

Synthesis

FR901483: Synthetic Efficiency Remains a Challenge

Review

Synthesis **2019**, *51*, 2237–2251
DOI: 10.1055/s-0037-1611779

Z. Ruan
C. Li
D. Shen
S.-H. Huang*
R. Hong*

Shanghai Institute of Organic
Chemistry (CAS), P. R. of China
Shanghai Institute of Technology,
P. R. of China



2237

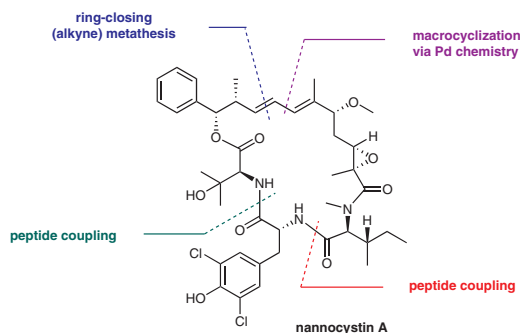
Synthesis

The Chemical Syntheses of Nannocystins

Short Review

Synthesis **2019**, *51*, 2252–2260
DOI: 10.1055/s-0037-1611796

Z. Wang*
State University of New York,
USA



2252

Synthesis

A New Wave of Amide Bond Formations for Peptide Synthesis

Short Review

2261

Synthesis 2019, 51, 2261–2277
DOI: 10.1055/s-0037-1611773

K. Hollanders
B. U. W. Maes*
S. Ballet*

Vrije Universiteit Brussel,
Belgium
University of Antwerp, Belgium



Synthesis

Directed *ortho*-Metalation of Arenesulfonyl Fluorides and Aryl Fluorosulfates

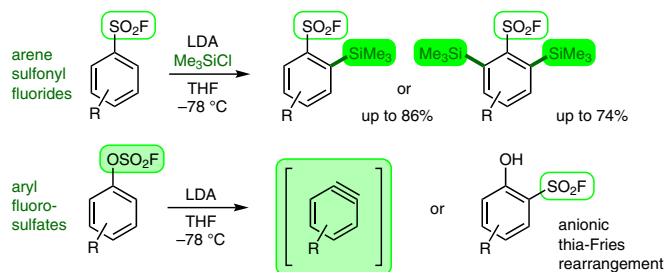
Feature

2278

Synthesis 2019, 51, 2278–2286
DOI: 10.1055/s-0037-1610877

A. Talko
D. Antoniak
M. Barbasiewicz*

University of Warsaw, Poland



Synthesis

A Graphene Oxide Nanosheet Supported NHC–Palladium Complex as a Highly Efficient and Recyclable Suzuki Coupling Catalyst

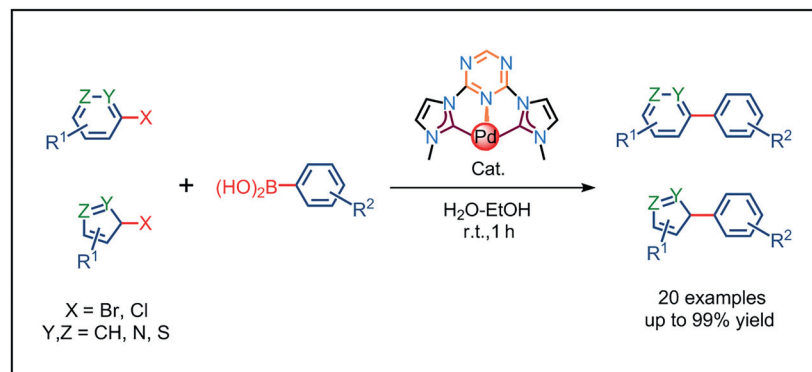
Paper

2287

Synthesis 2019, 51, 2287–2292
DOI: 10.1055/s-0037-1611726

Y. Qian
J. So
S.-Y. Jung
S. Hwang
M.-J. Jin*
S. E. Shim*

Inha University, South Korea



Synthesis

Synthesis **2019**, *51*, 2293–2304
DOI: 10.1055/s-0037-1611747

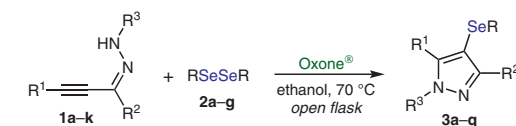
G. Perin*
P. C. Nobre
D. H. Mailahn
M. S. Silva
T. Barcellos
R. G. Jacob
E. J. Lenardão
C. Santi
J. A. Roehrs

