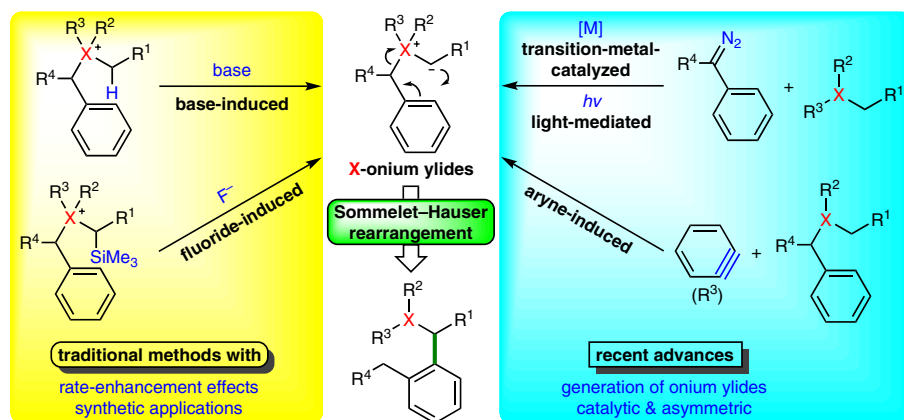


Synthesis

Reviews and Full Papers in Chemical Synthesis

December 15, 2022 • Vol. 54, 5337–5550



Recent Advances in the Generation of Onium Ylides for Sommelet-Hauser Rearrangements

E. Tayama

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Synthesis

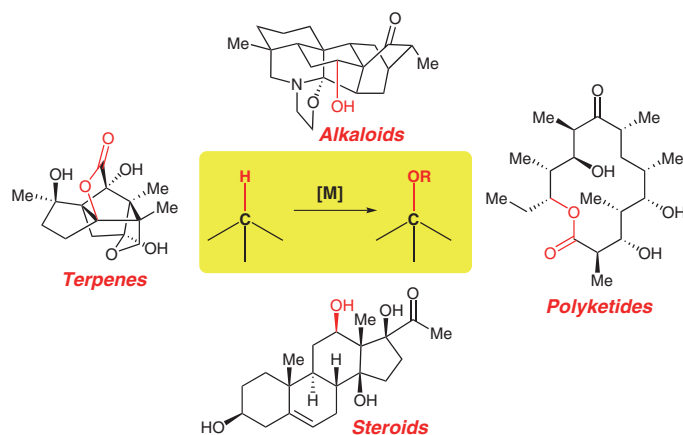
Synthesis 2022, 54, 5337–5359
DOI: 10.1055/a-1918-4338

V. C. S. Santana
M. C. V. Fernandes
I. Cappuccelli
A. C. G. Richieri
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Metal-Catalyzed C–H Bond Oxidation in the Total Synthesis of Natural and Unnatural Products

Review

5337



Synthesis

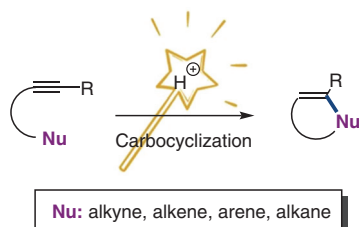
Synthesis 2022, 54, 5360–5384
DOI: 10.1055/a-1927-8439

P. Hermange
J. Gicquiaud
M. Barbier
A. Karnat
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Brønsted Acid Catalyzed Carbocyclizations Involving Electrophilic Activation of Alkynes

Review

5360



Synthesis

Synthesis 2022, 54, 5385–5399
DOI: 10.1055/a-1914-7261

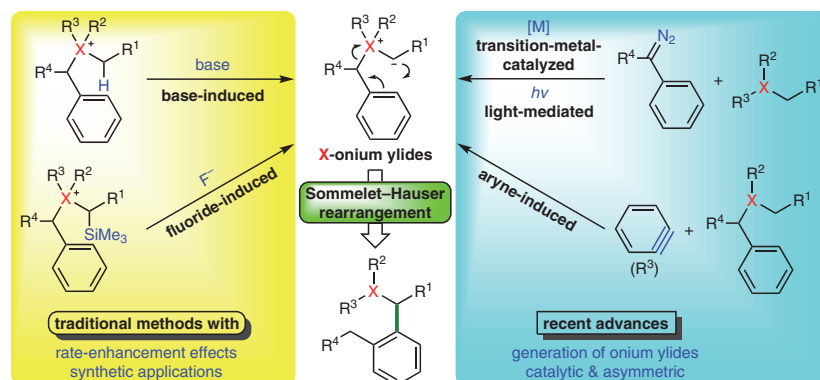
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Recent Advances in the Generation of Onium Ylides for Sommelet–Hauser Rearrangements

