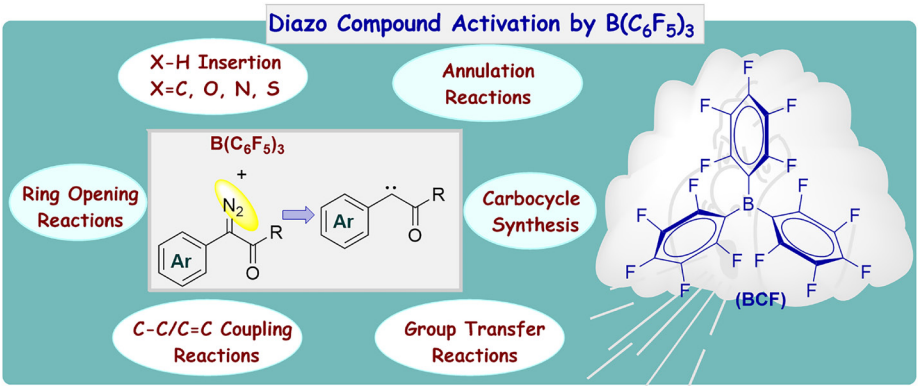
Synthesis

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

Thieme

Synthesis

Reviews and Full Papers in Chemical Synthesis

2023
Vol. 55, No. 23
December I

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Synthesis

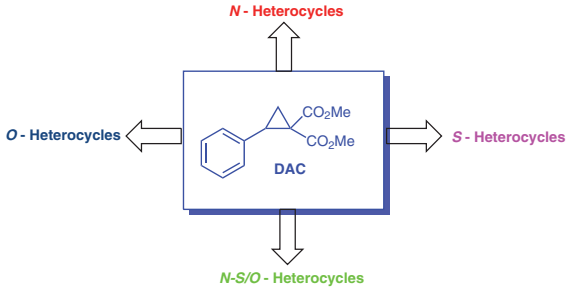
Synthesis of Heterocycles from Donor-Acceptor Cyclopropanes: A Five-Year Recap

Review

3875

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

A. Deepthi*
M. C. B.
M. Mohan
University of Kerala, India



Synthesis

Recent Advances in the Asymmetric Doyle–Kirmse Reaction

Short Review

3895

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

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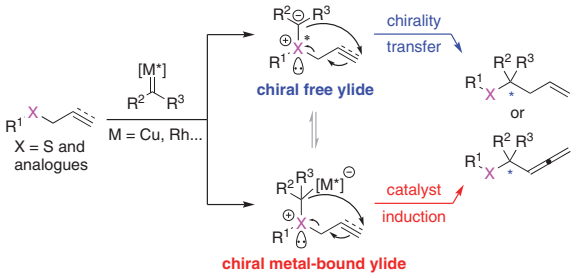

chirality induction in asymmetric Doyle-Kirmse reaction

Synthesis

Activation of Diazo Compounds by Fluorinated Triarylborane Catalysts

Short Review

OPEN ACCESS

3906

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

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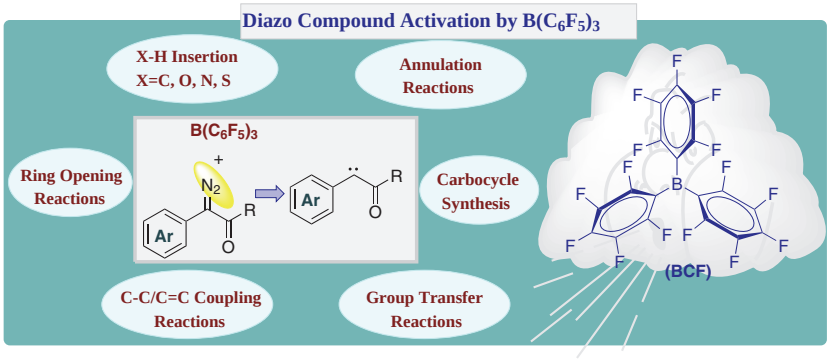

