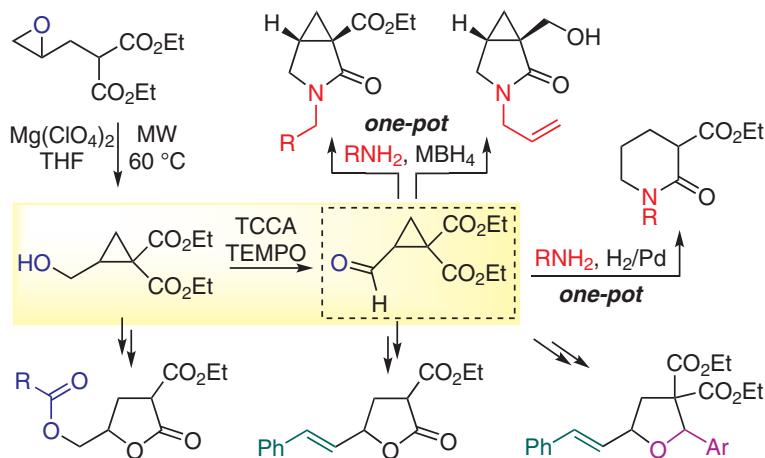


Synthesis

Reviews and Full Papers in Chemical Synthesis

July 20, 2021 • Vol. 53, 2319–2516



Functionalized Cyclopropanes as Versatile Intermediates for the Diversity-Oriented Synthesis of γ -Lactones, γ -Lactams and δ -Lactams

A. P. Maximiano, G. S. Ramos, M. V. Marques, M. M. Sá

14

 Thieme

Synthesis

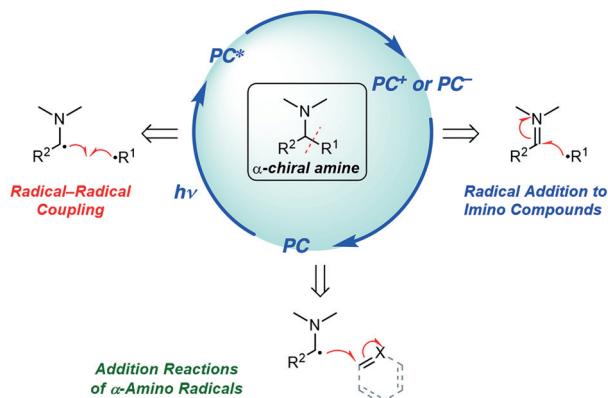
Synthesis 2021, 53, 2319–2341
DOI: 10.1055/a-1396-8343

S. T. J. Cullen
G. K. Friestad*

University of Iowa, USA

Synthesis of Chiral Amines by C–C Bond Formation with Photoredox Catalysis

Review
2319



Synthesis

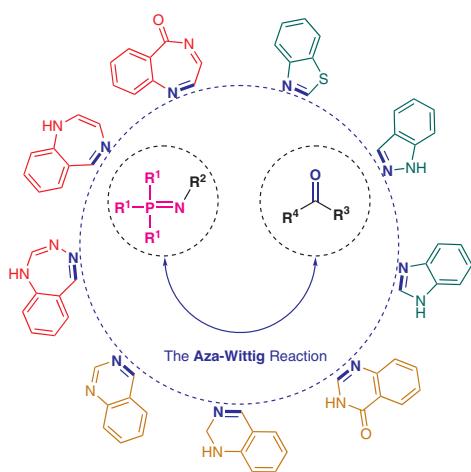
Synthesis 2021, 53, 2342–2366
DOI: 10.1055/a-1394-7511

