Synthesis

Reviews and Full Papers in Chemical Synthesis

2019
Vol. 51, No. 5
March I

Synthesis **2019**, *51*, 985–1005
DOI: 10.1055/s-0037-1611659

D. Kurandina
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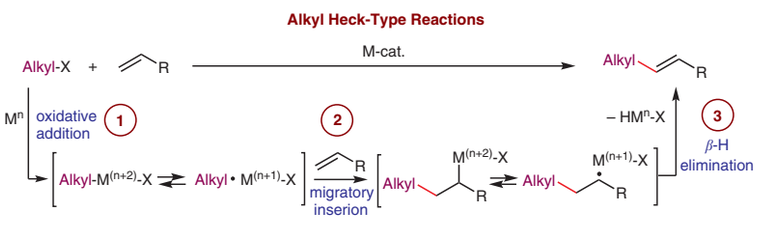

Synthesis **2019**, *51*, 1006–1020
DOI: 10.1055/s-0037-1611638

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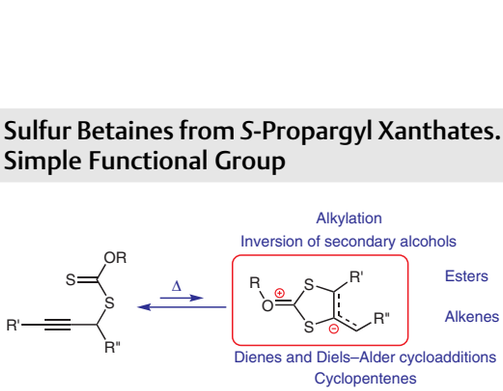
Laboratoire de Synthèse Organique associé au CNRS, Ecole Polytechnique, France



Synthesis

Synthesis **2019**, *51*, 1021–1036
DOI: 10.1055/s-0037-1611636

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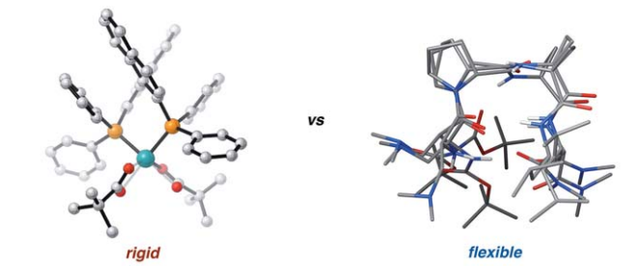
Conformational Dynamics in Asymmetric Catalysis: Is Catalyst Flexibility a Design Element?

Short Review



Rigidity is not a required design element for highly selective asymmetric catalysts

Synthesis

Synthesis **2019**, *51*, 1037–1048
DOI: 10.1055/s-0037-1611637

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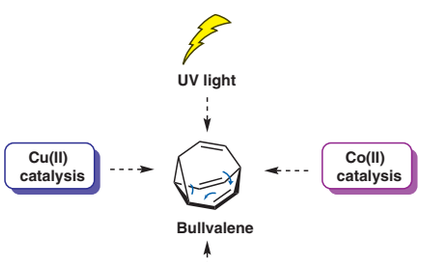
Synthesis of Bullvalenes: Classical Approaches and Recent Developments

Short Review



Synthesis

Synthesis **2019**, *51*, 1049–1062
DOI: 10.1055/s-0037-1611649

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Transition-Metal-Catalyzed Alkenyl sp^2 C–H Activation: A Short Account

Short Review

[M] = Pd, Rh, Ru, Cu, etc.

- Stereoselective alkene synthesis
- Atom economical
- Versatile products
- Synthesis of cyclic alkenes including macrocycles

Synthesis

Advancements in Visible-Light-Enabled Radical C(sp)²–H Alkylation of (Hetero)arenes

Short Review

1063

Synthesis **2019**, *51*, 1063–1072
DOI: 10.1055/s-0037-1611658

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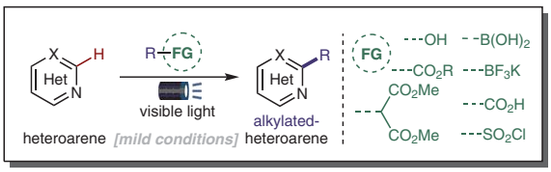

