

## Synthesis

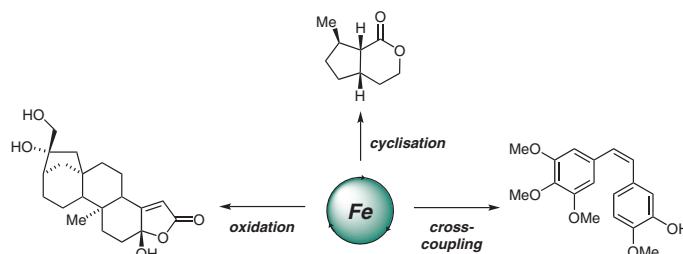
## Iron Catalysis in Target Synthesis

## Review

*Synthesis* **2020**, 52, 949–963  
DOI: 10.1055/s-0039-1690813

**P. DaBell**  
**S. P. Thomas\***  
University of Edinburgh, UK

949



## Synthesis

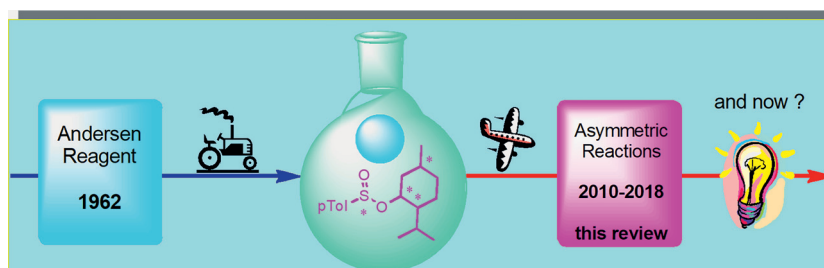
## Recent Applications in the Use of Sulfoxides as Chiral Auxiliaries for the Asymmetric Synthesis of Natural and Biologically Active Products

## Short Review

*Synthesis* **2020**, 52, 964–978  
DOI: 10.1055/s-0039-1690803

**X. Salom-Roig**  
**C. Bauder\***  
Université de Strasbourg, France

964



## Synthesis

*Synthesis* **2020**, *52*, 979–992  
DOI: 10.1055/s-0039-1690807

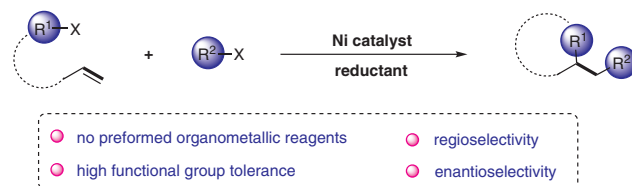
Y. Ping  
W. Kong\*

Wuhan University, P. R. of China

## Ni-Catalyzed Reductive Difunctionalization of Alkenes

## Short Review

979



## Synthesis

*Synthesis* **2020**, *52*, 993–1006  
DOI: 10.1055/s-0039-1690816

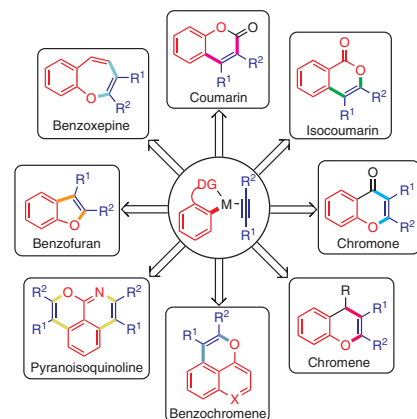
G. Kuang  
G. Liu  
X. Zhang  
N. Lu  
Y. Peng\*  
Q. Xiao\*  
Y. Zhou\*

Jiangxi Normal University,  
P. R. of China  
Huazhong University of Science  
and Technology, P. R. of China  
Jiangxi Science and Technology  
Normal University, P. R. of China

## Directing-Group-Assisted Transition-Metal-Catalyzed Direct C–H Oxidative Annulation of Arenes with Alkynes for Facile Construction of Various Oxygen Heterocycles

## Short Review

993



## Synthesis

*Synthesis* **2020**, *52*, 1007–1014  
DOI: 10.1055/s-0039-1690806

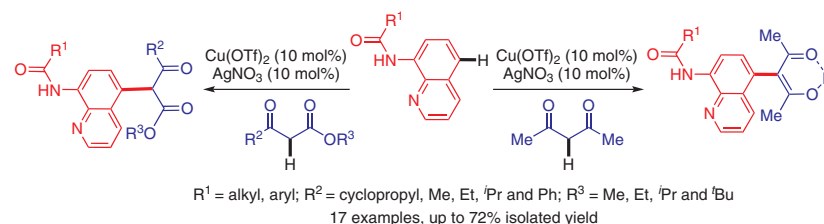
F. Zhan  
W. Zhang  
H. Zhao\*

University of Jinan, P. R. of China  
Fujian Institute of Research on  
the Structure of Matter,  
P. R. of China

