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Accounts and Rapid Communications in Chemical Synthesis

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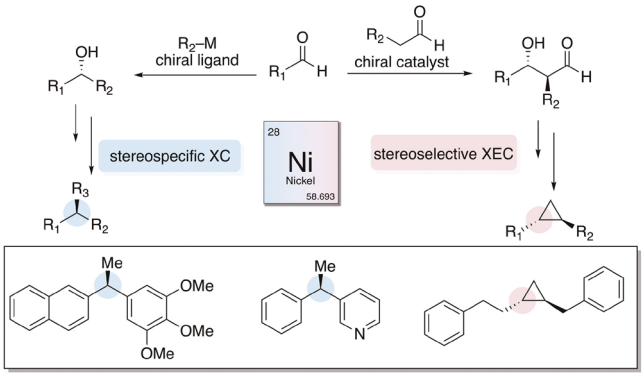

Harnessing C–O Bonds in Stereoselective Cross-Coupling and Cross-Electrophile Coupling Reactions

A. B. Sanford, E. R. Jarvo

12

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2021
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Synlett

Synlett **2021**, *32*, 1151–1156
DOI: 10.1055/s-0040-1705987

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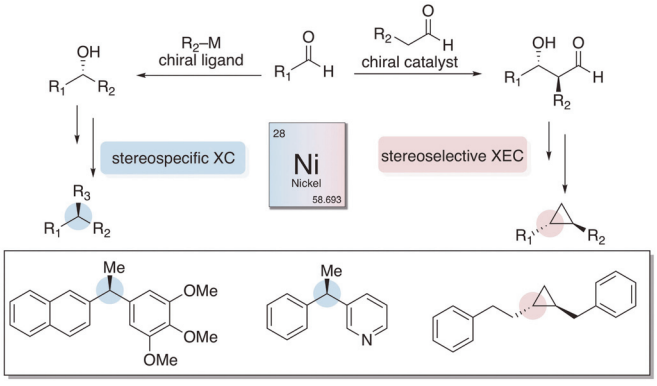
Harnessing C–O Bonds in Stereoselective Cross-Coupling and Cross-Electrophile Coupling Reactions

Account

1151



Synlett

Synlett **2021**, *32*, 1157–1168
DOI: 10.1055/s-0040-1706009

Z. D. Tucker
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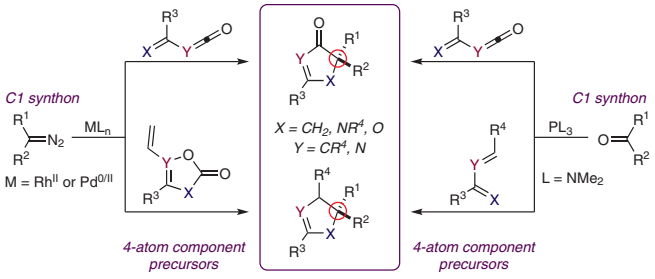
(4+1)-Cycloadditions Exploiting the Biphilicity of Oxyphosphonium Enolates and Rh^{II}/Pd^{II}-Stabilized Metallocarbenes for the Construction of Five-Membered Frameworks

Account

1157



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Allenes: Versatile Building Blocks in Cobalt-Catalyzed C–H Activation

Synpacts

1169

Synlett **2021**, *32*, 1169–1178
DOI: 10.1055/a-1471-7307

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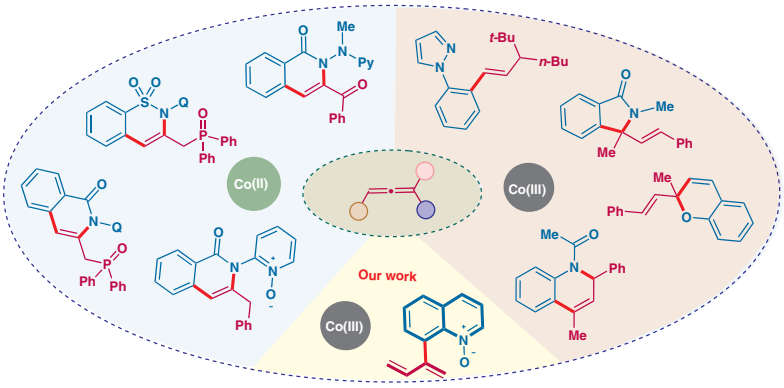

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Cooperative Hydrogen Atom Transfer: From Theory to Applications

Synpacts

1179

Synlett **2021**, *32*, 1179–1186
DOI: 10.1055/a-1463-9527

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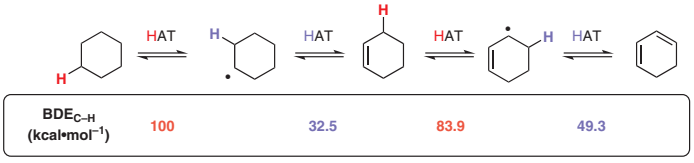

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Synthetic Studies on the Viridin Skeleton through Regio- and Stereoselective Functionalization of the AE-Ring Moiety

