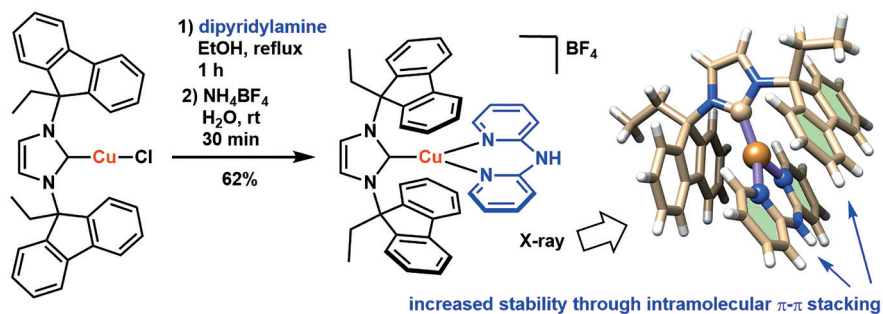


Synthesis

Reviews and Full Papers in Chemical Synthesis

May 19, 2021 • Vol. 53, 1683–1848



Stereochemical Control of Tricoordinate Copper(I) Complexes Based on *N*-(9-Alkyl-9-fluorenyl)-Substituted Heterocyclic Carbenes

H. Almallah, E. Brenner, D. Matt, C. Gourlaouen, M. Hissler

10

Synthesis

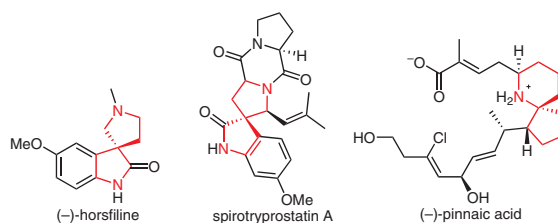
Synthesis 2021, 53, 1683–1705
DOI: 10.1055/a-1379-2312

M. P. Badart*
B. C. Hawkins*
University of Otago,
New Zealand

Synthetic Strategies to Access Heteroatomic Spirocentres Embedded in Natural Products

Review

1683



Synthesis

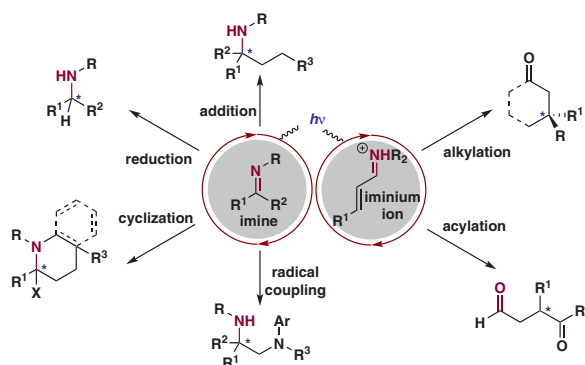
Synthesis 2021, 53, 1706–1718
DOI: 10.1055/a-1343-6541

J.-J. Zhao
H.-H. Zhang*
S. Yu*
Nanjing University, P. R. of China

Enantioselective Radical Functionalization of Imines and Iminium Intermediates via Visible-Light Photoredox Catalysis

Short Review

1706



Synthesis

Synthesis 2021, 53, 1719–1733
DOI: 10.1055/a-1344-2434

S. Zheng

Y. Hu

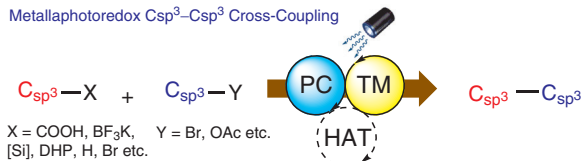
W. Yuan*

Huazhong University of Science
and Technology (HUST),
P. R. of China

Recent Advances in C(sp³)-C(sp³) Cross-Coupling via Metalla-photoredox Strategies

Short Review

1719

Metallaphotoredox C_{sp}³-C_{sp}³ Cross-Coupling

- ✓ Native nucleophiles instead of organometallics
- ✓ Broad substrate scope with diverse functionalities
- ✓ Mild reaction conditions with high selectivities
- ✓ Suitable for late-stage functionalization

Synthesis

Synthesis 2021, 53, 1734–1748
DOI: 10.1055/s-0040-1705995

W. Mazumdar

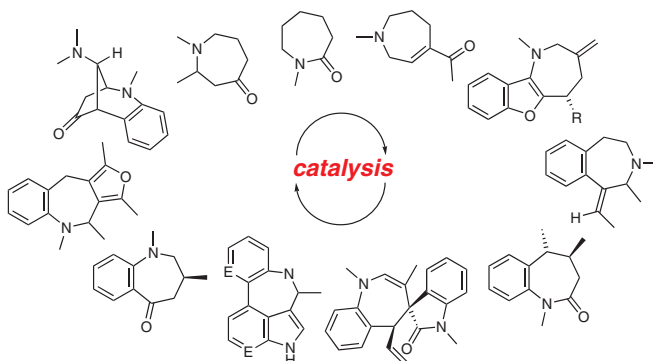
T. G. Driver*

University of Illinois at Chicago,
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Recent Advances in the Development of Catalytic Methods that Construct Medium-Ring Lactams, Partially Saturated Benzazepines and Their Derivatives

