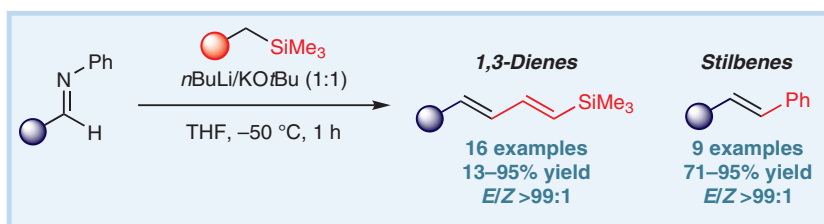


# Synthesis

Reviews and Full Papers in Chemical Synthesis

October 1, 2021 • Vol. 53, 3409–3638



Aza-Peterson Olefinations: Rapid Synthesis of (*E*)-Alkenes

T. K. Britten, A. J. Basson, D. D. Roberts, M. G. McLaughlin

19

## Synthesis

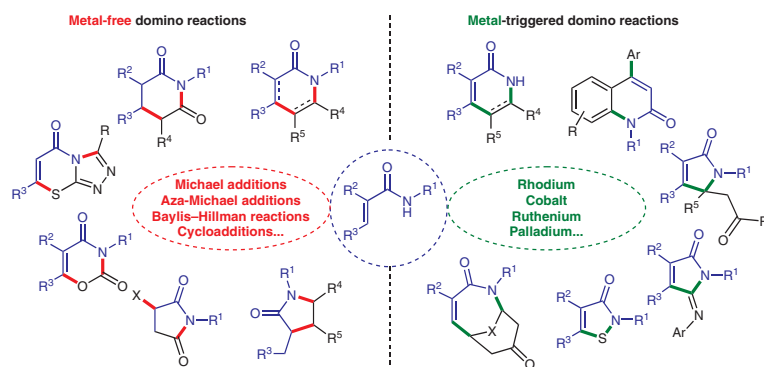
*Synthesis* 2021, 53, 3409–3439  
DOI: 10.1055/a-1503-7932

I. Alahyen  
L. Benhamou  
V. Dalla  
C. Taillier  
S. Comesse\*  
Normandie Univ, France

## 20 Years of Forging N-Heterocycles from Acrylamides through Domino/Cascade Reactions

Review

3409



## Synthesis

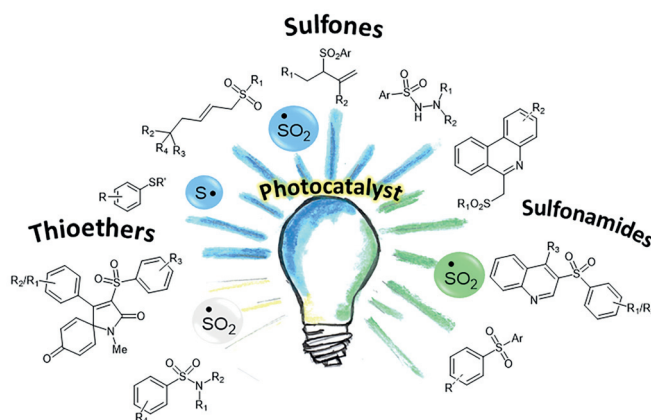
*Synthesis* 2021, 53, 3440–3468  
DOI: 10.1055/a-1509-5541

E. Azzi  
A. Lanfranco  
R. Moro  
A. Deagostino  
P. Renzi\*  
University of Torino, Italy

## Visible Light as the Key for the Formation of Carbon–Sulfur Bonds in Sulfones, Thioethers, and Sulfonamides: An Update

