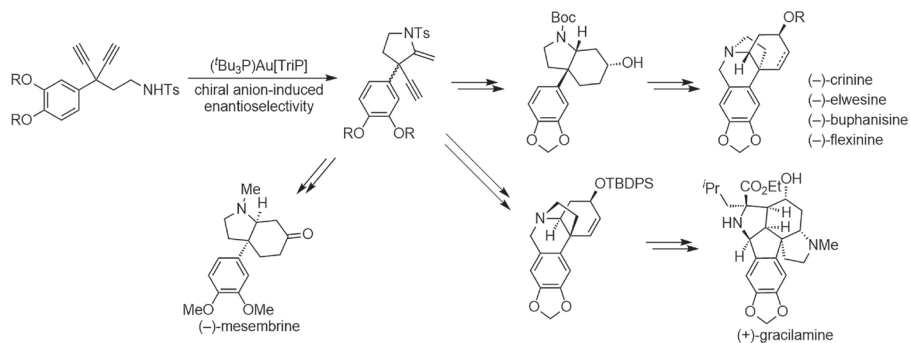


Synthesis

Reviews and Full Papers in Chemical Synthesis

October 15, 2024 • Vol. 56, 3083–3232



A Comprehensive Approach to C3a-Aryl-Substituted Hydroindole Alkaloids by Utilizing Enantioselective Gold Catalysis

J. K. Yu, C. Czekelius

20



Thieme

Synthesis

Synthesis 2024, 56, 3083–3107
DOI: 10.1055/a-2335-8516

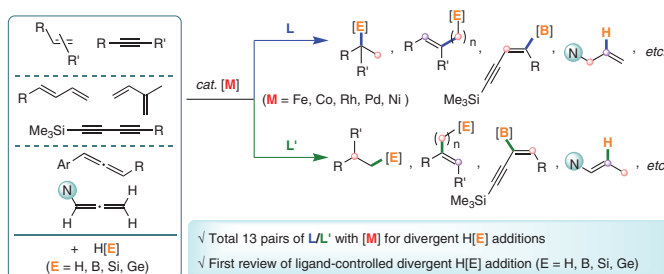
S. Park*

Guangdong Technion Israel Institute of Technology, P. R. of China

Recent Advances in Ligand-Controlled Regio- or Stereodivergent Transition-Metal-Catalyzed Hydroelementation (H[E]) (E = H, B, Si, Ge) of C–C Unsaturated Systems

Review

3083



Synthesis

Synthesis 2024, 56, 3108–3118
DOI: 10.1055/a-2317-6730

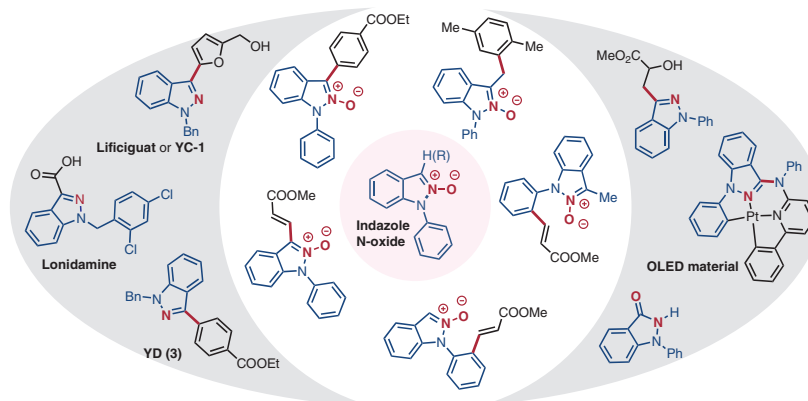
S. Arepally
J. K. Park*

Pusan National University,
Republic of Korea

Synthesis and Utilization of 1*H*-Indazole *N*-Oxides in the Production of C3-Functionalized 1*H*-Indazoles

