

Synthesis

Reviews and Full Papers in Chemical Synthesis

January 19, 2023 • Vol. 55, 159–368

Special Issue

dedicated to the 80th Birthday of Prof. Alain Krief
(Part I)

Guest editor: Guillaume Berionni



2

Synthesis

Synthesis 2023, 55, 159–163
DOI: 10.1055/s-0040-1720037

H. Hopf*

G. Mehta

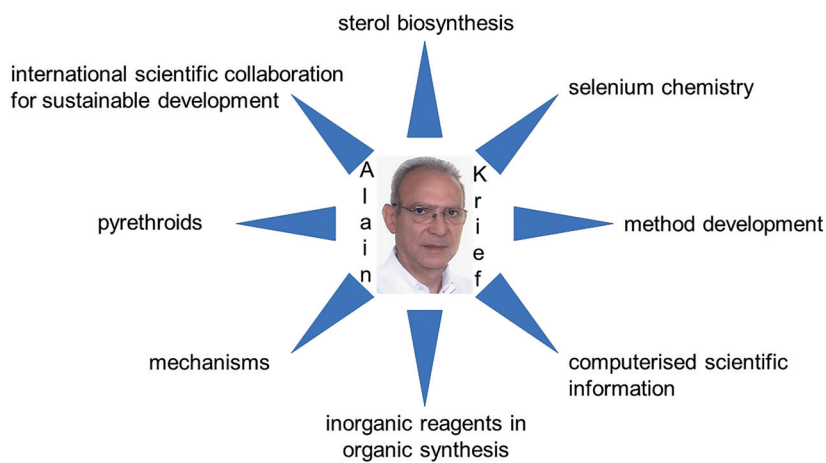
S. A. Matlin

Technische Universität Braun-
schweig, Germany

Professor Alain Krief: Advancing Chemistry; From Innovative Synthesis to Promoting Sustainable Development

Preface

159



Synthesis

Synthesis 2023, 55, 164–192
DOI: 10.1055/a-1932-6937

K. Gadde

D. De Vos

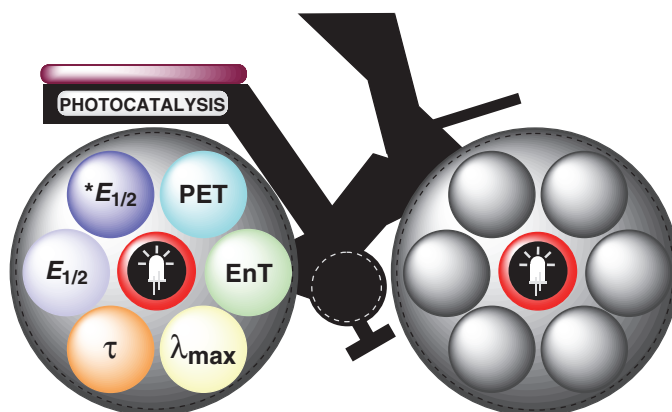
B. U. Maes*

University of Antwerp, Belgium

Basic Concepts and Activation Modes in Visible-Light-Photocatalyzed Organic Synthesis

Review

164



Synthesis

Synthesis **2023**, *55*, 193–231
DOI: 10.1055/a-1946-0512

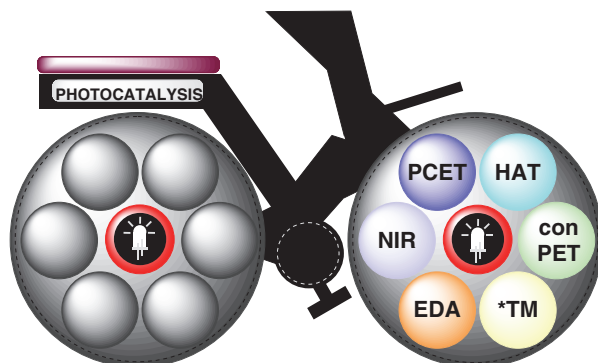
D. De Vos
K. Gadde
B. U. Maes*

University of Antwerp, Belgium

Emerging Activation Modes and Techniques in Visible-Light-Photocatalyzed Organic Synthesis

Review

193



Synthesis

Synthesis **2023**, *55*, 232–239
DOI: 10.1055/a-1757-2680

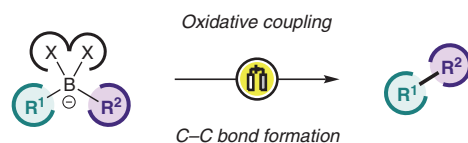
D. Didier*

Ludwig-Maximilians University,
Germany

Forging C–C Bonds through Intramolecular Oxidative Coupling of Organoborates – An Overview

