

Synthesis

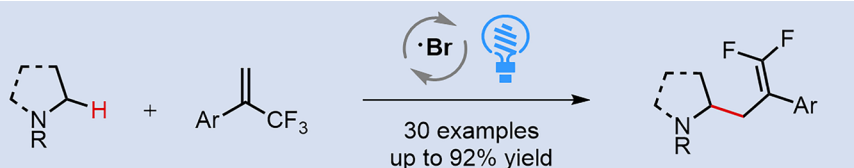
Reviews and Full Papers in Chemical Synthesis

June 4, 2024 • Vol. 56, 1657–1814

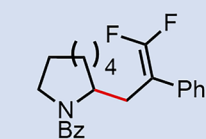
Special Topic

New Trends in Organic Synthesis from Chinese Chemists

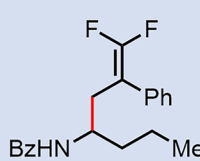
Editor: Hongli Bao



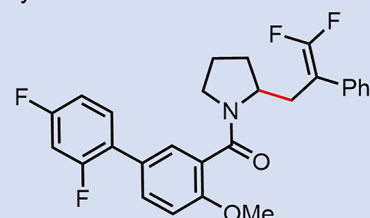
selected examples:



5- to 8-membered
azacycles



acyclic system



medicinally relevant molecule

Photoredox-Catalyzed $C(sp^3)$ -H Difluoroallylation of Amides

Y. Lin, X. Shu, H. Huo

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Synthesis

Synthesis 2024, 56, 1657–1676
DOI: 10.1055/a-2288-7553

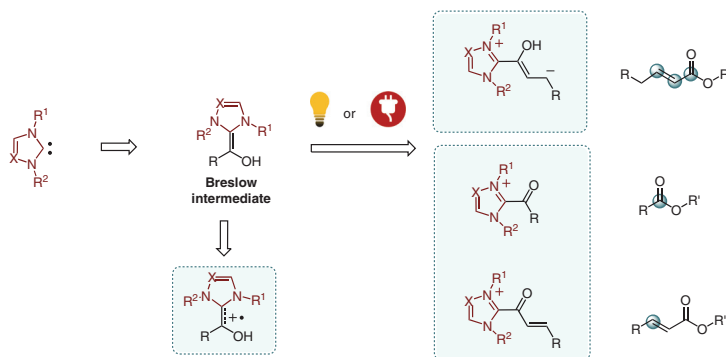
H.-R. Yu
Y.-M. Pan
F.-H. Cui

H.-T. Tang*
Guangxi Normal University,
P. R. of China

NHC-Mediated Photochemical/Electrochemical Synthesis of Carbonyl Compounds

Review

1657



Synthesis

Synthesis 2024, 56, 1677–1686
DOI: 10.1055/a-2133-1963

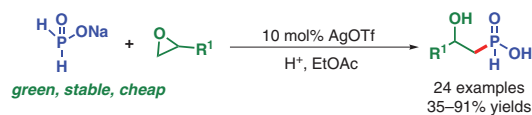
D.-W. Qian
J. Yang
G.-W. Wang
S.-D. Yang*

Lanzhou University,
P. R. of China

Synthesis of β -Hydroxyhydrophosphonic Acids from Inorganic Sodium Hypophosphite

Feature

1677



Synthesis

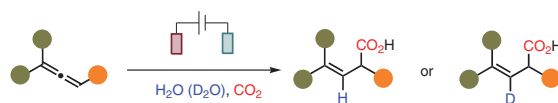
Electrochemical Hydro- and Deuteriocarboxylation of Allenes

Feature

Synthesis **2024**, *56*, 1687–1694
DOI: 10.1055/a-2200-5332

C.-L. Ding
J.-S. Zhong
H. Yan*
K.-Y. Ye*

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1687

Synthesis

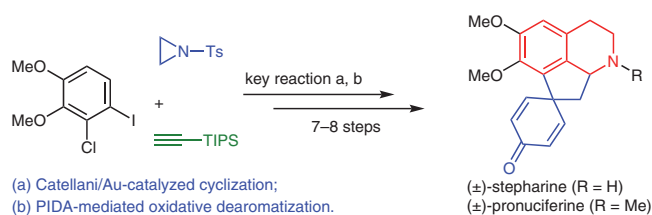
A Concise Total Synthesis of (\pm)-Stepharine and (\pm)-Pronuciferine

Feature

Synthesis **2024**, *56*, 1695–1701
DOI: 10.1055/a-1984-0755

R. Chen
S. Jia
Y. Man
H.-G. Cheng*
Q. Zhou*

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1695

Synthesis

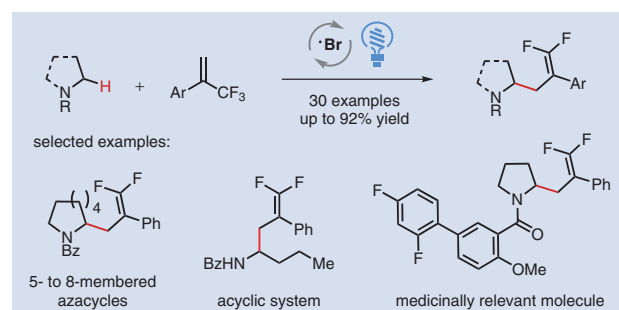
Photoredox-Catalyzed $\text{C}(\text{sp}^3)\text{-H}$ Difluoroallylation of Amides

