

## Synthesis

*Synthesis* 2020, 52, 159–188  
DOI: 10.1055/s-0039-1690688

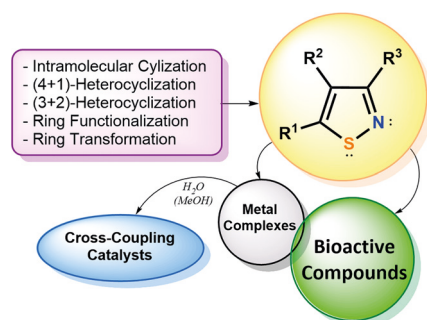
**A. V. Kletskov\***  
**N. A. Bumagin**  
**F. I. Zubkov**  
**D. G. Grudin**  
**V. I. Potkin**

Peoples' Friendship University of  
Russia (RUDN University),  
Russian Federation

## Isothiazoles in the Design and Synthesis of Biologically Active Substances and Ligands for Metal Complexes

Review

159



## Synthesis

*Synthesis* 2020, 52, 189–196  
DOI: 10.1055/s-0039-1690713

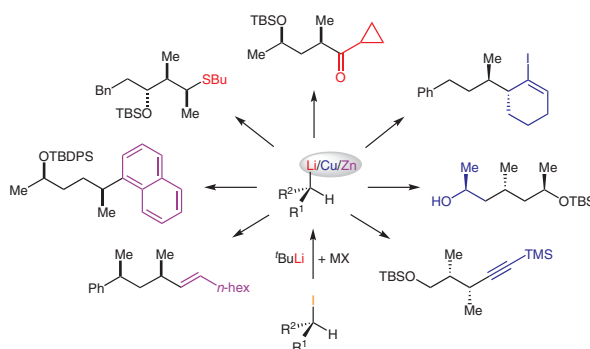
**J. Skotnitzki**  
**A. Kremsmair**  
**P. Knochel\***

Ludwig-Maximilians-Universität,  
Germany

## Stereoselective Preparation and Reactions of Chiral Secondary Alkylolithiums

Short Review

189



## Synthesis

## Recent Advances in Difluoromethylthiolation

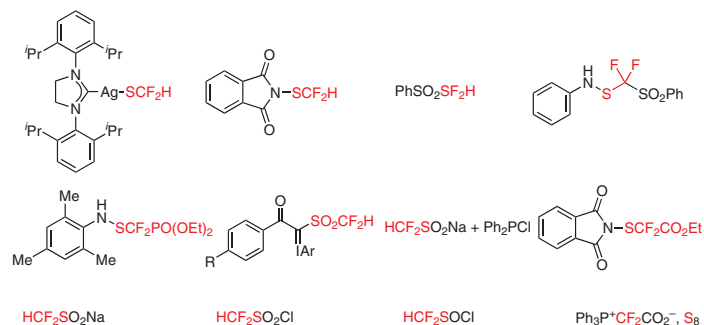
## Short Review

*Synthesis* 2020, 52, 197–207  
DOI: 10.1055/s-0039-1690714

197

X. Xiao  
Z.-T. Zheng  
T. Li  
J.-L. Zheng  
T. Tao  
L.-M. Chen  
J.-Y. Gu  
X. Yao\*  
J.-H. Lin\*  
J.-C. Xiao\*

University of South China, P. R. of China  
Shanghai Institute of Organic Chemistry, P. R. of China



## Synthesis

Direct Transformation of Propargylic Alcohols and *O,O*-Diethyl Phosphorothioic Acid into *S*-(2*H*-Chromen-4-yl) Phosphorothioates

