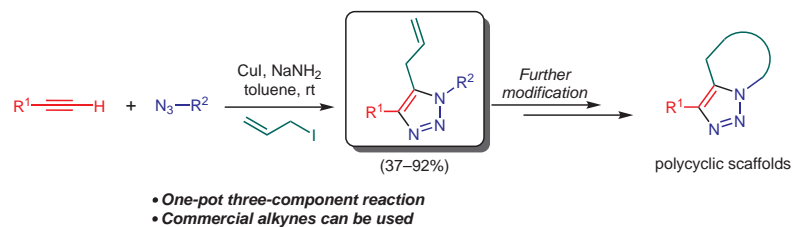
Y. Song
S. Lee
P. Dutta
J.-S. Ryu*

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A Copper(I)-Mediated Tandem Three-Component Synthesis of 5-Allyl-1,2,3-triazoles

Paper

744



Synthesis

Synthesis **2020**, *52*, 755–762
DOI: 10.1055/s-0039-1690754

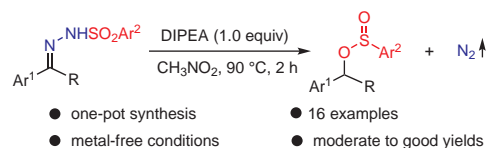
Y.-Z. Ji
Q.-X. Wu
H.-J. Li*
D.-H. Luo
Y.-C. Wu*

Harbin Institute of Technology,
P. R. of China
Weihai Institute of Marine Bio-
medical Industrial Technology,
P. R. of China

Base-Promoted Direct Synthesis of Sulfinates from *N*-Sulfonylhydrazones under Metal-Free Conditions

Paper

755



Synthesis

Synthesis **2020**, *52*, 763–768
DOI: 10.1055/s-0039-1691528

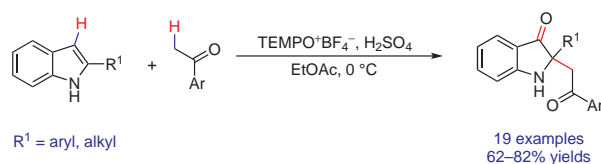
J. Liu
J. Huang
K. Jia
T. Du
C. Zhao
R. Zhu*
X. Liu*

Shandong University,
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Direct Oxidative Dearomatization of Indoles with Aromatic Ketones: Rapid Access to 2,2-Disubstituted Indolin-3-ones

Paper

763



Synthesis

Synthesis 2020, 52, 769–774
DOI: 10.1055/s-0039-1690755

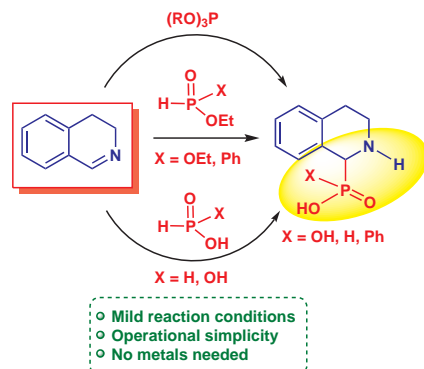
J. T. Hernández-Moreno
I. Romero-Estudillo
C. Cativiela
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Universidad Autónoma del Estado
de Morelos, Mexico

Practical Synthesis of 1,2,3,4-Tetrahydroisoquinoline-1-phosphonic and -1-phosphinic Acids through Kabachnik–Fields and Aza-Pudovik Reaction

Paper

769



Synthesis

Synthesis 2020, 52, 775–780
DOI: 10.1055/s-0039-1690758

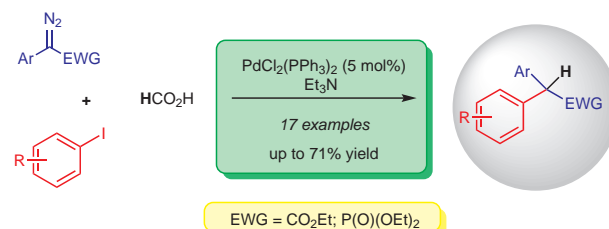
S. M. Golitsin
I. P. Beletskaya
I. D. Titanyuk*

Moscow State University,
Russian Federation

Palladium-Catalyzed Hydroarylation of Diazocarboxylates and Diazophosphonates

Paper

775



Synthesis

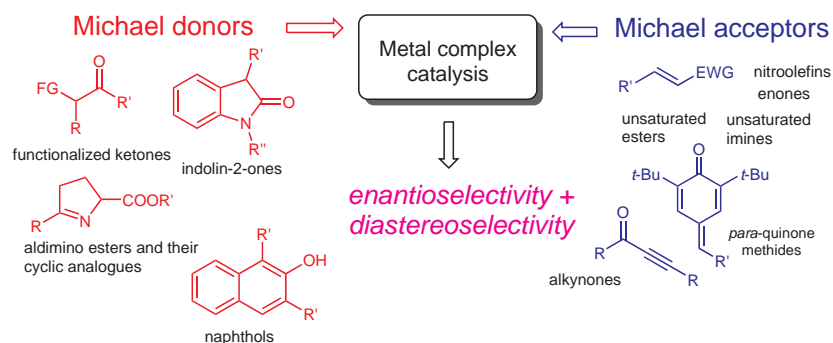
Synthesis 2020, 52, 781–795
DOI: 10.1055/s-0039-1690044

A. N. Reznikov*
Y. N. Klimochkin
Samara State Technical
University, Russian Federation

Recent Developments in Highly Stereoselective Michael Addition Reactions Catalyzed by Metal Complexes

Review

781



Synthesis

Synthesis 2020, 52, 796–806
DOI: 10.1055/s-0039-1690789

S.-Z. Song
Y. Dong*
G.-P. Ge*
Q. Li
W.-T. Wei*
Ningbo University, P. R. of China

Recent Advances in Radical Nitration Using *tert*-Butyl Nitrite

Short Review

796



Synthesis

Synthesis 2020, 52, 847–852
DOI: 10.1055/s-0039-1690730

B. Morra

N. A. Morra

D. G. MacDonald

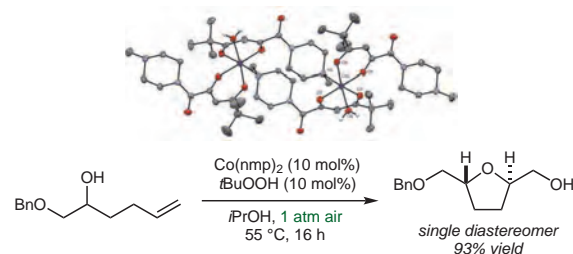
B. L. Pagenkopf*

The University of Western
Ontario, Canada

Gram-Scale Synthesis of the $\text{Co}(\text{nmp})_2$ Catalyst to Prepare *trans*-2,5-Disubstituted Tetrahydrofurans by the Aerobic Oxidative Cyclization of Pent-4-en-1-ols

PSP

847



Synthesis

Synthesis 2020, 52, 853–860
DOI: 10.1055/s-0039-1690763

M. Kohlhaas

F. Lutz

N. Paransothy

F. Octa-Smolín

C. Wölper

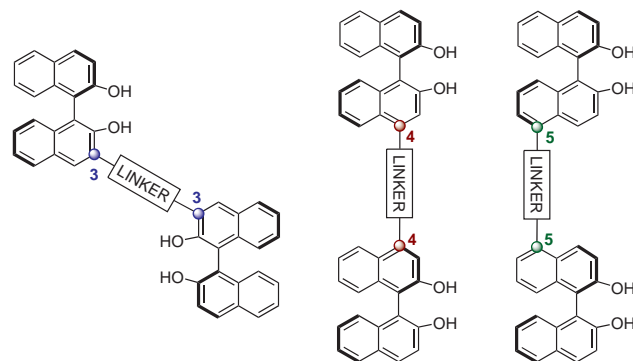
J. Niemeyer*

University of Duisburg-Essen,
Germany

Synthesis of Bis-BINOL Derivatives: Linking via the 3-, 4-, or 5-Position by Generation of Suitable C₁-Symmetric Precursors

Paper

853



Synthesis

Synthesis 2020, 52, 861–872
DOI: 10.1055/s-0039-1690760

M.-Y. Chang*

K.-T. Chen

Y.-L. Tsai

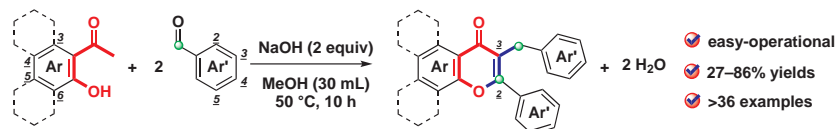
H.-Y. Chen

Kaohsiung Medical University,
Taiwan
Kaohsiung Medical University
Hospital, Taiwan

One-Pot Access to 2-Aryl-3-(arylmethyl)chromones

Paper

861



Ar = Ph, 4-FC₆H₃, 4-ClC₆H₃, 4-BrC₆H₃, 1-naphthyl, 5-MeOC₆H₃, 4-MeOC₆H₃, 3-MeOC₆H₃, 5-BuOC₆H₃, 4-BuOC₆H₃, 3-BuOC₆H₃, 5-BnOC₆H₃, 4-BnOC₆H₃, 3-BnOC₆H₃, 4,6-Cl₂C₆H₂, 4,6-F₂C₆H₂, 4-MeC₆H₃, 2-naphthyl, 4-PhC₆H₃, 4-(4-FC₆H₄)C₆H₃, 4-(4-MeOC₆H₄)C₆H₃, 4-(2-naphthyl)C₆H₃, 4-(4-PhC₆H₄)C₆H₃
Ar' = pyridyl, phenyl, naphthyl, furyl, thienyl, benzofuryl, benzothieryl, quinolinyl

Synthesis

Synthesis 2020, 52, 873–881
DOI: 10.1055/s-0039-1690766

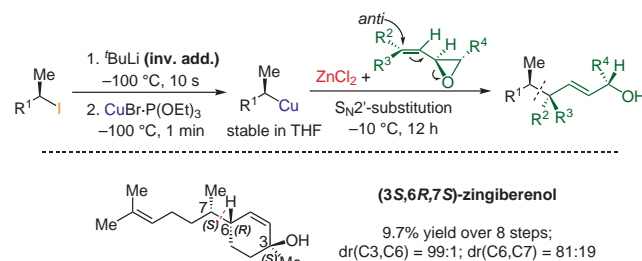
J. Skotnitzki
A. Kremsmair
B. Kicin
R. Saeb
V. Ruf
P. Knochel*

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Germany

 Stereoselective *anti*-S_N2'-Substitutions of Secondary Alkylcopper-Zinc Reagents with Allylic Epoxides: Total Synthesis of (3*S*,6*R*,7*S*)-Zingiberenol

Paper

873



Synthesis

Synthesis 2020, 52, 882–892
DOI: 10.1055/s-0039-1691487

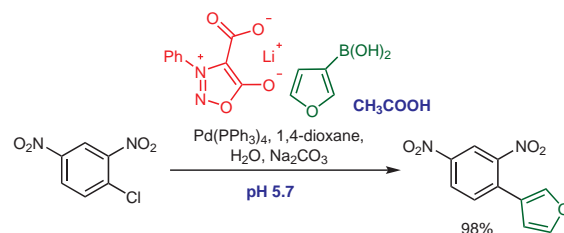
L. Pruschinski
A.-L. Lücke
T. Freese
S.-R. Kahnert
S. Mummel
A. Schmidt*

Clausthal University of Technology,
Germany

Suzuki–Miyaura Cross-Couplings under Acidic Conditions

Paper

882



Synthesis

Synthesis 2020, 52, 893–900
DOI: 10.1055/s-0039-1690765

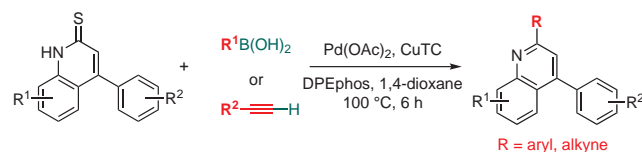
H.-L. Lu
F.-H. Guo
T.-L. Wang
X.-C. Wang
Z.-J. Quan*

Northwest Normal University,
P. R. of China
Gansu International Scientific
and Technological Cooperation
Base of Water-Retention Chemical
Functional Materials,
P. R. of China

 Palladium-Catalyzed/Copper-Mediated Desulfurization and Arylation of Quinoline-2-(1*H*)-thione for Rapid Access to Quinoline Derivatives

Paper

893



- C–C bonds formation
- 29 examples, up to 85% yield
- without an inert atmosphere
- base-free

Synthesis

Synthesis 2020, 52, 901–908
DOI: 10.1055/s-0037-1610742

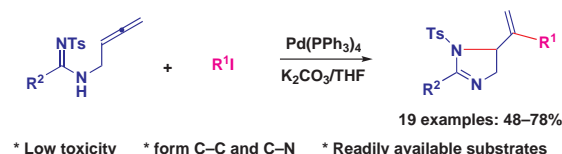
Y. Liu
C. Zhang
X. Liang
X. Zeng
R. Lu
Z. Fang
S. Wang
Y. Liu
J. Hu*

Weifang Medical University,
P. R. of China

Synthesis of 2-Imidazolines via Palladium-Catalyzed Cyclization Reaction of 2,3-Allenyl Amines and Aryl Iodides

Paper

901



* Low toxicity * form C–C and C–N * Readily available substrates

Synthesis

Synthesis 2020, 52, 909–916
DOI: 10.1055/s-0039-1691531

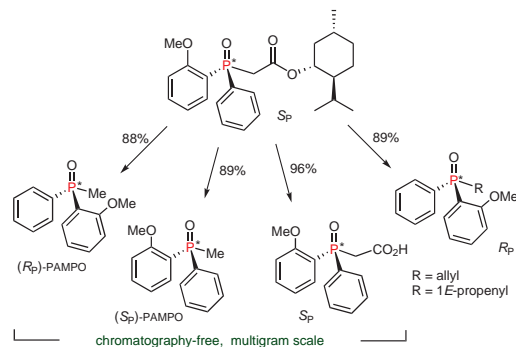
K. Dziuba
M. Lubańska
K. M. Pietrusiewicz*

Maria Curie-Skłodowska University,
Poland

Enantiodivergent Synthesis of Both PAMPO Enantiomers Using L-Menthyl Chloroacetate and Stereomutation at P in Classical Quaternisation Reactions

Paper

909



Synthesis

Synthesis 2020, 52, 917–927
DOI: 10.1055/s-0039-1690759

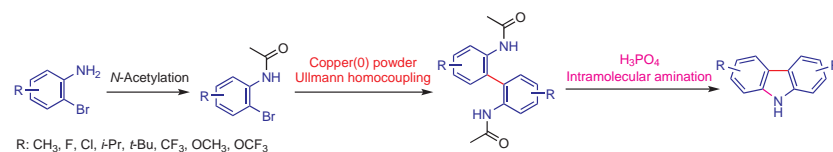
J. Ban
M. Lim
S. Shabbir
J. Baek
H. Rhee*

Hanyang University,
Republic of Korea

Site-Specific Synthesis of Carbazole Derivatives through Aryl Homocoupling and Amination

Paper

917



Synthesis

Synthesis 2020, 52, 928–932
DOI: 10.1055/s-0039-1690809

Y. Li

H. Guo*

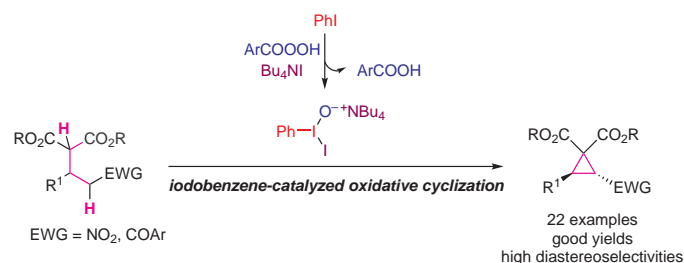
R. Fan*

Fudan University, P. R. of China

Iodobenzene-Catalyzed Oxidative Cyclization for the Synthesis of Highly Functionalized Cyclopropanes

Paper

928



Synthesis

Synthesis 2020, 52, 933–941
DOI: 10.1055/s-0039-1690039

R. Bartolotta

C. La Rosa*

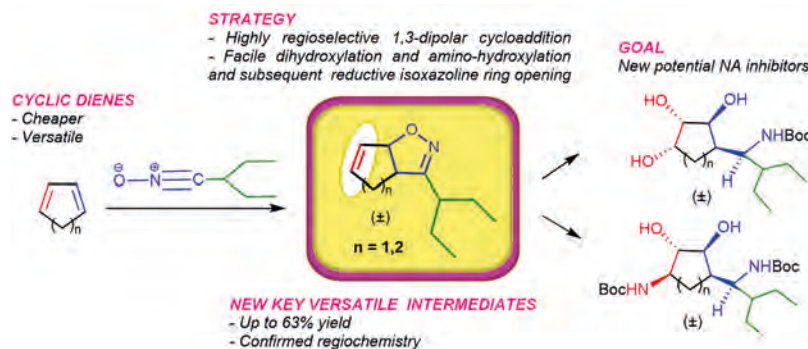
D. Nava

Università degli Studi di Milano,
Italy

New Strategy of Synthesis of Peramivir Analogues as Potential Neuraminidase Inhibitors

Paper

933



Synthesis

Synthesis 2020, 52, 942–948
DOI: 10.1055/s-0039-1691522

K. Ohsawa

H. Zhao

T. Tokunaga

C. Thomas

A. Ganesan

Y. Masuda

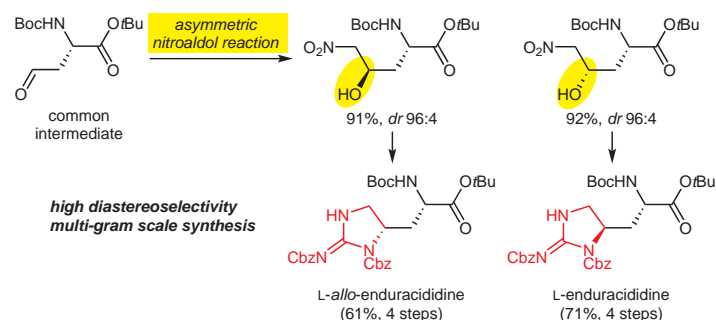
T. Doi*

Tohoku University, Japan

Stereoselective Synthesis of Protected L-*allo*-Enduracididine and L-Enduracididine via Asymmetric Nitroaldol Reaction

Paper

942



Synthesis

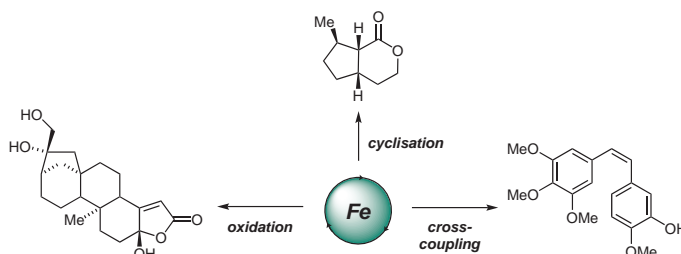
Iron Catalysis in Target Synthesis

Review

Synthesis 2020, 52, 949–963
DOI: 10.1055/s-0039-1690813

P. DaBell
S. P. Thomas*
University of Edinburgh, UK

949



Synthesis

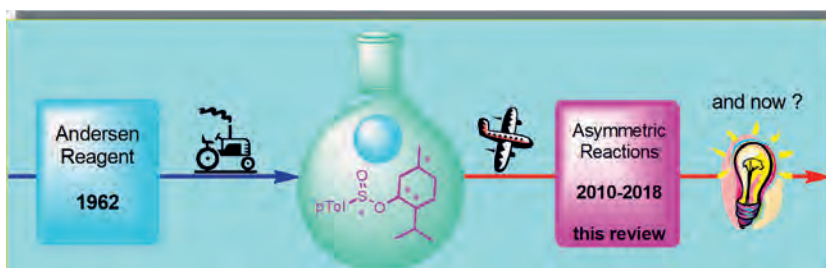
Recent Applications in the Use of Sulfoxides as Chiral Auxiliaries for the Asymmetric Synthesis of Natural and Biologically Active Products

Short Review

Synthesis 2020, 52, 964–978
DOI: 10.1055/s-0039-1690803

X. Salom-Roig
C. Bauder*
Université de Strasbourg, France

964



Synthesis

Synthesis 2020, 52, 979–992
DOI: 10.1055/s-0039-1690807

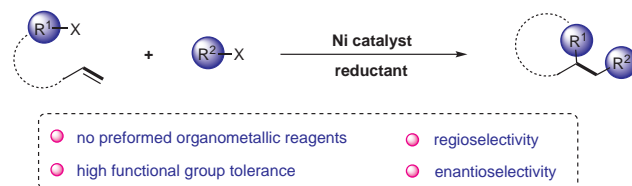
Y. Ping
W. Kong*

Wuhan University, P. R. of China

Ni-Catalyzed Reductive Difunctionalization of Alkenes

Short Review

979



Synthesis

Synthesis 2020, 52, 993–1006
DOI: 10.1055/s-0039-1690816

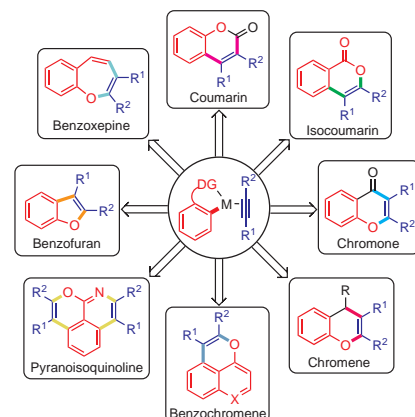
G. Kuang
G. Liu
X. Zhang
N. Lu
Y. Peng*
Q. Xiao*
Y. Zhou*

Jiangxi Normal University,
P. R. of China
Huazhong University of Science
and Technology, P. R. of China
Jiangxi Science and Technology
Normal University, P. R. of China

Directing-Group-Assisted Transition-Metal-Catalyzed Direct C–H Oxidative Annulation of Arenes with Alkynes for Facile Construction of Various Oxygen Heterocycles

Short Review

993



Synthesis

Synthesis 2020, 52, 1007–1014
DOI: 10.1055/s-0039-1690806

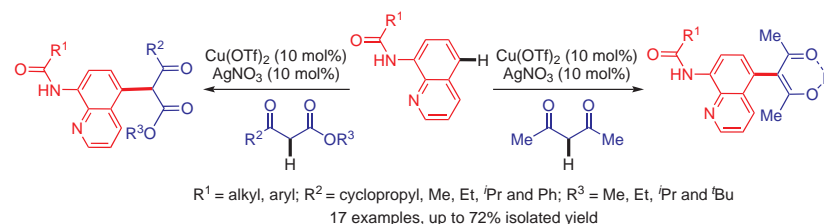
F. Zhan
W. Zhang
H. Zhao*

University of Jinan, P. R. of China
Fujian Institute of Research on
the Structure of Matter,
P. R. of China

Copper/Silver Cocatalyzed Regioselective C5–H Functionalization of 8-Aminoquinoline Amides with 1,3-Dicarbonyl Compounds

Feature

1007



Synthesis

Synthesis 2020, 52, 1015–1024
DOI: 10.1055/s-0039-1691560

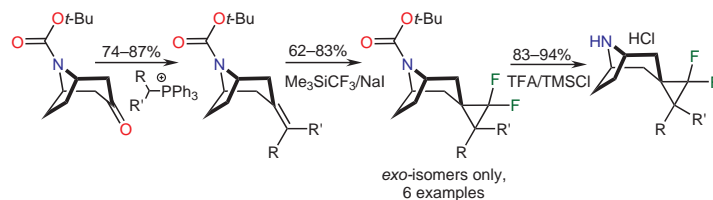
A. Gerasov
G. A. Dolgonos
A. Yu. Mandzhulo
A. Ryabitsky
V. Fetyukhin
O. Lukin
A. Shivanyuk*

Life Chemicals Inc., Ukraine
Taras Shevchenko National
University of Kyiv, Ukraine

Selective Synthesis of *exo*-Spiro[2',2']-difluorocyclopropane-3',2'-tropanes]

Paper

1015



Synthesis

Synthesis 2020, 52, 1025–1034
DOI: 10.1055/s-0039-1690785

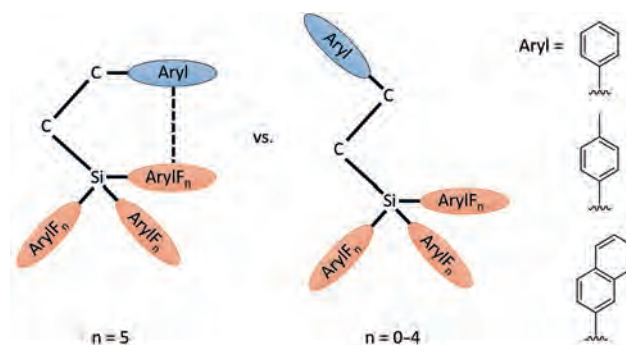
M. Linnemannstöns
B. Neumann
H.-G. Stammler
N. W. Mitzel*

Universität Bielefeld, Germany

Synthesis and Structural Diversity of Triaryl(phenylethyl)silanes

Paper

1025



Synthesis

Synthesis 2020, 52, 1035–1046
DOI: 10.1055/s-0039-1690799

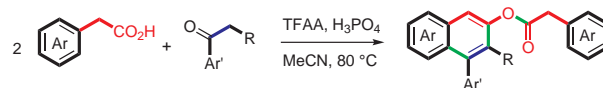
M.-Y. Chang*
S.-M. Chen
Y.-T. Hsiao

Kaohsiung Medical University,
Taiwan
Kaohsiung Medical University
Hospital, Taiwan

One-Pot Access to 4-Aryl-2-arylacetoxy-naphthalenes via Benz-annulation of Oxygenated Arylacetic Acids and Alkyl Aryl Ketones

Paper

1035



easy-operation

51–94% yields

>31 examples

Synthesis

Synthesis 2020, 52, 1047–1059
DOI: 10.1055/s-0039-1690751

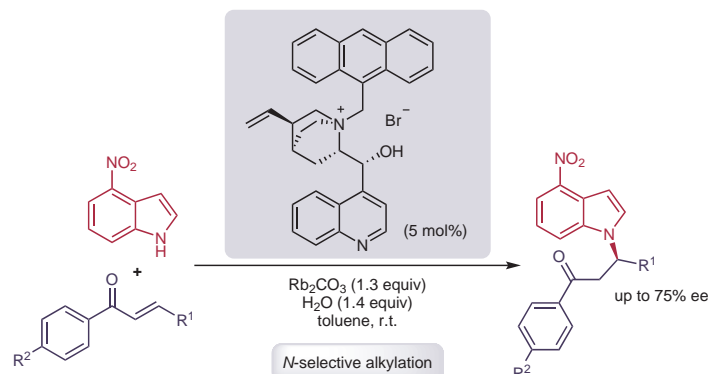
D. Trubitsõn
J. Martõnova
K. Erkman
A. Metsala
J. Saame
K. Kõster
I. Järving
I. Leito
T. Kanger*

Tallinn University of Technology,
Estonia

Enantioselective *N*-Alkylation of Nitroindoles under Phase-Transfer Catalysis

Paper

1047



Synthesis

Synthesis 2020, 52, 1060–1066
DOI: 10.1055/s-0039-1690055

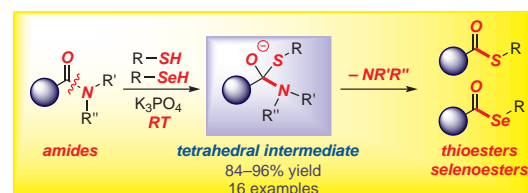
Md. M. Rahman
G. Li
M. Szostak*

Rutgers University, USA

Thioesterification and Selenoesterification of Amides via Selective *N*–*C* Cleavage at Room Temperature: *N*–*C*(*O*) to *S*/*Se*–*C*(*O*) Interconversion

Paper

1060



Synthesis

Synthesis 2020, 52, 1067–1075
DOI: 10.1055/s-0039-1691541

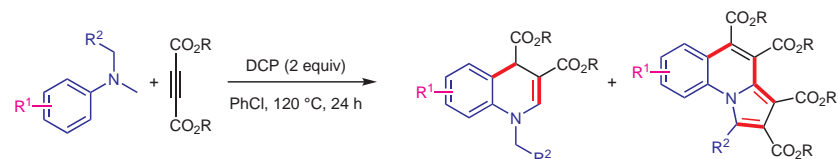
Z. Luo*
X. Han
C. Liu*
Q. Liu
R. Li
P. Liu
X. Xu*

Anhui University of Science and
Technology, P. R. of China
Gannan Medical University,
P. R. of China

Catalyst-Free Synthesis of 1,4-Dihydroquinolines and Pyrrolo-[1,2-*a*]quinolines via Intermolecular [4+2]/[3+2] Radical Cyclization of *N*-Methylanilines with Alkynoates

Paper

1067



R = Me, Et, *t*-Bu
R¹ = H, Me, OMe, OEt, F, Br, CF₃
R² = H, Me, *n*-Pr, *n*-pentyl, cyclopentyl

- catalyst-free
- [4+2]/[3+2] radical cyclization
- one-pot process
- moderate to high overall yields

Synthesis

Synthesis 2020, 52, 1076–1086
DOI: 10.1055/s-0039-1690774

D. A. dos Santos

A. R. da Silva

J. Ellena

C. C. P. da Silva

M. W. Paixão

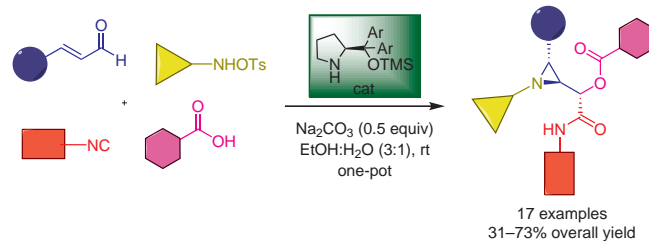
A. G. Corrêa*

Federal University of São Carlos,
Brazil

Green One-Pot Asymmetric Synthesis of Peptidomimetics via Sequential Organocatalyzed Aziridination and Passerini Multicomponent Reaction

Paper

1076



Synthesis

Synthesis 2020, 52, 1087–1095
DOI: 10.1055/s-0039-1691540

A. D. Zubenko*

A. A. Shchukina

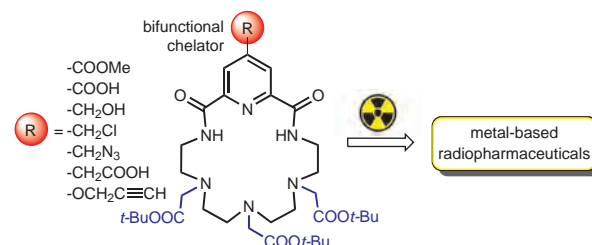
O. A. Fedorova

A. N. Nesmeyanov Institute of
Organoelement Compounds of
Russian Academy of Sciences,
Russian Federation

Synthetic Approaches to the Bifunctional Chelators for Radionuclides Based On Pyridine-Containing Azacrown Compounds

Paper

1087



Synthesis

Synthesis 2020, 52, 1096–1102
DOI: 10.1055/s-0039-1690788

T. Senoo

A. Inoue

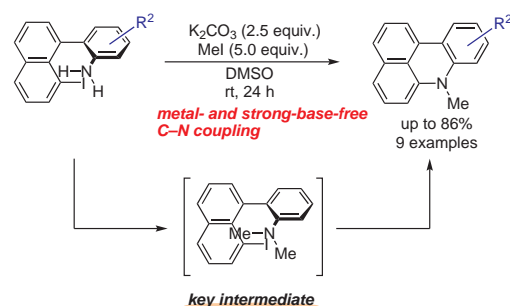
K. Mori*

Tokyo University of Agriculture
and Technology, Japan

Facile Synthesis of π -Conjugated Heteroaromatic Compounds via Weak-Base-Promoted Transition-Metal-Free C–N Coupling

Paper

1096



Synthesis

Synthesis 2020, 52, 1103–1112
DOI: 10.1055/s-0039-1690052

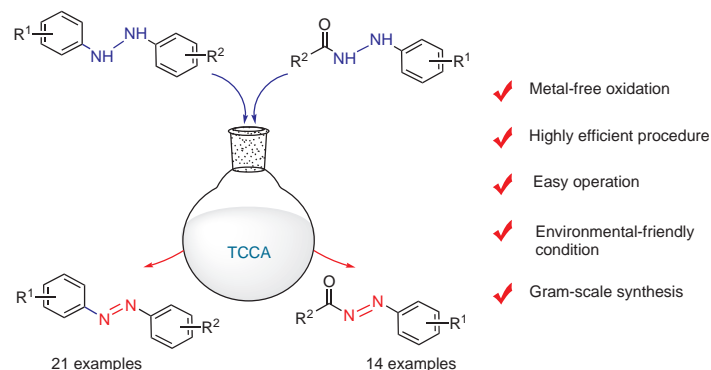
Y. Su*
X. Liu
J. Yu
G. Cao
R. Zhang
Y. Zhao
D. Huang
K.-H. Wang
C. Huo
Y. Hu

Northwest Normal University,
P. R. China

Trichloroisocyanuric Acid Mediated Oxidative Dehydrogenation of Hydrazines: A Practical Chemical Oxidation To Access Azo Compounds