Universidade Federal de Pelotas
(UFPel), Brazil

Synthesis of 4-Organoselenanyl-1*H*-pyrazoles: Oxone®-Mediated Electrophilic Cyclization of α,β -Alkynyl Hydrazones by Using Diorganyl Diselenides

Paper

2293



- ✓ mild reaction condition
- ✓ good yield, 17 examples
- ✓ ⁷⁷Se NMR and HRMS studies
- ✓ easy to scale-up
- ✓ metal- and halogen-free

Synthesis

Synthesis **2019**, *51*, 2305–2310
DOI: 10.1055/s-0037-1610867

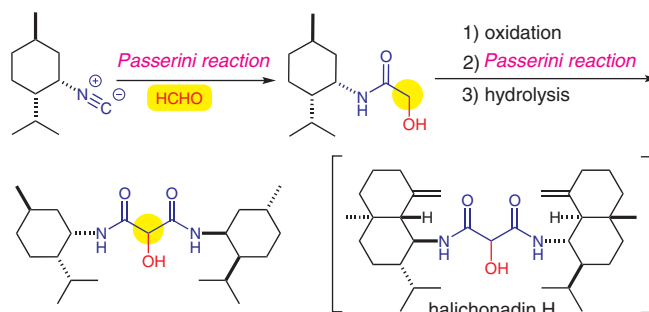
Y. Ichikawa*
T. Yamasaki
K. Nakanishi
Y. Udagawa
S. Hosokawa
T. Masuda

Kochi University, Japan

Bioinspired Synthesis of the Central Core of Halichonadin H: The Passerini Reaction in a Hypothetical Biosynthesis of Marine Natural Products

Paper

2305



Synthesis

Synthesis **2019**, *51*, 2311–2317
DOI: 10.1055/s-0037-1611765

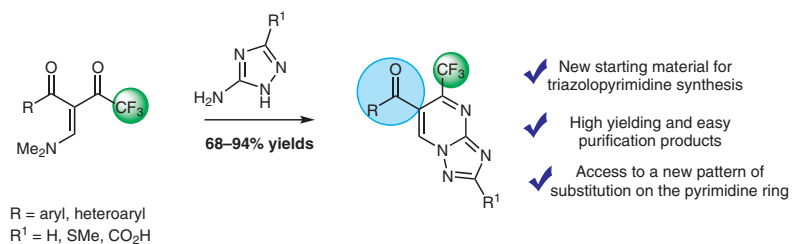
V. P. Andrade
M. Mittersteiner
H. G. Bonacorso
C. P. Frizzo
M. A. P. Martins
N. Zanatta*

Universidade Federal de Santa
Maria, Brazil

Regioselective Synthesis of 5-(Trifluoromethyl)[1,2,4]triazolo [1,5-*a*]pyrimidines from β -Enamino Diketones

Paper

2311



Synthesis

Synthesis 2019, 51, 2318–2322
DOI: 10.1055/s-0037-1610865

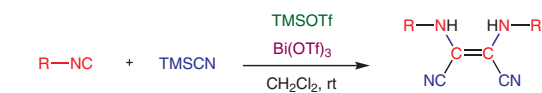
S. Tafuku
T. Fukuda
K. Chiba
Y. Kitano*

Tokyo University of Agriculture
and Technology, Japan

A New Method for the Preparation of Bis(alkylamino)maleonitriles from Aliphatic Isocyanides with TMSCN and Bi(OTf)₃

Paper

2318



R = *tert*-alkyl

13 examples

up to 43% yield

- In a single step
- Highly functional-group tolerant
- Simple and mild conditions

