

Synthesis

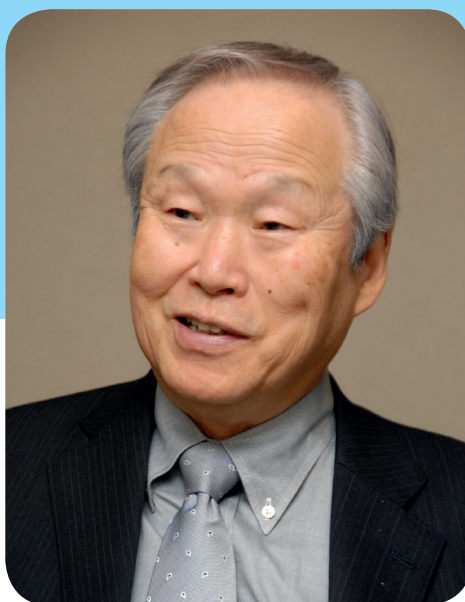
Reviews and Full Papers in Chemical Synthesis

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Special Issue (Part I)

Bond Activation – in Honor of Prof. Shinji Murai

Editor: Hideki Yorimitsu, Guest Editor: Naoto Chatani



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Synthesis

Remote C–H Functionalizations by Ruthenium Catalysis

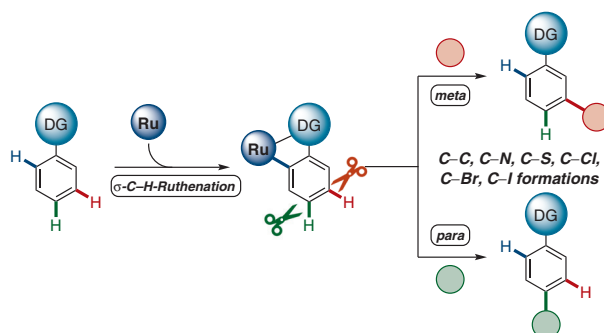
Special Topic

Synthesis 2021, 53, 2911–2934
DOI: 10.1055/a-1485-5156

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2911



Synthesis

Advances in Transition-Metal-Catalyzed C–H Bond Oxygenation of Amides

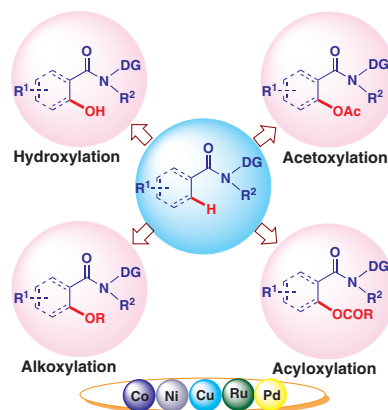
Special Topic

Synthesis 2021, 53, 2935–2946
DOI: 10.1055/a-1481-2584

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2935



Synthesis

Synthesis 2021, 53, 2947–2960
DOI: 10.1055/a-1483-4575

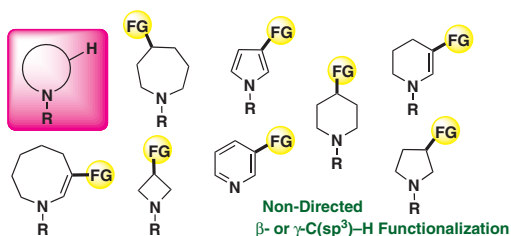
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Non-Directed β - or γ -C(sp³)-H Functionalization of Saturated Nitrogen-Containing Heterocycles

Special Topic

2947



Synthesis

Synthesis 2021, 53, 2961–2975
DOI: 10.1055/s-0040-1720406

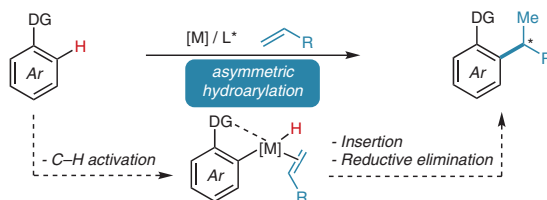
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Enantioselective Intermolecular Murai-Type Alkene Hydroarylation Reactions