Review

3440



## Synthesis

## A Review on Synthetic Approaches towards Kavalactones

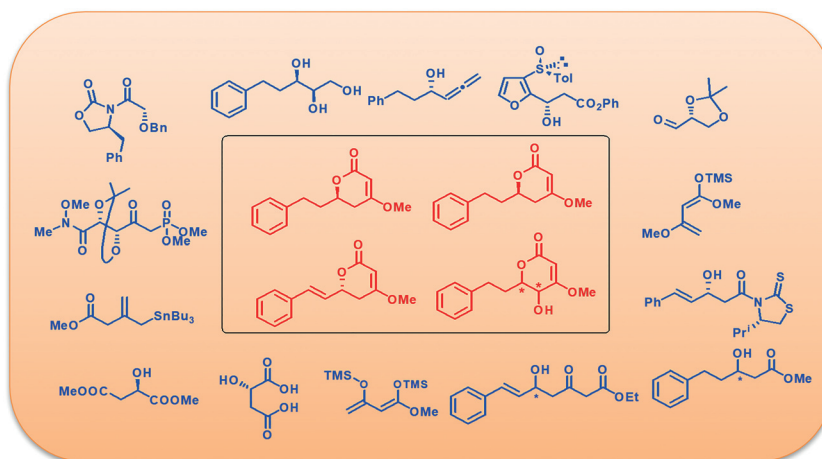
## Review

*Synthesis* 2021, 53, 3469–3484  
DOI: 10.1055/s-0040-1706044

K. Tadiparthi\*  
P. Anand

CHRIST (Deemed to be University), India

3469



## Synthesis

## Cyanide Anions as Nucleophilic Catalysts in Organic Synthesis

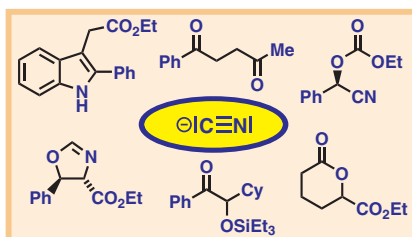
## Short Review

*Synthesis* 2021, 53, 3485–3496  
DOI: 10.1055/a-1499-8943

D. Kieslich  
J. Christoffers\*

Carl von Ossietzky Universität  
Oldenburg, Germany

3485



## Synthesis

## The Use of Electrophilic Cyclization for the Preparation of Condensed Heterocycles

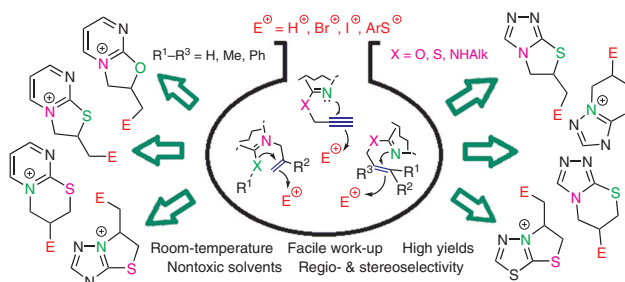
## Short Review

*Synthesis* 2021, 53, 3497–3512  
DOI: 10.1055/s-0040-1706036

M. Slivka\*  
M. Onysko

Uzhhorod National University,  
Ukraine

3497



## Synthesis

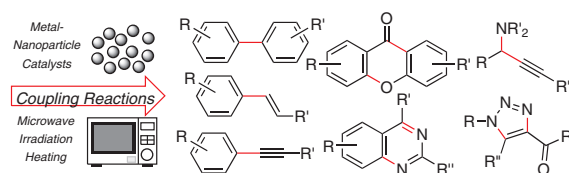
Synthesis 2021, 53, 3513–3521  
DOI: 10.1055/a-1505-0916

M. Sako  
M. Arisawa\*  
Osaka University, Japan

## Recent Advances in Metal-Nanoparticle-Catalyzed Coupling Reactions Assisted by Microwave Irradiation

## Short Review

3513



## Synthesis

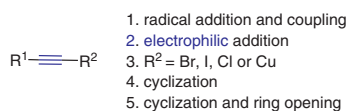
Synthesis 2021, 53, 3522–3534  
DOI: 10.1055/a-1486-2158

B. Gao  
D. Deng\*  
D. Huang\*  
X. Sun\*  
Lishui University, No. 1,  
P. R. of China  
Ministry of Science & Technology,  
P. R. of China

## Recent Advances in the Tandem Difunctionalization of Alkynes: Mechanism-Based Classification

## Short Review

3522



## Synthesis

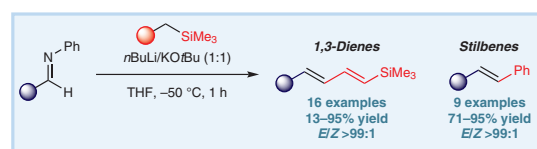
Synthesis 2021, 53, 3535–3544  
DOI: 10.1055/a-1493-6670

