Synlett

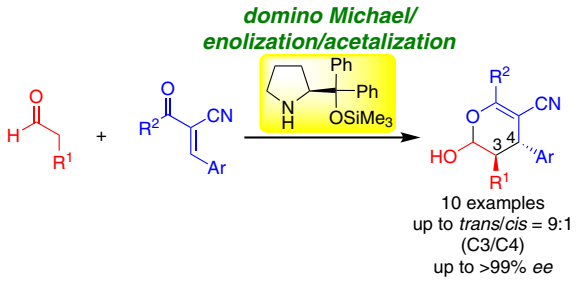
Accounts and Rapid Communications in Chemical Synthesis

December 17, 2024 • Vol. 35, 2251–2563

# Special Issue

## to Celebrate the 75th Birthday of Prof. Brindaban C. Ranu

*Editor: Prof. Dr. Debabrata Maiti*
*Guest editor: Dr. Sukalyan Bhadra*




**Enantioselective Synthesis of Substituted Dihydropyrans by Organocatalyst-Mediated Domino Michael/Enolization/ Acetalization Reactions**

*Y. Hayashi, X. Han, W. R. Hack*

20



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Rapid Communications
in Chemical Synthesis

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*December II*

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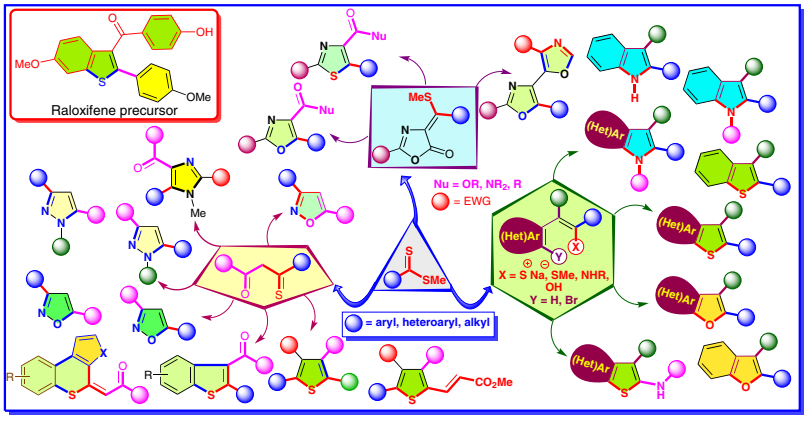




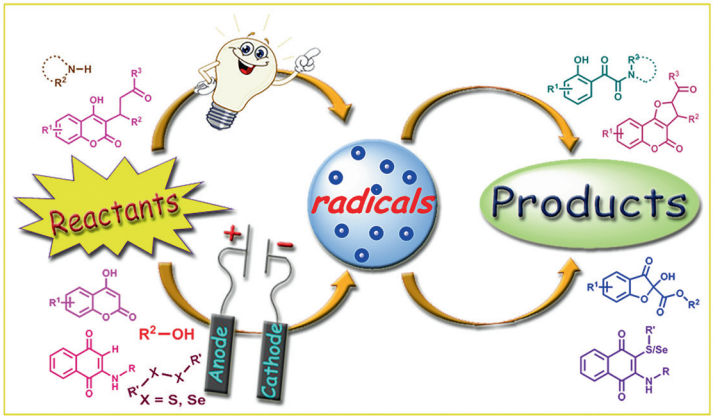

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*Synlett* **2024**, *35*, 2289–2296
DOI: 10.1055/a-2384-6583

**D. Das**
**R. D. Mandal**
**P. Mukherjee**
**P. Bhattacharya**
**A. R. Das***
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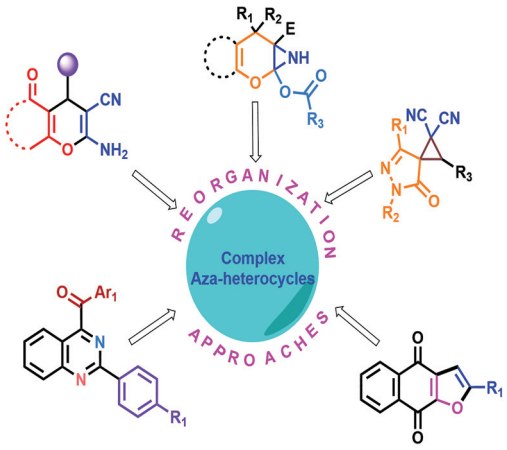
## Skeletal Reorganization: Approaches towards the Synthesis of Aza-Heterocyclic Cores