Short Review

3108

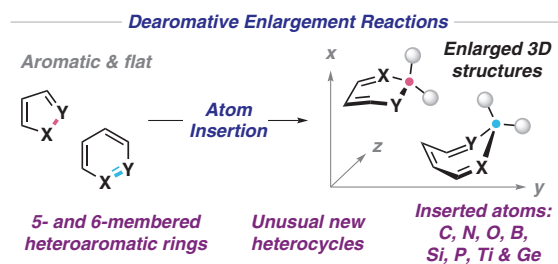


Synthesis 2024, 56, 3119–3130
DOI: 10.1055/a-2335-8799

X. Moreau
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3119

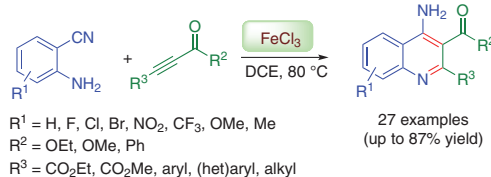


3131

Synthesis 2024, 56, 3131–3141
DOI: 10.1055/a-2368-8500

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Indian Institute of Technology
Guwahati, India



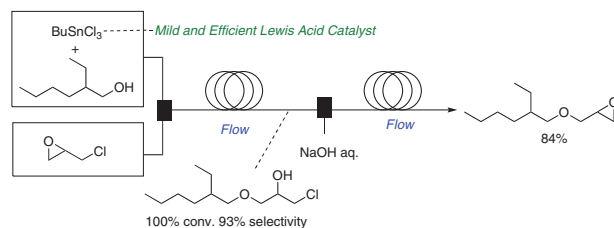
- C–N and C–C bond formation
- gram-scale synthesis
- inexpensive Fe(III) salt promoted
- easily available starting materials

3142

Synthesis 2024, 56, 3142–3146
DOI: 10.1055/a-2359-8893

T. Kasakado
M. Nakamura
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Synthesis

Synthesis 2024, 56, 3147–3159
DOI: 10.1055/s-0043-1775389

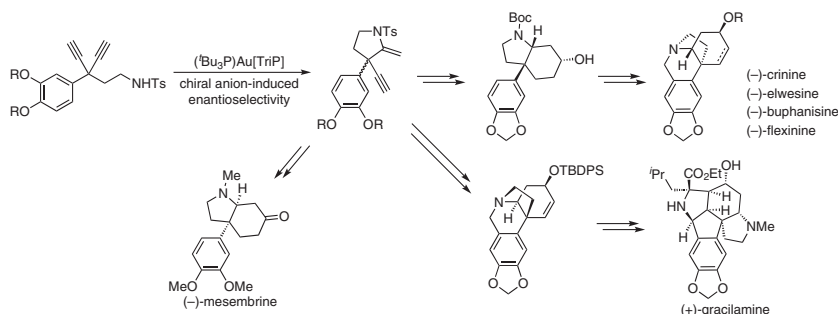
J. K. Yu
C. Czekelius*

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A Comprehensive Approach to C3a-Aryl-Substituted Hydroindole Alkaloids by Utilizing Enantioselective Gold Catalysis

Paper

3147



Synthesis

Synthesis 2024, 56, 3160–3166
DOI: 10.1055/a-2367-2434

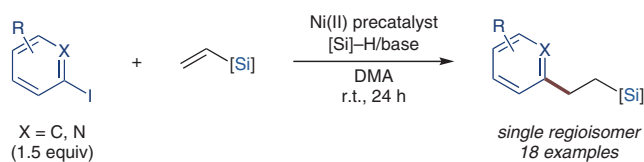
D. Brösamlen
M. Oestreich*

Technische Universität Berlin,
Germany

Ni–H-Catalyzed Chemo- and Regioselective Hydroarylation of Vinylsilanes

Paper

3160



Synthesis

Synthesis 2024, 56, 3167–3172
DOI: 10.1055/a-2367-1877

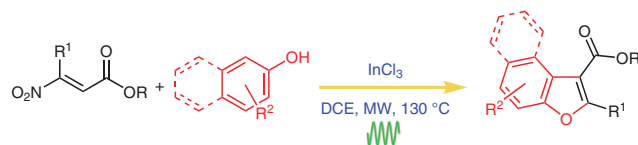
B. Bassetti
M. Principi
R. Ballini
M. Petrini
A. Palmieri*