Special Topic

2961



Synthesis

Synthesis 2021, 53, 2976–2983
DOI: 10.1055/a-1469-7408

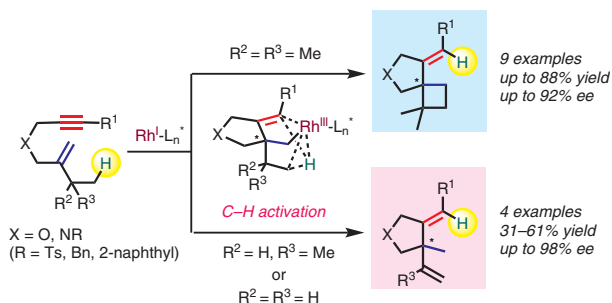
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Rhodium(I)-Catalyzed Enantioselective Cyclization of Enynes through Site-Selective C(sp³)-H Bond Activation Triggered by Formation of Rhodacycle

Special Topic

2976



Synthesis

Synthesis 2021, 53, 2984–2994
DOI: 10.1055/s-0040-1706025

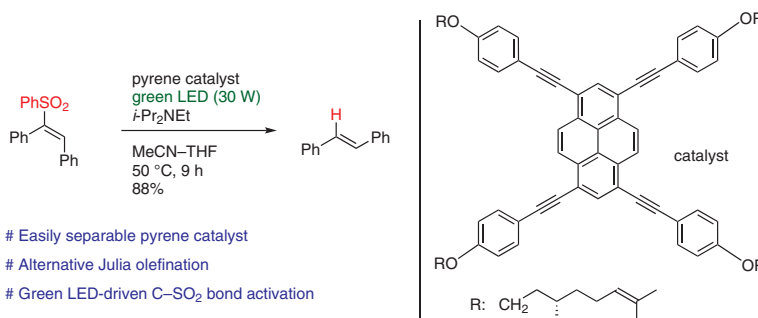
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Custom-Made Pyrene Photocatalyst-Promoted Desulfonation of Arylethenyl Sulfones Using Green-Light-Emitting Diodes

Special Topic

2984



Synthesis

Synthesis 2021, 53, 2995–3000
DOI: 10.1055/a-1437-9917

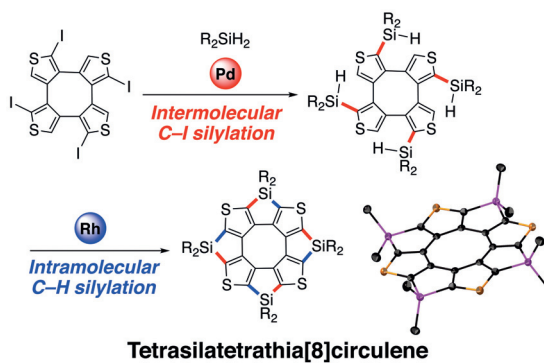
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Synthesis of Tetrasilatetraphia[8]circulenes through C–I and C–H Silylation

Special Topic

2995



- ✓ Role of phosphine ligands for silylation
- ✓ Electronic effect of substituents on Si

Synthesis

Synthesis 2021, 53, 3001–3010
DOI: 10.1055/a-1502-3641

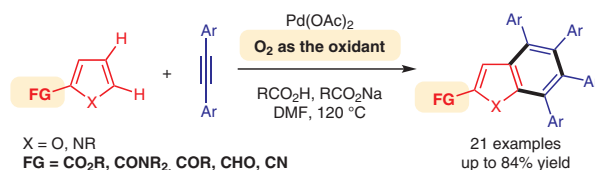
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Palladium-Catalyzed C–H Benzannulation of Functionalized Furans and Pyrroles with Alkynes

Special Topic

3001



Synthesis

Synthesis 2021, 53, 3011–3018
DOI: 10.1055/a-1375-5283

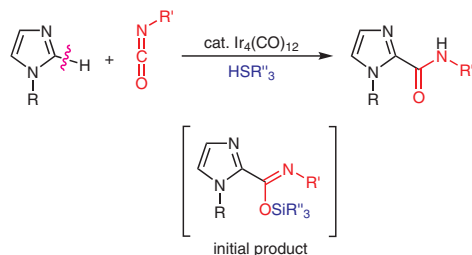
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Iridium-Catalyzed Direct Amidation of Imidazoles at the C-2 Position with Isocyanates in the Presence of Hydrosilanes Leading to Imidazole-2-Carboxamides

