

Synthesis

Reviews and Full Papers in Chemical Synthesis

November 17, 2021 • Vol. 53, 4131–4312

Special Issue

dedicated to Prof. Sarah Reisman, recipient of the
2019 Dr. Margaret Faul Women in Chemistry Award

Guest Editors: M. M. Faul, A. Fürstner



22

Synthesis

Synthesis 2021, 53, 4131–4133
DOI: 10.1055/s-0040-1720011

M. M. Faul*
A. Fürstner*

Process Development, Amgen
Inc., USA
Max-Planck-Institut für Kohlen-
forschung, Germany

SYNTHESIS Special Issue in Honor of Professor Sarah Reisman

Editorial

4131



Synthesis

Synthesis 2021, 53, 4134–4177
DOI: 10.1055/s-0040-1706023

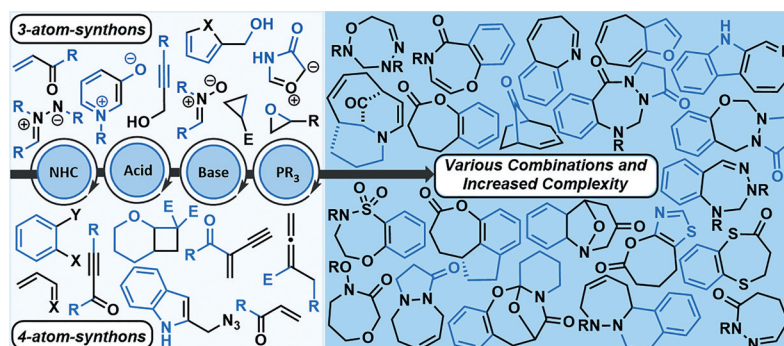
H. Lam*
X. Abel-Snape
M. F. Köllen
M. Lautens*

University of Toronto, Canada

Recent Advances in Transition-Metal-Free (4+3)-Annulations

Special Topic

4134



Synthesis

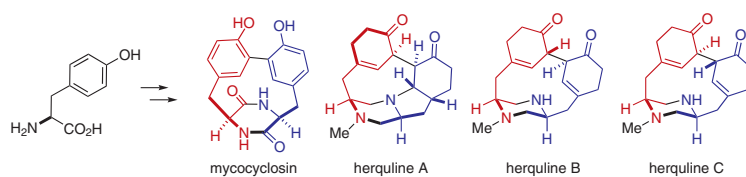
Total Synthesis of Mycocyclin and the Herquelines

Special Topic

4178

Synthesis 2021, 53, 4178–4186
DOI: 10.1055/a-1403-4312

J. S. Ryan
C. S. Schindler*
University of Michigan, USA



Synthesis

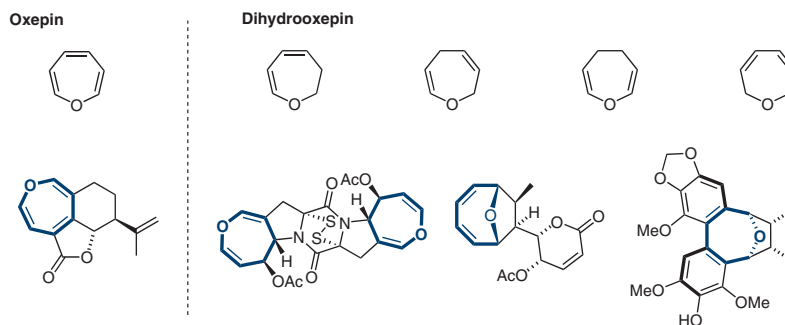
Total Synthesis of Oxepin and Dihydrooxepin Containing Natural Products

Special Topic

4187

Synthesis 2021, 53, 4187–4202
DOI: 10.1055/s-0037-1610776

K. R. Sokol
T. Magauer*
Leopold-Franzens-University
Innsbruck, Austria



Synthesis

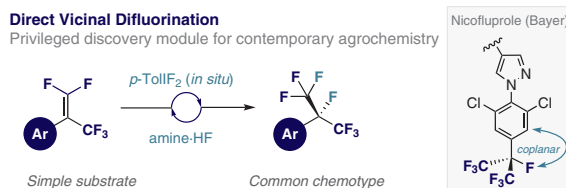
An I(I)/I(III) Catalysis Route to the Heptafluoroisopropyl Group: A Privileged Module in Contemporary Agrochemistry

Special Topic

4203

Synthesis 2021, 53, 4203–4212
DOI: 10.1055/a-1485-4916

V. Martín-Heras
C. G. Daniliuc
R. Gilmour*
Westfälische Wilhelms-Universität
Münster, Germany



Synthesis

Synthesis 2021, 53, 4213–4220
DOI: 10.1055/s-0037-1610779

D. P. Wood
W. Guan
S. Lin*

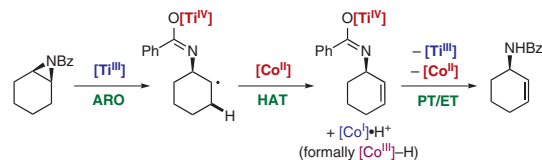
Cornell University, USA

Titanium and Cobalt Bimetallic Radical Redox Relay for the Isomerization of *N*-Bz Aziridines to Allylic Amides