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 β -Nitroacrylates and Phenols as Key Precursors of Arenofuran-3-carboxylates

Paper

3167



Synthesis

Synthesis 2024, 56, 3173–3180
DOI: 10.1055/s-0043-1775390

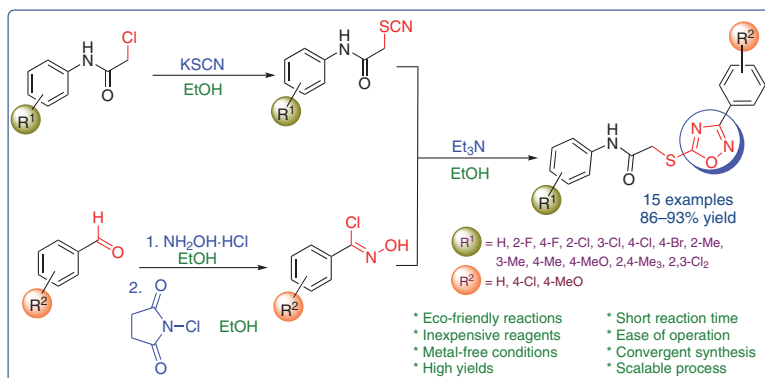
V. Y. Radhakrishna
G. L. Khatik
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Amrita Vishwa Vidyapeetham,
Amritapuri Campus, India

1,3-Dipolar Cycloaddition Reaction of Nitrile Oxide to Thiocyanates: An Efficient and Eco-Friendly Synthesis of *N*-Aryl-2-((3-aryl-1,2,4-oxadiazol-5-yl)thio)acetamides

Paper

3173



Synthesis

Synthesis 2024, 56, 3181–3190
DOI: 10.1055/a-2361-0011

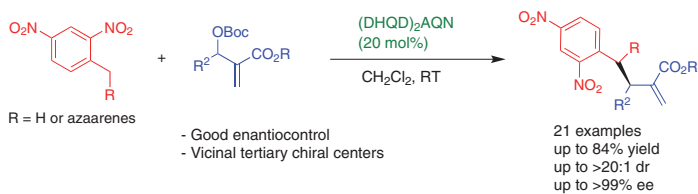
Y.-D. Wu
B.-W. Huang
Y.-C. Chen
J.-L. Han*

National Chung Hsing University,
Taiwan R.O.C.

Asymmetric Organocatalytic Benzylation of Morita–Baylis–Hillman Carbonates with 2,4-Dinitrotoluene Derivatives

Paper

3181



Synthesis

Synthesis 2024, 56, 3191–3198
DOI: 10.1055/a-2359-8967

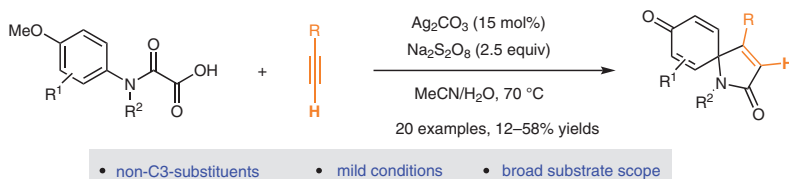
C.-A. Jin
R.-X. Liang*
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College of Chemical Engineering,
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Silver-Catalyzed Dearomative [3+2] Spiroannulation of Aryl Oxamic Acids with Alkynes