Short Review

232



Synthesis

Synthesis **2023**, *55*, 240–245
DOI: 10.1055/a-1896-8449

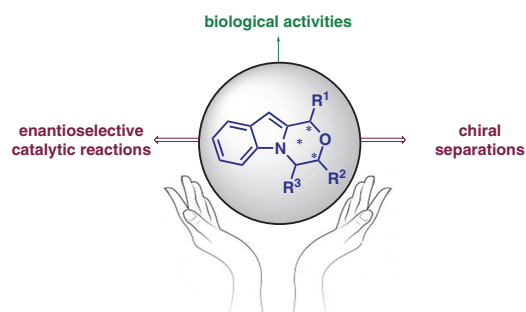
A. Dupeux
V. Michelet*

University Côte d'Azur, France

Chiral 1,4-Oxazino[4,3-*a*]indoles as a Challenging Scaffold: Syntheses and Properties

Short Review

240



Synthesis

Copillar[5]arene Chemistry: Synthesis and Applications

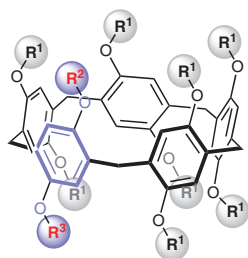
Short Review

246

Synthesis **2023**, *55*, 246–262
DOI: 10.1055/s-0040-1738369

W. Chen
S. P. Vincent*

UNamur, NARILIS, Belgium



Copillar[4+1]arene

Synthesis

Halodiazirines as Valuable Reagents for the Synthesis of Halocyclopropanes

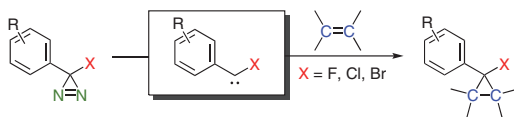
Short Review

263

Synthesis **2023**, *55*, 263–271
DOI: 10.1055/a-1961-8237

H.-M. To
O. Malets
M. Mazur
O. Mykhailenko
O. Kompaniets
T. Ollevier*

Université Laval, Canada



Synthesis

Radical Cyclization of Ynamides to Nitrogen Heterocycles

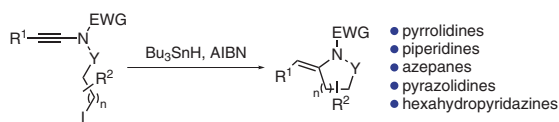
Paper

272

Synthesis **2023**, *55*, 272–288
DOI: 10.1055/a-1868-8092

C. Zhang
N. Blanchard
G. Evano*

Université libre de Bruxelles
(ULB), Belgium



Synthesis

Synthesis 2023, 55, 289–296
DOI: 10.1055/a-1878-8597

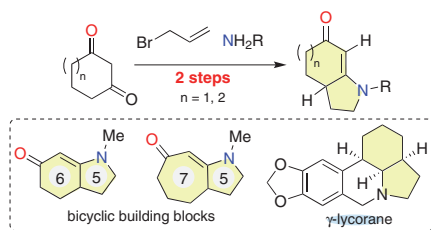
Y. Chen
X.-T. Hu
X.-Y. Xie
D. Li
C.-X. Zheng
Y.-X. Zhang
W.-J. Wang
R. Zhan*
L.-D. Shao*

Yunnan University of Chinese
Medicine, P. R. of China
Yunnan Normal University,
P. R. of China

A Practical Approach to 6H-Indol-6-ones Enables the Formal Synthesis of γ -Lycorane

Paper

289



Synthesis

Synthesis 2023, 55, 297–306
DOI: 10.1055/a-1921-8664

L. Bodart
J. Wouters*

University of Namur (UNamur),
Belgium

Crystal Structures of Organoselenium Compounds: Structural Descriptors for Chalcogen Bonds

Paper

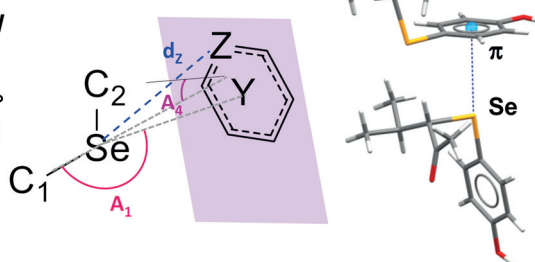
297

Relevant parameters for $\text{Ch}\cdots\pi$ interactions:

$d_z < \text{sum of vdW radii of Se and Z}$

A_1 close to 180°
($150^\circ < A_1 < 180^\circ$)

A_4 close to 0°
($0^\circ < A_4 < 40^\circ$)



Synthesis

Synthesis 2023, 55, 307–314
DOI: 10.1055/a-1508-9593

M. Elsherbini
A. Osi
H. Alharbi
F. Karam
T. Wirth*

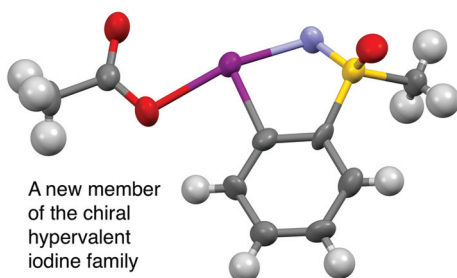
Cardiff University, UK

Sulfur-Based Chiral Iodoarenes: An Underexplored Class of Chiral Hypervalent Iodine Reagents