Synthesis

Pyrroles as Dienes in (4+3) Cycloadditions

Short Review

1073

Synthesis **2019**, *51*, 1073–1086
DOI: 10.1055/s-0037-1611660

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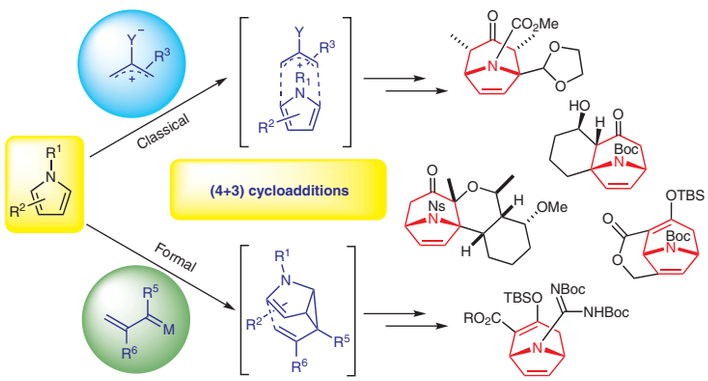

Synthesis

Gold Vinylidenes as Useful Intermediates in Synthetic Organic Chemistry

Short Review

1087

Synthesis **2019**, *51*, 1087–1099
DOI: 10.1055/s-0037-1611647

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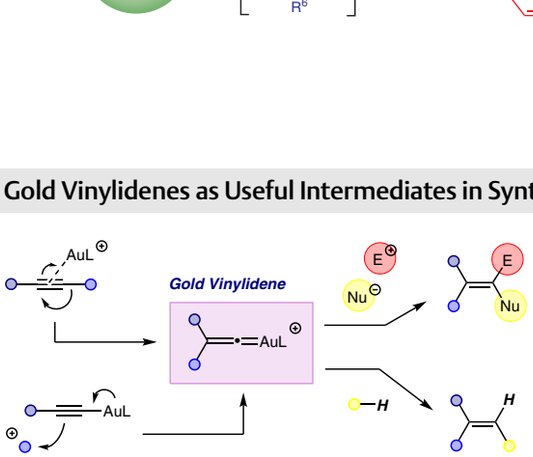

Synthesis

Recent Advances in the Application of Ring-Closing Metathesis for the Synthesis of Unsaturated Nitrogen Heterocycles

Short Review

1100

Synthesis **2019**, *51*, 1100–1114
DOI: 10.1055/s-0037-1611651

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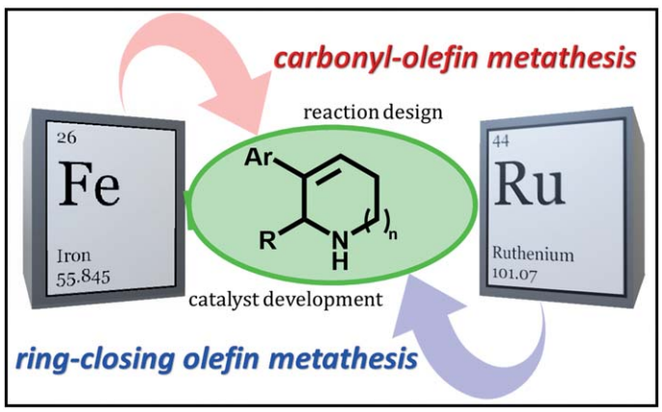

Synthesis

Straightforward One-Pot Syntheses of Silylamides of Magnesium and Calcium via an In Situ Grignard Metalation Method

Feature

1115

Synthesis **2019**, *51*, 1115–1122
DOI: 10.1055/s-0037-1610407

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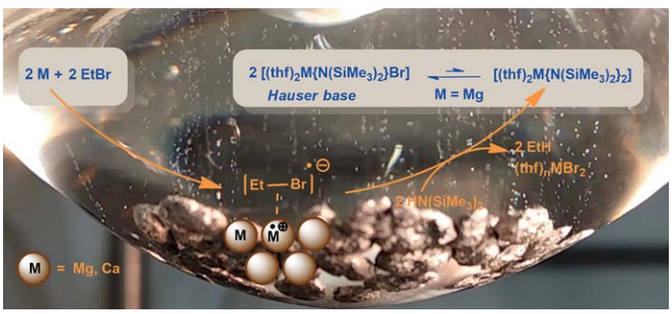