Short Review

5385



Synthesis

Synthesis 2022, 54, 5400–5408
DOI: 10.1055/a-1929-4890

W.-S. Huang

Q. Wang

H. Yang

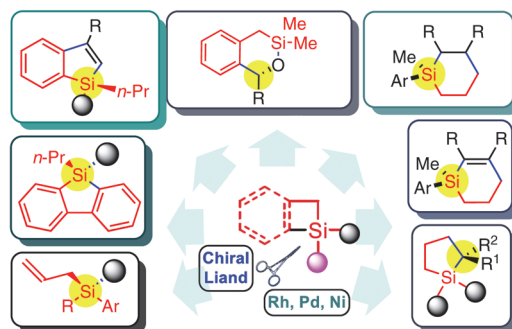
L.-W. Xu*

Central South University,
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Hangzhou Normal University,
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State-of-the-Art Advances in Enantioselective Transition-Metal-Mediated Reactions of Silacyclobutanes

Short Review

5400



Synthesis

Synthesis 2022, 54, 5409–5422
DOI: 10.1055/a-1900-8895

B. Paul

H. Paul

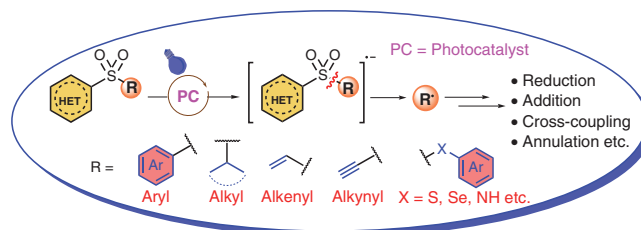
I. Chatterjee*

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Photoredox-Mediated Desulfonylative Radical Reactions: An Excellent Approach Towards C–C and C–Heteroatom Bond Formation

Short Review

5409



Synthesis

Synthesis 2022, 54, 5423–5433
DOI: 10.1055/a-1912-1096

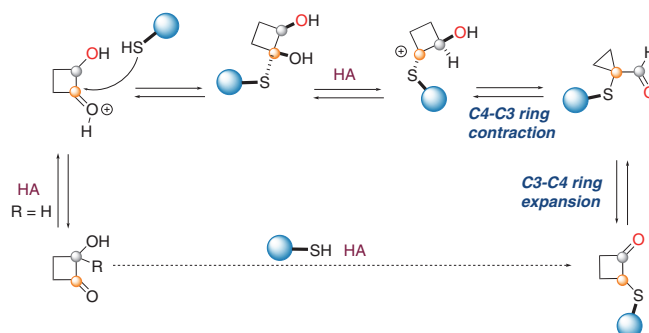
S. Porcu
M. C. Cabua
V. Velichko
J.-P. Baltaze
A. Frongia
C. M. Carbonaro
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Insights into the Reactivity of 2-Hydroxycyclobutanones with Thiols Corroborated by Quantum Chemical DFT Investigations and NMR and Raman Analysis

Feature

5423



Synthesis

Synthesis 2022, 54, 5434–5444
DOI: 10.1055/a-1938-2521

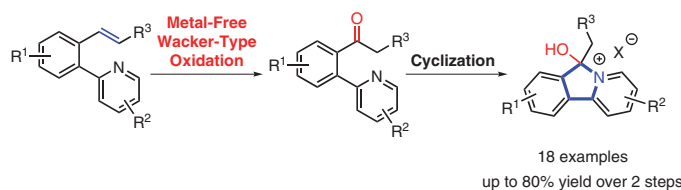
D. Shi
T. Zeng
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Unexpected Pyridinyl Group Mediated Metal-Free Wacker-Type Oxidation en Route to Pyrido[2,1-a]isoindol-5-ium Salts