Synthesis

Synthesis 2019, 51, 2323–2330
DOI: 10.1055/s-0037-1610869

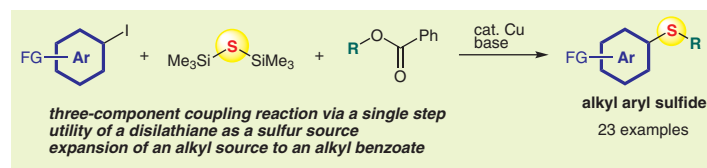
N. Sakai*
H. Maeda
Y. Ogiwara

Tokyo University of Science
(RIKADAI), Japan

Copper-Catalyzed Three-Component Coupling Reaction of Aryl Iodides, a Disilathiane, and Alkyl Benzoates Leading to a One-Pot Synthesis of Alkyl Aryl Sulfides

Paper

2323



Synthesis

Synthesis 2019, 51, 2331–2338
DOI: 10.1055/s-0037-1610868

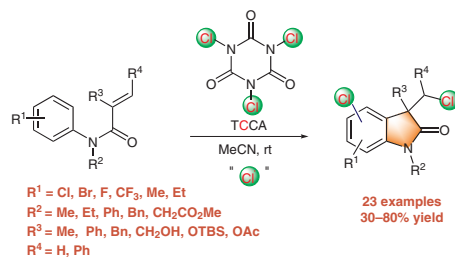
Y. Su*
L. Cao
Y. Shi
Y. Feng
W. Xue
G. Cao
K.-H. Wang
D. Huang
C. Huo
Y. Hu

Northwest Normal University,
P. R. of China

Trichloroisocyanuric Acid Induced Chlorine Radical Cascade Chlorination/Carbocyclization of Acrylamides: Constructing Chlorinated Oxindoles by C–Cl and C–C Bond-Forming Reactions

Paper

2331



- ✓ Chlorine-radical-induced cyclization
- ✓ Without metal or additional oxidant
- ✓ Efficient C–Cl and C–C bond formation

Synthesis

Synthesis 2019, 51, 2339–2350
DOI: 10.1055/s-0037-1610875

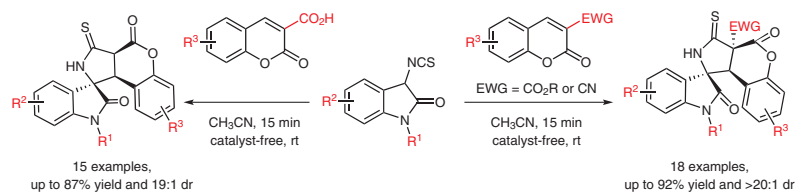
X. Zuo
S. Chen
S.-W. Xu
S.-Q. Chang
X.-L. Liu*
Y. Zhou
W.-C. Yuan

Guizhou University,
P. R. of China

Highly Efficient, Catalyst-Free, Diastereoselective, Diversity-Oriented Synthesis of Dihydrocoumarin–Pyrrolidine–Spirooxindoles Bearing Three Contiguous Stereocenters

Paper

2339



Synthesis

Synthesis 2019, 51, 2351–2358
DOI: 10.1055/s-0037-1610695

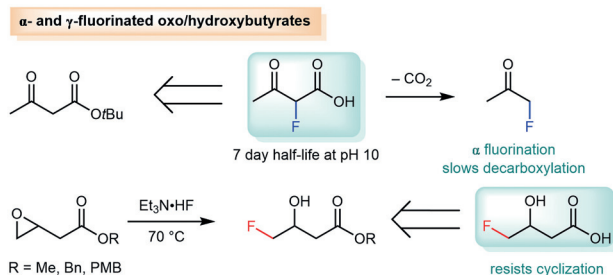
S. J. Mattingly
F. Wuest*
R. Schirmacher*