Synthesis

Asymmetric Organocatalysis Revisited: Taming Hydrindanes with Jørgensen–Hayashi Catalyst

Feature

1123

Synthesis **2019**, *51*, 1123–1134
DOI: 10.1055/s-0037-1610409

Y. Stöckl
W. Frey
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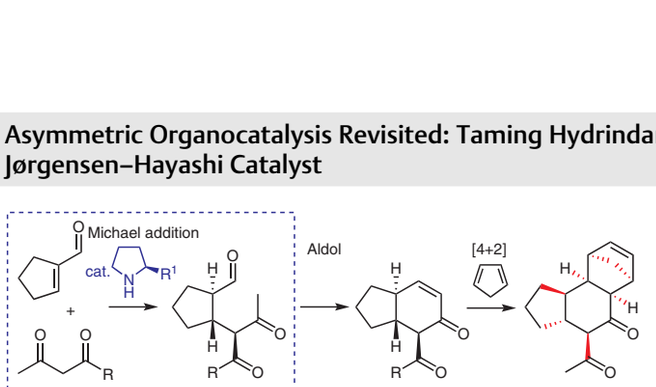

Synthesis

Synthesis **2019**, *51*, 1135–1138
DOI: 10.1055/s-0037-1611650

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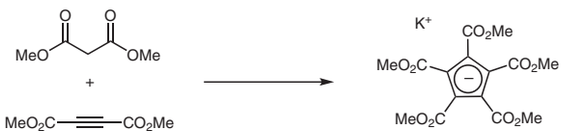
A Scalable, One-Pot Synthesis of 1,2,3,4,5-Pentacarbomethoxycyclopentadiene

Feature



PCCP

- *new one-pot procedure*
- *major improvement in ease of reaction and purification*

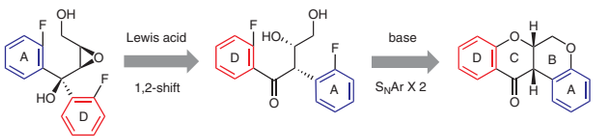
Synthesis

Synthesis **2019**, *51*, 1139–1156
DOI: 10.1055/s-0037-1611654

S. Matsuoka
K. Nakamura
K. Ohmori*
K. Suzuki*
Tokyo Institute of Technology, Japan

General Synthetic Approach to Rotenoids via Stereospecific, Group-Selective 1,2-Rearrangement and Dual S_NAr Cyclizations of Aryl Fluorides

Feature



Synthesis

Synthesis **2019**, *51*, 1157–1170
DOI: 10.1055/s-0037-1611634

A. I. Leonov
D. S. Timofeeva
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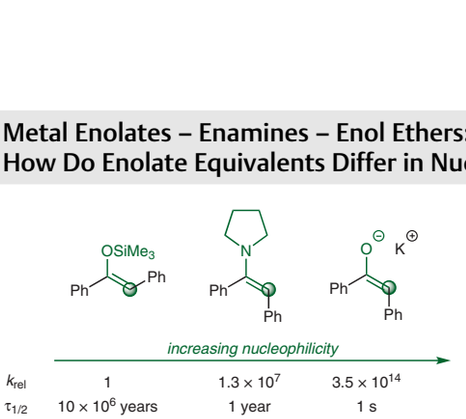
Metal Enolates – Enamines – Enol Ethers: How Do Enolate Equivalents Differ in Nucleophilic Reactivity?

