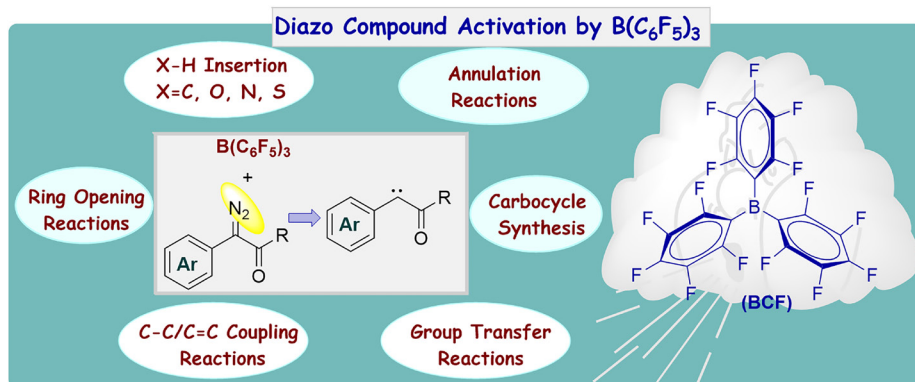


Synthesis

Reviews and Full Papers in Chemical Synthesis

December 1, 2023 • Vol. 55, 3875–4048



Activation of Diazo Compounds by Fluorinated Triarylborane Catalysts
M. Pramanik, R. L. Melen

23

Synthesis

Synthesis **2023**, 55, 3875–3894
DOI: 10.1055/a-2096-4302

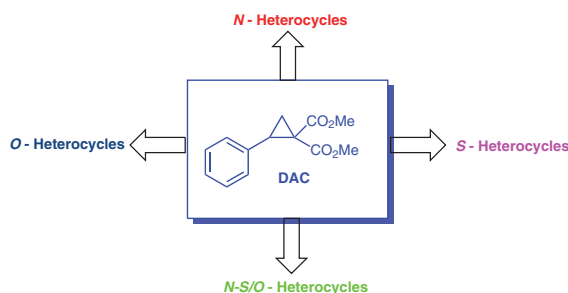
A. Deepthi*
M. C. B.
M. Mohan

University of Kerala, India

Synthesis of Heterocycles from Donor-Acceptor Cyclopropanes: A Five-Year Recap

Review

3875



Synthesis

Synthesis **2023**, 55, 3895–3905
DOI: 10.1055/a-2119-5390

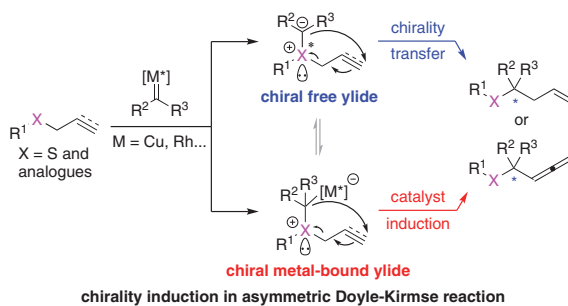
C.-Y. Shi
B. Zhou
M.-Y. Teng*
L.-W. Ye*

Yunnan Normal University,
P. R. of China

Recent Advances in the Asymmetric Doyle–Kirmse Reaction

Short Review

3895



Synthesis

Activation of Diazo Compounds by Fluorinated Triarylborane Catalysts

Short Review

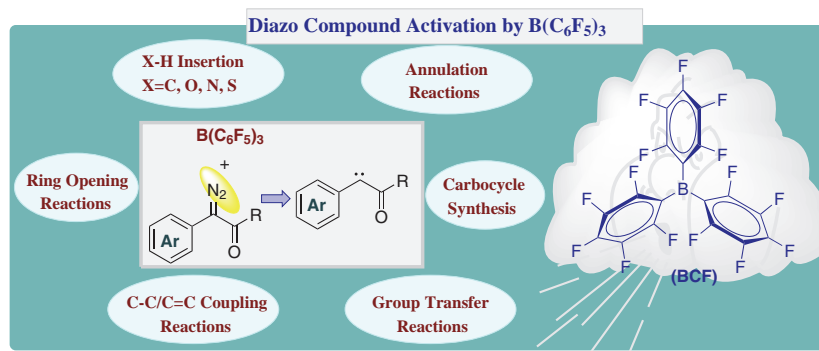
Synthesis 2023, 55, 3906–3918
DOI: 10.1055/a-2118-3046