Account



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*Synlett* **2024**, *35*, 2297–2330
DOI: 10.1055/a-2379-9912

**S. Kotha**
**N. K. Gupta**
**S. Ansari**
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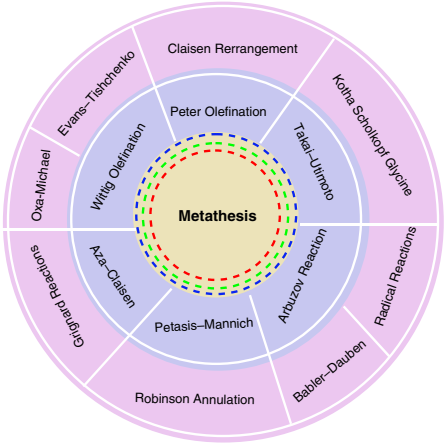
## Design of Molecular Diversity by Olefin Metathesis in Tandem with Other Reactions

Account



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*Synlett* **2024**, *35*, 2331–2345
DOI: 10.1055/a-2422-0992

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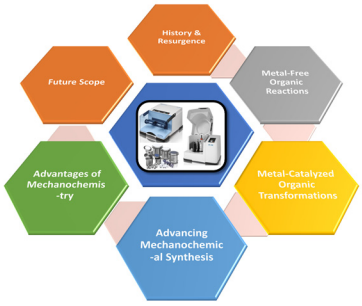
## Mechanochemistry: A Resurgent Force in Chemical Synthesis

Account





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*Synlett* **2024**, *35*, 2346–2366
DOI: 10.1055/s-0043-1775409

**M. S. Padmor**
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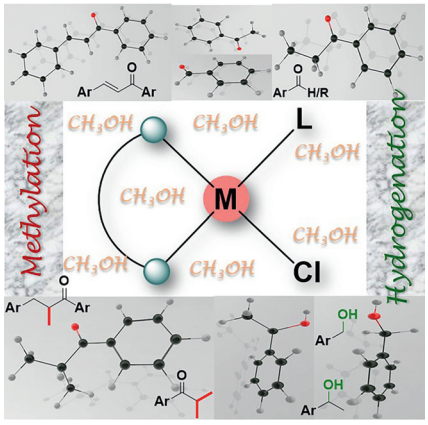
## Methanol for Hydrogenation and Methylation of Carbonyls: Advances and Challenges in Homogeneous Catalysis

Account



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*Synlett* **2024**, *35*, 2367–2377
DOI: 10.1055/a-2417-1070

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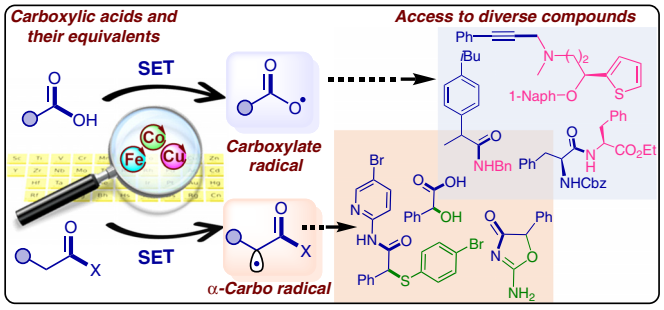
## 3d-Metal-Catalyzed Single-Electron-Transfer-Induced Conversion of Carboxylic Acids and Their Equivalents

Account



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*Synlett* **2024**, *35*, 2378–2384
DOI: 10.1055/a-2377-0629

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**S. Manna**
**P. Satta**
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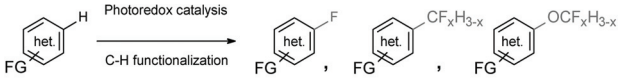
Evonik Chair of Organic Chemistry Ruhr-Universität Bochum, Germany

## Introduction of Fluorinated Groups via Photoredox-Catalyzed C–H Functionalization of (Hetero-)Arenes

Account





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*Synlett* **2024**, *35*, 2385–2390
DOI: 10.1055/a-2316-5200

