Synlett

Accounts and
Rapid Communications
in Chemical Synthesis

2018
Vol. 29, No. 15
September II

Total Synthesis of Astellatol: A Three-Decade Synthetic Puzzle

Synlett **2018**, *29*, 1933–1936
DOI: 10.1055/s-0037-1610149

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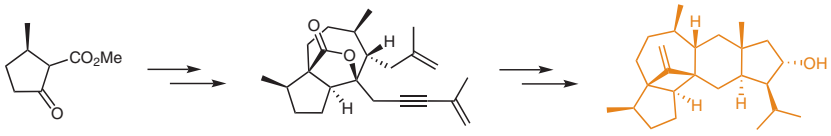

Astellatol

Key transformations:
1) A TMS group dominated facial selective hydrogenation
2) An intramolecular Pauson–Khand reaction formed the hydrindane scaffold
3) An unprecedented SmI_2-mediated reductive radical 1,6-addition forged the cyclobutane
4) A strategic oxidation/reduction unravelled extremely challenging late-stage *trans*-hydrindane synthesis

The Direct Pd-Catalyzed β-C(sp^3)–H Activation of Carboxylic Acids

Synlett **2018**, *29*, 1937–1943
DOI: 10.1055/s-0037-1610150

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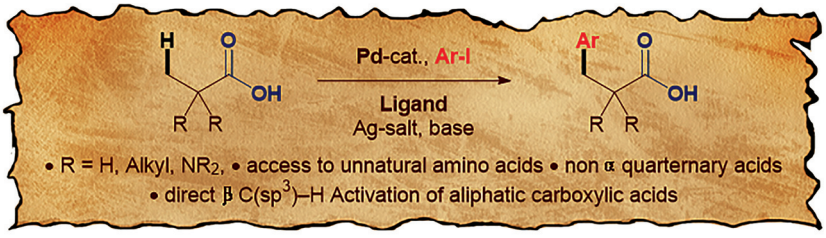

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Proline-Catalyzed Asymmetric α-Amination in the Synthesis of Bioactive Molecules

Account

1944

Synlett **2018**, *29*, 1944–1956
DOI: 10.1055/s-0037-1610022

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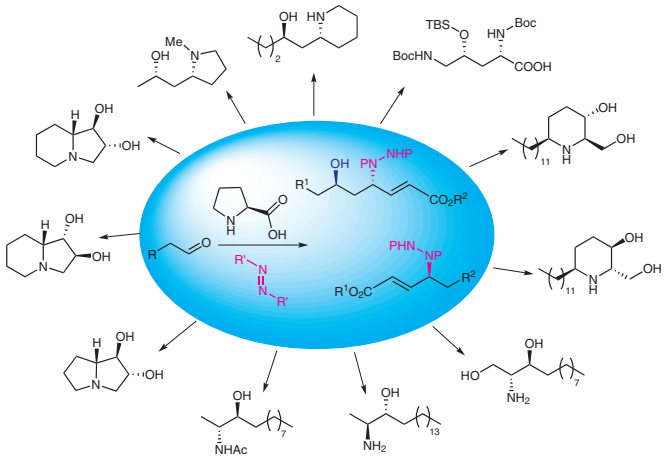

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Guanidines as Reagents in Proton-Coupled Electron-Transfer Reactions and Redox Catalysts

Account

1957

Synlett **2018**, *29*, 1957–1977
DOI: 10.1055/s-0037-1610156

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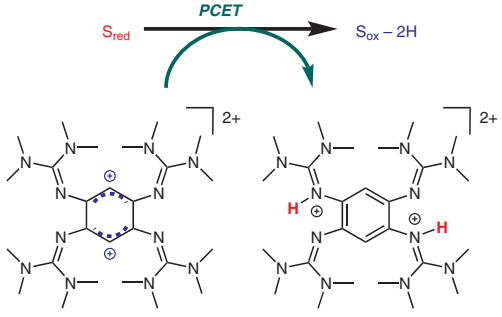

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Synthesis of Polycyclic Frameworks through Iron-Catalyzed Intramolecular [5+2] Cycloaddition

