Synthesis

Reviews and Full Papers in Chemical Synthesis

2018
Vol. 50, No. 22
November II

Synthesis

Synthesis **2018**, *50*, 4343–4350
DOI: 10.1055/s-0037-1610108

K. M. Oberg
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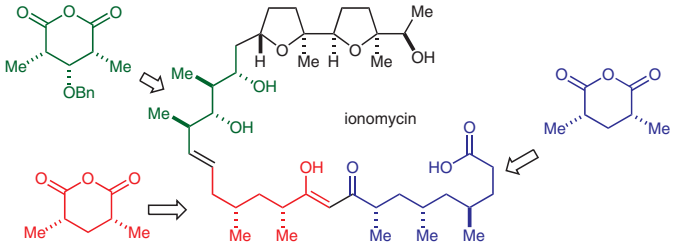
The Catalytic Alkylative Desymmetrization of Anhydrides in a Formal Synthesis of Ionomycin

Paper
4343



Synthesis

Synthesis **2018**, *50*, 4351–4358
DOI: 10.1055/s-0037-1609754

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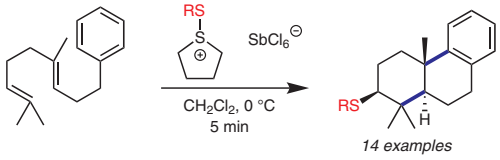
H. M. Chi
K. C. DeBacker
S. A. Snyder*
The University of Chicago, USA

Synthesis of Enhanced, Isolable Disulfanium Salts and their Application to Thiiranium-Promoted Polyene Cyclizations

Paper
4351



- Isolable and readily variable disulfanium salts where R = alkyl and aryl
- Generally higher yielding than other electrophilic sulfur transfer reagents for polyene cyclizations with yields up to 64%

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Synthesis

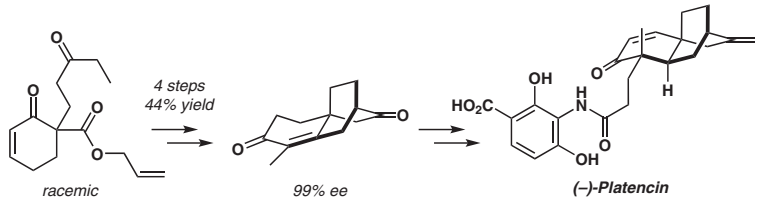
Synthesis **2018**, *50*, 4359–4367
DOI: 10.1055/s-0037-1610437

Short Enantioselective Formal Synthesis of (–)-Platencin

Paper

4359

C. Defieber
J. T. Mohr
G. A. Grabovyi
B. M. Stoltz*
California Institute of Technology, USA



Synthesis

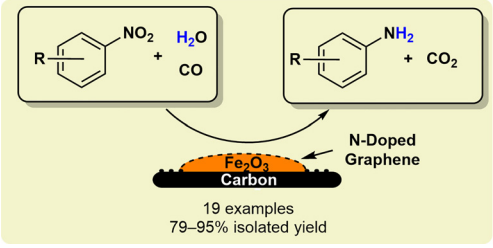
Synthesis **2018**, *50*, 4369–4376
DOI: 10.1055/s-0037-1610196

Heterogeneous Iron-Catalyzed Hydrogenation of Nitroarenes under Water-Gas Shift Reaction Conditions

Paper

4369

P. Ryabchuk
K. Junge
M. Beller*
Leibniz-Institut für Katalyse e.V., Germany



Synthesis

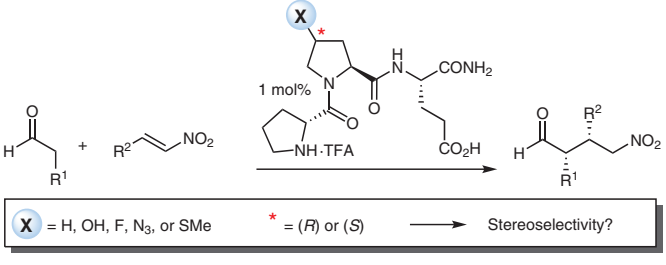
Synthesis **2018**, *50*, 4377–4382
DOI: 10.1055/s-0037-1609547

Effect of γ-Substituted Proline Derivatives on the Performance of the Peptidic Catalyst H-DPro-Pro-Glu-NH_2

Paper

4377

T. Schnitzer
H. Wennemers*
ETH Zürich, Switzerland



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Synthesis

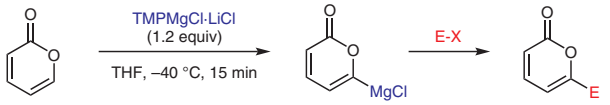
Synthesis **2018**, *50*, 4383–4394
DOI: 10.1055/s-0037-1610215

