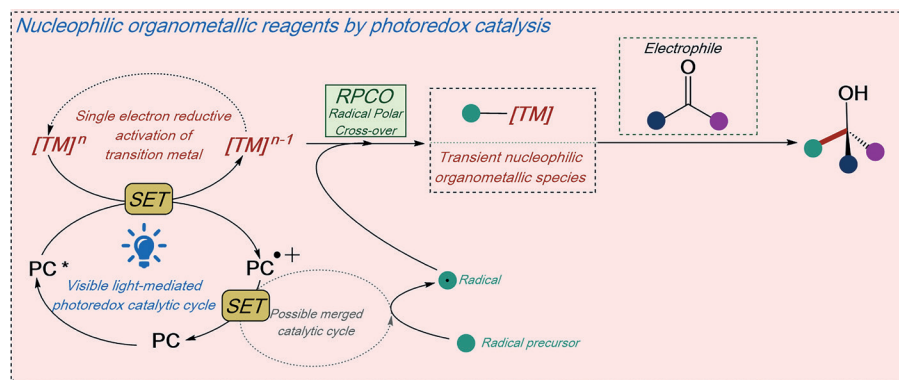


# Synthesis

Reviews and Full Papers in Chemical Synthesis

November 16, 2023 • Vol. 55, 3701–3874



Developing Organometallic Nucleophilic Reagents Via Photoredox Catalysis

A. Gualandi, F. Calogero, E. Pinosa, D. Corbisiero, P. G. Cozzi

22

## Synthesis

*Synthesis* 2023, 55, 3701–3724  
DOI: 10.1055/a-2091-8062

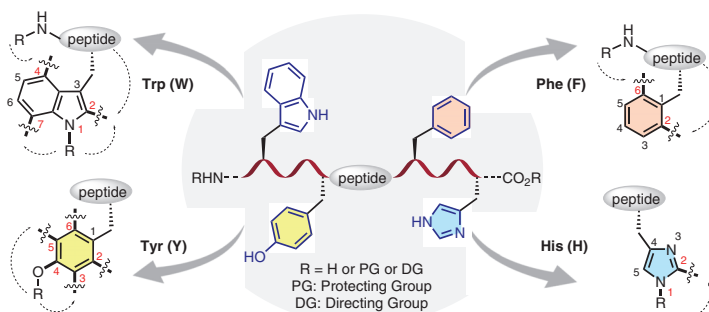
S. Bhunia  
M. Purushotham  
G. Karan  
B. Paul\*  
M. S. Maji\*

Indian Institute of Technology  
Kharagpur, India  
Bangalore University, India

## Exploring Chemical Modifications of Aromatic Amino Acid Residues in Peptides

Review

3701



## Synthesis

*Synthesis* 2023, 55, 3725–3736  
DOI: 10.1055/a-2085-5934

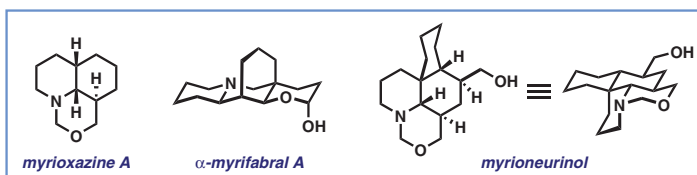
J. M. Aquilina  
M. W. Smith\*

UT Southwestern Medical Center,  
USA

## Synthetic Studies toward the Myrioneuron Alkaloids

Short Review

3725



## Synthesis

Synthesis 2023, 55, 3737–3758  
DOI: 10.1055/a-2107-4416

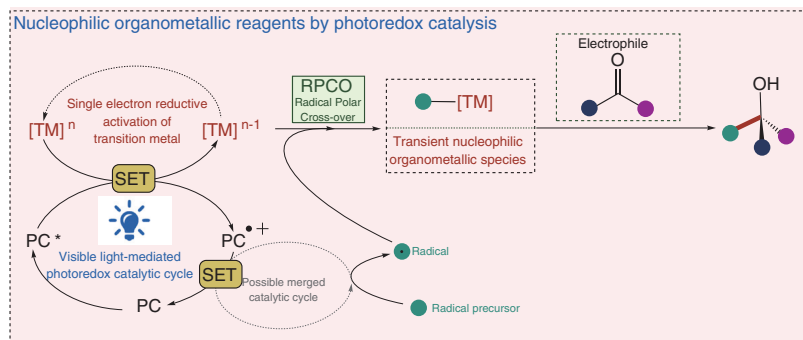
A. Gualandi\*  
F. Calogero  
E. Pinosa  
D. Corbisiero  
P. G. Cozzi\*