**H. S. Korawat**
**M. K. Saini**
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**M. S. Singh***
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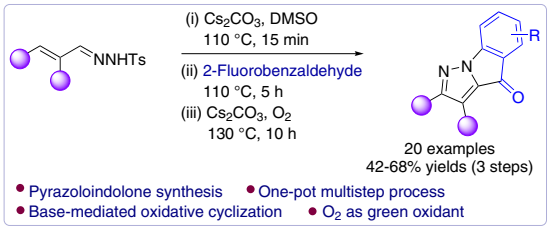
Banaras Hindu University, India

## One-Pot Expeditious Synthesis of Pyrazoloindolones via Base-Promoted Electrocyclization, C–N Coupling and Intramolecular Oxidative Cyclization

Letter
2385

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*Synlett* **2024**, *35*, 2391–2396
DOI: 10.1055/a-2324-8899

**Y. Hayashi***
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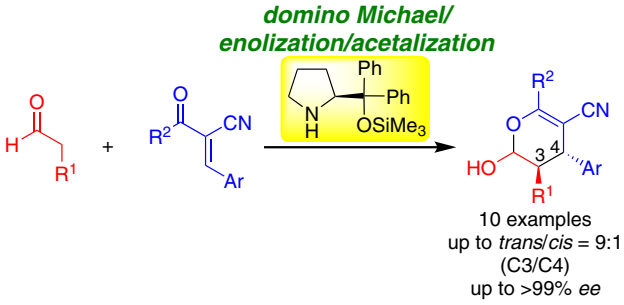
## Enantioselective Synthesis of Substituted Dihydropyrans by Organocatalyst-Mediated Domino Michael/Enolization/Acetalization Reactions

Letter
2391

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*Synlett* **2024**, *35*, 2397–2402
DOI: 10.1055/a-2356-8408

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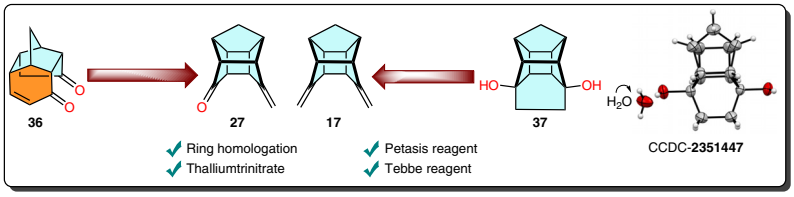
## Synthesis and Reactions of Pentacycloundecane Derivatives Related to Cookson's Dione

Letter
2397



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*Synlett* **2024**, *35*, 2403–2408
DOI: 10.1055/a-2377-0230

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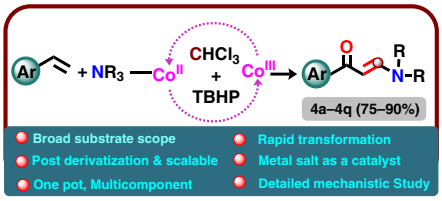
## Cobalt(II)-Catalyzed Proficient Synthesis of Enaminones from Aryl Alkenes and Amines

Letter



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*Synlett* **2024**, *35*, 2409–2416
DOI: 10.1055/a-2384-6371

**K. Anchal**
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## $NiCo_2O_4$-Nanoparticle-Catalyzed Microwave-Assisted Dehydrogenative Direct Oxidation of Primary Alcohols to Carboxylic Acids under Oxidant-Free Conditions

Letter




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DOI: 10.1055/a-2379-9191

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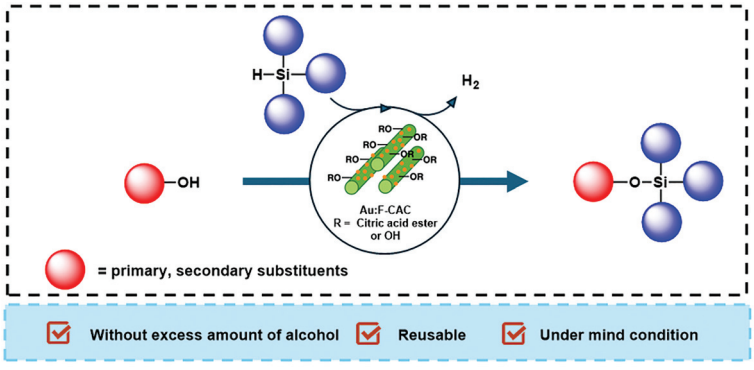
## Dehydrosilylation of Alcohols Using Gold Nanoparticles Deposited on Citric Acid Modified Fibrillated Cellulose