Feature

5434



Synthesis

Synthesis 2022, 54, 5445–5450
DOI: 10.1055/a-1920-3041

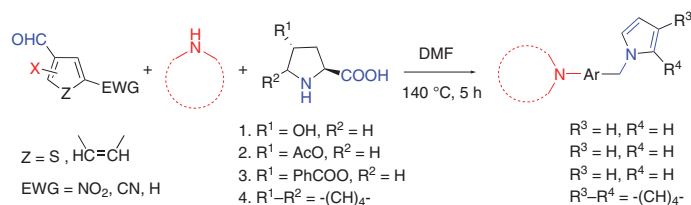
Y. Zhang
Y. Zhang
H. Qiu
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Linyi University, P. R. of China
Beijing Union University,
P. R. of China

A Three-Component Approach to (Hetero)arenes with Two N-Containing Heterocycle Motifs

Paper

5445



- One-pot three-component approach
- 16 examples, up to 94% yield
- Simple operation
- 68% yield at 5 gram scale

Synthesis

One-Pot Synthesis of 2-Sulfonamidobenzo[*b*]thiophenes Enabled by a Mild Protonative Activation of Ynamides

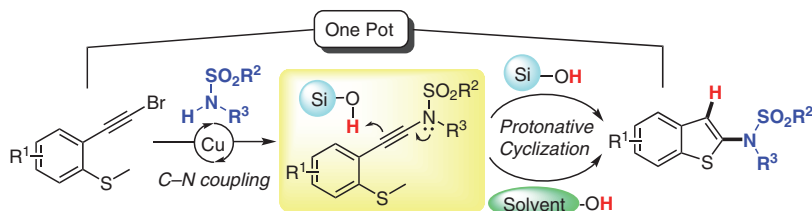
Paper

5451

Synthesis 2022, 54, 5451–5460
DOI: 10.1055/a-1929-2650

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Synthesis

Efficient Catalyst-Free Henry Reaction between Nitroalkanes and Aldehydes or Trifluoromethyl Ketones Promoted by Tap Water

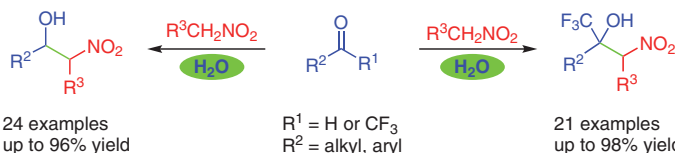
Paper

5461

Synthesis 2022, 54, 5461–5470
DOI: 10.1055/a-1933-3709

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- Reusable tap water medium
- Broad substrate scope and excellent yields
- Catalyst-free and additive-free
- Biologically active products

Synthesis

Organocatalytic Synthesis of Benzimidazole Derivatives

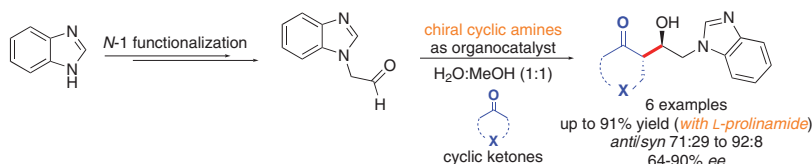
Paper

5471

Synthesis 2022, 54, 5471–5478
DOI: 10.1055/a-1911-6793

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Synthesis

Synthesis 2022, 54, 5479–5490
DOI: 10.1055/a-1898-9752

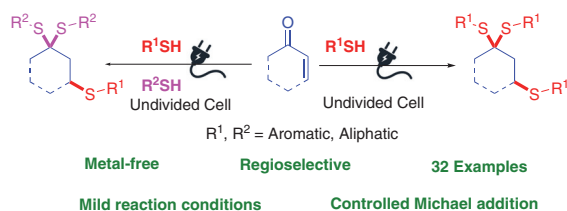
L. Yadav
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Electrochemical Cascade Thia-Michael and Thioacetalization of Cyclic Enones

