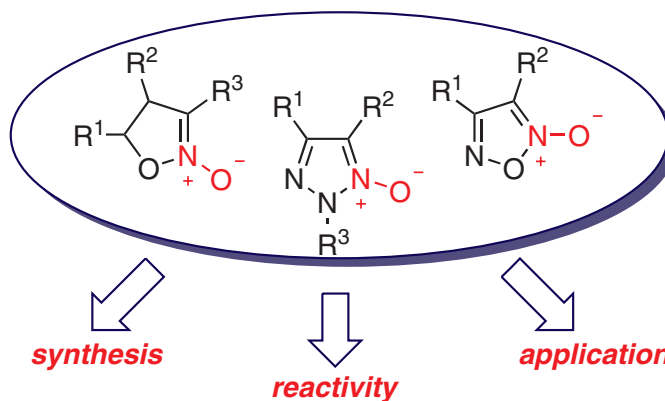


Synthesis

Reviews and Full Papers in Chemical Synthesis

October 19, 2021 • Vol. 53, 3639–3868



Five-Membered Heterocyclic N-Oxides: Recent Advances in Synthesis and Reactivity

L. L. Fershtat, F. E. Teslenko

20

Synthesis

Synthesis 2021, 53, 3639–3652
DOI: 10.1055/s-0040-1720451

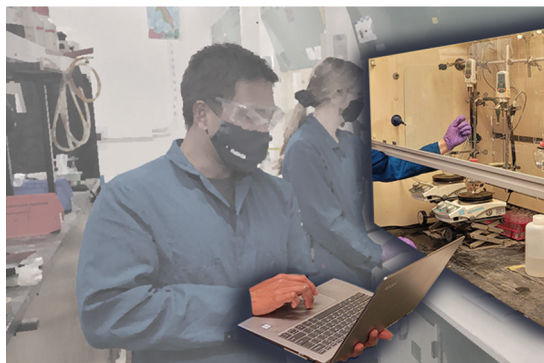
C. J. Laconsay
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Melding of Experiment and Theory Illuminates Mechanisms of Metal-Catalyzed Rearrangements: Computational Approaches and Caveats

Review

3639



Synthesis

Synthesis 2021, 53, 3653–3672
DOI: 10.1055/a-1517-7329

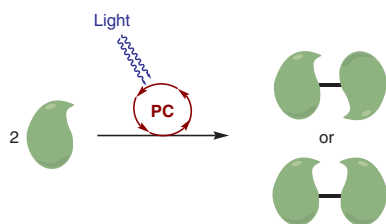
M. de Gracia Retamosa
H. A. Döndaş
S. Sobhani
C. Nájera
M. A. Yus
J. M. Sansano*

Universidad de Alicante, Spain

Photocatalytic Homocoupling Transformations

Review

3653



Synthesis

Synthesis **2021**, 53, 3673–3682
DOI: 10.1055/a-1529-7678

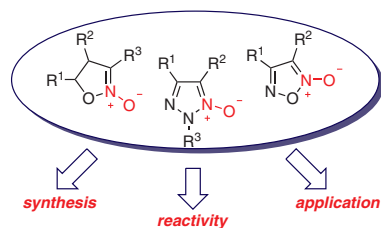
L. L. Fershtat*
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Five-Membered Heterene *N*-Oxides: Recent Advances in Synthesis and Reactivity

Short Review

3673



Synthesis

Synthesis **2021**, 53, 3683–3698
DOI: 10.1055/a-1511-0382

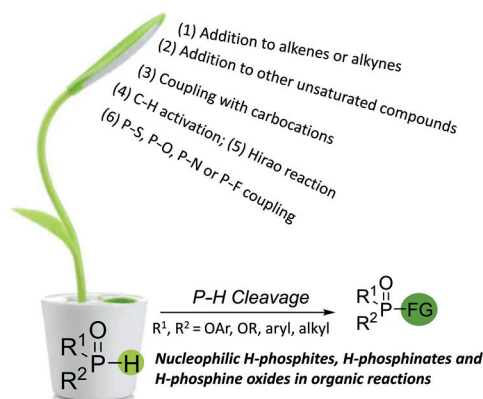
Z.-Y. Wang*
Q. Guo
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Nucleophilic H-Phosphites, H-Phosphinates, and H-Phosphine Oxides in Organic Reactions