Paper

1103



Synthesis

Synthesis 2020, 52, 1113–1121
DOI: 10.1055/s-0039-1691575

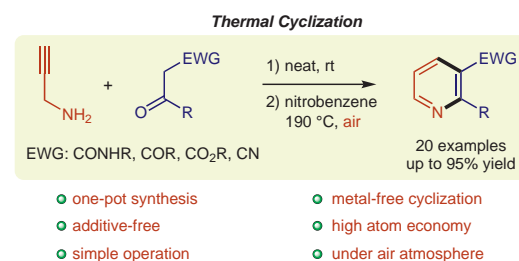
Y. Chikayuki
T. Miyashige
S. Yonekawa
A. Kirita
N. Matsuo
H. Teramoto
S. Sasaki
K. Higashiyama
T. Yamauchi*

Hoshi University, Japan

Transition-Metal-Free Synthesis of Pyridine Derivatives by Thermal Cyclization of *N*-Propargyl Enamines

Paper

1113



Synthesis

Synthesis 2020, 52, 1122–1130
DOI: 10.1055/s-0039-1691642

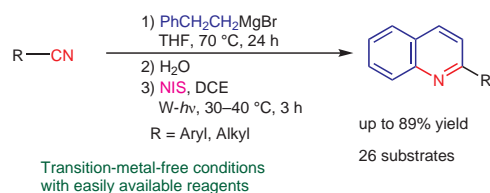
H. Naruto
H. Togo*

Chiba University, Japan

Preparation of 2-Arylquinolines from 2-Arylethyl Bromides and Aromatic Nitriles with Magnesium and *N*-Iodosuccinimide

Paper

1122



Synthesis

Synthesis 2020, 52, 1131–1139
DOI: 10.1055/s-0039-1691643

Z. Han

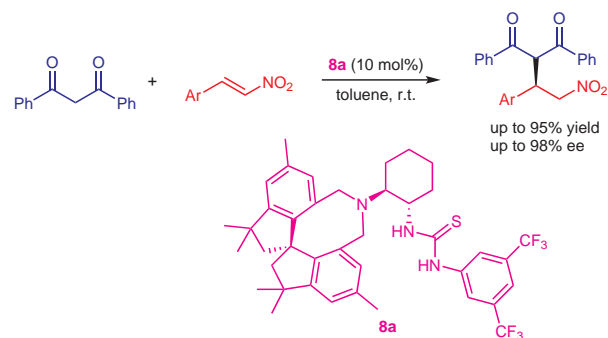
X. Lin*

Zhejiang University,
P. R. of China

Synthesis of Chiral Tertiary Amine–Thioureas Based on Spirobiindane and Application in Catalytic Asymmetric Michael Addition Reaction

Paper

1131



Synthesis

Synthesis 2020, 52, 1140–1146
DOI: 10.1055/s-0039-1690795

G. Sereda*

A. M. Sarkar*

A. Hussain

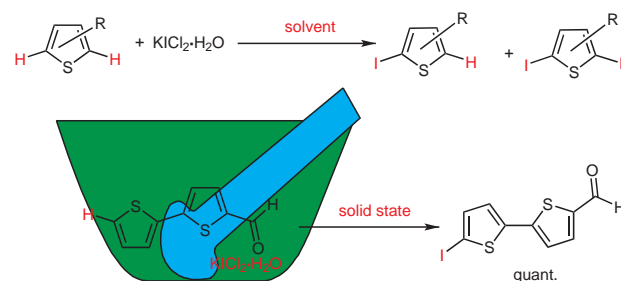
N. Zefirov

University of South Dakota, USA

Solvent-Free and Liquid-Phase Iodination of Thiophene Derivatives with Potassium Dichloriodate Monohydrate

Paper

1140



Synthesis

Synthesis 2020, 52, 1147–1180
DOI: 10.1055/s-0039-1690817

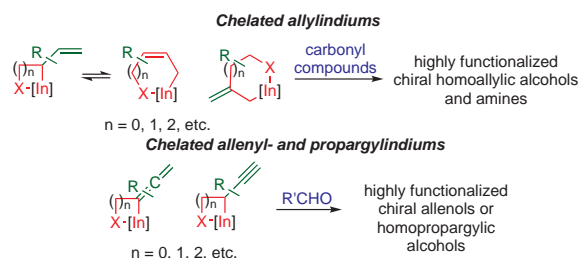
B. K. Zambroń*

Institute of Organic Chemistry,
Polish Academy of Sciences,
Poland

Internal Chelation within Functionalized Organoindium Reagents: Prospects for Regio- and Stereocontrol in the Allylation, Propargylation and Allenylation of Carbonyl Compounds

Review

1147



Synthesis

Synthesis 2020, 52, 1181–1202
DOI: 10.1055/s-0039-1690810

Y. Zhu

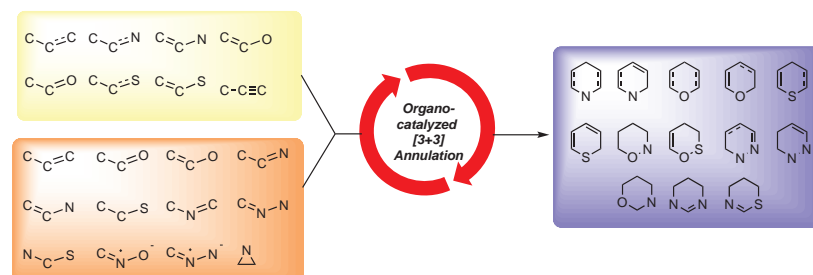
Y. Huang*

Nankai University, P. R. of China

Organocatalyzed [3+3] Annulations for the Construction of Heterocycles

Short Review

1181



Synthesis

Synthesis **2020**, 52, 1203–1210
DOI: 10.1055/s-0039-1690054

D. Li

S. Lv

J. Qu

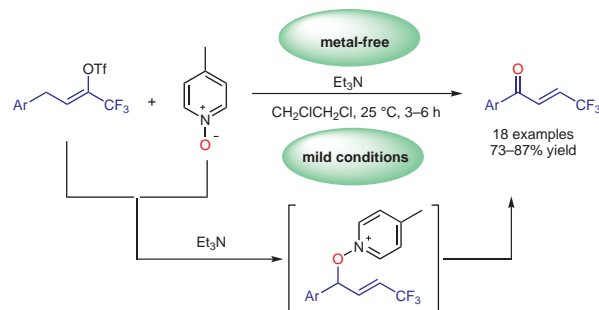
Y. Zhou*

Dalian University of Technology,
P. R. of China

Oxidation of 4-Aryl-1,1,1-trifluorobut-2-en-2-yl Trifluoromethanesulfonates by 4-Picoline-*N*-Oxide: A Novel Approach to β -Trifluoromethyl- α,β -enones

Feature

1203



Synthesis

Synthesis, **2020**, 1211–1214
DOI: 10.1055/s-0039-1690830

F. F. Mulks*

R. Heckershoff

M. Zimmer

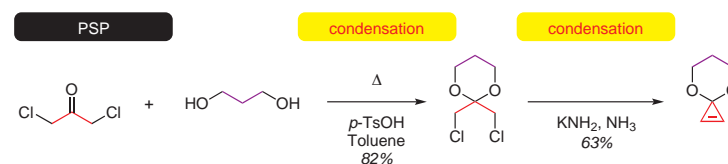
A. S. K. Hashmi

Ruprecht-Karls Universität Hei-
delberg, Germany

Practical Preparation of Cyclopropenone 1,3-Propanediol Ketal

PSP

1211



Synthesis

Synthesis **2020**, 52, 1215–1222
DOI: 10.1055/s-0039-1690241

R. Connon

L. Carroll

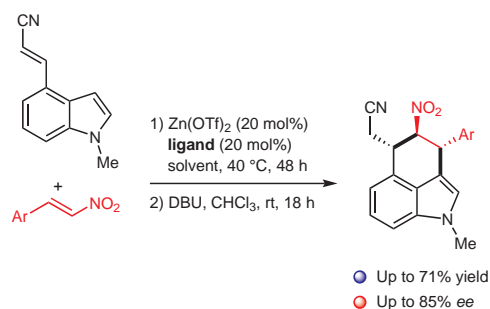
P. J. Guiry*

University College Dublin,
Ireland

A Base-Promoted One-Pot Asymmetric Friedel–Crafts Alkylation/Michael Addition of 4-Substituted Indoles

Special Topic

1215



Synthesis

Synthesis 2020, 52, 1223–1230
DOI: 10.1055/s-0039-1690737

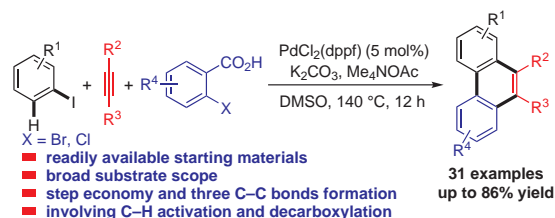
Y. Yang
L. Zhou
X. Yang
X. Luo
G. Deng
Y. Yang*
Y. Liang*

Hunan Normal University,
P. R. of China

Synthesis of Phenanthrenes via Palladium-Catalyzed Three-Component Domino Reaction of Aryl Iodides, Internal Alkynes, and *o*-Bromobenzoic Acids

Special Topic

1223



Synthesis

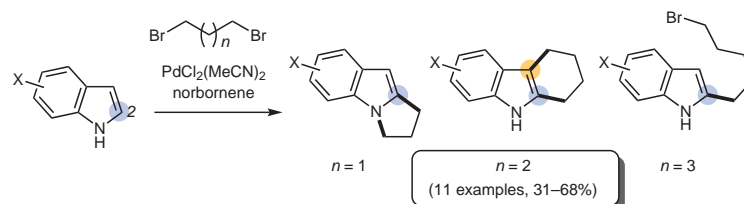
Synthesis 2020, 52, 1231–1238
DOI: 10.1055/s-0039-1690693

M. Henkel
T. Bach*
Technische Universität
München, Germany

Annulation of Indoles with 1,*n*-Dibromoalkanes by a Pd(II)-Catalyzed and Norbornene-Mediated Reaction Cascade

Special Topic

1231



Synthesis

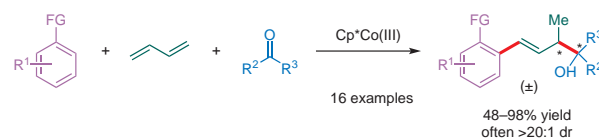
Synthesis 2020, 52, 1239–1246
DOI: 10.1055/s-0039-1690741

Z. Shen
C. Li
B. Q. Mercado
J. A. Ellman*
Yale University, USA

Cobalt(III)-Catalyzed Diastereoselective Three-Component C–H Bond Addition to Butadiene and Activated Ketones

Special Topic

1239



Synthesis

Synthesis 2020, 52, 1247–1252
DOI: 10.1055/s-0039-1690756

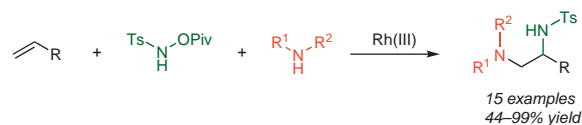
S. Lee
Y. J. Jang
E. J. T. Phipps
H. Lei
T. Rovis*

Columbia University, USA

Rhodium(III)-Catalyzed Three-Component 1,2-Diamination of Unactivated Terminal Alkenes

Special Topic

1247



Synthesis

Synthesis 2020, 52, 1253–1265
DOI: 10.1055/s-0039-1690219

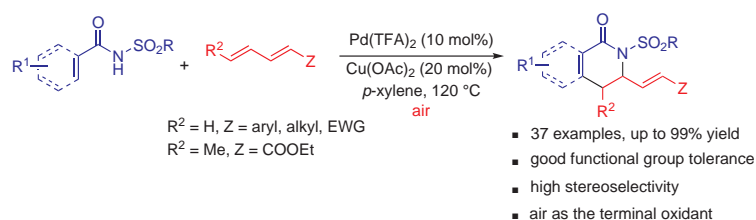
M. Sun
J. Li
W. Chen
H. Wu
J. Yang
Z. Wang*

Taizhou University,
P. R. of China

Palladium-Catalyzed [4+2] Annulation of Aryl and Alkenyl Carboxamides with 1,3-Dienes via C–H Functionalization: Synthesis of 3,4-Dihydroisoquinolones and 5,6-Dihydropyridinones

Special Topic

1253



Synthesis

Synthesis 2020, 52, 1266–1272
DOI: 10.1055/s-0039-1690802

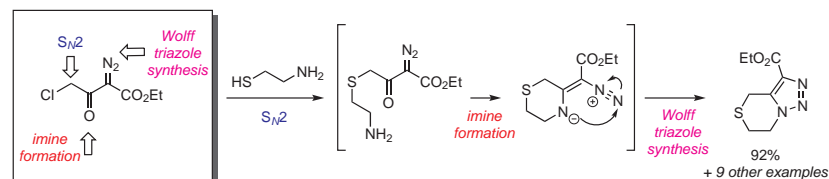
D. Dar'in
O. Khoroshilova
G. Kantin
M. Krasavin*

Saint Petersburg State University,
Russian Federation

Realizing the Trifunctional Potential of Alkyl 4-Chloro-2-diazo-3-oxobutanoates: Convenient Assembly of 6,7-Dihydro-4H-[1,2,3]triazolo[5,1-c][1,4]thiazine Core

Paper

1266



Synthesis

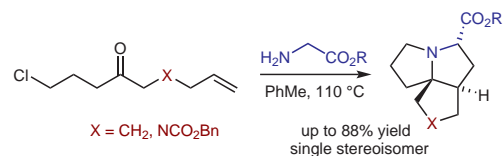
Synthesis 2020, 52, 1273–1278
DOI: 10.1055/s-0039-1691588

A. Choi
J. Castle
R. Saruengkanphasit
I. Coldham*
University of Sheffield, UK

Synthesis of Spirocyclic Amines by 1,3-Dipolar Cycloaddition of Azomethine Ylides and Azomethine Imines

Paper

1273



Synthesis

Synthesis 2020, 52, 1279–1286
DOI: 10.1055/s-0039-1691589

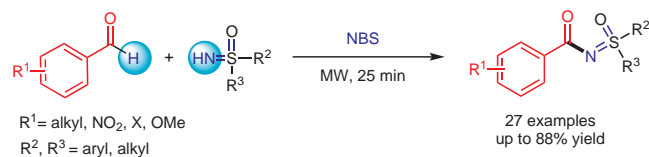
K. K. Rajbongshi
S. Ambala
T. Govender
H. G. Kruger
P. I. Arvidsson*
T. Naicker*

University of KwaZuluNatal,
South Africa

Microwave-Accelerated *N*-Acylation of Sulfoximines with Aldehydes under Catalyst-Free Conditions

Paper

1279



Synthesis

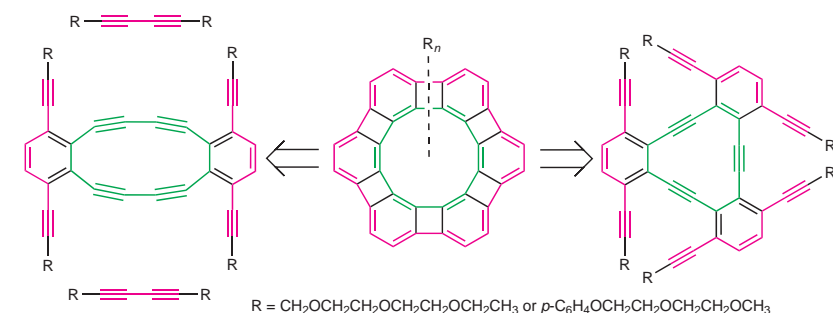
Synthesis 2020, 52, 1287–1300
DOI: 10.1055/s-0039-1690050

U. Dahlmann
K. P. C. Vollhardt*
University of California at Berkeley, USA

Oligoether-Substituted Derivatives of Carbon-Rich 1,4,7,10,13,16-Hexaethynyltribenzo[*a,e,i*]cyclododeca-5,11,17-triynyl ($\text{C}_{36}\text{H}_{12}$) and 1,4,9,12-Tetrakis(ethynyl)dibenzo[*a,g*]cyclododeca-5,7,13,15-tetrayne (C_{28}H_8): Potential Precursors to the Circular [6]Phenylene ('Antikekulene') Frame

Paper

1287



Synthesis 2020, 52, 1301–1314
DOI: 10.1055/s-0039-1690819

1301

C. Qiu

H. Yu

C. Qiu

F. Li*

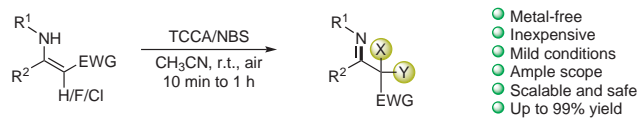
T. Suo

C. Wang

S. Bie

Z. Li*

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Chinese Medicine, P. R. of China



R^1 = aryl, alkyl
 R^2 = het/aryl, alkyl
EWG = CO_2Et ,
 CO_2Bn , $COPh$, CN

X = Y = Cl, 26 examples
X = Y = Br, 23 examples
X = F/Cl, Y = Cl/Br, 3 examples

- Metal-free
- Inexpensive
- Mild conditions
- Ample scope
- Scalable and safe
- Up to 99% yield

Synthesis

Synthesis 2020, 52, 1315–1345
DOI: 10.1055/s-0039-1690058

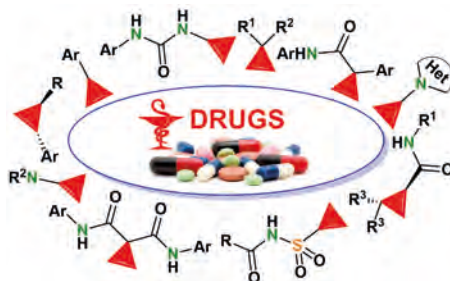
Z. Časar*

Lek Pharmaceuticals, d.d., Sandoz Development Center Slovenia, Slovenia

Synthetic Approaches to Contemporary Drugs that Contain the Cyclopropyl Moiety

Review

1315



Synthesis

Synthesis 2020, 52, 1346–1356
DOI: 10.1055/s-0039-1690842

H.-Y. Tu

S. Zhu*

F.-L. Qing

L. Chu*

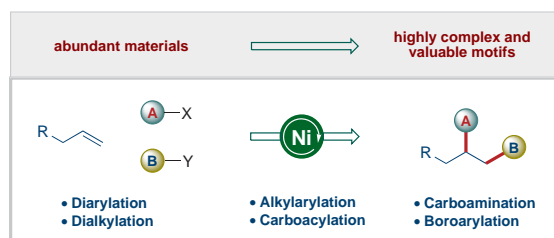
Donghua University,
P. R. of China

Recent Advances in Nickel-Catalyzed Three-Component Difunctionalization of Unactivated Alkenes

Short Review

1346

Nickel-Catalyzed Three-Component Difunctionalization of Unactivated Alkenes



Synthesis

Synthesis 2020, 52, 1357–1368
DOI: 10.1055/s-0039-1690839

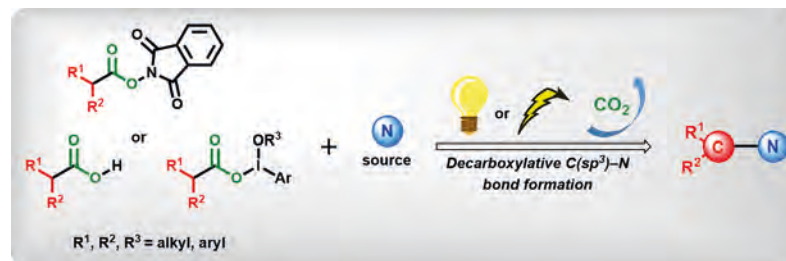
Y. Zheng
X. Shao
V. Ramadoss
L. Tian*
Y. Wang*

Nanjing Tech University,
P. R. of China

Recent Developments in Photochemical and Electrochemical Decarboxylative C(sp³)-N Bond Formation

Short Review

1357



Synthesis

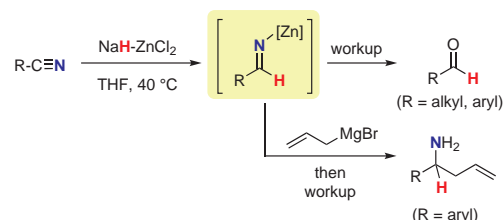
Synthesis 2020, 52, 1369–1378
DOI: 10.1055/s-0039-1690838

D. Y. Ong
S. Chiba*
Nanyang Technological University,
Singapore

Controlled Reduction of Nitriles by Sodium Hydride and Zinc Chloride

Feature

1369



Synthesis

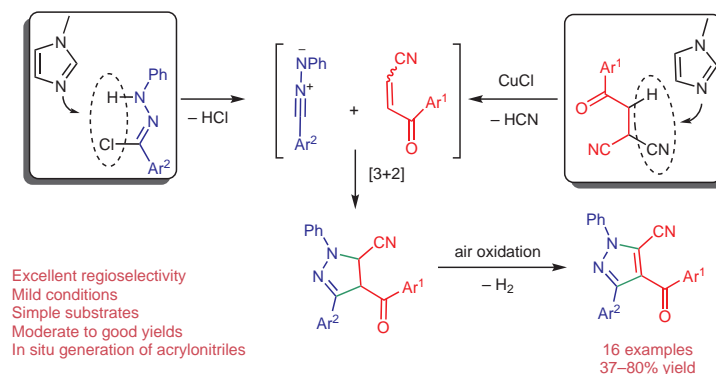
Synthesis 2020, 52, 1379–1386
DOI: 10.1055/s-0039-1691591

I. Yavari*
O. Khaledian
Tarbiat Modares University, Iran

Copper-Catalyzed Tandem Dehydrocyanation and [3+2] Cycloaddition Reactions of Phenacylmalononitriles: Regioselective Synthesis of Functionalized 4-Benzoyl-5-cyanopyrazoles under Mild Conditions

Paper

1379



Synthesis

Synthesis 2020, 52, 1387–1397
DOI: 10.1055/s-0039-1691597

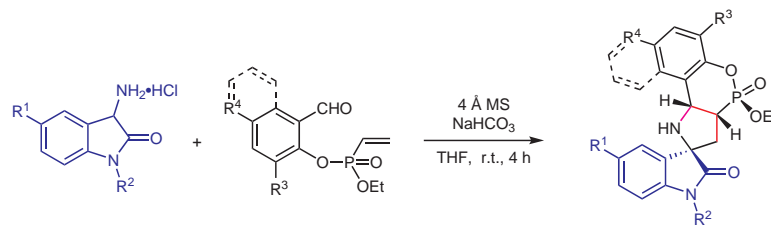
T. Huang
L. Liu
Q. Wang
M. Wu*
D. Kong*

Hainan Normal University,
P. R. of China
Hainan Medical University,
P. R. of China

1,3-Dipolar Cycloaddition of 3-Amino Oxindole-Based Azomethine Ylides and O-Vinylphosphonylated Salicylaldehydes for Diastereoselective Synthesis of Oxindole Spiro-P,N-polycyclic Heterocycles

Paper

1387



R = MeO, Cl, Br, F, alkyl, H Bn

28 examples, up to 96% yield
Only *cis*-selective intramolecular dipolar cycloaddition
Three new bonds (C–N, 2 C–C), two new P,N-heterocycles
Mild reaction conditions
Potential biological activity of the products

Synthesis

Synthesis 2020, 52, 1398–1406
DOI: 10.1055/s-0039-1690053

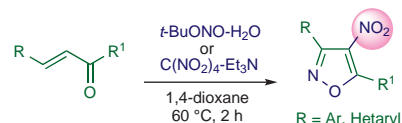
D. A. Vasilenko
K. S. Sadovnikov
K. N. Sedenkova
A. V. Kurova
Y. K. Grishin
T. S. Kuznetsova
V. B. Rybakov
Y. A. Volkova
E. B. Averina*

Lomonosov Moscow State Uni-
versity, Russian Federation

Synthesis of 4-Nitroisoxazoles via NO/NO₂-Mediated Heterocyclization of Aryl-Substituted α,β -Unsaturated Ketones

Paper

1398



R = Ar, Hetaryl
R¹ = Alk, Ar
19 examples
up to 80% yield

Synthesis

Synthesis 2020, 52, 1407–1416
DOI: 10.1055/s-0039-1691564

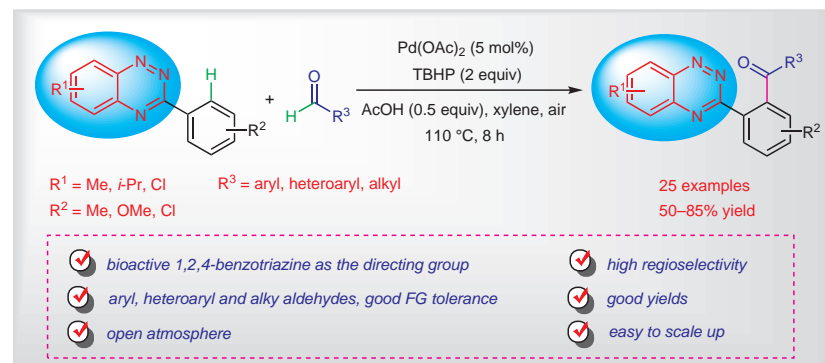
J. Liu
S. Jin
Y. Zhou
D. Ni
T. Liu
B. Cui*
G. Hu
X. Yu
G. Huang*

Hubei Polytechnic University,
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Lanzhou University,
P. R. of China

Palladium-Catalyzed *ortho*-Monoacylation of Arenes with Aldehydes via 1,2,4-Benzotriazine-Directed C–H Bond Activation

Paper

1407



Synthesis

Synthesis 2020, 52, 1417–1424
DOI: 10.1055/s-0037-1610739

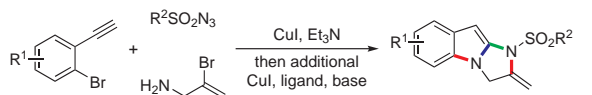
H. Jin
D. Liu
B. Zhou*
Y. Liu*

Zhejiang University of Technology,
China

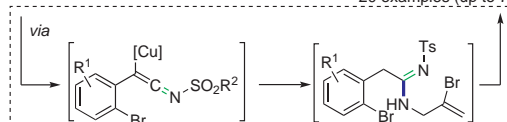
One-Pot Copper-Catalyzed Three-Component Reaction of Sulfonyl Azides, Alkynes, and Allylamines To Access 2,3-Dihydro-1*H*-imidazo[1,2-*a*]indoles

Paper

1417



20 examples (up to 77% yield)



- ◆ Easily available copper catalyst
- ◆ One-pot process
- ◆ Four C–N bonds being constructed
- ◆ High step-economy

Synthesis

Synthesis 2020, 52, 1425–1434
DOI: 10.1055/s-0037-1610750

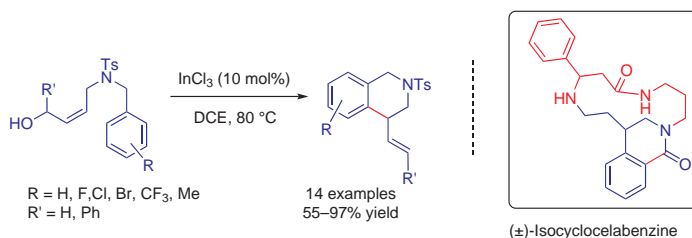
N. R. Devi
S. Shit
B. K. Behera
A. K. Saikia*

Indian Institute of Technology
Guwahati, India

Synthesis of 4-Vinyl-1,2,3,4-tetrahydroisoquinoline from *N*-Tethered Benzyl-Alkenol Catalyzed by Indium(III) Chloride: Formal Synthesis of (±)-Isocyclocelabenzine

Paper

1425



(±)-Isocyclocelabenzine

Synthesis

Synthesis 2020, 52, 1435–1443
DOI: 10.1055/s-0039-1690808

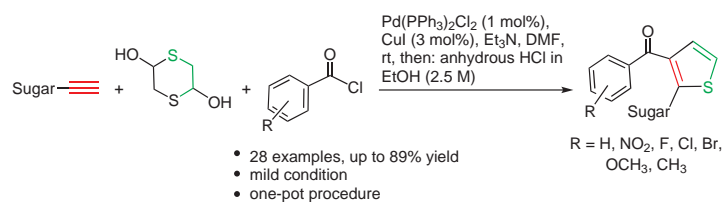
Y. Luo
F. Gao
H. Liu*
F. Zhang*
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Facile Synthesis of Novel Benzoylthiophene C-Nucleoside Analogues via Coupling of Sugar Alkynes, Aroyl Chlorides, and 1,4-Dithiane-2,5-diol

Paper

1435



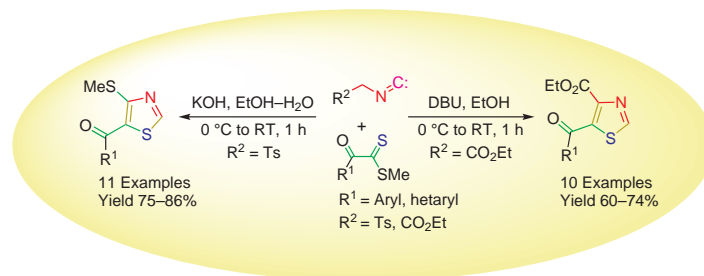
R = H, NO₂, F, Cl, Br,
OCH₃, CH₃

- 28 examples, up to 89% yield
- mild condition
- one-pot procedure

K. R. Kiran
T. R. Swaroop*
N. Rajeev
S. M. Anil
K. S. Rangappa*
M. P. Sadashiva*

University of Mysore, India

Cyclization of Active Methylene Isocyanides with α -Oxodithioesters Induced by Base: An Expedient Synthesis of 4-Methylthio/Ethoxy-carbonyl-5-acylthiazoles



Synthesis

Synthesis 2020, 52, 1489–1497
DOI: 10.1055/s-0039-1691733

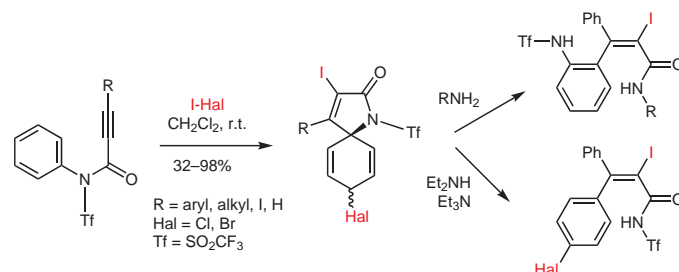
V. A. Fiore
M. Keim
R. Werz
G. Maas*

Ulm University, Germany

Electrophilic *ipso*-Halocyclization of *N*-Phenyl-*N*-triflylpropiolamides Leading to 8-Halo-1-azaspiro[4.5]deca-3,6,9-trien-2-ones

Paper

1489



Synthesis

Synthesis 2020, 52, 1498–1511
DOI: 10.1055/s-0037-1610749

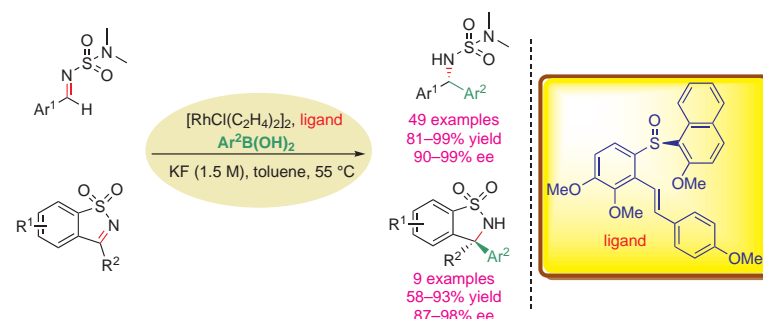
F. Xue*
Q. Liu*
Y. Zhu
Y. Huang
J. Ge
B. Wan*

Henan Institute of Science and Technology, P. R. of China
Dalian Allychem Co., Ltd, P. R. of China
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Highly Enantioselective Rh-Catalyzed Arylation of *N,N*-Dimethylsulfonyl-Protected Aldimines and Cyclic *N*-Sulfonylimines with Chiral Phenyl Backbone Sulfoxide-Olefin Ligands

Paper

1498



- Broad substrate scope without steric and electronic property limitation
- Great *ortho*-substitution tolerance with excellent enantioselectivity and high yield

Synthesis

Synthesis 2020, 52, 1512–1522
DOI: 10.1055/s-0040-1707969

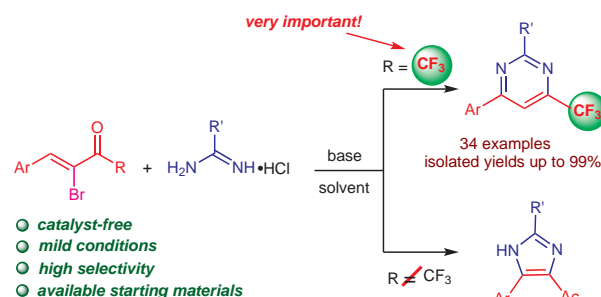
A. R. Romanov
A. Yu. Rulev*
A. V. Popov
E. V. Kondrashov
S. V. Zinchenko

A. E. Favorsky Institute of Chemistry, Russian Federation

Reaction of Bromoenones with Amidines: A Simple Catalyst-Free Approach to Trifluoromethylated Pyrimidines

Paper

1512



Synthesis

Synthesis 2020, 52, 1523–1530
DOI: 10.1055/s-0037-1610754

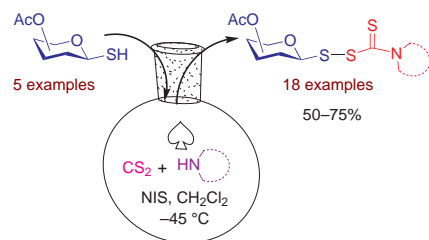
A. Guichait
S. Ghosh
A. K. Misra*

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Synthesis of Novel Glycosyl Carbamo(dithioperoxo)thioate Derivatives