Letter





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*Synlett* **2024**, *35*, 2423–2428
DOI: 10.1055/a-2370-6900

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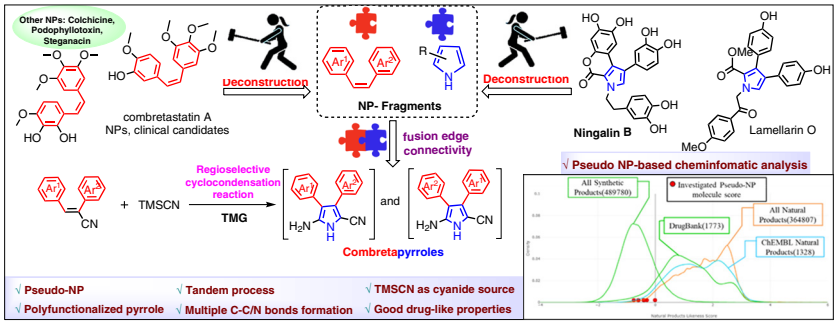
## Synthesis of Diarylpyrrole Pseudo-Natural Products: Cyanide-Mediated Nitrile-to-Nitrile Cyclocondensation and C–H Acidity-Guided Regioselectivity

Letter



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*Synlett* **2024**, *35*, 2429–2434
DOI: 10.1055/a-2384-6441

**K. Mohar**
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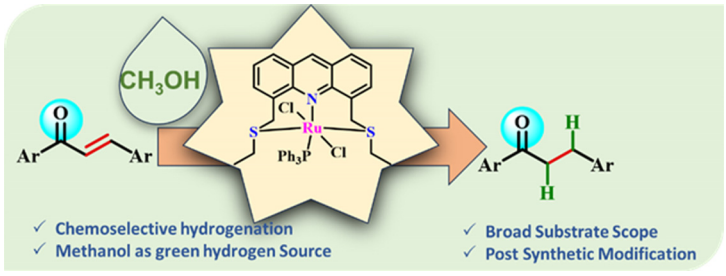
## Activating Methanol for Chemoselective Transfer Hydrogenation of Chalcones Using an SNS-Ruthenium Complex

Letter



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*Synlett* **2024**, *35*, 2435–2440
DOI: 10.1055/a-2384-7323

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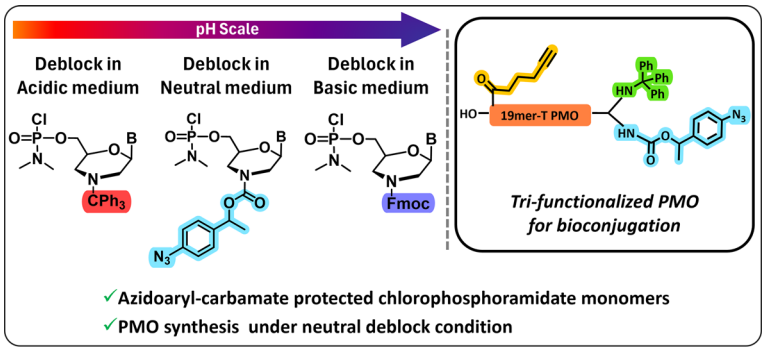
## Synthesis of Phosphorodiamidate Morpholino Oligonucleotides (PMOs) Using Staudinger Reduction as a Deblocking Condition and Its Usefulness for Orthogonal Conjugation in Bi- and Trifunctionalized PMOs

Letter





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*Synlett* **2024**, *35*, 2441–2446
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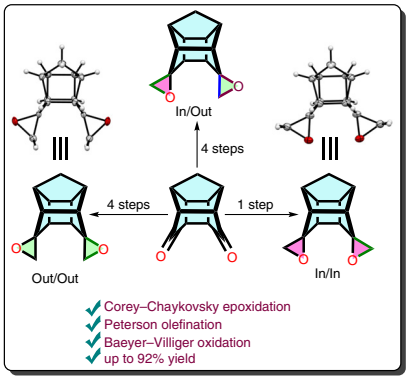
## Design and Synthesis of Out/Out, Out/In, and In/In Epoxides in Polycyclic Cage Frameworks