Short Review

3683



Synthesis

Synthesis **2021**, 53, 3699–3715
DOI: 10.1055/a-1522-7460

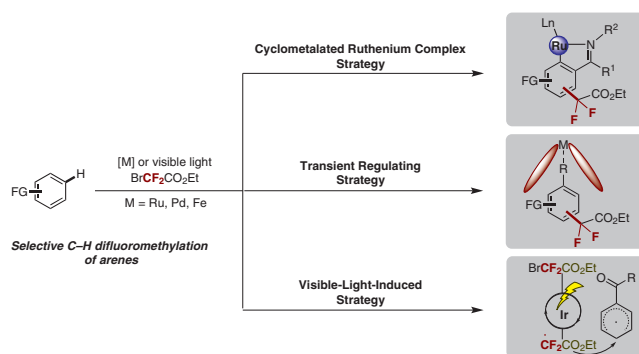
G. Ju
G. Tu
Y. Zhao*

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P. R. of China

Recent Advances in Transition-Metal-Catalyzed Selective C–H Alkoxy-carbonyldifluoromethylation Reactions of Aromatic Substrates

Short Review

3699



Synthesis

Synthesis 2021, 53, 3716–3724
DOI: 10.1055/s-0040-1720382

S.-H. Li

C.-Y. Long

X.-G. Yang*

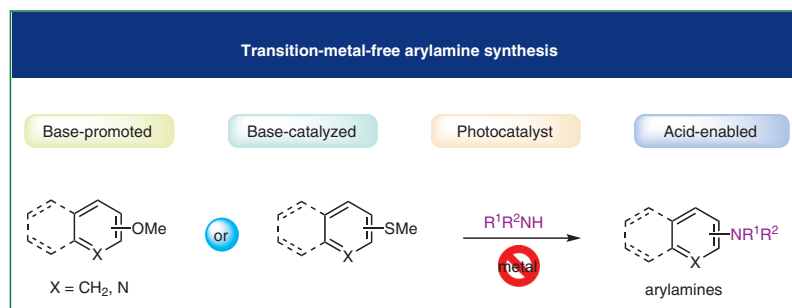
X.-Q. Wang*

Hunan University, P. R. of China
Linyi University, P. R. of China

Recent Progress in Amination Enabled by Transition-Metal-Free C(sp²)–O/C(sp²)–S Bond Cleavage Strategy

Short Review

3716



Synthesis

Synthesis 2021, 53, 3725–3734
DOI: 10.1055/a-1509-5655

C. Sedano

C. Virumbrales

S. Suárez-Pantiga

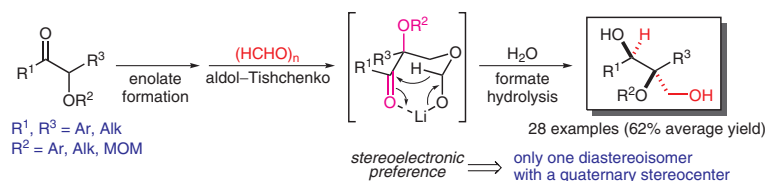
R. Sanz*

Universidad de Burgos, Spain

Aldol–Tishchenko Reaction of α -Oxy Ketones: Diastereoselective Synthesis of 1,2,3-Triol Derivatives

Feature

3725



Synthesis

Synthesis 2021, 53, 3735–3743
DOI: 10.1055/a-1517-7177

J. St-Gelais

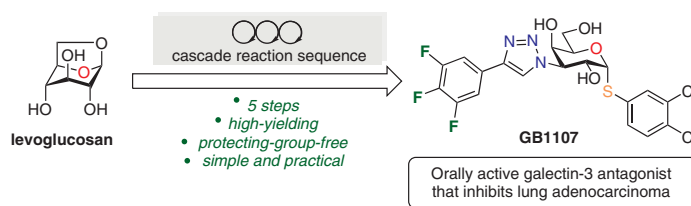
D. Giguère*

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Protecting-Group-Free Synthesis of GB1107: An Orally Active Galectin-3 Antagonist