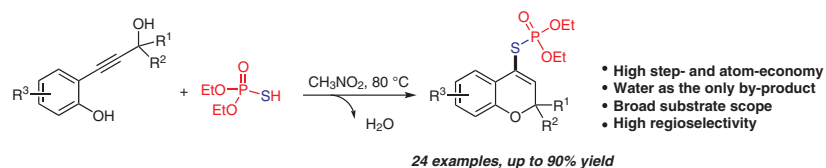
## Feature

208

*Synthesis* 2020, 52, 208–218  
DOI: 10.1055/s-0039-1690749

X.-R. Song  
T. Yang  
H. Ding  
Q. Xiao\*

Jiangxi Science & Technology Normal University, P. R. of China



## Synthesis

Visible-Light-Promoted C2 Trifluoromethylation of Quinoline *N*-Oxides

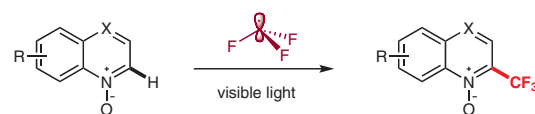
## Paper

219

*Synthesis* 2020, 52, 219–226  
DOI: 10.1055/s-0039-1690726

C. Liang  
W.-T. Zhuo  
Y.-N. Niu  
G.-L. Gao\*

Harbin Institute of Technology, P. R. of China



- simple operation
- mild reaction conditions
- 20 different examples
- broad substrate scope
- up to 60% yield

## Synthesis

*Synthesis* 2020, 52, 227–238  
DOI: 10.1055/s-0039-1690231

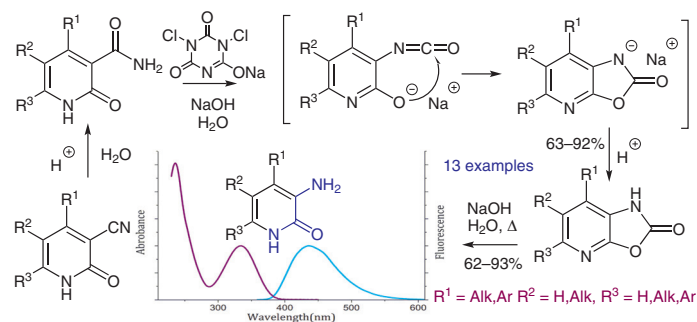
A. L. Shatsuskas  
A. A. Abramov  
S. A. Chernenko  
A. S. Kostyuchenko  
A. S. Fisyuk\*

Omsk State Technical University,  
Russian Federation

## Synthesis and Photophysical Properties of 3-Amino-4-arylpyridin-2(1H)-ones

Paper

227



## Synthesis

*Synthesis* 2020, 52, 239–245  
DOI: 10.1055/s-0039-1690220

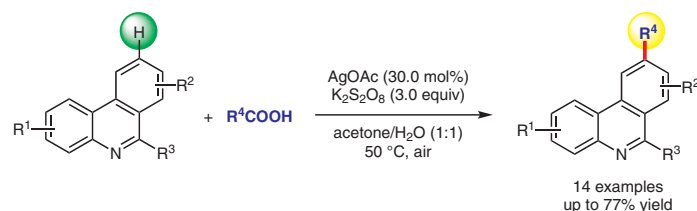
T. Huang  
Y. Yu  
H. Wang  
Y. Lin  
Y. Ma  
H. Wang  
C.-H. Ding\*  
J. Xiao\*  
B. Xu\*

Shanghai University,  
P. R. of China  
Shanghai Institute of Organic  
Chemistry, P. R. of China

## Silver-Promoted Regioselective Oxidative Decarboxylative C–H Alkylation of Phenanthridines with Carboxylic Acids

Paper

239



## Synthesis

*Synthesis* 2020, 52, 246–252  
DOI: 10.1055/s-0039-1690208

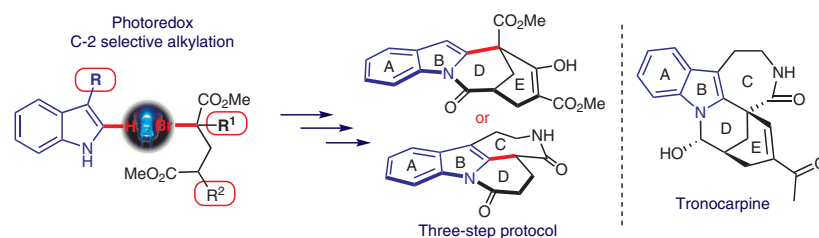
D. A. Contreras-Cruz  
M. Castañón-García  
E. Becerril-Rodríguez  
L. D. Miranda\*

