Synthesis

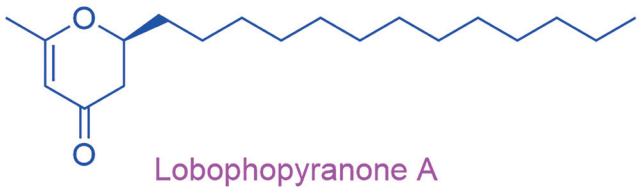
Reviews and Full Papers in Chemical Synthesis

January 3, 2025 • Vol. 57, 1–250

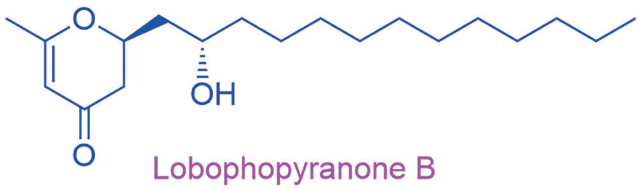
Special Topic (Part I)

Dedicated to Prof. H. Ila

Guest Editors: I. N.N. Namboothiri, Chelvam Venkatesh, Jung Min Joo



Lobophopyranone A



Lobophopyranone B

Asymmetric Total Synthesis of Lobophopyranone A and B

G. S. Reddy, U. M. Choudhury, H. S. Keerthana, K. C. Naik, D. K. Mohapatra

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Thieme

Synthesis

Reviews and Full Papers in Chemical Synthesis

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January I

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Synthesis **2025**, 57, 1–38
DOI: 10.1055/a-2311-4002

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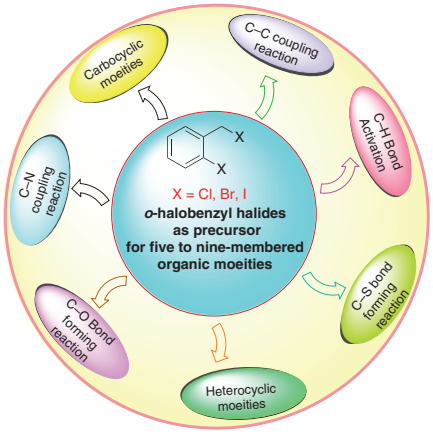

Synthesis **2025**, 57, 39–70
DOI: 10.1055/a-2317-7262

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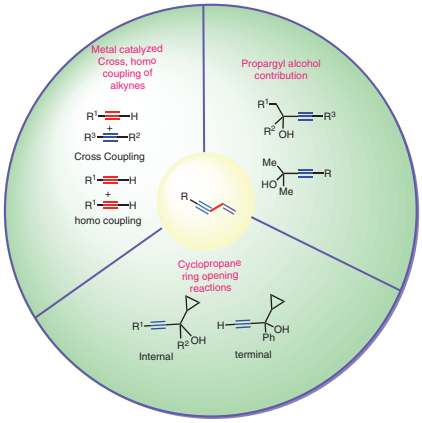

Synthesis

Synthesis **2025**, *57*, 71–83
DOI: 10.1055/a-2353-1722

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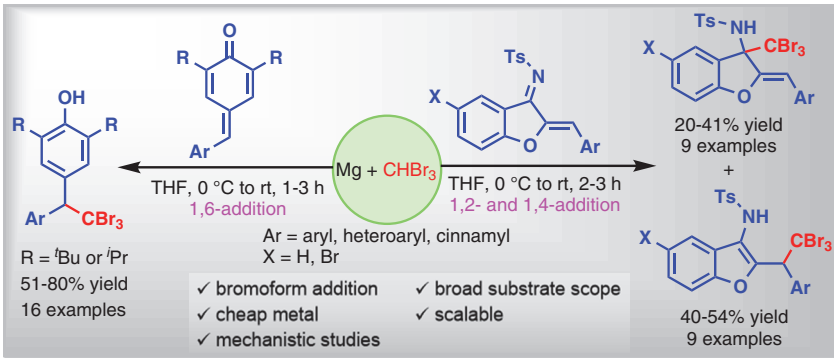
Magnesium-Mediated Regioselective Additions of Bromoform to Quinone Methides and Aurone-Derived Azadienes