Letter

1187

Synlett **2021**, *32*, 1187–1191
DOI: 10.1055/a-1527-3781

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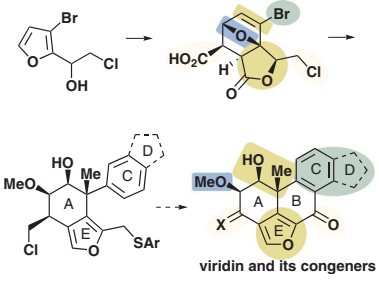

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Synlett
Synlett **2021**, *32*, 1192–1196
DOI: 10.1055/a-1520-2192

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J. Wu
Y. Yang
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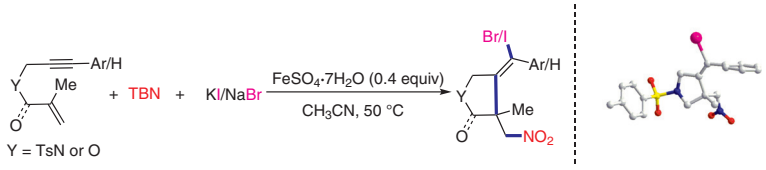
Luoyang Normal University, P. R. of China

Iron-Mediated Radical Nitrohalogenation Reactions of Enynes with *tert*-Butyl Nitrite

Letter

1192



- convenient operations
- good selectivity (*Z*/*E* ratio up to 100%)
- 18 examples, yield up to 90%
- various nitro/halogen-containing heterocycles

Synlett
Synlett **2021**, *32*, 1197–1200
DOI: 10.1055/a-1525-3647

W. Zhou
Q. Huang
L. Shen
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W. He
H. Deng
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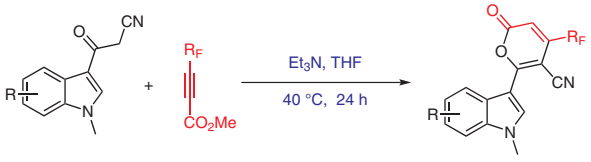
Facile Synthesis of 4-Perfluoroalkylated 2*H*-Pyran-2-ones Bearing Indole Skeleton *via* a Base-Promoted Cascade Process

Letter

1197



16 examples
up to 99% yield

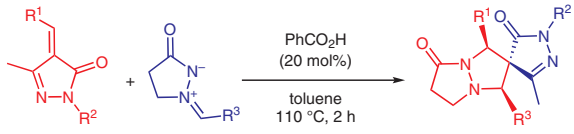
Synlett
Synlett **2021**, *32*, 1201–1206
DOI: 10.1055/a-1506-4509

Z. Tang
H.-H. Wu
X.-Z. Fan
H. Zhang
L.-Y. Cai
X.-F. Bi
H.-W. Zhao*
Beijing University of Technology, P. R. of China

Diastereoselective Synthesis of Spiropyrazolones via 1,3-Dipolar [3+2] Cycloadditions between Pyrazolone-Based Olefins and *N*,*N*′-Cyclic Azomethine Imines

Letter

1201



32 examples
up to 98% yield
up to >20:1 dr

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Synlett **2021**, *32*, 1207–1212
DOI: 10.1055/a-1511-0435

Ligand-Free Palladium-Catalyzed Carbonylative Suzuki Couplings of Vinyl Iodides with Arylboronic Acids under Substoichiometric Base Conditions

Letter
1207

Z. Yang
P.-X. Gong
J. Chen
J. Zhang
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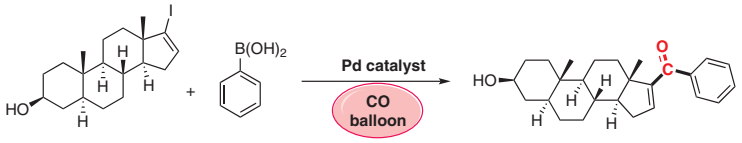
Nanjing Normal University, P. R. of China



Synlett
Synlett **2021**, *32*, 1213–1218
DOI: 10.1055/a-1507-6499

H_2O_2-Promoted Alkylation of Quinoxalin-2(1*H*)-ones with Styrenes and Dimethyl Sulfoxide

Letter
1213

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H. Yao*
B. Wang
Z. Yan
F. Xiong
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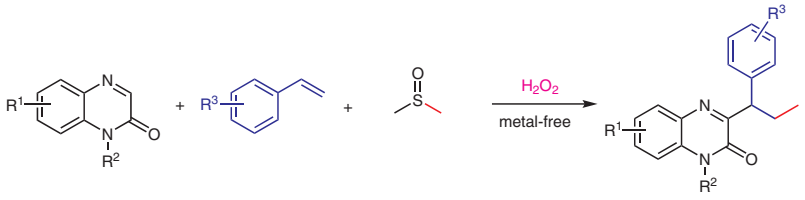
Nanchang University, P. R. of China



