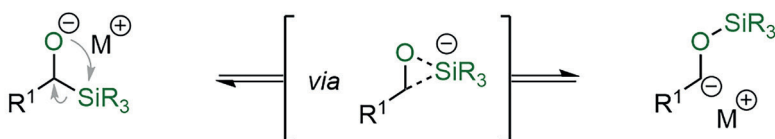


Synthesis

Reviews and Full Papers in Chemical Synthesis

August 15, 2024 • Vol. 56, 2445–2594

Brook rearrangement



Capabilities:

- C–C and C–X bond formation
- C–C and C–X bond cleavage
- Stereodefined olefins formation
- Annulation reactions
- Dearomatization reactions

Unveiling Novel Synthetic Pathways through Brook Rearrangement

M. Agbaria, N. Egbaria, Z. Nairoukh

16

Synthesis

Synthesis 2024, 56, 2445–2461
DOI: 10.1055/s-0042-1751526

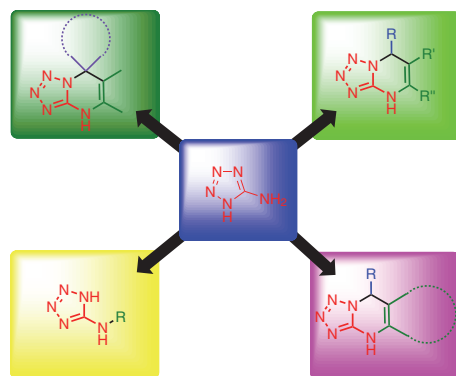
R. Javahershenas*
H. Mei
M. Koley
V. A. Soloshonok
A. Makarem*

Urmia University, Iran
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Recent Advances in the Multicomponent Synthesis of Heterocycles Using 5-Aminotetrazole

Review

2445



Synthesis

Synthesis 2024, 56, 2462–2482
DOI: 10.1055/a-2270-0604

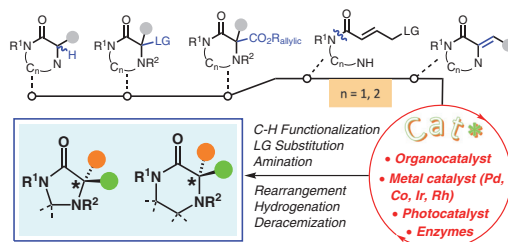
C. Palomo
A. Landa*
M. Oiarbide*

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Catalytic Asymmetric Synthesis of α -Mono and α,α -Disubstituted 5- and 6-Membered α -Aza-lactams

Short Review

2462



Synthesis

Unveiling Novel Synthetic Pathways through Brook Rearrangement

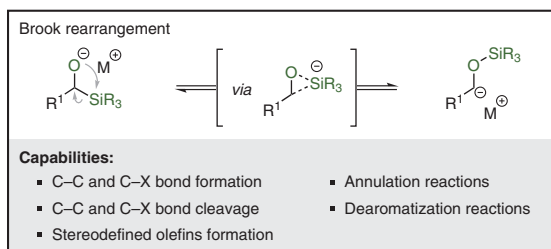
Short Review

Synthesis 2024, 56, 2483–2498
DOI: 10.1055/a-2257-7304

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2483



Synthesis

Accessing *meta*-Enone-Substituted Anisoles using ArN₂BF₄ as Precatalyst *via* Rearrangement of Alkyne-Tethered Cyclohexadienones

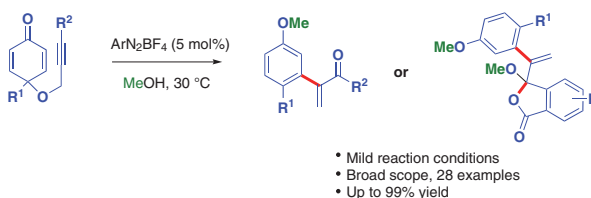
Feature

Synthesis 2024, 56, 2499–2506
DOI: 10.1055/a-2331-9439

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2499



Synthesis

Sequential Paired Electrochemical Transformation of Styrene Oxide via Anodic Meinwald Rearrangement and Cathodic Nitromethylation in an Electrochemical Flow Reactor with Catalytic Electrical Input