K. Pedrood
M. N. Montazer
B. Larijani
M. Mahdavi*

Tehran University of Medical Sciences, Iran

Recent Advances in the Synthesis of Heterocycles by the Aza-Wittig Reaction

Short Review
2342

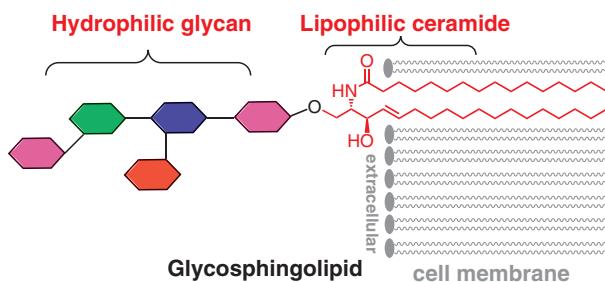


Synthesis**Enzymatic Synthesis of Glycosphingolipids: A Review****Short Review**

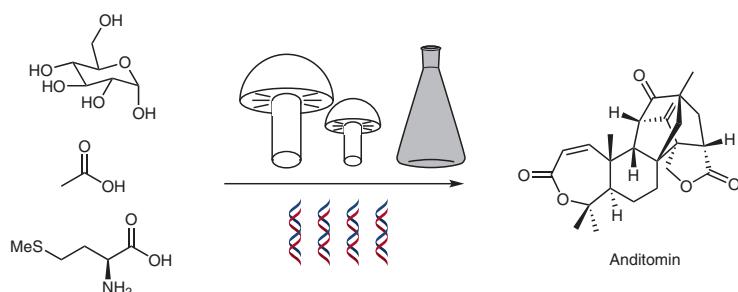
2367

Synthesis 2021, 53, 2367–2380
DOI: 10.1055/a-1426-4451**Q. Li**
Z. Guo*

University of Florida, USA

**Synthesis****Total Mycosynthesis: Rational Bioconstruction and Bioengineering of Fungal Natural Products****Short Review**

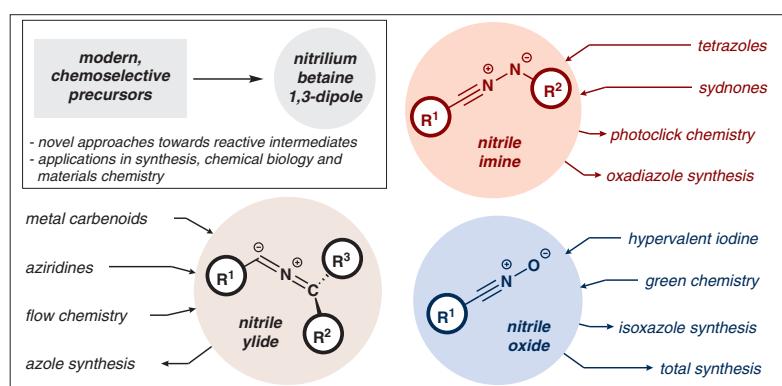
2381

Synthesis 2021, 53, 2381–2394
DOI: 10.1055/a-1401-2716**L. Kahlert**
C. Schotte
R. J. Cox*Leibniz University of Hannover,
Germany

Total Synthesis of Known and New Fungal Natural Products by Pathway Expression

Synthesis**Recent Advances in the Generation of Nitrilium Betaine 1,3-Dipoles****Short Review**

2395

Synthesis 2021, 53, 2395–2407
DOI: 10.1055/a-1389-1281**K. Livingstone**
G. Little
C. Jamieson*
University of Strathclyde, UK

Synthesis

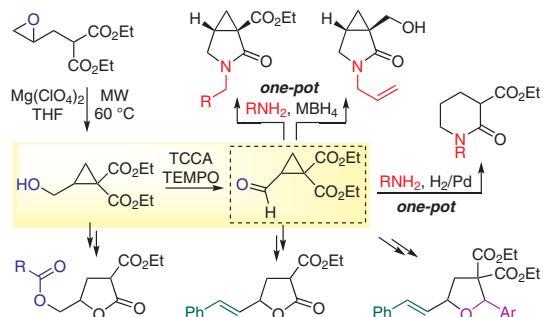
Synthesis 2021, 53, 2408–2421
DOI: 10.1055/a-1389-1203

Functionalized Cyclopropanes as Versatile Intermediates for the Diversity-Oriented Synthesis of γ -Lactones, γ -Lactams and δ -Lactams**Feature**

2408

A. P. Maximiano
G. S. Ramos
M. V. Marques
M. M. Sa*

Universidade Federal de Santa Catarina, Brazil

**Synthesis**

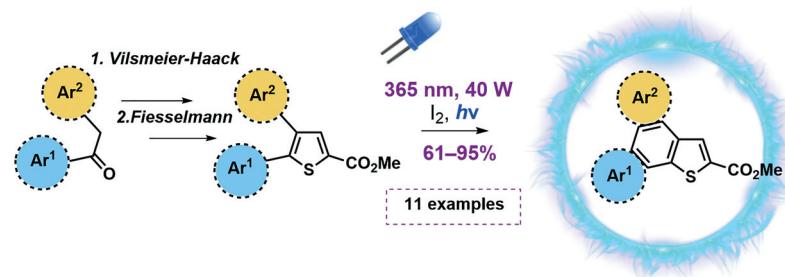
Synthesis 2021, 53, 2422–2434
DOI: 10.1055/a-1416-4924