Special Topic

3011



Synthesis

Synthesis 2021, 53, 3019–3028
DOI: 10.1055/a-1482-2567

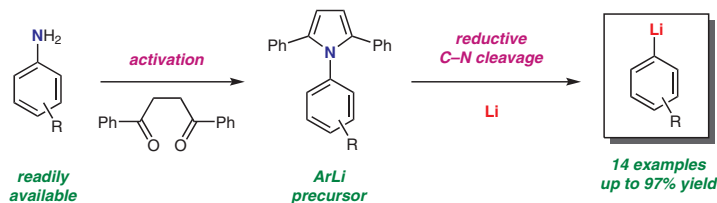
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Generation of Aryllithium Reagents from *N*-Arylpyrroles Using Lithium

Special Topic

3019



Synthesis

Synthesis 2021, 53, 3029–3036
DOI: 10.1055/a-1416-6997

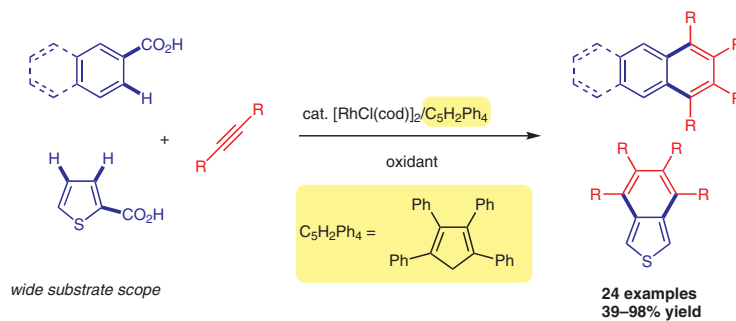
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Synthesis of Benzo-Fused Cyclic Compounds via Rhodium-Catalyzed Decarboxylative Coupling of Aromatic Carboxylic Acids with Alkynes

Special Topic

3029



Synthesis

Synthesis 2021, 53, 3037–3044
DOI: 10.1055/a-1467-2494

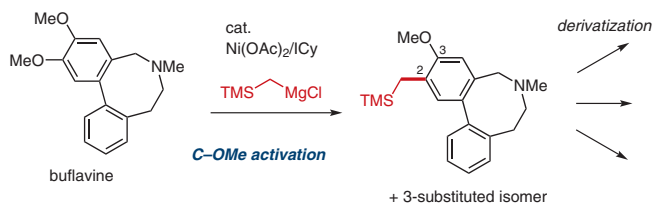
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Late-Stage Derivatization of Buflavine by Nickel-Catalyzed Direct Substitution of a Methoxy Group via C–O Bond Activation

Special Topic

3037



Synthesis

Synthesis 2021, 53, 3045–3050
DOI: 10.1055/a-1484-6216

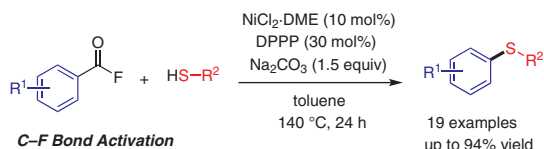
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Nickel-Catalyzed Decarbonylative Thioetherification of Acyl Fluorides via C–F Bond Activation

Special Topic

3045



Synthesis

Synthesis 2021, 53, 3051–3056
DOI: 10.1055/a-1477-7059

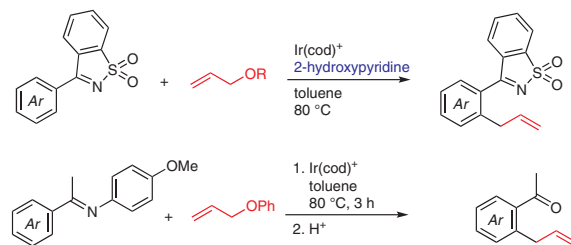
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Iridium-Catalyzed Direct C–H Alkylation of Ketimines

