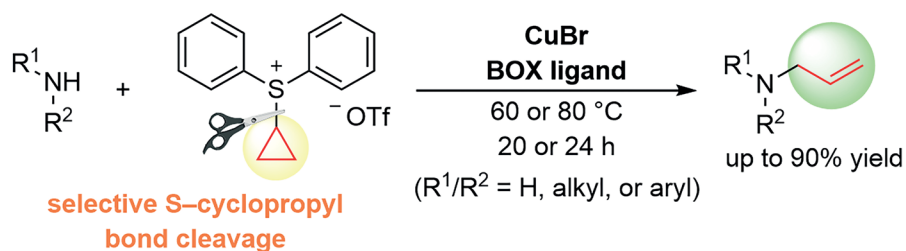


Synthesis

Reviews and Full Papers in Chemical Synthesis

May 17, 2022 • Vol. 54, 2309–2526



- good functional group tolerance and a wide range of substrates
- applicable to drug molecules, showing excellent chemoselectivity
- the first use of cyclopropyldiphenylsulfonium trifluoromethanesulfonate as a powerful allylation reagent

Copper-Catalyzed Allylation of Amines with Cyclopropyldiphenylsulfonium Trifluoromethanesulfonate

Y. Ma, Z.-Y. Tian, S.-Y. Zheng, C.-P. Zhang

10

Synthesis

Synthesis 2022, 54, 2309–2329
DOI: 10.1055/s-0041-1737563

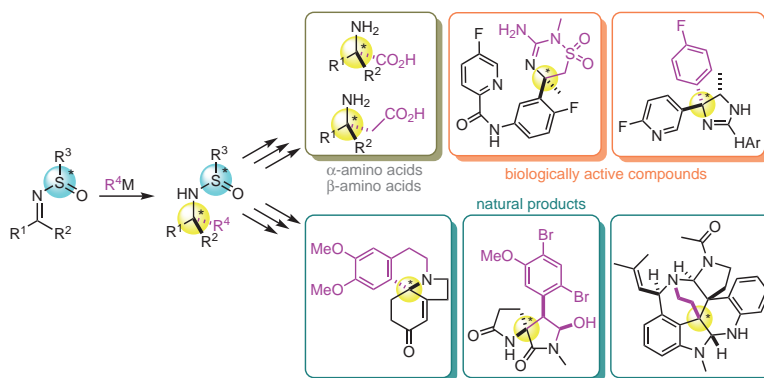
C. Achuen
S. Carret*
J.-F. Poisson*
F. Berthiol*

Université Grenoble Alpes,
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1,2-Additions on Chiral *N*-Sulfinylketimines: An Easy Access to Chiral α -Tertiary Amines

Review

2309



Synthesis

Synthesis 2022, 54, 2330–2339
DOI: 10.1055/a-1739-4793

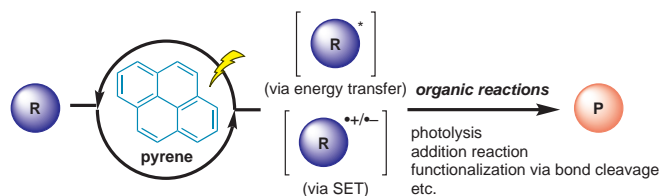
A. Shiozuka
K. Sekine*
Y. Kuninobu*

Kyushu University, Japan

Photoinduced Organic Reactions by Employing Pyrene Catalysts

Short Review

2330



Synthesis

Tertiary Alkylative Suzuki–Miyaura Couplings

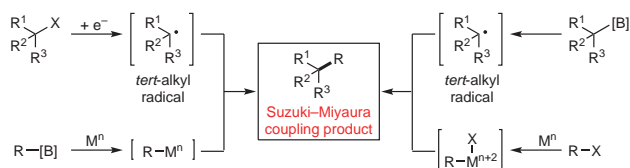
Short Review

2340

Synthesis **2022**, *54*, 2340–2349
DOI: 10.1055/a-1732-4597

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Synthesis

Copper-Catalyzed Allylation of Amines with Cyclopropyldiphenylsulfonium Trifluoromethanesulfonate