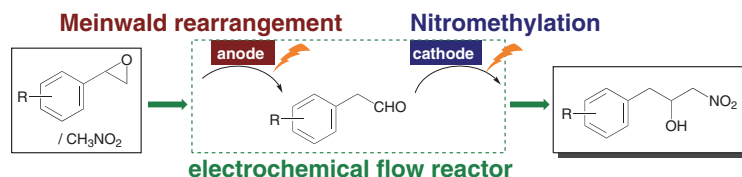
Paper

Synthesis 2024, 56, 2507–2512
DOI: 10.1055/a-2309-6737

E. Sato*
K. Nagamine
C. Sasaki
S. Kunimoto
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2507



Synthesis

Ketyl Radical Enabled Synthesis of Oxetanes

Paper

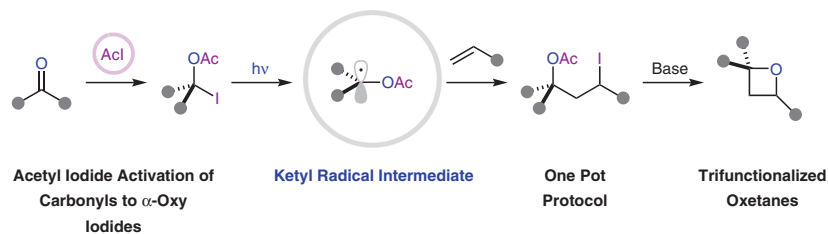
2513

Synthesis 2024, 56, 2513–2520
DOI: 10.1055/s-0043-1774907

M. R. Gatzka
S. G. Parikh
K. A. Rykaczewski
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Synthetic Challenge: Access to Oxetanes from Unactivated Carbonyls and Alkenes



Synthesis

BF₃·OEt₂-Mediated (3+2) Cycloaddition Reactions of Donor-Acceptor Cyclopropanes (DACs) with Cyanamides: Access to Cyclic Amidines

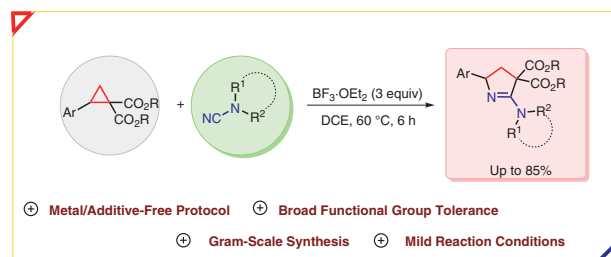
Paper

2521

Synthesis 2024, 56, 2521–2528
DOI: 10.1055/a-2323-0721

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Synthesis

Metal-Free Synthesis of Selanyl-Substituted Chromenones via Selanylation/Cyclization of Alkynyl Aryl Ketones

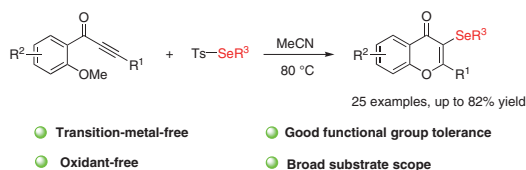
Paper

2529

Synthesis 2024, 56, 2529–2536
DOI: 10.1055/s-0043-1775369

X.-R. Gong
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Synthesis

Synthesis 2024, 56, 2537–2548
DOI: 10.1055/a-2328-2947

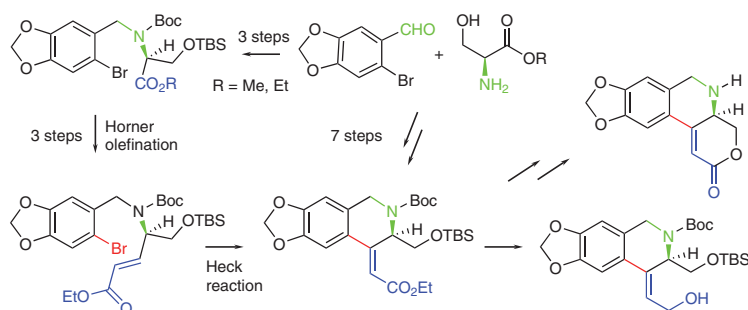
S. Bernhard
N. Kümmerer
D. Urgast
F. Hack
J. Ungelenk
A. Frank
D. Schollmeyer
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Ex-Chiral-Pool Synthesis of Optically Active 4-Alkylidene-Tetrahydroisoquinolines – Key Intermediates for Crinine Alkaloid Total Syntheses