Paper

OPEN ACCESS

307



A new member
of the chiral
hypervalent
iodine family

Synthesis

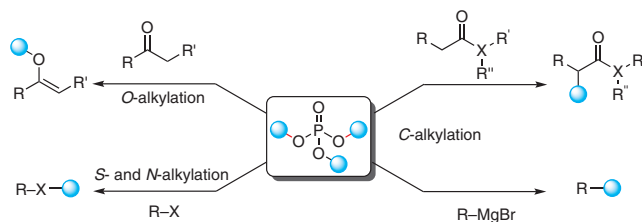
Synthesis 2023, 55, 315–332
DOI: 10.1055/a-1504-8366

A. Banerjee*
T. Hattori*
H. Yamamoto*
Chubu University, Japan

Regio- and Stereoselective (S_N2) *N*-, *O*-, *C*- and *S*-Alkylation Using Trialkyl Phosphates

Paper

315



Synthesis

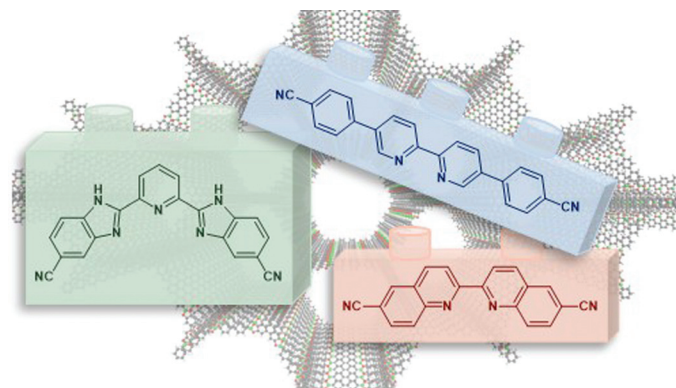
Synthesis 2023, 55, 333–340
DOI: 10.1055/a-1626-5749

J. Everaert
M. Debruyne
F. Vanden Bussche
K. Van Hecke
T. S. Heugebaert
P. Van Der Voort
V. Van Speybroeck
C. V. Stevens*
Ghent University, Belgium

Synthesis of Nitrile-Functionalized Polydentate N-Heterocycles as Building Blocks for Covalent Triazine Frameworks

Paper

333



Synthesis

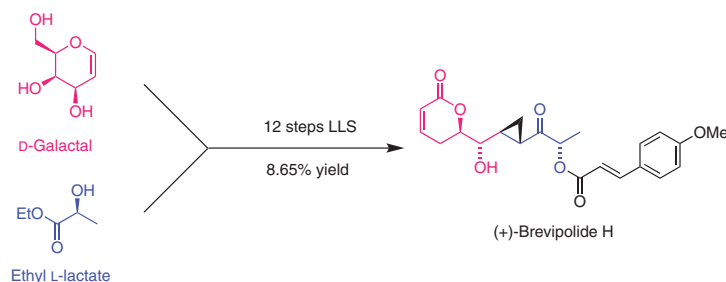
Synthesis 2023, 55, 341–346
DOI: 10.1055/a-1700-3520

Z. Zhao
Q. Lv
J. Geng
Y. Liu
C. Hu
Y. Du
J. Liu*
Research Center for Eco-Environmental Sciences, P. R. of China

Stereoselective Total Synthesis of (+)-Brevipolide H from D-Galactal

Paper

341



Synthesis

A Selenium-Bridged 10-Boratriptycene Lewis Acid

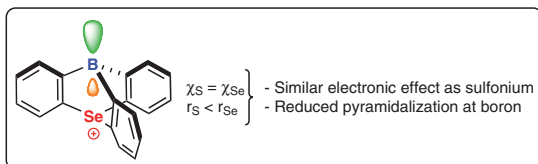
Paper

347

Synthesis 2023, 55, 347–353
DOI: 10.1055/a-1840-5680

A. Osi
N. Tumanov
J. Wouters
A. Chardon*
G. Berionni*

University of Namur, Belgium



Synthesis

Elucidation of the Nucleophilic Potential of Diazocyclopentadiene

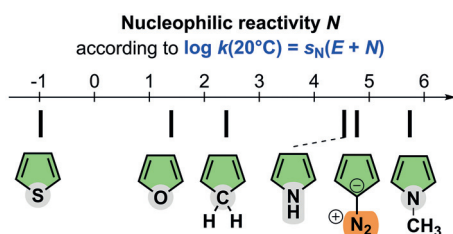
Paper

354

Synthesis 2023, 55, 354–358
DOI: 10.1055/s-0041-1737327

M. Hartnagel
A. R. Ofial
H. Mayr*

Ludwig-Maximilians-Universität
München, Germany



Synthesis

Expanding the Library of 2-Phenylbenzotellurazoles: Red-Shifting Effect of Ethoxy Functionalities on the UV/Vis Absorption Properties

Paper

359

Synthesis 2023, 55, 359–367
DOI: 10.1055/s-0041-1737898

D. Romito
L. Amendolare
K. K. Kalathil
D. Bonifazi*

University of Vienna, Austria

