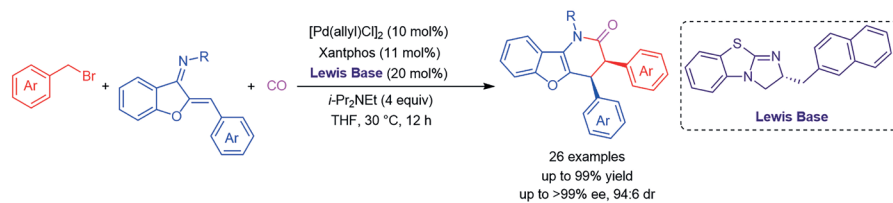


# Synthesis

Reviews and Full Papers in Chemical Synthesis

May 2, 2024 • Vol. 56, 1335–1504



Stereoselective Synthesis of 3,4-Dihydrobenzofuro[3,2-*b*]pyridin-2(1*H*)-ones Enabled by Pd/Chiral Isothiourea Relay Catalysis

*M. Sayed, Z. Shi, T. Fan, H.-C. Shen, Z.-Y. Han*

9

## Synthesis

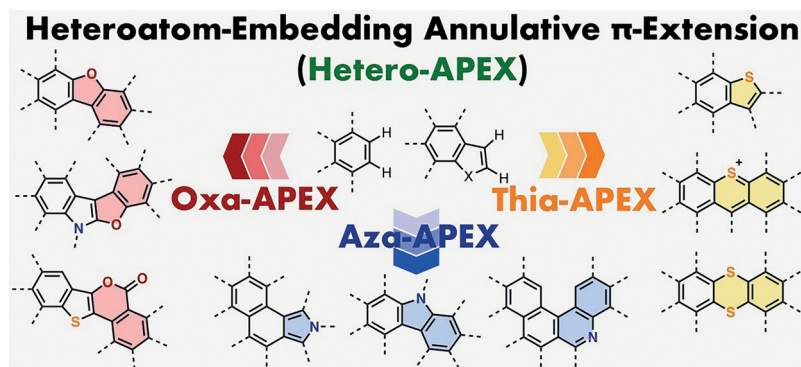
*Synthesis* 2024, 56, 1335–1354  
DOI: 10.1055/a-2169-4078

H. Ito\*  
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## Heteroatom-Embedding Annulative $\pi$ -Extension (Hetero-APEX) Reactions: An Overview

Review

1335



## Synthesis

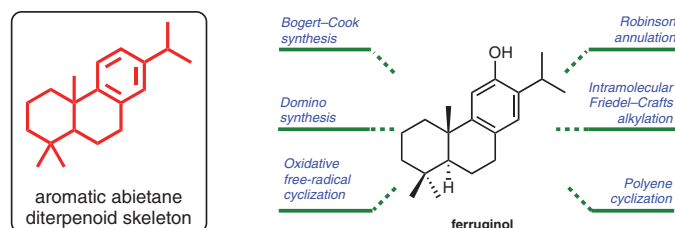
*Synthesis* 2024, 56, 1355–1368  
DOI: 10.1055/a-2186-7983

M. Li  
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## Review of the Total Synthesis of the Aromatic Abietane Diterpenoid Ferruginol

Short Review

1355



## Synthesis

Synthesis 2024, 56, 1369–1380  
DOI: 10.1055/a-2193-4927

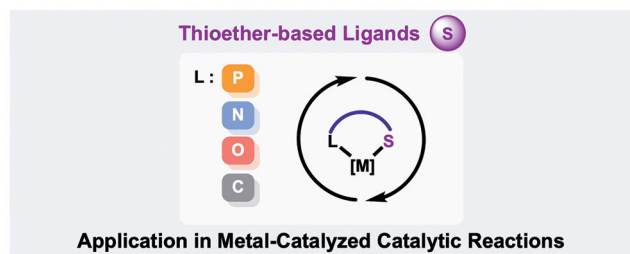
S. Bellemin-Laponnaz\*  
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## Recent Progress in Developing Thioether-Containing Ligands for Catalysis Applications

