Recent Trends in Group 9 Catalyzed C–H Borylation Reactions: Different Strategies To Control Site-, Regio-, and Stereoselectivity

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Research Progress on N-Heterocyclic Carbene Catalyzed Reactions for Synthesizing Ketones through Radical Mechanism

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Recent Advances in the Total Synthesis of Cephalotane-Type Norditerpenoids from Cephalotaxus sinensis

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Catalyst Engineering through Heterobidentate (N–X-Type) Ligand Design for Iridium-Catalyzed Borylation

Heterobidentate ligand for C–H borylation

Organic molecules

Bpin

DG

Organic molecules

Bpin

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External-Ligand-Free, Nickel-Catalyzed Alkenylation of N-Sulfonyl-amines with Internal Alkynes

R1NH

Ar

R2

♦ good regioselectivity

♦ high atom economy

♦ external-ligand-free

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Pyrazoles in the Intersection of Mesomeric Betaines and N-Heterocyclic Carbenes: Formation of NHC Selenium Adducts of Pyrazolium-4-aminides

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**Synthesis of 2,3-Diarylquinoxaline Carboxylic Acids in High-Temperature Water**

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**Applications of Photoredox Catalysis for the Radical-Induced Cleavage of C–C Bonds**

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**Generation of Thiyyl Radicals from Air-Stable, Odorless Thiophenol Surrogates: Application to Visible-Light-Promoted C–S Cross-Coupling**

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W. Shepherd
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Properties and Synthetic Performances of Phenylamino Cyanoarenes under One-Photon Excitation Manifolds

New bimodal organic PCs
- EWGs and EDGs
- Easy synthesis
- Increased performances

Hirao Cross-Coupling Reaction as an Efficient Tool to Build Non-natural C2-Phosphonylated Sugars

Palladium-catalyzed C-P bond formation

Yields: 56–91%
10 examples
- High protecting group tolerance
- Successful on unprotected sugars

Hydrogenation of Olefins, Alkynes, Allenes, and Arenes by Borane-Based Frustrated Lewis Pairs

Classic borane-based FLPs

Hydroborane-based FLPs
**Organic Nitrating Reagents**

*Synthesis* 2022, 54, 3432–3472
DOI: 10.1055/s-0040-1719905

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**Mimicking Enzymes: Taking Advantage of the Substrate-Recognition Properties of Metalloporphyrins in Supramolecular Catalysis**

*Synthesis* 2022, 54, 3473–3481
DOI: 10.1055/a-1729-9223

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**Recent Trends in Group 9 Catalyzed C–H Borylation Reactions: Different Strategies To Control Site-, Regio-, and Stereoselectivity**

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