Paper

1523



Synthesis

Synthesis 2020, 52, 1531–1540
DOI: 10.1055/s-0039-1691599

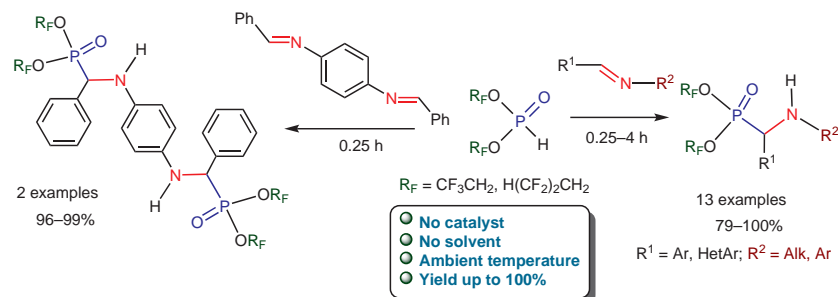
S. N. Arbuzova
N. K. Gusarova
T. I. Kazantseva
S. I. Verkhoturova
S. V. Zinchenko
N. A. Kolyvanov
B. A. Trofimov*

A. E. Favorsky Irkutsk Institute of
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Catalyst- and Solvent-Free Synthesis of α -Amino Polyfluoroalkylphosphonates from Bis(fluoroalkyl) Phosphonates and Aldimines

Paper

1531



Synthesis

Synthesis 2020, 52, 1541–1543
DOI: 10.1055/s-0037-1610752

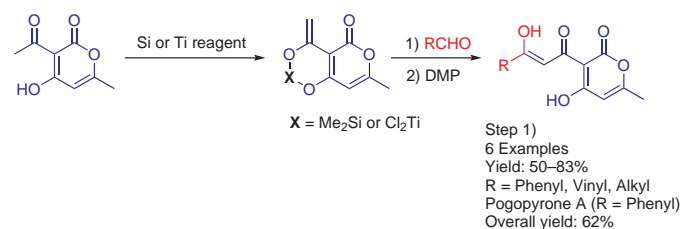
S. Wang
G. A. Kraus*

Iowa State University, USA

The Dianion of Dehydroacetic Acid: A Direct Synthesis of Pogopyrone A

Paper

1541



Synthesis

Synthesis 2020, 52, 1544–1560
DOI: 10.1055/s-0039-1690826

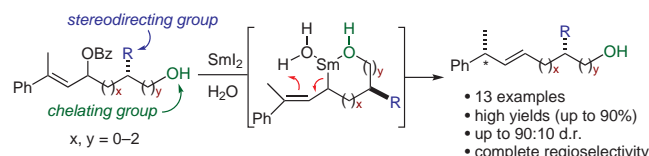
T. F. Stockdale
M. A. Leitch
G. W. O'Neil*

Western Washington University,
USA

Chelation and Stereodirecting Group Effects on Regio- and Diastereoselective Samarium(II)-Water Allylic Benzoate Reductions

Paper

1544



Synthesis

Synthesis 2020, 52, 1561–1575
DOI: 10.1055/s-0039-1690794

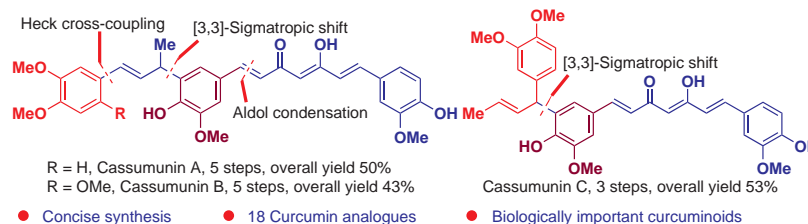
M. A. Hussain
F. A. Khan*

Indian Institute of Technology
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Total Synthesis of (±)-Cassumunins A–C and Curcumin Analogues

Paper

1561



Synthesis

Synthesis 2020, 52, 1576–1584
DOI: 10.1055/s-0039-1691699

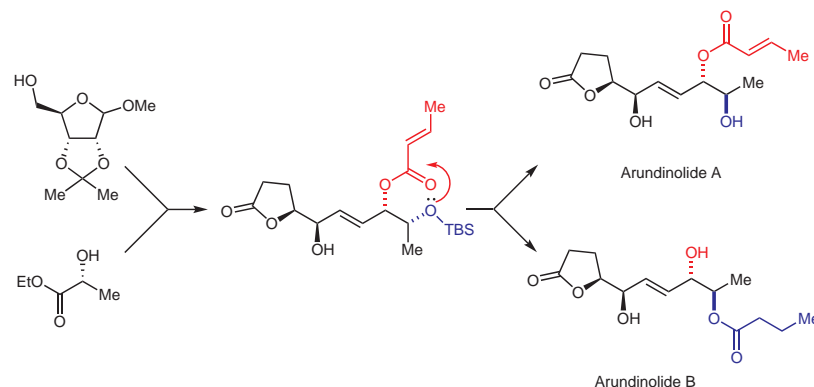
C. Chang
J. Geng
Y. Liu
Y. Du
J. Liu*
Z.-B. Dong*

Research Center for Eco-Environmental Sciences, P. R. of China
Wuhan Institute of Technology,
P. R. of China

Stereoselective Total Synthesis of Arundinolides A and B

Paper

1576



Synthesis

Synthesis 2020, 52, 1585–1601
DOI: 10.1055/s-0039-1690844

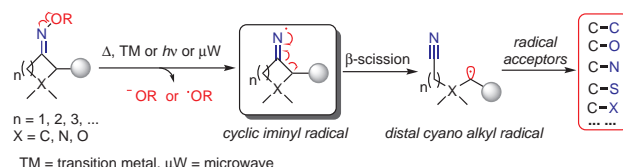
T. Xiao*
H. Huang
D. Anand
L. Zhou*

Kunming University of Science
and Technology, P. R. of China
Sun Yat-sen University,
P. R. of China

Iminyl-Radical-Triggered C–C Bond Cleavage of Cycloketone Oxime Derivatives: Generation of Distal Cyano-Substituted Alkyl Radicals and Their Functionalization

Review

1585



Synthesis

Synthesis 2020, 52, 1602–1616
DOI: 10.1055/s-0039-1690089

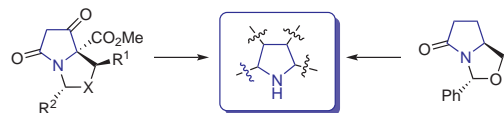
M. K. Khan
D. Wang
M. G. Moloney*

Oxford Suzhou Centre for Ad-
vanced Research, P. R. of China
University of Oxford, UK

Functionalised Nitrogen Heterocycles and the Search for New Antibacterials and Bioactives

Short Review

1602



Synthesis

Synthesis 2020, 52, 1617–1624
DOI: 10.1055/s-0039-1708005

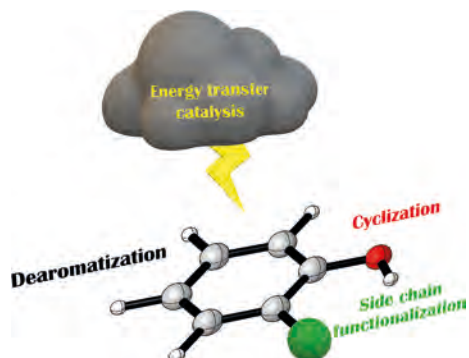
J. Fischer
P. Nun
V. Coeffard*

Université de Nantes, France

Visible-Light-Driven Transformations of Phenols via Energy Transfer Catalysis

Short Review

1617



Synthesis

Synthesis 2020, 52, 1625–1633
DOI: 10.1055/s-0039-1690866

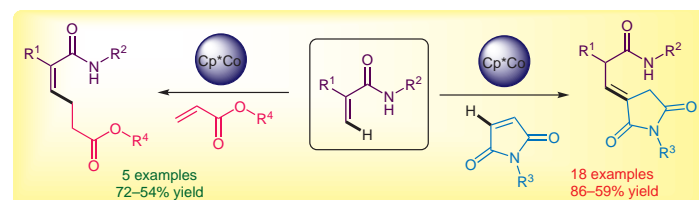
M. S. Keerthana
R. Manoharan
M. Jeganmohan*

Indian Institute of Technology
Madras, India

Cobalt(III)-Catalyzed Redox-Neutral Coupling of Acrylamides with Activated Alkenes via C–H Bond Activation

Feature

1625



Synthesis

Synthesis 2020, 52, 1634–1642
DOI: 10.1055/s-0039-1690837

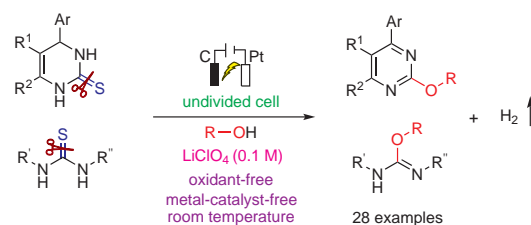
Z.-H. Zhu
M.-Z. Ren
B.-Q. Cao
Z.-J. Quan*
X.-C. Wang*

Northwest Normal University,
P. R. of China

Metal- and Oxidant-Free Electrochemical Oxidative Desulfurization C–O Coupling of Thiourea-Type Compounds with Alcohols

Paper

1634



Synthesis

Synthesis 2020, 52, 1643–1658
DOI: 10.1055/s-0039-1690800

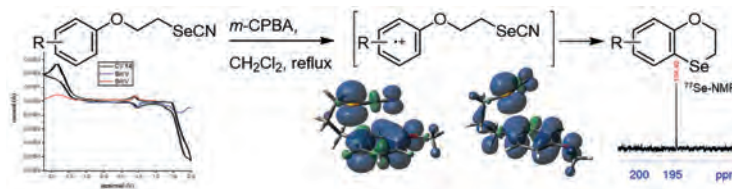
M. N. Chao
S. H. Szajnman*
M. Cattaneo
J. Sanchez Gonzalez
S. M. Bonesi
J. B. Rodriguez*

Universidad de Buenos Aires,
Argentina

Synthetic and Mechanistic Studies on 2,3-Dihydrobenzo[*b*][1,4]-oxaselenines Formation from Selenocyanates

Paper

1643



Synthesis

Synthesis 2020, 52, 1659–1665
DOI: 10.1055/s-0039-1691731

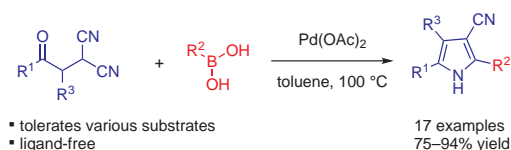
Z. Wang
W. Chen
H. Luo
C. He
G. Zhang*
Y. Yu*

Zhejiang University,
P. R. of China

Cascade Reactions to Substituted 1*H*-Pyrrole-3-carbonitriles via Ligand-Free Palladium(II)-Catalyzed C(sp)–C(sp²) Coupling

Paper

1659



Synthesis

Synthesis 2020, 52, 1666–1679
DOI: 10.1055/s-0039-1690822

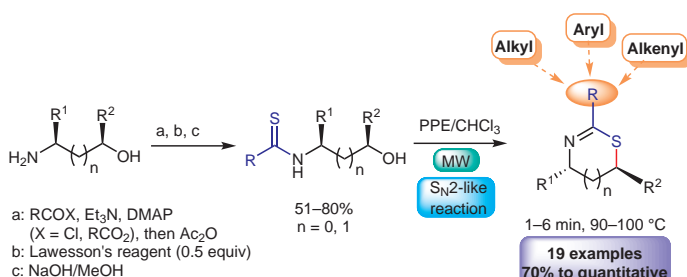
M. C. Mollo
J. A. Bisceglia
N. B. Kilimciler
M. Mancinelli
L. R. Orelli*

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Argentina

Microwave-Assisted Synthesis of 2-Substituted 2-Thiazolines and 5,6-Dihydro-4*H*-1,3-thiazines

Paper

1666



Synthesis

Synthesis 2020, 52, 1680–1686
DOI: 10.1055/s-0039-1690871

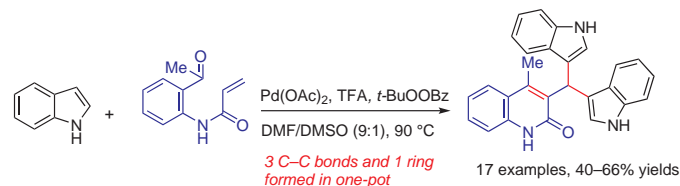
L. Duan
M.-X. Zuo
K.-Q. Xie
Y.-C. Liu
W.-Z. Qiu
L.-P. Wang
S. Liu*

Guizhou Medical University,
P. R. of China
Key Laboratory of Chemistry for
Natural Products of Guizhou
Province, P. R. of China

Palladium-Catalyzed Cascade Synthesis of Novel Quinolone- Bis-(indolyl)methane Hybrids as Promising α -Glucosidase Inhibitors

Paper

1680



Synthesis

Synthesis 2020, 52, 1687–1694
DOI: 10.1055/s-0039-1690823

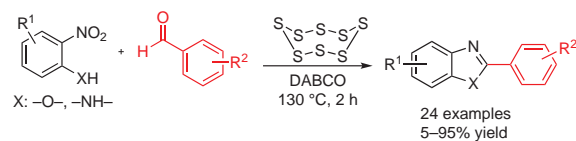
M.-H. D. Dang
L. H. T. Nguyen
P. H. Tran*

Vietnam National University,
Vietnam

Sulfur/DABCO Promoted Reductive Coupling/Annulation Cascade Reaction between *o*-Hydroxy/Amino Nitrobenzenes and Benzaldehydes

Paper

1687



Synthesis

Synthesis 2020, 52, 1695–1706
DOI: 10.1055/s-0039-1690905

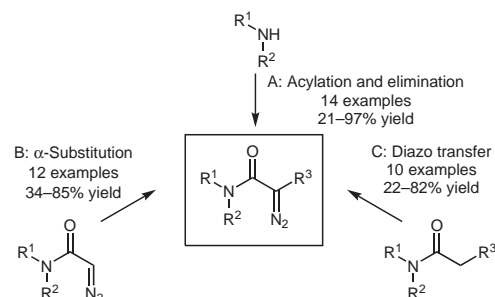
S. Chow
A. I. Green
C. Arter
S. Liver
A. Leggott
L. Trask
G. Karageorgis
S. Warriner
A. Nelson*

University of Leeds, UK

Efficient Approaches for the Synthesis of Diverse α -Diazo Amides

Paper

1695



N. Etivand*

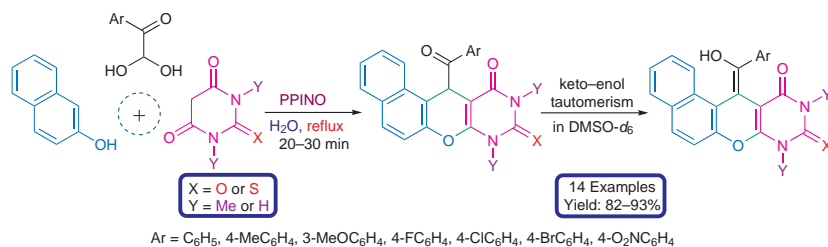
J. Khalafy

M. G. Dekamin

Urmia University, Iran

Fast and Efficient Green Procedure for the Synthesis of Benzo[5,6]chromene Derivatives and Their Sulfur Analogues in Water by Organocatalyst Potassium Phthalimide-*N*-oxyl

One-Pot Annulation
 Green Reaction Process
 Cheap and Efficient Organocatalyst



Synthesis

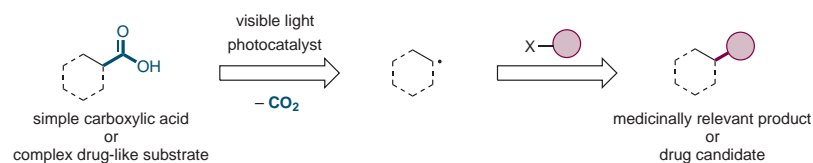
Synthesis 2020, 52, 1719–1737
DOI: 10.1055/s-0039-1690843

L. McMurray*
T. M. McGuire
R. L. Howells
AstraZeneca, UK

Recent Advances in Photocatalytic Decarboxylative Coupling Reactions in Medicinal Chemistry

Review

1719



Synthesis

Synthesis 2020, 52, 1738–1750
DOI: 10.1055/s-0039-1690857

Z. Chai*
Anhui Normal University,
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Catalytic Asymmetric Transformations of Racemic Aziridines

Short Review

1738



ring opening reaction & [3+x] annulation
stereoselectivity & regioselectivity

- ▣ enantioconvergent transformation
- ▣ (regiodivergent parallel) kinetic resolution

Synthesis

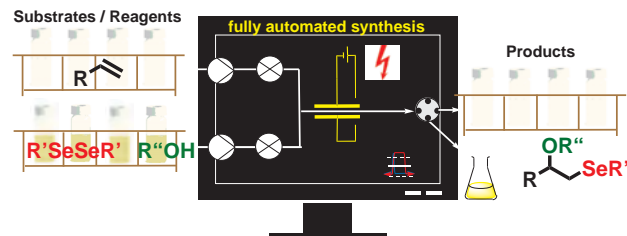
Automated Electrochemical Selenenylations

Feature

Synthesis 2020, 52, 1751–1761
DOI: 10.1055/s-0039-1690868

N. Amri
T. Wirth*
Cardiff University, UK

1751



Synthesis

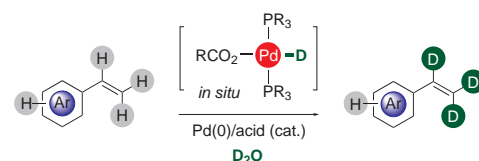
Functionalization of Alkenyl C–H Bonds with D₂O via Pd(0)/Carboxylic Acid Catalysis

Feature

Synthesis 2020, 52, 1762–1772
DOI: 10.1055/s-0039-1690892

N. Camedda
A. Serafino
R. Maggi
F. Bigi
G. Cera
G. Maestri*
Università di Parma, Italy

1762



Synthesis

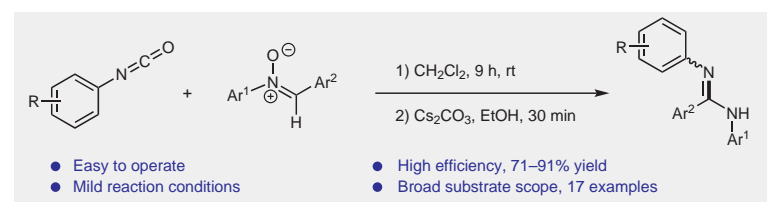
A Convenient Synthesis of Amidines via Cycloaddition–Decarboxylation of Isocyanates and Nitrones

Paper

Synthesis 2020, 52, 1773–1778
DOI: 10.1055/s-0040-1707989

Y. Wu
X. Chen
M.-M. Zhang*
Jiangsu Normal University,
P. R. of China

1773



Synthesis

Synthesis 2020, 52, 1779–1794
DOI: 10.1055/s-0039-1690088

C.-K. Chan

C.-Y. Lai

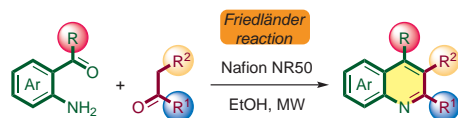
C.-C. Wang*

Academia Sinica, Taiwan, R.O.C.

Environmentally Friendly Nafion-Mediated Friedländer Quinoline Synthesis under Microwave Irradiation: Application to One-Pot Synthesis of Substituted Quinolinyl Chalcones

Paper

1779



- 56 examples • good FG tolerance • high yields
- atom-economic • environmentally friendly

Synthesis

Synthesis 2020, 52, 1795–1803
DOI: 10.1055/s-0039-1690852

G. Casotti

G. Fusini

M. Ferreri

L. F. Pardini

C. Evangelisti*

G. Angelici*

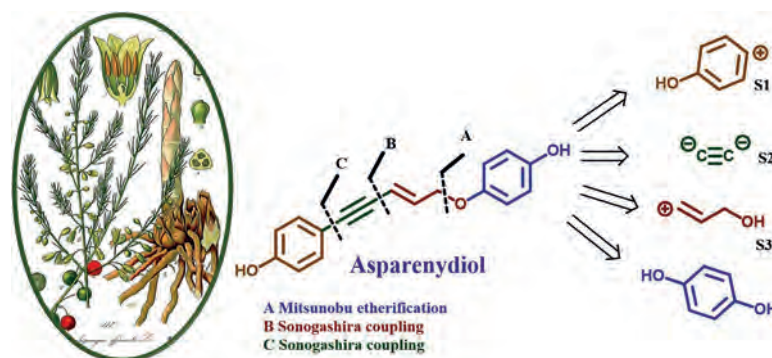
A. Carpita

University of Pisa, Italy
CNR, Istituto di Chimica dei
Composti Organometallici
(ICCOM), Italy

Total Synthesis of Asparenydiol by Two Sonogashira Cross-Coupling Reactions Promoted by Supported Pd and Cu Catalysts

Paper

1795



Synthesis

Synthesis 2020, 52, 1804–1822
DOI: 10.1055/s-0039-1707985

A. Meléndez

E. Plata

D. Rodríguez

D. Ardila

S. A. Guerrero

L. M. Acosta

J. Cobo

M. Nogueras

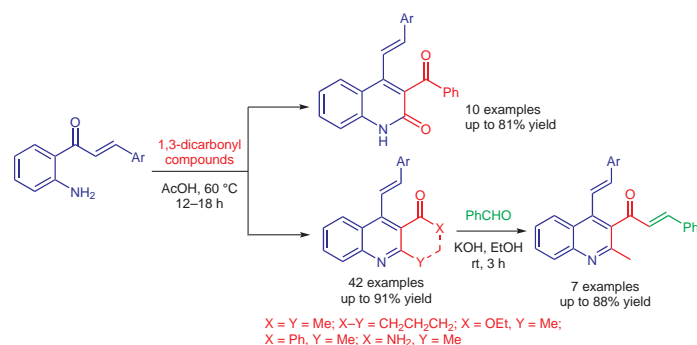
A. Palma*

Universidad Industrial de
Santander, Colombia

Straightforward Synthesis of Novel 4-Styrylquinolines/4-Styrylquinolin-2-ones and 9-Styryldihydroacridin-1(2H)-ones from Substituted 2'-Aminoaldehydes

Paper

1804



Synthesis

Synthesis 2020, 52, 1823–1832
DOI: 10.1055/s-0039-1690864

N. Sakai*

K. Sasaki

H. Suzuki

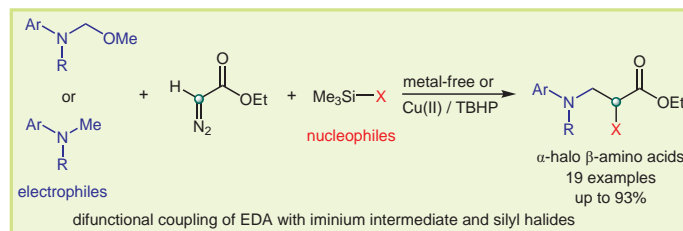
Y. Ogiwara

Tokyo University of Science
(RIKADAI), Japan

One-Pot Synthesis of α -Halo β -Amino Acid Derivatives via the Difunctional Coupling of Ethyl α -Diazoacetate with Silyl Halides and *N,O*-Acetals or Aromatic Tertiary Amines

Paper

1823



Synthesis

Synthesis 2020, 52, 1833–1840
DOI: 10.1055/s-0039-1691740

D. Cheng*

X. Yan

J. Shen

Y. Pu

X. Xu*

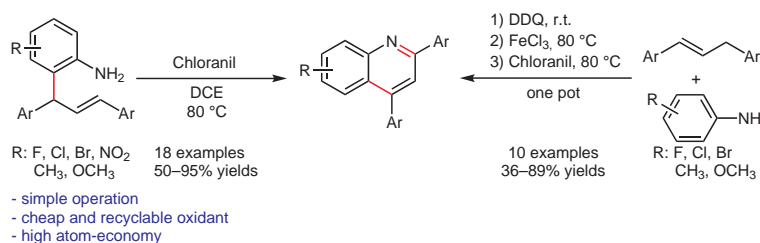
J. Yan*

Zhejiang University of Technology,
P. R. of China

Synthesis of 2,4-Diarylquinoline Derivatives via Chloranil-Promoted Oxidative Annulation and One-Pot Reaction

Paper

1833



Synthesis

Synthesis 2020, 52, 1841–1846
DOI: 10.1055/s-0040-1707996

H. Xu

M.-Y. Weng

H. Chen

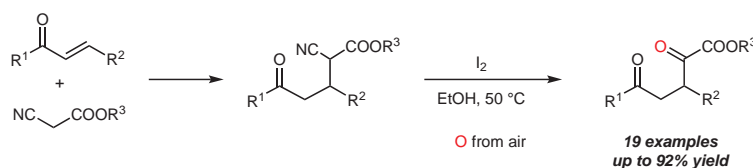
Z. Zhang*

Anhui Polytechnic University,
P. R. of China

Unexpected Iodine-Promoted Aerobic Oxidation of α -Cyano- δ -keto Esters: A Facile Synthesis of α,δ -Dicarbonyl Esters

Paper

1841

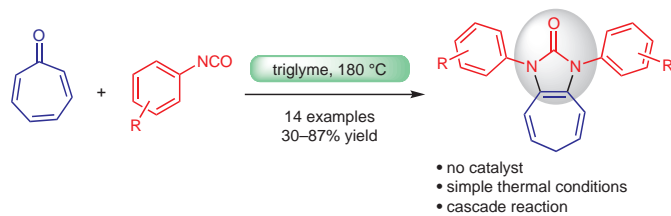


- metal-free
- air as the oxidant
- ethanol as the solvent
- good to excellent yields
- good functional group tolerance

Synthesis 2020, 52, 1847–1854
DOI: 10.1055/s-0040-1708006

J. Yu
X. Chen
Y. Liu
B. Wu
H. Li
Y. Hu*
L. Wang*
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P. R. of China
Qingdao Agricultural University,
P. R. of China



Synthesis

Synthesis 2020, 52, 1855–1873
DOI: 10.1055/s-0039-1690847

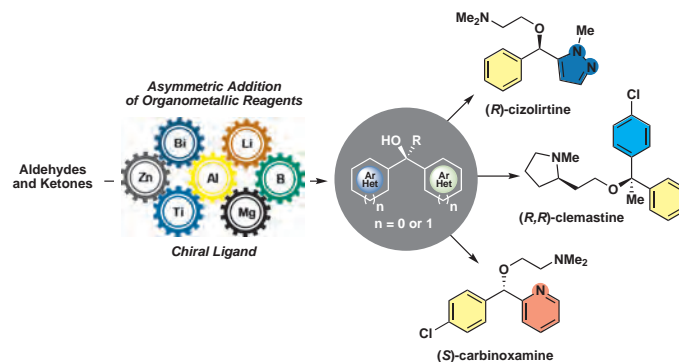
W. K. O. Teixeira
D. Y. de Albuquerque
S. Narayanaperumal*
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Universidade Federal de São Carlos – UFSCar, Brazil
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Recent Advances in the Synthesis of Enantiomerically Enriched Diaryl, Aryl Heteroaryl, and Diheteroaryl Alcohols through Addition of Organometallic Reagents to Carbonyl Compounds

Review

1855



Synthesis

Synthesis 2020, 52, 1874–1896
DOI: 10.1055/s-0039-1690858

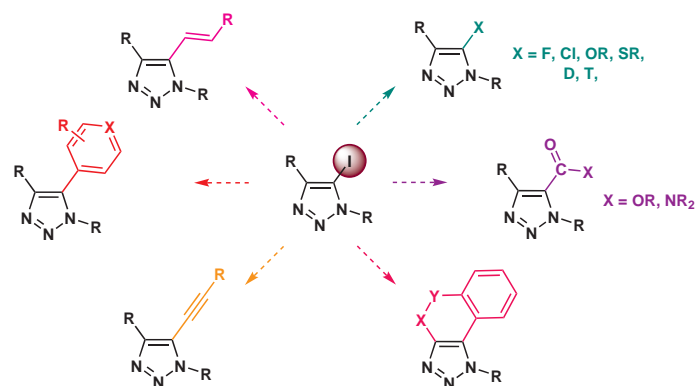
N. A. Danilkina
A. I. Govdi
I. A. Balova*

Saint Petersburg State University (SPbU), Russian Federation

5-Iodo-1*H*-1,2,3-triazoles as Versatile Building Blocks

Short Review

1874



Synthesis

Synthesis 2020, 52, 1897–1902
DOI: 10.1055/s-0039-1690893

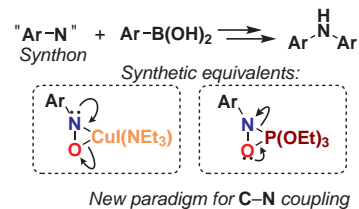
O. A. Levitskiy
T. V. Magdesieva*

Lomonosov Moscow State University, Russia

Reductive Amination of Aryl Boronic Acids: Parallelism of the Catalytic Reactivity of Transition Metals and Main Group Elements in the C(sp²)-N Bond-Forming Reactions

Feature

1897



Synthesis

Synthesis 2020, 52, 1903–1914
DOI: 10.1055/s-0039-1690091

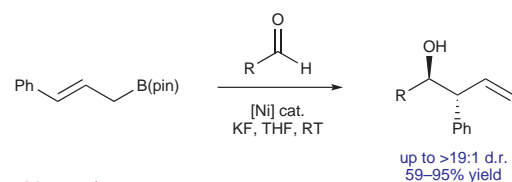
F. M. Dennis
C. C. Robertson
B. M. Partridge*

University of Sheffield, UK

Nickel-Catalysed Allylboration of Aldehydes

Paper

1903



- 26 examples
- Allylation through a cyclic transition state
- Ni acts as a Lewis acid catalyst

Synthesis

Synthesis 2020, 52, 1915–1926
DOI: 10.1055/s-0039-1707987

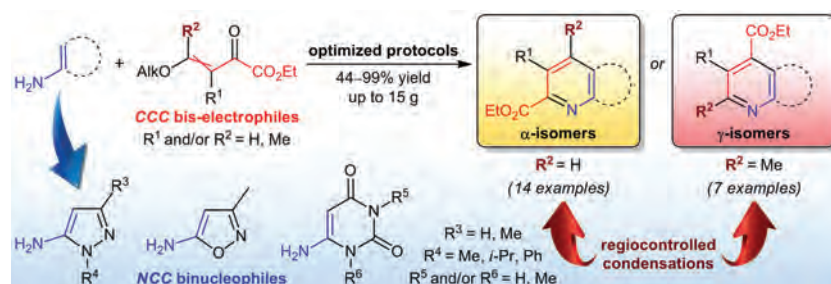
O. O. Stepaniuk
T. V. Rudenko
B. V. Vashchenko
V. O. Matvienko
I. S. Kondratov*
A. A. Tolmachev
O. O. Grygorenko*

Enamine Ltd., Ukraine
Taras Shevchenko National University of Kyiv, Ukraine

Synthesis of Fused Pyridine Carboxylates by Reaction of β-Alkoxyvinyl Glyoxylates with Amino Heterocycles

Paper

1915



Synthesis

Synthesis 2020, 52, 1927–1933
DOI: 10.1055/s-0039-1690854

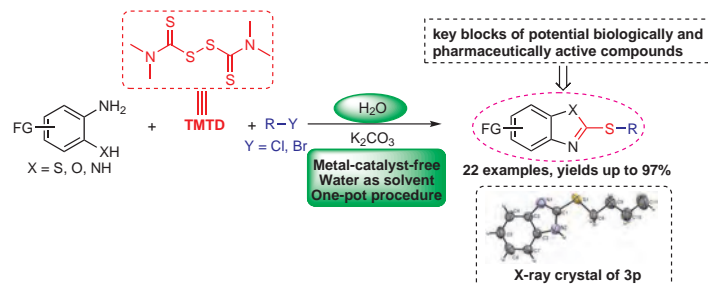
J.-Q. Chen
J. Guo
Z.-B. Dong*

Wuhan Institute of Technology,
P. R. of China
Ministry of Education Key Laboratory for the Synthesis and Application of Organic Functional Molecules, P. R. of China

Three-Component Synthesis of 2-Alkylthiobenzoazoles in Aqueous Media

Paper

1927



Synthesis

Synthesis 2020, 52, 1934–1946
DOI: 10.1055/s-0040-1707524

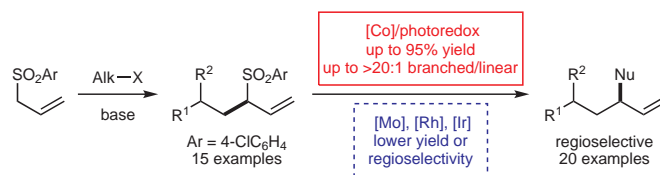
T. Sekino
S. Sato
K. Kuwabara
K. Takizawa
T. Yoshino
M. Kojima*
S. Matsunaga*

Hokkaido University, Japan

Allyl 4-Chlorophenyl Sulfone as a Versatile 1,1-Synthon for Sequential α -Alkylation/Cobalt-Catalyzed Allylic Substitution

Paper

1934



Synthesis

Synthesis 2020, 52, 1947–1958
DOI: 10.1055/s-0039-1691744

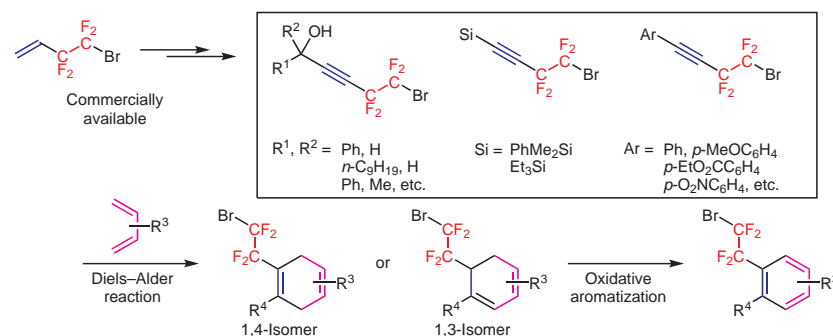
G. Egashira
C. Kajimoto
T. Kataoka
S. Yamada
T. Konno*