Short Review

1734



Synthesis

Synthesis 2021, 53, 1749–1759
DOI: 10.1055/s-0037-1610763

A. Sirvent

S. Hernández-Ibáñez

M. Yus*

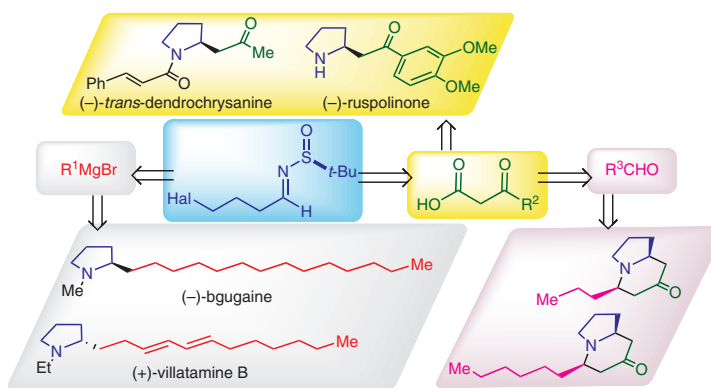
F. Foubelo*

Universidad de Alicante, Spain

Pyrrolidine and Indolizidine Alkaloids from Chiral *N*-*tert*-Butanesulfinyl Imines Derived from 4-Halobutanal

Feature

1749



Synthesis

Synthesis 2021, 53, 1760–1770
DOI: 10.1055/s-0040-1706639

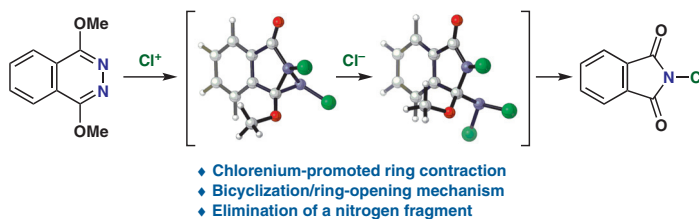
J. K. Im
I. Jeong
B. Yang
H. Moon
J.-H. Choi*
W.-j. Chung*

Gwangju Institute of Science and
Technology, Republic of Korea

N-Chlorinative Ring Contraction of 1,4-Dimethoxyphthalazines via a Bicyclization/Ring-Opening Mechanism

Paper

1760



Synthesis

Synthesis 2021, 53, 1771–1784
DOI: 10.1055/s-0040-1706101

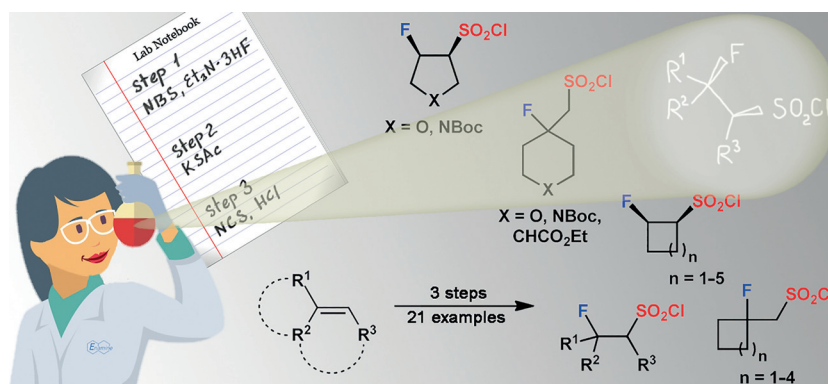
R. Gurbanov
A. Sokolov
S. Golovach
K. Melnykov
A. V. Dobrydnev
O. O. Grygorenko*

Enamine Ltd., Ukraine
Taras Shevchenko National Uni-
versity of Kyiv, Ukraine

Synthesis of sp³-Enriched β -Fluoro Sulfonyl Chlorides

Paper

1771



Synthesis

Synthesis 2021, 53, 1785–1794
DOI: 10.1055/s-0040-1706194

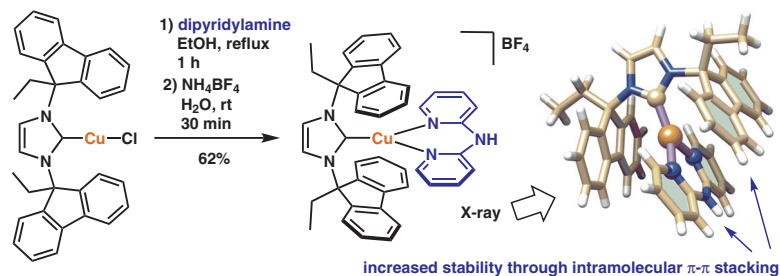
H. Almallah
E. Brenner*
D. Matt*
C. Gourlaouen
M. Hissler