Letter



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*Synlett* **2024**, *35*, 2447–2452
DOI: 10.1055/a-2412-9738

**T. Pramanik**
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**S. Santra**
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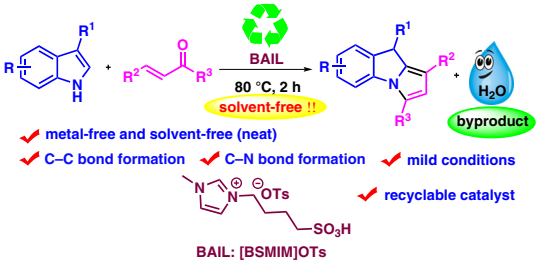
Visva-Bharati (A Central University), India

## Brønsted Acidic Ionic Liquid: An Efficient Organocatalyst for the Synthesis of Pyrrolo[1,2-a]indoles under Neat Conditions

Letter



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*Synlett* **2024**, *35*, 2453–2458
DOI: 10.1055/a-2403-2383

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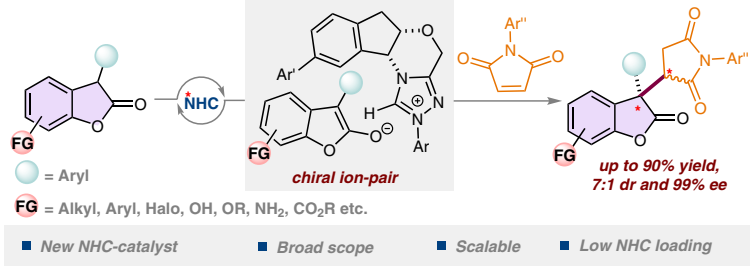
## Asymmetric Intermolecular Conjugate Addition of 3-Substituted 2-Benzofuranones to Maleimides via Noncovalent NHC Catalysis

Letter





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**D. Shukla**
**S. Singh**
**A. K. Sharma**
**B. Singh**
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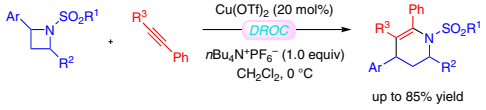
**M. K. Ghorai***

Department of Chemistry, Indian Institute of Technology, India

## Lewis Acid Catalyzed Domino Ring-Opening Cyclization of Azetidines with Alkynes: Synthesis of Tetrahydropyridines

Letter

2459




Ar = Ph, *p*-ClC$_6$H$_4$, *o*-ClC$_6$H$_4$; R$^1$ = Ph, *p*-*t*BuC$_6$H$_4$, *p*-MeC$_6$H$_4$; R$^2$ = *n*Pr, *n*Bu; R$^3$ = H, Me, Et, Ph

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*Synlett* **2024**, *35*, 2465–2470
DOI: 10.1055/a-2422-1416

**P. Pattanayak**
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**H. S. Keerthana**
**A. Naresh**
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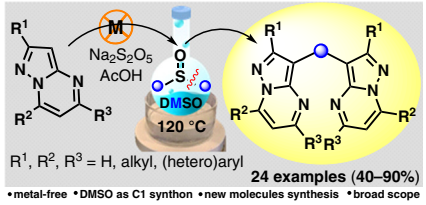
## Sodium Metabisulfite Mediated Synthesis of Bis(pyrazolo[1,5-*a*] pyrimidin-3-yl)methanes from Pyrazolo[1,5-*a*]pyrimidines with Dimethyl Sulfoxide as a C1 Synthon

Letter

2465

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*Synlett* **2024**, *35*, 2471–2476
DOI: 10.1055/a-2427-7689

**S. Das**
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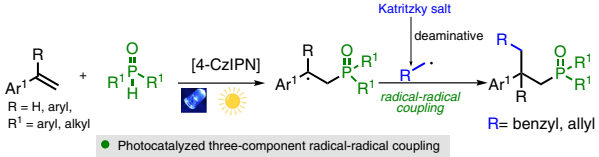
## Visible-Light Organophotoredox-Catalyzed Phosphonoalkylation of Alkenes via Deaminative Three-Component Radical–Radical Coupling