Paper

Synthesis **2024**, *56*, 1702–1710
DOI: 10.1055/s-0043-1763660

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X. Shu
H. Huo*

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1702

Synthesis

Visible-Light-Enabled Radical Alkynylation of Activated Alkenes

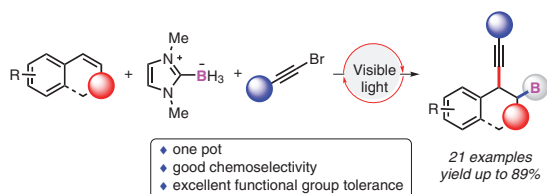
Paper

1711

Synthesis 2024, 56, 1711–1718
DOI: 10.1055/s-0042-1751512

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S. Yao
J. Xie*

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Synthesis

Boryl Radical-Promoted Deoxygenative Alkylation of Benzyl Acetates

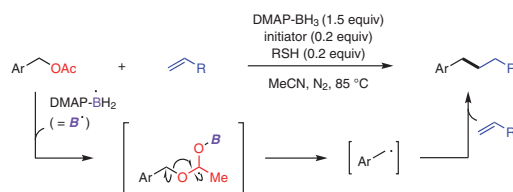
Paper

1719

Synthesis 2024, 56, 1719–1726
DOI: 10.1055/s-0042-1751463

N.-N. Liu
X.-C. Wan
L.-W. Hui
F.-L. Zhang*
Y.-F. Wang*

University of Science and Technology of China, P. R. of China



Synthesis

FSO₂ Radical-Initiated Photoredox Cyclization of 4-Enoic Acids to Functionalized γ -Lactones

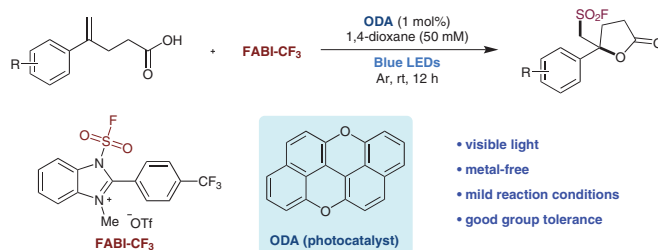
Paper

1727

Synthesis 2024, 56, 1727–1734
DOI: 10.1055/s-0042-1751535

X. Fang
X. Geng
P. Wang
H. Zhang
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Synthesis

Synthesis **2024**, *56*, 1735–1740
DOI: 10.1055/a-2226-4082

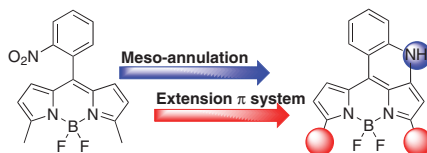
L. Chang
S. Zhou
X. Kong
L. Gai*
H. Lu

Hangzhou Normal University,
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3-/3,5-Styryl-Substituted BODIPY with *N*-Bridged Annulation: Synthesis and Spectroscopic Properties

Paper

1735



Synthesis

Synthesis **2024**, *56*, 1741–1748
DOI: 10.1055/a-2204-8921

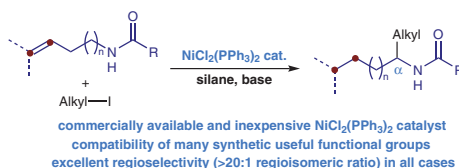
Q.-W. Zhu
D. Liu
Z. Li
J.-W. Wang
W. Nie
X. Lu*
Y. Fu*

University of Science and Tech-
nology of China, P. R. of China

Phosphine Ligand Effects in Nickel-Catalyzed Alkene Migratory Hydroalkylation

Paper

1741



Synthesis

Synthesis **2024**, *56*, 1749–1755
DOI: 10.1055/a-2020-8828

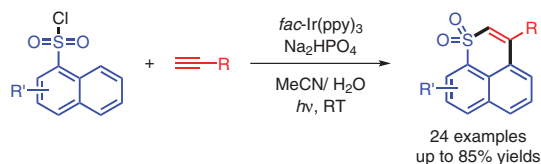
Y. Wei
J. Liu
X. Wu
Y. Chen
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Synthesis of 1-Thiaphenylene Derivatives via Radical Cyclization of 1-Naphthalenesulfonyl Chlorides with Alkynes

Paper

1749



Synthesis

Synthesis 2024, 56, 1756–1764
DOI: 10.1055/a-2254-0907

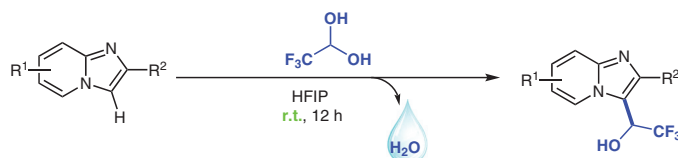
Z. Liu
X. Guo*
Z. Chen
L. Wu
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P. R. of China

