

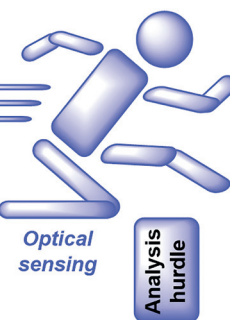
Synthesis

Reviews and Full Papers in Chemical Synthesis

June 1, 2022 • Vol. 54, 2527–2730



Asymmetric reaction screening



Product yield, ee & absolute configuration

Accelerated Asymmetric Reaction Screening with Optical Assays

D. S. Hassan, F. S. Kariapper, C. C. Lynch, C. Wolf

11

Synthesis

Accelerated Asymmetric Reaction Screening with Optical Assays

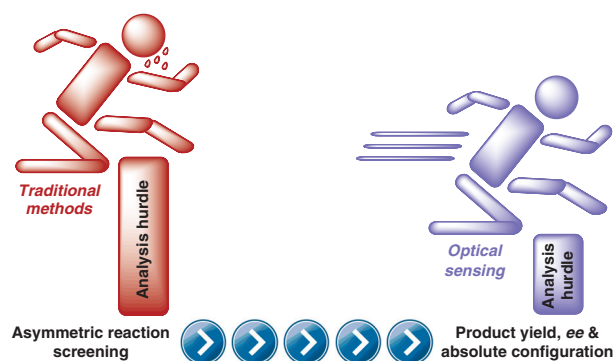
Short Review

Synthesis 2022, 54, 2527–2538
DOI: 10.1055/a-1754-2271

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2527



Synthesis

Recent Advances in Radical Reactions of Vinyl Triflates and Their Derivatives

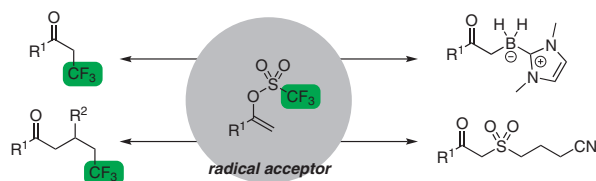
Short Review

Synthesis 2022, 54, 2539–2547
DOI: 10.1055/a-1765-7383

T. Kawamoto*
A. Kamimura

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2539



Synthesis

Synthesis 2022, 54, 2548–2560
DOI: 10.1055/s-0040-1719902

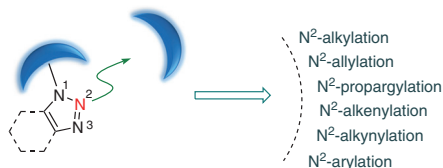
Y. Zheng
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V. Ramadoss
H. Zhang
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Zhoukou Normal University,
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Recent Developments in N²-Selective Functionalizations of 1,2,3-Triazoles

Short Review

2548



N¹ blocked by

- ◆ Bulky groups on triazoles and/or agents
- ◆ Catalysis with sterically bulky ligands
- ◆ Intermolecular hydrogen bond

Synthesis

Synthesis 2022, 54, 2561–2573
DOI: 10.1055/a-1751-1929

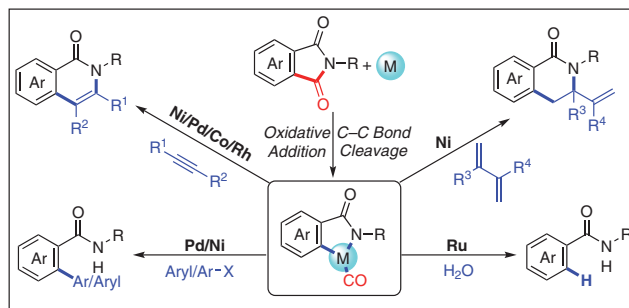
Y.-Y. Liu
S.-H. Sun
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B. Wan
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Transition-Metal-Catalyzed Decarbonylative Functionalization of Phthalimides

Short Review

2561



Synthesis

Synthesis 2022, 54, 2574–2584
DOI: 10.1055/a-1744-4566

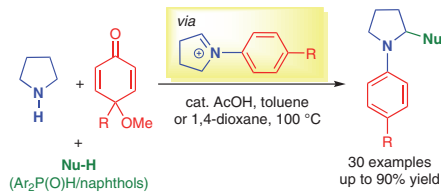
X. Li
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K. Yin
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p-Quinol Ethers and *p*-Quinone Monoacetals as Arylation and Oxidation Reagents: Tandem *N*-Arylation and α -Functionalization of Pyrrolidine via Redox-Neutral Three-Component Reaction