Alma Mater Studiorum - Università di Bologna, Italy

## Developing Organometallic Nucleophilic Reagents Via Photoredox Catalysis

Short Review

3737



## Synthesis

Synthesis 2023, 55, 3759–3776  
DOI: 10.1055/a-2111-9910

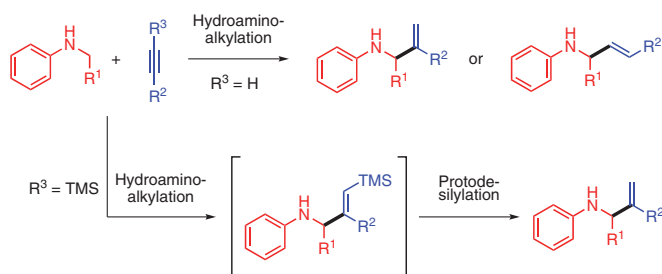
H. Thye  
F. Fornfeist  
D. Geik  
L. L. Schlüschen  
M. Schmidtman  
S. Doye\*

Universität Oldenburg, Germany

## Titanium-Catalyzed Intermolecular Hydroaminoalkylation of Terminal Alkynes

Feature

3759



## Synthesis

Synthesis 2023, 55, 3777–3792  
DOI: 10.1055/a-2126-3774

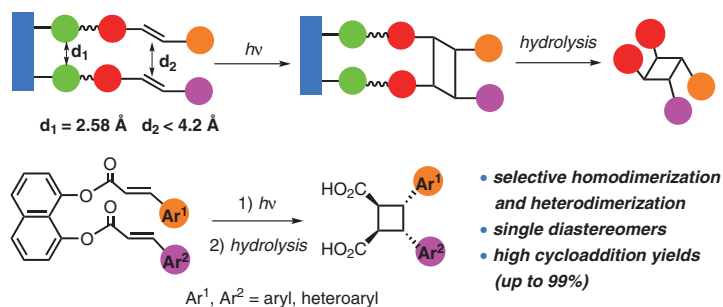
B. B. Yagci  
B. Munir  
Y. Zorlu  
Y. E. Türkmen\*

Bilkent University, Türkiye

## Access to Symmetrical and Unsymmetrical Cyclobutanes via Template-Directed [2+2]-Photodimerization Reactions of Cinnamic Acids

Feature

3777



## Synthesis

Synthesis 2023, 55, 3793–3798  
DOI: 10.1055/a-2122-1573

S. Song

Y.-Z. Yin

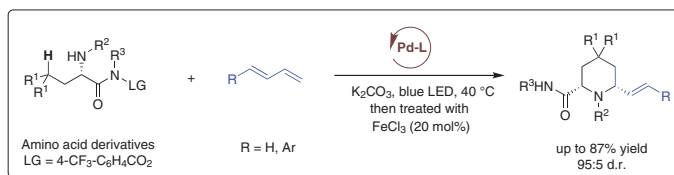
Z.-Y. Han\*

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

## A Photoinduced Palladium-Catalyzed Cascade Reaction for the Synthesis of Chiral Piperidines with Chiral Amino Acid Derivatives and 1,3-Dienes

Paper

3793



## Synthesis

Synthesis 2023, 55, 3799–3808  
DOI: 10.1055/a-2147-1336

K. K. Das

D. Ghorai

S. Mahato

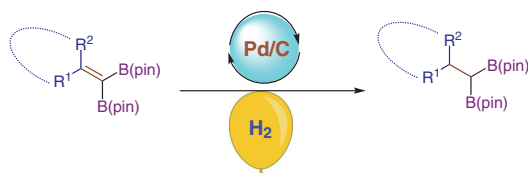
S. Panda\*

Indian Institute of Technology  
Kharagpur, India

## Palladium/Charcoal-Catalysed Olefin Reduction for the Simple and Efficient Synthesis of Substituted *gem*-Diborylalkanes

Paper

3799



- ✓ Broad scope, 24 examples, good to excellent yields
- ✓ Synthesis of various alkyl, aryl, heteroaryl geminal B(pin) derivatives
- ✓ Application to gram-scale synthesis and the formation of natural products

## Synthesis

Synthesis 2023, 55, 3809–3824  
DOI: 10.1055/s-0041-1738451

D. D. Bautista

E. A. González\*

R. M. Chávez Santos

M. T. Ramírez Apán

M. A. Vilchis Reyes

R. Martínez\*

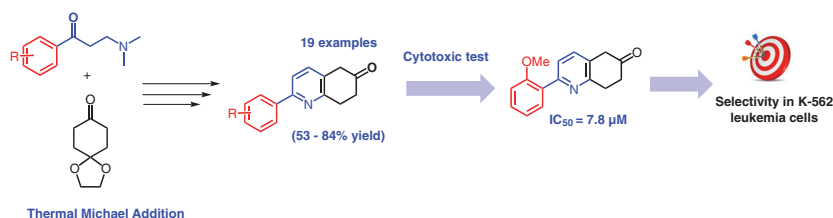
Universidad Nacional Autónoma  
de México, México  
Universidad Juárez Autónoma de  
Tabasco, Mexico