Letter

1978

Synlett **2018**, *29*, 1978–1982
DOI: 10.1055/s-0037-1610258

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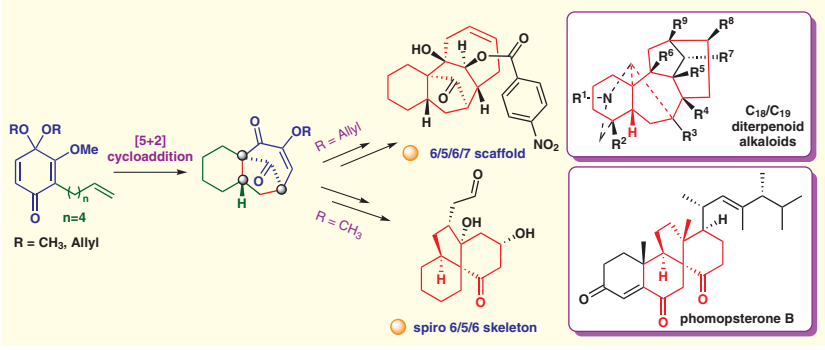

Synlett

Synlett **2018**, *29*, 1983–1988
DOI: 10.1055/s-0037-1610235

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L. A. Canalle
D. Molendijk
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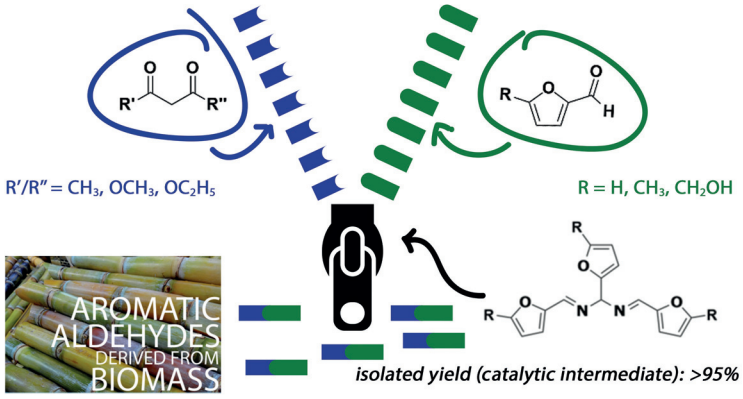
Exploration of the Role of Double Schiff Bases as Catalytic Intermediates in the Knoevenagel Reaction of Furanic Aldehydes: Mechanistic Considerations

Letter



Synlett

Synlett **2018**, *29*, 1989–1994
DOI: 10.1055/s-0037-1610228

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A. Nagaki
H. Shimoda
M. Uwamori
J.-i. Yoshida
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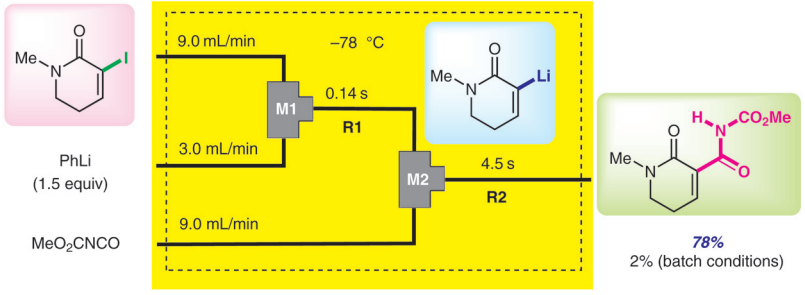
Efficient Preparation of Cyclic α-Alkylidene β-Oxo Imides by Using a Flow Microreactor System

Letter



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Synlett **2018**, *29*, 1995–2000
DOI: 10.1055/s-0037-1610218

D. Anandkumar
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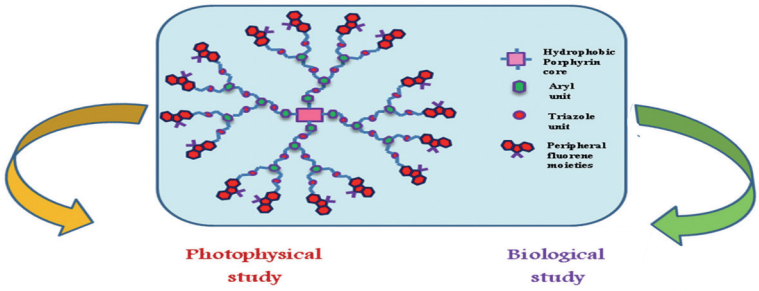
University of Madras, India

Photophysical and Electrochemical Properties and Anticancer Activities of Porphyrin-Cored Fluorenodendrimers Synthesized by Click Chemistry

Letter



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Synlett **2018**, *29*, 2001–2005
DOI: 10.1055/s-0037-1610533

A 'Turn-on' Fluorescence Glycosyl Dithiocarbamate Probe for Selective Fluoride Sensing in Aqueous Medium