Feature

3735



Synthesis

Synthesis **2021**, 53, 3744–3750
DOI: 10.1055/a-1493-6885

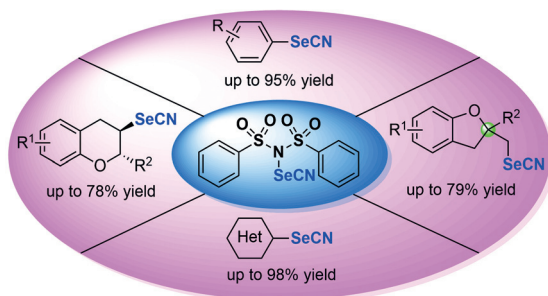
D. Zhu
A.-H. Ye
Z.-M. Chen*

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N-Selenocyanato-Dibenzenesulfonimide: A New Electrophilic Selenocyanation Reagent

Feature

3744



Synthesis

Synthesis **2021**, 53, 3751–3759
DOI: 10.1055/s-0037-1610775

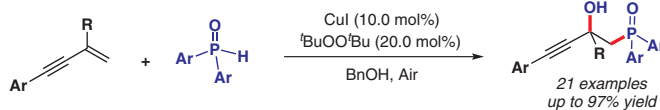
S. Zhu*
J. Wang
B. Zhou
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Copper/*Di-tert*-butyl Peroxide-Catalyzed Regioselective Hydroxyphosphorylation of 1,3-Enynes

Feature

3751



Synthesis

Synthesis **2021**, 53, 3760–3768
DOI: 10.1055/a-1512-1763

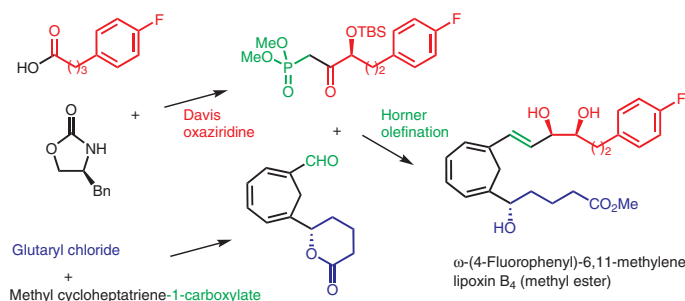
L. Trippe
A. Nava
A. Frank
D. Schollmeyer
U. Nubbemeyer*

Johannes Gutenberg-Universität
Mainz, Germany

Synthesis of Enantiopure ω -(4-Fluorophenyl)-6,11-Methylene Lipoxin B₄ Methyl Ester

Paper

3760



Synthesis

Copper-Catalyzed Sulfonylation of Cyclobutanone Oxime Esters with Sulfonyl Hydrazides

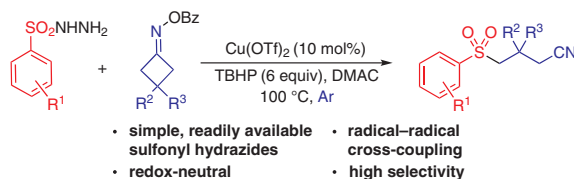
Paper

3769

Synthesis 2021, 53, 3769–3776
DOI: 10.1055/a-1516-8481

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Synthesis

 α -Xanthylmethyl Ketones from α -Diazo ketones

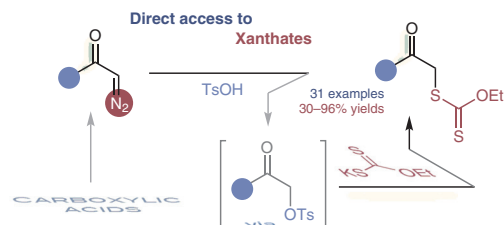
Paper

3777

Synthesis 2021, 53, 3777–3790
DOI: 10.1055/a-1513-9968

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Synthesis

Electrochemical Aromatization of Dihydroazines: Effect of Chalcogenophosphoryl (CGP) Substituents on Anodic Oxidation of 9-CGP-9,10-dihydroacridine

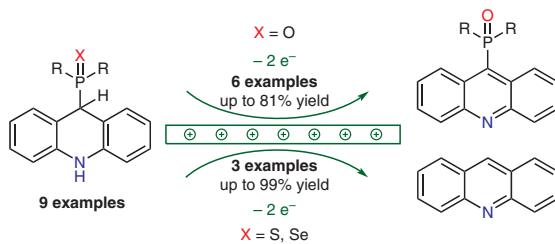
Paper

3791

Synthesis 2021, 53, 3791–3798
DOI: 10.1055/a-1521-3166

A. V. Shchepochkin*
O. N. Chupakhin
N. S. Demina
M. A. Averkov
T. Yu. Shimanovskaya
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Synthesis