PSP



Synthesis

Synthesis **2025**, *57*, 84–90
DOI: 10.1055/a-2317-6778

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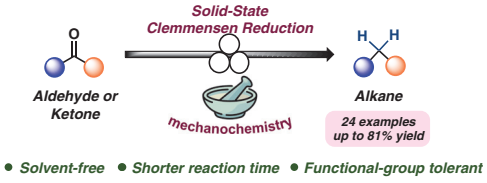
Solid-State Mechanochemical Clemmensen Reduction

Paper



Synthesis

Synthesis **2025**, *57*, 91–98
DOI: 10.1055/a-2335-8566

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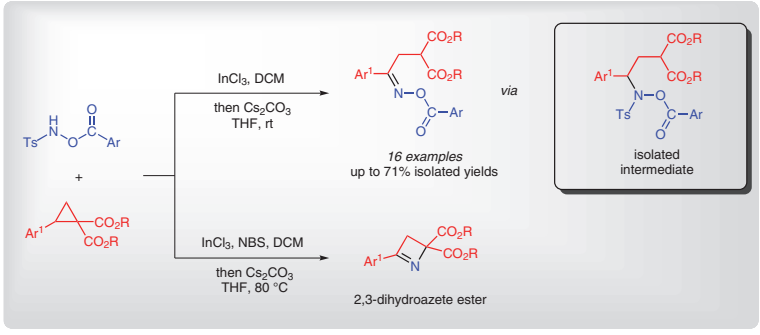
Ring-Opening of Donor-Acceptor Cyclopropane Diester for the Synthesis of Oxime Esters and 2,3-Dihydroazete Ester

Paper



Synthesis

Asymmetric Total Synthesis of Lobophopyranone A and B

Paper

99

Synthesis **2025**, *57*, 99–108
DOI: 10.1055/a-2338-4462

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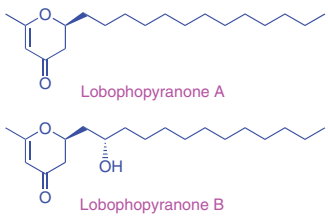

Synthesis

Annulation Reactions of Isoquinolinium Ylides with Sulfamate-Derived Cyclic Imines toward Polycyclic 1,3-Benzoxazepine Heterocycles

Paper

109

Synthesis **2025**, *57*, 109–114
DOI: 10.1055/a-2349-6944

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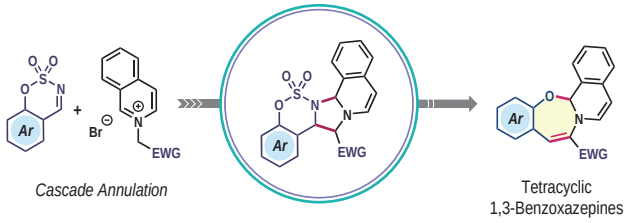

Synthesis

Synthesis and Aggregation-Induced Emission Properties of New Carbazole-Based Pyranones and their Ring-Transformed Derivatives

Paper

115

Synthesis **2025**, *57*, 115–124
DOI: 10.1055/a-2367-1988

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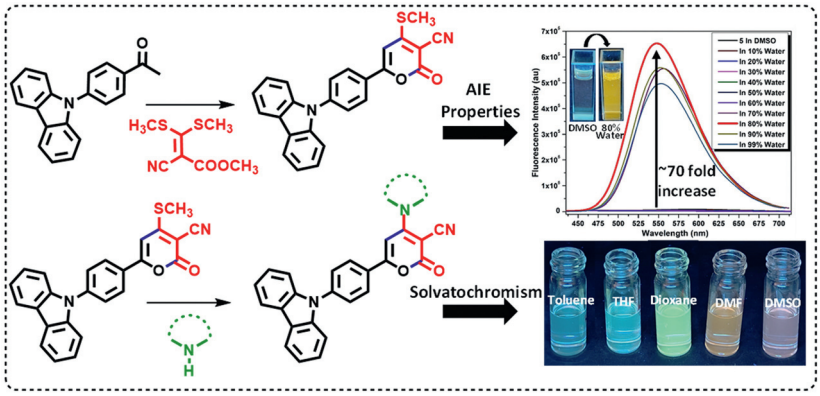