Letter

2001

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B. Mishra
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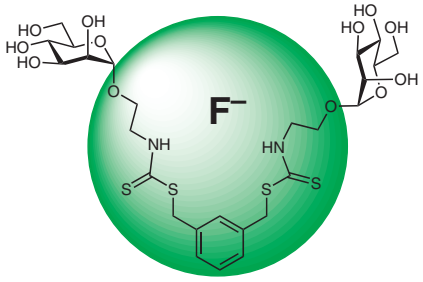

Synlett

Synlett **2018**, *29*, 2006–2010
DOI: 10.1055/s-0037-1610232

Chiral VAPOL Imidodiphosphoric Acid-Catalyzed Asymmetric Vinylogous Mannich Reaction for the Synthesis of Butenolides

Letter

2006

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G. Liu
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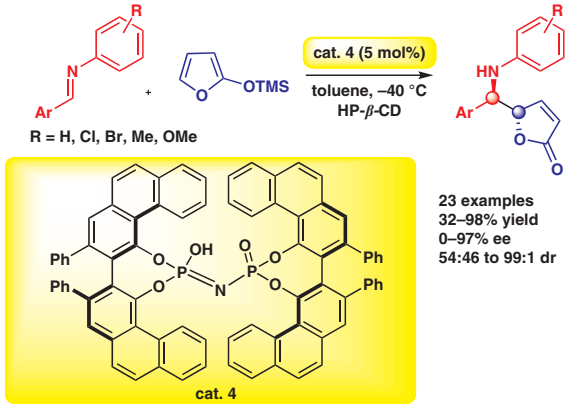
Jilin University, P. R. of China



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Synlett **2018**, *29*, 2011–2014
DOI: 10.1055/s-0037-1610253

A Synthesis of Novel Perinaphthenones from Acetylenic Esters and Acenaphthoquinone–Malononitrile Adduct in the Presence of Triphenylphosphine

Letter

2011

I. Yavari*
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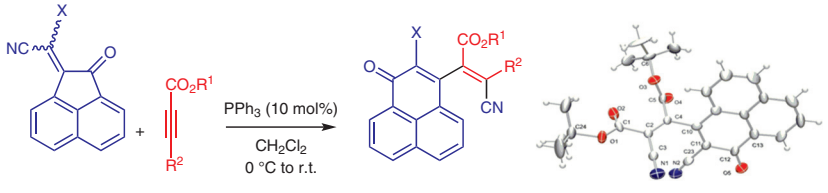
M. R. Halvagar
Tarbiat Modares University, Iran



X = CN, CO_2Et
R^1 = Me, Et, ^{t}Bu
R^2 = H, CO_2Me, CO_2Et, $CO_2{}^t$Bu

- 10 Examples, 75–88% yield
- Regioselective
- Mild reaction conditions
- Metal-free catalyst

Synlett

Synlett **2018**, *29*, 2015–2018
DOI: 10.1055/s-0037-1610262

X. Zhang
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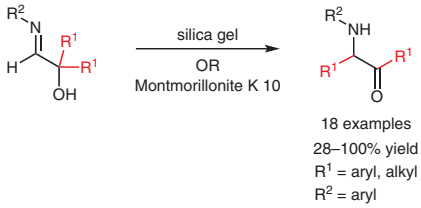
The Acceleration of the Rearrangement of α-Hydroxy Aldimines by Lewis or Brønsted Acids

Letter

2015



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Synlett **2018**, *29*, 2019–2022
DOI: 10.1055/s-0037-1610549

I. Yavari*
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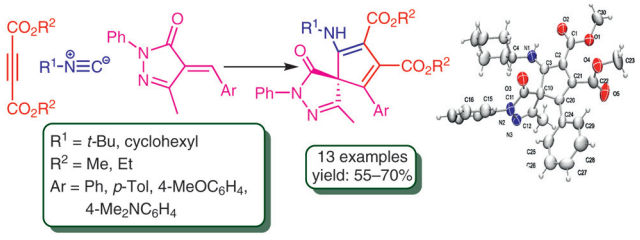
A Convenient Synthesis of Functionalized 2,3-Diazaspiro[4.4]nona-1,6,8-trienes

Letter

2019



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Synlett **2018**, *29*, 2023–2026
DOI: 10.1055/s-0037-1610654