## Copper/Silver Cocatalyzed Regioselective C5–H Functionalization of 8-Aminoquinoline Amides with 1,3-Dicarbonyl Compounds

## Feature

1007



## Synthesis

*Synthesis* 2020, 52, 1015–1024  
DOI: 10.1055/s-0039-1691560

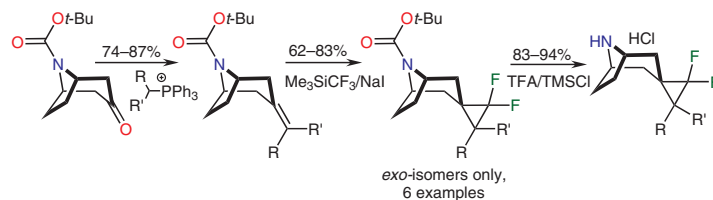
A. Gerasov  
G. A. Dolgonos  
A. Yu. Mandzhulo  
A. Ryabitsky  
V. Fetyukhin  
O. Lukin  
A. Shivanyuk\*

Life Chemicals Inc., Ukraine  
Taras Shevchenko National  
University of Kyiv, Ukraine

Selective Synthesis of *exo*-Spiro[2',2'-difluorocyclopropane-3',2'-tropanes]

Paper

1015



## Synthesis

*Synthesis* 2020, 52, 1025–1034  
DOI: 10.1055/s-0039-1690785

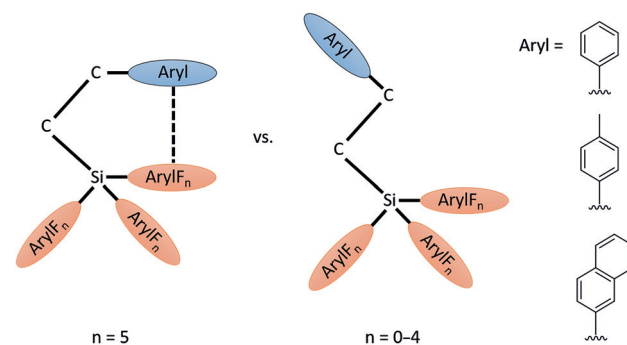
M. Linnemannstöns  
B. Neumann  
H.-G. Stammer  
N. W. Mitzel\*

Universität Bielefeld, Germany

## Synthesis and Structural Diversity of Triaryl(phenylethyl)silanes

Paper

1025



## Synthesis

*Synthesis* 2020, 52, 1035–1046  
DOI: 10.1055/s-0039-1690799

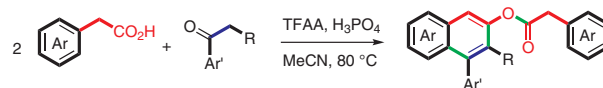
M.-Y. Chang\*  
S.-M. Chen  
Y.-T. Hsiao

Kaohsiung Medical University,  
Taiwan  
Kaohsiung Medical University  
Hospital, Taiwan

## One-Pot Access to 4-Aryl-2-arylacetoxy-naphthalenes via Benz-annulation of Oxygenated Arylacetic Acids and Alkyl Aryl Ketones

Paper

1035



easy-operation

51–94% yields

>31 examples

## Synthesis

Synthesis 2020, 52, 1047–1059  
DOI: 10.1055/s-0039-1690751

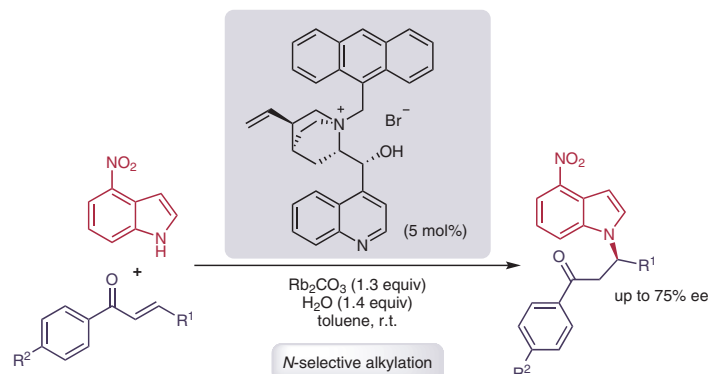
D. Trubitsõn  
J. Martõnova  
K. Erkman  
A. Metsala  
J. Saame  
K. Kõster  
I. Järving  
I. Leito  
T. Kanger\*

