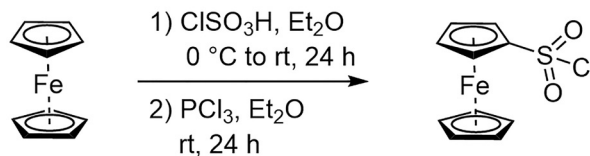


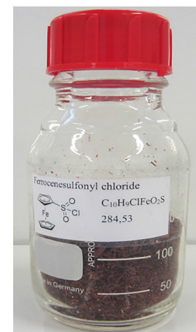
Synthesis

Reviews and Full Papers in Chemical Synthesis

August 3, 2021 • Vol. 53, 2517–2712



Large-scale synthesis: 400 mmol
Purification by crystallization
65% yield - 74 g in one batch



Synthesis of Ferrocenesulfonyl Chloride: Key Intermediate toward Ferrocenesulfonamides

W. Erb, M. Wen, T. Roisnel, F. Mongin

15

Synthesis

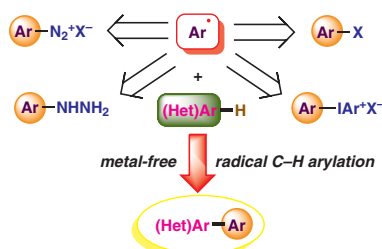
Real Metal-Free C–H Arylation of (Hetero)arenes: The Radical Way

Review

Synthesis 2021, 53, 2517–2544
DOI: 10.1055/a-1437-9761

F. Bellina*
Università di Pisa, Italy

2517



Synthesis

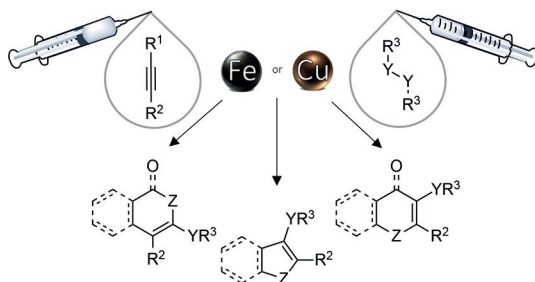
Diorganyl Dichalcogenides and Copper/Iron Salts: Versatile Cyclization System To Achieve Carbo- and Heterocycles from Alkynes

Short Review

Synthesis 2021, 53, 2545–2558
DOI: 10.1055/a-1463-4098

C. K. Jurinic
A. L. Belladonna
R. F. Schumacher*
B. Godoi*
Federal University of Fronteira Sul, Brazil
Federal University of Santa Maria, Brazil