Feature



Synthesis

Synthesis **2019**, *51*, 1171–1177
DOI: 10.1055/s-0037-1610413

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A. Maeda
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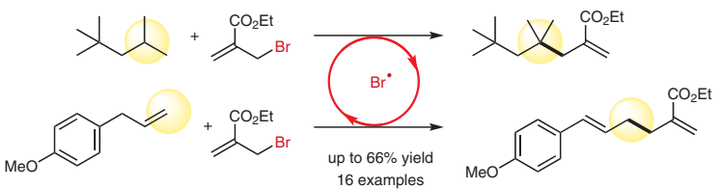
National Chiao Tung University, Taiwan

Bromine-Radical-Mediated Site-Selective Allylation of C(sp^3)–H Bonds

Feature



Synthesis

Synthesis **2019**, *51*, 1178–1184
DOI: 10.1055/s-0037-1610404

L. Schober
S. Ratnam
Y. Yamashita
N. Adebar
M. Pieper
A. Berkessel
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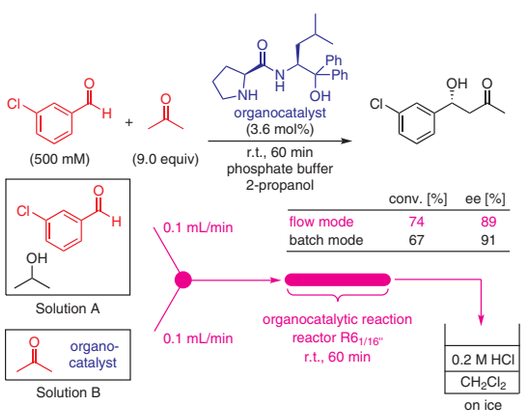
An Asymmetric Organocatalytic Aldol Reaction of a Hydrophobic Aldehyde in Aqueous Medium Running in Flow Mode

Feature



Synthesis

Synthesis **2019**, *51*, 1185–1195
DOI: 10.1055/s-0037-1611661

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H. Sasa
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C. Yasui
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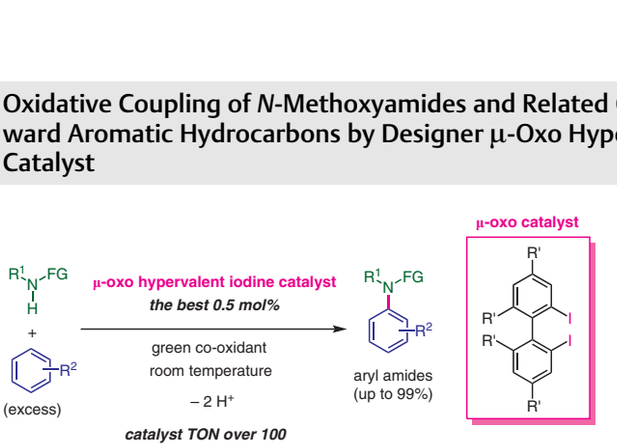
Oxidative Coupling of *N*-Methoxyamides and Related Compounds toward Aromatic Hydrocarbons by Designer μ-Oxo Hypervalent Iodine Catalyst

Feature



Synthesis

Synthesis **2019**, *51*, 1196–1206
DOI: 10.1055/s-0037-1611656

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B. Glowacki
L. Iovkova
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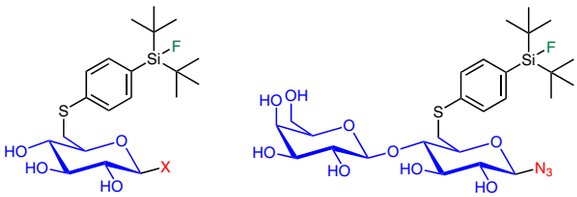
University of Alberta, Canada

GlucoSiFA and LactoSiFA: New Types of Carbohydrate-Tagged Silicon-Based Fluoride Acceptors for ^{18}F-Positron Emission Tomography (PET)

Feature



Synthesis

Synthesis **2019**, *51*, 1207–1215
DOI: 10.1055/s-0037-1611646

R. McLellan
M. Uzelac
L. J. Bole
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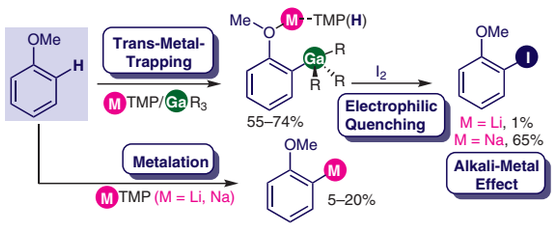
Alkali Metal Effects in Trans-Metal-Trapping (TMT): Comparing LiTMP with NaTMP in Cooperative MTMP/Ga(CH$_2$SiMe$_3$)$_3$ Metalation Reactions

