

## Synthesis

*Synthesis* 2020, 52, 1315–1345  
DOI: 10.1055/s-0039-1690058

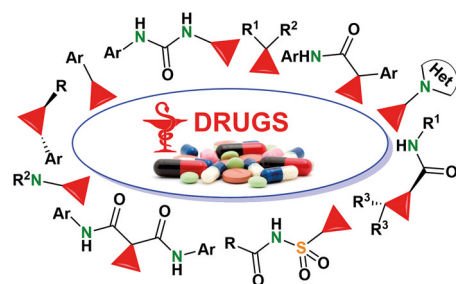
Z. Časar\*

Lek Pharmaceuticals, d.d., Sandoz Development Center Slovenia, Slovenia

## Synthetic Approaches to Contemporary Drugs that Contain the Cyclopropyl Moiety

Review

1315



## Synthesis

*Synthesis* 2020, 52, 1346–1356  
DOI: 10.1055/s-0039-1690842

H.-Y. Tu

S. Zhu\*

F.-L. Qing

L. Chu\*

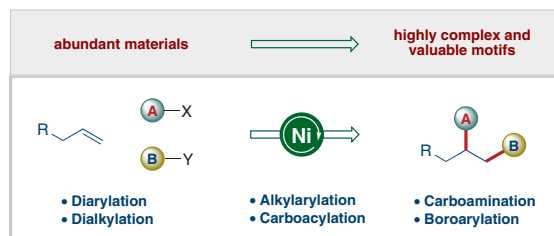
Donghua University,  
P. R. of China

## Recent Advances in Nickel-Catalyzed Three-Component Difunctionalization of Unactivated Alkenes

Short Review

1346

*Nickel-Catalyzed Three-Component Difunctionalization of Unactivated Alkenes*



## Synthesis

*Synthesis* 2020, 52, 1357–1368  
DOI: 10.1055/s-0039-1690839

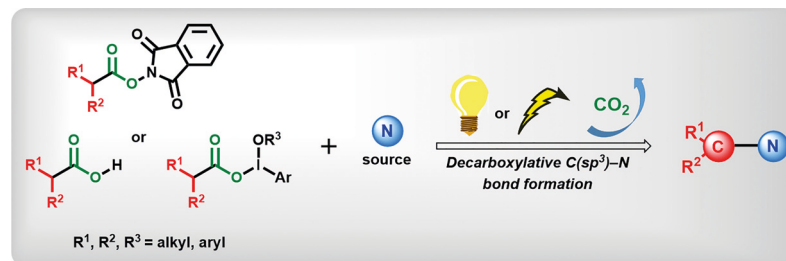
Y. Zheng  
X. Shao  
V. Ramadoss  
L. Tian\*  
Y. Wang\*

Nanjing Tech University,  
P. R. of China

Recent Developments in Photochemical and Electrochemical Decarboxylative C(sp<sup>3</sup>)-N Bond Formation

## Short Review

1357



## Synthesis

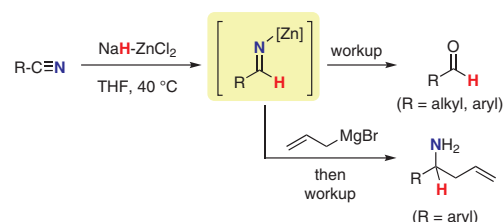
*Synthesis* 2020, 52, 1369–1378  
DOI: 10.1055/s-0039-1690838

D. Y. Ong  
S. Chiba\*  
Nanyang Technological University,  
Singapore

## Controlled Reduction of Nitriles by Sodium Hydride and Zinc Chloride

## Feature

1369



## Synthesis

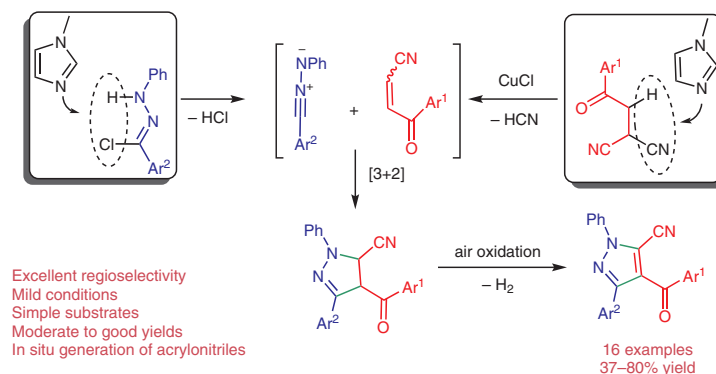
*Synthesis* 2020, 52, 1379–1386  
DOI: 10.1055/s-0039-1691591