2545



Synthesis

Synthesis 2021, 53, 2559–2569
DOI: 10.1055/s-0040-1706030

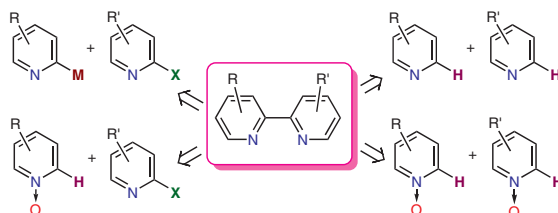
A. E. Rubtsov*
A. V. Malkov*

Perm State University, Russian Federation
Loughborough University, UK

Recent Advances in the Synthesis of 2,2'-Bipyridines and Their Derivatives

Short Review

2559



Synthesis

Synthesis 2021, 53, 2570–2582
DOI: 10.1055/a-1426-4744

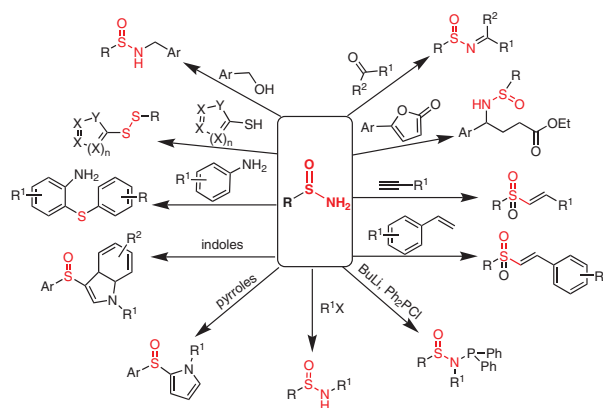
Q. Zhang
J. Xi
H. Ze
Z. Qingle*

Chengdu University of Technology, P. R. of China

Syntheses and Transformations of Sulfinamides

Short Review

2570



Synthesis

Synthesis 2021, 53, 2583–2593
DOI: 10.1055/a-1458-2419

A. Rehpenn
A. Walter
G. Storch*

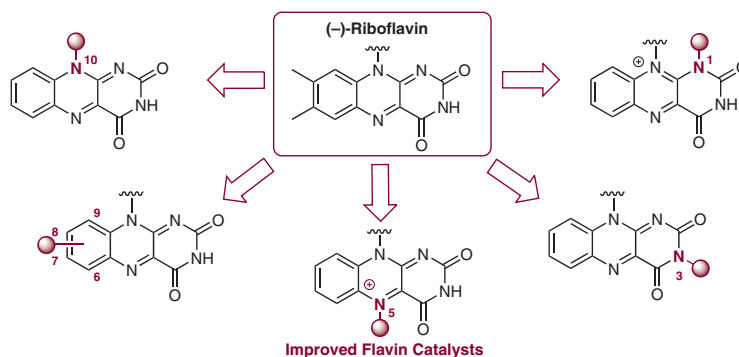
Technische Universität München, Germany

Molecular Editing of Flavins for Catalysis

Short Review

OPEN ACCESS

2583



Synthesis

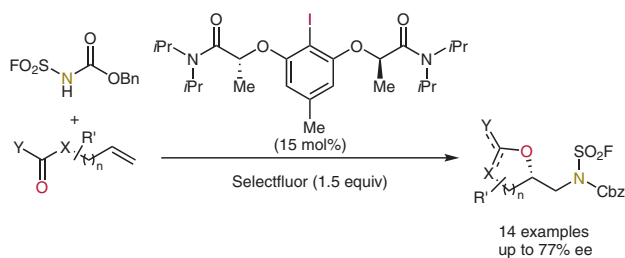
Synthesis **2021**, 53, 2594–2601
DOI: 10.1055/s-0037-1610768

C. Wata
T. Hashimoto*
Chiba University, Japan

Organiodine-Catalyzed Enantioselective Intramolecular Oxyaminations of Alkenes with *N*-(Fluorosulfonyl)carbamate

Feature

2594



Synthesis

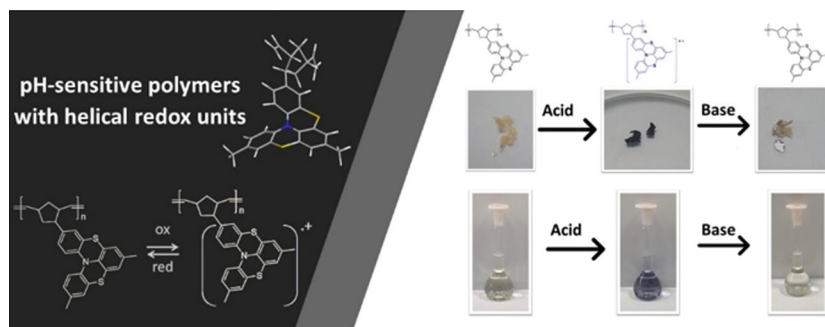
Synthesis **2021**, 53, 2602–2611
DOI: 10.1055/s-0040-1706743

M. Lupi
S. Menichetti
P. Stagnaro
R. Utzeri
C. Vigliani*
University of Florence, Italy

Thia-Bridged Triarylamine[4]helicene-Functionalized Polynorbornenes as Redox-Active pH-Sensitive Polymers

Feature

2602



Synthesis

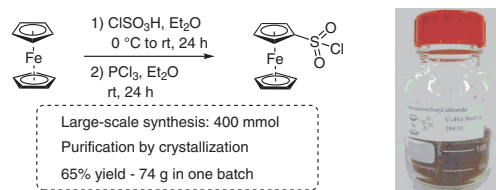
Synthesis **2021**, 53, 2612–2620
DOI: 10.1055/a-1478-7002

W. Erb*
M. Wen
T. Roisnel
F. Mongin
Univ Rennes, France

Synthesis of Ferrocenesulfonyl Chloride: Key Intermediate toward Ferrocenesulfonamides

PSP

2612



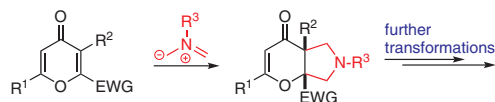
Synthesis

Synthesis 2021, 53, 2621–2631
DOI: 10.1055/s-0040-1706032

D. L. Obydenov*
V. D. Steben'kov
K. L. Obydenov
S. A. Usachev
V. S. Moshkin
V. Y. Sosnovskikh

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Reactions of 4-Pyrones with Azomethine Ylides as a Chemoselective Method for the Construction of Multisubstituted Pyrano[2,3-c]pyrrolidines



R¹ = H, Ar, Me; R² = H, Br; R³ = Me, Bn;
EWG = CO₂Et, CO₂Me, CN, CF₃

- steric vs electronic effect
- 16 examples
- high chemoselectivity
- yields up to 80%