Letter

2471




- Photocatalyzed three-component radical-radical coupling
- Circumvented other competitive two-component couplings
- Regioselective C-P and C-C bond formation
- Redox-neutral protocol: no sacrificial oxidant/reductant
- Generation of an all carbon quarternary center

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*Synlett* **2024**, *35*, 2477–2481
DOI: 10.1055/a-2316-5066

**D. Lai**
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**S. Sinha**
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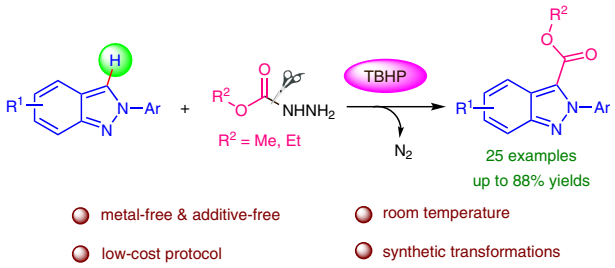
## Metal-Free Synthesis of C-3-Alkoxycarbonylated 2*H*-Indazoles Using Alkyl Carbazates

Letter



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*Synlett* **2024**, *35*, 2482–2486
DOI: 10.1055/a-2375-7696

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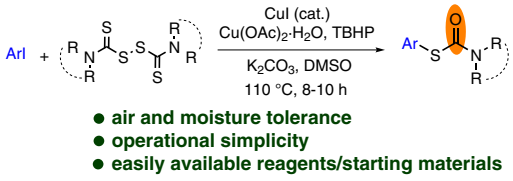
## Thiuram Disulfide Mediated Copper-Catalyzed C–S Cross-Coupling: Synthesis of *S*-Thiocarbamate Compounds

Letter



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*Synlett* **2024**, *35*, 2487–2495
DOI: 10.1055/a-2378-1847

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**S. Sahoo**
**S. Banerjee**
**C. D. Mukhopadhyay**
**S. Banerjee**
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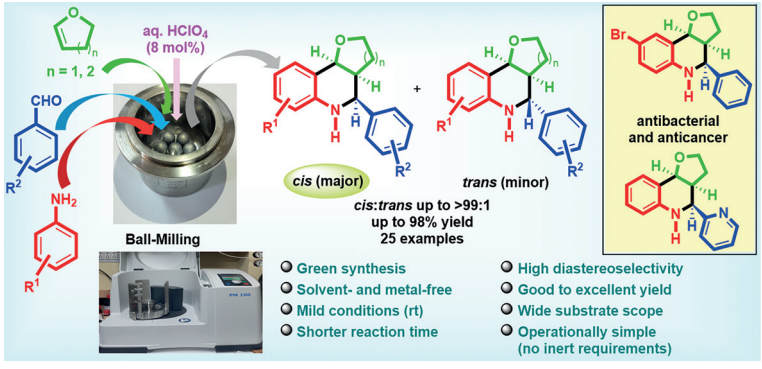
Department of Chemistry, India

## Reaction under Ball-Milling: Solvent- and Metal-Free One-Pot Diastereoselective Synthesis of Tetrahydroquinoline Derivatives as Potential Antibacterial and Anticancer Agents

Letter





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*Synlett* **2024**, *35*, 2496–2502
DOI: 10.1055/a-2388-9487

**M. Vageesh**
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**P. Hima**
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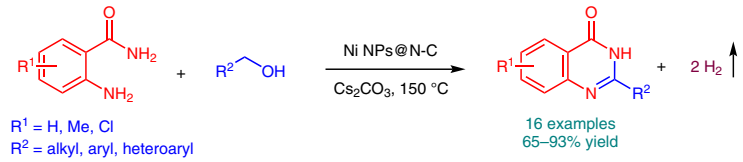
## Acceptorless Dehydrogenation under Neat Reaction Conditions: Synthesis of 2-Aryl/Alkyl Quinazolinones Using Supported Ni NPs as Catalyst

Letter






*Moderate to good yield* | *Broad functional group tolerance* | *Inexpensive catalyst precursors*

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*Synlett* **2024**, *35*, 2503–2507
DOI: 10.1055/a-2388-9578