Feature

2574



Synthesis

Synthesis **2022**, *54*, 2585–2594
DOI: 10.1055/a-1748-6564

Y. Li

T. Hu

L. Gao*

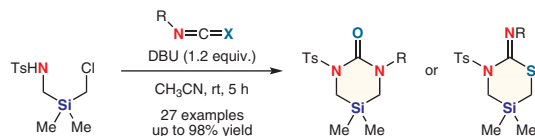
Z. Song*

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Addition/Substitution Approach of TsNHCH₂SiMe₂CH₂Cl with Isocyanates or Isothiocyanates To Construct 1,3,5-Diazasilinan-2-ones or 1,3,5-Thiazasilinan-2-imines

Feature

2585



Synthesis

Synthesis **2022**, *54*, 2595–2603
DOI: 10.1055/a-1742-3723

M. Viviano

G. Trapasso

M. Annatelli

C. Milite

S. Castellano

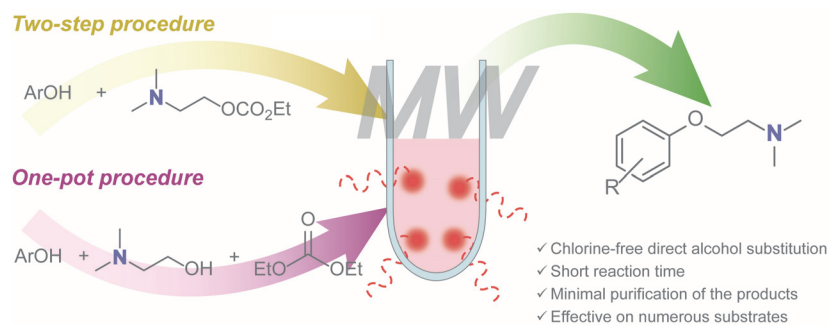
F. Aricò*

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Microwave-Assisted Aminoalkylation of Phenols via Mustard Carbonate Analogues

Feature

2595



Synthesis

Synthesis **2022**, *54*, 2604–2615
DOI: 10.1055/s-0040-1719878

A. A. Peshkov

A. Makhmet

O. Bakulina

E. Kanov

R. Gainetdinov

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D. Dar'in

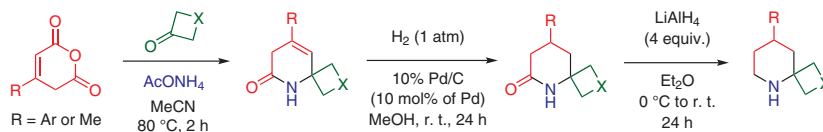
M. Krasavin*

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Immanuel Kant Baltic Federal
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A General Approach to Spirocyclic Piperidines via Castagnoli–Cushman Chemistry

PSP

2604



Synthesis

Synthesis **2022**, *54*, 2616–2628
DOI: 10.1055/a-1740-5785

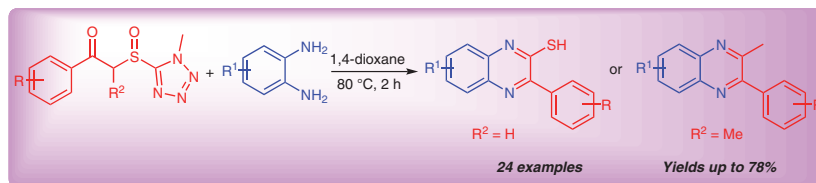
J. Dong*
Y. Chen
X. Huang*

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P. R. of China

Facile Synthesis of Quinoxaline-2-thiol and Quinoxaline from α -Oxosulfines and *o*-Arylenediamines

Paper

2616



Synthesis

Synthesis **2022**, *54*, 2629–2634
DOI: 10.1055/a-1736-1749

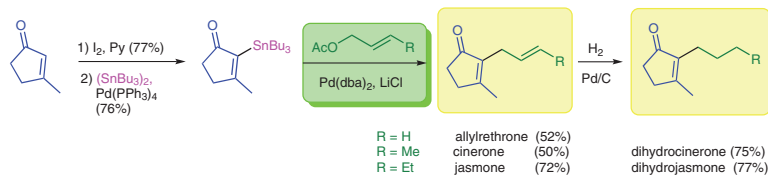
F. Parpal
A. P. Paullier
E. Pandolfi
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Universidad de la República,
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Synthesis of Pyrethroids and Jasmonoids through Palladium-Catalyzed Cross-Coupling Reactions