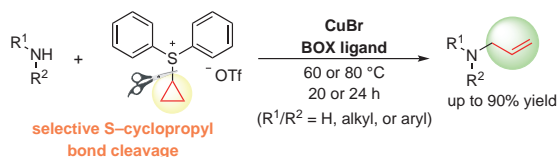
Feature

2350

Synthesis **2022**, *54*, 2350–2360
DOI: 10.1055/a-1730-2540

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- good functional group tolerance and a wide range of substrates
- applicable to drug molecules, showing excellent chemoselectivity
- the first use of cyclopropyldiphenylsulfonium trifluoromethanesulfonate as a powerful allylation reagent

Synthesis

UV-Light-Induced Dehydrogenative *N*-Acylation of Amines with 2-Nitrobenzaldehydes To Give 2-Aminobenzamides

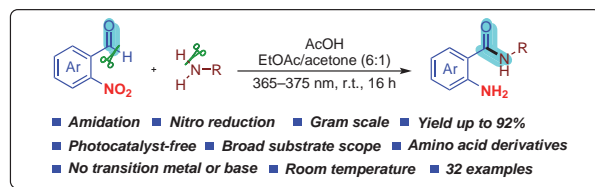
Feature

2361

Synthesis **2022**, *54*, 2361–2372
DOI: 10.1055/a-1736-4388

D. Zeng
T. Yang
N. Tang
W. Deng*
J. Xiang
S.-F. Yin
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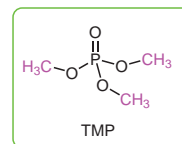
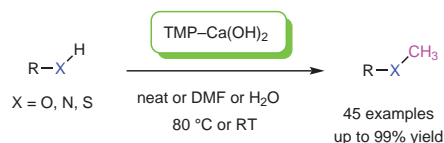
Synthesis

Synthesis **2022**, *54*, 2373–2390
DOI: 10.1055/a-1731-3852

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A Mild Heteroatom (O-, N-, and S-) Methylation Protocol Using Trimethyl Phosphate (TMP)–Ca(OH)₂ Combination