University of Alberta, Canada

Synthesis of 2-Fluoroacetoacetic Acid and 4-Fluoro-3-hydroxybutyric Acid

Paper

2351



Synthesis

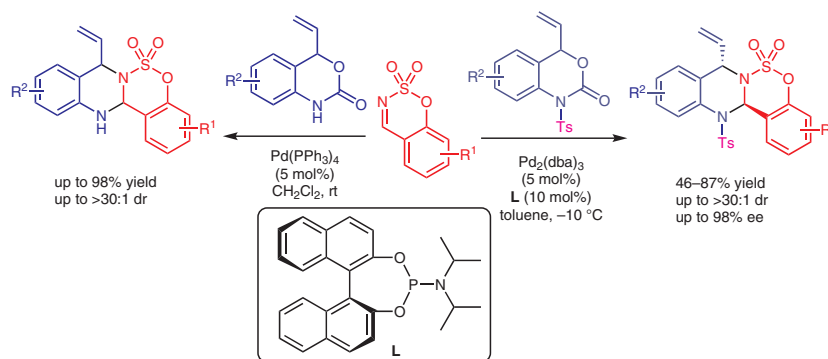
Synthesis 2019, 51, 2359–2370
DOI: 10.1055/s-0037-1610685

D. Mun
E. Kim
S.-G. Kim*
Kyonggi University,
Republic of Korea

Palladium-Catalyzed Decarboxylative [4+2] Cycloaddition of Vinyl Benzoxazinanones with Cyclic *N*-Sulfinamides: Stereoselective Synthesis of Benzosulfamidate-Fused Tetrahydroquinazolines

Paper

2359



Synthesis

Synthesis 2019, 51, 2371–2378
DOI: 10.1055/s-0037-1610696

R. Chatterjee
S. Santra
G. V. Zyryanov
A. Majee*

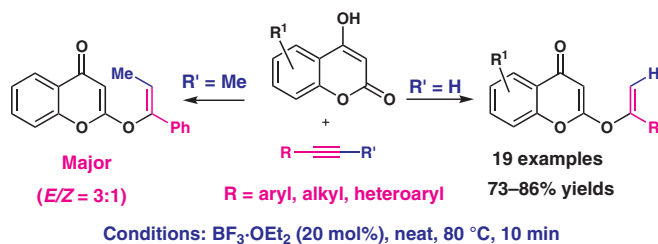
Visva-Bharati (A Central University), India

Vinylation of Carbonyl Oxygen in 4-Hydroxycoumarin: Synthesis of Heteroarylated Vinyl Ethers

Paper

2371

O-Vinylation of 4-Hydroxycoumarin



Synthesis

Synthesis 2019, 51, 2379–2386
DOI: 10.1055/s-0037-1610698

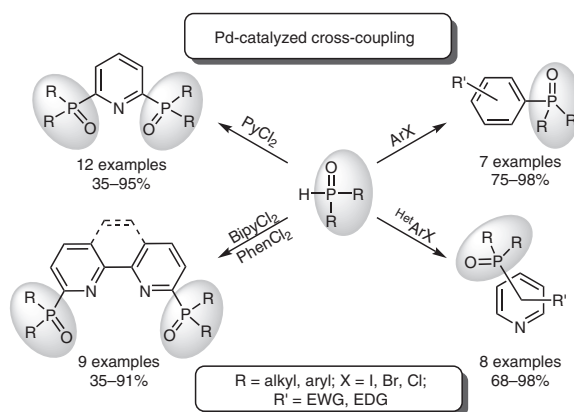
G. G. Zakirova
D. Y. Mladentsev
N. E. Borisova*

Lomonosov Moscow State University, Russian Federation

Palladium-Catalyzed C–P Cross-Coupling between (Het)aryl Halides and Secondary Phosphine Oxides

Paper

2379



Synthesis

Synthesis 2019, 51, 2387–2396
DOI: 10.1055/s-0037-1612253

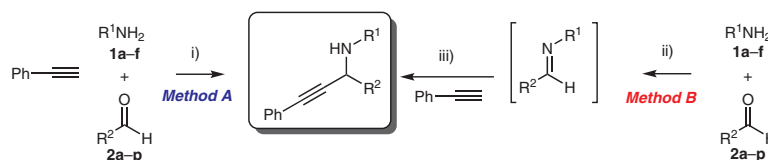
C. Cimarelli*
F. Navazio
F. V. Rossi
F. Del Bello
E. Marcantoni