Kyoto Institute of Technology,
Japan

Synthesis and Application of Tetrafluoroethylene (CF₂CF₂)-Containing Acetylene Derivatives

Paper

1947



Synthesis

Synthesis 2020, 52, 1959–1968
DOI: 10.1055/s-0039-1690870

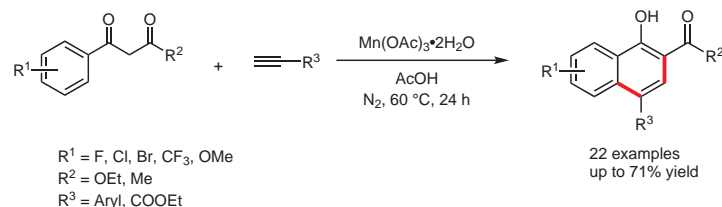
L. He
Y. Yang*
F. Li
X. Liu
W. Pan*

Guizhou Medical University,
P. R. of China
The Key Laboratory of Chemistry
for Natural Products of Guizhou
Province and Chinese Academy
of Sciences, P. R. of China

Mn(III)-Mediated Facile Access to Polysubstituted α -Naphthols from β -Keto Ester Derivatives and Terminal Alkynes

Paper

1959



Synthesis

Synthesis 2020, 52, 1969–1980
DOI: 10.1055/s-0039-1690848

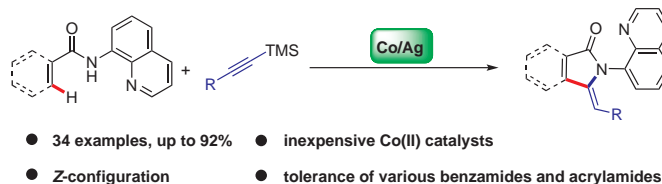
J. Wang
Q. Teng
C. Lin*
F. Gao
X. Liu
L. Shen*

Jiangxi Science & Technology
Normal University, P. R. of China

Co(II)-Catalyzed Desilylative Annulation of Benzamides and Acrylamides with Alkynylsilanes: Access to 3-Methyleneisindolin-1-one and 5-Methylene-1*H*-pyrrol-2(5*H*)-one Derivatives

Paper

1969



Synthesis

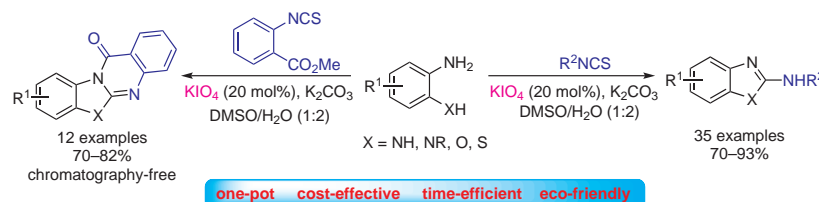
Synthesis 2020, 52, 1981–1990
DOI: 10.1055/s-0039-1690855

C. Duangkamol
W. Phakhodee
M. Pattarawarapan*
Chiang Mai University, Thailand

Potassium Periodate Mediated Oxidative Cyclodesulfurization toward Benzofused Nitrogen Heterocycles

Paper

1981



Synthesis

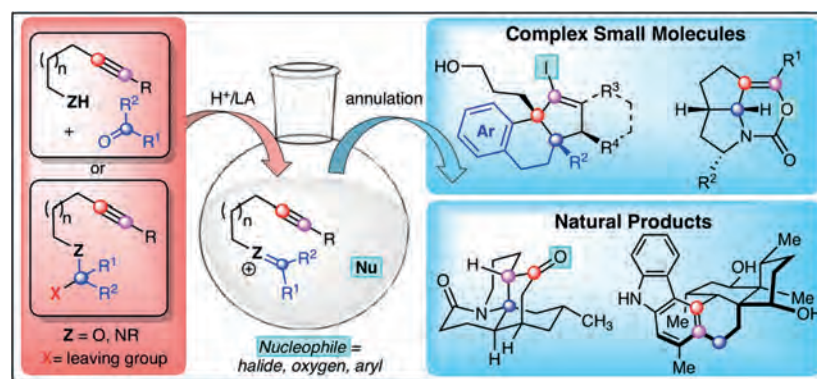
Synthesis 2020, 52, 1991–2007
DOI: 10.1055/s-0039-1690869

S. Abdul-Rashed
C. Holt
A. J. Frontier*
University of Rochester, USA

Alkynyl Prins and Alkynyl Aza-Prins Annulations: Scope and Synthetic Applications

Review

1991



Synthesis

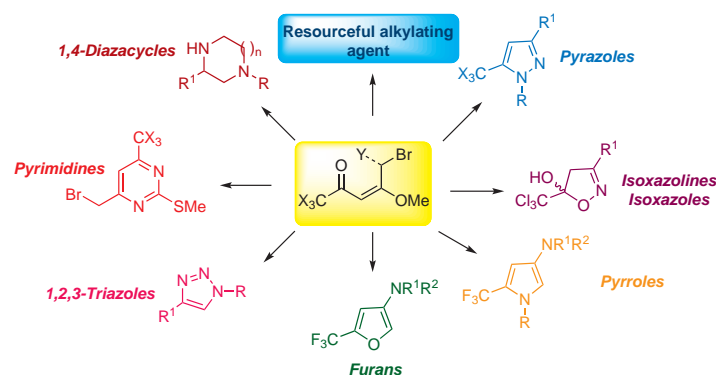
Synthesis 2020, 52, 2008–2016
DOI: 10.1055/s-0039-1690890

M. Mittersteiner*
H. G. Bonacorso
M. A. P. Martins
N. Zanatta*
Universidade Federal de Santa
Maria, Brazil

Brominated β -Alkoxyvinyl Trihalomethyl Ketones as Promising Synthons in Heterocyclic Synthesis

Short Review

2008



Synthesis

Homogeneous Gold-Catalyzed Aryl–Aryl Coupling Reactions

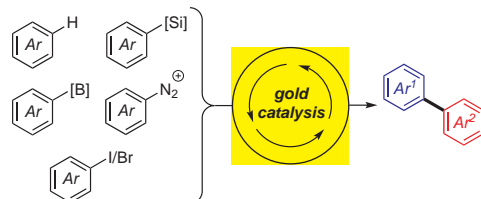
Short Review

Synthesis 2020, 52, 2017–2030
DOI: 10.1055/s-0039-1690882

2017

S. Kramer*

Technical University of Denmark,
Denmark



Synthesis

Zeolites Catalyze the Nazarov Reaction and the *tert*-Butylation of Alcohols by Stabilization of Carboxonium Intermediates

Feature

Synthesis 2020, 52, 2031–2037
DOI: 10.1055/s-0039-1690896

2031

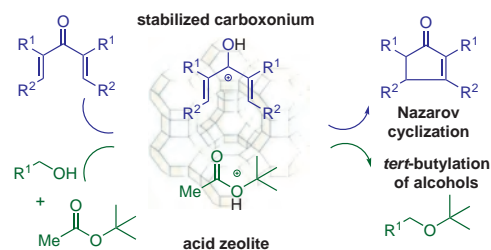
M. Tejada-Serrano

S. Sanz-Navarro

F. Blake

A. Leyva-Pérez*

Universidad Politécnica de
València, Spain



Synthesis

Palladium-Catalyzed [3+2] Cycloaddition of Vinylaziridine and Indane-1,3-diones: Diastereo- and Enantioselective Access to Spiro-Pyrrolidines

Paper

Synthesis 2020, 52, 2038–2044
DOI: 10.1055/s-0040-1707472

2038

F. Vetica*

S. J. Bailey

M. Kumar

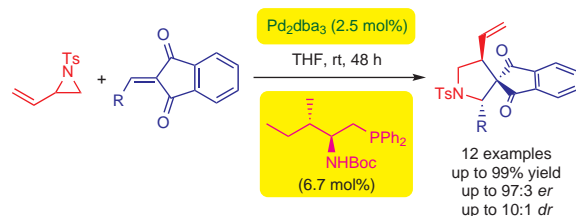
S. Mahajan

C. von Essen

K. Rissanen

D. Enders

RWTH Aachen University,
Germany



Synthesis

Synthesis 2020, 52, 2045–2064
DOI: 10.1055/s-0039-1690840

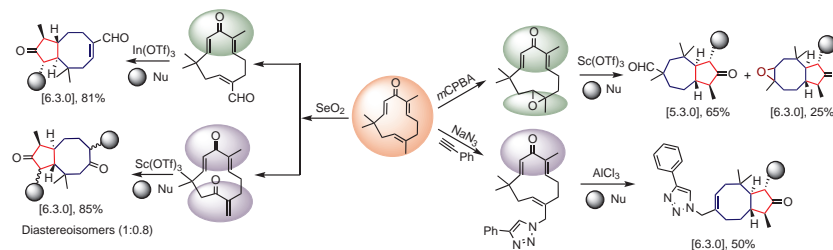
P. Sharathna
M. T. Meenu
B. P. Dhanya
G. Gopalan
P. Sasikumar
R. S. Krishnan
K. V. Radhakrishnan*

CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), India
Academy of Scientific and Innovative Research (AcSIR), CSIR-NIIST, India

Accessing Polycyclic Terpenoids from Zerumbone via Lewis Acid Catalyzed Synthetic Strategies

Paper

2045



Synthesis

Synthesis 2020, 52, 2065–2072
DOI: 10.1055/s-0039-1690865

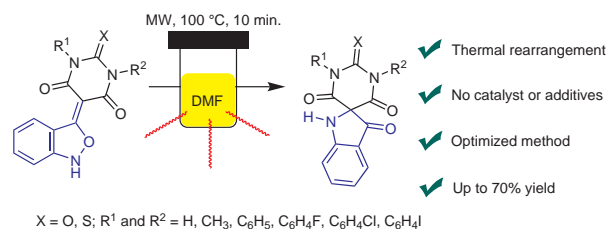
P. F. Soeiro
J. L. Serrano
J. A. Paixão
R. E. F. Boto
S. Silvestre
P. Almeida*

University of Beira Interior,
Portugal

The Synthesis of 2-Spiroindolin-3-one-(thio)barbiturates from 2,1-Benzisoxazoles: A Rearrangement Promoted by Thermal Conditions

Paper

2065



Synthesis

Synthesis 2020, 52, 2073–2091
DOI: 10.1055/s-0039-1690860

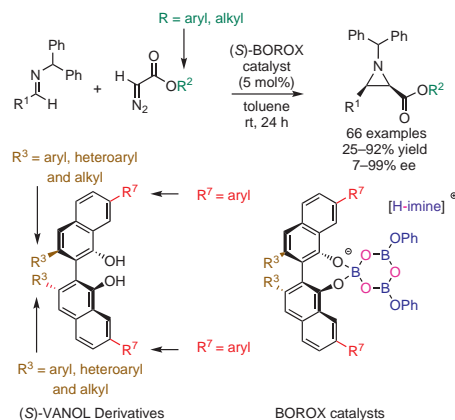
Y. Guan
Z. Lu
X. Yin
A. Mohammadlou
R. J. Staples
W. D. Wulff*

Michigan State University, USA

Catalytic Asymmetric Aziridination of Benzhydryl Imines and Diazoacetate Esters with BOROXY Catalysts from 3,3'-Disubstituted VANOL Ligands

Paper

2073



Synthesis

Synthesis 2020, 52, 2092–2098
DOI: 10.1055/s-0039-1707988

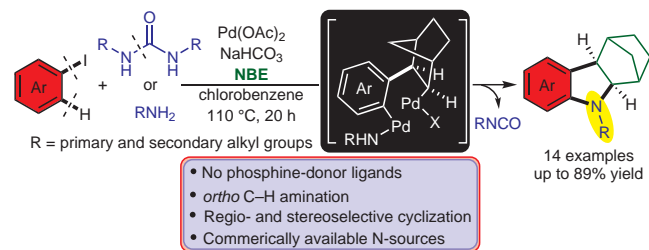
M. Ghasemi
F. Jafarpour*
A. Habibi*

University of Tehran, Iran
Kharazmi University, Iran

Palladium/Norbornene Chemistry in the Synthesis of Polycyclic Indolines with Simple Nitrogen Sources

Paper

2092



Synthesis

Synthesis 2020, 52, 2099–2105
DOI: 10.1055/s-0040-1707103

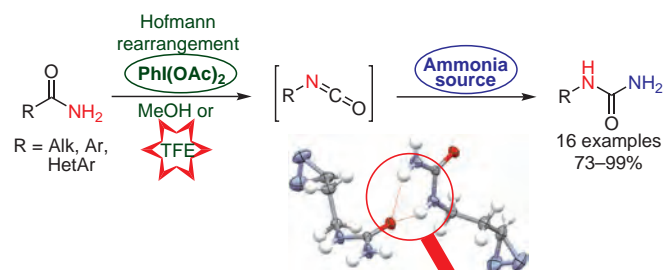
N. Saraiva Rosa
T. Glachet
Q. Ibert
J.-F. Lohier
X. Franck
V. Reboul*

Normandie Univ, France

A Straightforward Synthesis of N-Substituted Ureas from Primary Amides

Paper

2099



Synthesis

Synthesis 2020, 52, 2106–2110
DOI: 10.1055/s-0039-1690863

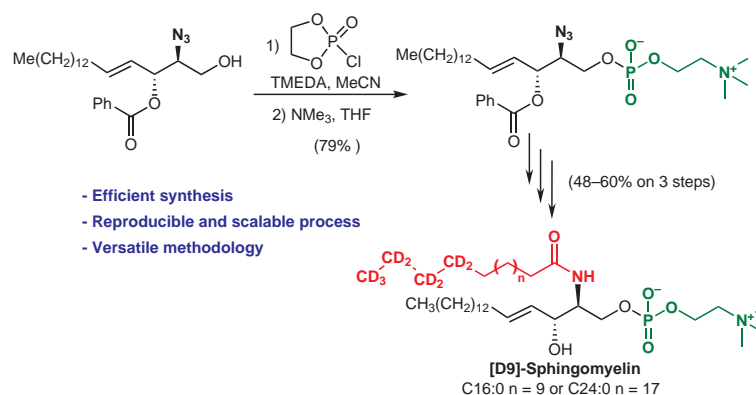
N. Philippe*
S. Péard*
F. Le Strat
J. Blankenstein
S. Roy

Sanofi-Aventis R & D, France

An Improved, Versatile, and Easily Scalable Synthesis of Sphingomyelins: Application to Stable Isotope Labeling

Paper

2106



Synthesis

Synthesis **2020**, 52, 2111–2120
DOI: 10.1055/s-0040-1707999

H. Yu

P. Liao

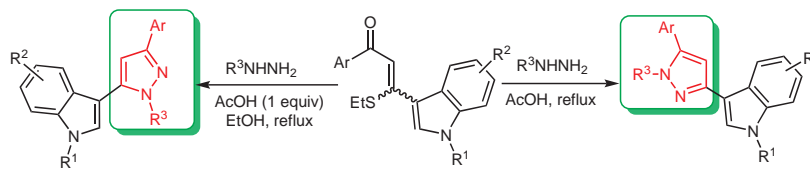
Z. Mei*

Baicheng Normal University,
P. R. of China

Regioselective Synthesis of Isomeric 3-[1-Substituted Pyrazol-3(5)-yl]indoles from β -Ethylthio- β -indolyl- α,β -unsaturated Ketones

Paper

2111



■ good flexibility
■ high synthesis efficiency

■ good regioselectivity
■ high yields
■ 20 examples

Synthesis

Synthesis **2020**, 52, 2121–2126
DOI: 10.1055/s-0039-1690883

J. Lan

G. Jiang

J. Yang

H. Zhu

Z. Le*

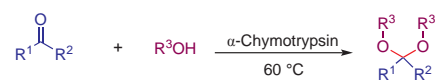
Z. Xie*

East China University of Technol-
ogy, P. R. of China

α -Chymotrypsin-Induced Acetalization of Aldehydes and Ketones with Alcohols

Paper

2121



- Broad substrate scopes
- 16 examples
- C–O bond formation
- Mild reaction conditions
- Up to 98% yield
- Biocatalysis-promoted

Synthesis

Asymmetric Synthesis of Ethers by Catalytic Alkene Hydroalkoxylation

Review

Synthesis **2020**, 52, 2127–2146
DOI: 10.1055/s-0039-1690874

W.-B. Xie

Z. Li*

ShanghaiTech University,
P. R. of China



2127

Synthesis

Manifestation of the β -Silicon Effect in the Reactions of Unsaturated Systems Involving a 1,2-Silyl Shift

Short Review

Synthesis **2020**, 52, 2147–2161
DOI: 10.1055/s-0039-1690898

R. Beļunieks

M. Puriņš

M. Turks*

Rīga Technical University, Latvia



2147

Synthesis

N-Phosphorylated Pyrrolidines: An Overview of Synthetic Approaches

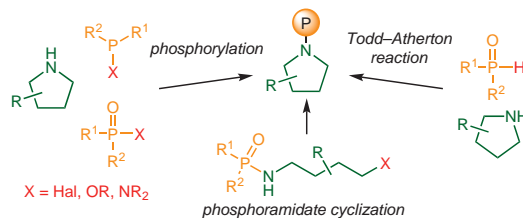
Short Review

Synthesis 2020, 52, 2162–2170
DOI: 10.1055/s-0039-1690889

2162

A. V. Smolobochkin*
A. S. Gazizov*
R. A. Turmanov
D. S. Abdullaeva
A. R. Burilov
M. A. Pudovik

Arbuzov Institute of Organic and
Physical Chemistry,
Russian Federation



Synthesis

A Bond-Weakening Borinate Catalyst that Improves the Scope of the Photoredox α -C–H Alkylation of Alcohols

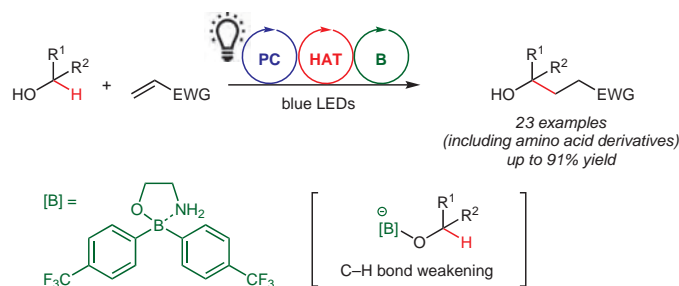
Feature

Synthesis 2020, 52, 2171–2184
DOI: 10.1055/s-0040-1707114

2171

K. Sakai
K. Oisaki*
M. Kanai*

The University of Tokyo, Japan



Synthesis

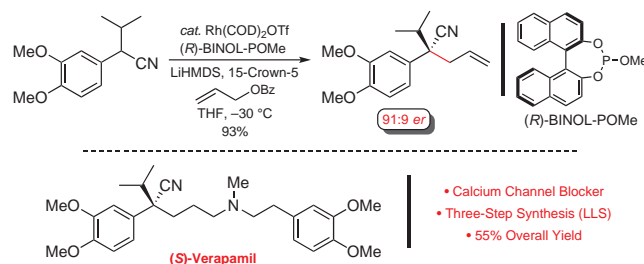
A Concise and Modular Three-Step Synthesis of (*S*)-Verapamil using an Enantioselective Rhodium-Catalyzed Allylic Alkylation Reaction

PSP

Synthesis 2020, 52, 2185–2189
DOI: 10.1055/s-0040-1707390

2185

M.-J. Tom
B. W. H. Turnbull
P. A. Evans*
Queen's University, Canada



Synthesis

Synthesis 2020, 52, 2190–2195
DOI: 10.1055/s-0040-1708017

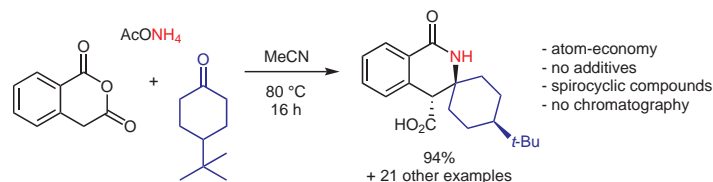
A. Safrygin
O. Bakulina
D. Dar'in
M. Krasavin*

Saint Petersburg State University,
Russian Federation

Three-Component Reaction of Homophthalic Anhydride with Carbonyl Compounds and Ammonium Acetate: New Developments

Paper

2190



Synthesis

Synthesis 2020, 52, 2196–2223
DOI: 10.1055/s-0039-1690833

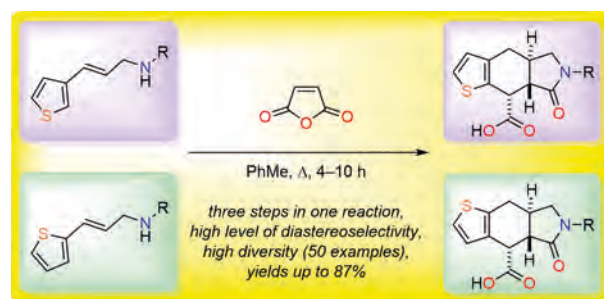
M. A. Nadirova
Y.-O. V. Laba
V. P. Zaytsev
J. S. Sokolova
K. M. Pokazeev
V. A. Anokhina
V. N. Khrustalev
Y. I. Horak
R. Z. Lytvyn
M. Siczek
V. Kinzhybalo
Y. V. Zubavichus
M. L. Kuznetsov
M. D. Obushak*
F. I. Zubkov*

RUDN University, Russian Federation
University of Lviv, Ukraine

Application of the Intramolecular Diels–Alder Vinylarene (IMDAV) Approach for the Synthesis of Thieno[2,3-*f*]isoindoles

Paper

2196



Synthesis

Synthesis 2020, 52, 2224–2232
DOI: 10.1055/s-0040-1707945

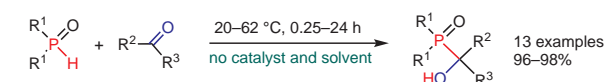
N. K. Gusarova
N. I. Ivanova
K. O. Khrapova
P. A. Volkov
A. A. Telezhkin
L. I. Larina
A. V. Afonin
D. V. Pavlov
B. A. Trofimov*

A. E. Favorsky Irkutsk Institute of
Chemistry, Russian Federation

Catalyst- and Solvent-Free Hydrophosphorylation of Ketones with Secondary Phosphine Oxides: Green Synthesis of Tertiary α -Hydroxyphosphine Oxides

Paper

2224



R¹ = Ph, Ph(CH₂)₂, 4-ClC₆H₄(CH₂)₂
R² = CH₂C(=O)OEt, *o*-C₆H₁₁, 4-ClC₆H₄, 4-NO₂C₆H₄, Ph
R² - R³ = (CH₂)₄, (CH₂)₅; R³ = Me, CH₂Cl, 2-Py

Synthesis

Synthesis 2020, 52, 2233–2240
DOI: 10.1055/s-0040-1707816

C. R.

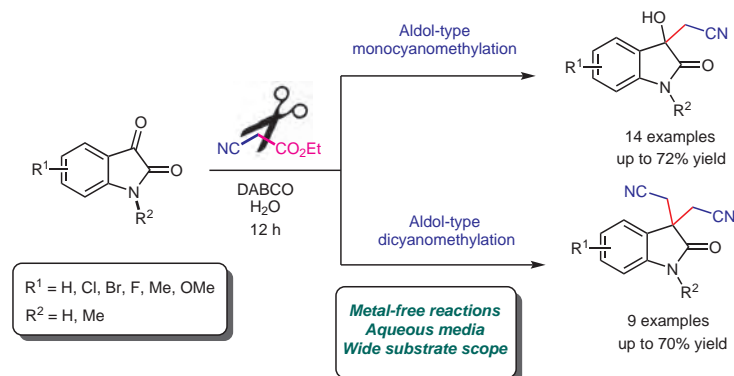
K. N. Tiwari*

National Institute of Pharmaceutical Education and Research (NIPER), India

Krapcho Dealkoxycarbonylation Strategy of Ethyl Cyanoacetate for the Synthesis of 3-Hydroxy-3-cyanomethyl-2-oxindoles and 3,3'-Dicyanomethyl-2-oxindoles in a Reaction with Isatin

Paper

2233



Synthesis

Synthesis 2020, 52, 2241–2244
DOI: 10.1055/s-0040-1708018

J. E. Hernández-Martínez

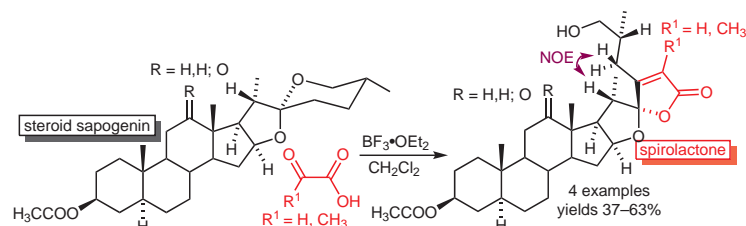
M. A. Iglesias-Arteaga*

Universidad Nacional Autónoma de México, México

BF₃·OEt₂-Catalyzed Aldol Condensation of Steroid Sapogenins and 2-Oxoacids: A Single Step Conversion of Steroid Spiroketal into Branched α,β -Unsaturated Spirolactones

Paper

2241



Synthesis

Synthesis 2020, 52, 2245–2258
DOI: 10.1055/s-0039-1690881

A. Kumari

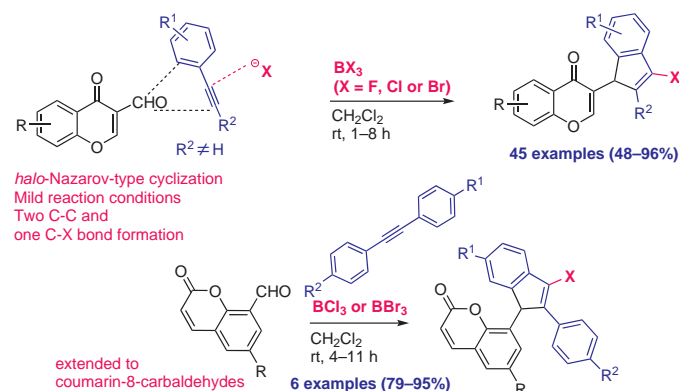
R. A. Fernandes*

Indian Institute of Technology Bombay, India

BX₃-Mediated Intermolecular Formation of Functionalized 3-Halo-1H-indenes via Cascade Halo-Nazarov-Type Cyclization

Paper

2245



Synthesis

Synthesis **2020**, *52*, 2259–2266
DOI: 10.1055/s-0040-1707525

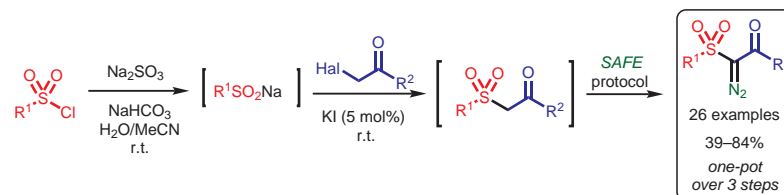
D. Dar'in
G. Kantin
O. Bakulina
M. Krasavin*

Saint Petersburg State University,
Russian Federation

Facile One-Pot Access to α -Diazo- β -ketosulfones from Sulfonyl Chlorides and α -Haloketones

Paper

2259



Synthesis

Synthesis **2020**, *52*, 2267–2276
DOI: 10.1055/s-0040-1707471

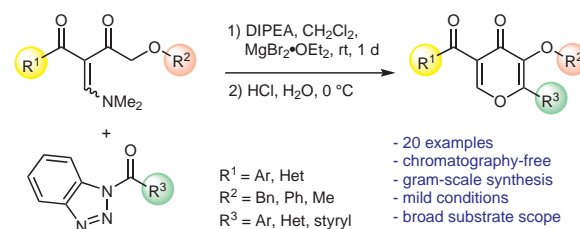
D. L. Obydenov*
V. V. Viktorova
E. V. Chernyshova
A. S. Shirinkin
S. A. Usachev
V. Y. Sosnovskikh

Ural Federal University,
Russian Federation

Direct Synthesis of 5-Acyl-3-oxy-4-pyrones Based On Acid-Catalyzed Acylation of Enaminodiones with Acylbenzotriazoles via Soft Enolization

Paper

2267



Synthesis

Recent Advances in Decarboxylative Reactions of Alkynoic Acids

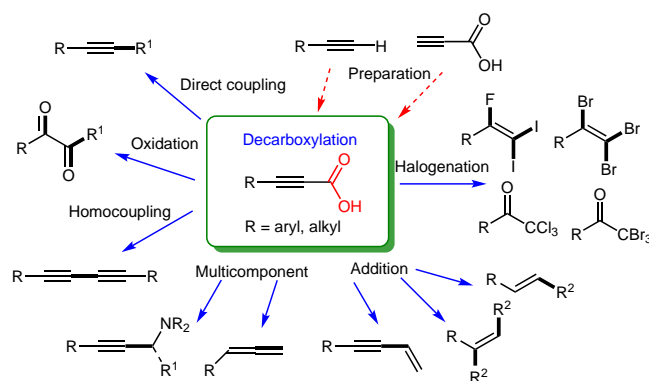
Review

Synthesis 2020, 52, 2277–2298
DOI: 10.1055/s-0040-1707600

M. A. Idris
S. Lee*

Chonnam National University,
Republic of Korea

2277



Synthesis

Synthesis of Oxazoline and Oxazole Derivatives by Hypervalent-Iodine-Mediated Oxidative Cycloaddition Reactions

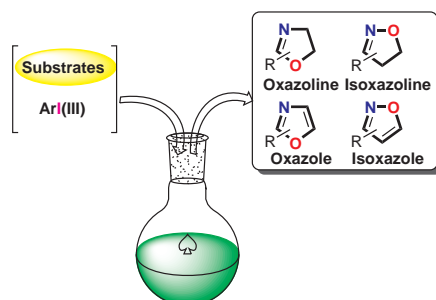
Short Review

Synthesis 2020, 52, 2299–2310
DOI: 10.1055/s-0040-1707122

A. Yoshimura*
A. Saito*
M. S. Yusubov
V. V. Zhdankin*

University of Minnesota Duluth,
USA
Tokyo University of Agriculture
and Technology, Japan

2299



Synthesis

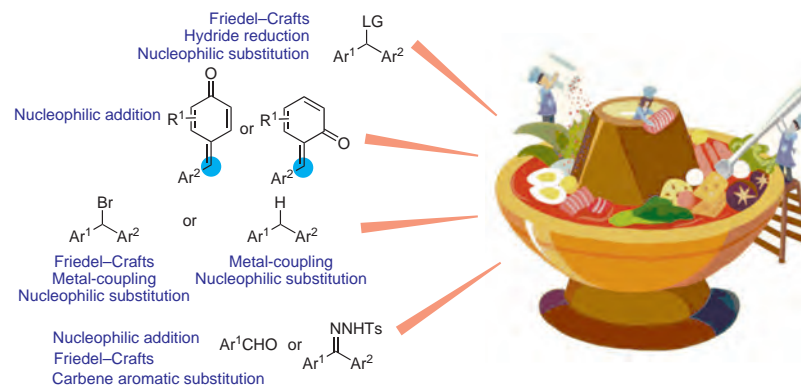
Recent Advances in Triarylmethane Synthesis

Short Review

Synthesis **2020**, *52*, 2311–2329
DOI: 10.1055/s-0040-1707115

X. Liu
X. Wu
L. Zhang*
X. Lin*
D. Huang*

Lishui University, P. R. China



2311

Synthesis

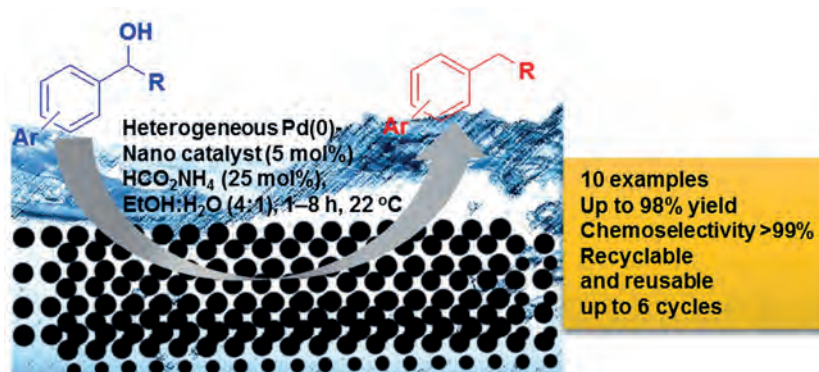
Efficient Heterogeneous Palladium-Catalyzed Transfer Hydrogenolysis of Benzylic Alcohols by Formic Acid

Feature

Synthesis **2020**, *52*, 2330–2336
DOI: 10.1055/s-0040-1707398

S. Afewerki*
C. Palo-Nieto
A. Córdoba*

Mid Sweden University, Sweden



2330

Synthesis

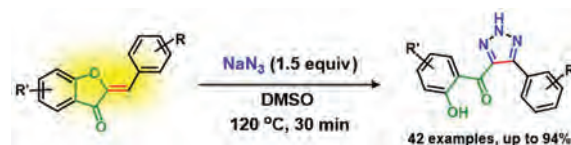
An Unusual Triazole Synthesis from Aurones