Special Topic

3051



Synthesis

Synthesis 2021, 53, 3057–3064
DOI: 10.1055/a-1511-1025

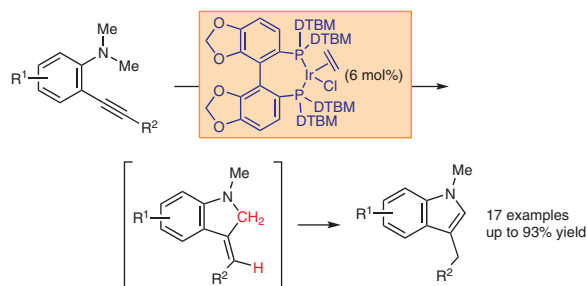
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Intramolecular Addition of a Dimethylamino C(sp³)-H Bond across C–C Triple Bonds Using IrCl(DTBM-SEGPHOS)(ethylene) Catalyst: Synthesis of Indoles from 2-Alkynyl-N-methylanilines

Special Topic

3057



Synthesis

Synthesis 2021, 53, 3065–3074
DOI: 10.1055/a-1328-6436

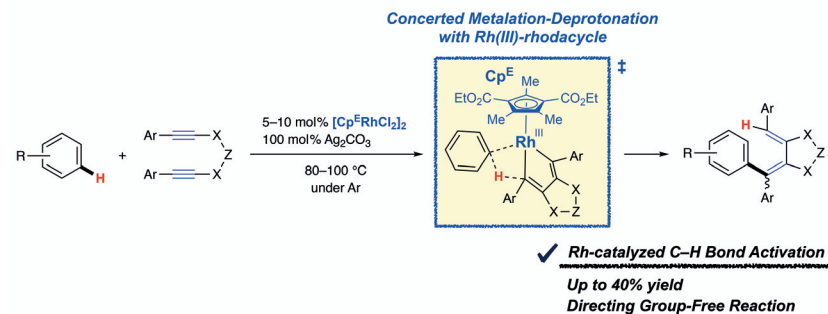
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Dienylation of Unfunctionalized Arenes with 1,6-Diynes via Rhodium-Catalyzed Directing-Group-Free C–H Bond Activation

Special Topic

3065



Synthesis

Synthesis 2021, 53, 3075–3080
DOI: 10.1055/a-1337-5504

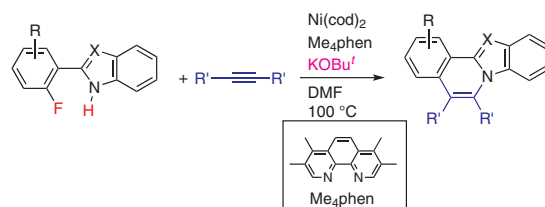
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Nickel-Catalyzed C–F/N–H Annulation of 2-(2-Fluoroaryl) N-Heteroaromatic Compounds with Alkynes: Activation of C–F Bonds

Special Topic

3075



Synthesis

Synthesis 2021, 53, 3081–3084
DOI: 10.1055/a-1368-7072

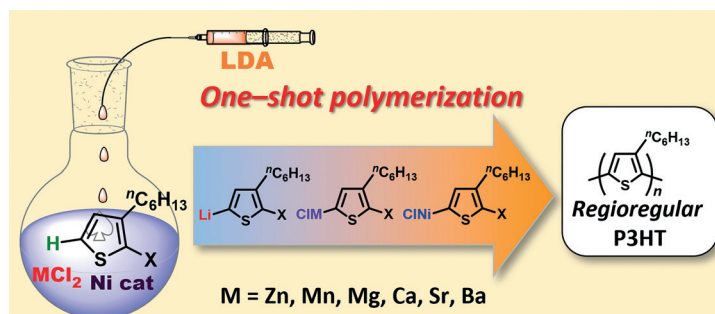
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One-Shot Deprotonative Metalation/Transmetalation/Polymerization of Halothiophenes Catalyzed by Nickel Complex for Polythiophene Synthesis

Special Topic

3081



Synthesis

Synthesis 2021, 53, 3085–3093
DOI: 10.1055/a-1422-9632

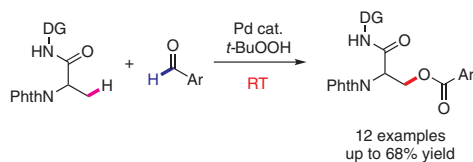
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Palladium-Catalyzed sp³ C–H Benzoylation of Alanine Derivatives Using Aldehydes under Ambient Conditions

Special Topic

3085



- Benzoylation of unactivated sp³ C–H bonds
- Use of aldehydes for benzoylation
- Mild conditions and simple reaction protocol

