Synthesis

Reviews and Full Papers in Chemical Synthesis

June 1, 2023 • Vol. 55, 1613–1798

Special Issue

dedicated to Prof. Cristina Nevado, recipient of the 2021 Dr. Margaret Faul Women in Chemistry Award

Editor: Corinna Schindler,
Guest editors: Margaret Faul, Alois Fürstner

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Thieme

Synthesis

Reviews and Full Papers in Chemical Synthesis

2023
Vol. 55, No. 11
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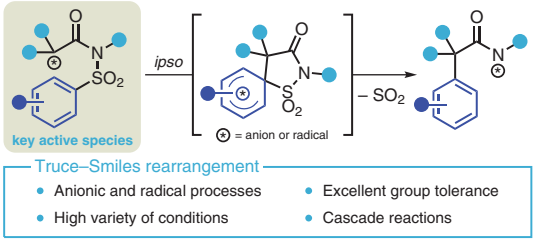


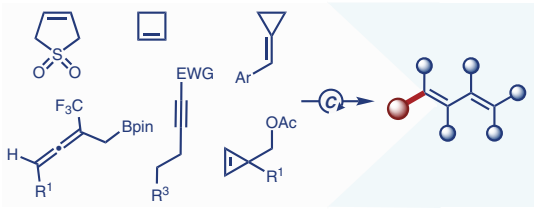
Synthesis

Synthesis **2023**, *55*, 1642–1651
DOI: 10.1055/a-1924-2564

Catalytic Dienylation: An Emergent Strategy for the Stereoselective Construction of Conjugated Dienes and Polyenes

Short Review

J. Ahmed
G. C. Haug
V. D. Nguyen
A. Porey
R. Trevino
O. V. Larionov*
The University of Texas at San Antonio, USA



Synthesis

Synthesis **2023**, *55*, 1652–1661
DOI: 10.1055/a-1966-4974

Azidation with Hypervalent Iodine Reagents

Short Review

R. Simonet-Davin
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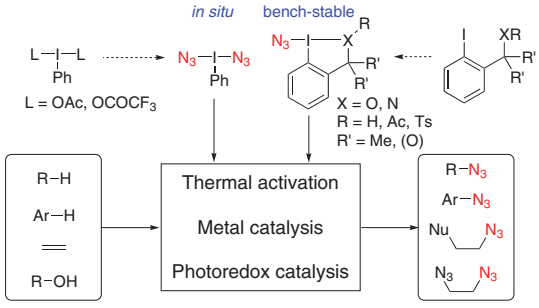

Synthesis

Synthesis **2023**, *55*, 1662–1670
DOI: 10.1055/a-1878-7795

Synthetic Strategies Towards the Meroterpenoids Cochlearols A and B from *Ganoderma cochlear*

Short Review

S. A. Chamness
E. F. Traficante
T. R. Vogel
C. S. Schindler*
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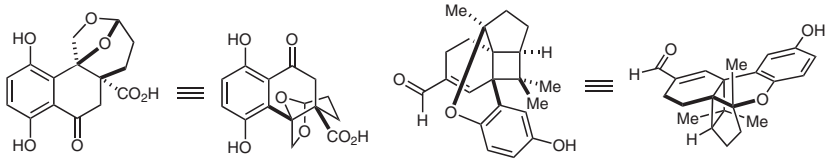

cochlearol A cochlearol B

Synthesis

Synthetic Studies towards Pyrido[1,2-*a*]azepine *Stemona* Alkaloids

Paper

1671

Synthesis **2023**, *55*, 1671–1689
DOI: 10.1055/a-1777-2477

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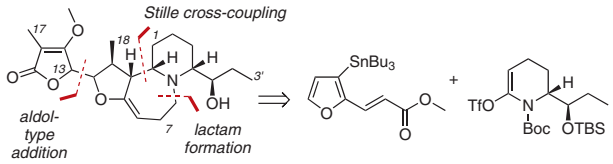

Synthesis

Versatile Synthesis of Trisphosphines Bearing Phenylene and Vinylene Backbones Useful for Metal Catalysis and Materials Applications