**H. A. Vadariya**
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**B. M. Farves**
**K. N. Boda**
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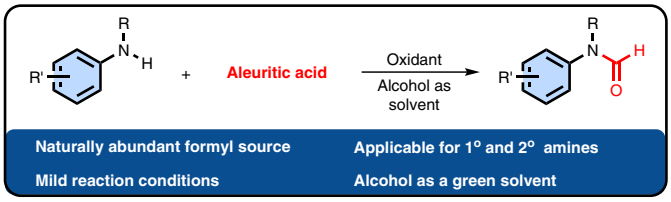
## Sustainable *N*-Formylation of Anilines: Harnessing Aleuritic Acid as a Renewable Formyl Source

Letter



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*Synlett* **2024**, *35*, 2508–2514
DOI: 10.1055/a-2384-6655

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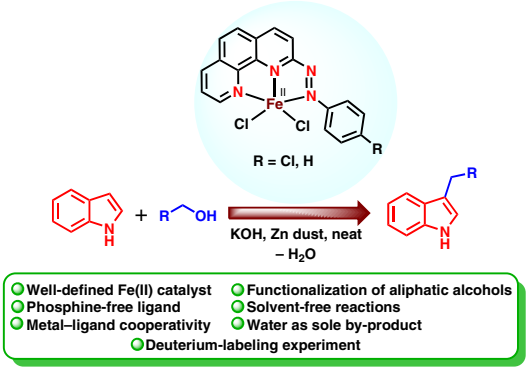
## Fe(II)-Catalyzed Metal–Ligand Cooperative Approach for Selective *C3*-Alkylation of Indoles

Letter





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*Synlett* **2024**, *35*, 2515–2519
DOI: 10.1055/a-2384-6807

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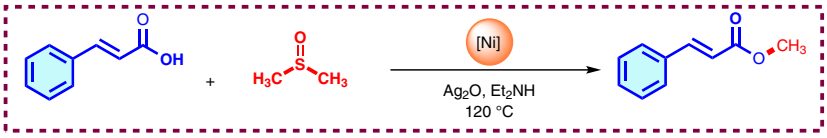
## Nickel-Catalyzed *O*-Methylation of Cinnamic Acid Using DMSO as Methyl Surrogate

Letter






- Cheap catalyst
- DMSO as methyl source
- Good functional-group tolerance
- Moderate to high reaction yield

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*Synlett* **2024**, *35*, 2520–2524
DOI: 10.1055/a-2416-2329

**R. Gundamalla**
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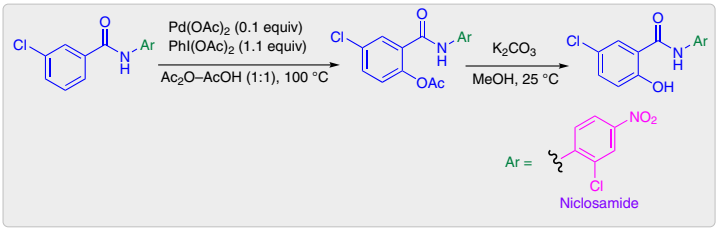
## C–H Activation: A Versatile Tool for the Synthesis of Niclosamide and Its Derivatives

Letter



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*Synlett* **2024**, *35*, 2525–2531
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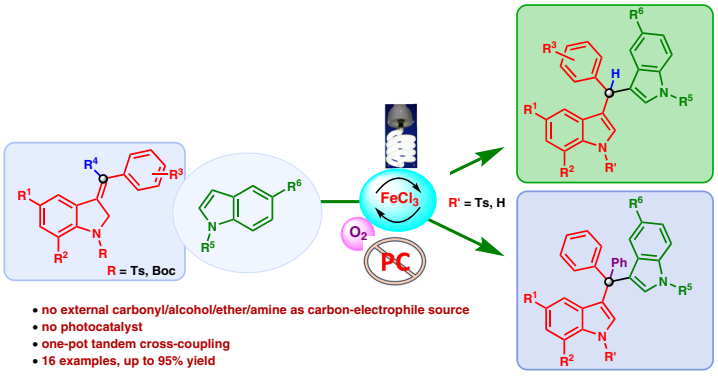
## Visible-Light-Induced Iron(III)-Catalyzed Synthesis of Unsymmetrical Bis(indolyl)methanes through Hydrogen Atom Transfer