Paper

2629



Synthesis

Synthesis **2022**, *54*, 2635–2646
DOI: 10.1055/a-1742-2736

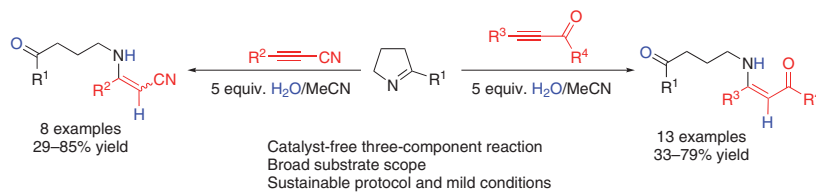
L. A. Oparina
A. G. Mal'kina
N. A. Kolyvanov
I. A. Ushakov
I. V. Saliy
K. A. Apartsin
B. A. Trofimov*

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δ -Keto Aminoacrylonitriles and δ -Keto Aminoenones from 1-Pyrrolines, Cyanoacetylenes, and Acetylenic Ketones

Paper

2635



Synthesis

Total Synthesis of Lamellarins U and A3 by Interrupting Halogen Dance

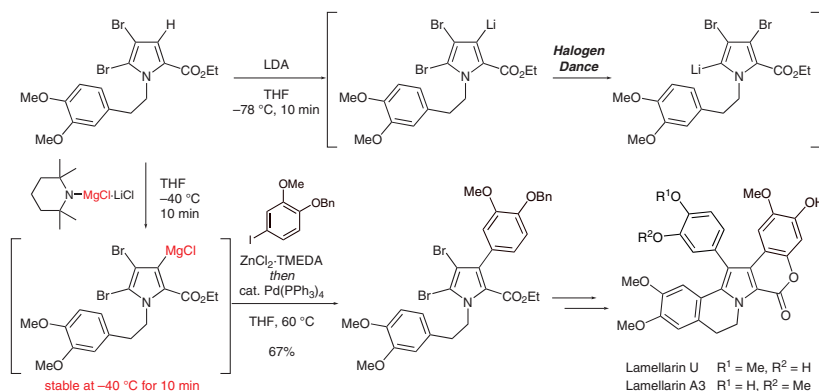
Paper

2647

Synthesis **2022**, *54*, 2647–2660
DOI: 10.1055/a-1736-7337

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Synthesis

Synthesis of Dibenzotetrathiafulvalenes of Oxalic Acid with Electron-Rich Aromatic 1,2-Dithiols and Application to Dithioacetalization with 9-Fluorencarboxylic Acids or Dicarboxylic Acids

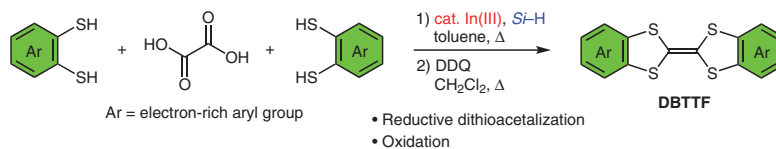
Paper

2661

Synthesis **2022**, *54*, 2661–2668
DOI: 10.1055/a-1742-2821

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K. Minato
S. Nakata
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Synthesis

Synthesis of Seleno Oxindoles via Iodine-Induced Radical Cyclization of *N*-Arylacrylamides with Diorganyl Diselenides

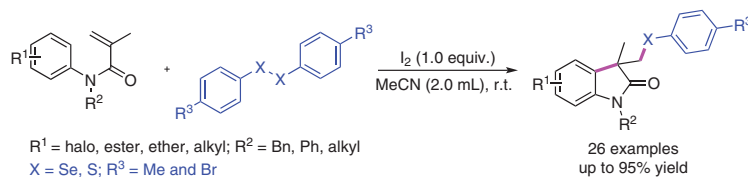
Paper

2669

Synthesis **2022**, *54*, 2669–2676
DOI: 10.1055/a-1739-5042

H. Jiang
H. Shen
C. Li
Z. Jin
Y. Shang
Y. Chen
M. Yi
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Shenzhen University,
P. R. of China
Hunan Optical Agriculture Engi-
neering Technology Research
Center, P. R. of China



Mild conditions
High atom economy
Good functional group tolerance and moderate to good yields
Novel synthetic method of seleno oxindoles