Paper

1690

Synthesis **2023**, *55*, 1690–1699
DOI: 10.1055/a-1970-4520

T. Doba
S. Fukuma
R. Shang*
E. Nakamura*
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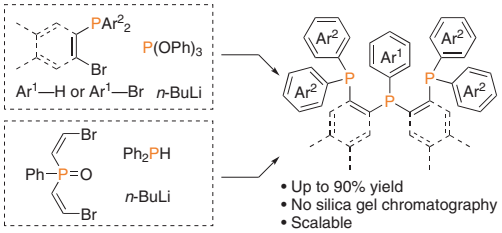

Synthesis

A Seven-Step Total Synthesis of (–)-Thebaine

Paper

1700

Synthesis **2023**, *55*, 1700–1705
DOI: 10.1055/a-1948-3335

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P. Lan
M. G. Banwell*
L. V. White*
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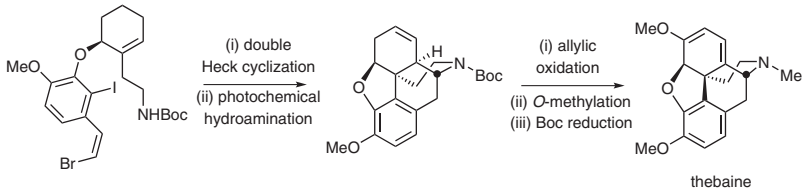
Guangdong Medical University, P. R. of China



Synthesis

Synthesis **2023**, *55*, 1706–1713
DOI: 10.1055/a-1948-5493

P. Zebrowski
K. Röser
D. Chrenko
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M. Waser*
Johannes Kepler University Linz, Austria

Enantioselective β-Selective Addition of Isoxazolidin-5-ones to Allenoates Catalyzed by Quaternary Ammonium Salts

Paper

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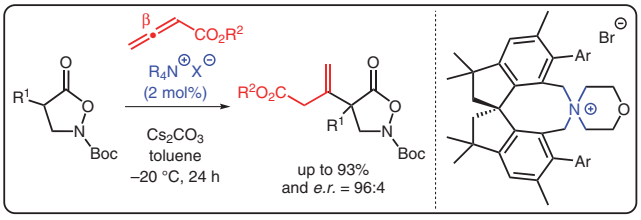

Synthesis

Synthesis **2023**, *55*, 1714–1723
DOI: 10.1055/s-0042-1751383

F. Seoane-Carabel
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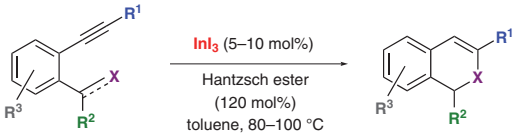
Synthesis of 1*H*-Isochromenes and 1,2-Dihydroisoquinolines by Indium(III)-Catalyzed Cycloisomerization of *ortho*-(Alkynyl)benzyl Derivatives

Paper



X = OH, O, NHTs, NPMP
R^1 = alkyl, aryl, alkenyl
R^2 = H, alkyl, R^3 = CH_3, CF_3

26 examples
Yields up to 97%

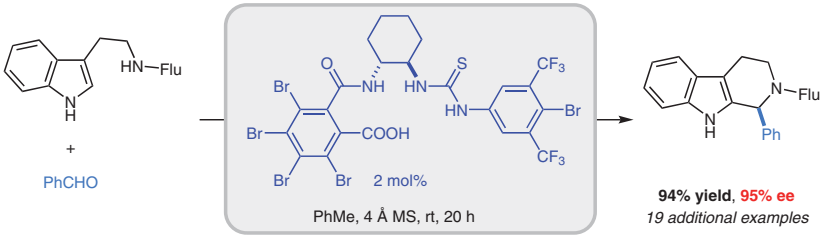
Synthesis

Synthesis **2023**, *55*, 1724–1735
DOI: 10.1055/a-1970-4452

A. Adili
A. V. Sole
B. Das
M. E. Matter
D. Seidel*
University of Florida, USA

N-Fluorenyltryptamines as a Useful Platform for Catalytic Enantioselective Pictet–Spengler Reactions