Tallinn University of Technology,  
Estonia

Enantioselective *N*-Alkylation of Nitroindoles under Phase-Transfer Catalysis

Paper

1047



## Synthesis

Synthesis 2020, 52, 1060–1066  
DOI: 10.1055/s-0039-1690055

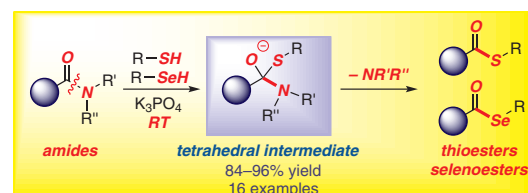
Md. M. Rahman  
G. Li  
M. Szostak\*

Rutgers University, USA

Thioesterification and Selenoesterification of Amides via Selective *N*–C Cleavage at Room Temperature: *N*–C(O) to *S*/Se–C(O) Interconversion

Paper

1060



## Synthesis

Synthesis 2020, 52, 1067–1075  
DOI: 10.1055/s-0039-1691541

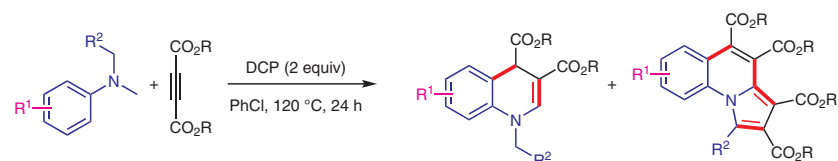
Z. Luo\*  
X. Han  
C. Liu\*  
Q. Liu  
R. Li  
P. Liu  
X. Xu\*

Anhui University of Science and  
Technology, P. R. of China  
Gannan Medical University,  
P. R. of China

Catalyst-Free Synthesis of 1,4-Dihydroquinolines and Pyrrolo-[1,2-*a*]quinolines via Intermolecular [4+2]/[3+2] Radical Cyclization of *N*-Methylanilines with Alkynoates

Paper

1067



R = Me, Et, *t*-Bu  
R<sup>1</sup> = H, Me, OMe, OEt, F, Br, CF<sub>3</sub>  
R<sup>2</sup> = H, Me, *n*-Pr, *n*-pentyl, cyclopentyl

- catalyst-free
- [4+2]/[3+2] radical cyclization
- one-pot process
- moderate to high overall yields

## Synthesis

Synthesis 2020, 52, 1076–1086  
DOI: 10.1055/s-0039-1690774

D. A. dos Santos

A. R. da Silva

J. Ellena

C. C. P. da Silva

M. W. Paixão

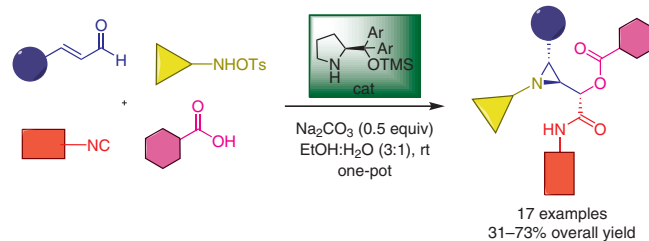
A. G. Corrêa\*

Federal University of São Carlos,  
Brazil

### Green One-Pot Asymmetric Synthesis of Peptidomimetics via Sequential Organocatalyzed Aziridination and Passerini Multicomponent Reaction

Paper

1076



## Synthesis

Synthesis 2020, 52, 1087–1095  
DOI: 10.1055/s-0039-1691540

A. D. Zubenko\*

A. A. Shchukina

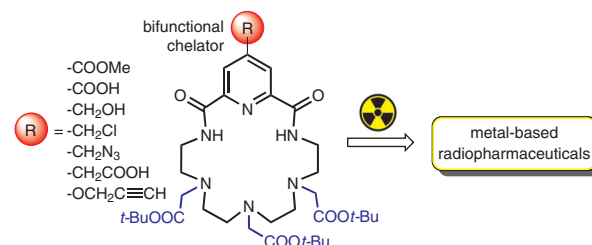
O. A. Fedorova

A. N. Nesmeyanov Institute of  
Organoelement Compounds of  
Russian Academy of Sciences,  
Russian Federation

### Synthetic Approaches to the Bifunctional Chelators for Radionuclides Based On Pyridine-Containing Azacrown Compounds

Paper

1087



## Synthesis

Synthesis 2020, 52, 1096–1102  
DOI: 10.1055/s-0039-1690788

T. Senoo

A. Inoue

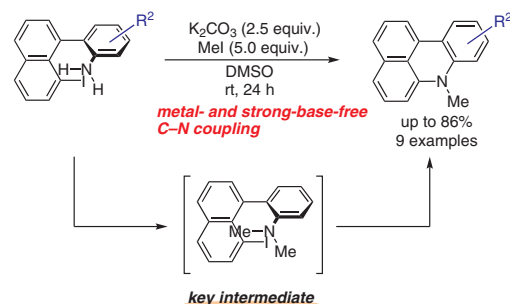
K. Mori\*

Tokyo University of Agriculture  
and Technology, Japan

### Facile Synthesis of $\pi$ -Conjugated Heteroaromatic Compounds via Weak-Base-Promoted Transition-Metal-Free C–N Coupling