Paper

Synthesis **2020**, *52*, 2337–2346
DOI: 10.1055/s-0040-1708019

A. Kafle
S. Bhattarai
S. T. Handy*

Middle Tennessee State University, USA



2337

Synthesis

Regioselective Synthesis of Pyrazolyl-pyrimidine Hybrids of Pharmacological Interest

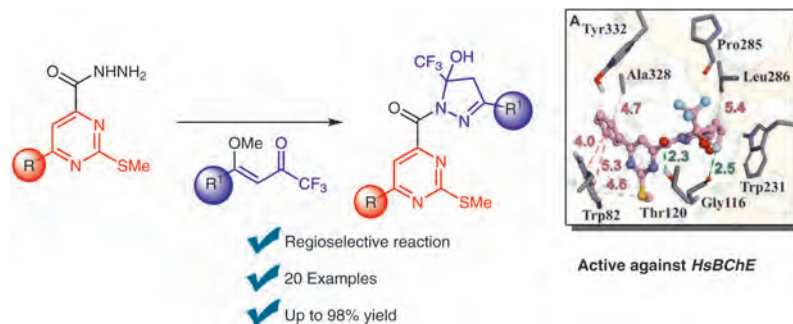
Paper

Synthesis 2020, 52, 2347–2356
DOI: 10.1055/s-0040-1707948

2347

A. F. Camargo
M. A. Marangoni
P. A. de Moraes
P. A. Nogara
B. A. Afolabi
C. E. Bencke
J. B. Rocha
H. G. Bonacorso
M. A. Martins
N. Zanatta*

Universidade Federal de Santa
Maria, Brazil



Synthesis

Preparation and Reactions of (1*H*-Tetrazol-5-yl)zinc Pivalates

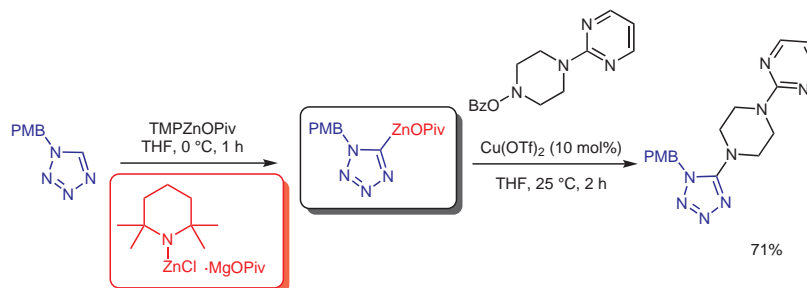
Paper

Synthesis 2020, 52, 2357–2363
DOI: 10.1055/s-0039-1691734

2357

C. P. Tüllmann
S. Steiner
P. Knochel*

Ludwig-Maximilian-University,
Germany



Synthesis

Application of α -Amino- β -fluorophosphonates in Construction of their Dipeptide Analogues

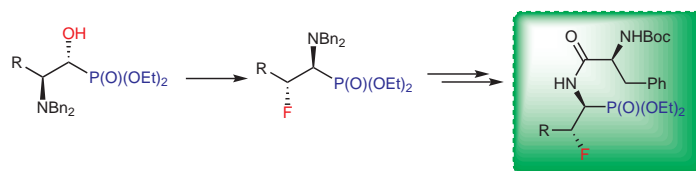
Paper

Synthesis 2020, 52, 2364–2372
DOI: 10.1055/s-0040-1707813

2364

M. Kaźmierczak*
G. Dutkiewicz
T. Cytłak

Adam Mickiewicz University in
Poznań, Poland



Synthesis

Synthesis 2020, 52, 2373–2378
DOI: 10.1055/s-0040-1708020

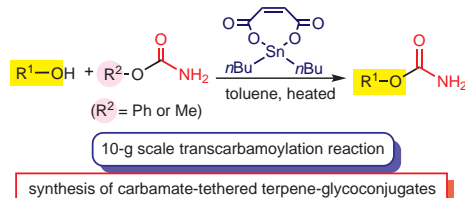
Y. Ichikawa*
T. Hasegawa
T. Minami
H. Sato
Y. Morishita
R. Ochi
T. Masuda

Kochi University, Japan

Further Development of the Tin-Catalyzed Transcarbamylation Reaction

Paper

2373



Synthesis

Synthesis 2020, 31, 2379–2386
DOI: 10.1055/s-0040-1707395

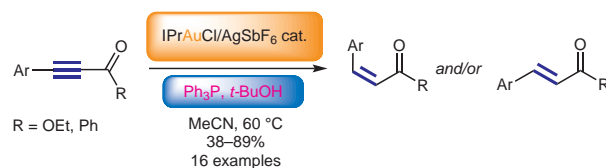
A. P. Cocoltzi-Xochitiotzi
M. Hernández-Hernández
I. Medina-Mercado
W. d. J. Jiménez-Martínez
V. M. Mastranzo
S. Porcel*

Universidad Nacional Autónoma de México, México

Gold-Catalyzed Partial Hydrogenation of Activated Alkynes Mediated by Triphenylphosphine

Paper

2379



Synthesis

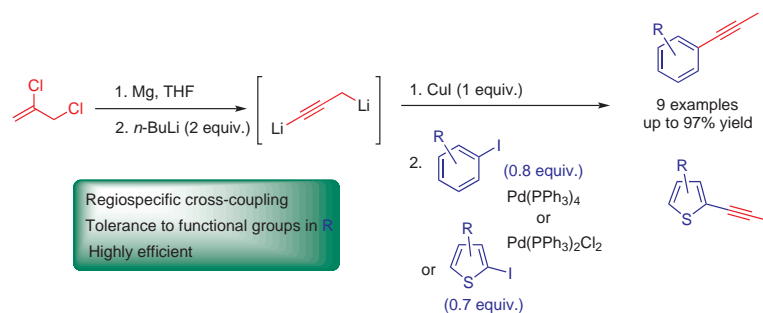
Synthesis 2020, 52, 2387–2394
DOI: 10.1055/s-0039-1690895

J. A. Cabezas*
N. Ferlini
Universidad de Costa Rica,
Costa Rica

Regiospecific Palladium-Catalyzed Cross-Coupling Reactions Using the Operational Equivalent of 1,3-Dilithiopropyne

Paper

2387



Synthesis

Synthesis 2020, 52, 2395–2409
DOI: 10.1055/s-0040-1707514

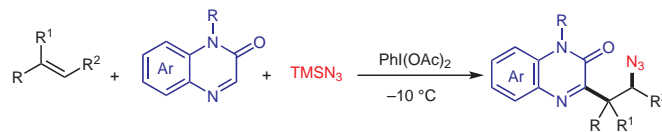
Y. Du
Y. Chen
Y.-L. Liu
W. Qin*
Z. Li*

South China Agricultural University,
P. R. of China

Transition-Metal-Free, Intermolecular Azidoheteroarylation of Alkenes: Efficient Access to β -Azidoalkylated Quinoxalinones and Preliminary Antifungal Evaluation Against *Magnaporthe grisea*

Paper

2395



- Transition-metal-free and extended to P radical
- Mild conditions and broad scope (43 examples, up to 99% yield)
- Promising inhibitory rate against *Magnaporthe grisea*

Synthesis

Synthesis 2020, 52, 2410–2426
DOI: 10.1055/s-0040-1707104

K. Modzelewski

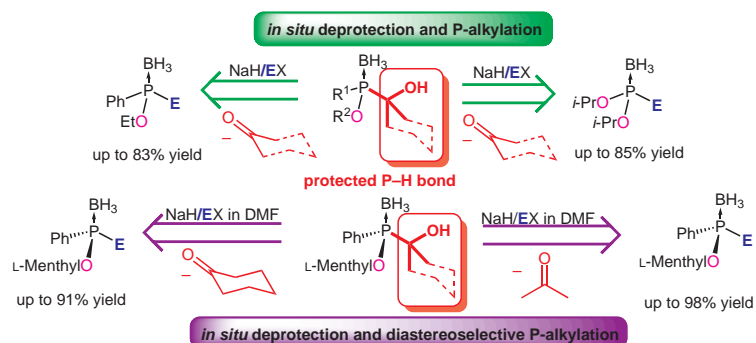
S. Sowa*

Marie Curie-Skłodowska University in Lublin, Poland

Alkylation of Phosphinite/Phosphonite-Boranes via Temporary Protection of the P–H Bond

Paper

2410



Synthesis

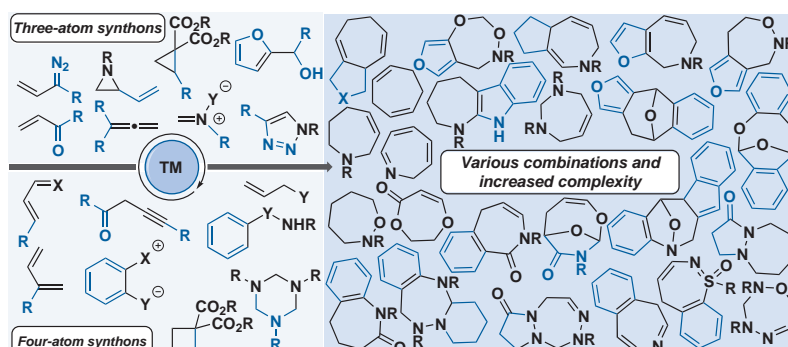
Synthesis 2020, 52, 2427–2449
DOI: 10.1055/s-0039-1690875

H. Lam
M. Lautens*
University of Toronto, Canada

Recent Advances in Transition-Metal-Catalyzed (4+3)-Cycloadditions

Review

2427



Synthesis

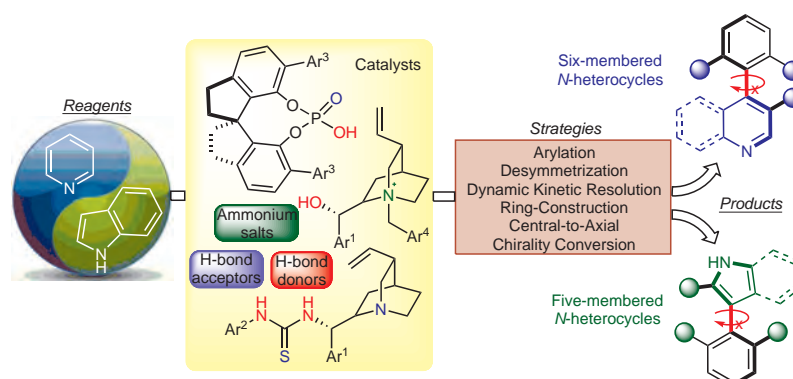
Synthesis 2020, 52, 2450–2468
DOI: 10.1055/s-0040-1707814

V. Corti*
G. Bertuzzi*
Aarhus University, Denmark

Organocatalytic Asymmetric Methodologies towards the Synthesis of Atropisomeric N-Heterocycles

Short Review

2450



Synthesis

Synthesis 2020, 52, 2469–2482
DOI: 10.1055/s-0040-1707160

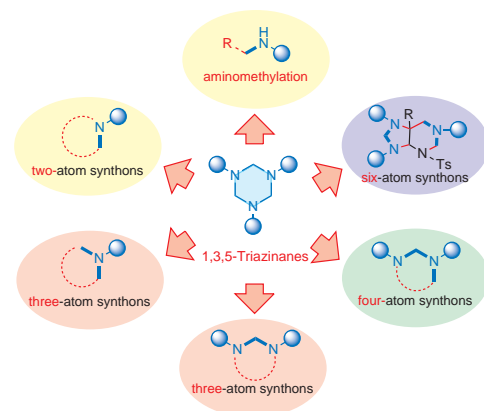
D. Liang
W.-J. Xiao
J.-R. Chen*

Central China Normal University,
P. R. of China

Recent Advances of 1,3,5-Triazinanes in Aminomethylation and Cycloaddition Reactions

Short Review

2469



Synthesis

Synthesis 2020, 52, 2483–2496
DOI: 10.1055/s-0040-1707185

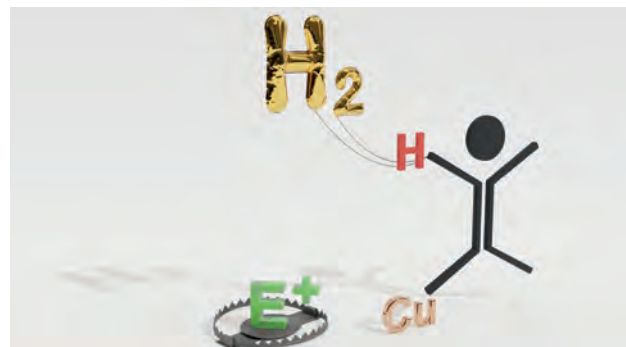
L. T. Brechmann
J. F. Teichert*

Technische Universität Berlin,
Germany

Catch It If You Can: Copper-Catalyzed (Transfer) Hydrogenation Reactions and Coupling Reactions by Intercepting Reactive Intermediates Thereof

Short Review

2483



Synthesis

Synthesis 2020, 52, 2497–2511
DOI: 10.1055/s-0040-1707403

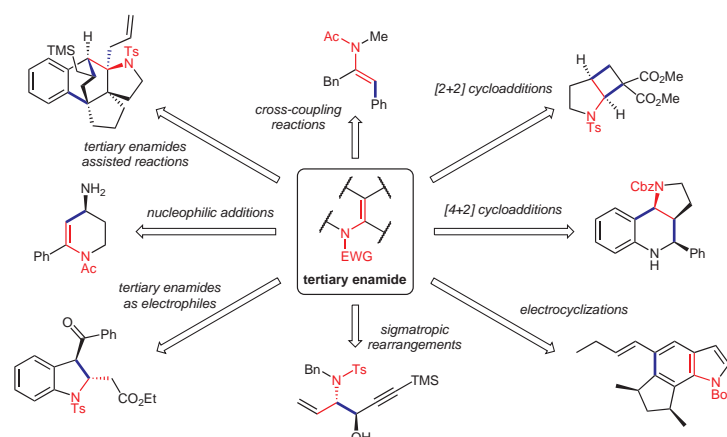
F. Beltran
L. Miesch*

Institut de Chimie, CNRS-UdS
UMR 7177, France

Tertiary Enamides as Versatile and Valuable Substrates to Reach Chemical Diversity

Short Review

2497



Synthesis

Synthesis 2020, 52, 2512–2520
DOI: 10.1055/s-0040-1707135

Y. Zhang
X. Yang
J. Wu*
D. Huang*

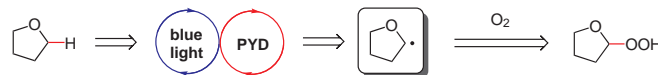
National University of Singapore,
Singapore

Aerobic C–H Functionalization Using Pyrenedione as the Photocatalyst

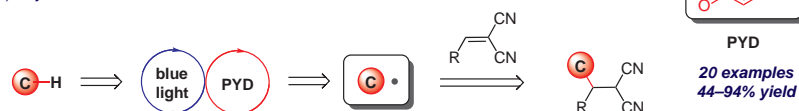
Feature

2512

a) hyperoxidation



b) alkylation



Synthesis

Synthesis 2020, 52, 2521–2527
DOI: 10.1055/s-0040-1707400

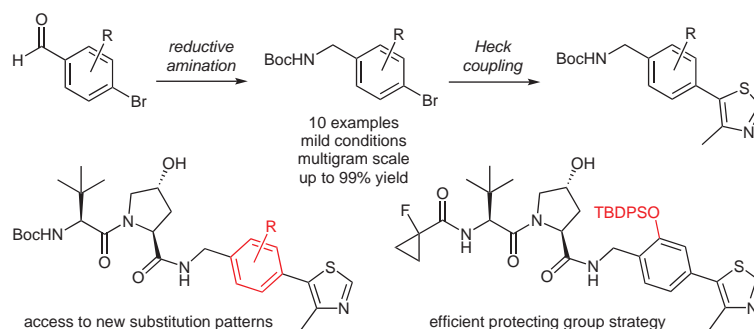
C. Steinebach
S. A. Voell
L. P. Vu
A. Bricelj
I. Sosič
G. Schnakenburg
M. Gütschow*

University of Bonn, Germany

A Facile Synthesis of Ligands for the von Hippel–Lindau E3 Ligase

PSP

2521



Synthesis

Synthesis 2020, 52, 2528–2534
DOI: 10.1055/s-0039-1690886

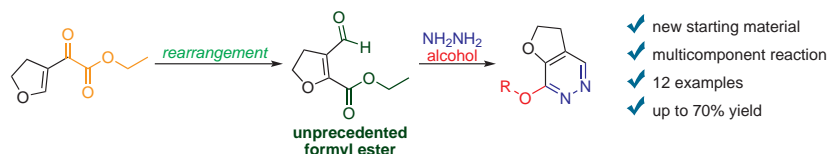
M. A. Marangoni
P. A. Moraes
A. F. Camargo
H. G. Bonacorso
M. A. P. Martins
N. Zanatta*

Universidade Federal de Santa
Maria, Brazil

Synthesis of a Novel 1,4-Dicarbonyl Scaffold – Ethyl 3-Formyl-4,5-dihydrofuran-2-carboxylate – and Its Application to the Synthesis of Pyridazines

Paper

2528



Synthesis

Synthesis 2020, 52, 2535–2540
DOI: 10.1055/s-0040-1707963

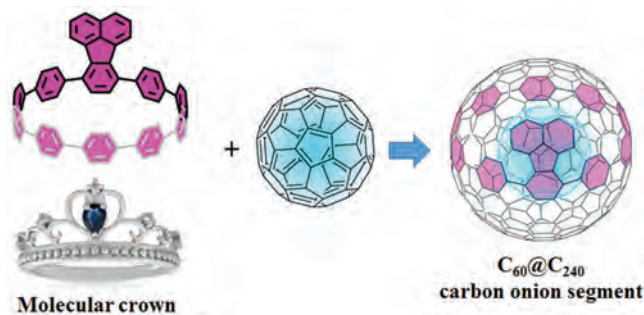
Q. Huang
Y. Wu
Y. Zhou
H. Liu
J. Wang
S. Wang
P. Du*

University of Science and Technology of China (USTC),
P. R. of China

Synthesis, Photophysical and Supramolecular Properties of a π -Conjugated Molecular Crown Containing a Pentagonal Unit: A Model Compound for Fullerene C_{240}

Paper

2535



Synthesis

Synthesis 2020, 52, 2541–2550
DOI: 10.1055/s-0040-1707120

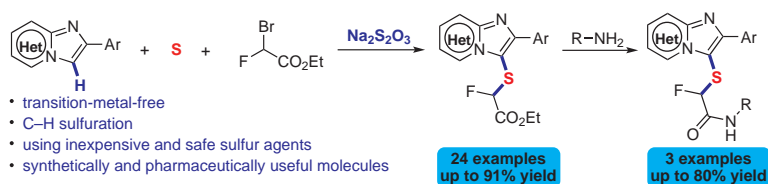
Y.-C. Gao
Z.-H. Huang
Z.-S. Zhang
J.-X. Xie
Z.-N. Cui*
R.-Y. Tang*

South China Agricultural University, P. R. of China
Lingnan Guangdong Laboratory of Modern Agriculture,
P. R. of China

Sulfite-Promoted C–H Fluoroalkyl Sulfuration of Imidazoheterocycles with Bromofluoroacetate and Elemental Sulfur

Paper

2541



Synthesis

Synthesis 2020, 52, 2551–2562
DOI: 10.1055/s-0040-1707907

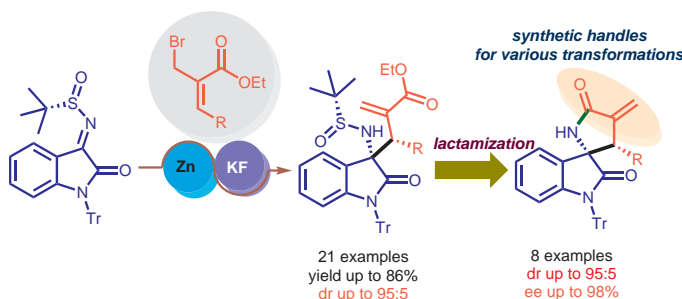
V. U. B. Rao
S. Singh
K. N. Tripathi
R. P. Singh*

Indian Institute of Technology
Delhi, India

Stereoselective Synthesis of Spiro- α -methylene- γ -lactams via Chiral Quaternary 3-Aminoindole Adducts Accessed by Zn-Mediated Allylation of Sulfinyl Ketimines

Paper

2551

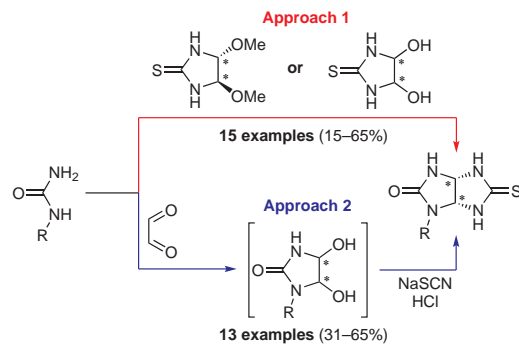


Synthesis 2020, 52, 2563–2571
DOI: 10.1055/s-0040-1707391

V. V. Baranov*
A. A. Galochkin
Y. V. Nelyubina
A. N. Kravchenko
N. N. Makhova

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2563

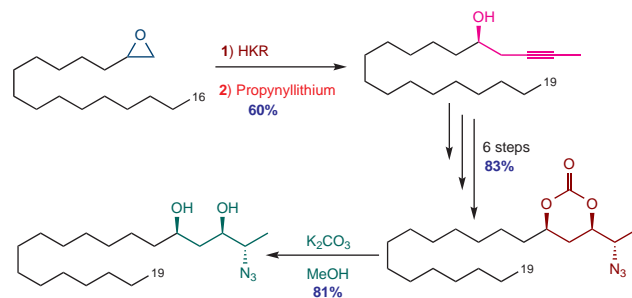


Synthesis 2020, 52, 2572–2578
DOI: 10.1055/s-0040-1707397

R. Pemha*
D. E. Pegnyemb
P. Mosset

Université de Rennes, France
Jules Verne University of Picardie, France

2572



Synthesis

Synthesis 2020, 52, 2579–2599
DOI: 10.1055/s-0040-1707101

G. Li
M. Szostak*
Rutgers University, USA

Non-Classical Amide Bond Formation: Transamidation and Amidation of Activated Amides and Esters by Selective N–C/O–C Cleavage

Review

2579



Synthesis

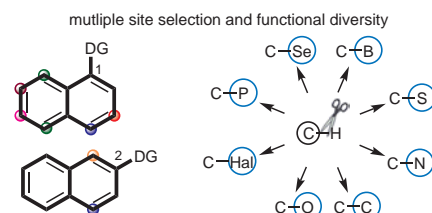
Synthesis 2020, 52, 2600–2612
DOI: 10.1055/s-0040-1707855

B. Large
D. Prim*
Université Paris-Saclay, France

C–H Functionalization Strategies in the Naphthalene Series: Site Selections and Functional Diversity

Short Review

2600



Synthesis

Synthesis **2020**, *52*, 2613–2622
DOI: 10.1055/s-0040-1707815

A. A. Almasalma

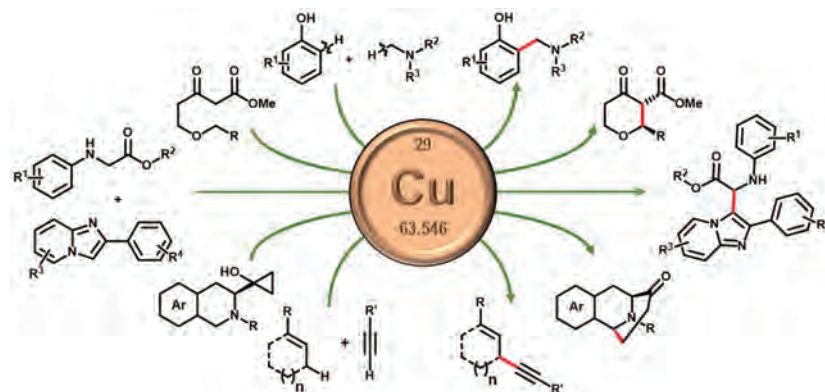
E. Mejía*

Leibniz Institute for Catalysis,
Germany

Recent Advances on Copper-Catalyzed C–C Bond Formation via C–H Functionalization

Short Review

2613



Synthesis

Synthesis **2020**, *52*, 2623–2638
DOI: 10.1055/s-0040-1707128

T. Agrawal

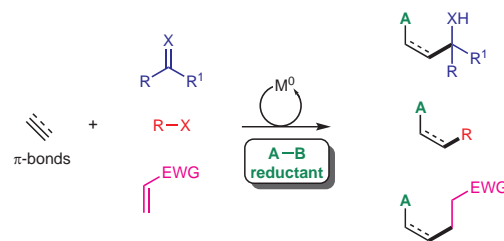
J. D. Sieber*

Virginia Commonwealth
University, USA

Recent Developments in C–C Bond Formation Using Catalytic Reductive Coupling Strategies

Short Review

2623



Synthesis

Synthesis **2020**, *52*, 2639–2649
DOI: 10.1055/s-0040-1707860

A. Álvarez-Pérez

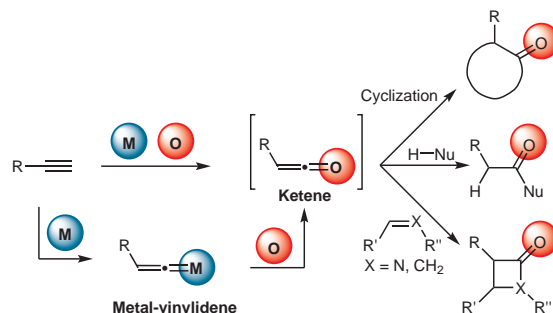
C. Saá*

J. A. Varela*
Universidade de Santiago de
Compostela, Spain

Oxidation of Alkynes via Catalytic Metal-Vinylidenes

Short Review

2639



Synthesis

Synthesis 2020, 52, 2650–2661
DOI: 10.1055/s-0040-1707176

C.-J. Xu

W. Du

Ł. Albrecht

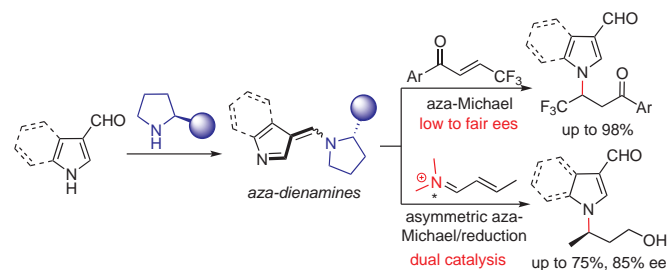
Y.-C. Chen*

Sichuan University, P. R. of China

Lewis Basic Amine Catalyzed Aza-Michael Reaction of Indole- and Pyrrole-3-carbaldehydes

Feature

2650



Synthesis

Synthesis 2020, 52, 2662–2666
DOI: 10.1055/s-0040-1707823

S. A. Zisopoulou

A. E. Pafili

P. Gkizis

T. Andreou

T. V. Koftis

A. Lithadioti

E. Neokosmidis

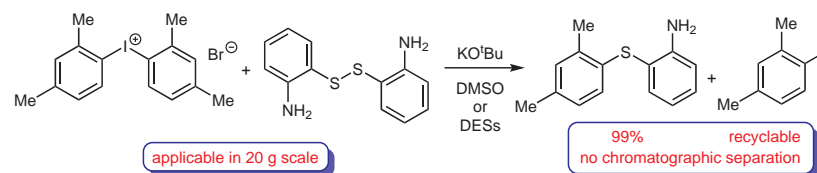
J. K. Gallos*

Aristotle University of
Thessaloniki, Greece

Environmentally Benign Large-Scale Synthesis of a Precursor to Vortioxetine

PSP

2662



Synthesis

Synthesis 2020, 52, 2667–2678
DOI: 10.1055/s-0040-1707393

D. A. Chaplygin

I. V. Ananyev

L. L. Fershtat*

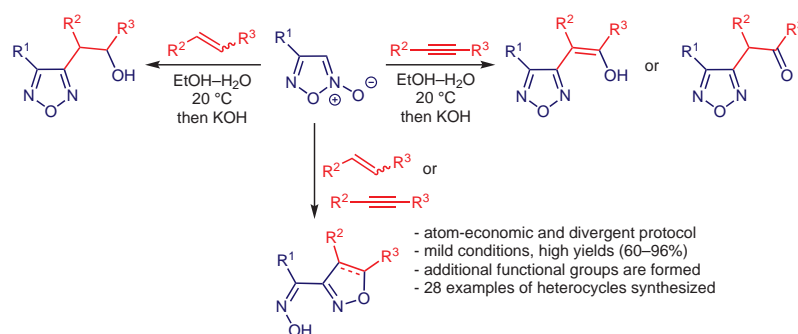
N. N. Makhova

N. D. Zelinsky Institute of Organic
Chemistry, Russian Federation

Divergent Synthesis of Five-Membered Nitrogen Heterocycles via Cascade Reactions of 4-Arylfuroxans

Paper

2667



Synthesis

Synthesis 2020, 52, 2679–2688
DOI: 10.1055/s-0040-1707396

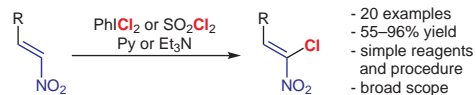
A. A. Fadeeva
S. L. Ioffe
A. A. Tabolin*

N. D. Zelinsky Institute of Organic Chemistry, Russian Federation

Chlorination of Conjugated Nitroalkenes with PhICl_2 and SO_2Cl_2 for the Synthesis of α -Chloronitroalkenes

Paper

2679



Synthesis

Synthesis 2020, 52, 2689–2697
DOI: 10.1055/s-0040-1707147

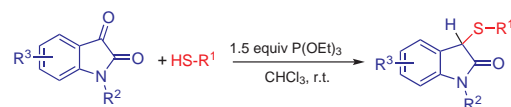
T. Huang
L. Liu
Q. Wang
D. Kong*
M. Wu*

Hainan Normal University,
P. R. of China
Hainan Medical University,
P. R. of China

 $\text{P}(\text{OEt})_3$ -Mediated Formal S–H Insertion: Reductive Couplings of Isatins with Thiols to Generate 3-Sulfenylated Oxindoles

Paper

2689



R^1 = aryl, alkyl, heterocyclyl
 R^2 = Bn, Et
 R^3 = OMe, Me, Et, H, F, Cl, Br

- A rare metal-free S–H bond insertion
- Readily available starting materials
- Obviating the use of hazardous, unstable diazo compounds
- Broadened substrate scope
- Mild reaction conditions

Synthesis

Synthesis 2020, 52, 2698–2704
DOI: 10.1055/s-0040-1707148

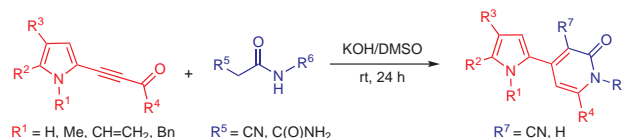
I. V. Saliy
M. D. Gotsko
L. N. Sobenina
I. A. Ushakov
B. A. Trofimov*

A. E. Favorsky Irkutsk Institute of Chemistry, Russian Federation

Bio-inspired Functionalized Pyrrole-Pyridone Ensembles: Synthesis on the Platform of Acylethylnylpyrroles

Paper

2698



R^1 = H, Me, $\text{CH}=\text{CH}_2$, Bn
 R^2 = H, Ph, Pr, Bu
 R^2-R^3 = $(\text{CH}_2)_4$
 R^3 = H, Et, Pr
 R^4 = Ph, furyl
 R^5 = CN, $\text{C}(\text{O})\text{NH}_2$
 R^6 = H, Me
 R^7 = CN, H

Synthesis

Synthesis 2020, 52, 2705–2712
DOI: 10.1055/s-0040-1707966

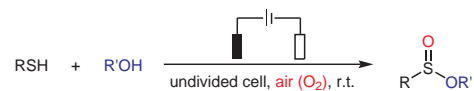
H. Zhou
J. Duan
D. Xie
J. Yang*
B. Ma
G. Wang
C. Wu
X.-C. Wang*

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P. R. of China

Electrochemical Synthesis of Sulfinic Esters via Aerobic Oxidative Esterification of Thiophenols with Alcohols

Paper

2705



- catalyst-free
- air as the sole oxygen source
- mild reaction conditions
- 31 examples, up to 98% yield

Synthesis

Synthesis 2020, 52, 2713–2720
DOI: 10.1055/s-0040-1707856

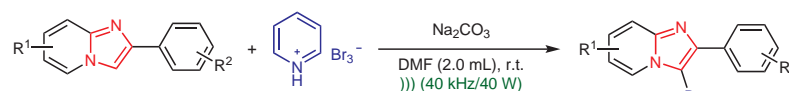
H. Jiang
D. Guo
Y. Zhang
Q.-P. Shen
S. Tang
J. You
Y. Huo
H. Wang
Q.-W. Gui*

Hunan Agricultural University,
P. R. of China

Ultrasound-Promoted and Base-Mediated Regioselective Bromination of Imidazo[1,2-a]pyridines with Pyridinium Tribromide

Paper

2713



- inexpensive and safe brominating reagent
- mild conditions and ultrasound-promoted
- simple operation and gram scale

31 examples
up to 96% yield

Synthesis

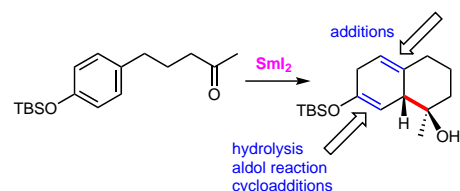
Synthesis 2020, 52, 2721–2730
DOI: 10.1055/s-0040-1707889

