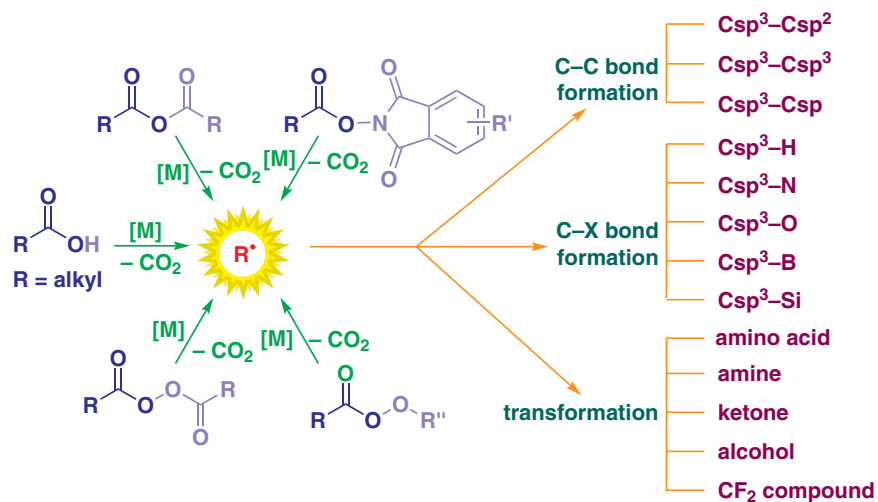


# Synthesis

Reviews and Full Papers in Chemical Synthesis

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Recent Progress in Radical Decarboxylative Functionalizations Enabled by Transition-Metal (Ni, Cu, Fe, Co or Cr) Catalysis

H. Chen, Y. A. Liu, X. Liao

1

## Synthesis

*Synthesis* 2021, 53, 1–29  
DOI: 10.1055/s-0040-1707273

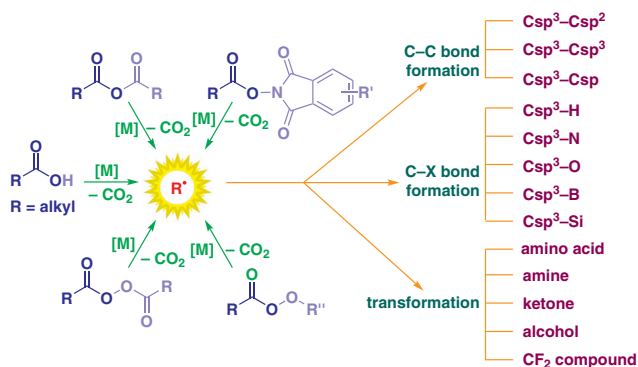
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## Recent Progress in Radical Decarboxylative Functionalizations Enabled by Transition-Metal (Ni, Cu, Fe, Co or Cr) Catalysis

Review

1



## Synthesis

*Synthesis* 2021, 53, 30–50  
DOI: 10.1055/s-0040-1705918

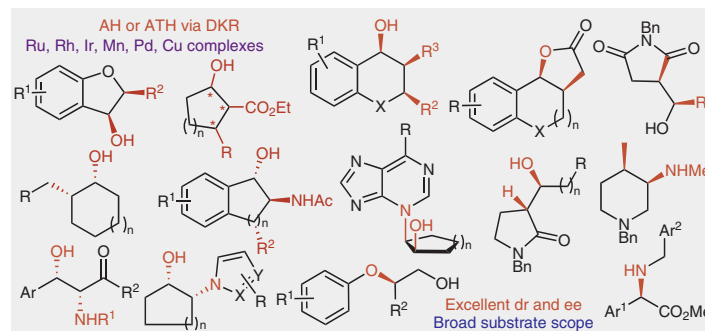
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## Recent Progress and Applications of Transition-Metal-Catalyzed Asymmetric Hydrogenation and Transfer Hydrogenation of Ketones and Imines through Dynamic Kinetic Resolution