## Synthesis and Cytotoxic Evaluation of 2-Aryl-7,8-dihydroquinolin-6(5H)-ones

Paper

3809

R = F, Cl, Br, OH, OMe, NO<sub>2</sub>, CN, CF<sub>3</sub>, Me



## Synthesis

## Synthesis of (2-Aminopyrimidin-4-yl)(pyridin-4-yl)methanone and Derivatives

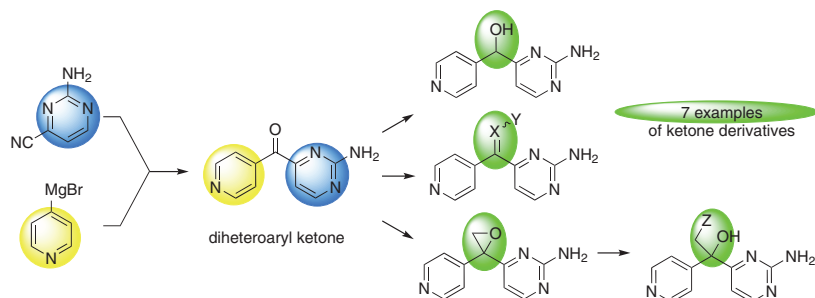
Paper

3825

*Synthesis* **2023**, *55*, 3825–3832  
DOI: 10.1055/a-2107-4571

F. Giraud\*  
B. Josselin  
S. Ruchaud  
F. Anizon\*  
P. Moreau\*

Université Clermont Auvergne,  
France



## Synthesis

Conformationally Restricted Carbocyclic  $\gamma$ -Amino Acids: Synthesis of Diastereomeric 3-Amino-5-arylcyclopentane 1-Carboxylic Acids

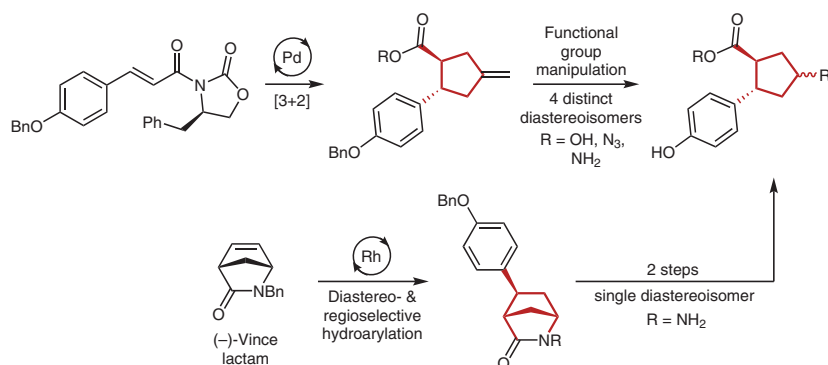
Paper

3833

*Synthesis* **2023**, *55*, 3833–3840  
DOI: 10.1055/s-0042-1751484

A. Dumas  
D. Li  
S. Bonert  
P. Aubeelucksing  
A.-P. Schaffner  
S. Hanessian\*

Université de Montréal, Canada



## Synthesis

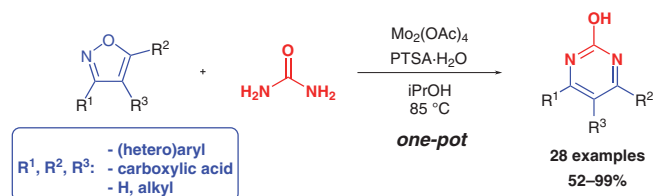
## Molybdenum-Mediated One-Pot Synthesis of 2-Hydroxypyrimidines from Isoxazoles

Paper

3841

*Synthesis* **2023**, *55*, 3841–3850  
DOI: 10.1055/a-2107-4492

S. Rochelle  
S. Beaumont\*  
Galapagos SASU, France



R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>:  
- (hetero)aryl  
- carboxylic acid  
- H, alkyl

28 examples  
52–99%

## Synthesis

Synthesis 2023, 55, 3851–3861  
DOI: 10.1055/a-2122-3731

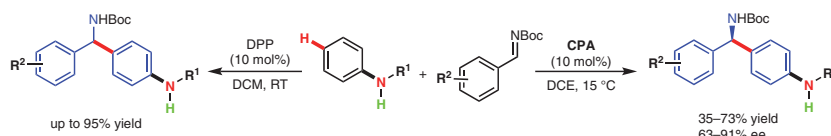
C.-L. Wang  
Y.-L. Li  
L. Wang  
X.-H. Wang  
J. Zhou  
H.-Y. Bai  
T.-M. Ding\*  
Z.-L. Sun\*

Southern Medical University,  
P. R. of China  
Shanghai Jiao Tong University,  
P. R. of China

### Direct Organocatalytic Asymmetric *para* C–H Aminoalkylation of Aniline Derivatives Affording Diarylmethylamines

Paper

3851



## Synthesis

Synthesis 2023, 55, 3862–3874  
DOI: 10.1055/s-0042-1751464

M. B. Williams  
M. L. Martin  
S. Wiedmann  
A. Boyer\*  
University of Glasgow, UK

### Exploiting 1,1-Dibromoalkenes as Direct Precursors to 5-Substituted 1,2,3-Triazoles

Paper

3862