A Simple and Efficient Synthesis of Fused Benzo[*b*]thiophene Derivatives**Paper**

2422

E. B. Ulyankin
A. S. Kostyuchenko
S. A. Chernenko
M. O. Bystrushkin
A. L. Samsonenko
A. L. Shatsauskas
A. S. Fisyuk*

Omsk F. M. Dostoevsky State University, Russian Federation
Omsk State Technical University, Russian Federation

**Synthesis**

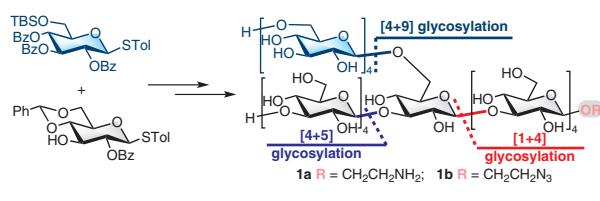
Synthesis 2021, 53, 2435–2448
DOI: 10.1055/a-1440-9386

Convergent Synthesis of Branched β -Glucan Tridecasaccharides Ready for Conjugation**Paper**

2435

X. Zhou
Q. Long
D. Li
J. Gao
Q. Sun
S. Sun
Y. Su
P. Wang
W. Peng*
M. Li*

Ocean University of China, P. R. of China
Shanghai Jiao Tong University, P. R. of China
Laboratory for Marine Drugs and Bioproducts, P. R. of China



- convergent synthesis based on catalytic glycosylation of glycosyl trichloroacetimidates
- in 4.7% and 3.9% overall yield and in the longest linear sequence of 16 and 17 steps
- gram-scale access to the nonasaccharide main chain
- installation of the tetrasaccharide branch via orthoester rearrangement

Synthesis

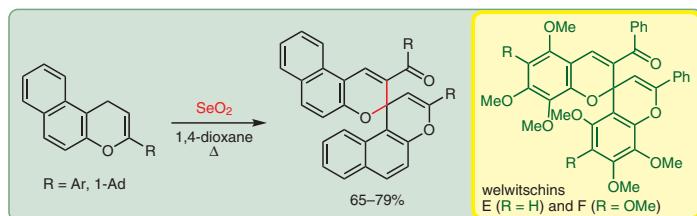
Synthesis 2021, 53, 2449–2456
DOI: 10.1055/a-1396-8123

Oxidative Dimerization of 1H-Benzo[*f*]chromenes: Synthesis of Benzannulated Analogues of Spiroflavonoids Welwitschins E and F**Paper**

2449

M. R. Demidov**V. A. Osyanin*****D. V. Osipov****Y. N. Klimochkin**

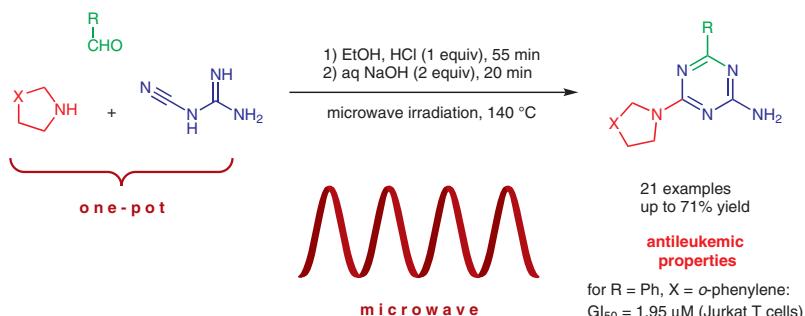
Samara State Technical University, Russian Federation

**Synthesis**

Synthesis 2021, 53, 2457–2468
DOI: 10.1055/a-1401-2795

A New One-Pot Three-Component Synthesis of 4-Aryl-6-cycloamino-1,3,5-triazin-2-amines under Microwave Irradiation**Paper**

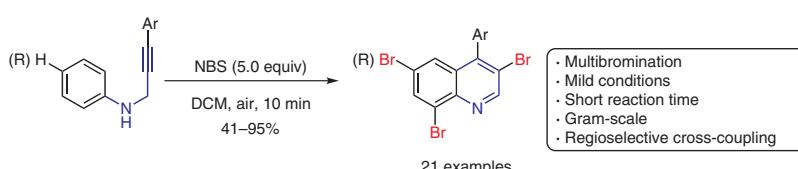
2457

M. S. Bin Shahari**A. Junaid****E. R. T. Tiekkink****A. V. Dolzhenko***Monash University Malaysia,
Malaysia
Curtin University, Australia**Synthesis**