Directed Zincation or Magnesiation of 2- and 4-Pyrones and Their Derivatives

Paper

4383

D. S. Ziegler
L. Klier
N. Müller
K. Karaghiosoff
P. Knochel*
Ludwig-Maximilians-Universität München, Germany



E-X = iodide, aldehyde, aryl or heteroaryl halide, allylic halide, acyl chloride

44–95% yield

Synthesis

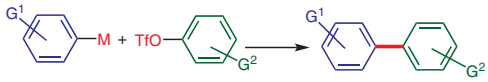
Synthesis **2018**, *50*, 4395–4412
DOI: 10.1055/s-0037-1611053

Directed *ortho* Metalation (DoM)-Linked Corriu–Kumada, Negishi, and Suzuki–Miyaura Cross-Coupling Protocols: A Comparative Study

Paper

4395

C. A. Quesnelle
V. Snieckus*
Queen's University, Canada



M = MgX, ZnX, $B(OR)_2$

Synthesis

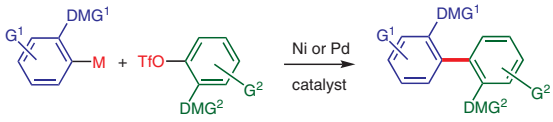
Synthesis **2018**, *50*, 4413–4428
DOI: 10.1055/s-0037-1610273

The Directed *ortho* Metalation (DoM)–Cross-Coupling Connection: Synthesis of Polyfunctional Biaryls

Paper

4413

C. A. Quesnelle
V. Snieckus*
Queen's University, Canada



M = $B(OH)_2$, MgX, ZnX

DMG^1, DMG^2 = $CONR_2$, $OCONR_2$, OMOM, NHBoc

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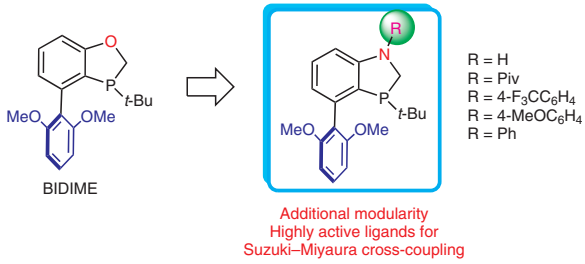
Synthesis
Synthesis **2018**, *50*, 4429–4434
DOI: 10.1055/s-0037-1610158

Modular Dihydrobenzoazaphosphole Ligands for Suzuki–Miyaura Cross-Coupling

Paper **4429**

Y. Zhang*
K. S. Lao
J. D. Sieber
Y. Xu
L. Wu
X.-J. Wang
J.-N. Desrosiers
H. Lee
N. Haddad
Z. S. Han
N. K. Yee
J. J. Song
A. R. Howell
C. H. Senanayake*
Boehringer Ingelheim Pharmaceuticals, USA



Synthesis
Synthesis **2018**, *50*, 4435–4443
DOI: 10.1055/s-0036-1591590

Enantioselective Arylation of Oxindoles Using Modified BI-DIME Ligands

Paper **4435**

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N. Haddad*
J. T. Reeves
B. Qu
S. Rodriguez
H. Lee
N. K. Yee
J. J. Song
C. A. Busacca
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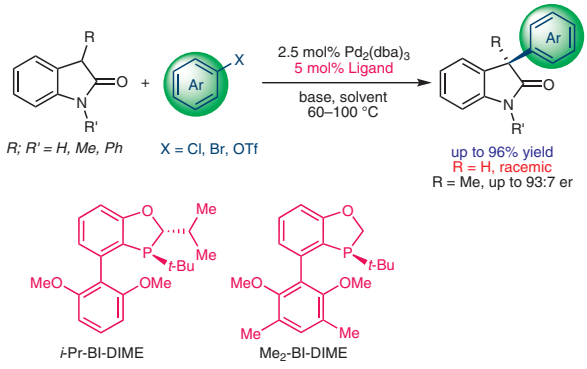
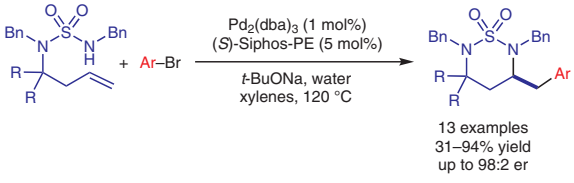


Synthesis
Synthesis **2018**, *50*, 4444–4452
DOI: 10.1055/s-0036-1591574

Asymmetric Synthesis of Six-Membered Cyclic Sulfamides via Palladium-Catalyzed Alkene Carboamination Reactions

Paper **4444**

Z. J. Garlets
J. P. Wolfe*
University of Michigan, USA



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Synthesis
Synthesis **2018**, *50*, 4453–4461
DOI: 10.1055/s-0037-1610140

A Divergent Nickel-Catalyzed Synthesis of Quinazolinediones and Benzoxazinone Imines