T. K. Britten\*  
A. J. Basson  
D. D. Roberts  
M. G. McLaughlin\*  
Manchester Metropolitan University,  
UK

## Aza-Peterson Olefinations: Rapid Synthesis of (E)-Alkenes

## Feature

3535



## Synthesis

*Synthesis* **2021**, 53, 3545–3554  
DOI: 10.1055/a-1509-6078

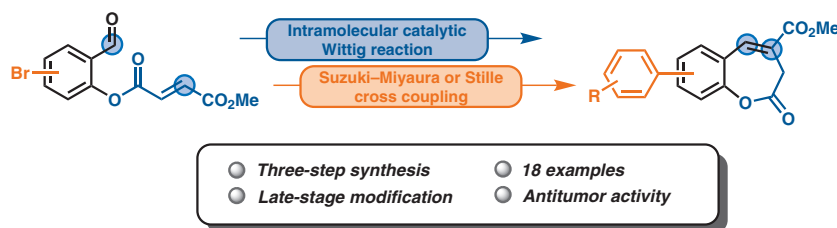
L. Pudnika  
I. Domranceva  
T. Werner\*  
R. Zalubovskis  
A. Grandane\*

Latvian Institute of Organic Synthesis, Latvia  
Paderborn University, Germany  
Leibniz Institute for Catalysis, Rostock, Germany

### Base-Free Catalytic Wittig-/Cross-Coupling Reaction Sequence as Short Synthetic Strategy for the Preparation of Highly Functionalized Arylbenzoxepinones

Feature

3545



## Synthesis

*Synthesis* **2021**, 53, 3555–3563  
DOI: 10.1055/a-1485-4956

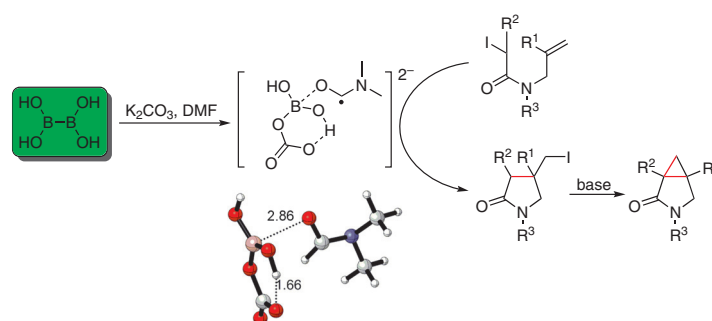
P. Wang  
Y. Li  
G. Wang\*

Tianjin University, P. R. China

### Tetrahydroxydiboron-Initiated Atom-Transfer Radical Cyclization

Feature

3555



## Synthesis

*Synthesis* **2021**, 53, 3564–3572  
DOI: 10.1055/a-1493-6420

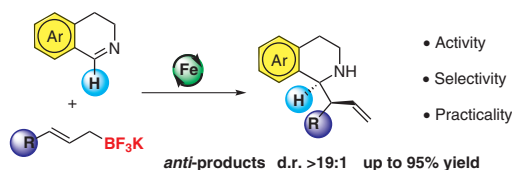
Y. Fang  
X. Hu  
Z. Shi  
X. Zhao  
R. R. Gopireddy  
Y. Luo\*

Hefei University of Technology,  
P. R. of China

### Iron-Catalyzed Stereoselective Allylboration of 3,4-Dihydroisoquinolines with Potassium Allyltrifluoroborates

Feature

3564



## Synthesis

*Synthesis* **2021**, *53*, 3573–3577  
DOI: 10.1055/a-1526-7657

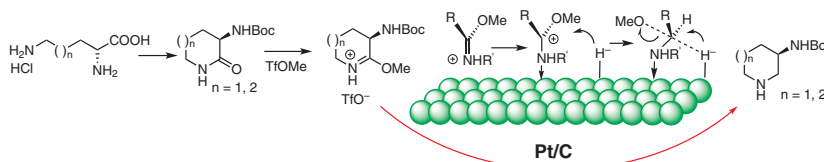
**R. Kadyrov\***  
**O. L. Tok**

Institute of Inorganic Chemistry,  
Academy of Sciences of the  
Czech Republic, Czech Republic  
Evonik Resource Efficiency GmbH,  
Germany

### Convenient Synthesis of (*R*)-3-[(*tert*-Butoxycarbonyl)amino]piperidine and (*R*)-3-[(*tert*-Butoxycarbonyl)amino]azepane