Special Topic

4213

Bimetallic Radical Redox-Relay Catalysis:



Synthesis

Synthesis 2021, 53, 4221–4230
DOI: 10.1055/s-1638-5783

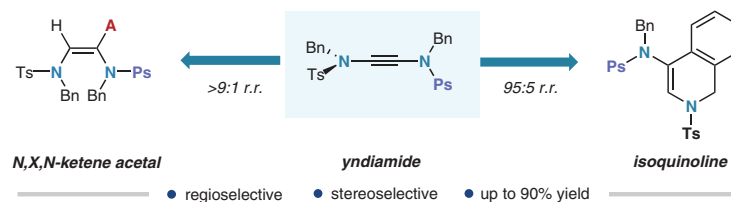
O. L. Garry
S. J. Mansfield
E. A. Anderson*

University of Oxford, U.K.

Regio- and Stereoselective Addition of Brønsted Acids to Yndiamides: Synthesis of *N,O,N*- and *N,S,N*-Trisubstituted Ketene Acetals

Special Topic

4221



Synthesis

Synthesis 2021, 53, 4231–4238
DOI: 10.1055/s-0040-1706046

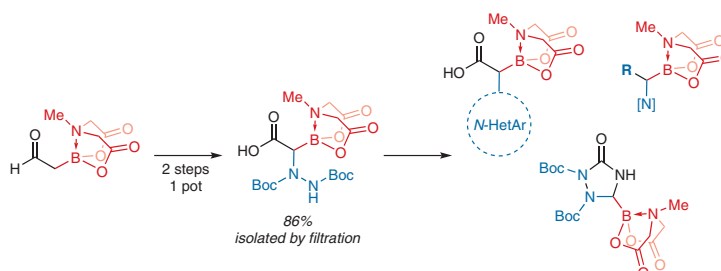
C.-H. Tien
A. Trofimova
W. Shao
A. K. Yudin*

University of Toronto, Canada

Synthesis of Borylated Hydrazino Acid Derivatives

Special Topic

4231



Synthesis

Synthesis 2021, 53, 4239–4245
DOI: 10.1055/s-0040-1706264

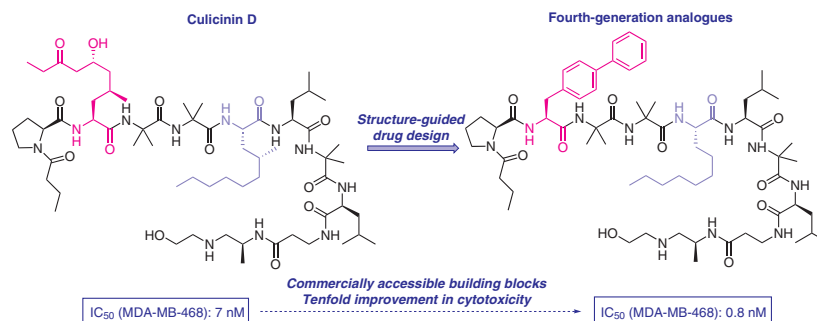
J. K. Kasim
I. Kavianinia*
M. Bull
P. W. R. Harris
J. B. Smaill
A. V. Patterson
M. A. Brimble*

The University of Auckland,
New Zealand

Fourth-Generation Analogues of the Anticancer Peptaibol Culicinin D: Probing the Effects of Hydrophobicity and Halogenation on Cytotoxicity

Special Topic

4239



Synthesis

Synthesis 2021, 53, 4246–4262
DOI: 10.1055/a-1464-2576

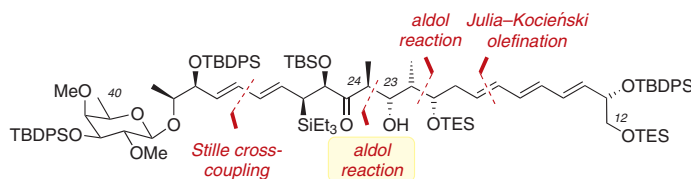
S. Wienhold
L. Fritz
T. Judt
S. Hackl
T. Neubauer
B. Sauerer
T. Bach*

Technische Universität
München, Germany

Studies towards the Synthesis of (–)-Pulvomycin: Construction of the C12–C40 Segment by a Stereoselective Aldol Reaction

Special Topic

4246



Synthesis

Synthesis 2021, 53, 4263–4271
DOI: 10.1055/a-1509-5904

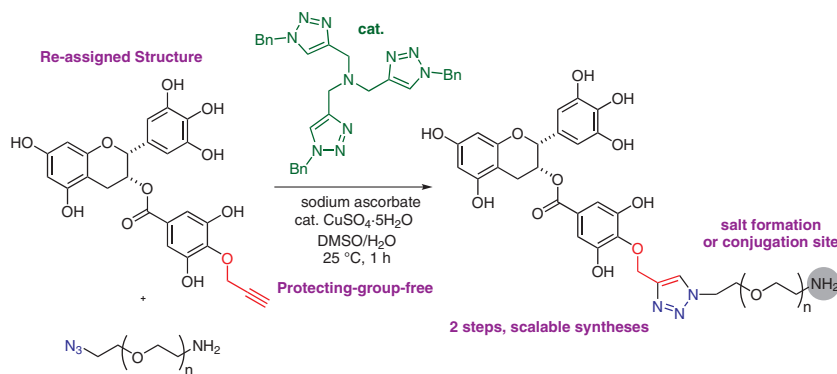
A. El Khoury
P. M. Seidler
D. S. Eisenberg*
P. G. Harran*