Feature

2373

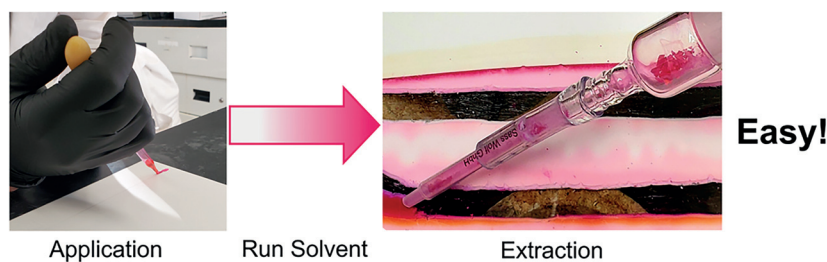
Synthesis

Synthesis **2022**, *54*, 2391–2394
DOI: 10.1055/a-1766-2416

J. J. Hayward*
L. Mader
J. F. Trant*

University of Windsor, Canada

Giving Preparative Thin-Layer Chromatography Some Tender Loving Care



PSP

2391

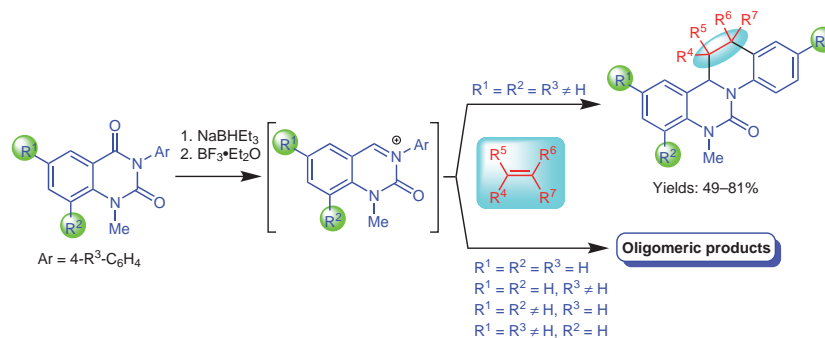
Synthesis

Synthesis **2022**, *54*, 2395–2414
DOI: 10.1055/a-1755-2061

A. S. Filatov
A. G. Larina
M. L. Petrov
V. M. Boitsov
A. V. Stepakov*

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Saint Petersburg State Institute
of Technology,
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Synthesis of Quinolino[1,2-c]quinazolin-6-one Derivatives via Formal (4+2)-Cycloaddition of Alkenes to Quinazoline-Derived N-Acyliminium Cations: An Experimental and Theoretical Study



Paper

2395

Synthesis

Total Synthesis of Cryptoleurine and Its Analogues

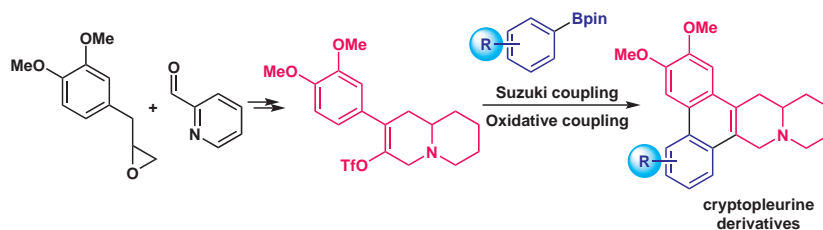
Paper

2415

Synthesis 2022, 54, 2415–2422
DOI: 10.1055/a-1730-8628

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Synthesis

Total Synthesis of Cryptoleurine and Its Analogues

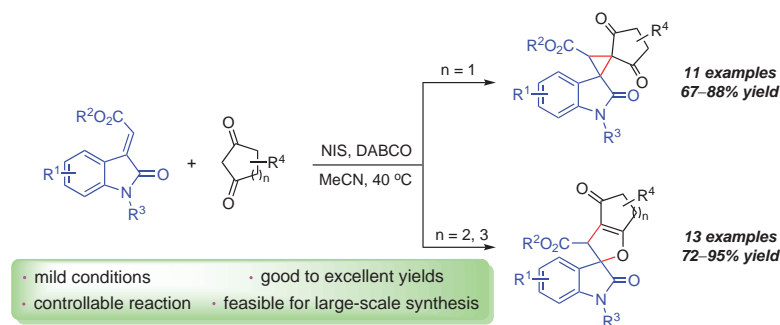
Paper

2423

Synthesis 2022, 54, 2423–2432
DOI: 10.1055/a-1731-2703

H. Chen
H. Xu*
Z.-Y. He
P. Zou
F.-H. Huang
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Synthesis

Rh₂(esp)₂-Catalyzed Redox/Cycloaddition Cascade of Diazoacetone Enones with *N*-Methyl Nitrones: Diastereoselective Synthesis of β -Lactams with Two Adjacent Chiral Centers

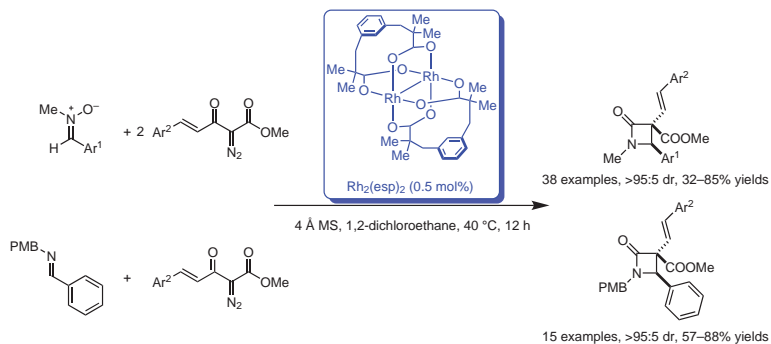
Paper

2433

Synthesis 2022, 54, 2433–2446
DOI: 10.1055/s-0040-1719883

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R. Xu
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Synthesis