Review

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## Synthesis

## Recent Advances in Copper-Catalyzed Radical C–H Bond Activation Using N–F Reagents

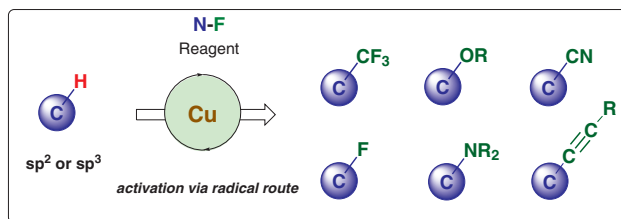
## Short Review

51

Synthesis 2021, 53, 51–64  
DOI: 10.1055/s-0040-1707234

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## Synthesis

## Synthetic Approaches to Non-Tropane, Bridged, Azapolycyclic Ring Systems Containing Seven-Membered Carbocycles

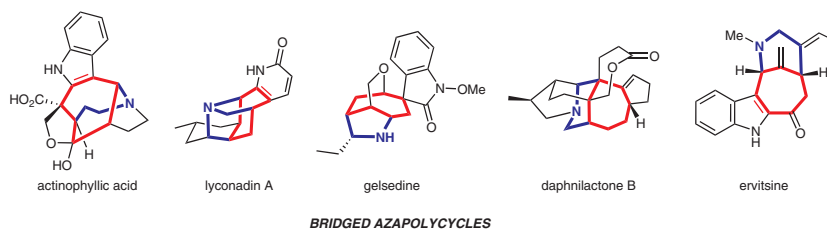
## Short Review

65

Synthesis 2021, 53, 65–78  
DOI: 10.1055/s-0040-1707385

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## Synthesis

## The Power of Iron Catalysis in Diazo Chemistry

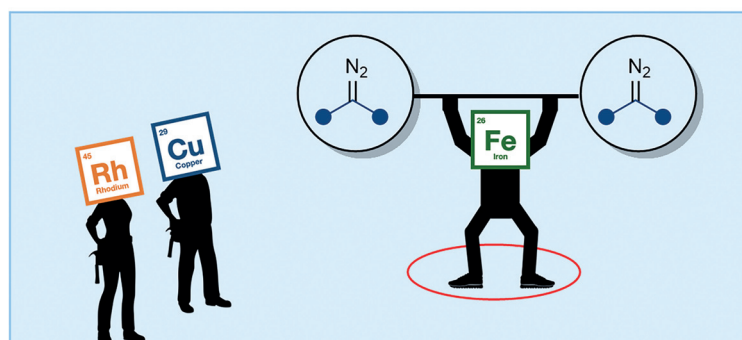
## Short Review

79

Synthesis 2021, 53, 79–94  
DOI: 10.1055/s-0040-1707272

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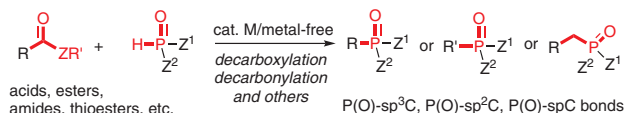


Synthesis 2021, 53, 95–106  
DOI: 10.1055/s-0040-1707286

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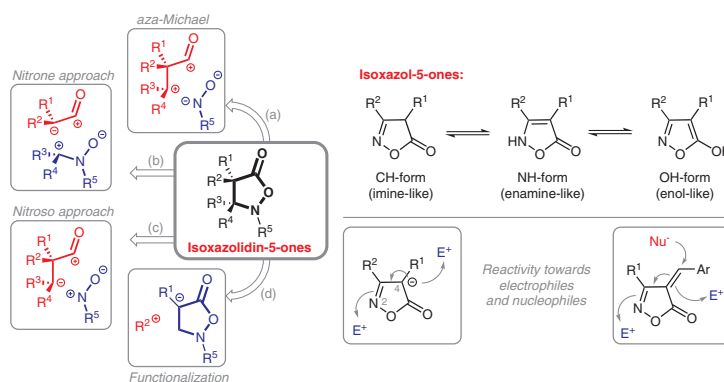
Phosphorylation of carboxylic acids and their derivatives forming P(O)-C bonds



Synthesis 2021, 53, 107–122  
DOI: 10.1055/s-0040-1706483

A. Macchia  
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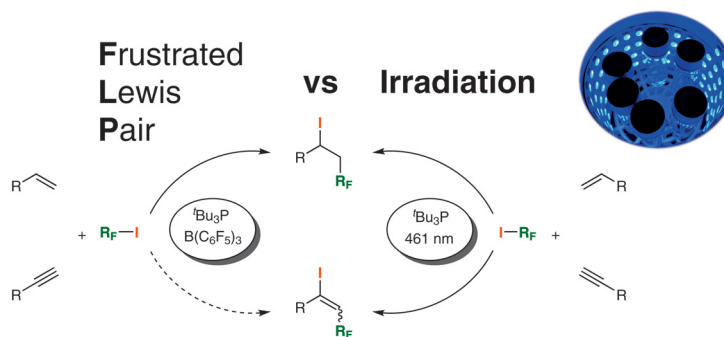
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Synthesis 2021, 53, 123–134  
DOI: 10.1055/s-0040-1707232

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## Synthesis

*Synthesis* 2021, 53, 135–145  
DOI: 10.1055/s-0040-1707245

M.-Y. Chang\*

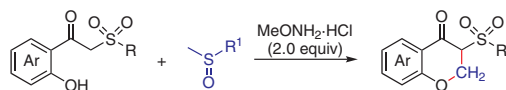
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Kaohsiung Medical University  
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### MeONH<sub>2</sub>·HCl-Mediated $\alpha$ -Methylenation/Conjugate Addition of $\alpha$ -Sulfonyl *o*-Hydroxyacetophenones with Methyl Sulfoxides: Route to 3-Sulfonylchroman-4-ones