R^1 = alkyl, halo
R^2 = alkyl, aryl
R^3 = alkyl, halo

26 examples (43–84%)
metal-free catalysis
H_2O_2 as a green oxidant

Synlett
Synlett **2021**, *32*, 1219–1222
DOI: 10.1055/a-1469-5742

Iron-Catalyzed Oxidative Radical Alkoxycarbonylation of Activated Alkenes with Carbazates toward Alkoxycarbonylated Benzimidazo[2,1-*a*]isoquinolin-6(5*H*)-ones

Letter
1219

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F. Wang
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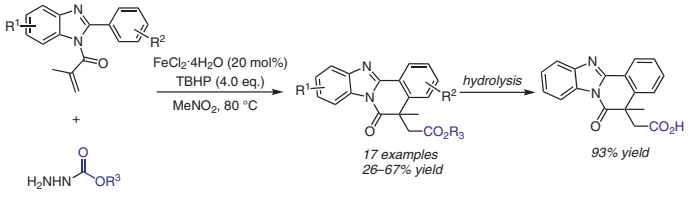
Hunan Provincial Key Laboratory of Water Treatment Functional Materials, P. R. of China
Hunan Province Engineering Research Center of Electroplating Wastewater Reuse Technology, P. R. of China



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Synlett **2021**, *32*, 1223–1226
DOI: 10.1055/a-1500-9673

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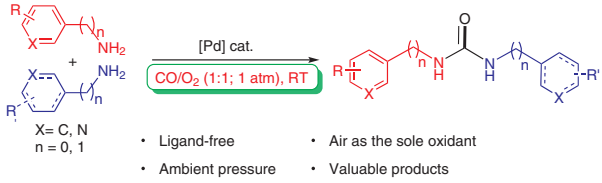
Palladium-Catalyzed Aerobic Oxidative Carbonylation of Amines Enables the Synthesis of Unsymmetrical N,N′-Disubstituted Ureas

Letter

1223



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Synlett **2021**, *32*, 1227–1230
DOI: 10.1055/a-1520-9916

M. Oka
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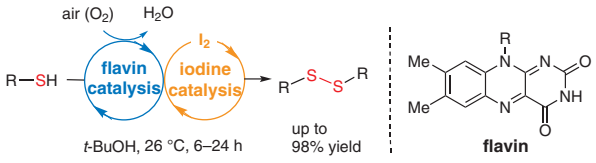
Shimane University, Japan

Green Aerobic Oxidation of Thiols to Disulfides by Flavin–Iodine Coupled Organocatalysis

Letter

1227



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Synlett **2021**, *32*, 1231–1235
DOI: 10.1055/a-1522-9361

Z. Chen
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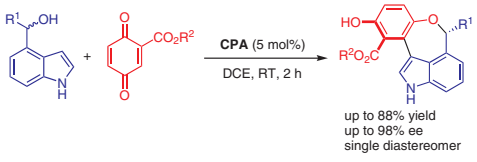
Chiral Phosphoric Acid Catalyzed Enantioselective [4+3]-Cyclization Reaction of Indol-4-ylmethanols and Quinone Esters

Letter

1231



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DOI: 10.1055/a-1529-4797

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Diastereoselective Synthesis of Morpholine Derivatives from Grignard Reagents and *N*-Sulfinyl Imines

Letter
1236

Synlett
Synlett **2021**, *32*, 1241–1245
DOI: 10.1055/a-1523-3336

H. Li
Y. Hou
Z. Lai
L. Ning
A. Li
Y. Li*
J. An*
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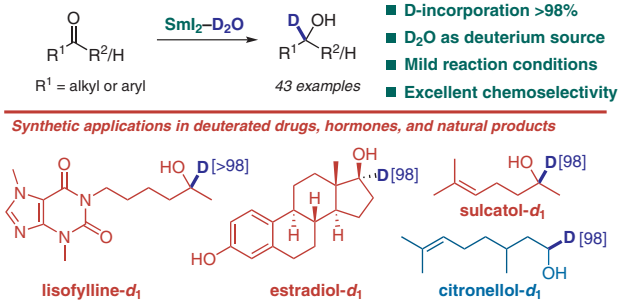
Synthesis of α-Deuterioalcohols by Single-Electron Umpolung Reductive Deuteration of Carbonyls Using D_2O as Deuterium Source

Letter
1241



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Synlett **2021**, *32*, 1246–1252
DOI: 10.1055/a-1479-4694

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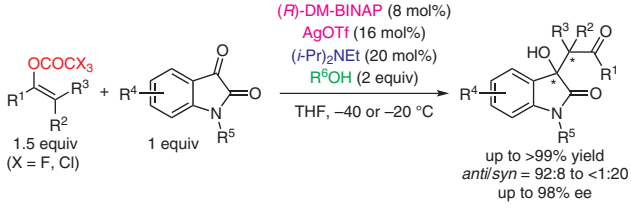
Chiba University, Japan

Chiral Silver Alkoxide Catalyzed Asymmetric Aldol Reaction of Alkenyl Esters with Isatins

Letter
1246



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