Synthesis

Reviews and Full Papers in Chemical Synthesis

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Synthesis

Synthesis **2020**, *52*, 1855–1873
DOI: 10.1055/s-0039-1690847

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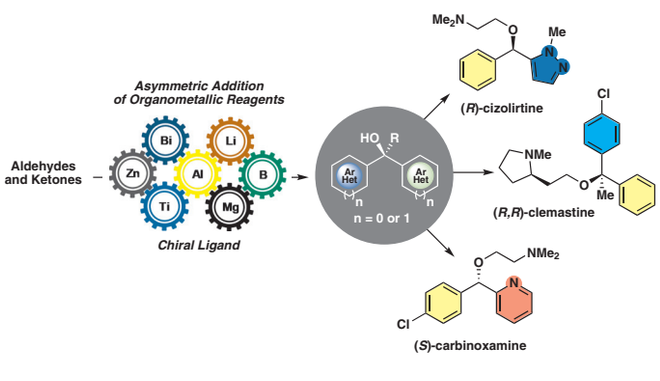
Recent Advances in the Synthesis of Enantiomerically Enriched Diaryl, Aryl Heteroaryl, and Diheteroaryl Alcohols through Addition of Organometallic Reagents to Carbonyl Compounds

Review

1855



Synthesis

Synthesis **2020**, *52*, 1874–1896
DOI: 10.1055/s-0039-1690858

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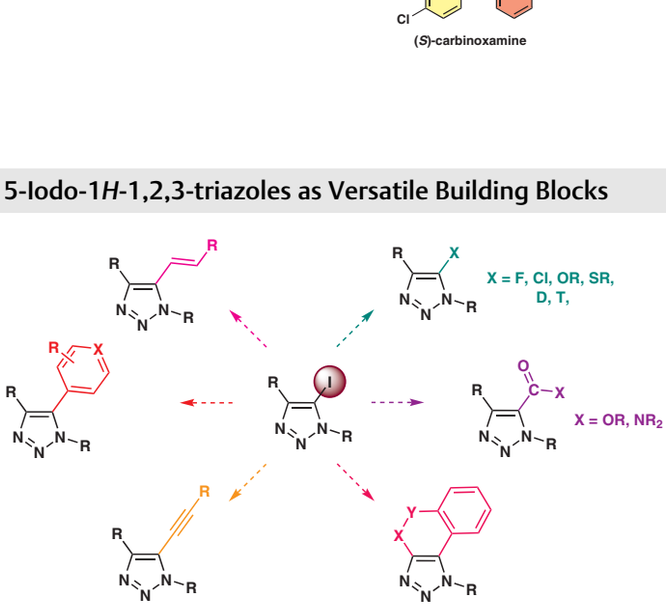
5-Iodo-1*H*-1,2,3-triazoles as Versatile Building Blocks

Short Review

1874



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Synthesis

Synthesis **2020**, *52*, 1897–1902
DOI: 10.1055/s-0039-1690893

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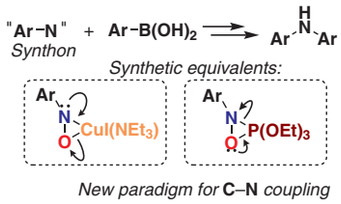
Reductive Amination of Aryl Boronic Acids: Parallelism of the Catalytic Reactivity of Transition Metals and Main Group Elements in the C(sp^2)–N Bond-Forming Reactions

Feature

1897



Synthesis

Synthesis **2020**, *52*, 1903–1914
DOI: 10.1055/s-0039-1690091

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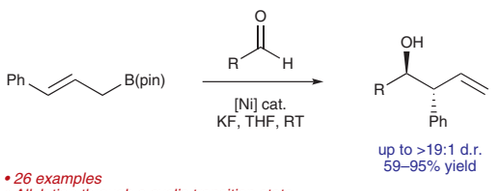
Nickel-Catalysed Allylboration of Aldehydes

Paper

1903



- *26 examples*
- *Allylation through a cyclic transition state*
- *Ni acts as a Lewis acid catalyst*

Synthesis

Synthesis **2020**, *52*, 1915–1926
DOI: 10.1055/s-0039-1707987

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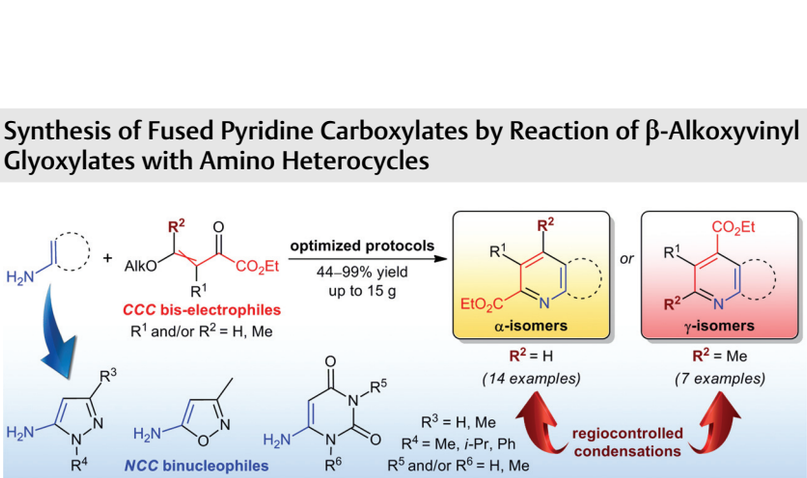
Synthesis of Fused Pyridine Carboxylates by Reaction of β-Alkoxyvinyl Glyoxylates with Amino Heterocycles