Synthesis 2021, 53, 3799–3814
DOI: 10.1055/a-1523-1409

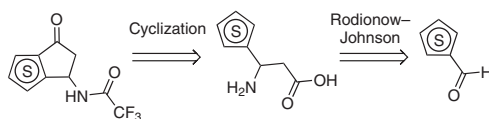
P. Zipfel
J. Lalut
J. Sopková-de Oliveira Santos
C. Rochais
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Aminothiaindanone as an Accessible Scaffold for a Three-Point Chemical Diversity

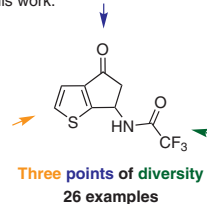
Paper

3799

Previous work:



This work:



Synthesis

Synthesis 2021, 53, 3815–3826
DOI: 10.1055/a-1509-8624

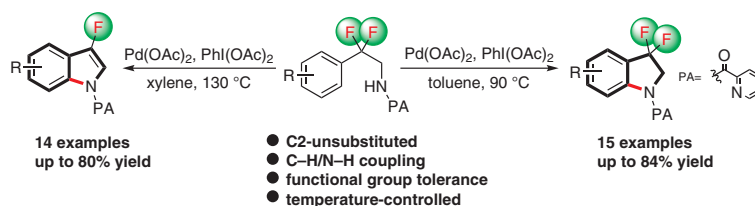
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Direct Approach to 3-Fluoroindoles and 3,3-Difluoroindolines from 2,2-Difluoro-2-phenylethan-1-amines via C–H/N–H Coupling

Paper

3815



Synthesis

Synthesis 2021, 53, 3827–3835
DOI: 10.1055/a-1516-9893

K. Tsubaki
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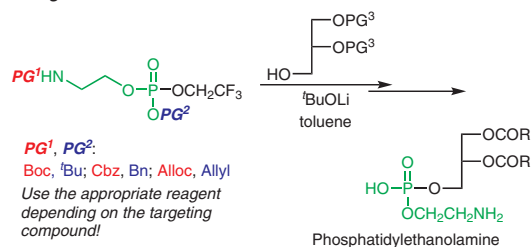
Kyushu Institute of Technology,
Japan

New Phosphorylating Agents for the Synthesis of Phosphatidylethanolamines

Paper

3827

Convenient Synthesis of Phosphatidylethanolamines
Using Transesterification



Synthesis

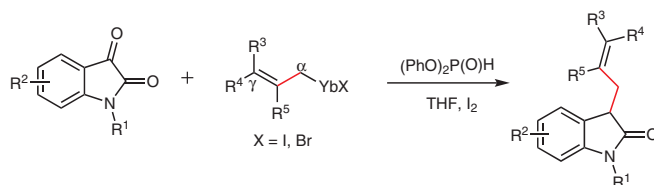
Synthesis 2021, 53, 3836–3846
DOI: 10.1055/a-1516-7917

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Applications of Ytterbium(II) Reagent as Grignard Reagent and Single-Electron Transfer Reagent in the Synthesis of 3-Substituted 2-Oxindoles

Paper

3836



Synthesis

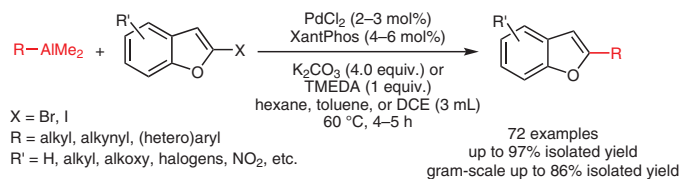
Synthesis 2021, 53, 3847–3861
DOI: 10.1055/a-1516-8745

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Highly Efficient Synthesis of 2-Substituted Benzo[*b*]furan Derivatives from the Cross-Coupling Reactions of 2-Halobenzo[*b*]furans with Organoalane Reagents

Paper

3847



Synthesis

Synthesis 2021, 53, 3862–3868
DOI: 10.1055/a-1523-1597

A. Nakamura
K. Yamamoto
R. Murakami
N. Kawashita
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One-Pot Synthetic Approaches for the Construction of Isochroman-4-ones and Benzoxazin-3-ones Using *O,P*-Acetals

Paper

3862