P. V. Santhini
G. Gopalan
A. S. Smrithy
K. V. Radhakrishnan*
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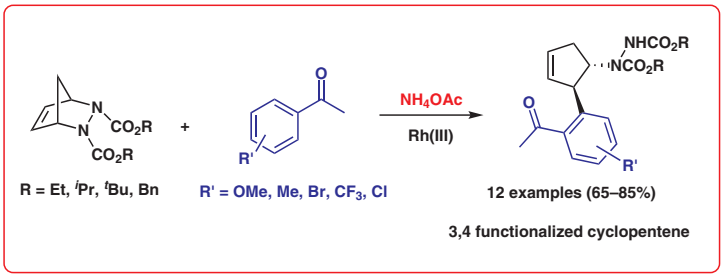
Rhodium(III)-Catalyzed C–H Activation/Alkylation of Diazabicyclic Olefins with Aryl Ketones: Facile Synthesis of Functionalized Cyclopentenes

Letter

2023



Synlett

Synlett **2018**, *29*, 2027–2030
DOI: 10.1055/s-0037-1609556

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Q. Liu
S. Lin*
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Synthesis of Thiophosphates by Coupling of Phosphates with Bunte Salts under Mild Conditions

Letter

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Synlett **2018**, *29*, 2031–2034
DOI: 10.1055/s-0037-1610227

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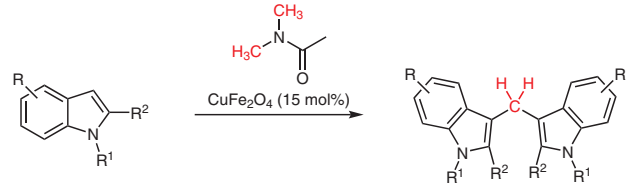
HCMC University of Technology,
Vietnam

Synthesis of Unnatural Arundines Using a Magnetically Reusable Copper Ferrite Catalyst

Letter



R = Me, halide, MeO, TMS, Bpin, pyrazoles
R^1 = H, Me, allyl, Bn, Ar
R^2 = H, Me, Ph

• reusable heterogeneous catalyst

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Synlett **2018**, *29*, 2035–2038
DOI: 10.1055/s-0037-1609939

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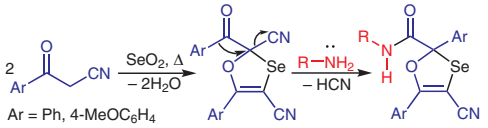
New Cyano-Group-Containing 1,3-Oxaselenoles: Nucleophilic Substitution of a Cyano Group with Rearrangement

Letter



Ar = Ph, 4-$MeOC_6H_4$
R = H, NH_2, CH_2Ph, 4-Tol, 4-$MeOC_6H_4$

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Synlett **2018**, *29*, 2039–2042
DOI: 10.1055/s-0037-1610229

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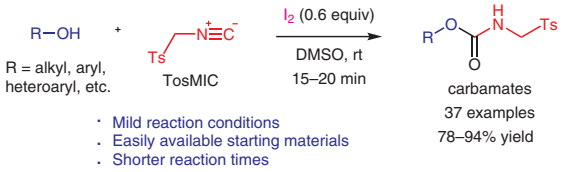
An Efficient Direct Access to Carbamates from Alcohols and TosMIC Mediated by Iodine in DMSO

Letter



- Mild reaction conditions
- Easily available starting materials
- Shorter reaction times

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Synlett **2018**, *29*, 2043–2045
DOI: 10.1055/s-0037-1610648

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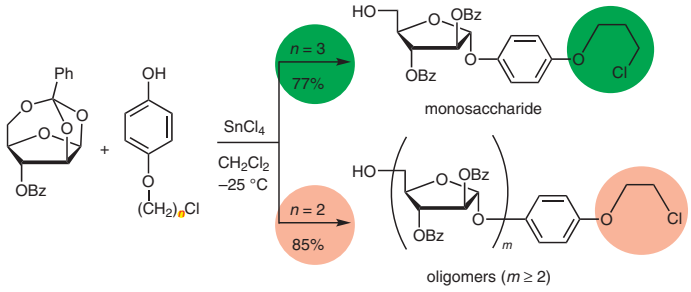
Length Matters: One Additional Methylene Group in a Reactant is Able to Affect the Reactivity Pattern and Significantly Increase the Product Yield

Letter



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Synlett **2018**, *29*, 2046–2050
DOI: 10.1055/s-0037-1610226

