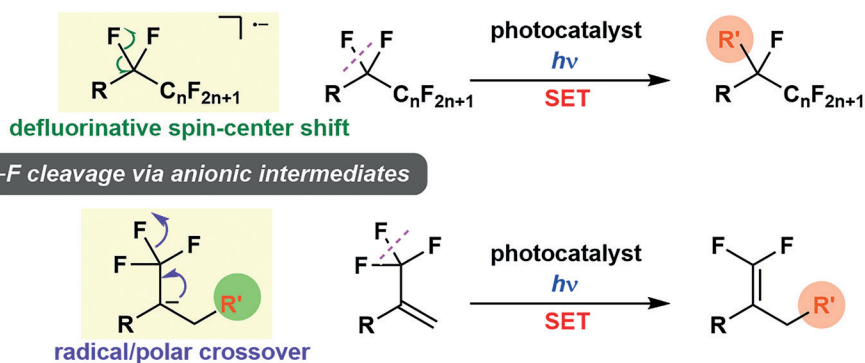


Synthesis

Reviews and Full Papers in Chemical Synthesis

June 15, 2022 • Vol. 54, 2731–2926



C(sp³)-F Bond Transformation of Perfluoroalkyl Compounds Mediated by Visible-Light Photocatalysis: Spin-Center Shifts and Radical/Polar Crossover Processes via Anionic Intermediates

Y. Nishimoto, N. Sugihara, M. Yasuda

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Synthesis

Recyclable Hypervalent Iodine Reagents in Modern Organic Synthesis

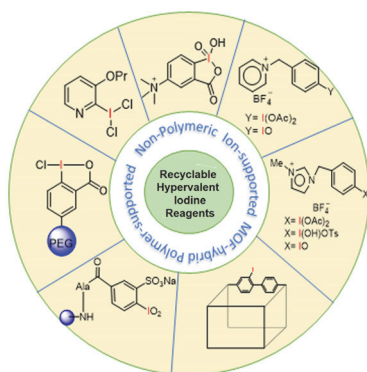
Review

Synthesis **2022**, 54, 2731–2748
DOI: 10.1055/s-0041-1737909

2731

Rimi
S. Soni
B. Uttam
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J.C. Bose University of Science
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Ritsumeikan University, Japan
University of Minnesota Duluth,
USA



Synthesis

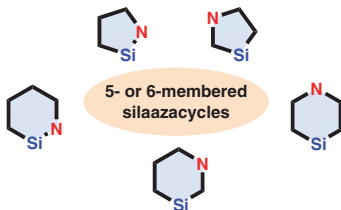
Synthetic Approaches for the Construction of Five- and Six-Membered Silaazacycles

Short Review

Synthesis **2022**, 54, 2749–2764
DOI: 10.1055/a-1755-3832

2749

W. Wang
L. Gao*
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Synthesis

Synthesis 2022, 54, 2765–2777
DOI: 10.1055/a-1755-3476

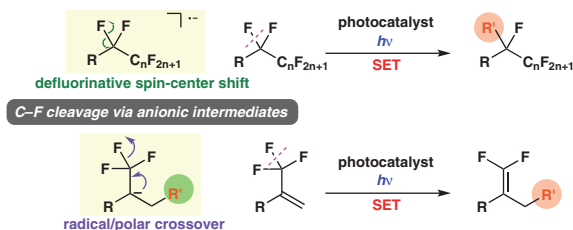
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C(sp³)–F Bond Transformation of Perfluoroalkyl Compounds Mediated by Visible-Light Photocatalysis: Spin-Center Shifts and Radical/Polar Crossover Processes via Anionic Intermediates