M. Pramanik
R. L. Melen*

Cardiff University, Translational
Research Hub, UK

OPEN
ACCESS

3906



Synthesis

Platinum(II) Complexes with Phenylpyridine, Benzo[*h*]quinoline, and NHC Ligands: Exploration of Ligand Effects on Photophysical Properties

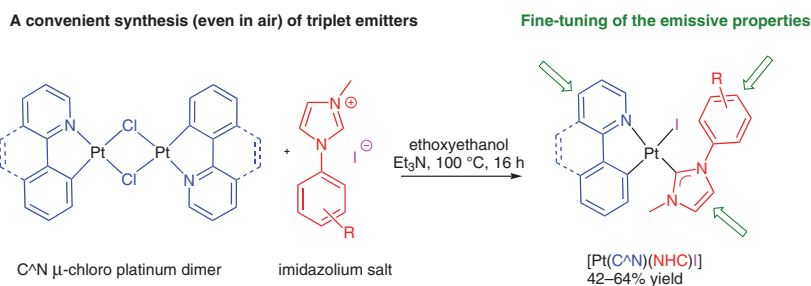
Feature

3919

Synthesis 2023, 55, 3919–3926
DOI: 10.1055/s-0042-1751482

P. Pinter
J. Soellner
T. Strassner*

TU Dresden, Germany



Synthesis

Studies on Selective Metalation and Cross-Coupling Reactions of Oxazoles

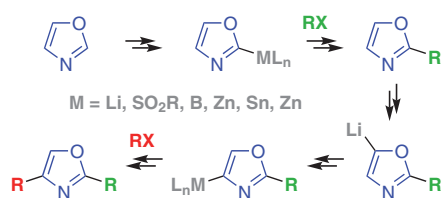
Feature

3927

Synthesis 2023, 55, 3927–3946
DOI: 10.1055/a-2126-0720

R. Wagner
P. Wollnitzke
S. Essig
J. P. Götz
D. Menche*

Kekulé-Institut für Organische
Chemie und Biochemie der Uni-
versität Bonn, Germany



Synthesis

Synthesis 2023, 55, 3947–3953
DOI: 10.1055/s-0042-1751502

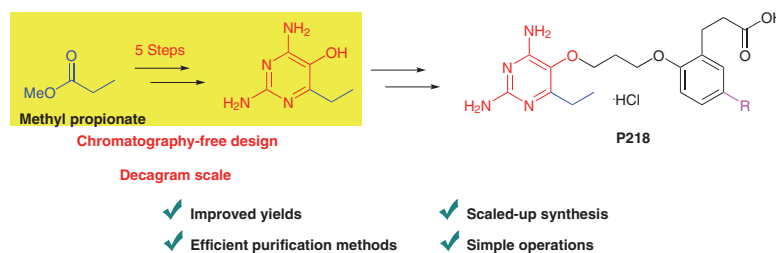
O. Vorasin
T. Phumjan
S. Saepua
D. Iwaniuk
S. Kamchonwongpaisan
Y. Yuthavong
C. Thongpanchang
N. Srimongkolpithak*

National Science and Technology
Development Agency, Thailand

Development of a Practical Synthetic Method for Clinical Candidate 3-(2-{3-[(2,4-Diamino-6-ethylpyrimidin-5-yl)oxy]propoxy} phenyl)propanoic acid (P218) and Its Hydroxylated Metabolites

PSP

3947



Synthesis

Synthesis 2023, 55, 3954–3960
DOI: 10.1055/a-2152-0355

L.-W. Wei
Z.-C. Ma
Z.-Q. Wang
Y. Zhao*
Y. Huang*

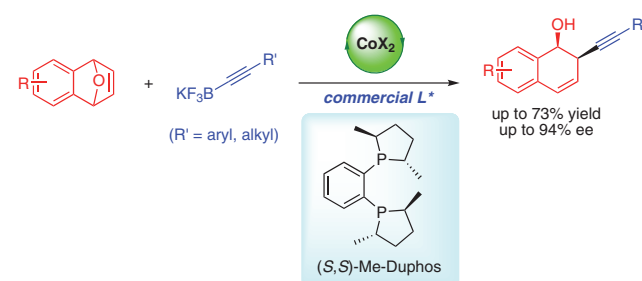
Xi'an Jiaotong University,
P. R. of China
National University of Singapore,
Singapore