Synthesis

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*
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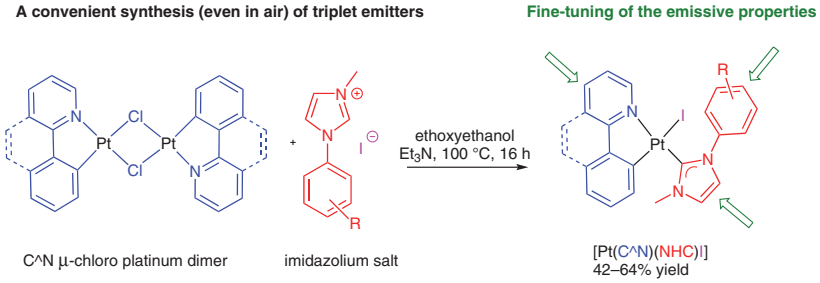

Synthesis

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
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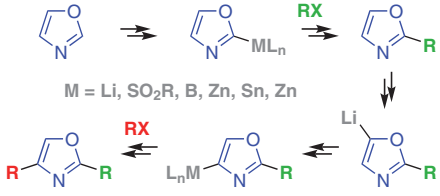

Synthesis

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

O. Vorasin
T. Phumjan
S. Saepua
D. Iwaniuk
S. Kamchonwongpaisan
Y. Yuthavong
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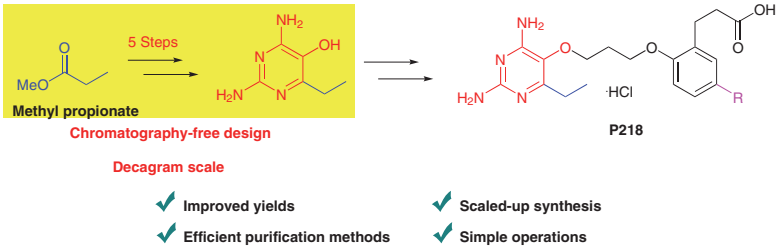
Development of a Practical Synthetic Method for Clinical Candidate 3-(2-[3-[(2,4-Diamino-6-ethylpyrimidin-5-yl)oxy]propoxy} phenyl)propanoic acid (P218) and Its Hydroxylated Metabolites

PSP

3947



Synthesis

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

L.-W. Wei
Z.-C. Ma
Z.-Q. Wang
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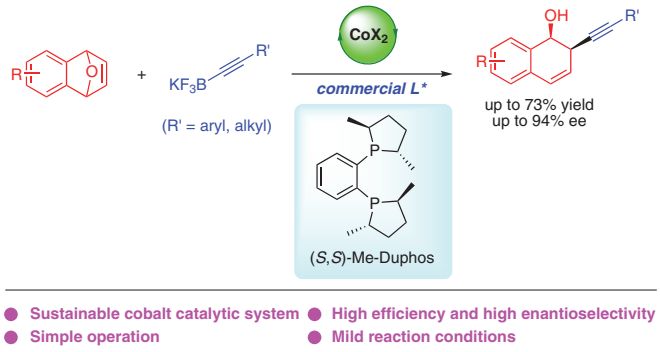
National University of Singapore, Singapore

Cobalt-Catalyzed Enantioselective Alkynylation of Oxabicyclic Alkenes

Paper

OPEN ACCESS

3954



Synthesis

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

Z. Zhao
R. Pan
Q. Lv
X. Xie*
J. Liu*
Y. Du
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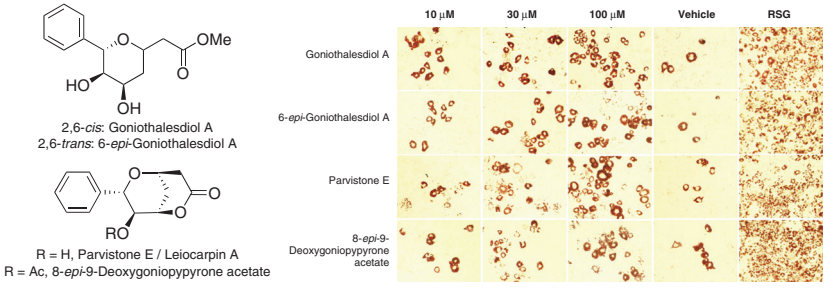
Divergent Synthesis and Biological Evaluation of 2,6-Disubstituted Tetrahydropyran-Containing Natural Products: Parvistone E, Goniothalesdiol A, 6-*epi*-Goniothalesdiol A, and 8-*epi*-9-Deoxygoniopypyrone