PSP

3573



## Synthesis

*Synthesis* **2021**, *53*, 3578–3584  
DOI: 10.1055/a-1509-5175

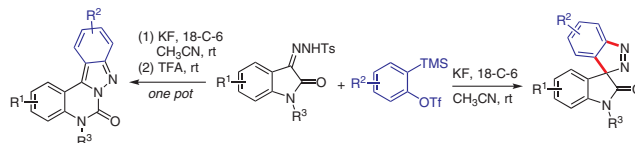
**B. Cheng\***  
**Y. He**  
**X. Zhang**  
**H. Li**  
**Z. Ding**  
**L. Feng**  
**H. Sun**  
**T. Wang\***  
**H. Zhai\***

Shenzhen Polytechnic,  
P. R. of China  
Peking University Shenzhen  
Graduate School, P. R. of China

### Synthesis of Spiro[indazole-3,3'-indolin]-2'-ones and Indazo[2,3-*c*]quinazolin-6(5*H*)-ones from Arynes and Isatin-Derived *N*-Tosylhydrazones

Paper

3578



## Synthesis

*Synthesis* **2021**, *53*, 3585–3590  
DOI: 10.1055/a-1479-6611

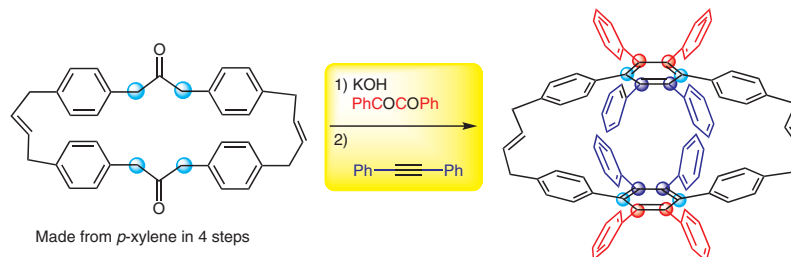
**B. Wiredu**  
**M. Thapa**  
**S. Y. Hua**  
**J. Desper**  
**D. H. Hua\***

Kansas State University, USA

### Synthesis of 2,24-Diene-12,13,15,16,34,35,37,38-octaphenyl[4.4]-triphenylparacyclophane

Paper

3585



## Synthesis

Synthesis 2021, 53, 3591–3596  
DOI: 10.1055/s-0040-1706050

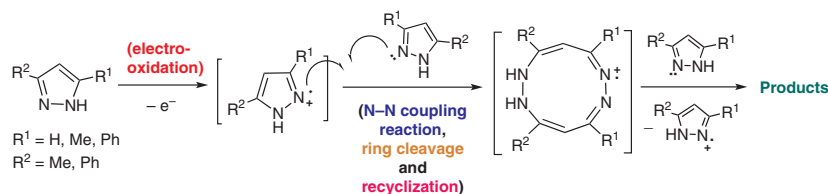
S. Zandi  
M. Sharafi-Kolkeshvandi  
F. Nikpour\*

University of Kurdistan, Iran

Electrochemically Catalyzed N–N Coupling and Ring Cleavage Reaction of 1*H*-Pyrazoles

Paper

3591



## Synthesis

Synthesis 2021, 53, 3597–3607  
DOI: 10.1055/a-1500-1343

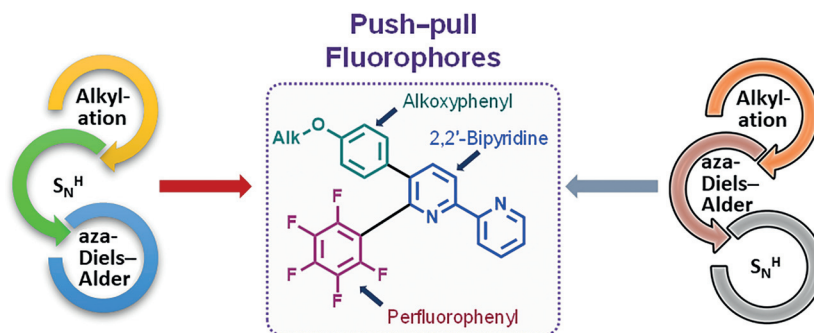
T. D. Moseev  
E. A. Nikiforov  
M. V. Varaksin\*  
E. S. Starnovskaya  
M. I. Savchuk  
I. L. Nikonov  
D. S. Kopchuk  
G. V. Zyryanov  
O. N. Chupakhin\*  
V. N. Charushin