Synthesis 2022, 54, 2447–2456
DOI: 10.1055/s-0041-1737374

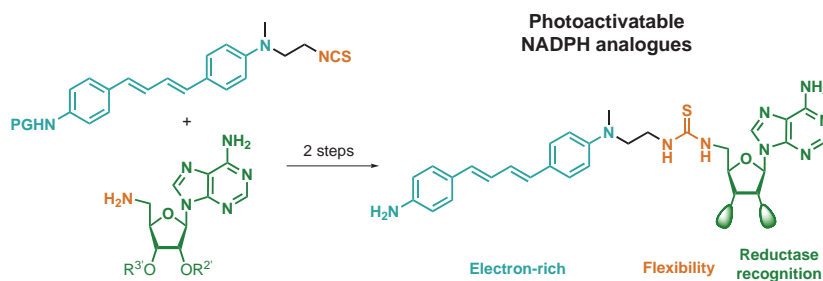
C. L. Polese
E. Deprez
P. Tauc
N. Bogliotti
J. Xie*

Université Paris-Saclay, France

Synthesis and Spectroscopic Characterization of Novel Thiourea-Bearing Photoactivatable NADPH Mimics Targeting NO Synthases

Paper

2447



Synthesis

Synthesis 2022, 54, 2457–2463
DOI: 10.1055/s-0041-1737412

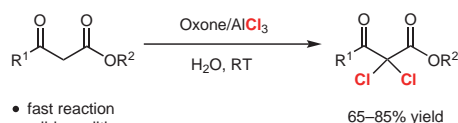
V. Giannopoulos
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University of Crete, Greece

Dichlorination of β -Keto Esters and 1,3-Diketones Mediated by Oxone/Aluminum Trichloride Mixture in Aqueous Medium

Paper

2457



Synthesis

Synthesis 2022, 54, 2464–2472
DOI: 10.1055/s-0041-1737337

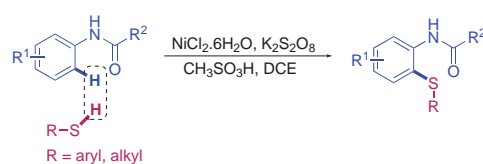
E. Kianmehr*
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A. Foroumadi*

University of Tehran, Iran
Tehran University of Medical Sciences, Iran

Nickel-Catalyzed Regioselective Thiolation of Anilides with Thiols

Paper

2464



Synthesis

Synthesis 2022, 54, 2473–2479
DOI: 10.1055/s-0041-1737844

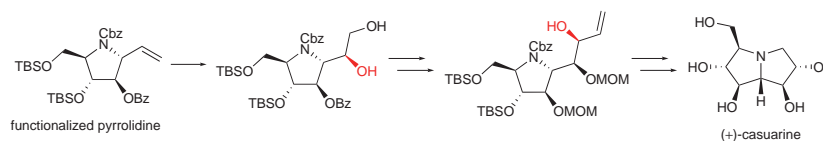
I.-S. Myeong
W.-H. Ham*

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Republic of Korea
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Stereoselective Total Synthesis of (+)-Casuarine via a Functionalized Pyrrolidine