Universidad Nacional Autónoma  
de México, Ciudad Universitaria,  
México

## A Photoredox Catalysis Approach for the Synthesis of Both the ABDE and the ABCD Cores of Tronocarpine

Paper

246



## Synthesis

*Synthesis* 2020, 52, 253–262  
DOI: 10.1055/s-0039-1690709

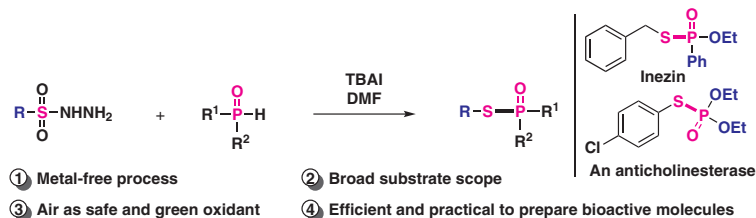
T. Liu\*  
Y. Zhang  
R. Yu  
J. Liu  
F. Cheng\*

Qujing Normal University,  
P. R. of China

## An Alternative Metal-Free Aerobic Oxidative Cross-Dehydrogenative Coupling of Sulfonyl Hydrazides with Secondary Phosphine Oxides

Paper

253



## Synthesis

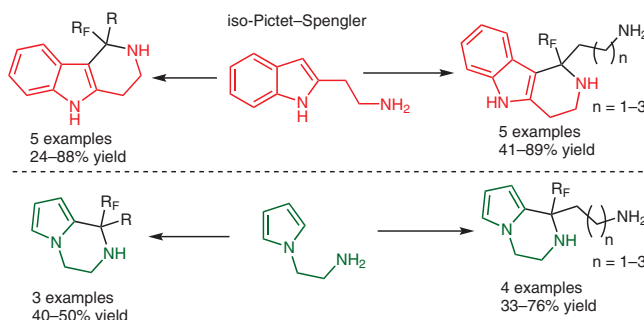
*Synthesis* 2020, 52, 263–272  
DOI: 10.1055/s-0039-1690729

N. G. Voznesenskaia  
O. I. Shmatova  
V. G. Nenajdenko\*  
Moscow State University,  
Russian Federation

Pictet–Spengler Synthesis of Perfluoroalkylated Tetrahydro- $\gamma$ -carbolines and Tetrahydropyrrolopyrazines

Paper

263



## Synthesis

*Synthesis* 2020, 52, 273–280  
DOI: 10.1055/s-0039-1690248

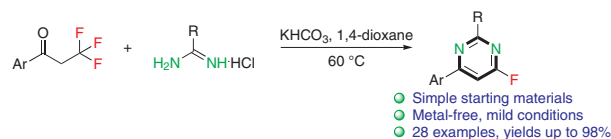
F. Liu  
X. Zhang  
Q. Qian\*  
C. Yang\*

Shanghai University,  
P. R. of China  
Shanghai Institute of Materia  
Medica, P. R. of China

A Concise and Efficient Approach to 2,6-Disubstituted 4-Fluoropyrimidines from  $\alpha$ -CF<sub>3</sub> Aryl Ketones

Paper

273



## Synthesis

*Synthesis* **2020**, *52*, 281–289  
DOI: 10.1055/s-0039-1690731

Y. Kim

Y. I. Kwon

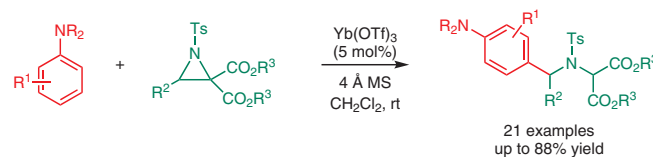
S.-G. Kim\*

Kyonggi University,  
Republic of Korea

### Efficient Synthesis of Diarylmethylamines via Lewis Acid Catalyzed Friedel–Crafts Reactions of Donor–Acceptor Aziridines with *N,N*-Dialkylanilines

