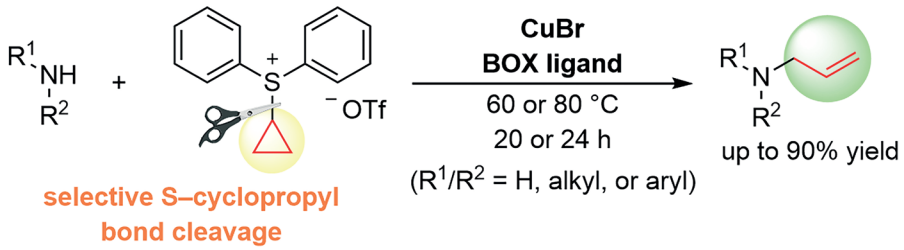
Synthesis

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

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Synthesis

Reviews and Full Papers in Chemical Synthesis

2022
Vol. 54, No. 10
May II

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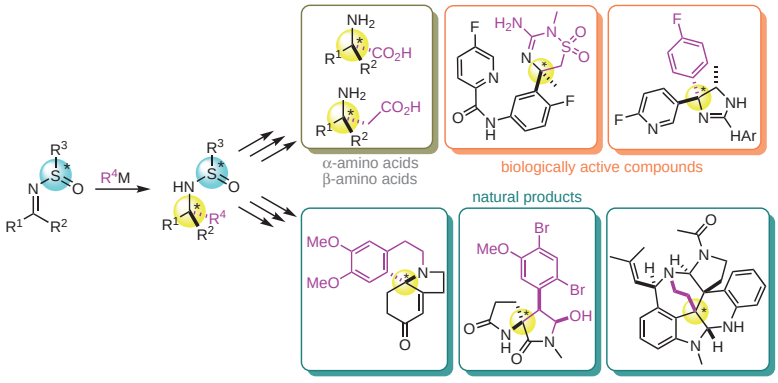
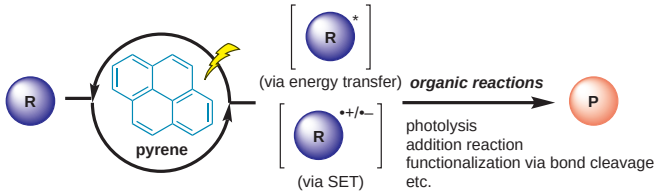




Synthesis

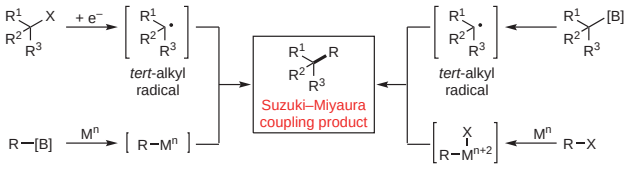
Tertiary Alkylative Suzuki–Miyaura Couplings

Short Review

2340

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

N. Tsuchiya
T. D. Sheppard*
T. Nishikata*
Yamaguchi University, Japan
University College London, UK



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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S.-Y. Zheng
C.-P. Zhang*
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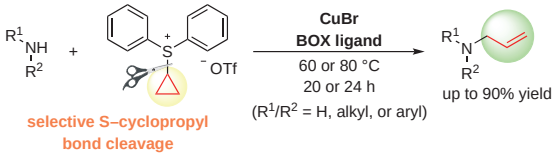


- good functional group tolerance and a wide range of substrates
- applicable to drug molecules, showing excellent chemoselectivity
- the first use of cyclopropyldiphenylsulfonium trifluoromethanesulfonate as a powerful allylation reagent

Synthesis

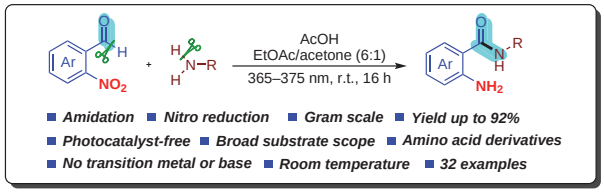
UV-Light-Induced Dehydrogenative *N*-Acylation of Amines with 2-Nitrobenzaldehydes To Give 2-Aminobenzamides

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
N. Kambe
R. Qiu*
Hunan University, P. R. China



Synthesis

A Mild Heteroatom (*O*-, *N*-, and *S*-) Methylation Protocol Using Trimethyl Phosphate (TMP)–$Ca(OH)_2$Combination

Feature

2373

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

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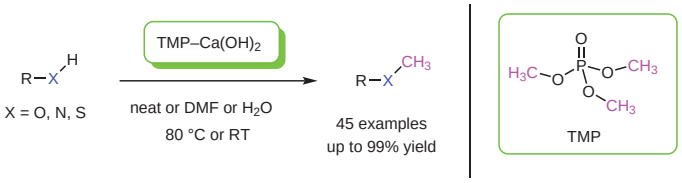