Synthesis

Synthesis **2025**, *57*, 125–137
DOI: 10.1055/s-0043-1763757

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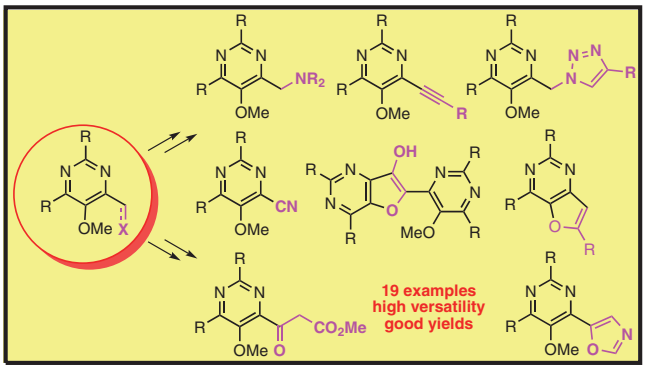
Synthesis of Heterocyclic Compounds with Pyrimidine-4-carbaldehydes as Key Intermediates

Paper



Synthesis

Synthesis **2025**, *57*, 138–146
DOI: 10.1055/a-2353-1618

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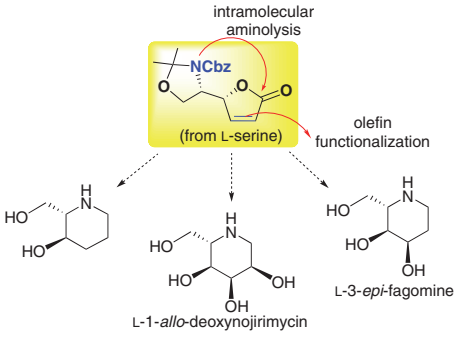
Stereoselective Synthetic Routes to Iminosugars: A Divergent Approach Utilizing a Common Multifunctional Chiral Scaffold

Paper



Synthesis

Synthesis **2025**, *57*, 147–153
DOI: 10.1055/a-2349-6836

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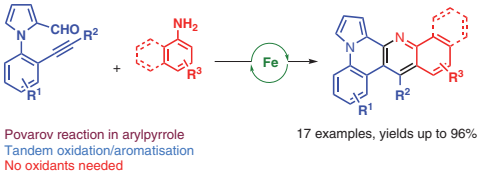
Iron(III)-Catalysed Povarov Cyclisation for the Synthesis of Fused Dibenzo[*b*,*f*][1,7]naphthyridine Embedded Arylpyrrolo Scaffolds

Paper



Synthesis

Synthesis **2025**, *57*, 154–166
DOI: 10.1055/a-2348-5564

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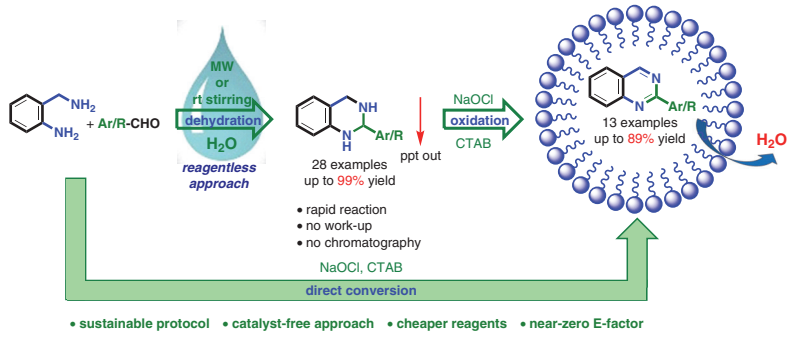
Dehydration in Water: A Reagentless and Straightforward Synthesis of Tetrahydroquinazolines under Microwave Irradiation or by Stirring at Room Temperature, and Their Subsequent Conversion into Quinazolines in a Micellar Medium