Cobalt-Catalyzed Enantioselective Alkynylation of Oxabicyclic Alkenes

Paper

OPEN ACCESS

3954



- Sustainable cobalt catalytic system
- High efficiency and high enantioselectivity
- Simple operation
- Mild reaction conditions

Synthesis

Synthesis 2023, 55, 3961–3968
DOI: 10.1055/a-2149-4214

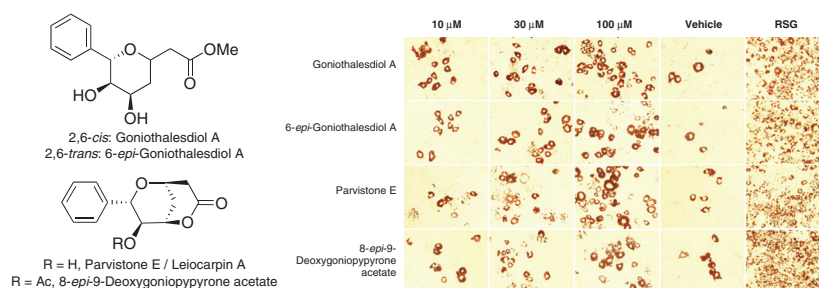
Z. Zhao
R. Pan
Q. Lv
X. Xie*
J. Liu*
Y. Du

Research Center for Eco-Environmental
Sciences, Chinese Academy
of Science, P. R. of China

Divergent Synthesis and Biological Evaluation of 2,6-Disubstituted Tetrahydropyran-Containing Natural Products: Parvistone E, Goniotaldesdiol A, 6-*epi*-Goniotaldesdiol A, and 8-*epi*-9-Deoxygoniopyrpyrone

Paper

3961



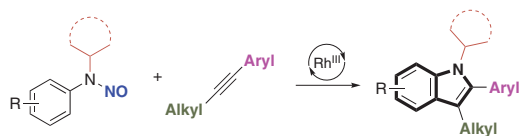
Synthesis

Synthesis **2023**, *55*, 3969–3980
DOI: 10.1055/s-0041-1738453

Y. Chang
T. Hou
Y. Dong*
H. Xu*

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

Rhodium-Catalyzed Regioselective Synthesis of *N*-Secondary Alkyl Indoles via Intermolecular Cyclization of *N*-Nitrosoanilines and Unsymmetrical Alkynes



- A broad substrate scope
- High regioselectivity
- Application for synthesis of indole drugs
- Late-stage indoylation of drug molecules

Synthesis

Synthesis **2023**, *55*, 3981–3990
DOI: 10.1055/a-2128-5335

G. Kumar
S. Ray
G. Shukla
M. S. Singh*

Banaras Hindu University,
India

One-Pot Synthesis of Quinoxaline *N*-Oxides via Radical-Mediated Cyclization of Ketene *N,S*-Acetals



- Catalyst- & additive-free tandem reaction
- Inter- & intramolecular (Csp²)–H functionalization
- Two C–N bonds formation with NO nitrogen
- High FG tolerance & large-scale synthesis
- Expansion of quinoxaline *N*-oxides chemical space