Paper

135



✓ DMSO as dual role

✓ >30 examples

✓ up to 93% yield

## Synthesis

*Synthesis* 2021, 53, 146–160  
DOI: 10.1055/s-0040-1706424

Y. S. Rozhkova\*

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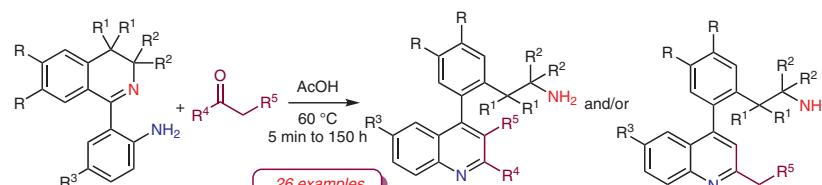
Y. V. Shklyae

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UB RAS, Russian Federation

### Synthesis of Aminoalkyl-Functionalized 4-Arylquinolines from 2-(3,4-Dihydroisoquinolin-1-yl)anilines via the Friedländer Reaction

Paper

146



26 examples

30–99% yield

only for unsymmetrical  
acyclic aliphatic ketones  
(R<sup>5</sup> = Me, *i*-Pr, Allyl, Bn)

R = H, OMe; R<sup>1</sup> = H, Me; R<sup>2</sup> = H, Me; R<sup>3</sup> = H, OMe, Me, Br, NO<sub>2</sub>; R<sup>4</sup> = Alk, Ar; R<sup>5</sup> = H, Alk, Allyl, Bn, Ac, COOEt

## Synthesis

*Synthesis* 2021, 53, 161–174  
DOI: 10.1055/s-0040-1707274

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Y. Takayanagi

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A. Toita

H. Yamakoshi

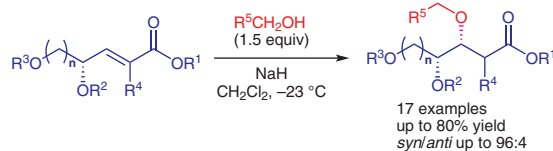
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### Stereoselective 1,4-Addition of Primary Alcohols to $\gamma$ -Alkoxy- $\alpha,\beta$ -unsaturated Esters

Paper

161



17 examples  
up to 80% yield  
*syn/anti* up to 96:4

## Synthesis

Synthesis 2021, 53, 175–181  
DOI: 10.1055/s-0040-1707230

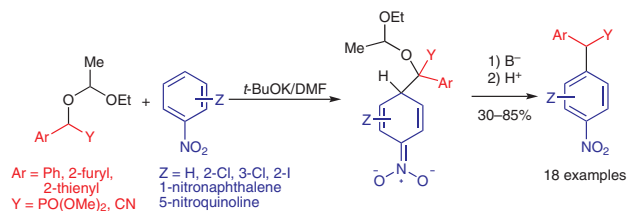
M. Mąkosza\*  
M. Bechicka

K. Wojciechowski  
Institute of Organic Chemistry  
Polish Academy of Sciences,  
Poland

### Simple Synthesis of Dimethyl Nitrobenzhydrylphosphonates and Heteroaryl Nitroarylacetonitriles via Vicarious Nucleophilic Substitution (VNS) Reaction

Paper

175



## Synthesis

Synthesis 2021, 53, 182–192  
DOI: 10.1055/s-0040-1707351

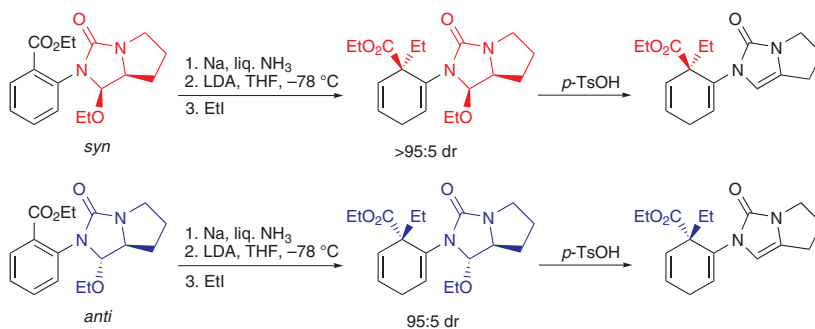
N. Tran  
D. Cadwallader  
C. Metallinos\*

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### Diastereoselective Synthesis of Alkylated 1,4-Cyclohexadiene Esters Using Epimeric Pyrroloimidazolones

Paper

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## Synthesis

## Instructions for Authors

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