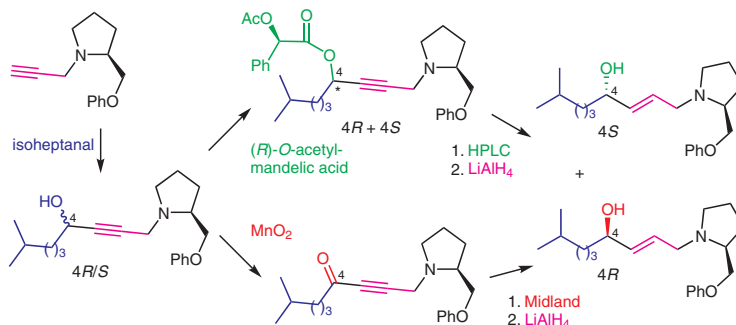
Synthesis

Synthesis 2021, 53, 2632–2642
DOI: 10.1055/s-0037-1610770

J. Donges
S. Hofmann
J. C. Walter
J. Reichertz
M. Brüggemann
A. Frank
U. Nubbemeyer*

Johannes Gutenberg-Universität Mainz, Germany

Synthesis of Optically Active *N*-(4-Hydroxynon-2-enyl)pyrrolidines: Key Building Blocks in the Total Synthesis of *Streptomyces coelicolor* Butanolide 5 (SCB-5) and Virginiae Butanolide A (VB-A)



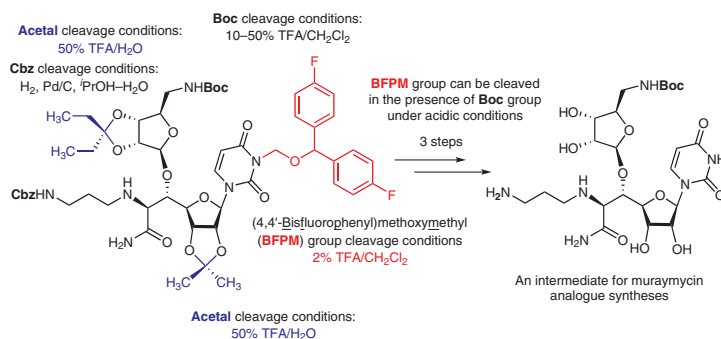
Synthesis

Synthesis 2021, 53, 2643–2650
DOI: 10.1055/a-1464-2473

K. Mitachi
D. Mingle
M. Kurosu*

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A Convenient Protecting Group for Uridine Ureido Nitrogen: (4,4'-Bisfluorophenyl)methoxymethyl Group



Synthesis

Synthesis 2021, 53, 2651–2655
DOI: 10.1055/a-1477-4371

X. Lu*

G. Chen

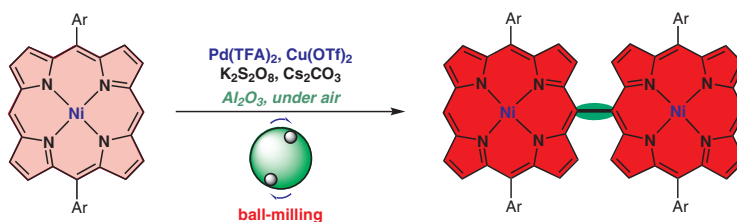
F. Li*

Fujian Polytechnic Normal University, P. R. of China
Beijing National Laboratory for Molecular Sciences, P. R. of China
Shanghai University, P. R. of China

Synthesis of Diporphyrins by Oxidative Coupling with Pd(TFA)₂-Cu(OTf)₂ under Ball-Milling Conditions

Paper

2651



Synthesis

Synthesis 2021, 53, 2656–2664
DOI: 10.1055/a-1499-8865

F. Cong

H. Jiang

X. Du*

W. Yang

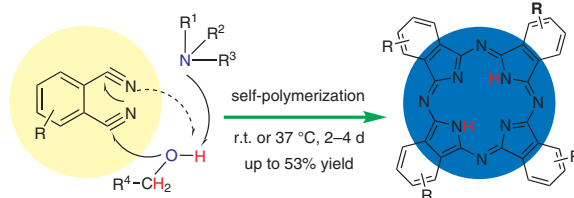
S. Zhang*

Northeast Normal University, P. R. of China
Tianjin Agricultural University, P. R. of China

Facile, Mild-Temperature Synthesis of Metal-Free Phthalocyanines

Paper

2656



Synthesis

Synthesis 2021, 53, 2665–2675
DOI: 10.1055/a-1458-2980

R. M. Al-Zoubi*

R. M. Altamimi

W. K. Al-Jammal

K. Q. Shawakfeh

M. S. Al-Zoubi

M. J. Ferguson

A. Zarour

A. Yassin

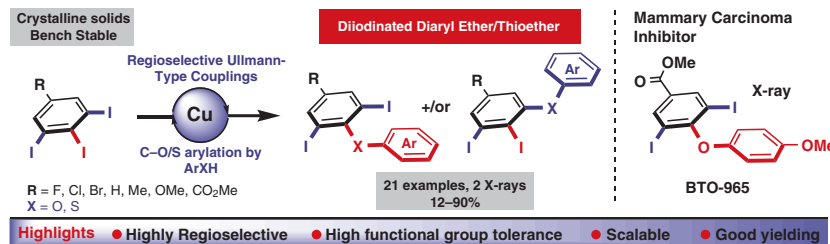
A. Al-Ansari

Jordan University of Science and Technology, Jordan
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CuI-Catalyzed Ullmann-Type Coupling of Phenols and Thiophenols with 5-Substituted 1,2,3-Triiodobenzenes: Facile Synthesis of Mammary Carcinoma Inhibitor BTO-956 in One Step