Letter






- no external carbonyl/alcohol/ether/amine as carbon-electrophile source
- no photocatalyst
- one-pot tandem cross-coupling
- 16 examples, up to 95% yield

Synlett

*Synlett* **2024**, *35*, 2532–2536
DOI: 10.1055/a-2413-0350

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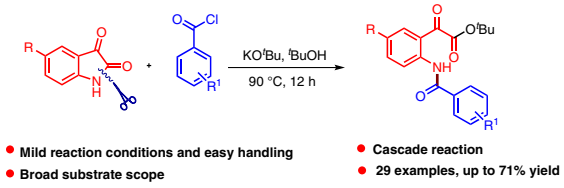
## Potassium *tert*-Butoxide Promoted α-Keto Ester Synthesis through C(O)–N Bond Cleavage of Isatins

Letter






Synlett

*Synlett* **2024**, *35*, 2537–2541
DOI: 10.1055/a-2388-9743

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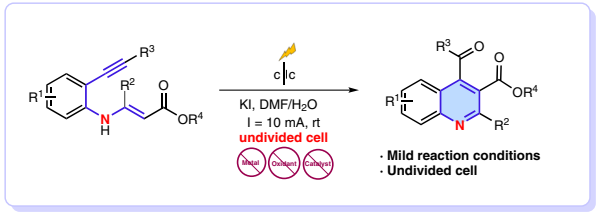
## Electrochemical Synthesis of Quinolines

Letter






Synlett

*Synlett* **2024**, *35*, 2542–2546
DOI: 10.1055/a-2413-0587

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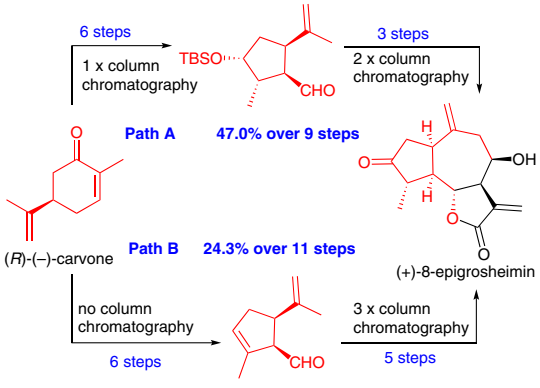
## A Concise Asymmetric Total Synthesis of (+)-8-Epigrosheimin via Catalyst-Free Tandem Allylboration–Lactonization

Letter





Synlett

*Synlett* **2024**, *35*, 2547–2553
DOI: 10.1055/a-2422-1340

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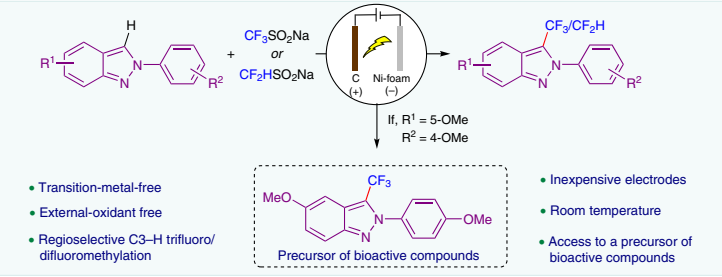
## Electrochemically Promoted Regioselective C3–H Trifluoro/Difluoromethylation of 2*H*-Indazoles at Room Temperature

Letter

2547




Synlett

*Synlett* **2024**, *35*, 2554–2558
DOI: 10.1055/a-2361-3510

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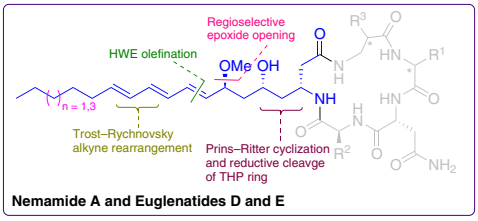
## Stereoselective Synthesis of Polyketide Segments of Nemamide A and Euglenatides D–E

Letter

2554




Synlett

*Synlett* **2024**, *35*, 2559–2563
DOI: 10.1055/a-2373-0372

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## Studies toward the Synthesis of Colletotrichamide A: Construction of the C19–C30 Segment of the Molecule

Letter

2559