Synthesis

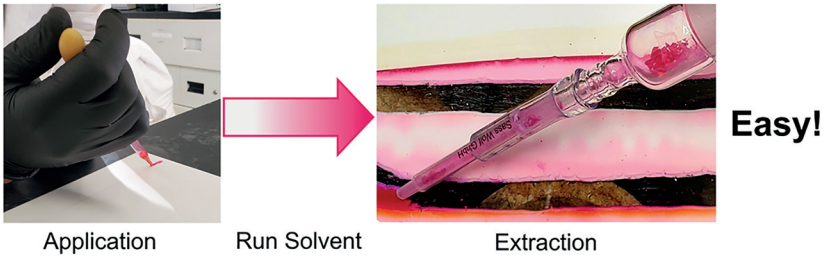
Giving Preparative Thin-Layer Chromatography Some Tender Loving Care

PSP

2391

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

J. J. Hayward*
L. Mader
J. F. Trant*
University of Windsor, Canada



Synthesis

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 **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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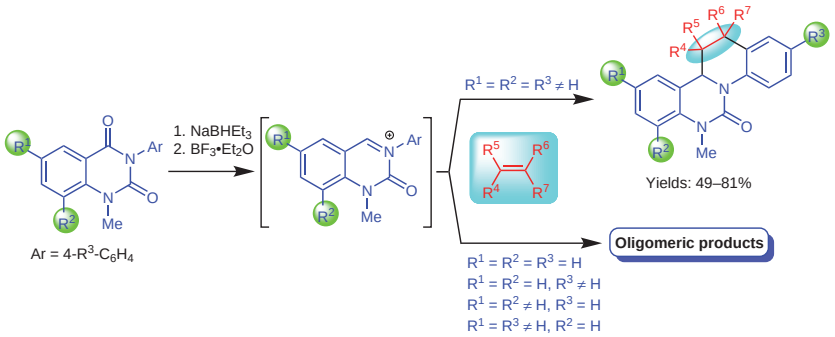
Saint Petersburg State Institute of Technology, Russian Federation



Synthesis

Paper

2415

Total Synthesis of Cryptopleurine and Its Analogues

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

Y. Yamaoka*
T. Yamakawa
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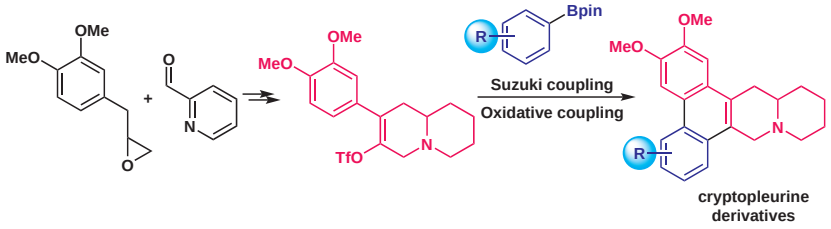

Synthesis

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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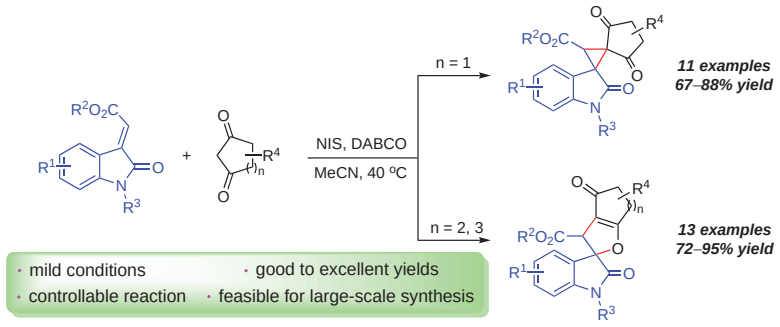


Synthesis

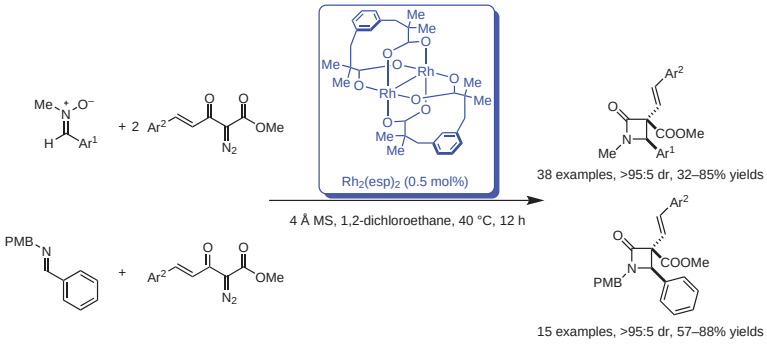
Paper

2433

$Rh_2(esp)_2$-Catalyzed Redox/Cycloaddition Cascade of Diazoacetoacetate Enones with *N*-Methyl Nitrones: Diastereoselective Synthesis of β-Lactams with Two Adjacent Chiral Centers