Paper

2665



Synthesis

Synthesis 2021, 53, 2676–2688
DOI: 10.1055/a-1477-6470

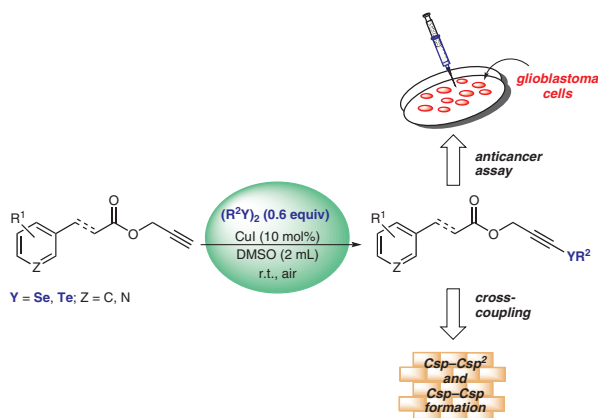
F. Gritzenco
J. C. Kazmierczak
T. Anjos
A. Sperança
M. L. B. Peixoto
M. Godoi
K. N. B. Ledebuhr
C. A. Brüning
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B. Godoi*

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Base-Free Synthesis and Synthetic Applications of Novel 3-(Organo-chalcogenyl)prop-2-yn-1-yl Esters: Promising Anticancer Agents

Paper

2676



Synthesis

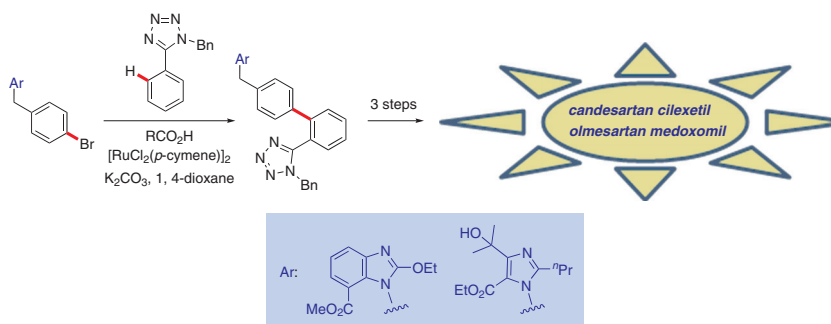
Synthesis 2021, 53, 2689–2692
DOI: 10.1055/a-1472-0925

M. Seki*
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Tokuyama Corporation, Japan

Convergent Synthesis of Angiotensin II Receptor Blockers through C–H Arylation of 1-Benzyl-5-phenyl-1H-tetrazole with Functionalized Aryl Bromides

Paper

2689



Synthesis

Synthesis 2021, 53, 2693–2701
DOI: 10.1055/a-1472-7578

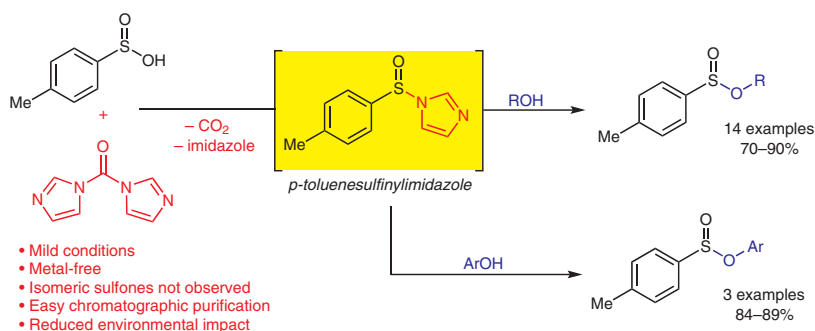
J. L. Shaw
B. J. Austermuehle
J. M. Witte
T. R. Dorsey
C. Delach
C. G. Hamaker
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N-*p*-Toluenesulfinylimidazole: A New in situ Reagent for the Mild and Efficient Synthesis of *p*-Toluenesulfinate Alkyl Esters and Aryl Esters

Paper

2693



Synthesis 2021, 53, 2702–2712
DOI: 10.1055/a-1477-4871

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A. Singh
M. Bhati
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