Paper
154



Synthesis

Synthesis **2025**, *57*, 167–175
DOI: 10.1055/s-0043-1775381

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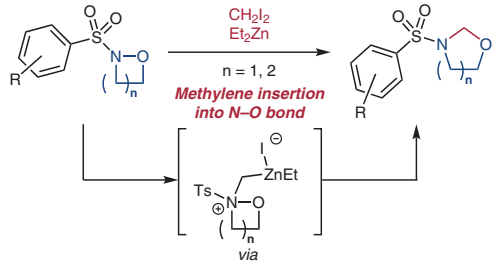
Zinc Carbenoid-Promoted Methylene Insertion in Saturated Heterocycles: Mechanistic Insights and Reactivity Profiles

Paper
167



Synthesis

Synthesis **2025**, *57*, 176–188
DOI: 10.1055/a-2356-8347

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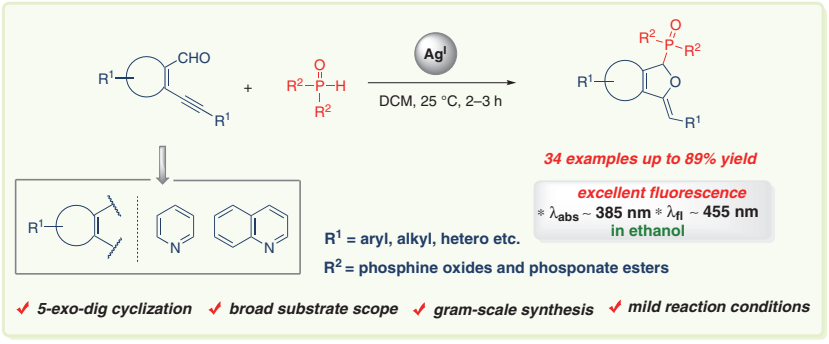
Harnessing the Reactivity of *ortho*-Alkynylaldehydes: Silver Triflate Catalyzed Regioselective Synthesis of Phosphony-lated Fluorescent Molecules

Paper
176



Synthesis

Synthesis **2025**, *57*, 189–195
DOI: 10.1055/a-2383-0905

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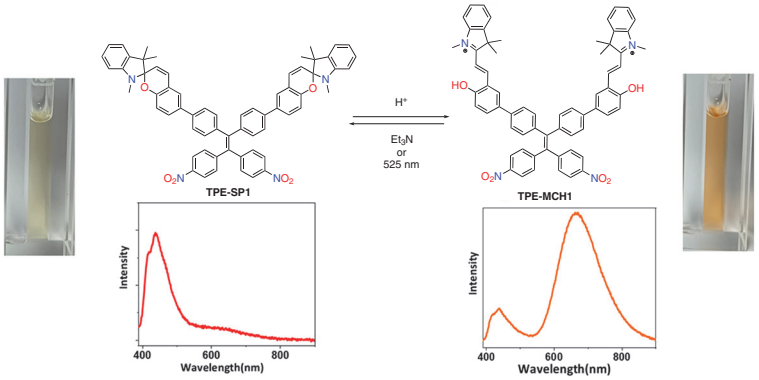
A Multi-Stimuli Responsive Spiropyran–Tetraphenylethene Conjugate for the Control of Near-Infrared Emission

Paper



Synthesis

Synthesis **2025**, *57*, 196–208
DOI: 10.1055/a-2369-3893

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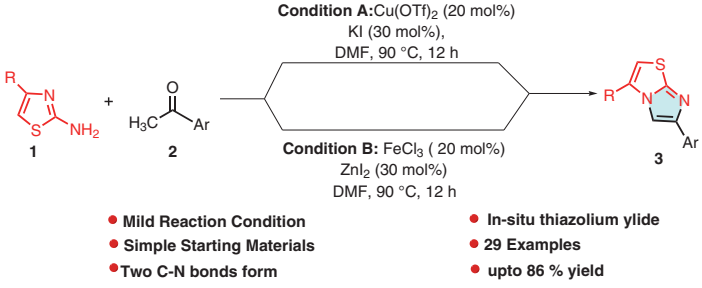
Transition-Metal-Catalyzed Rapid Synthesis of Imidazo[2,1-*b*]thiazoles: Access to Aza-Fused Heterocycles via Aerobic Oxidative Coupling of 2-Aminothiazoles and Acetophenones