Paper

2473



Synthesis

Synthesis 2022, 54, 2480–2486
DOI: 10.1055/a-1731-9464

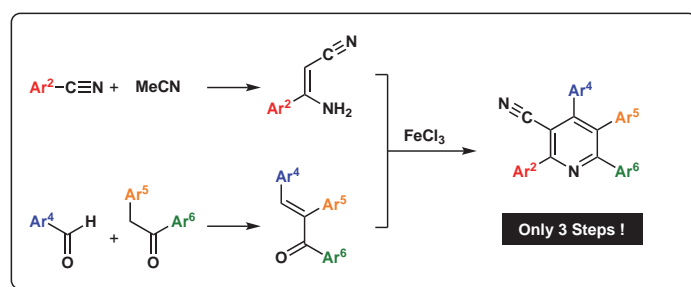
K. Iwai*
H. Yamauchi
S. Yokoyama
N. Nishiwaki*

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Japan

FeCl₃-Promoted Facile Synthesis of Multiply Arylated Nicotinonitriles

Paper

2480



Synthesis

Synthesis 2022, 54, 2487–2493
DOI: 10.1055/a-1730-8186

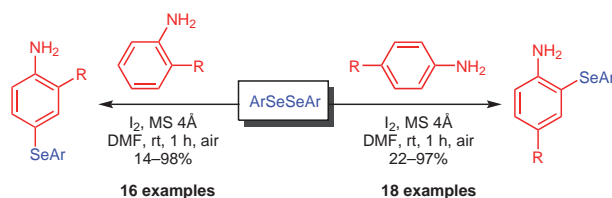
R. Bai
K. K. Dabaria
S. S. Badsara*

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Room Temperature, Metal-Free, Regioselective Arylselenation of Anilines Using Diselenides as Selenium Source

Paper

2487



Synthesis

Synthesis 2022, 54, 2494–2510
DOI: 10.1055/s-0040-1719882

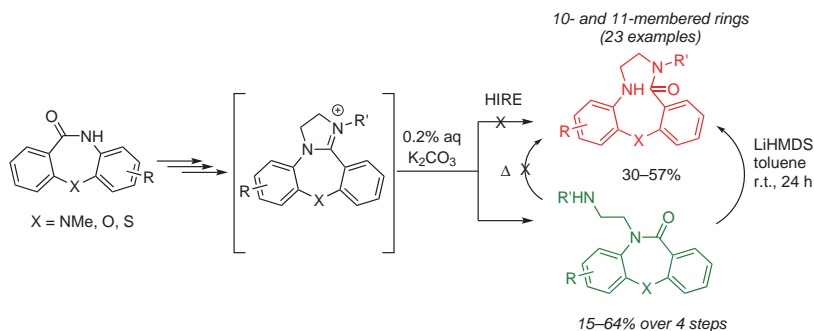
S. Grintsevich
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Immanuel Kant Baltic Federal University, Russian Federation

Significant Broadening of the Substrate Scope for the Hydrated Imidazoline Ring Expansion (HIRE) via the Use of Lithium Hexamethyldisilazide

Paper

2494



Synthesis

Synthesis 2022, 54, 2511–2515
DOI: 10.1055/s-0040-1719889

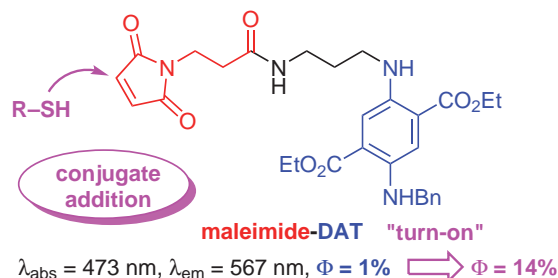
N. Schröder
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Synthesis of a Maleimide-Diaminoterephthalate Fluorescence Dye as a 'Turn-On' Probe for the Detection of Thiols

Paper

2511



Synthesis

Synthesis 2022, 54, 2516–2526
DOI: 10.1055/a-1736-4200

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M. A. Maximova
A. I. Albanov
N. A. Nedolya
B. A. Trofimov*

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Towards Rare-Functionalized *N*-Alkenyl-1*H*-pyrroles via Regioselectively Metalated *N*-Isopropenyl-1*H*-pyrroles

Paper

2516