I. Yavari\*  
O. Khaledian  
Tarbiat Modares University, Iran

## Copper-Catalyzed Tandem Dehydrocyanation and [3+2] Cycloaddition Reactions of Phenacylmalononitriles: Regioselective Synthesis of Functionalized 4-Benzoyl-5-cyanopyrazoles under Mild Conditions

## Paper

1379



## Synthesis

Synthesis 2020, 52, 1387–1397  
DOI: 10.1055/s-0039-1691597

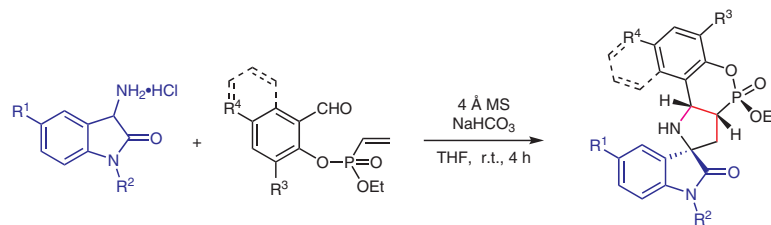
T. Huang  
L. Liu  
Q. Wang  
M. Wu\*  
D. Kong\*

Hainan Normal University,  
P. R. of China  
Hainan Medical University,  
P. R. of China

### 1,3-Dipolar Cycloaddition of 3-Amino Oxindole-Based Azomethine Ylides and O-Vinylphosphonylated Salicylaldehydes for Diastereoselective Synthesis of Oxindole Spiro-P,N-polycyclic Heterocycles

Paper

1387



R = MeO, Cl, Br, F, alkyl, H Bn

28 examples, up to 96% yield  
Only *cis*-selective intramolecular dipolar cycloaddition  
Three new bonds (C–N, 2 C–C), two new P,N-heterocycles  
Mild reaction conditions  
Potential biological activity of the products

## Synthesis

Synthesis 2020, 52, 1398–1406  
DOI: 10.1055/s-0039-1690053

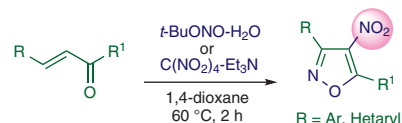
D. A. Vasilenko  
K. S. Sadovnikov  
K. N. Sedenkova  
A. V. Kurova  
Y. K. Grishin  
T. S. Kuznetsova  
V. B. Rybakov  
Y. A. Volkova  
E. B. Averina\*

Lomonosov Moscow State Uni-  
versity, Russian Federation

### Synthesis of 4-Nitroisoxazoles via NO/NO<sub>2</sub>-Mediated Heterocyclization of Aryl-Substituted $\alpha,\beta$ -Unsaturated Ketones

Paper

1398



R = Ar, Hetaryl  
R<sup>1</sup> = Alk, Ar  
19 examples  
up to 80% yield

## Synthesis

Synthesis 2020, 52, 1407–1416  
DOI: 10.1055/s-0039-1691564

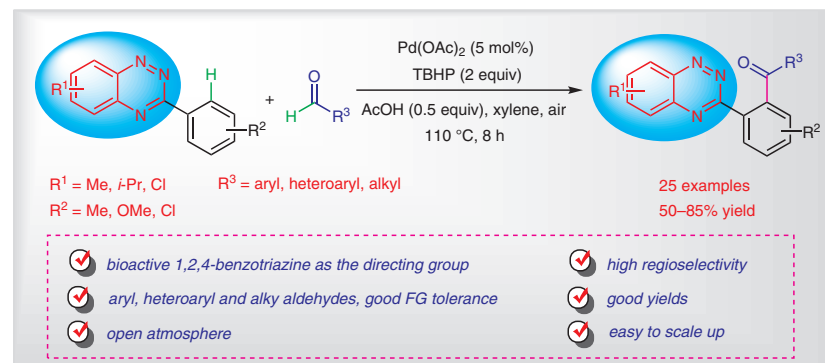
J. Liu  
S. Jin  
Y. Zhou  
D. Ni  
T. Liu  
B. Cui\*  
G. Hu  
X. Yu  
G. Huang\*