Paper
4453

W. Wertjes
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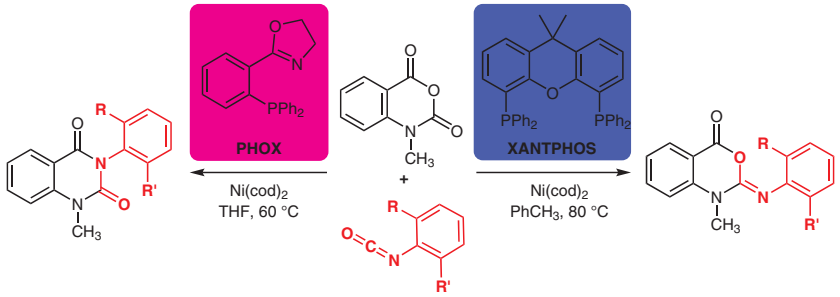
Q. Gao
E. M. Simmons
G. L. Beutner*
Bristol-Myers Squibb Company, USA



Synthesis
Synthesis **2018**, *50*, 4462–4470
DOI: 10.1055/s-0037-1609858

Site-Selective, Catalyst-Controlled Alkene Aziridination

Paper
4462

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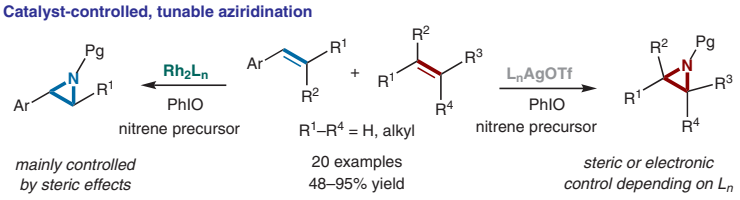

Synthesis
Synthesis **2018**, *50*, 4471–4475
DOI: 10.1055/s-0037-1610087

α-Arylation of Esters and Ketones Enabled by a Bench-Stable Pd(I) Dimer Catalyst

Paper
4471

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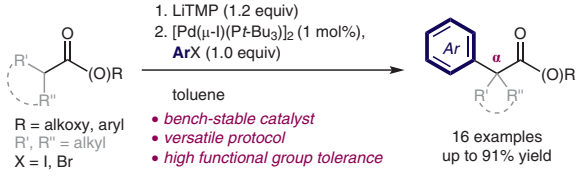

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Synthesis

Synthesis **2018**, *50*, 4476–4482
DOI: 10.1055/s-0036-1591597

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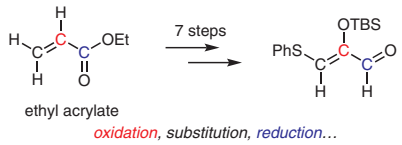
Synthesis of (*Z*)-2-[(*tert*-Butyldimethylsilyl)oxy]-3-(phenylthio)-acrylaldehyde

Paper

4476



Synthesis

Synthesis **2018**, *50*, 4483–4489
DOI: 10.1055/s-0037-1610184

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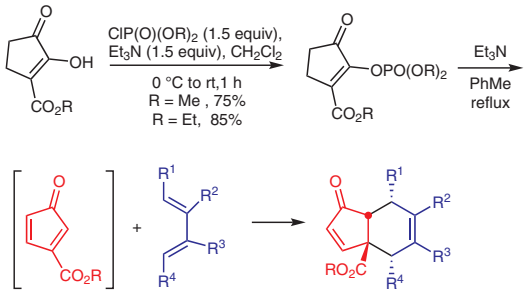
Derivatives of Alkyl 2-Hydroxy-3-oxocyclopent-1-enecarboxylates and Intermolecular [4+2] Cycloadditions of Cyclopentadienones Prepared Therefrom

Paper

4483



Synthesis

Synthesis **2018**, *50*, 4490–4500
DOI: 10.1055/s-0037-1610199

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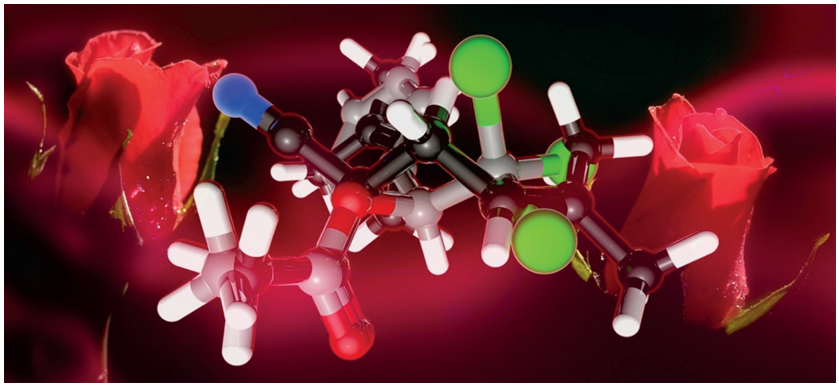
Unconventional Rose Odorants: Serendipitous Discovery and Unique Olfactory Properties of 2,2-Bis(prenyl)-3-oxobutyronitrile and Its Derivatives

Paper

4490



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