A. Niermann
H.-U. Reissig*
Freie Universität Berlin, Germany

7-Siloxy-Substituted Hexahydronaphthalene Derivatives: Samarium Diodide Promoted Synthesis and Typical Reactions

Paper

2721

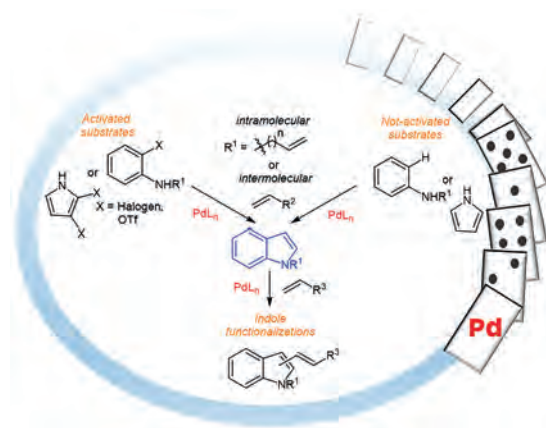


Synthesis

Synthesis 2020, 52, 2731–2760
DOI: 10.1055/s-0040-1707123

M. S. Christodoulou
E. M. Beccalli*
F. Foschi
S. Giofrè

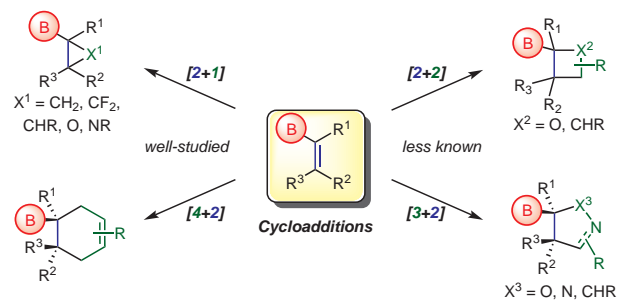
Università degli Studi di Milano,
Italy

Pd-Catalyzed Domino Reactions Involving Alkenes To Access Substituted Indole Derivatives
Review
2731

Synthesis

Synthesis 2020, 52, 2761–2780
DOI: 10.1055/s-0040-1707159

O. O. Grygorenko*
V. S. Moskvina
O. V. Hryshchuk
A. V. Tymtsunik

Enamine Ltd., Ukraine
V. P. Kukhar Institute of Bioorganic
Chemistry and Petrochem-
istry, Ukraine

Cycloadditions of Alkenylboronic Derivatives
Short Review
2761


Synthesis

Synthesis 2020, 52, 2781–2794
DOI: 10.1055/s-0040-1707154

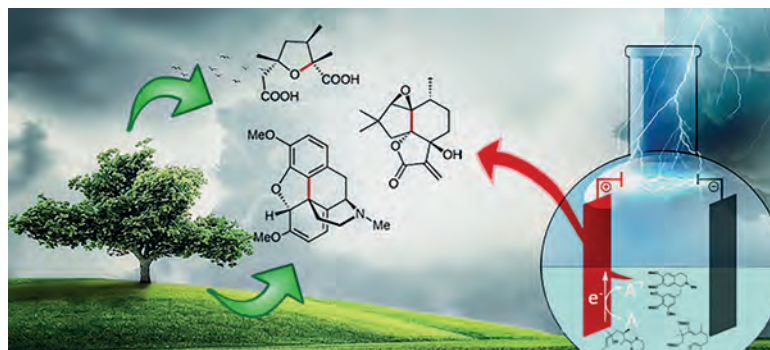
L. Geske
E. Sato
T. Opatz*

Johannes Gutenberg-Universität,
Germany

Anodic Oxidation as an Enabling Tool for the Synthesis of Natural Products

Short Review

2781



Synthesis

Synthesis 2020, 52, 2795–2806
DOI: 10.1055/s-0040-1707890

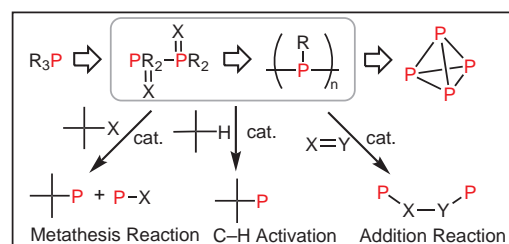
M. Arisawa*

Tohoku University, Japan

Transition-Metal-Catalyzed Synthesis of Organophosphorus Compounds Involving P–P Bond Cleavage

Short Review

2795



Synthesis

Synthesis 2020, 52, 2807–2820
DOI: 10.1055/s-0040-1707885

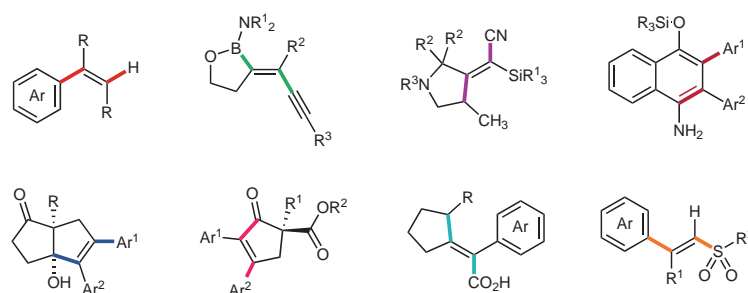
S. E. Bottcher
L. E. Hutchinson
D. J. Wilger*

Samford University, USA

Nickel-Catalyzed *anti*-Selective Alkyne Functionalization Reactions

Short Review

2807



Synthesis

Synthesis 2020, 52, 2821–2827
DOI: 10.1055/s-0040-1707179

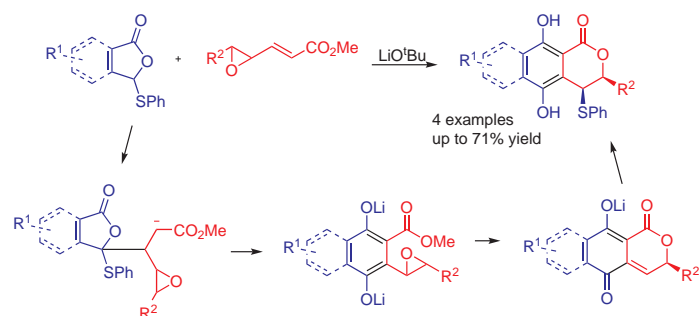
S. Wang
G. A. Kraus*

Iowa State University, USA

Annulations with Butenolides and Phthalides: New Entries to Isocoumarins, 3,4-Dihydroisocoumarins, and Benzofurans

Feature

2821



Synthesis

Synthesis 2020, 52, 2828–2832
DOI: 10.1055/s-0040-1707399

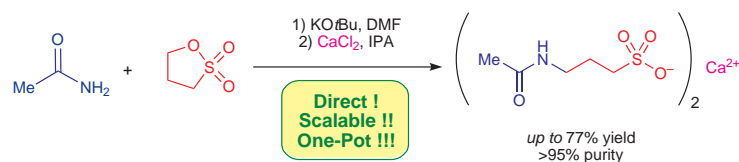
C. Cavarischia
A. Comely
M. Ćcija
T. Iacangeli
M. Pastó
L. Silvestri
G. Furlotti*

ANGELINI PHARMA S.p.A., Italy

A Convenient, Scalable Process for the Preparation and Purification of Calcium Acamprostate

PSP

2828



Synthesis

Synthesis 2020, 52, 2833–2840
DOI: 10.1055/s-0040-1707166

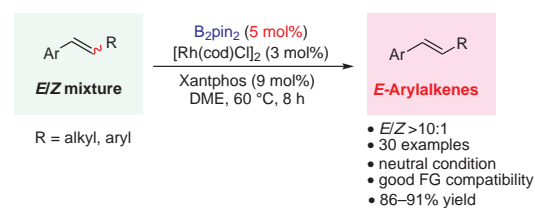
H. Yang
W. Dong
W. Wang
T. Li*
W. Zhao*

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Stereoselective Rhodium-Catalyzed Isomerization of Stereoisomeric Mixtures of Arylalkenes

Paper

2833



Synthesis

Synthesis 2020, 52, 2841–2856
DOI: 10.1055/s-0040-1707865

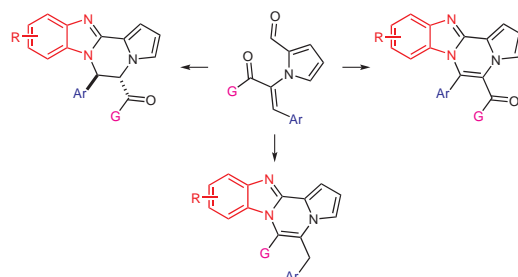
A. Dagar
D. R. Joshi
I. Kim*

Yonsei University,
Republic of Korea

Solvent-Controlled Divergent Syntheses of Polycyclic *N*-Fused Heteroaromatics

Paper

2841



- solvent-dependent divergent approaches to *N*-fused polycyclic heteroaromatics
- formation of multiple bonds via domino sequence in a one-pot mode
- several examples, yields up to 95%

Synthesis

Synthesis 2020, 52, 2857–2869
DOI: 10.1055/s-0040-1707405

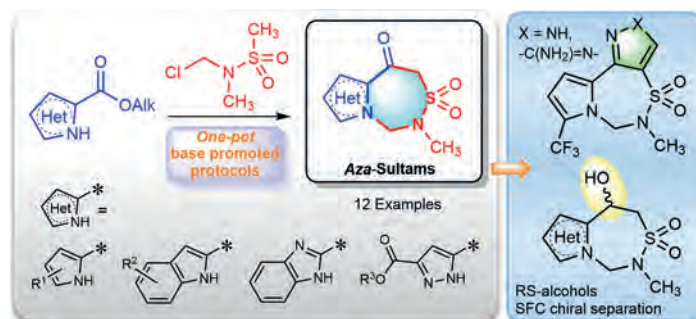
V. Y. Hys
D. S. Milokhov*
O. B. Volovenko
I. S. Konovalova
S. V. Shishkina
Y. M. Volovenko

Taras Shevchenko National Uni-
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Synthetic Approach to Fused Azasultams with 1,2,4-Thiadiazepine Framework

Paper

2857



Synthesis

Synthesis 2020, 52, 2870–2882
DOI: 10.1055/s-0040-1707854

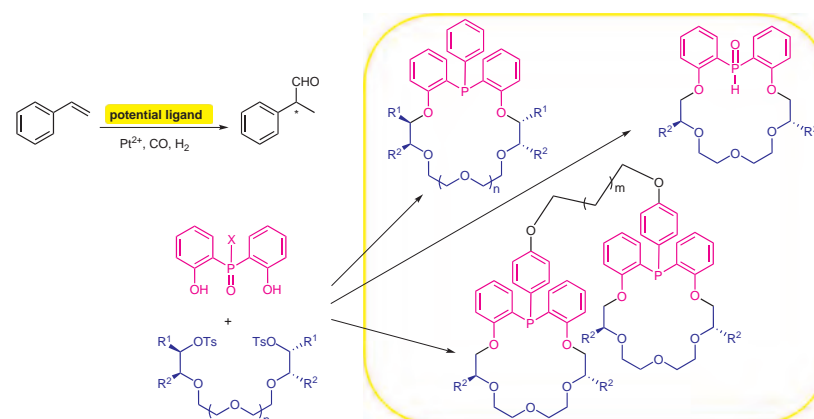
H. Szabó-Szentjóni
I. Majoros
A. Márton
I. Leveles
B. G. Vértessy
M. Dékány
T. Tóth
P. Huszthy*

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ogy and Economics, Hungary

Synthesis of New Chiral Crown Ethers Containing Phosphine or Secondary Phosphine Oxide Units

Paper

2870



Synthesis

Synthesis 2020, 52, 2883–2891
DOI: 10.1055/s-0040-1707882

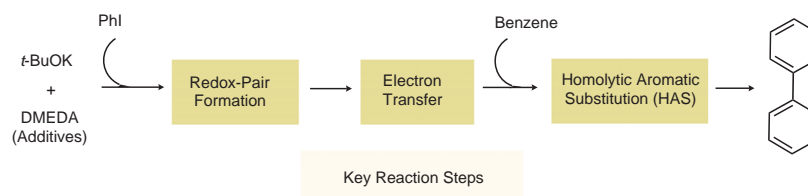
M. Patil*

University of Mumbai, India

Mechanism of the *t*-BuOM (M = K, Na, Li)/DMEDA-Mediated Direct C–H Arylation of Benzene: A Computational Study

Paper

2883



Synthesis

Synthesis 2020, 52, 2892–2898
DOI: 10.1055/s-0040-1707173

R. Bucci

F. Clerici

S. Pellegrino*

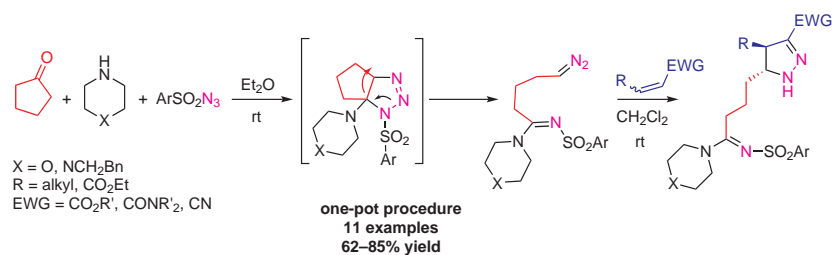
E. Erba*

Università degli Studi di Milano,
Italy

Diastereoselective Synthesis of Pyrazolines by Metal-Free Rearrangement of Bicyclic Triazolines

Paper

2892



Synthesis

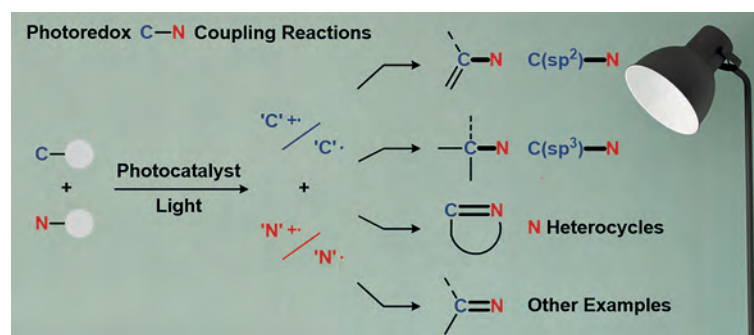
Recent Advances in Photocatalytic C–N Bond Coupling Reactions

Review

Synthesis 2020, 52, 2899–2921
DOI: 10.1055/s-0040-1707136

C.-M. Chan
Y.-C. Chow
W.-Y. Yu*

The Hong Kong Polytechnic University, Hong Kong

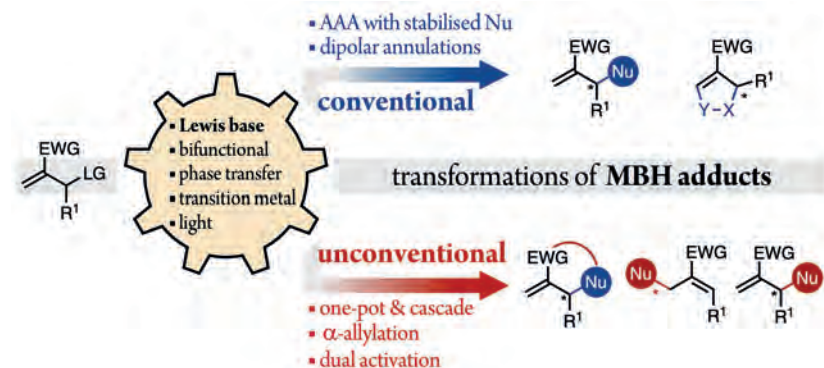
2899

Synthesis

Unconventional Transformations of Morita–Baylis–Hillman Adducts

Short Review

Synthesis 2020, 52, 2922–2939
DOI: 10.1055/s-0040-1707207

A. Calcatelli
A. Cherubini-Celli
E. Carletti
X. Companyó*
University of Padova, Italy

2922


Synthesis

Synthesis 2020, 52, 2940–2947
DOI: 10.1055/s-0040-1706403

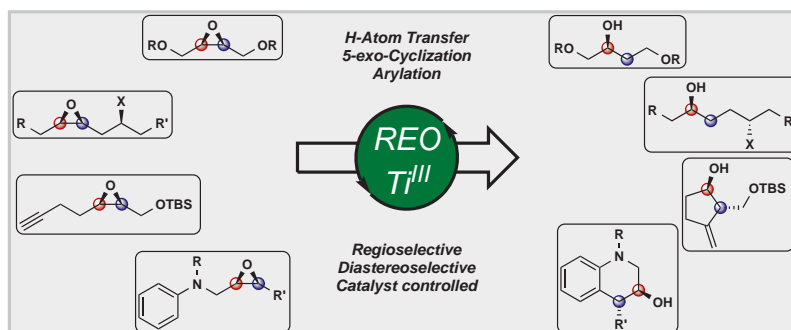
H. Weißbarth
F. Mühlhaus
A. Gansäuer*

Universität Bonn, Germany

Titanocene-Catalyzed Regiodivergent Epoxide Opening – From De-symmetrizing *meso*-Epoxides to Regiodivergent Arylation of Epoxides

Short Review

2940



Synthesis

Synthesis 2020, 52, 2948–2961
DOI: 10.1055/s-0040-1707210

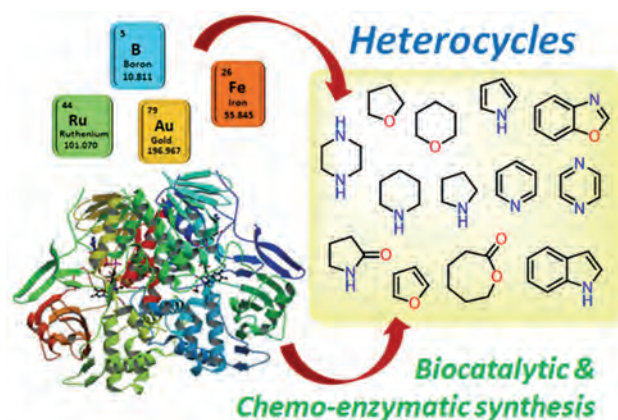
F. Zhao
D. Masci
E. Tomarelli
D. Castagnolo*

King's College London, UK

Biocatalytic and Chemo-Enzymatic Approaches for the Synthesis of Heterocycles

Short Review

2948



Synthesis

Synthesis 2020, 52, 2962–2969
DOI: 10.1055/s-0040-1707194

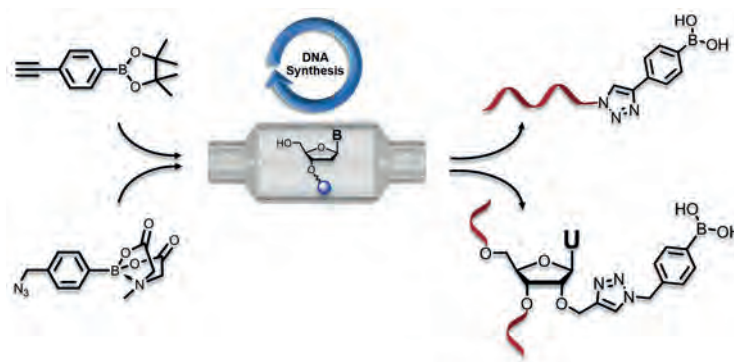
M. Debais
J.-J. Vasseur
S. Müller
M. Smetana*

University of Montpellier, CNRS,
ENCSM, France

Selective Chemical Modification of DNA with Boronic Acids by On-Column CuAAC Reactions

Feature

2962



Synthesis

Synthesis 2020, 52, 2970–2978
DOI: 10.1055/s-0040-1707886

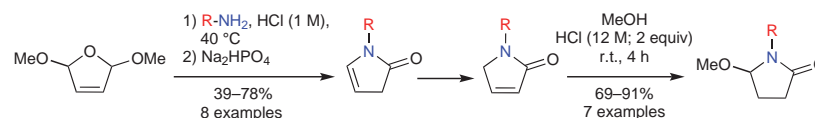
F. Souquet
W. Drici
S. A. Fayssal
I. Lazouni
S. Thueillon
J. Pérard-Viret*

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N-Acyliminium Ion Chemistry: Improving the Access to Unsaturated γ -Lactams and Their *N*- α -Methoxylated Derivatives: Application to an Expeditive Synthesis of (\pm)-Crispine A

PSP

2970



R-NH₂ = allylamine, aniline, benzylamine, (S)-1-phenylethan-1-amine,
2-(3,4-dimethoxyphenyl)ethanamine, L-Lys(Z)-OMe,
L-Phe-OMe, L-Val-OMe

Synthesis

Synthesis 2020, 52, 2979–2986
DOI: 10.1055/s-0040-1707205

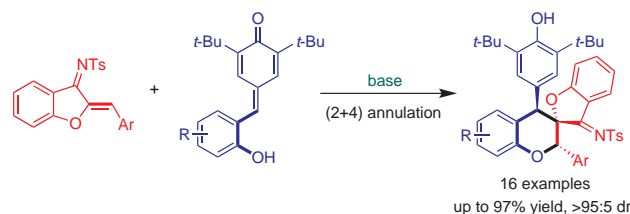
Y.-X. Wang
Y.-N. Lu
L.-L. Xu
F.-T. Sheng
J.-P. Zhang*
W. Tan*
F. Shi*

Jiangsu Normal University,
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Application of Benzofuran-Derived Azadienes as Two-Carbon Building Blocks in Annulations: Chemo- and Diastereoselective Construction of Spiro-Benzofuran Scaffolds

Paper

2979



Synthesis

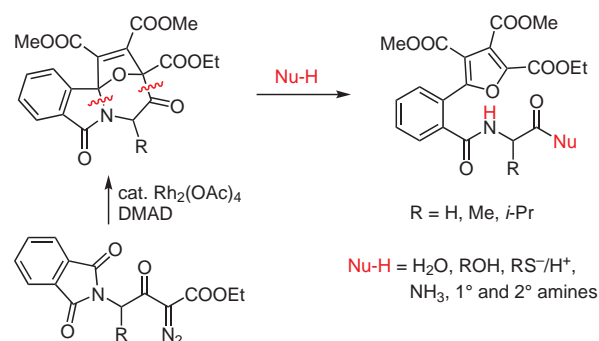
Synthesis 2020, 52, 2987–3000
DOI: 10.1055/s-0040-1707897

M. Dobesch
J. Greiner
G. Maas*
Ulm University, Germany

Tetrasubstituted Furans by Nucleophile-Induced Cleavage of Carbonyl Ylide–DMAD Cycloadducts

Paper

2987



Synthesis

Synthesis 2020, 52, 3001–3006
DOI: 10.1055/s-0040-1707899

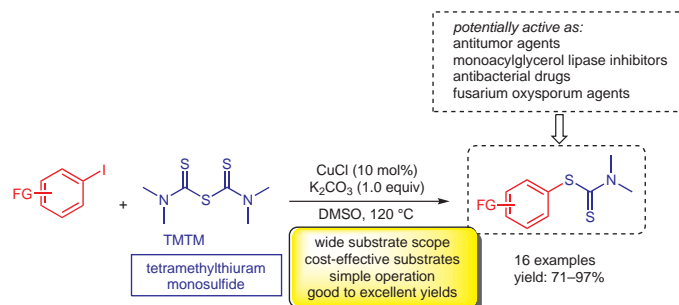
Y.-X. Wu
K. Peng
J.-H. Li
Z.-B. Dong*

Wuhan Institute of Technology,
P. R. of China
Hubei University,
P. R. of China

An Efficient Copper-Catalyzed C(sp²)-S Formation Starting from Aryl Iodides and Tetramethylthiuram Monosulfide (TMTM)

Paper

3001



Synthesis

Synthesis 2020, 52, 3007–3017
DOI: 10.1055/s-0040-1707906

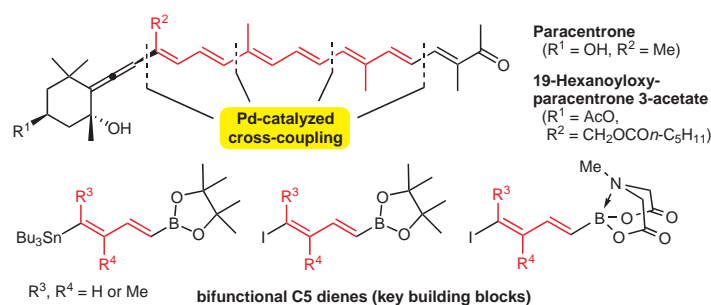
K. Sakaguchi*
Y. Nishioka
N. Kinashi
N. Yukihiro
T. Shinada
T. Nishimura
H. Hashimoto
S. Katsumura

Osaka City University, Japan

Synthesis of Allene-Containing Apocarotenoids by Cross-Coupling Strategy

Paper

3007



Synthesis

Synthesis 2020, 52, 3018–3028
DOI: 10.1055/s-0040-1707895

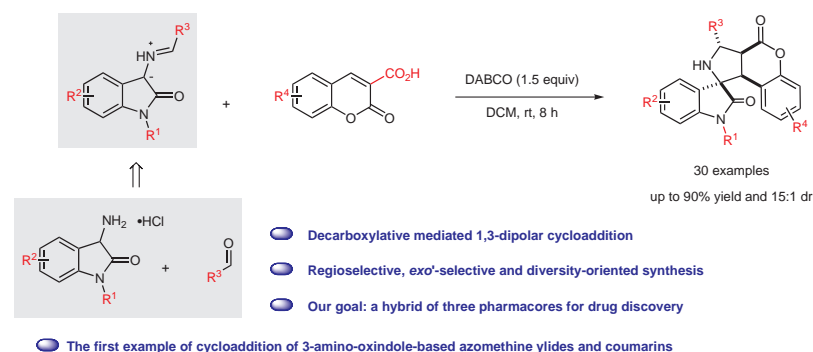
X.-W. Liu
S.-Q. Chang
Q.-L. Wang
S. Chen
J.-X. Wang
W. Zhou
Y. Zhou*

Guizhou University of Traditional
Chinese Medicine,
P. R. of China

Decarboxylative-Mediated Regioselective 1,3-Dipolar Cycloaddition for Diversity-Oriented Synthesis of Structurally *exo'*-Selective Spiro[oxindole-pyrrolidine-dihydrocoumarin] Hybrids

Paper

3018



Synthesis

Synthesis 2020, 52, 3029–3035
DOI: 10.1055/s-0040-1707193

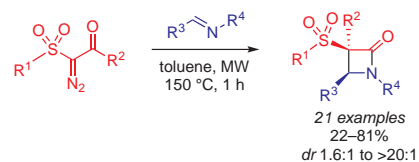
J. Synofzik
O. Bakulina
O. Balabas
D. Dar'in
M. Krasavin*

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Russian Federation

Catalyst-Free Synthesis of Diastereomerically Pure 3-Sulfonylazetidino-2-ones via Microwave-Assisted Tandem Wolff Rearrangement–Staudinger Cycloaddition

Paper

3029



Synthesis

Synthesis 2020, 52, 3036–3046
DOI: 10.1055/s-0040-1707167

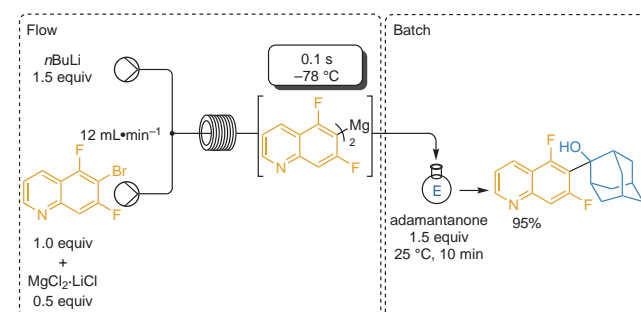
R. H. V. Nishimura
N. Weidmann
P. Knochel*

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Preparation of Diorganomagnesium Reagents by Halogen–Lithium Exchange of Functionalized Heteroaryl Halides and Subsequent in situ Trapping with $\text{MgCl}_2\cdot\text{LiCl}$ in Continuous Flow

Paper

3036



Synthesis

Synthesis 2020, 52, 3047–3057
DOI: 10.1055/s-0040-1707340

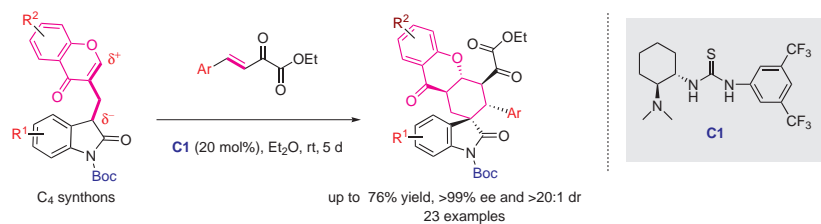
H.-J. Zhou
W. Zhou
X.-L. Liu*
Y.-P. Tian
J.-X. Wang
Y. Zhou*

Guizhou University of Traditional
Chinese Medicine,
P. R. of China

Catalytic Asymmetric Domino Michael/Annulation Reaction of Bifunctional Chromone Synthons with β,γ -Unsaturated α -Keto Esters: Rapid Access to Polysubstituted Spirocyclic Hexahydroxanthenes

Paper

3047



- the first example of enone as C_2 synthon in chemistry of chromones
- potential biologically active molecules

Synthesis

Synthesis 2020, 52, 3058–3064
DOI: 10.1055/s-0040-1707204

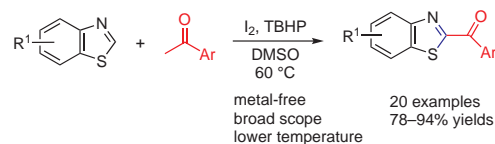
B. Wang
Q. Zhang
Z. Guo
K. Ablajan*

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P. R. of China

Iodine- and TBHP-Promoted Acylation of Benzothiazoles under Metal-Free Conditions

Paper

3058



Synthesis

Synthesis 2020, 52, 3065–3070
DOI: 10.1055/s-0040-1707186

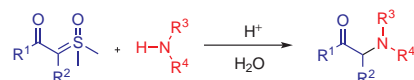
H. He
K. Yan
J. Li
R. Lai
Y. Luo
M. Guan*
Y. Wu*

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Metal-Free Insertion of Sulfoxonium Ylides into Arylamines in Water

Paper

3065



- Metal-free
- Water as solvent
- Up to 87% yield
- 25 examples
- Suitable for late-stage modification

Synthesis

Synthesis 2020, 52, 3071–3076
DOI: 10.1055/s-0040-1707158

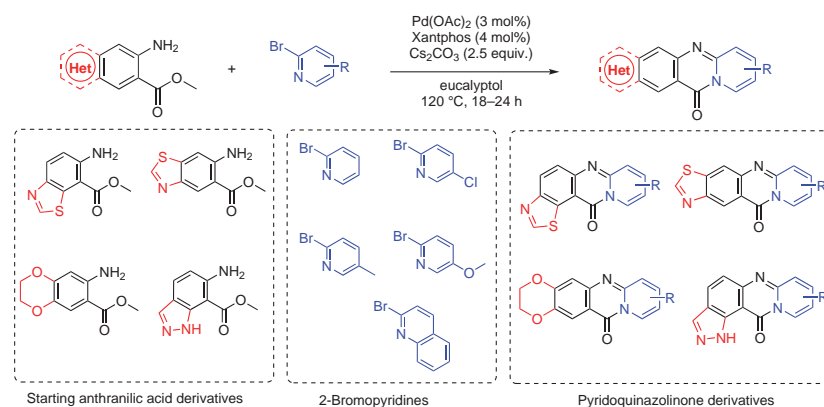
J. F. Campos
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T. Besson
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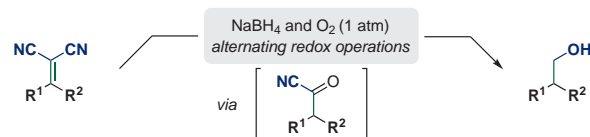
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7311, France

Synthesis of Benzo-Fused 11*H*-Pyrido[2,1-*b*]quinazolin-11-ones by a Buchwald–Hartwig Coupling/Pyridine Dearomatization Sequence in Eucalyptol

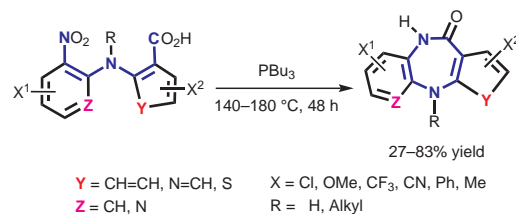
Paper

3071





Three Metal-Free Steps in One Operation in One Pot



Synthesis

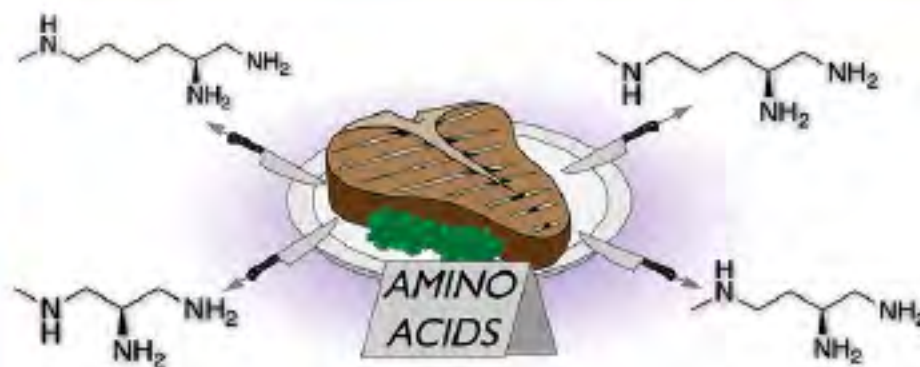
Reviews and Full Papers in Chemical Synthesis