University of California–
Los Angeles, USA

Catalytic Synthesis of PEGylated EGCG Conjugates that Disaggregate Alzheimer's Tau

Special Topic

4263



Synthesis

Synthesis 2021, 53, 4272–4278
DOI: 10.1055/a-1538-8429

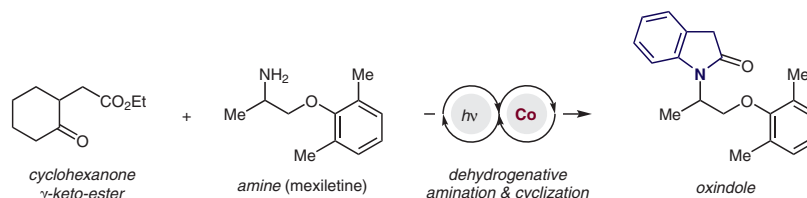
H. P. Caldora
S. Govaerts
S. U. Dighe
O. J. Turner
D. Leonori*

University of Manchester, UK

A de novo Synthesis of Oxindoles from Cyclohexanone-Derived γ -Keto-Ester Acceptors Using a Desaturative Amination–Cyclization Approach

Special Topic

4272



oxindole assembly via dehydrogenative amination–cyclization

Synthesis

Synthesis 2021, 53, 4279–4289
DOI: 10.1055/a-1645-2632

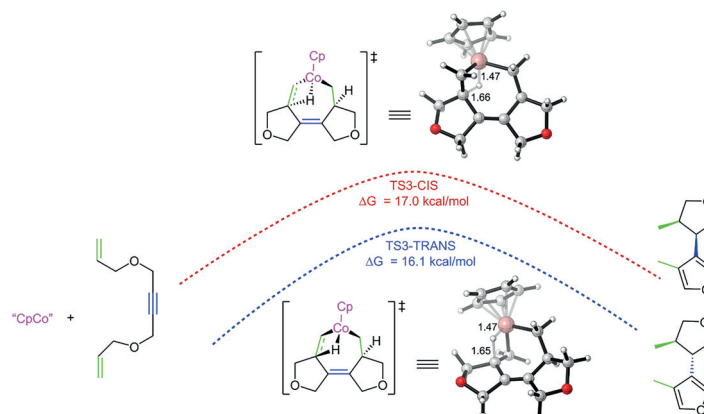
J. J. Wong
X. Chen
K. N. Houk*
K. P. C. Vollhardt*

University of California,
Los Angeles, USA
University of California at Berkeley,
USA

The Trajectory of the (η^5 -Cyclopentadienyl)cobalt-Mediated Cycloisomerization of Ene-Yne-Ene-Type Allyl Propargylic Ethers to Furans: A DFT Appraisal

Special Topic

4279



Synthesis

Synthesis 2021, 53, 4290–4296
DOI: 10.1055/s-0040-1719842

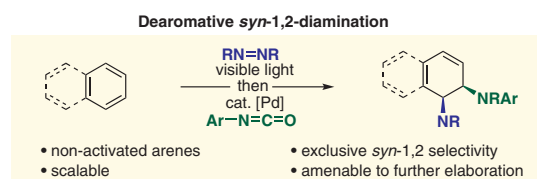
C. W. Davis
T. W. Bingham
M. Okumura
D. Sarlah*

University of Illinois, USA

Dearomative syn-1,2-Diamination of Benzene and Naphthalene

Special Topic

4290



Synthesis

Synthesis 2021, 53, 4297–4307
DOI: 10.1055/s-0037-1610774

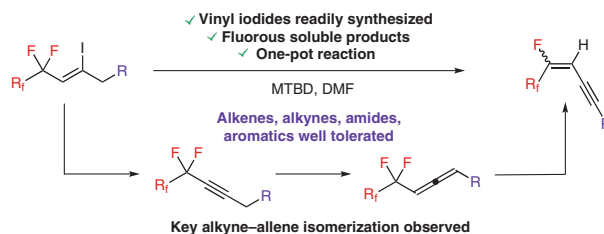
J. A. Jaye
E. M. Sletten*

University of California, Los Angeles, USA

Simple Synthesis of Fluorinated Ene-Ynes via In Situ Generation of Allenes

Special Topic

4297



Synthesis

Synthesis 2021, 53, 4308–4312
DOI: 10.1055/s-0040-1706039

L. Wang

S. Ni

J. Cornella*

Max-Planck-Institut für Kohlenforschung, Germany

Validation of Arylphosphorothiolates as Convergent Substrates for Ar-SF₄Cl and Ar-SF₅ Synthesis

Special Topic

4308