Short Review

2765



Synthesis

Synthesis 2022, 54, 2778–2786
DOI: 10.1055/a-1771-3564

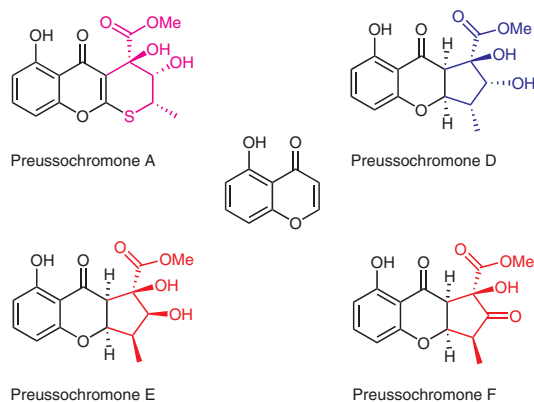
M. P. Beller
U. Koert*

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Synthetic Studies on Chromone Natural Products: The Preusschromones

Short Review

2778



Synthesis

Synthesis 2022, 54, 2787–2798
DOI: 10.1055/a-1750-3080

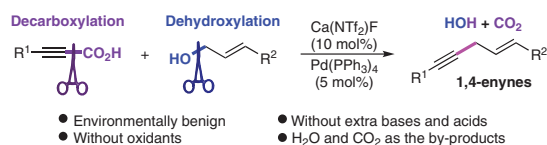
J. Qiu
J. Hou
Z. Sun
P. Xie*

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Dehydrative and Decarboxylative Coupling of Alkynoic Acids with Allylic Alcohols

Feature

2787



Synthesis

Synthesis 2022, 54, 2799–2815
DOI: 10.1055/a-1767-3026

K. Abaid
W. Erb*
M. Blot
T. Roisnel
F. Mongin
S. Touil*

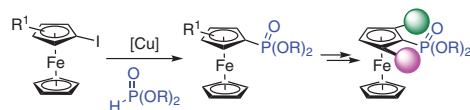
Univ Rennes, France
University of Carthage, Tunisia

Ferrocenephosphonates: Copper-Promoted Synthesis and Further Functionalization

Feature

2799

Cu-promoted Hirao coupling and post-functionalizations



Synthesis

Synthesis 2022, 54, 2816–2824
DOI: 10.1055/a-1765-1615

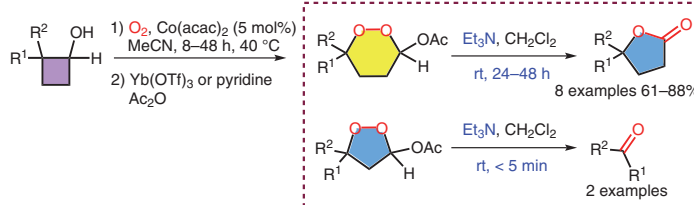
N. Jamey
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From Ring-Expansion to Ring-Contraction: Synthesis of γ -Lactones from Cyclobutanols and Relative Stability of Five- and Six-Membered Endoperoxides toward Organic Bases

Feature

2816



Synthesis

Synthesis 2022, 54, 2825–2838
DOI: 10.1055/a-1751-1225

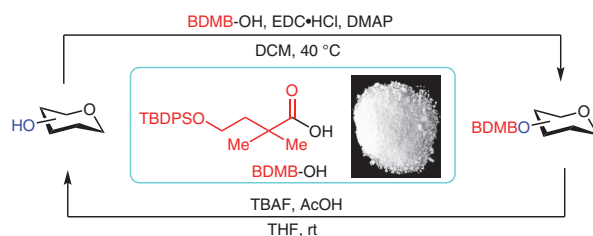
Q. Li
Y. Su
Z. Qiao
J. Wang
P. Wang
S. Ren
N. Song
M. Li*

Ocean University of China,
P. R. of China
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4-(*tert*-Butyldiphenylsilyloxy)-2,2-dimethylbutanoyl: An Easily Removable Pivaloyl-Type Protecting Group with High Orthogonality

Paper

2825



- convenient installation
- one-step orthogonal cleavage under mild conditions
- compatibility with a wide range of deprotection conditions