Synthesis 2021, 53, 2469–2476
DOI: 10.1055/a-1396-8198

Synthesis of Multibromo-Substituted Quinolines by NBS-Mediated Cascade Electrophilic Bromination/Cyclization of *N*-(3-Phenylprop-2-ynyl)anilines**Paper**

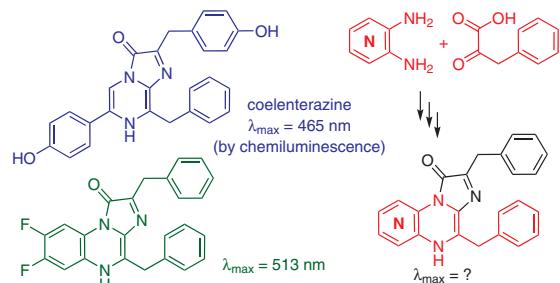
2469

S. Deng**W. Ouyang****J. Bai****X.-R. Song****R. Yang*****Q. Xiao***Jiangxi Science & Technology
Normal University,
P. R. of China

Synthesis 2021, 53, 2477–2484
DOI: 10.1055/a-1396-8607

G. Gagnot
P. Legrand
A. Tadros
F. Ezzahra Hibt
A. Quatela
Y. L. Janin*

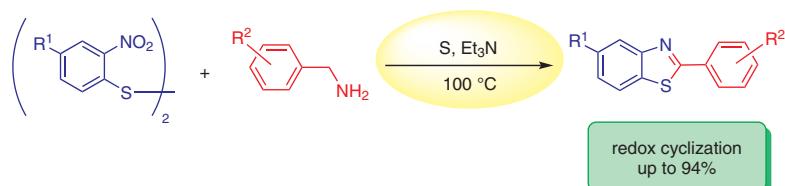
Unité de Chimie et Biocatalyse,
Institut Pasteur, France
Université de Paris, France



Synthesis 2021, 53, 2485–2493
DOI: 10.1055/a-1430-5100

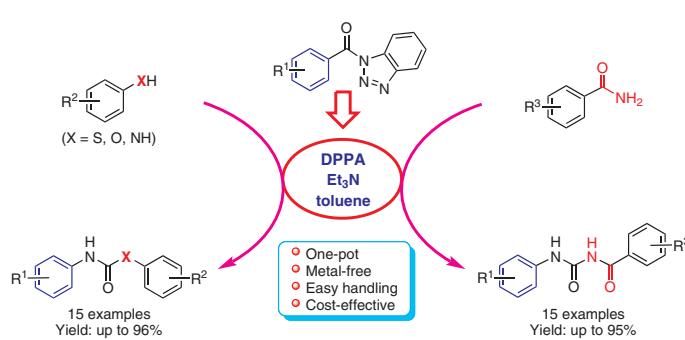
M. Teramoto*
M. Imoto
M. Takeda
T. Mizuno*
A. Nomoto
A. Ogawa

Seika Corporation, Japan
Osaka Prefecture University,
Japan



Synthesis 2021, 53, 2494–2502
DOI: 10.1055/a-1399-3823

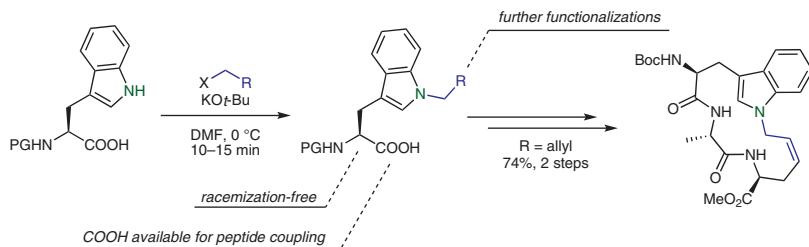
M. S. Yadav
S. K. Singh
A. K. Agrahari
A. S. Singh
V. K. Tiwari*
Banaras Hindu University, India



Synthesis 2021, 53, 2503–2511
DOI: 10.1055/a-1404-5079

L. Junk*
E. Papadopoulos
U. Kazmaier

Saarland University, Germany



Synthesis 2021, 53, 2512–2516
DOI: 10.1055/a-1404-4966

B. M. Gross
M. Oestreich*

Technische Universität Berlin,
Germany