Synthesis

Synthesis 2021, 53, 3094–3100
DOI: 10.1055/a-1467-2432

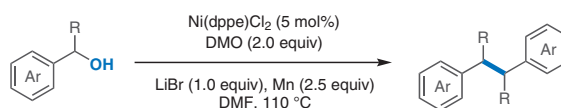
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Synthesis of Dibenzyls by Nickel-Catalyzed Homocoupling of Benzyl Alcohols

Special Topic

3094



Synthesis

Synthesis 2021, 53, 3101–3109
DOI: 10.1055/a-1468-8275

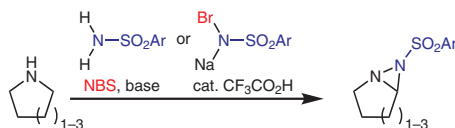
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Synthesis of Fused Diaziridine Derivatives from Cyclic Secondary Amines by Utilizing *N*-Bromosulfonamides as an Aminating Reagent

Special Topic

3101



Synthesis

Synthesis 2021, 53, 3110–3120
DOI: 10.1055/a-1485-5781

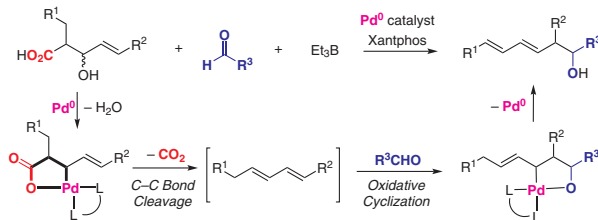
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Reconstruction of Carbon Bond Frameworks via Oxapalladacycles Promoted by the Synergistic Effect of Palladium Catalyst and Triethylborane

Special Topic

3110



Synthesis

Synthesis 2021, 53, 3121–3125
DOI: 10.1055/a-1523-6826

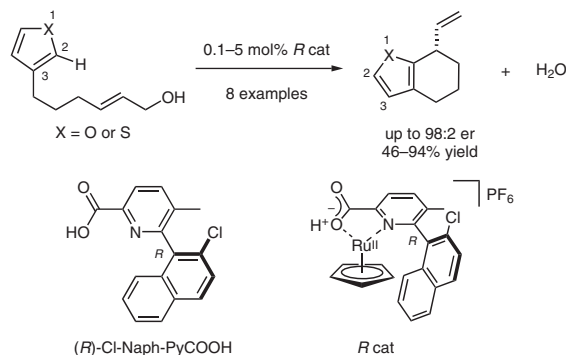
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Ruthenium-Catalyzed Asymmetric Dehydrative Allylic Cyclization of Five-Membered Chalcogen Heteroaromatics

Special Topic

3121



Synthesis

Synthesis 2021, 53, 3126–3136
DOI: 10.1055/a-1472-1059

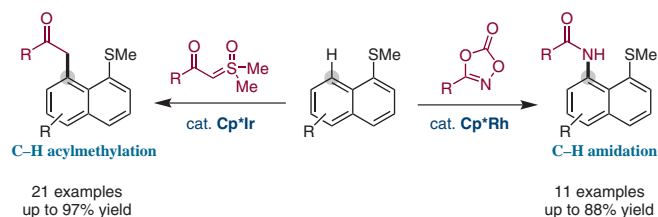
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Peri-Selective Direct Acylmethylation and Amidation of Naphthalene Derivatives Using Iridium and Rhodium Catalysts

Special Topic

3126



Synthesis

Synthesis 2020, 52, 3137–3143
DOI: 10.1055/s-0040-1705962

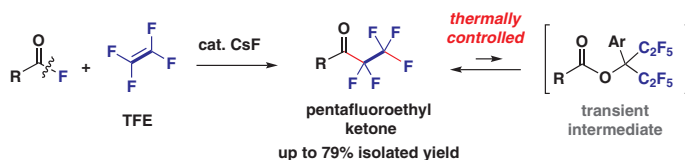
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CsF-Catalyzed Fluoroacylation of Tetrafluoroethylene Using Acyl Fluorides for the Synthesis of Pentafluoroethyl Ketones

Special Topic

3137



Synthesis

Synthesis 2021, 53, 3144–3150
DOI: 10.1055/a-1337-5416

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Iron-Catalyzed Remote C-H Alkylation of 8-Amidoquinolines with Cycloalkanes

Special Topic

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