Université de Strasbourg, France

Stereochemical Control of Tricoordinate Copper(I) Complexes Based on N-(9-Alkyl-9-fluorenyl)-Substituted Heterocyclic Carbenes

Paper

1785



Synthesis

Straightforward Route to γ -Sultams via Novel Tandem S_N /Michael Addition

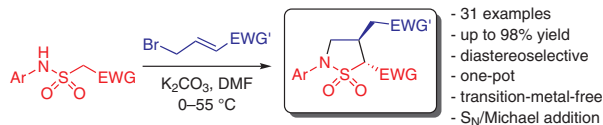
Paper

1795

Synthesis 2021, 53, 1795–1804
DOI: 10.1055/a-1343-9451

A. Klochkova
A. Bubyrev
D. Dar'in
O. Bakulina*
M. Krasavin
V. Sokolov

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Russian Federation



Synthesis

Straightforward Functionalization of Sulfur-Containing Peptides via 5- and 6-endo-dig Cyclization Reactions

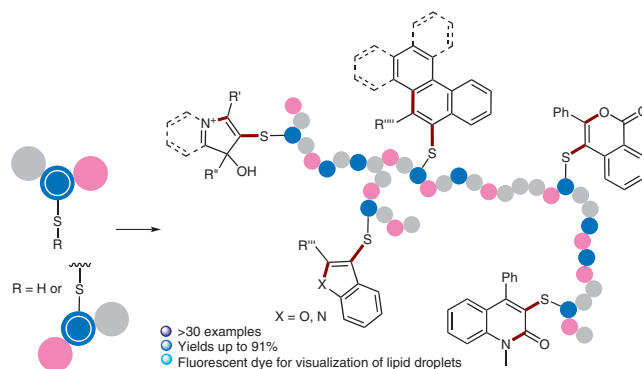
Paper

1805

Synthesis 2021, 53, 1805–1820
DOI: 10.1055/a-1343-5607

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P. Arsenyan*

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Synthesis

Construction of α -Alkylated Amines by Iridium Complex-Catalyzed One-Step Transfer Hydrogenation of C=C and C=N Bonds

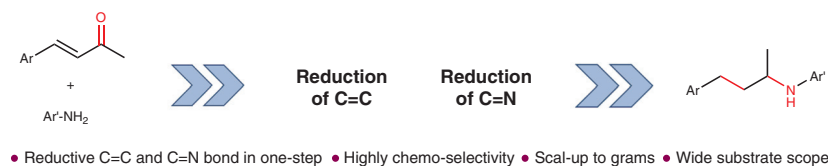
Paper

1821

Synthesis 2021, 53, 1821–1827
DOI: 10.1055/a-1344-2126

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X. Yang
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Synthesis

A Practical Procedure for Regioselective Bromination of Anilines

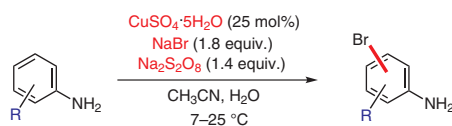
Paper

1828

Synthesis 2021, 53, 1828–1832
DOI: 10.1055/a-1441-3236

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R: NO₂, CO₂Me, CN, Ac, F, Cl, Br, etc.

12 examples, 44–98% yield

- Regioselective
- Mild conditions
- Ease of operation
- Wide substrate scope
- Use of cheap reagents
- Ecofriendly
- Robust and scalable

Synthesis

Controllable Lewis Base Catalyzed Michael Addition of α -Aminonitriles to Activated Alkenes: Facile Synthesis of Functionalized γ -Amino Acid Esters and γ -Lactams

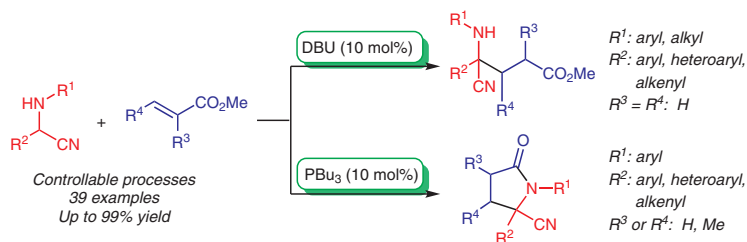
Paper

1833

Synthesis 2021, 53, 1833–1841
DOI: 10.1055/a-1337-4684

Z.-Y. He
H.-C. Jang
L.-S. Teng
Z.-L. Wei*
W.-W. Liao*

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Synthesis

Nickel-Catalyzed Intramolecular Nucleophilic Addition of Aryl Halides to Aryl Ketones for the Synthesis of Benzofuran Derivatives

Paper

1842

Synthesis 2021, 53, 1842–1848
DOI: 10.1055/s-0040-1706662

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