Paper

1096



## Synthesis

Synthesis 2020, 52, 1103–1112  
DOI: 10.1055/s-0039-1690052

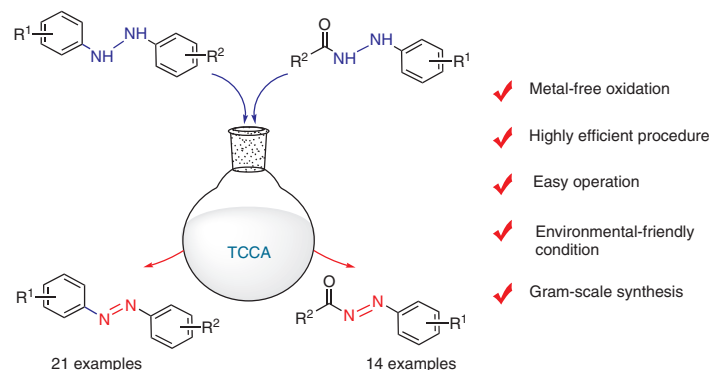
Y. Su\*  
X. Liu  
J. Yu  
G. Cao  
R. Zhang  
Y. Zhao  
D. Huang  
K.-H. Wang  
C. Huo  
Y. Hu

Northwest Normal University,  
P. R. China

## Trichloroisocyanuric Acid Mediated Oxidative Dehydrogenation of Hydrazines: A Practical Chemical Oxidation To Access Azo Compounds

Paper

1103



## Synthesis

Synthesis 2020, 52, 1113–1121  
DOI: 10.1055/s-0039-1691575

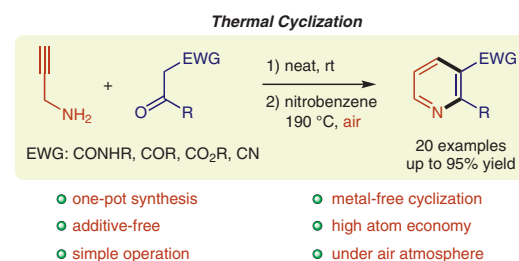
Y. Chikayuki  
T. Miyashige  
S. Yonekawa  
A. Kirita  
N. Matsuo  
H. Teramoto  
S. Sasaki  
K. Higashiyama  
T. Yamauchi\*

Hoshi University, Japan

Transition-Metal-Free Synthesis of Pyridine Derivatives by Thermal Cyclization of *N*-Propargyl Enamines

Paper

1113



## Synthesis

Synthesis 2020, 52, 1122–1130  
DOI: 10.1055/s-0039-1691642

H. Naruto  
H. Togo\*

Chiba University, Japan

Preparation of 2-Arylquinolines from 2-Arylethyl Bromides and Aromatic Nitriles with Magnesium and *N*-Iodosuccinimide

Paper

1122



## Synthesis

*Synthesis* **2020**, *52*, 1131–1139  
DOI: 10.1055/s-0039-1691643

Z. Han

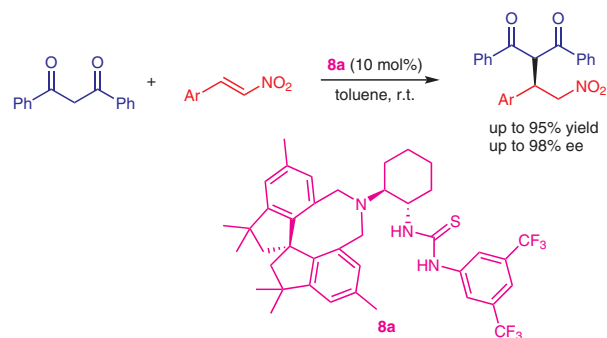
X. Lin\*

Zhejiang University,  
P. R. of China

### Synthesis of Chiral Tertiary Amine–Thioureas Based on Spirobiindane and Application in Catalytic Asymmetric Michael Addition Reaction

## Paper

1131



## Synthesis

*Synthesis* **2020**, *52*, 1140–1146  
DOI: 10.1055/s-0039-1690795

G. Sereda\*

A. M. Sarkar\*

A. Hussain

N. Zefirov

University of South Dakota, USA

### Solvent-Free and Liquid-Phase Iodination of Thiophene Derivatives with Potassium Dichloroiodate Monohydrate

## Paper

1140