Metal-Free Synthesis of Trifluoromethyl Carbinol-Containing Imidazo[1,2-a]pyridines via Dehydrative Coupling of Imidazo[1,2-a]pyridines with Trifluoroacetaldehyde

Paper

1756



- 31 examples, up to 97% yield
- Versatile transformations
- Transition-metal-free & oxidant-free
- Scale-up reaction

Synthesis

Synthesis 2024, 56, 1765–1774
DOI: 10.1055/s-0042-1751545

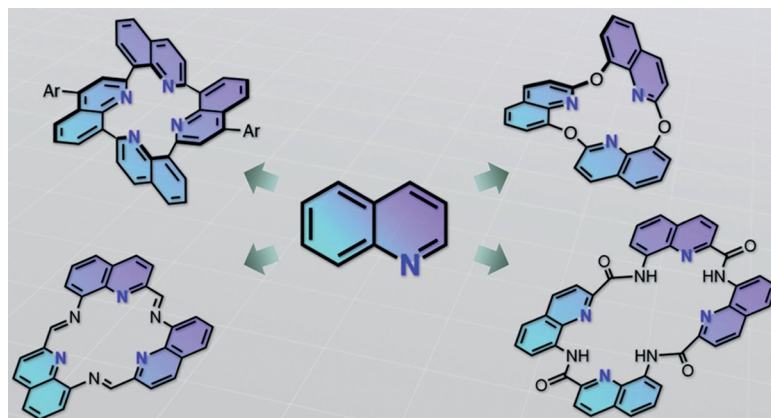
W. Xu
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Recent Advances in Quinoline-Based Macrocycles: Synthesis, Properties, and Applications in Catalytic Reactions

Short Review

1765



Synthesis

Synthesis 2024, 56, 1775–1786
DOI: 10.1055/s-0042-1751534

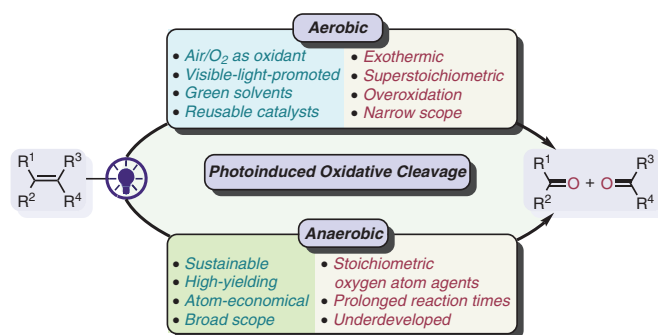
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Recent Advances in Photoinduced Oxidative Cleavage of Alkenes

Short Review

1775



Synthesis

Synthesis 2024, 56, 1787–1792
DOI: 10.1055/a-2257-0684

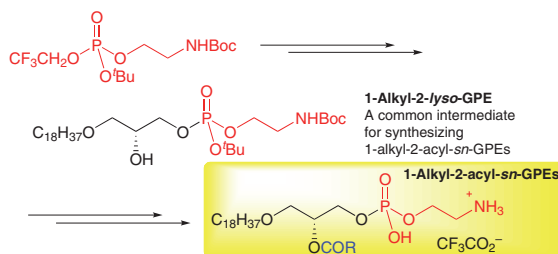
T. Okauchi*
K. Tsubaki
Y. Higuma
H. Shimooka
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A Convenient Method for Synthesizing 1-Alkyl-2-acyl-*sn*-glycero-3-phosphoethanolamines

Paper

1787



Synthesis

Synthesis 2024, 56, 1793–1798
DOI: 10.1055/a-2261-3255

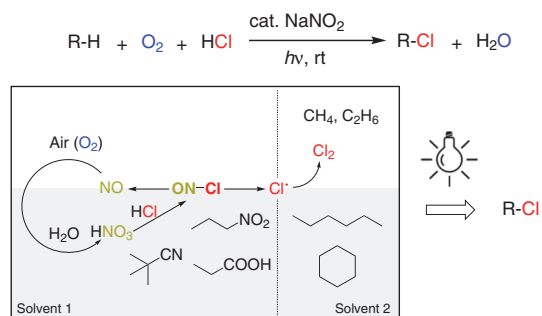
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Visible-Light-Driven Oxidative Chlorination of Alkyl sp^3 C–H Bonds with HCl/Air at Room Temperature

Paper

1793



Synthesis

Synthesis 2024, 56, 1799–1806
DOI: 10.1055/a-2259-3283

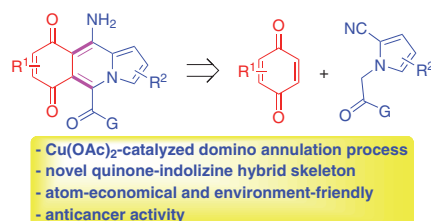
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Access to 8-Aminoindolizine Fused with Quinone via $\text{Cu}(\text{OAc})_2$ -Catalyzed Domino [4+2] Annulation

Paper

1799



Synthesis 2024, 56, 1807–1814
DOI: 10.1055/a-2241-6966

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