Paper

2537



Synthesis

Synthesis 2024, 56, 2549–2557
DOI: 10.1055/s-0043-1775368

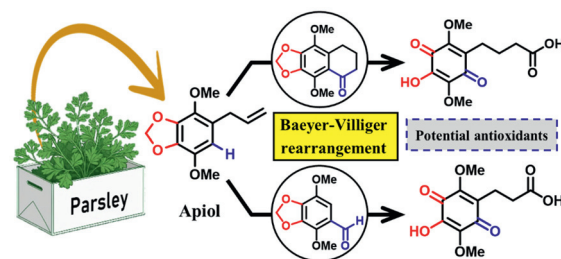
D. V. Demchuk
O. I. Adaeva
D. V. Tsyganov
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R. A. Dolotov
E. A. Muravsky
A. E. Varakutin
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Synthesis of Methoxy Analogues of Coenzyme Q₁₀ Metabolites from Parsley Seed Extracts via Baeyer–Villiger Rearrangement of Carbonyl-Substituted Polyalkoxybenzenes

Paper

2549



Synthesis

Synthesis 2024, 56, 2558–2564
DOI: 10.1055/s-0043-1774866

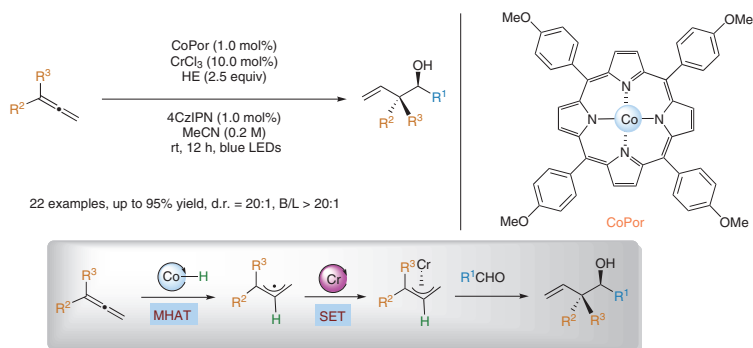
H. Li
X. Wang
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Radical Allylation of Aldehydes with Allenes by Photoredox Cobalt and Chromium Dual Catalysis

Paper

2558



Synthesis

Synthesis 2024, 56, 2565–2571
DOI: 10.1055/a-2315-1934

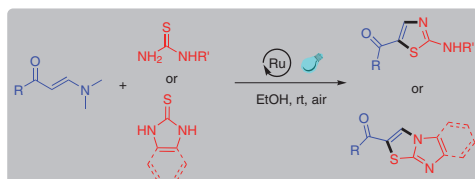
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Photocatalytic Annulation of Enaminones with Thioureas for the Synthesis of 2-Aminothiazoles via Tandem C–S and C–N Bond Formation

Paper

2565



✓ air as the terminal oxidant ✓ ambient visible-light photocatalysis
✓ tandem C–S and C–N bond formation ✓ simple and fused thiazoles

Synthesis

Synthesis 2024, 56, 2572–2580
DOI: 10.1055/a-2309-1501

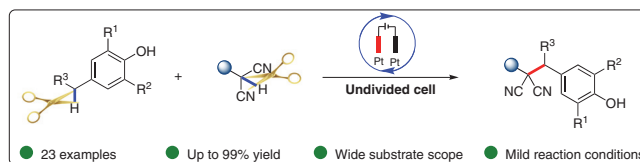
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Electrochemical Oxidative Cross-Coupling for the Construction of C(sp³)–C(sp³) Bonds

Paper

2572



● 23 examples ● Up to 99% yield ● Wide substrate scope ● Mild reaction conditions

Synthesis

Synthesis 2024, 56, 2581–2587
DOI: 10.1055/a-2317-6659

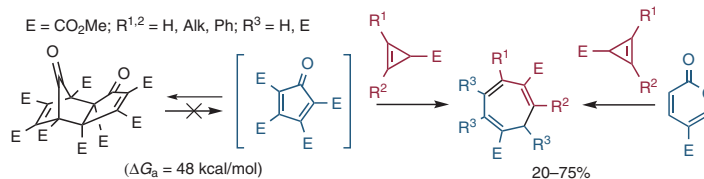
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Cyclopentadienone and Pyrone Derivatives as Precursors of Electron-Deficient Cycloheptatrienes: Quantum Chemical Investigation and Synthesis

Paper

2581



Synthesis 2024, 56, 2588–2594
DOI: 10.1055/a-2329-4214

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