University of Camerino, Italy

Activation of Primary Amines by Copper(I)-Based Lewis Acid Promoters in the Solventless Synthesis of Secondary Propargylamines

Paper

2387



Method A: 9 examples up to 62% yield
i) CuSO_4 (30 mol%)/ NaI (60 mol%),
 PhCOOH (5 mol%), solventless, N_2 , 80 °C

Method B: 20 examples up to 95% yield
ii) MgSO_4 , $\text{CeCl}_3 \cdot 7\text{H}_2\text{O}$ (30 mol%), solventless, N_2 , r.t., 0.25 h
iii) CuI (30 mol%), solventless, N_2 , 40 °C

Synthesis

A Facile and Efficient Approach for the Synthesis of 3-Aryl-4-hydroxy-1,3-thiazolidin-2-ones

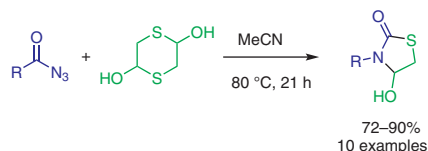
Paper

2397

Synthesis 2019, 51, 2397–2401
DOI: 10.1055/s-0037-1610862

Y. Zhu[§]
Q. Wang[§]
H. Luo
Z. Wang
G. Zhang*
Y. Yu*

Zhejiang University,
P. R. of China



Synthesis

One-Pot Three-Component Synthesis of Pyrrolidin-2-ones via a Sequential Wittig/Nucleophilic Addition/Cyclization Reaction

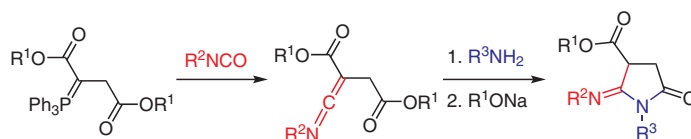
Paper

2402

Synthesis 2019, 51, 2402–2408
DOI: 10.1055/s-0037-1612279

Z.-R. Guan
S. Liu
Z.-M. Liu
M.-W. Ding*

Central China Normal University,
P. R. of China



Synthesis

The Quest for Double Vicinal C–H Bond Activation on the ($\eta^5:\eta^5$ -Fulvalene)diiridium Platform: Syntheses and Structures of ($\eta^5:\eta^5$ -Fulvalene) $\text{Ir}_2(\text{ortho-}\mu\text{-C}_6\text{H}_4)(\text{CO})_2$ (*Ir-Ir*) and Related Complexes

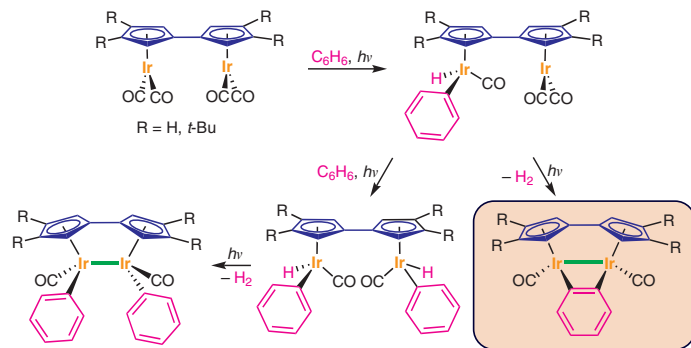
Paper

2409

Synthesis 2019, 51, 2409–2429
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J. Baumgartner
R. G. Bergman*
B. Kayser
T. P. Klupinski
Y. K. Park
K. P. C. Vollhardt*
M. J. West
B. Zhu

University of California at
Berkeley, USA



F. Fache*
I. de Azpiazu
B. Pelotier
O. Piva
C. Gozzi

Université Claude Bernard Lyon
1, France

Green Access to α -Haloalkyl and α -Halobenzyl Esters, Versatile Intermediates for the One-Pot Two-Step Synthesis of O,O' -Diacyl Acetals Using Zinc-Based Ionic Liquid Catalyst