Hubei Polytechnic University,  
P. R. of China  
Lanzhou University,  
P. R. of China

### Palladium-Catalyzed *ortho*-Monoacylation of Arenes with Aldehydes via 1,2,4-Benzotriazine-Directed C–H Bond Activation

Paper

1407



## Synthesis

*Synthesis* 2020, 52, 1417–1424  
DOI: 10.1055/s-0037-1610739

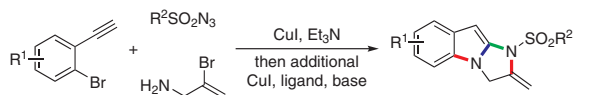
H. Jin  
D. Liu  
B. Zhou\*  
Y. Liu\*

Zhejiang University of Technology,  
China

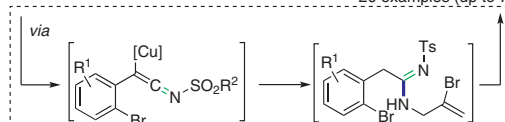
### One-Pot Copper-Catalyzed Three-Component Reaction of Sulfonyl Azides, Alkynes, and Allylamines To Access 2,3-Dihydro-1*H*-imidazo[1,2-*a*]indoles

Paper

1417



20 examples (up to 77% yield)



- ◆ Easily available copper catalyst
- ◆ One-pot process
- ◆ Four C–N bonds being constructed
- ◆ High step-economy

## Synthesis

*Synthesis* 2020, 52, 1425–1434  
DOI: 10.1055/s-0037-1610750

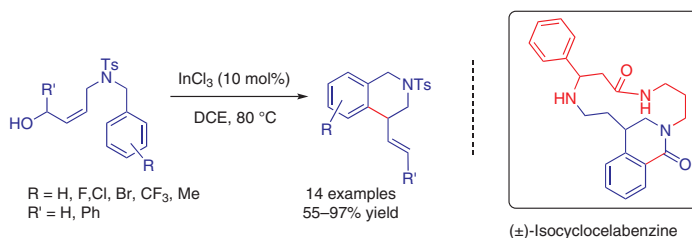
N. R. Devi  
S. Shit  
B. K. Behera  
A. K. Saikia\*

Indian Institute of Technology  
Guwahati, India

### Synthesis of 4-Vinyl-1,2,3,4-tetrahydroisoquinoline from *N*-Tethered Benzyl-Alkenol Catalyzed by Indium(III) Chloride: Formal Synthesis of (±)-Isocyclocelabenzine

Paper

1425



## Synthesis

*Synthesis* 2020, 52, 1435–1443  
DOI: 10.1055/s-0039-1690808

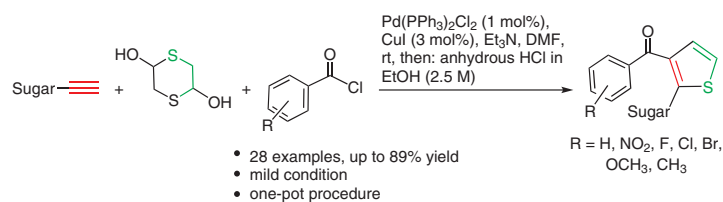
Y. Luo  
F. Gao  
H. Liu\*  
F. Zhang\*  
Y. Zhao

Zhengzhou University,  
P. R. of China

### Facile Synthesis of Novel Benzoylthiophene C-Nucleoside Analogues via Coupling of Sugar Alkynes, Aroyl Chlorides, and 1,4-Dithiane-2,5-diol

Paper

1435



K. R. Kiran

T. R. Swaroop\*

N. Rajeev

S. M. Anil

K. S. Rangappa\*

M. P. Sadashiva\*

University of Mysore, India