Paper

281



## Synthesis

*Synthesis* **2020**, *52*, 290–296  
DOI: 10.1055/s-0039-1690218

Y. Lu

L. Chen

X. Chen

M. Yao

Z. Luo\*

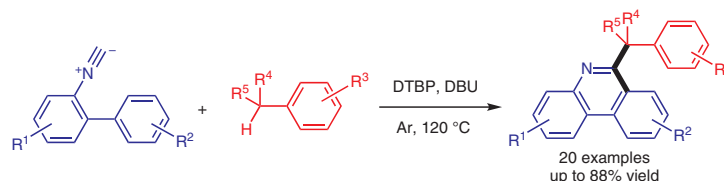
Y. Zhang\*

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

### Metal-Free Synthesis 6-Benzylphenanthridines via Radical Addition/Cyclization of 2-Isocyanobiphenyls

Paper

290



## Synthesis

*Synthesis* **2020**, *52*, 297–303  
DOI: 10.1055/s-0039-1690031

Y. Zhang

D. Zhou

Y. Ma\*

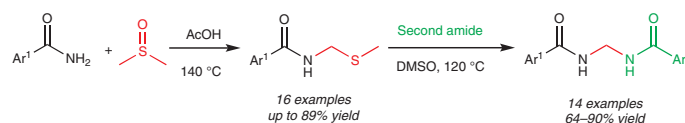
J. Chen\*

Zhejiang Chinese Medical Uni-  
versity, P. R. of China  
Taizhou University, P. R. of China

### DMSO-Mediated Synthesis of Methylene-Bridged Unsymmetrical Bisamides in the Presence of AcOH

Paper

297



- Unsymmetrical synthesis
- Broad substrate scope
- Transition-metal free
- Simple operations

## Synthesis

Synthesis 2020, 52, 304–310  
DOI: 10.1055/s-0039-1690716

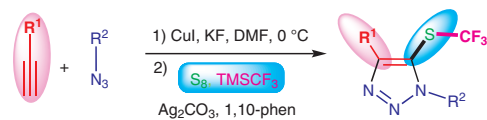
L.-L. Zhang  
M.-T. Li  
L.-L. Shen  
Q.-P. Wu\*

Beijing Institute of Technology,  
P. R. of China

### Efficient Synthesis of 5-Trifluoromethylthio-1,2,3-Triazoles: One-Pot Multicomponent Reaction from Elemental Sulfur and TMSCF<sub>3</sub>

Paper

304



20 examples, up to 81% yield

## Synthesis

Synthesis 2020, 52, 311–319  
DOI: 10.1055/s-0039-1690717

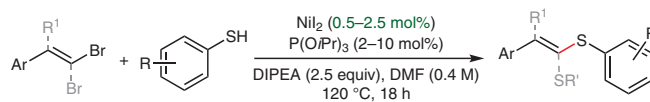
A. D. Marchese  
B. Mirabi  
E. M. Larin  
M. Lautens\*

University of Toronto, Canada

### A Simplified Protocol for the Stereospecific Nickel-Catalyzed C–S Vinylation Using NiX<sub>2</sub> Salts and Alkyl Phosphites

Paper

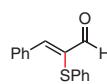
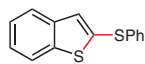
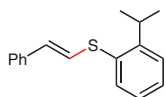
311



• 21 examples

• low catalyst load

• 22–92% yield



## Synthesis

Synthesis 2020, 52, 320–326  
DOI: 10.1055/s-0039-1690295

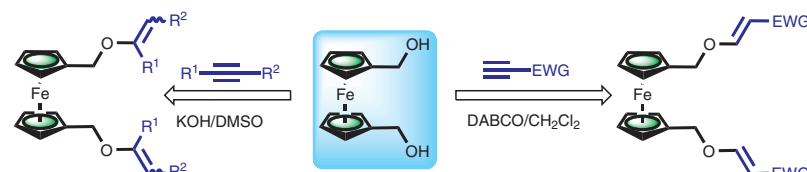
L. A. Oparina  
N. A. Kolyvanov  
O. A. Tarasova  
A. I. Albanov  
A. P. Tantsyrev  
B. A. Trofimov\*

A. E. Favorsky Irkutsk Institute of  
Chemistry, Russian Federation

### Nucleophilic Addition of 1,1'-Bis(hydroxymethyl)ferrocene to Alkynes: Synthesis of Ferrocene Diethenyl Ethers

Paper

320



3 examples

68–80% yield

R<sup>1</sup> = R<sup>2</sup> = H; R<sup>1</sup> = Me, R<sup>2</sup> = H;

R<sup>1</sup> = H, R<sup>2</sup> = Ph

4 examples

91–98% yield

EWG = CO<sub>2</sub>Me, CO<sub>2</sub>Et,  
2-Furoyl, C(O)Ph