Paper

3961



Synthesis

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

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

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

Paper

3969

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

Synthesis

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

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M. S. Singh*

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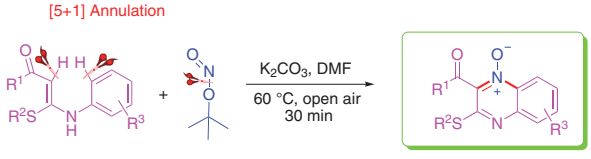
One-Pot Synthesis of Quinoxaline *N*-Oxides via Radical-Mediated Cyclization of Ketene *N*,*S*-Acetals

Paper

3981



- Catalyst- & additive-free tandem reaction
- Inter- & intramolecular (Csp^2)–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*

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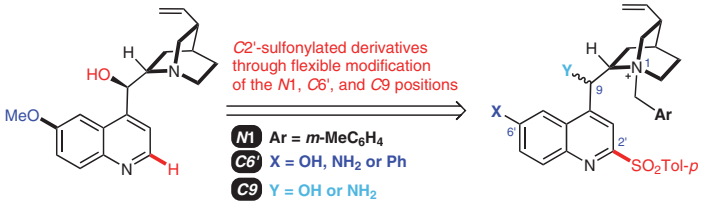
A Concise and Flexible Synthesis of C2′-Sulfonylated Quinine Derivatives

Paper

3991



Synthesis

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

Paper

4000

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

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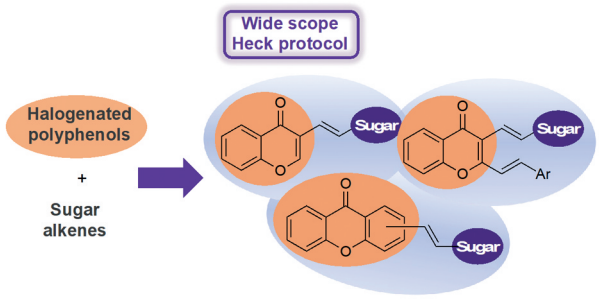

Synthesis

Synthesis of Pyrido[2,3-*d*]pyrimidines Catalyzed by 2,3-Dichloro-5,6-dicyano-1,4-benzoquinone (DDQ)/*tert*-Butyl Nitrite (TBN)/O_2

Paper

4011

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

D. Cheng*
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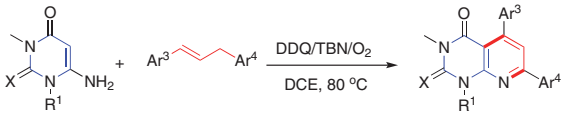

• High atom economy • Green terminal oxidant • Metal-free

Synthesis

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

Paper

4020

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

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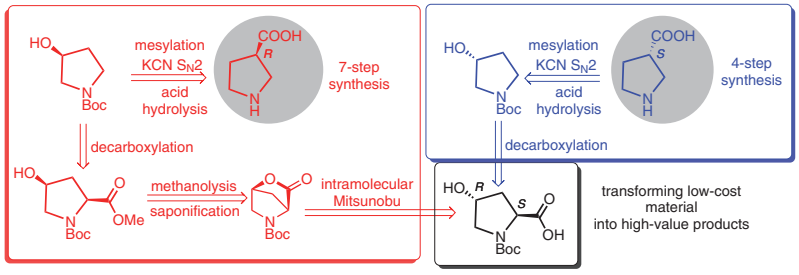

Synthetic hallmark
- precise
- facile
- economical
- enantioselective

Steady access to
- therapeutic compounds
- anti-tumor compounds
- efficient organocatalyst

Synthesis

Synthesis **2023**, *55*, 4025–4033
DOI: 10.1055/a-2122-4080

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Research Centre for Natural Sciences, Hungary
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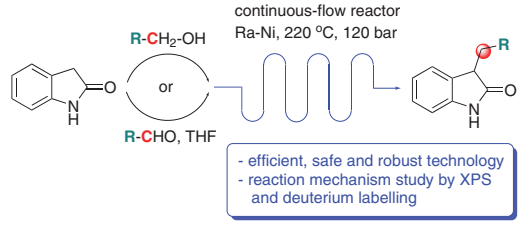
Continuous-Flow Regioselective Reductive Alkylation of Oxindole with Alcohols and Aldehydes in a Fast and Economical Manner



Synthesis

Synthesis **2023**, *55*, 4034–4048
DOI: 10.1055/a-2105-2850

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

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