Paper



94% yield, **95% ee**
19 additional examples

Synthesis

Synthesis **2023**, *55*, 1736–1743
DOI: 10.1055/a-1959-1930

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R. Hunter
W. F. Petersen*
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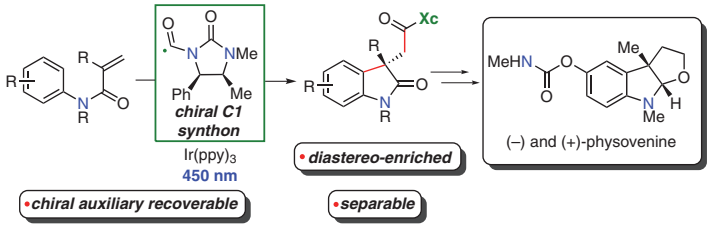
Chiral Acyl Radicals Generated by Visible Light Enable Stereoselective Access to 3,3-Disubstituted Oxindoles: Application toward the Synthesis of (–)- and (+)-Physovenine

Paper

1736



Synthesis

Synthesis **2023**, *55*, 1744–1751
DOI: 10.1055/a-1970-4584

S. Koyama
F. Takahashi
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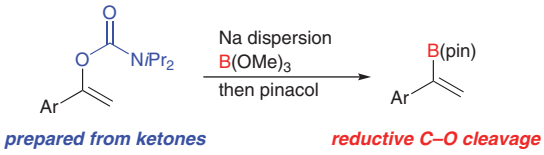
Borylation of Alkenyl Carbamates by Means of Sodium Metal

Paper

1744



Synthesis

Synthesis **2023**, *55*, 1752–1763
DOI: 10.1055/a-1850-3687

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B. Zhou
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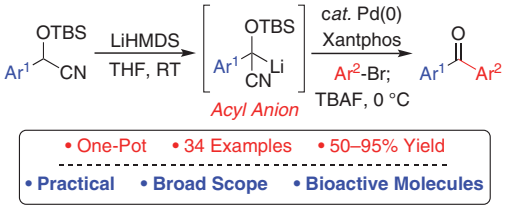
Central South University, Canada

Palladium-Catalyzed Cross-Coupling of Cyanohydrins with Aryl Bromides: Construction of Biaryl Ketones

Paper

1752



Synthesis

Synthesis **2023**, *55*, 1764–1769
DOI: 10.1055/a-1988-6052

L. Finck
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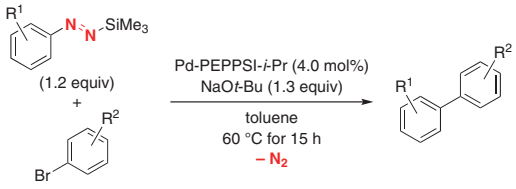
Palladium-Catalyzed Denitrogenative Cross-Coupling of Silicon-Masked, Aryl-Substituted Diazenes and Aryl Bromides

Paper

1764



Synthesis

Synthesis **2023**, *55*, 1770–1782
DOI: 10.1055/a-1993-6899

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Control over Stereogenic N–N Axes by Pd-Catalyzed 5-*endo*-Hydroaminocyclizations

Paper

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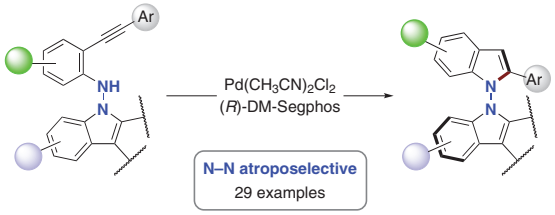
1770



Synthesis

Synthesis **2023**, *55*, 1783–1791
DOI: 10.1055/s-0042-1751424

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Visible-Light-Mediated Regioselective Chlorosulfonylation of Acrylamides

Paper

1783

Synthesis

Anti-Markovnikov Hydrogermylation of Alkenes via Lewis Acid Catalysis

Paper

1792

Synthesis **2023**, *55*, 1792–1798
DOI: 10.1055/a-2036-3868

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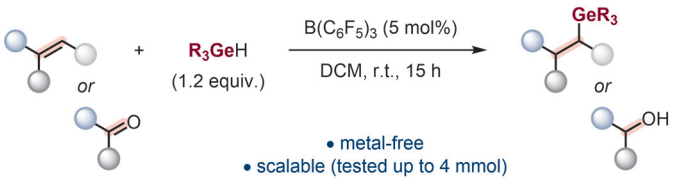

- metal-free
- scalable (tested up to 4 mmol)
- electron-rich and -poor alkenes, ketones or aldehydes