Synthesis

Synthesis 2022, 54, 2677–2686
DOI: 10.1055/s-0040-1719907

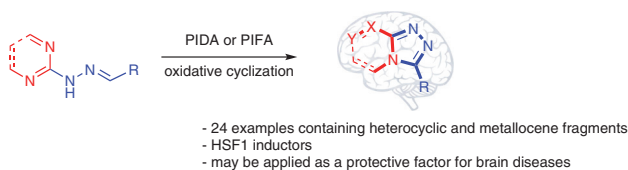
P. O. Serebrennikova
I. A. Utepova*
O. N. Chupakhin
I. V. Guzhova
E. R. Mikhaylova
A. P. Antonchick

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Synthesis and Biological Investigation of 1,2,4-Triazolo[4,3-*a*]azines as Potential HSF1 Inductors

Paper

2677



Synthesis

Synthesis 2022, 54, 2687–2695
DOI: 10.1055/a-1736-8721

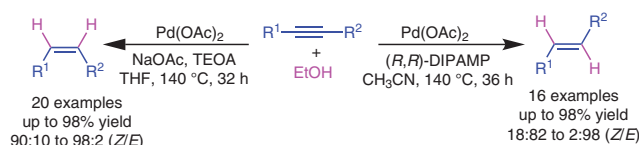
C. Wang*
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T. Li
X. Zhao
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Palladium-Catalyzed Semihydrogenation of Alkynes with EtOH: Highly Stereoselective Synthesis of *E*- and *Z*-Alkenes

Paper

2687



- Ethanol as a hydrogen source
- Ligand/additive and solvent control
- Good yield
- *E/Z* Selectivity
- Wide substrate scope

Synthesis

Synthesis 2022, 54, 2696–2706
DOI: 10.1055/a-1737-2765

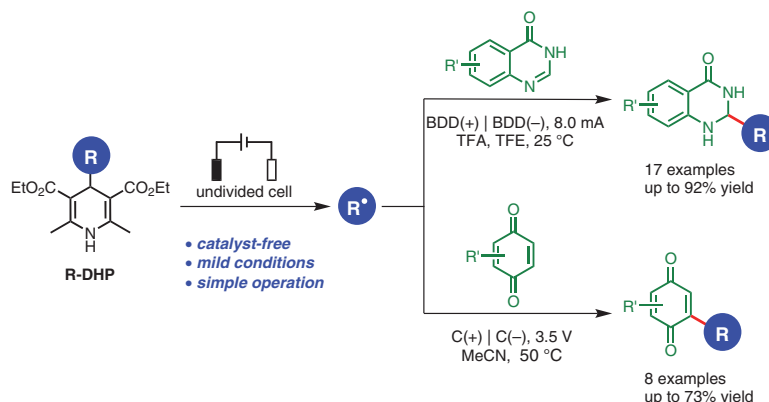
X. Luo
Q. Feng*
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Radical Addition of 4-Hydroxyquinazolines and Alkylation of Quinones by the Electro-Induced Homolysis of 4-Alkyl-1,4-dihydropyridines

Paper

2696



Synthesis

Synthesis 2022, 54, 2707–2723
DOI: 10.1055/a-1734-9782

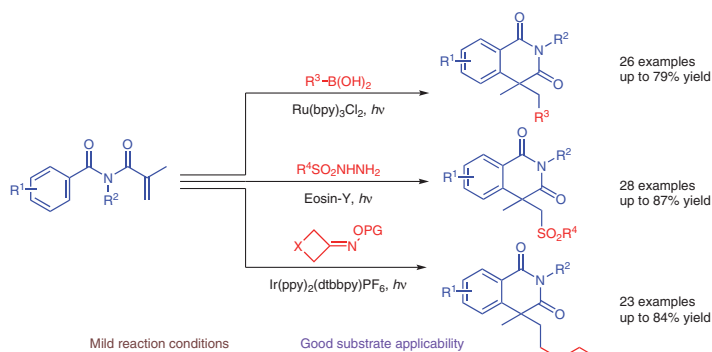
Synthesis of Isoquinoline-1,3(2*H*,4*H*)-diones by Visible-Light-Mediated Cyclization of Acryloylbenzamides with Alkylboronic Acids, Arylsulfonyl Hydrazides and Oxime Esters

Paper

2707

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Synthesis

Synthesis 2022, 54, 2724–2730
DOI: 10.1055/s-0041-1737534

Preparation of Ring-Methoxylated Arylnitromethanes by the Victor Meyer Reaction

Paper

2724

A. S. Maksimenko
P. A. Buikin
E. D. Daeva
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