Paper



- Mild Reaction Condition
- Simple Starting Materials
- Two C-N bonds form
- In-situ thiazolium ylide
- 29 Examples
- upto 86 % yield

Synthesis

Synthesis **2025**, *57*, 209–217
DOI: 10.1055/a-2373-0255

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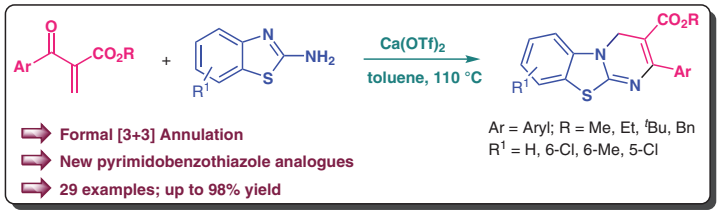
A Formal [3+3] Annulation of Morita–Baylis–Hillman Ketones to Construct Pyrimidobenzothiazoles

Paper



- Formal [3+3] Annulation
- New pyrimidobenzothiazole analogues
- 29 examples; up to 98% yield

Ar = Aryl; R = Me, Et, ^{t}Bu, Bn
R^1 = H, 6-Cl, 6-Me, 5-Cl

Synthesis

Synthesis **2025**, *57*, 218–228
DOI: 10.1055/a-2371-3579

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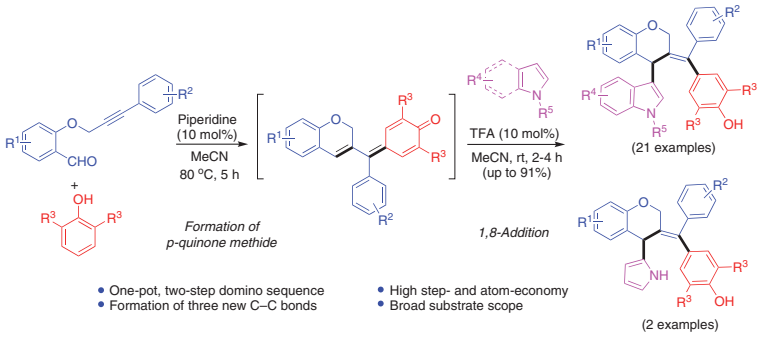
One-Pot, Two-Step Synthesis of Highly Functionalized 4-Indolyl/Pyrrolyl-Chromanes *via* a *para*-Quinone Methide Formation–1,8-Addition Sequence

Paper

218



Synthesis

Synthesis **2025**, *57*, 229–239
DOI: 10.1055/a-2360-8167

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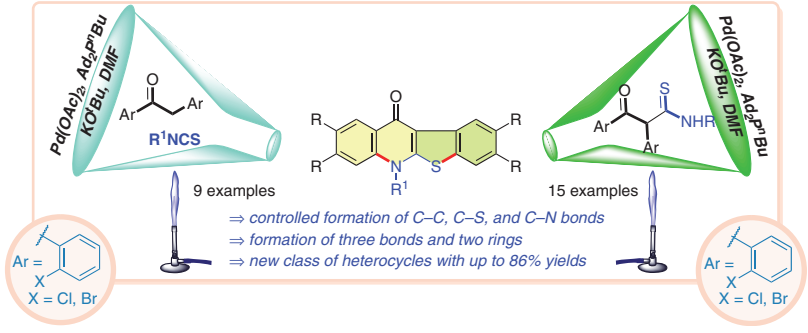
Palladium-Catalyzed Domino Heteroarylation of Thioamides: A Simple Route to Benzothieno[2,3-*b*]quinolones

Paper

229



Synthesis

Synthesis **2025**, *57*, 240–250
DOI: 10.1055/a-2367-1675

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Design and Efficient Synthesis of New 4-Amino-Substituted 2-(4-Bromobenzyl)-5,6,7,8-tetrahydrobenzo[4,5]thieno[2,3-*d*]-pyrimidines of Anticancer Interest and Their In Silico Study

Paper

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