Synthesis

Synthesis 2022, 54, 2839–2848
DOI: 10.1055/a-1758-6312

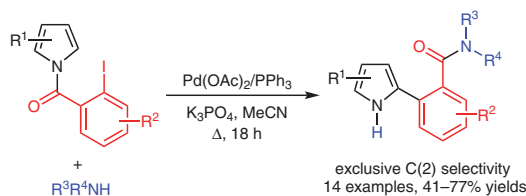
M. Petkovic*
M. Jovanovic
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Dual Role of the Arylating Agent in a Highly C(2)-Selective Pd-Catalysed Functionalisation of Pyrrole Derivatives

Paper

2839



Synthesis

Synthesis 2022, 54, 2849–2855
DOI: 10.1055/a-1768-2082

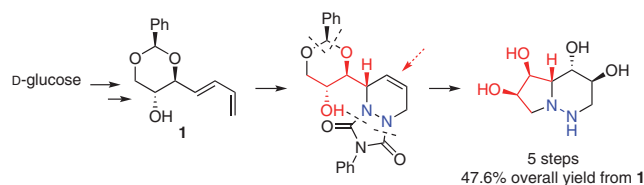
C. E. A. Sousa*
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Concise Synthesis of (*S*)-7-Hydroxy-5-aza-8a-*epi*-D-swainsonine from a D-Erythrose Derivative

Paper

2849



Synthesis

Synthesis 2022, 54, 2856–2864
DOI: 10.1055/a-1768-2138

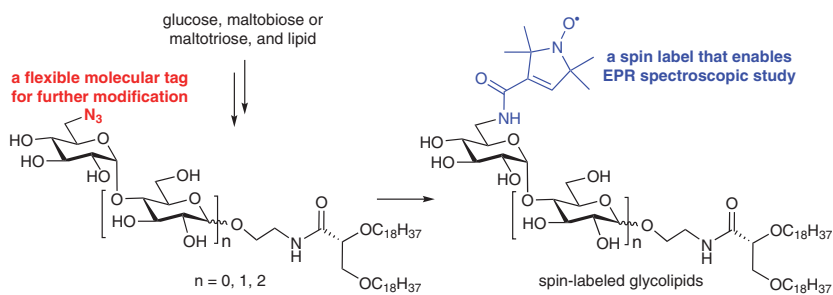
X. Yan
Z. Guo*

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Synthesis of Structurally Defined Nitroxide Spin-Labeled Glycolipids as Useful Probes for Electron Paramagnetic Resonance (EPR) Spectroscopy Studies of Cell Surface Glycans

Paper

2856



Synthesis

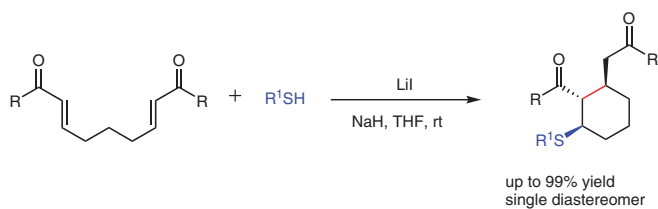
Synthesis 2022, 54, 2865–2875
DOI: 10.1055/a-1754-7424

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Stereoselective Synthesis of Cyclohexane Derivatives: Tandem Lithium Iodide Mediated Intramolecular Conjugate Addition of Thiols to α,β -Bis-enones

Paper
2865



Synthesis

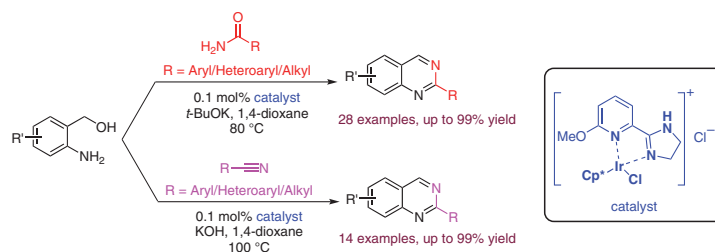
Synthesis 2022, 54, 2876–2884
DOI: 10.1055/a-1755-4700