November 3, 2020 • Vol. 52, 3095–3294

Special Topic

Recent Advances in Amide Bond Formation

Editor: Franziska Schoenebeck



Syntheses of Enantiopure 1,2-Ethylenediamines with Tethered Secondary Amines of the Formula $H_2NCH_2CH[(CH_2)_nNHMe]NH_2$ ($n = 1-4$) from α -Amino Acids: New Agents for Asymmetric Catalysis

C. Q. Kabes, J. H. Gunn, M. A. Selbst, R. F. Lucas, J. A. Gladysz

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Synthesis

Synthesis 2020, 52, 3095–3110
DOI: 10.1055/s-0040-1707149

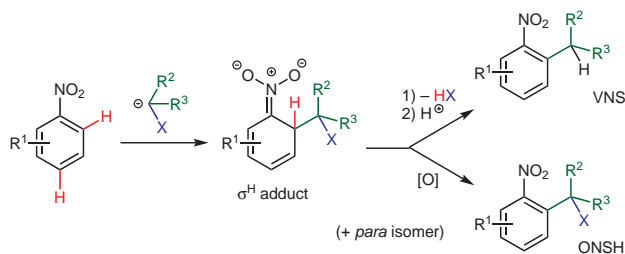
R. Loska*
M. Małkosza*

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Introduction of Carbon Substituents into Nitroarenes via Nucleophilic Substitution of Hydrogen: New Developments

Review

3095



Synthesis

Synthesis 2020, 52, 3111–3128
DOI: 10.1055/s-0040-1707225

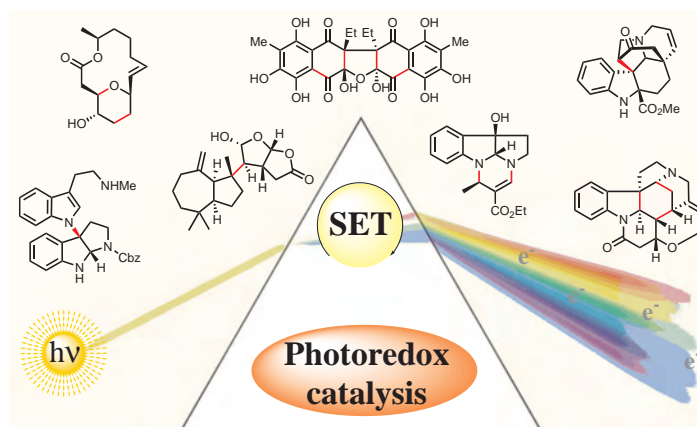
J. B. Mateus-Ruiz
A. Cordero-Vargas*

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Visible-Light-Mediated Photoredox Reactions in the Total Synthesis of Natural Products

Short Review

3111



Synthesis

Synthesis 2020, 52, 3129–3139
DOI: 10.1055/s-0040-1707247

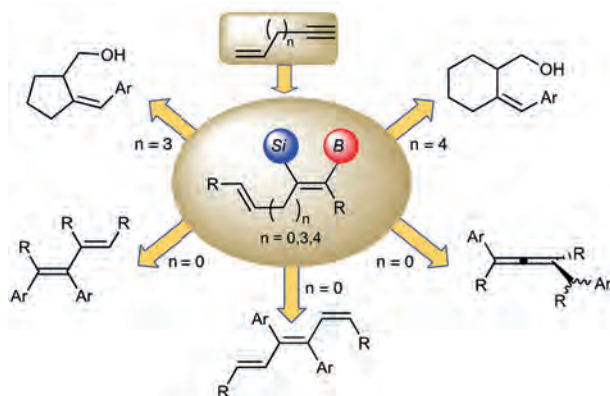
C. Moberg*

KTH Royal Institute of Technology,
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Silylboranes as Powerful Tools in Organic Synthesis: Stereo- and Regioselective Reactions with 1,*n*-Enynes

Short Review

3129



Synthesis

Synthesis 2020, 52, 3140–3152
DOI: 10.1055/s-0040-1707222

M. Rehan

J. Flegel

F. Heitkamp

J. L. Pergomet

F. Otte

C. Strohmann

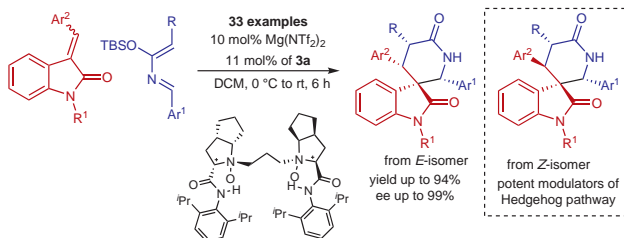
K. Kumar*

Max-Planck-Institute für Molekulare
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Asymmetric Synthesis of 3,3'-Piperidinoyl Spirooxindoles and Discovery of Stereospecific Cycloadducts as Novel Hedgehog Pathway Modulators

Feature

3140



Synthesis

Synthesis 2020, 52, 3153–3161
DOI: 10.1055/s-0040-1707175

L. Kadari

T. Roisnel

W. Erb*

P. R. Krishna*

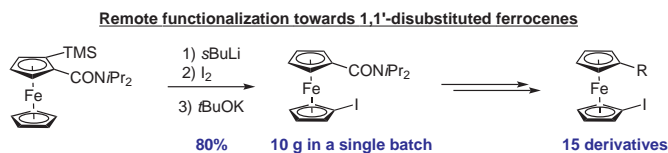
F. Mongin

Univ Rennes, France
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Technology, India

Remote Deprotometalation-Iodolysis of *N,N*-Diisopropyl-2-trimethylsilylferrocenecarboxamide: A New Route Toward 1,1'-Disubstituted Ferrocenes

PSP

3153



Synthesis

Synthesis **2020**, 52, 3162–3188
DOI: 10.1055/s-0040-1707357

M. Shiri*

N. Farajinia-Lehi

P. Salehi

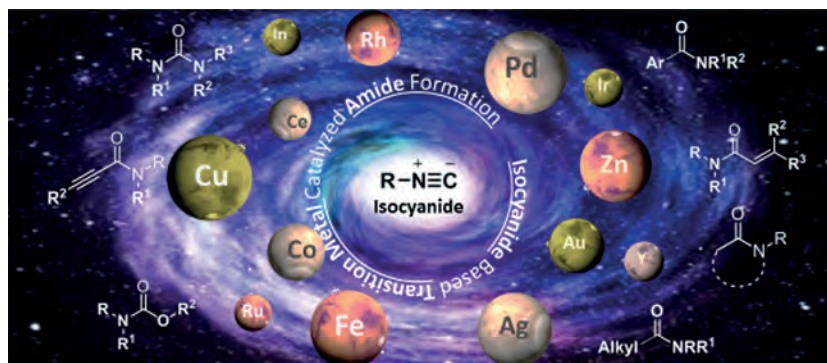
Z. Tanbakouchian

Alzahra University, Iran
Pakshoo Industrial Group,
Second, Iran

Transition Metal and Inner Transition Metal Catalyzed Amide Derivatives Formation through Isocyanide Chemistry

Special Topic

3162



Synthesis

Synthesis **2020**, 52, 3189–3210
DOI: 10.1055/s-0040-1706296

S. R. Manne

B. G. de la Torre

A. El-Faham*

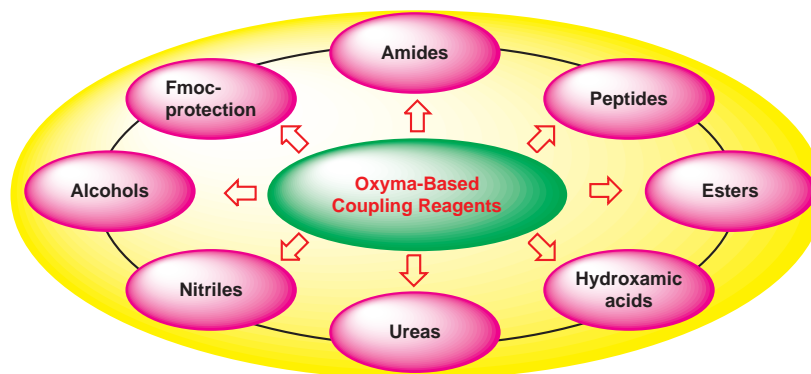
F. Albericio*

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try of Catalonia (IQAC-CSIC),
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OxymaPure Coupling Reagents: Beyond Solid-Phase Peptide Synthesis

Special Topic

3189



Synthesis

Synthesis **2020**, 52, 3211–3218
DOI: 10.1055/s-0040-1707124

B. Zhao

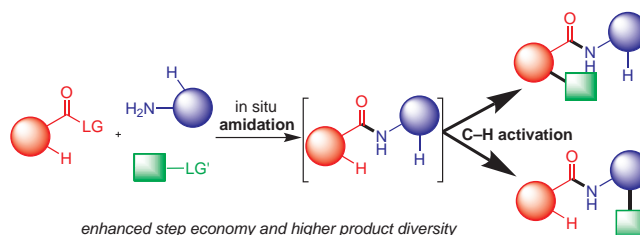
Y. Liu*

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Step-Economical C–H Activation Reactions Directed by In Situ Amidation

Special Topic

3211



Synthesis

Synthesis 2020, 52, 3219–3230
DOI: 10.1055/s-0040-1707394

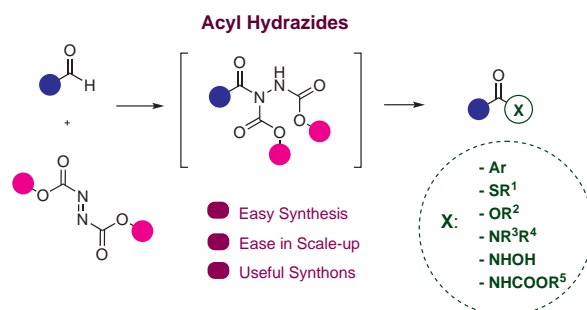
N. Spiliopoulou
C. T. Constantinou
I. Triandafillidi*
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Synthetic Approaches to Acyl Hydrazides and Their Use as Synthons in Organic Synthesis

Special Topic

3219



Synthesis

Synthesis 2020, 52, 3231–3242
DOI: 10.1055/s-0040-1707133

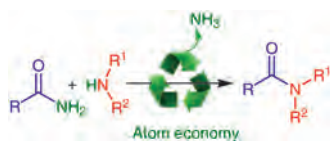
M. Kolypadi Marković
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Amide Synthesis by Transamidation of Primary Carboxamides

Special Topic

3231



Synthesis

Synthesis 2020, 52, 3243–3252
DOI: 10.1055/s-0040-1707132

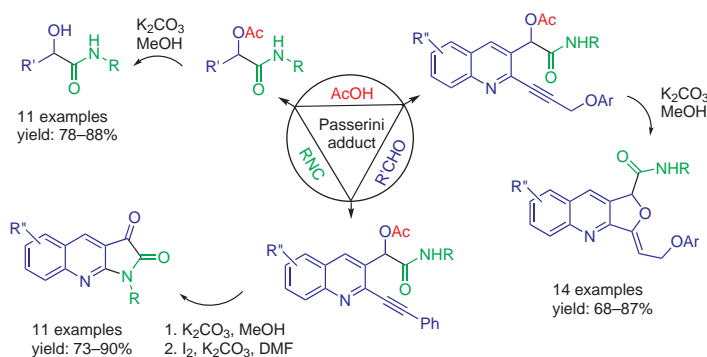
M. Shiri*
Z. Gholami-Koupaei
F. Bandehali-Naeini
M.-S. Tonekaboni
S. Soheil-Moghaddam
D. Ebrahimi
S. Karami
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Highly Selective Synthesis of α -Hydroxy, α -Oxy, and α -Oxo Amides by a Post-Passerini Condensation Transformation

Special Topic

3243



Synthesis

Synthesis 2020, 52, 3253–3262
DOI: 10.1055/s-0040-1707174

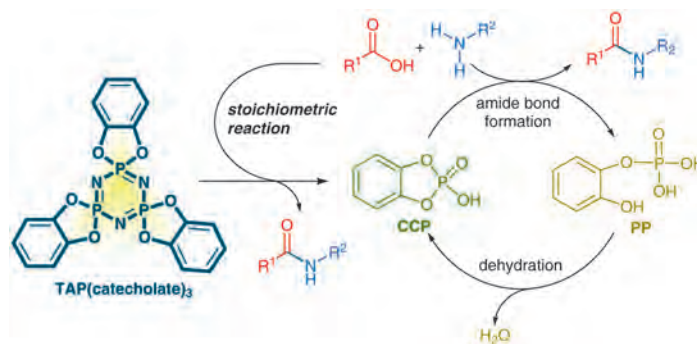
F. S. Movahed
D. N. Sawant
D. B. Bagal
S. Saito*

Nagoya University, Japan

Tris(*o*-phenylenedioxy)cyclotriphosphazene as a Promoter for the Formation of Amide Bonds Between Aromatic Acids and Amines

Special Topic

3253



Synthesis

Synthesis 2020, 52, 3263–3271
DOI: 10.1055/s-0040-1707864

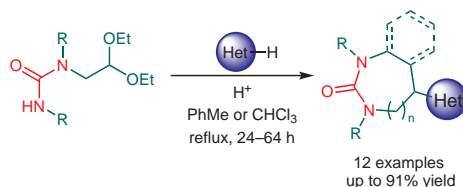
A. V. Smolobochkin*
A. S. Gazizov*
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A. G. Strel'nik
A. I. Samigullina
A. R. Burilov
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Nucleophilic Cyclization/Electrophilic Substitution of (2,2-Dialkoxyethyl)ureas: Highly Regioselective Access to Novel 4-(Het)arylimidazolidinones and Benzo[d][1,3]diazepinones

Special Topic

3263



Synthesis

Synthesis 2020, 52, 3272–3276
DOI: 10.1055/s-0040-1707809

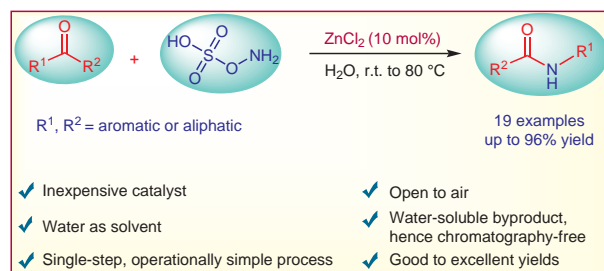
S. Verma
P. Kumar
A. K. Khatana
D. Chandra
A. K. Yadav
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Babasaheb Bhimrao Ambedkar
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Zinc(II)-Catalyzed Synthesis of Secondary Amides from Ketones via Beckmann Rearrangement Using Hydroxylamine-*O*-sulfonic Acid in Aqueous Media

Special Topic

3272



Synthesis

Synthesis 2020, 52, 3277–3285
DOI: 10.1055/s-0040-1707146

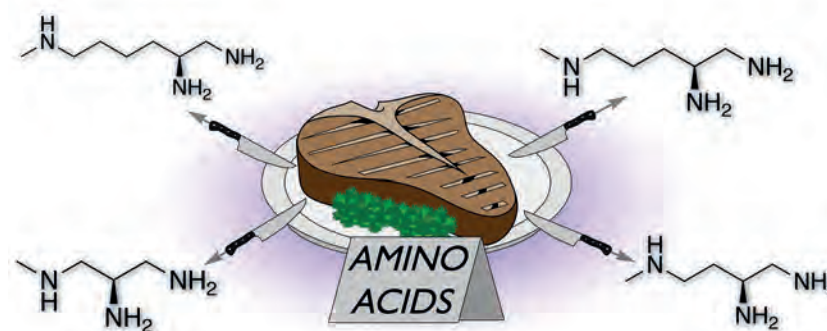
C. Q. Kabes
J. H. Gunn
M. A. Selbst
R. F. Lucas
J. A. Gladysz*

Texas A&M University, USA

Syntheses of Enantiopure 1,2-Ethylenediamines with Tethered Secondary Amines of the Formula $\text{H}_2\text{NCH}_2\text{CH}[(\text{CH}_2)_n\text{NHMe}]\text{NH}_2$ ($n = 1-4$) from α -Amino Acids: New Agents for Asymmetric Catalysis

Special Topic

3277



Synthesis

Synthesis 2020, 52, 3286–3294
DOI: 10.1055/s-0040-1705892

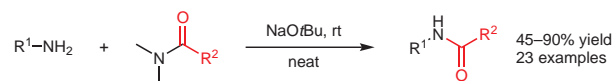
R. Zhang
J.-C. Zhang
W.-Y. Zhang
Y.-Q. He
H. Cheng*
C. Chen*
Y.-C. Gu

Hubei University of Arts and Science, P. R. of China
Wuhan University of Technology, P. R. of China

A Practical Approach for the Transamidation of *N,N*-Dimethyl Amides with Primary Amines Promoted by Sodium *tert*-Butoxide under Solvent-Free Conditions

Special Topic

3286



R^1 = aliphatic, (hetero)aryl; R^2 = H or alkyl

- Transition-metal-free and solvent-free
- Uses 1.5 equiv of NaOtBu and 3.0 equiv of the *N,N*-disubstituted amide
- Compatible with long-chain alkyl groups and heteroatom-containing amines
- Gram-scale reactions with an easy work-up procedure

Synthesis

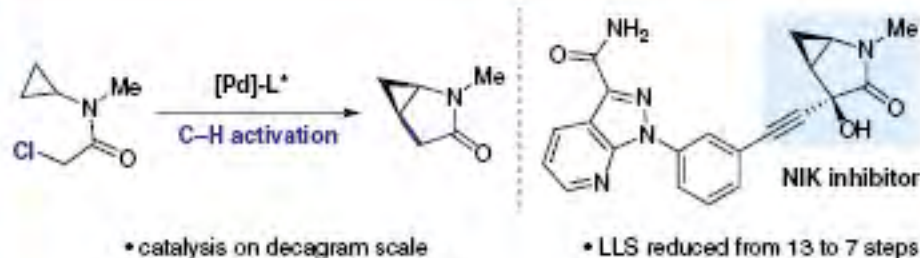
Reviews and Full Papers in Chemical Synthesis

November 17, 2020 • Vol. 52, 3295–3492

Special Topic

Synthesis in Industry

Editor: Franziska Schoenebeck



Synthesis of an Azabicyclo[3.1.0]hexanone-Containing Inhibitor of NF- κ B Inducing Kinase via Catalytic C-H Activation

J. J. Crawford, D. Liao, A. Kolesnikov, W. Lee, M. L. Landry

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Synthesis

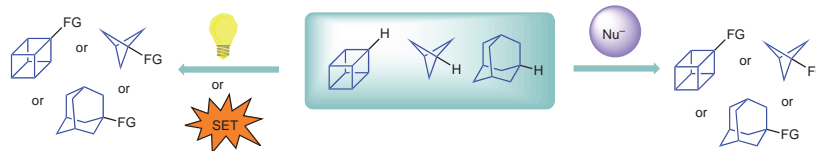
Synthesis 2020, 52, 3295–3325
DOI: 10.1055/s-0040-1707884

N. Grover
M. O. Senge*
The University of Dublin, Ireland

Synthetic Advances in the C–H Activation of Rigid Scaffold Molecules

Review

3295



Synthesis

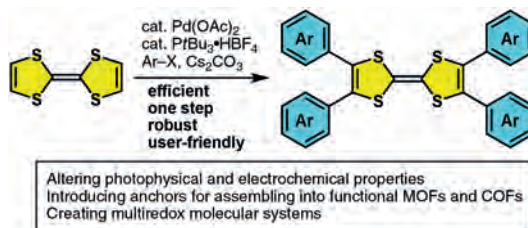
Synthesis 2020, 52, 3326–3336
DOI: 10.1055/s-0040-1707256

H. Yorimitsu*
A. Yoshimura
Y. Misaki
Kyoto University, Japan

Catalytic C–H Arylation of Tetrathiafulvalenes for the Synthesis of Functional Materials

Short Review

3326



Synthesis

Synthesis **2020**, *52*, 3337–3355
DOI: 10.1055/s-0040-1707206

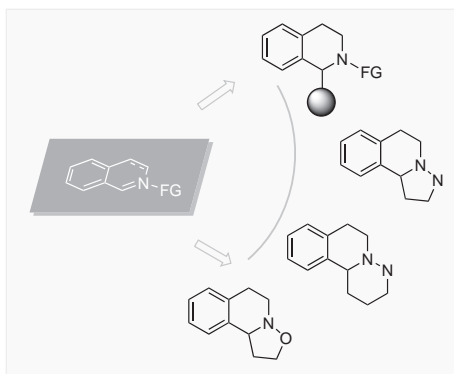
D. Li*
X. Chen
W. Gao*

Capital Medical University,
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Asymmetric Synthesis of C₁-Chiral THIQs with Imines in Isoquinoline Rings

Short Review

3337



Synthesis

Synthesis **2020**, *52*, 3356–3373
DOI: 10.1055/s-0040-1706402

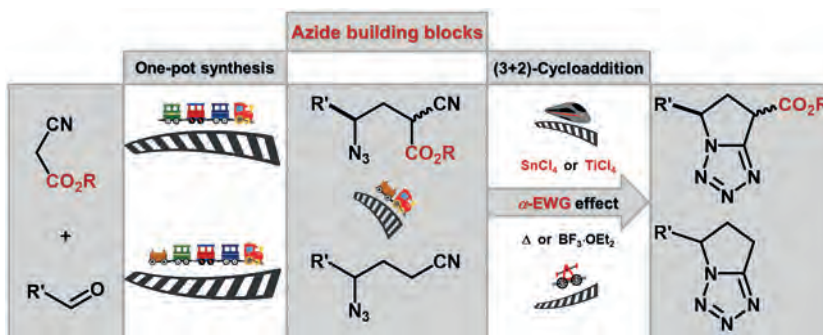
K. L. Ivanov
H. B. Tukhtaev
F. O. Tukhtaeva
S. I. Bezzubov
M. Ya. Melnikov
E. M. Budynina*

Lomonosov Moscow State Uni-
versity, Russian Federation
Lebedev Physical Institute,
Russian Federation

One-Pot Synthesis of γ -Azidobutyronitriles and Their Intramolecular Cycloadditions

Feature

3356



Synthesis

Synthesis **2020**, *52*, 3374–3377
DOI: 10.1055/s-0040-1707353

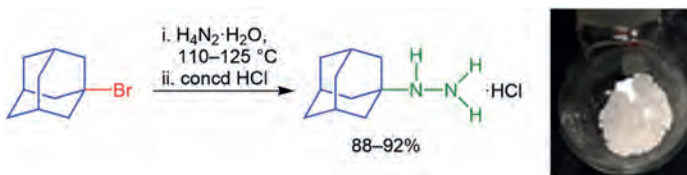
A. Delpe Acharige
R. Neri
J. Hodgson
S. H. Bossmann*

Kansas State University, USA

A Catalyst-Free, Temperature-Driven One-Pot Synthesis of 1-Adamantylhydrazine Hydrochloride

PSP

3374



Synthesis

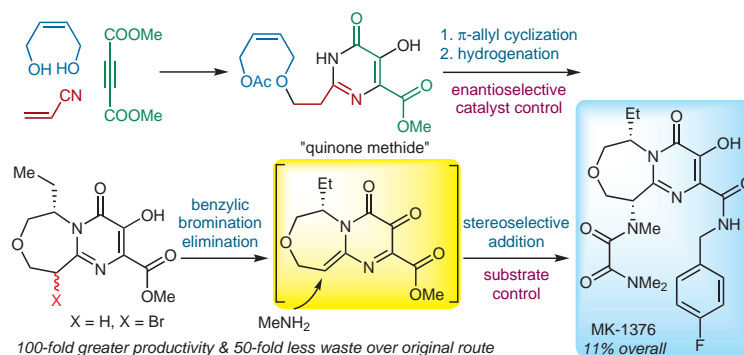
Synthesis of Fused Oxepane HIV Integrase Inhibitor MK-1376

Special Topic

3378

Synthesis 2020, 52, 3378–3388
DOI: 10.1055/s-0040-1707994

P. E. Maligres*
Z. J. Song*
N. A. Strotman
J. Yin
T. Pei
H. R. Strotman
T. Itoh
E. C. Sherer
G. R. Humphrey
Merck & Co., Inc., USA



Synthesis

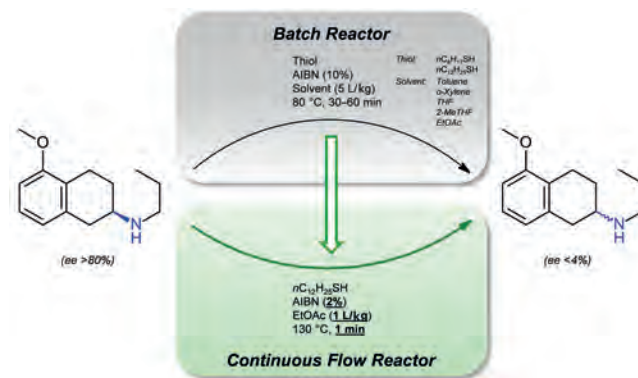
Intensification of Free-Radical Racemization for a Non-activated Amine in a Continuous Flow Reactor

Special Topic

3389

Synthesis 2020, 52, 3389–3396
DOI: 10.1055/s-0040-1707339

F. C. Toussaint*
T. Defrance*
S. Decouvreur
N. Carly
A. Merschaert
UCB Pharma S.A., Belgium



Synthesis

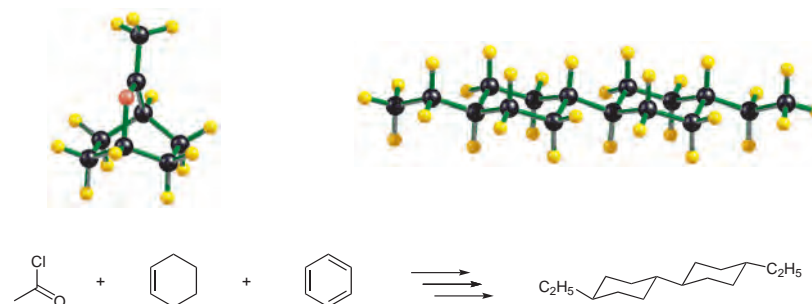
Controlling the All-trans Stereochemistry in Liquid Crystalline 4,4'-Dialkyl-[1,1'-bicyclohexyl] Compounds

Special Topic

3397

Synthesis 2020, 52, 3397–3405
DOI: 10.1055/s-0040-1707349

A. Wächtler*
M. Bremer*
D. Maillard
T. Mohr
Consultant, Germany
Merck KGaA, Germany



Synthesis

Practical Early Development Synthesis of Nav1.7 Inhibitor GDC-0310

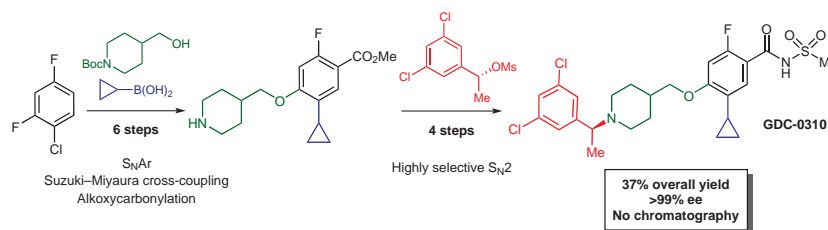
Special Topic

3406

Synthesis 2020, 52, 3406–3414
DOI: 10.1055/s-0040-1707859

A. Stumpf*
F. St-Jean*
D. Lao
Z. K. Cheng
R. Angelaud
F. Gosselin

Genentech Inc., USA



Synthesis

Copper-Catalyzed Asymmetric Hydroamination of Styrenes with *piv*ZPhos as Ligand

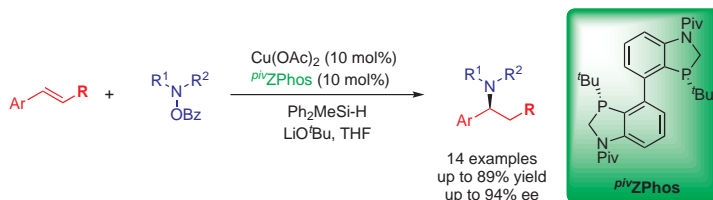
Special Topic

3415

Synthesis 2020, 52, 3415–3419
DOI: 10.1055/s-0040-1707346

C. Chen
L. Wu
Y. Wang
L. Wu*
Y. Zhang*

Boehringer Ingelheim Pharmaceuticals, Inc., USA



Synthesis

Synthesis of an Azabicyclo[3.1.0]hexanone-Containing Inhibitor of NF-κB Inducing Kinase via Catalytic C–H Activation

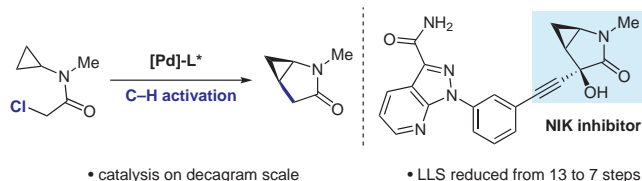
Special Topic

3420

Synthesis 2020, 52, 3420–3426
DOI: 10.1055/s-0040-1707279

J. J. Crawford*
D. Liao
A. Kolesnikov
W. Lee
M. L. Landry

Genentech, Inc., USA



Synthesis

Synthesis 2020, 52, 3427–3438
DOI: 10.1055/s-0040-1707079

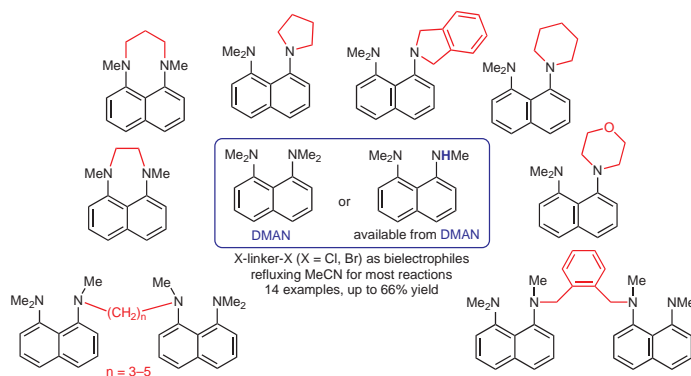
E. V. Kolupaeva
V. A. Ozeryanskii*
A. F. Pozharskii

Southern Federal University,
Russian Federation

N-Methylated 1,8-Diaminonaphthalenes as Bifunctional Nucleophiles in Reactions with α,ω -Dihalogenoalkanes: A Facile Route to Heterocyclic and Double Proton Sponges

Paper

3427



Synthesis

Synthesis 2020, 52, 3439–3445
DOI: 10.1055/s-0040-1707233

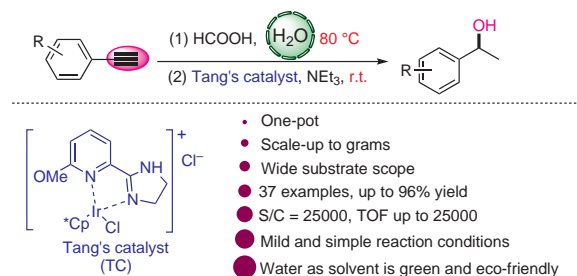
N. Luo
Y. Zhong
J.-T. Liu
L. Ouyang*
R. Luo*

Gannan Medical University,
P. R. of China

An Efficient Hydration and Tandem Transfer Hydrogenation of Alkynes for the Synthesis of Alcohol in Water

Paper

3439



Synthesis

Synthesis 2020, 52, 3446–3451
DOI: 10.1055/s-0040-1707219

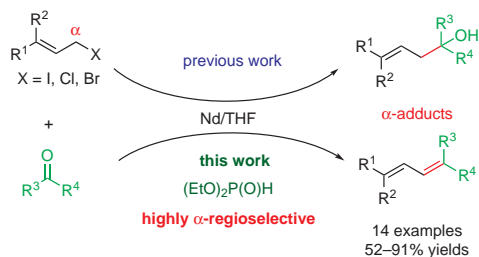
D. Xie
Y. Wang
B. Yang
S. Zhang*

Soochow University,
P. R. of China

Neodymium-Promoted Highly Selective Carbon–Carbon Double Bond Formation of Ketones with Allyl Halides in the Presence of Diethyl Phosphite

Paper

3446



Synthesis

Synthesis 2020, 52, 3452–3460
DOI: 10.1055/s-0040-1707341

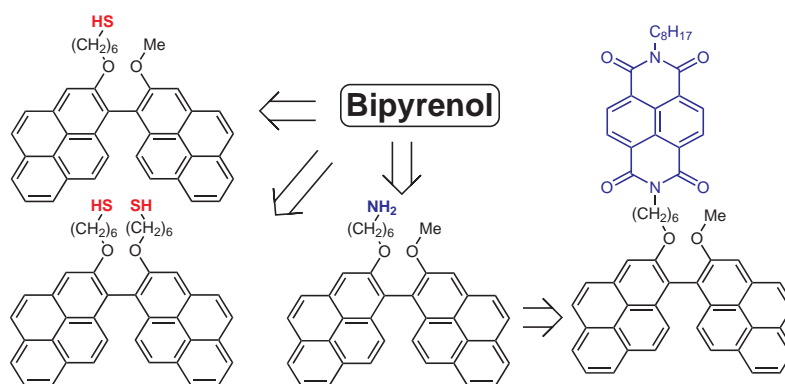
U. A. Liza
K.-i. Sugiura*

Tokyo Metropolitan University,
Japan

Functionalization of Bipyrenol: Potential Precursors for Advanced Chiral Molecules