Paper

1915



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Synthesis

Synthesis **2020**, *52*, 1927–1933
DOI: 10.1055/s-0039-1690854

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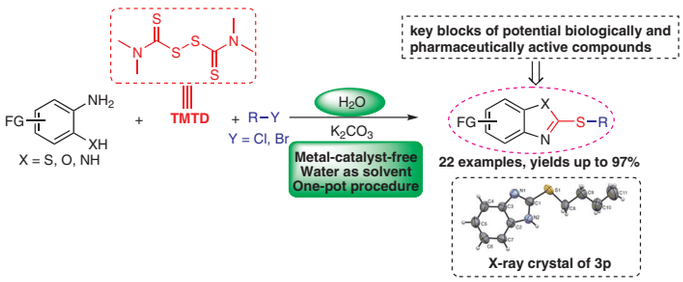
Three-Component Synthesis of 2-Alkylthiobenzoazoles in Aqueous Media

Paper

1927



Synthesis

Synthesis **2020**, *52*, 1934–1946
DOI: 10.1055/s-0040-1707524

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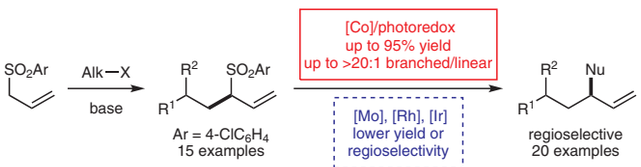
Allyl 4-Chlorophenyl Sulfone as a Versatile 1,1-Synthon for Sequential α-Alkylation/Cobalt-Catalyzed Allylic Substitution

Paper

1934



Synthesis

Synthesis **2020**, *52*, 1947–1958
DOI: 10.1055/s-0039-1691744

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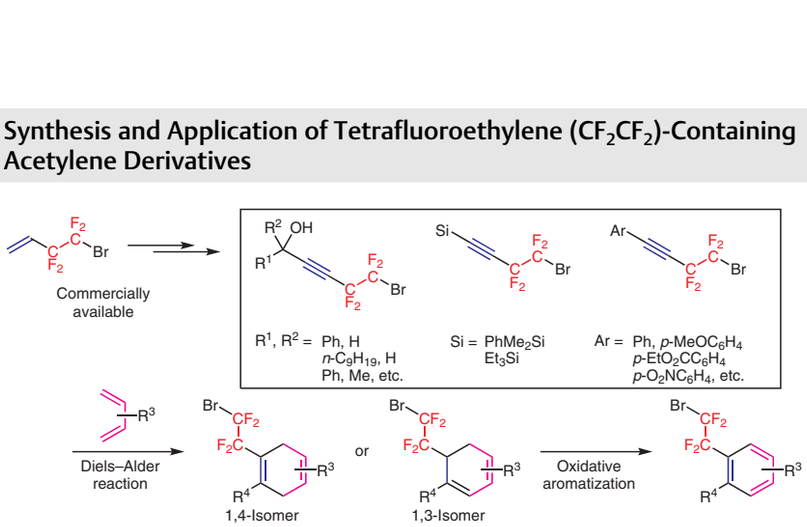
Synthesis and Application of Tetrafluoroethylene (CF_2CF_2)-Containing Acetylene Derivatives

Paper

1947



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Synthesis

Synthesis **2020**, *52*, 1959–1968
DOI: 10.1055/s-0039-1690870

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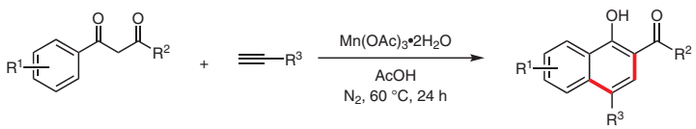
Mn(III)-Mediated Facile Access to Polysubstituted α-Naphthols from β-Keto Ester Derivatives and Terminal Alkynes



R^1 = F, Cl, Br, CF_3, OMe
R^2 = OEt, Me
R^3 = Aryl, COOEt

22 examples
up to 71% yield

Synthesis

Synthesis **2020**, *52*, 1969–1980
DOI: 10.1055/s-0039-1690848

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Co(II)-Catalyzed Desilylative Annulation of Benzamides and Acrylamides with Alkynylsilanes: Access to 3-Methyleneisoindolin-1-one and 5-Methylene-1*H*-pyrrol-2(5*H*)-one Derivatives

- **34 examples, up to 92%**
- ***Z*-configuration**
- **inexpensive Co(II) catalysts**
- **tolerance of various benzamides and acrylamides**

Synthesis

Synthesis **2020**, *52*, 1981–1990
DOI: 10.1055/s-0039-1690855

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Potassium Periodate Mediated Oxidative Cyclodesulfurization toward Benzofused Nitrogen Heterocycles

12 examples
70–82%
chromatography-free

X = NH, NR, O, S

35 examples
70–93%

one-pot cost-effective time-efficient eco-friendly

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