Paper

5479



Synthesis

Synthesis 2022, 54, 5491–5499
DOI: 10.1055/a-1932-5749

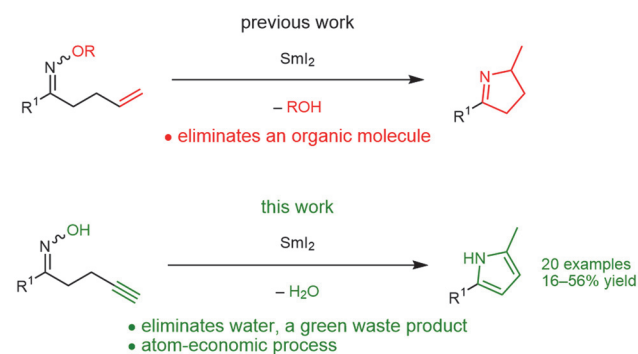
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A Method for Pyrrole Synthesis through Intramolecular Cyclization of γ -Alkynyl Oximes Promoted by SmI_2

Paper

5491



Synthesis

Synthesis 2022, 54, 5500–5508
DOI: 10.1055/s-0040-1720040

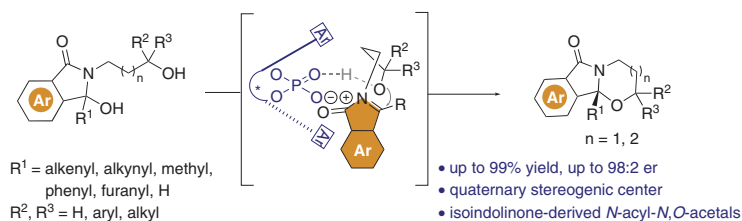
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Asymmetric Synthesis of 3,3-Disubstituted Isoindolinones Enabled by Organocatalytic Functionalization of Tertiary Alcohols

Paper

5500



Synthesis

Synthesis 2022, 54, 5509–5519
DOI: 10.1055/s-0040-1720042

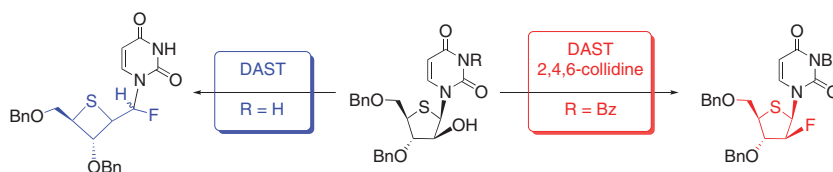
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N. Hannda
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DAST-Mediated Fluorination of 1-[4-Thio-β-D-arabinofuranosyl]uracil: Investigation of Thiolane vs Thietane Formation and Stereoselective Synthesis of 4'-ThioFAC

Paper

5509



Synthesis

Synthesis 2022, 54, 5520–5528
DOI: 10.1055/a-1918-4406

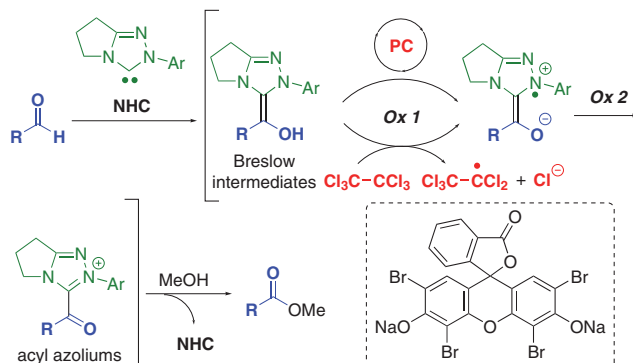
E. Yoshioka
H. Takahashi
A. Kubo
M. Ohno
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N-Heterocyclic Carbene Catalyzed Cross Dehydrogenative Coupling of Aldehydes with Methanol: Combined Use of Eosin Y and Hexachloroethane

Paper

5520



Synthesis

Synthesis 2022, 54, 5529–5539
DOI: 10.1055/a-1898-9675

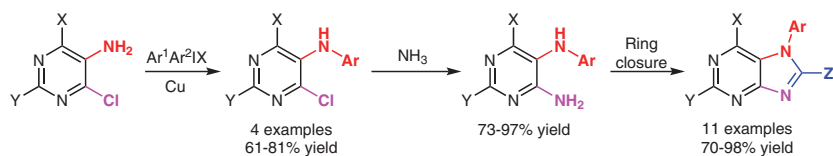
A. Sebris
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Synthesis of 7-Arylpurines from Substituted Pyrimidines

Paper

5529



Synthesis 2022, 54, 5540–5550
DOI: 10.1055/s-0042-1751361

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