H. Shui
Y. Zhong
L. Ouyang
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Iridium-Catalyzed Acceptorless Dehydrogenative Coupling of 2-Aminoarylmethanols with Amides or Nitriles to Synthesize Quinazolines

Paper
2876



Synthesis

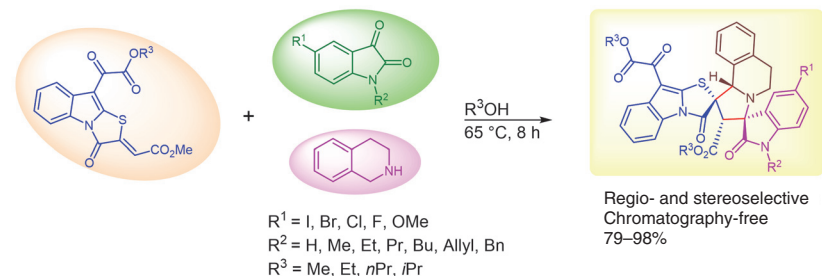
Synthesis 2022, 54, 2885–2893
DOI: 10.1055/a-1777-2423

N. V. Thomas
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Stereoselective Synthesis of Dispirooxindoles Incorporating Pyrrolo[2,1-*a*]isoquinoline via [3+2] Cycloaddition of Azomethine Ylides with a Thiazolo[3,2-*a*]indole Dipolarophile

Paper
2885



Synthesis

Synthesis 2022, 54, 2894–2906
DOI: 10.1055/s-0037-1610793

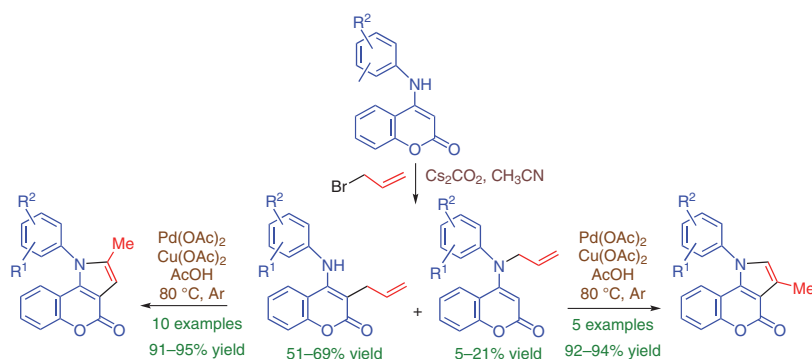
B. D. Balalas
M. G. Kanelli
C. Gabriel
E. Pontiki
D. J. Hadjipavlou-Litina
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Pd-Catalyzed N–H or C–H Functionalization/Oxidative Cyclization for the Efficient Synthesis of *N*-Aryl-Substituted [3,4]-Fused Pyrrolo-coumarins

Paper

2894



Synthesis

Synthesis 2022, 54, 2907–2915
DOI: 10.1055/a-1743-0191

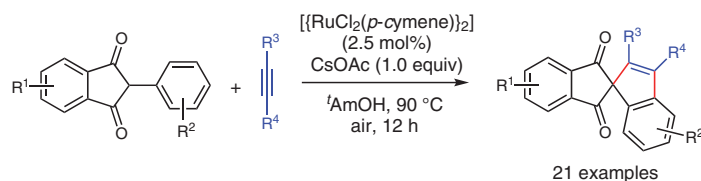
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Ru(II)-Catalyzed C–H Activation and Alkyne Annulation Reaction of Phenyl Indandiones: Synthesis of Spirobi[indene]diones

Paper

2907



Synthesis

Synthesis 2022, 54, 2916–2926
DOI: 10.1055/a-1764-8950

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Functionalized D- and L-Arabeto-Pyrrolidines as Potent and Selective Glycosidase Inhibitors

Paper

2916