Ural Federal University,  
Russian Federation  
Institute of Organic Synthesis,  
Ural Branch of the Russian  
Academy of Sciences,  
Russian Federation

## Novel Pentafluorophenyl- and Alkoxyphenyl-Appended 2,2'-Bipyridine Push–Pull Fluorophores: A Convenient Synthesis and Photophysical Studies

Paper

3597



## Synthesis

Synthesis 2021, 53, 3608–3612  
DOI: 10.1055/a-1482-9822

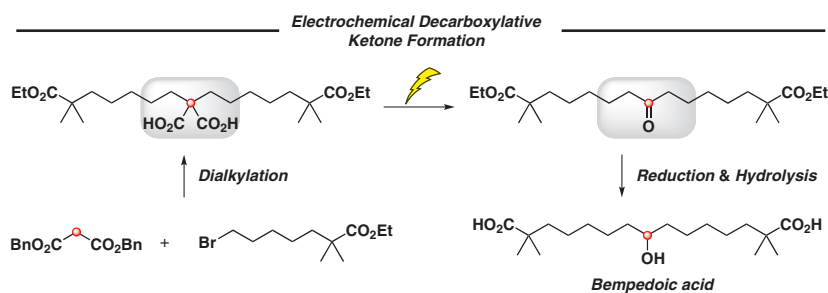
Z. Xu  
Y. Zheng  
L. Tian\*  
Y. Wang\*

Nanjing Tech University,  
P. R. of China

## Synthesis of Bempedoic Acid through Electrochemical Decarboxylation of Dialkylated Malonic Acid

Paper

3608



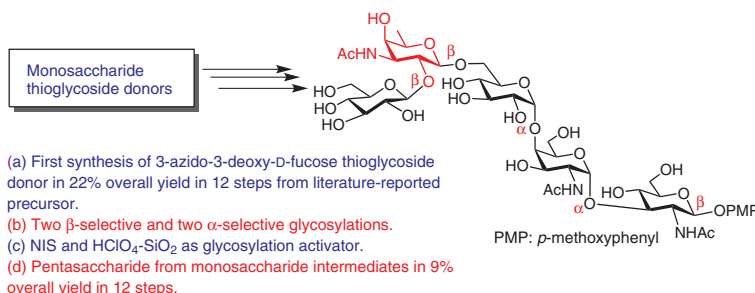
Synthesis

Synthesis 2021, 53, 3613–3620  
DOI: 10.1055/s-0037-1610777

A. Gucchait  
M. Kundu  
A. K. Misra\*  
Bose Institute, India

Synthesis of Pentasaccharide Repeating Unit Corresponding to the Cell Wall O-Polysaccharide of *Salmonella enterica* O55 Strain Containing a Rare Sugar 3-Acetamido-3-deoxy-D-fucose

Paper  
3613



Synthesis

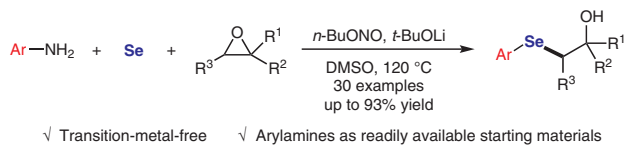
Synthesis 2021, 53, 3621–3629  
DOI: 10.1055/a-1499-8742

H. Wang  
H. Li  
Y. Bai  
Y. Hei  
J. Chen  
G. Yu\*  
Y.-B. Zhou\*

Shaoxing University,  
P. R. of China  
Zhejiang Engineering Research  
Center of Fat-Soluble Vitamin,  
P. R. of China  
Wenzhou University,  
P. R. of China

Synthesis of  $\beta$ -Hydroxy Aryl Selenides via Transition-Metal-Free Three-Component Reaction of Arylamines, Elemental Selenium, and Epoxides

Paper  
3621



Synthesis

Synthesis 2021, 53, 3630–3638  
DOI: 10.1055/a-1508-9541

H. Imai  
Y. Kanzaka  
Y. Sunatsuki  
H. Abe\*  
University of Toyama, Japan

Synthesis of Nilotinin M3: An Ellagitannin Containing an Isodehydrodi-galloyl Group

Paper  
3630