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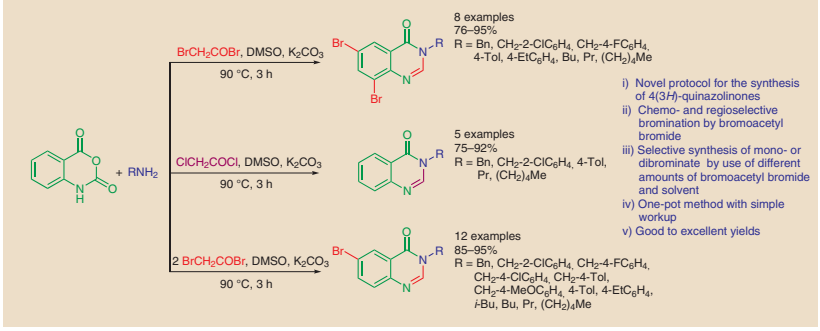
A Domino Process for the Sustainable Synthesis of Quinazolin-4(3*H*)-ones with Direct Chemo- and Regioselective Bromination

Letter



Synlett

Synlett **2018**, *29*, 2051–2055
DOI: 10.1055/s-0037-1610259

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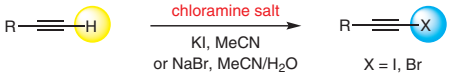
Chloramine Salt Mediated Oxidative Halogenation of Terminal Alkynes with KI or NaBr: Practical Synthesis of 1-Bromoalkynes and 1-Iodoalkynes

Letter



- Practical approach
- Simple operation
- Gram-scale synthesis
- General access to 1-bromoalkynes and 1-iodoalkynes

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Synlett **2018**, *29*, 2056–2060
DOI: 10.1055/s-0037-1610655

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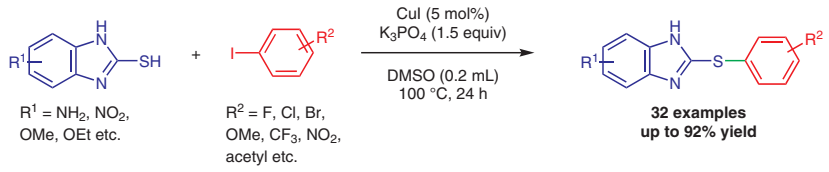
Nanyang Technological University, Singapore

Ligand-Free CuI-Catalyzed Chemoselective S-Arylation of 2-Mercaptobenzimidazole with Aryl Iodides

Letter



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Synlett **2018**, *29*, 2061–2065
DOI: 10.1055/s-0037-1609912

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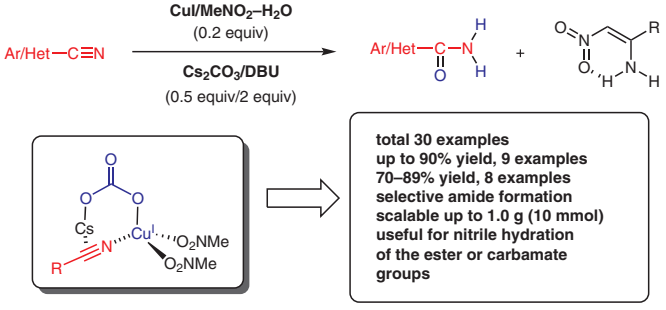
Nitrile Hydration Reaction Using Copper Iodide/Cesium Carbonate/DBU in Nitromethane–Water

Letter



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Synlett **2018**, *29*, 2066–2070
DOI: 10.1055/s-0037-1609494

A *De Novo* Synthetic Route to 1,2,3,4-Tetrahydroisoquinoline Derivatives

Letter

2066

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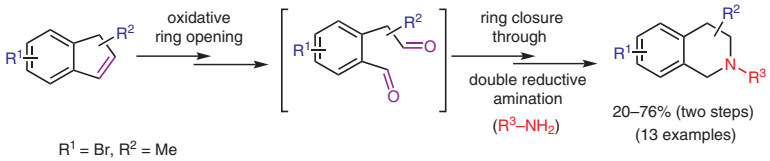

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Synlett **2018**, *29*, 2071–2075
DOI: 10.1055/s-0037-1610225

Cu-Catalyzed Conjugate Addition of Grignard Reagents to Thiochromones: An Enantioselective Pathway for Accessing 2-Alkylthiochromanones

Letter

2071

S. Luo
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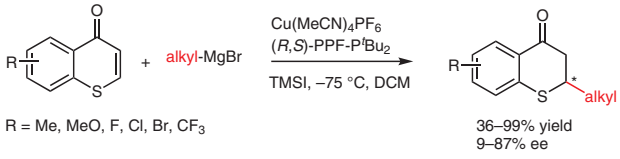
Guizhou Normal University, P. R. of China



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Synlett **2018**, *29*, 2076–2080
DOI: 10.1055/s-0037-1610649

Transition-Metal-Free Synthesis of Thiosulfonates through Radical Coupling Reaction

Letter

2076

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