Feature



Synthesis

Synthesis **2019**, *51*, 1216–1224
DOI: 10.1055/s-0037-1611653

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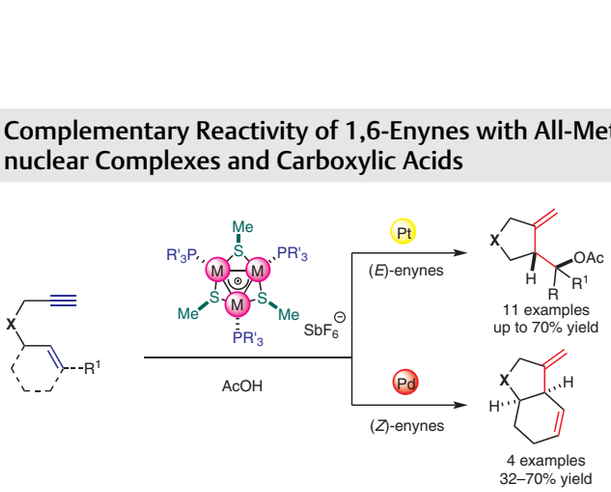
Complementary Reactivity of 1,6-Enynes with All-Metal Aromatic Trinuclear Complexes and Carboxylic Acids

Feature



Synthesis

Copper-Catalysed Hydroamination of *N*-Allenylsulfonamides: The Key Role of Ancillary Coordinating Groups

Paper

1225

Synthesis **2019**, *51*, 1225–1234
DOI: 10.1055/s-0037-1611673

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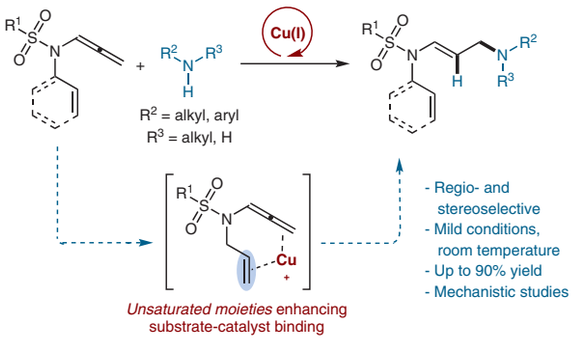

Synthesis

Synthesis of 2-Azidomethyl-5-ethynylfuran: A New Bio-Derived Self-Clickable Building Block

Paper

1235

Synthesis **2019**, *51*, 1235–1242
DOI: 10.1055/s-0037-1610414

B. Ya. Karlinskii
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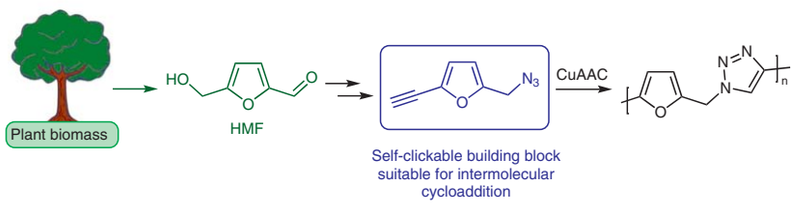

Synthesis

Visible Light-Promoted Formation of C–B and C–S Bonds under Metal- and Photocatalyst-Free Conditions

Paper

1243

Synthesis **2019**, *51*, 1243–1252
DOI: 10.1055/s-0037- 1611648

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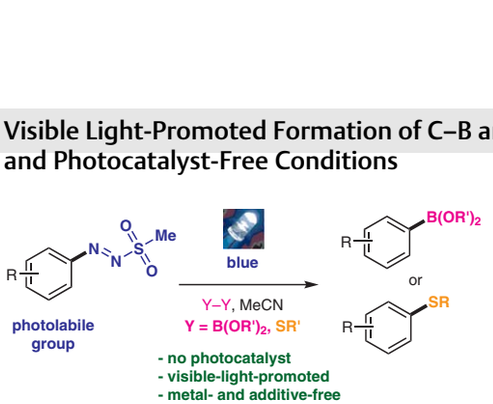