Paper

3452



Synthesis

Synthesis 2020, 52, 3461–3465
DOI: 10.1055/s-0040-1707191

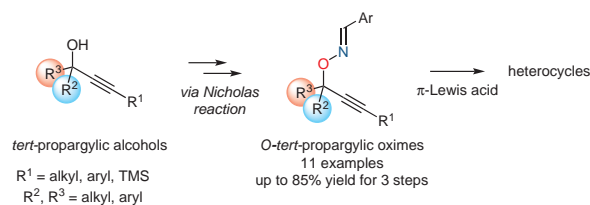
I. Nakamura*
K. Shiga
M. Suzuki
M. Terada

Tohoku University, Japan

Efficient Synthesis of *O*-*tert*-Propargylic Oximes via Nicholas Reaction

Paper

3461



Synthesis

Synthesis 2020, 52, 3466–3472
DOI: 10.1055/s-0040-1707229

Q. Li
H. Jin
Y. Liu*

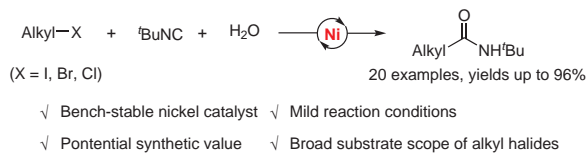
B. Zhou*

Zhejiang University of Technology,
P. R. of China

Nickel-Catalyzed Multicomponent Coupling Reaction of Alkyl Halides, Isocyanides and H₂O: An Expedient Way to Access Alkyl Amides

Paper

3466



Synthesis

Synthesis of L-Kynurenine and Homo-L-Kynurenine via an Aza-Fries Rearrangement

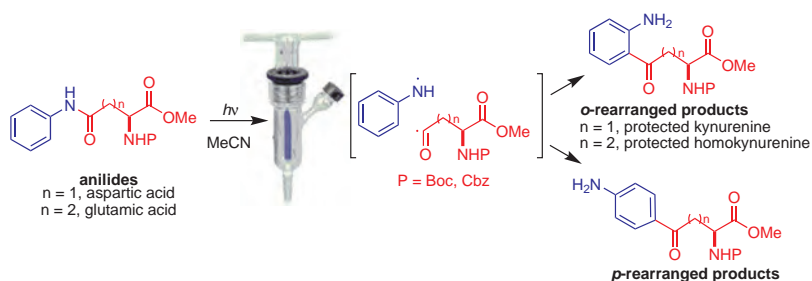
Paper

3473

Synthesis 2020, 52, 3473–3479
DOI: 10.1055/s-0040-1707223

E. Bonilla-Reyes
A. Sánchez-Carrillo
A. Vázquez*

Universidad Nacional Autónoma de México, México



Synthesis

Scalable Synthesis of 3-Ethyl-4-methyl-1,5-dihydro-2H-pyrrol-2-one: An Important Building Block of the Antidiabetic Drug Glimepiride

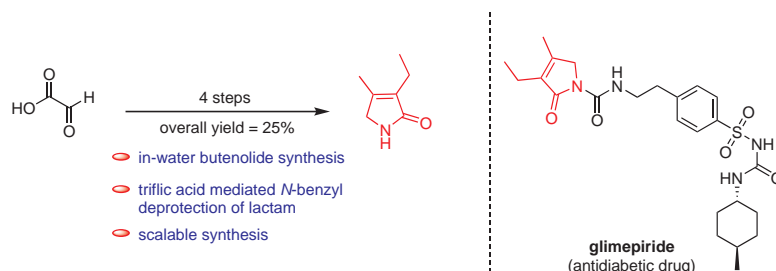
Paper

3480

Synthesis 2020, 52, 3480–3484
DOI: 10.1055/s-0040-1707344

S. P. Chavan*
A. A. Pawar
N. B. Patil
A. L. Kadam
S. S. Shinde

CSIR-National Chemical Laboratory, India
Academy of Scientific and Innovative Research (AcSIR), India



Synthesis

Synthesis of Chiral *N*-Nitro-oxazolidin-2-ones and *O*-(β -Nitraminoalkyl) Carbamates in Liquefied 1,1,1,2-Tetrafluoroethane Medium

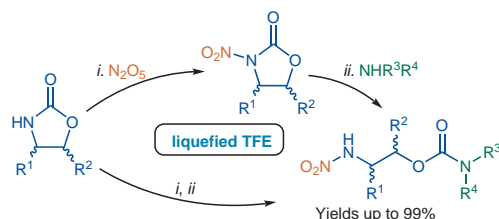
Paper

3485

Synthesis 2020, 52, 3485–3491
DOI: 10.1055/s-0040-1706762

S. S. Arabadzi
M. N. Zharkov
I. V. Kuchurov*
S. G. Zlotin*

N. D. Zelinsky Institute of Organic Chemistry, Russian Federation

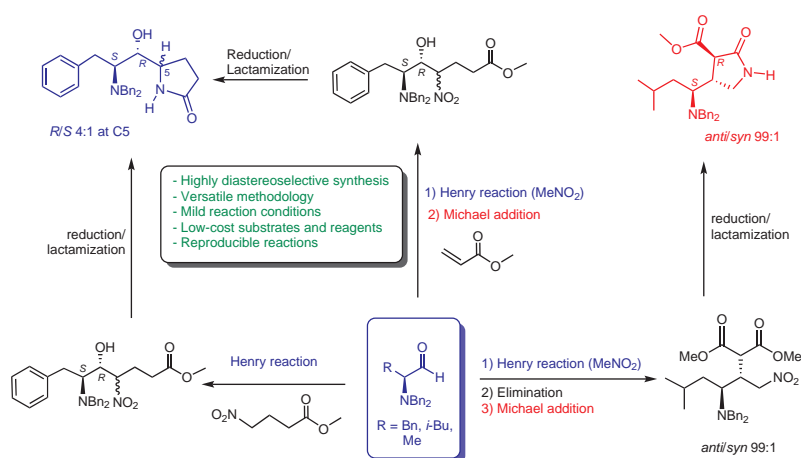


Reviewed by
Sami Lakhdar

Synthesis

Reviews and Full Papers in Chemical Synthesis

December 1, 2020 • Vol. 52, 3493–3692



Divergent and Diastereoselective Synthesis of α -Monosubstituted and *trans*- α,β -Disubstituted γ -Lactams from (*S*)-*N,N*-Dibenzyl- α -amino Aldehydes via Henry and Michael Reactions

F. P. Meirelis, B. G. N. Vieira, V. L. P. Pereira

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Synthesis

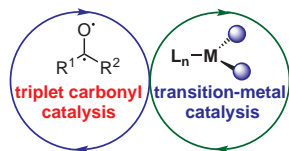
Synthesis 2020, 52, 3493–3510
DOI: 10.1055/s-0040-1707183

D.-L. Zhu
D. J. Young
H.-X. Li*
Soochow University,
P. R. of China

Carbonyl-Photoredox/Metal Dual Catalysis: Applications in Organic Synthesis

Review

3493



Synthesis

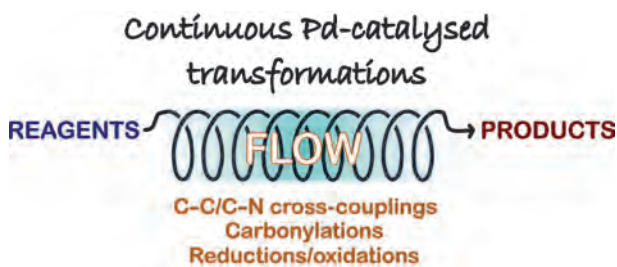
Synthesis 2020, 52, 3511–3529
DOI: 10.1055/s-0040-1707212

M. Markovič
P. Lopatka
T. Gracza
P. Kooš*
Slovak University of Technology,
Slovakia

Recent Applications of Continuous Flow in Homogeneous Palladium Catalysis

Review

3511



Synthesis

Recent Advances in the Synthesis and Applications of 2-Arylbenzothiazoles

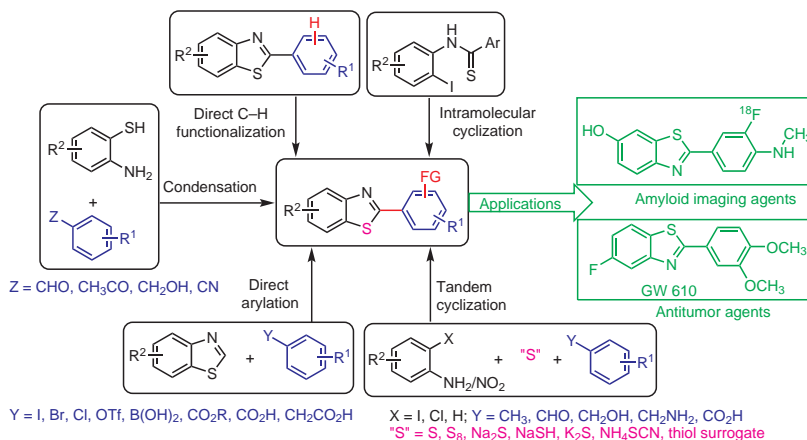
Short Review

3530

Synthesis **2020**, 52, 3530–3548
DOI: 10.1055/s-0040-1707208

F. Gan
P. Luo*
J. Lin
Q. Ding

Jiangxi Provincial People's Hospital, P. R. of China



Synthesis

Progress on Iridium-Catalyzed Hydrosilylation of Alkenes and Alkynes

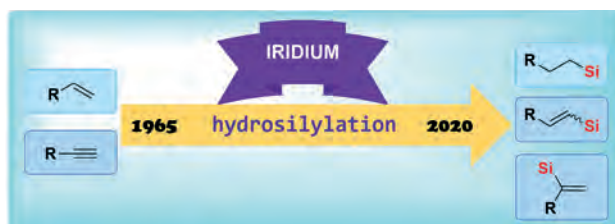
Short Review

3549

Synthesis **2020**, 52, 3549–3563
DOI: 10.1055/s-0040-1707239

W. Gao
S. Ding*

Beijing University of Chemical Technology, P. R. of China
Peking University, P. R. of China



Synthesis

Recent Advances in Denitrogenative Reactions of Pyridotriazoles

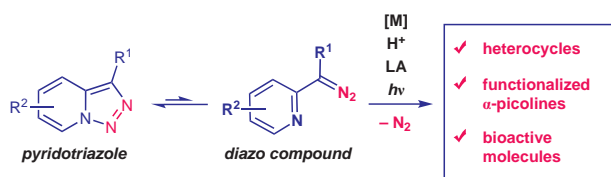
Short Review

3564

Synthesis **2020**, 52, 3564–3576
DOI: 10.1055/s-0040-1707254

I. P. Filippov
G. D. Titov
N. V. Rostovskii*

Institute of Chemistry, Russian Federation



Synthesis

Syntheses and Applications of Singh's Catalyst

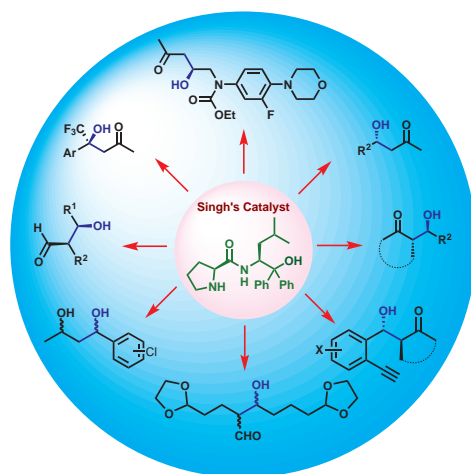
Short Review

Synthesis **2020**, 52, 3577–3582
DOI: 10.1055/s-0040-1707235

M. Khandelwal
S. K. Ray
R. K. Khangarot*

Mohanlal Sukhadia University,
India

3577



Synthesis

1,3-Diphenyldisiloxane Enables Additive-Free Redox Recycling Reactions and Catalysis with Triphenylphosphine

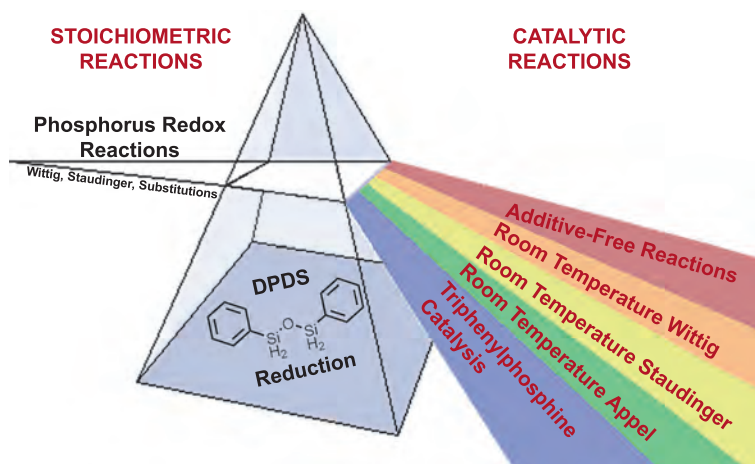
Feature

Synthesis **2020**, 52, 3583–3594
DOI: 10.1055/s-0040-1707345

J. A. Buonomo
M. S. Cole
C. G. Eiden
C. C. Aldrich*

University of Minnesota, USA

3583



Synthesis

Scale-Up of a Heck Alkenylation Reaction: Application to the Synthesis of an Amino-Modifier Nucleoside 'Ruth Linker'

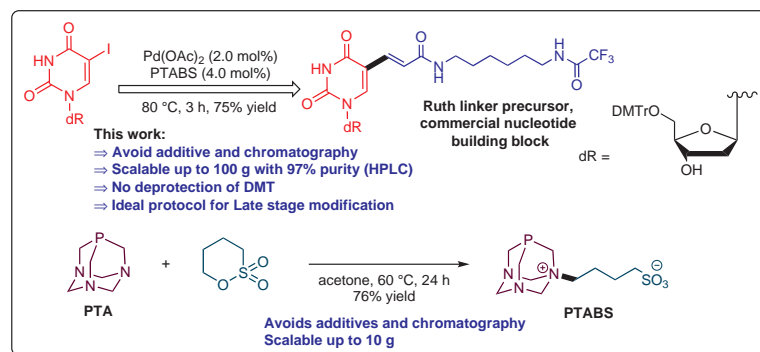
PSP

Synthesis **2020**, 52, 3595–3603
DOI: 10.1055/s-0040-1707260

S. Bhilare
S. Kori
H. Shet
G. Balaram
K. Mahendar
Y. S. Sanghvi
A. R. Kapdi*

Institute of Chemical Technolo-
gy, India

3595



Synthesis

Synthesis 2020, 52, 3604–3621
DOI: 10.1055/s-0040-1707209

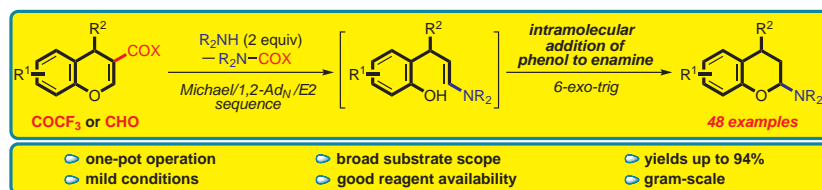
V. A. Osyanin*
D. V. Osipov
I. V. Melnikova
K. S. Korzhenko
I. A. Semenova
Y. N. Klimochkin

Samara State Technical University,
Russian Federation

Catalyst-Free Synthesis of Chromane-Type N,O-Acetals via Intramolecular Addition of Phenols to Enamines

Paper

3604



Synthesis

Synthesis 2020, 52, 3622–3631
DOI: 10.1055/s-0040-1707228

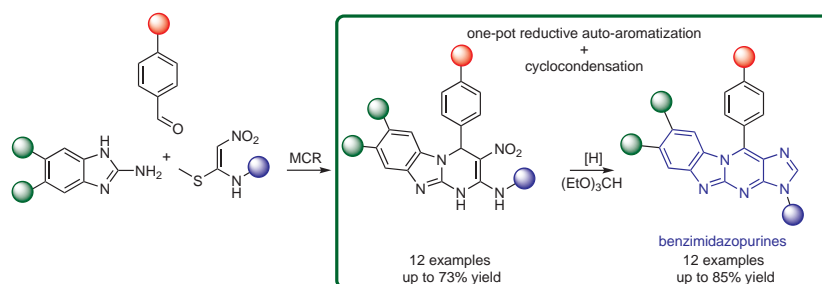
V. V. Fedotov*
E. N. Ulomsky
K. V. Savateev
E. M. Mukhin
D. A. Gazizov
E. B. Gorbunov
V. L. Rusinov

Ural Federal University, Russian
Federation

A PASE Approach to the Synthesis of Benzimidazopurines as Polycondensed Purine Derivatives

Paper

3622



Synthesis

Synthesis 2020, 52, 3632–3639
DOI: 10.1055/s-0040-1707352

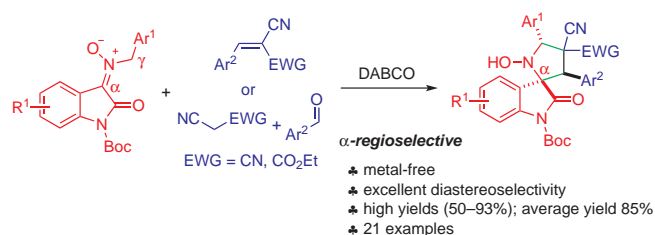
X. Cheng
W. Fei
Z. Luo
J. Li
Z. Wang*
W. Yao*

Zhejiang Sci-Tech University,
P. R. China
Chongqing University,
P. R. China

DABCO-Catalyzed α -Regio- and Diastereoselective (3+2) Cycloadditions of Nitron Ylides from Isatins and Activated Alkenes

Paper

3632



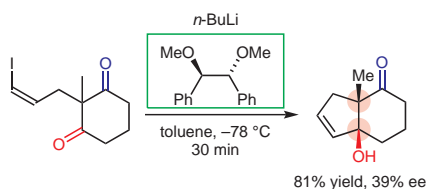
Synthesis

Synthesis 2020, 52, 3667–3674
DOI: 10.1055/s-0040-1706421

T. Yoshimura*
Y. Enami
J.-i. Matsuo

Kanazawa University,
Japan

Asymmetric Synthesis of a Bicyclo[4.3.0]nonene Derivative Bearing a Quaternary Carbon Stereocenter: Desymmetrization of σ -Symmetrical Diketones through Intramolecular Addition of an Alkenyl Anion



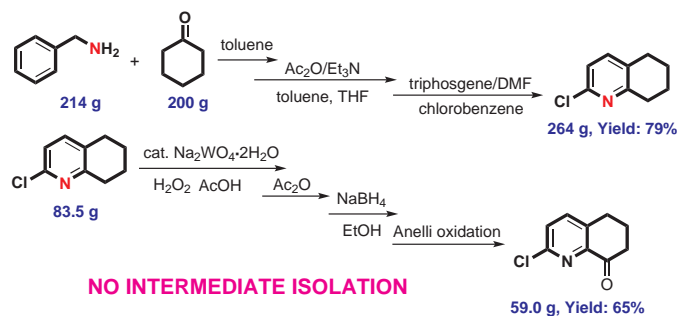
Synthesis

Synthesis 2020, 52, 3675–3683
DOI: 10.1055/s-0040-1707236

Z. Zong
K. Wu
L. Jin*
N. Sun
B. Hu
Z. Shen
X. Hu*

Zhejiang University of Technology,
P. R. of China

Large-Scale Synthesis of 2-Chlorotetrahydroquinoline and 2-Chlorotetrahydroquinolin-8-one



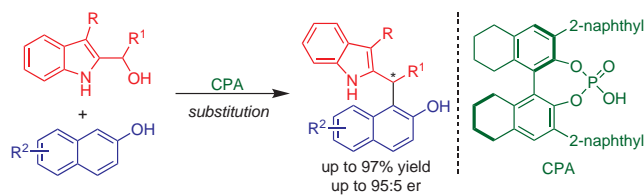
Synthesis

Synthesis 2020, 52, 3684–3692
DOI: 10.1055/s-0040-1707237

J.-P. Lan
Y.-N. Lu
K.-W. Chen
F. Jiang
F. Gao*
Y.-C. Zhang*
F. Shi*

Jiangsu Normal University,
P. R. of China

Catalytic Asymmetric Substitution Reaction of 3-Substituted 2-Indolylmethanols with 2-Naphthols



Synthesis

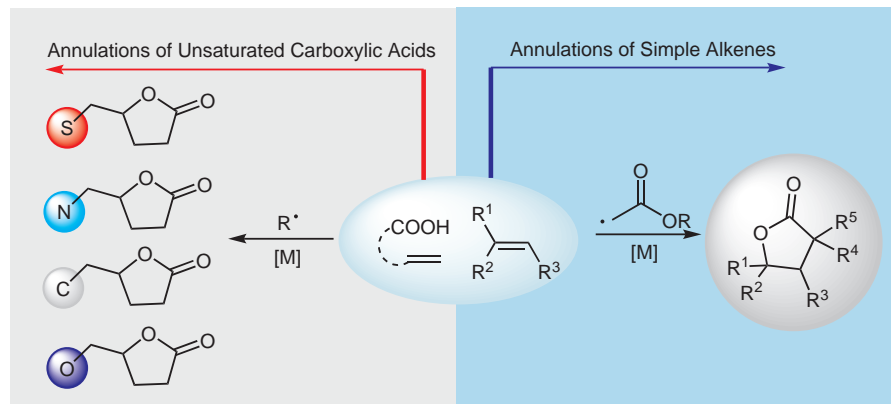
Reviews and Full Papers in Chemical Synthesis

December 17, 2020 • Vol. 52, 3693–3890

Special Topic

Recent Advances in Metal-Catalyzed
Ring Construction

Editor: Franziska Schoenebeck



Radical Strategy for the Transition-Metal-Catalyzed Synthesis of γ -Lactones: A Review

B. Wei, K.-W. Li, Y.-C. Wu, S.-Q. Tong, R.-J. Song

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Synthesis

Synthesis **2020**, 52, 3735–3750
DOI: 10.1055/s-0040-1707386

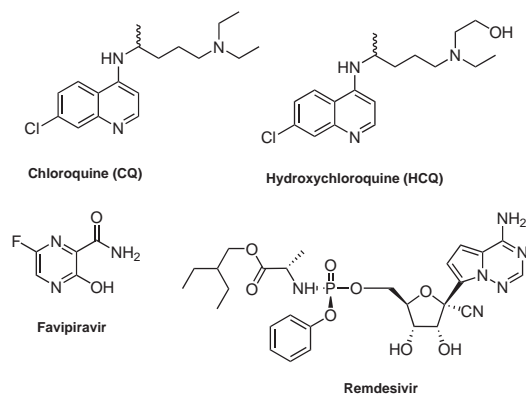
N. Al Bujug*

Taibah University,
Kingdom of Saudi Arabia

Methods of Synthesis of Remdesivir, Favipiravir, Hydroxychloroquine, and Chloroquine: Four Small Molecules Repurposed for Clinical Trials during the Covid-19 Pandemic

Short Review

3735



Synthesis

Synthesis **2020**, 52, 3751–3763
DOI: 10.1055/s-0040-1707342

X. Pang

X. Peng

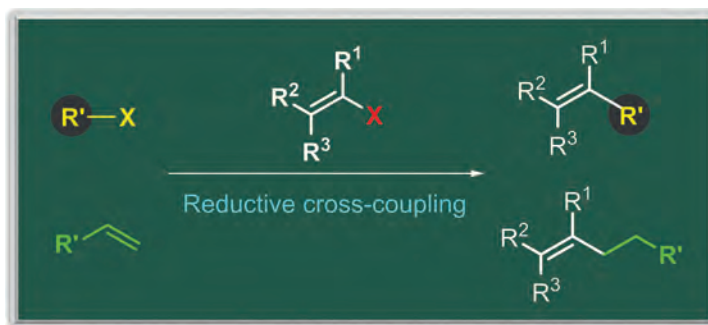
X.-Z. Shu*

Lanzhou University, China

Reductive Cross-Coupling of Vinyl Electrophiles

Short Review

3751



Synthesis

Synthesis **2020**, 52, 3764–3780
DOI: 10.1055/s-0040-1707255

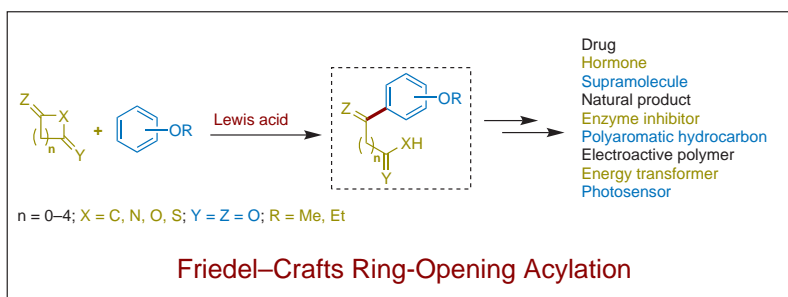
R. Talukdar*

Sanjay Gandhi Postgraduate Institute of Medical Sciences, India

Synthetically Important Ring-Opening Acylations of Alkoxybenzenes

Short Review

3764



Synthesis

Synthesis 2020, 52, 3781–3800
DOI: 10.1055/s-0040-1707253

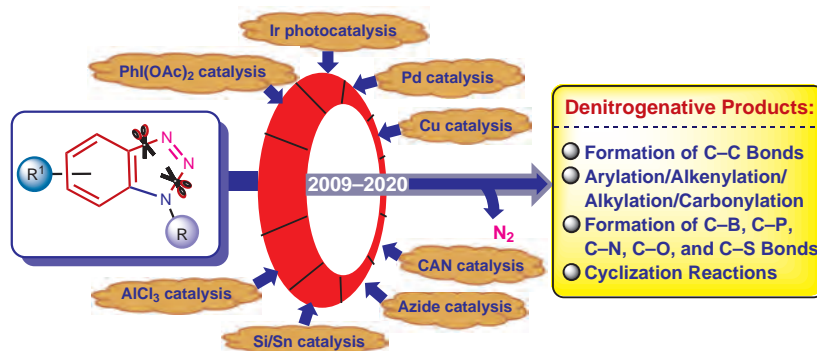
J. Yu
A. S. Singh
G. Yan*
J. Yu
V. K. Tiwari*

Lishui University, P. R. of China
Banaras Hindu University, India

Recent Developments on Denitrogenative Functionalization of Benzotriazoles

Short Review

3781



Synthesis

Synthesis 2020, 52, 3801–3810
DOI: 10.1055/s-0040-1707294

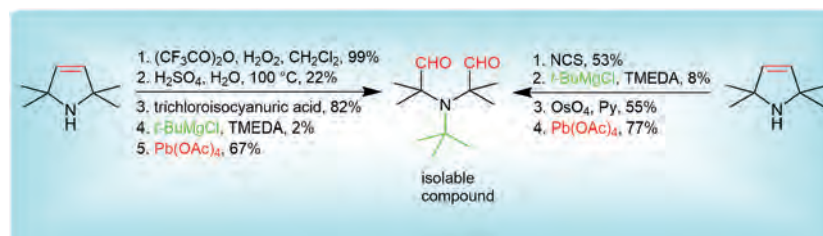
K. Banert*
M. Heck
A. Ihle
E. Michael
R. Weber

Chemnitz University of Technology,
Germany

Record-Breaking Steric Crowding in Trialkylamines Prepared by Oxidative Ring Opening

Feature

3801



Synthesis

Synthesis 2020, 52, 3811–3817
DOI: 10.1055/s-0040-1706471

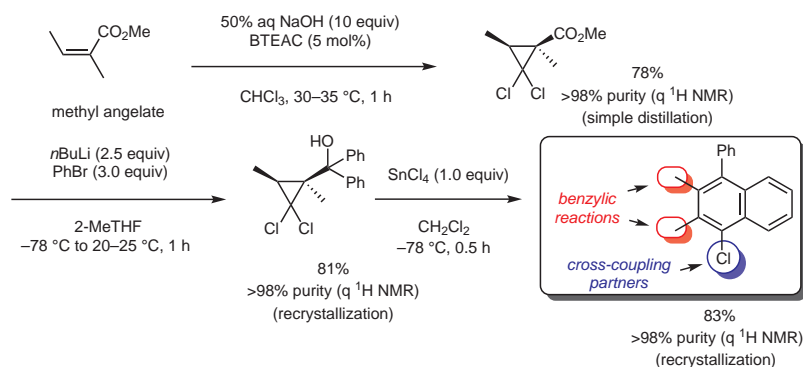
K. Moriguchi
T. Kono
S. Seko
Y. Tanabe*

Kwansei Gakuin University, Japan

Gram-Scale Robust Synthesis of 1-Chloro-2,3-dimethyl-4-phenyl-naphthalene: A Promising Scaffold with Three Contiguous Reaction Positions

PSP

3811



Synthesis

Synthesis 2020, 52, 3818–3836
DOI: 10.1055/s-0040-1707355

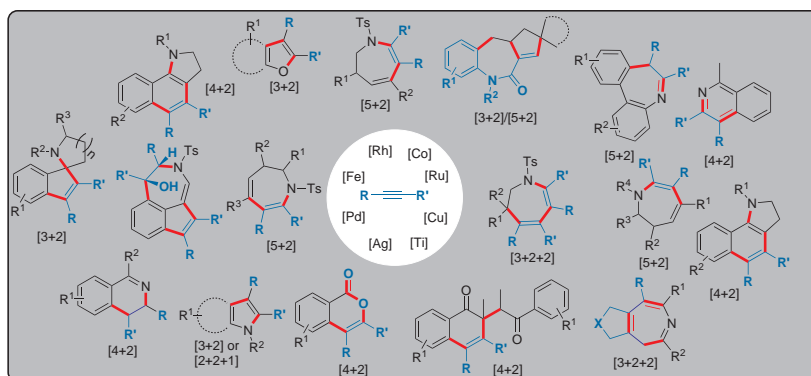
J.-H. Qin
J.-H. Li*
D.-L. An*

Hunan University, P. R. of China
Nanchang Hangkong, P. R. of China
Lanzhou University, P. R. of China

Recent Advances in Cycloaddition Reactions with Alkynes to Construct Heterocycles

Special Topic

3818



Synthesis

Synthesis 2020, 52, 3837–3854
DOI: 10.1055/s-0040-1707905

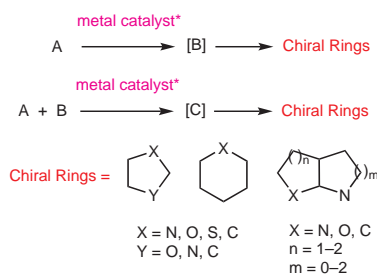
H. Pellissier*

Aix Marseille Univ, CNRS, France

The Use of Domino Reactions for the Synthesis of Chiral Rings

Special Topic

3837



Synthesis

Synthesis 2020, 52, 3855–3864
DOI: 10.1055/s-0040-1707835

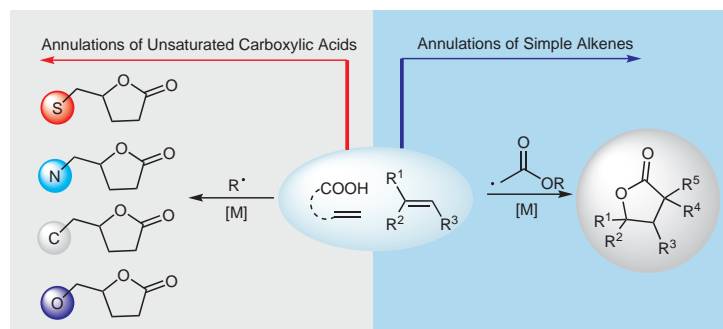
B. Wei
K.-W. Li
Y.-C. Wu
S.-Q. Tong
R.-J. Song*

Nanchang Hangkong University,
P. R. of China

Radical Strategy for the Transition-Metal-Catalyzed Synthesis of γ -Lactones: A Review

Special Topic

3855



Synthesis

Synthesis 2020, 52, 3865–3873
DOI: 10.1055/s-0040-1707863

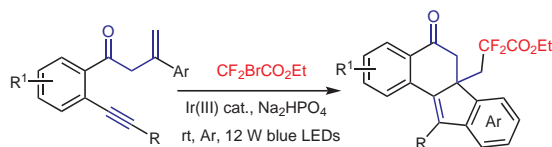
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Iridium(III)-Catalyzed Difluoroalkylation–Bicyclization of 1,7-Enynes toward Benzo[*a*]fluoren-5-ones under Visible-Light Photoredox Conditions

Special Topic

3865



Synthesis

Synthesis 2020, 52, 3874–3880
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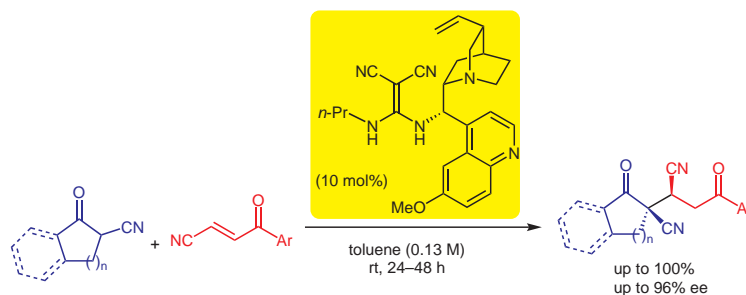
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Asymmetric Conjugate Addition of α -Cyanoketones to Benzoyl Acrylonitrile Derivatives Using a Diaminomethylenemalononitrile Organocatalyst

Paper

3874



Synthesis

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Electrophilic Amination with Anthranils through Thioamide-Assisted Cobalt(III)-Catalyzed C(sp³)-H Activation

Paper

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