Paper

3191



Synthesis

Synthesis 2024, 56, 3199–3205
DOI: 10.1055/s-0043-1775386

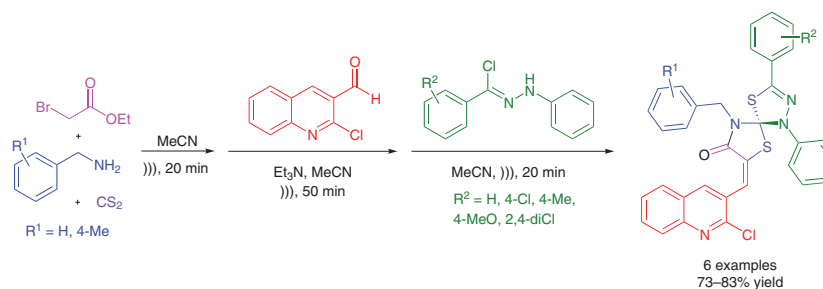
A. Alizadeh*
E. A. Chelebari
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at Modares University, Iran

Regio- and Chemoselective Synthesis of 4,6-Dithia-1,2,9-triazaspiro-[4.4]non-2-en-8-ones through an Ultrasound-Promoted One-Pot Sequential Pseudo-Five-Component Reaction

Paper

3199



Synthesis

Synthesis 2024, 56, 3206–3214
DOI: 10.1055/a-2359-8813

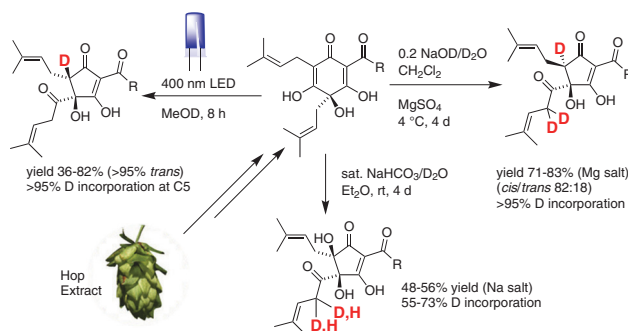
B. C. Hamper*
H. J. Campbell
R. Luo
M. Murphy
P. Gleason
T. Smith
R. Jagan

University of Missouri-St. Louis,
USA

Selective Synthesis of Deuterated cis- and trans-Isohumulones and trans-Isohumulinones

Paper

3206



Synthesis

Synthesis 2024, 56, 3215–3219
DOI: 10.1055/a-2361-0069

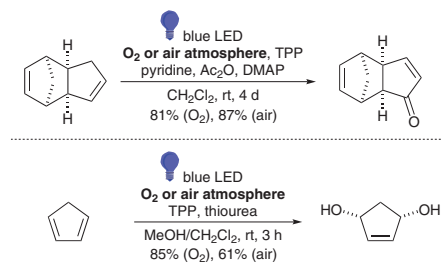
M. Hasumi
T. Tsutsumi
D. Shikama
I. Hayakawa*

Nihon University, Japan

Efficient Oxidation with Singlet Oxygen from 5,10,15,20-Tetraphenylporphyrin under Blue LED Irradiation and Air Atmosphere: Simplified Preparation of Key Building Blocks for Natural Product Synthesis

Paper

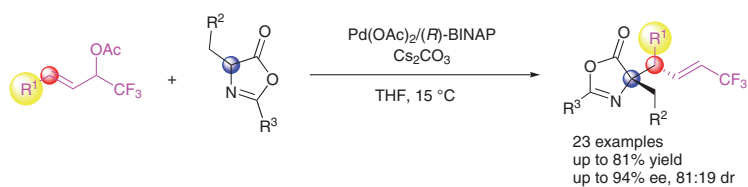
3215



S. Zhang
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D. Li
J. Zhao
J. Qu
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Palladium-Catalyzed Asymmetric Allylic Alkylation of Azlactones: An Efficient Access to Unsaturated Trifluoromethylated α -Amino Acid Derivatives Possessing α -Quaternary Stereogenic Centers



- Good yields, exclusive regioselectivity and good stereoselectivity
- Mild reaction conditions
- Readily scalable to gram scale
- Diverse transformations