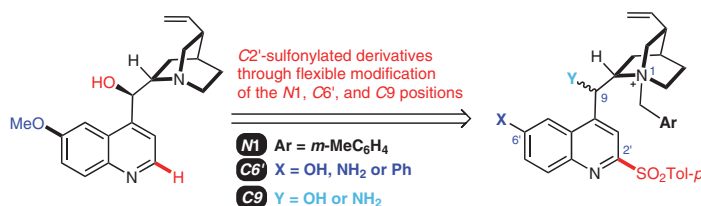
Synthesis

Synthesis **2023**, *55*, 3991–3999
DOI: 10.1055/a-2135-9037

C.-Y. Gu
J. Zhou
D.-X. Tan*
F.-S. Han*

Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, P. R. of China

A Concise and Flexible Synthesis of C2'-Sulfonylated Quinine Derivatives



Synthesis

Synthesis 2023, 55, 4000–4010
DOI: 10.1055/a-2147-2788

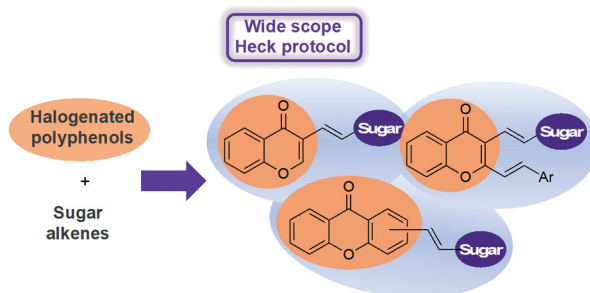
S. M. Tomé
R. G. Soengas*
A. M. S. Silva*

University of Aveiro, Portugal
University of Oviedo, Spain

Application of the Heck Reaction for the Synthesis of C-Glycosyl Phenolic Compounds

Paper

4000



Synthesis

Synthesis 2023, 55, 4011–4019
DOI: 10.1055/a-2156-7470

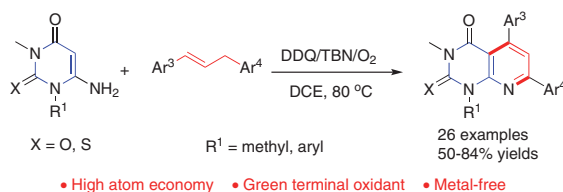
D. Cheng*
H. Xia
H. Gu
Y. Wang
J.-H. Li*
X. Xu*

Zhejiang University of Technology, P. R. of China

Synthesis of Pyrido[2,3-*d*]pyrimidines Catalyzed by 2,3-Dichloro-5,6-dicyano-1,4-benzoquinone (DDQ)/*tert*-Butyl Nitrite (TBN)/O₂

Paper

4011



Synthesis

Synthesis 2023, 55, 4020–4024
DOI: 10.1055/a-2145-5470

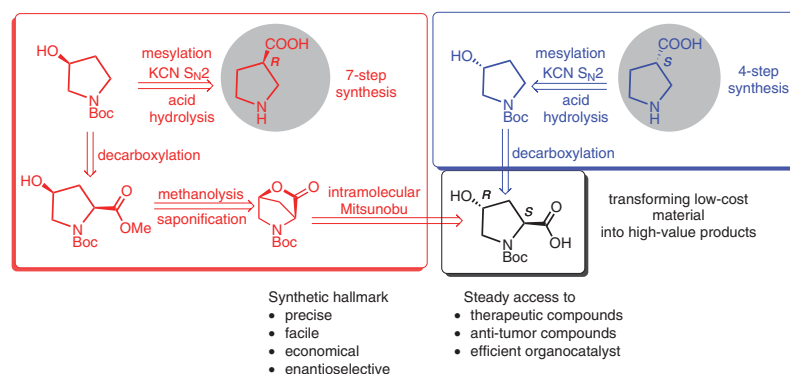
S. D. Chandra
E. W. F. Fung
D. M. Perrin*

The University of British Columbia, Canada

Efficient Syntheses of (*S*)- and (*R*)-β-Proline

Paper

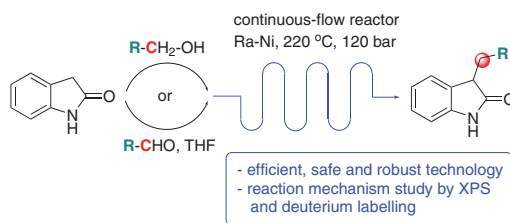
4020



A. Mándoki
G. Orsy
Z. Pászti
M. Porcs-Makkay
D. Bogdán
G. Simig
I. Mándity*
B. Volk*

Research Centre for Natural Sciences, Hungary
Egis Pharmaceuticals Plc., Hungary

Continuous-Flow Regioselective Reductive Alkylation of Oxindole with Alcohols and Aldehydes in a Fast and Economical Manner



D. D. Komolova
Y. A. Pronina
S. V. Lozovskiy
S. I. Selivanov
A. I. Ponyaev
A. S. Filatov
V. M. Boitsov
A. V. Stepakov*

Saint-Petersburg State University, Russian Federation

Palladium-Catalyzed Oxidative Cycloaddition of Quinazoline-2,4(1*H*,3*H*)-diones and Diarylalkynes via C–H/N–H Activation