Synthesis

Lewis Acid Promoted Trapping of Chiral Aza-enolates

Paper

1253

Synthesis **2019**, *51*, 1253–1262
DOI: 10.1055/s-0037-1611657

F. Lanza
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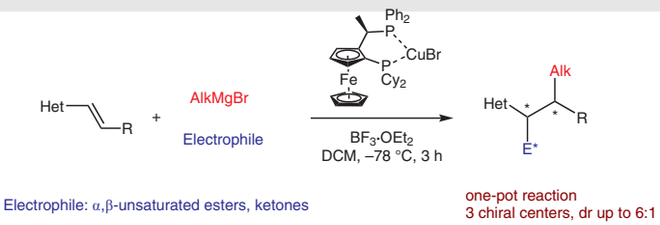

Synthesis

Organocatalytic Desymmetrisation of Fittig's Lactones: Deuterium as a Reporter Tag for Hidden Racemisation

Paper

1263

Synthesis **2019**, *51*, 1263–1272
DOI: 10.1055/s-0037-1611655

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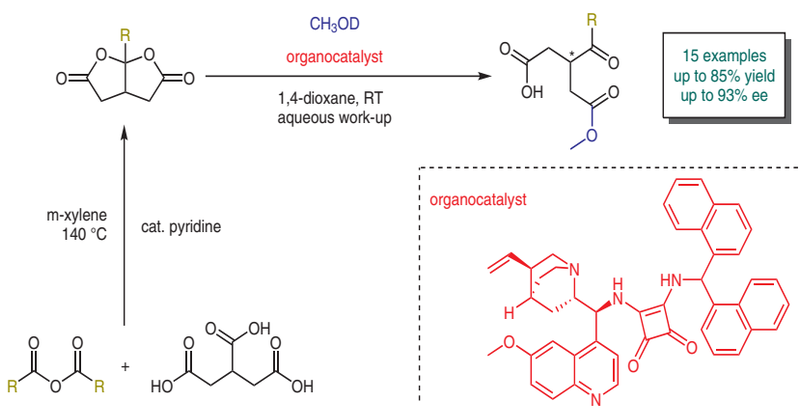

Synthesis

Synthesis and Evaluation of Cyclic Acetals of Serine Hydroxylamine for Amide-Forming KAHA Ligations

Paper

1273

Synthesis **2019**, *51*, 1273–1283
DOI: 10.1055/s-0037-1611635

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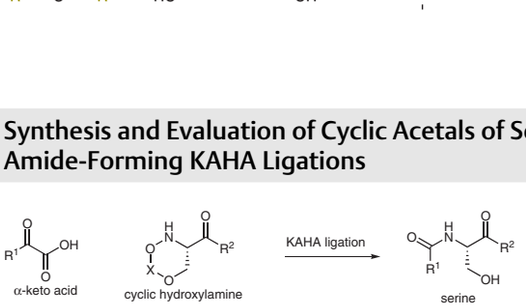

Synthesis

Synthesis **2019**, *51*, 1284–1292
DOI: 10.1055/s-0037-1611633

Visible-Light-Induced Decarboxylative C–H Adamantylation of Azoles at Ambient Temperature

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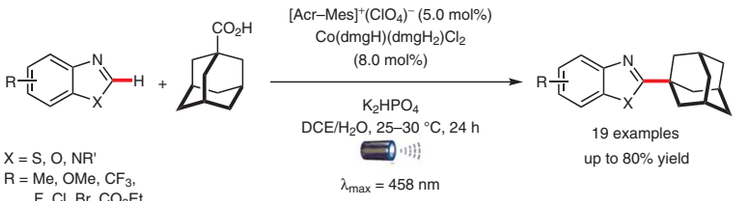

X = S, O, NR'
R = Me, OMe, CF_3, F, Cl, Br, CO_2Et

- C–H Adamantylation
- Visible-light-promoted decarboxylation
- No stoichiometric oxidants
- No expensive Ir or Ru photocatalysts
- Ambient reaction temperature

Synthesis