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

Y. Zhao
R. Xu
Z. Xu
X. Xu*
Wuhan Institute of Technology,
P. R. of China



Synthesis

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

Paper

2447

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

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E. Deprez
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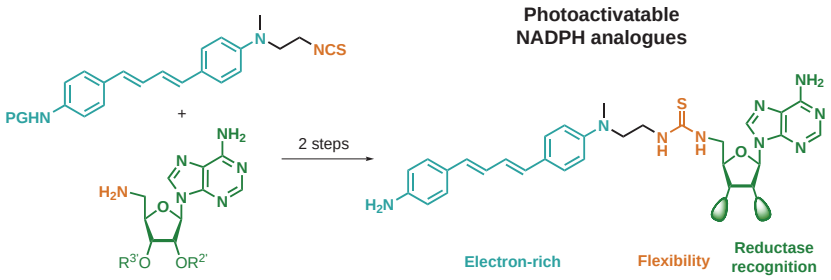

Synthesis

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

Paper

2457

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

V. Giannopoulos
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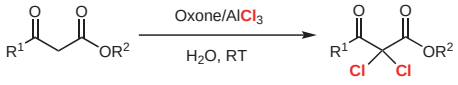

- fast reaction
- mild conditions
- easy isolation

65–85% yield

Synthesis

Nickel-Catalyzed Regioselective Thiolation of Anilides with Thiols

Paper

2464

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

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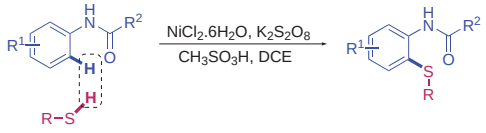

Synthesis

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

Paper

2473

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

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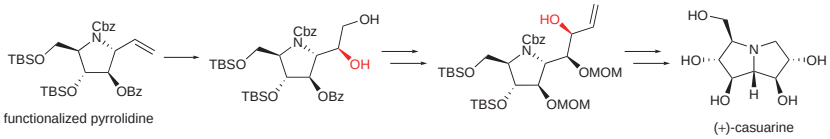

Synthesis

$FeCl_3$-Promoted Facile Synthesis of Multiply Arylated Nicotinonitriles

Paper

2480

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

K. Iwai*
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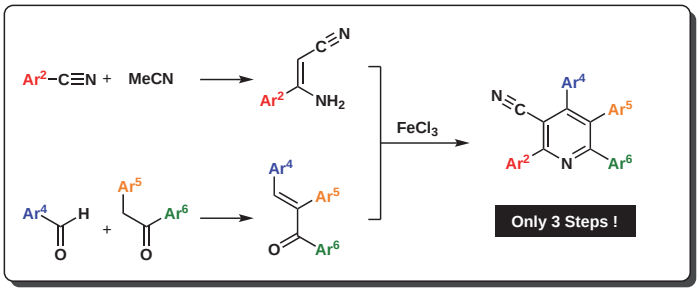

Synthesis

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

Paper

2487

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

R. Bai
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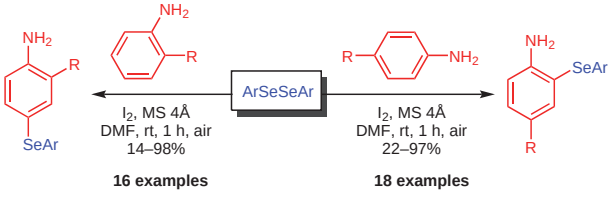

Synthesis

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

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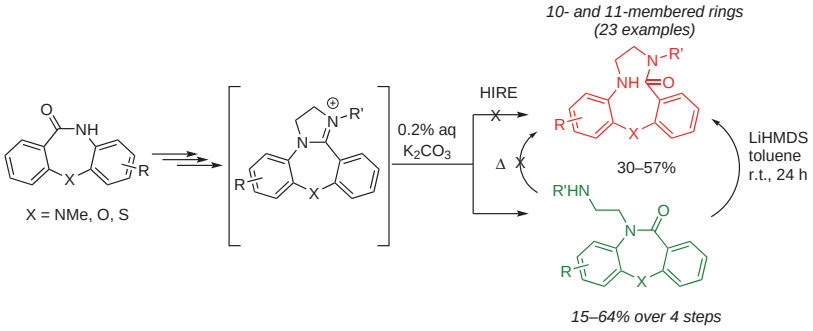
Significant Broadening of the Substrate Scope for the Hydrated Imidazoline Ring Expansion (HIRE) via the Use of Lithium Hexamethyldisilazide

Paper



Synthesis

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

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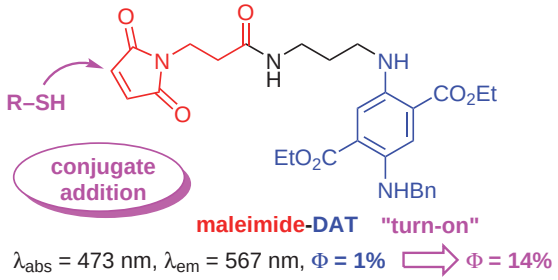
Synthesis of a Maleimide-Diaminoterephthalate Fluorescence Dye as a 'Turn-On' Probe for the Detection of Thiols

Paper



Synthesis

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

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

Paper