Short Review

1369



## Synthesis

Synthesis 2024, 56, 1381–1392  
DOI: 10.1055/s-0043-1763679

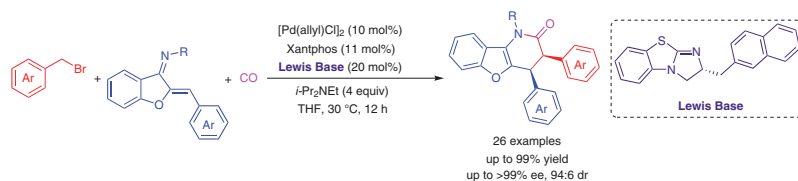
M. Sayed\*  
Z. Shi  
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Stereoselective Synthesis of 3,4-Dihydrobenzofuro[3,2-*b*]pyridin-2(1*H*)-ones Enabled by Pd/Chiral Isothiourea Relay Catalysis

Paper

1381



## Synthesis

Synthesis 2024, 56, 1393–1400  
DOI: 10.1055/a-2240-5349

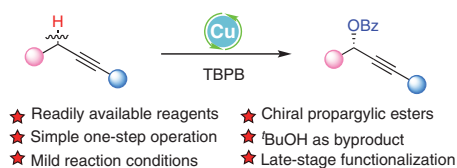
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X. Zhu\*  
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Fujian Institute of Research on  
the Structure of Matter,  
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## Copper-Catalyzed Enantioselective Radical Esterification of Propargylic C–H Bonds

Paper

1393



## Synthesis

Synthesis 2024, 56, 1401–1406  
DOI: 10.1055/a-2249-2326

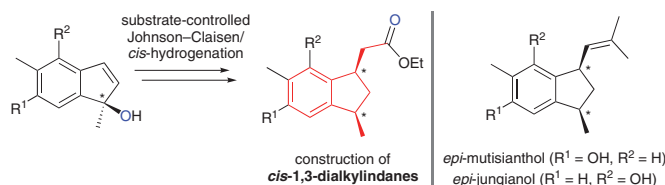
C. S. Tran  
M. Yoon  
L. D. Le  
S. Kim  
H. Kim  
J. Kim  
L. H. Nguyen  
M. Koh\*  
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Rapid Access to *cis*-1,3-Dialkylindanes: Asymmetric Formal Syntheses of *epi*-Mutisianthol and *epi*-Jungianol

Paper

1401



## Synthesis

Synthesis 2024, 56, 1407–1414  
DOI: 10.1055/a-2222-3822

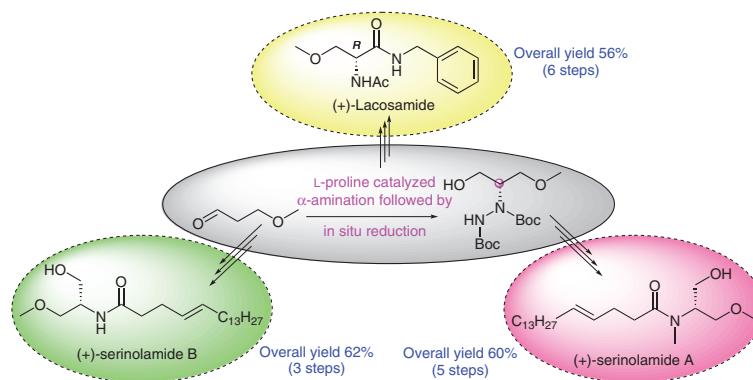
A. R. Jadhao  
S. B. Waghmode\*

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## Organocatalytic Approach to the Enantioselective Total Synthesis of (+)-Serinolamides A and B and (+)-Lacosamide

Paper

1407



## Synthesis

Synthesis 2024, 56, 1415–1421  
DOI: 10.1055/a-2248-5438

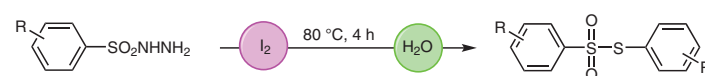
Q. Chen  
Z.-H. Chen  
Y.-T. Liang  
Y. Zeng  
S.-W. Yu\*  
K. Yang\*  
Z.-Y. Wang\*

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Gannan Medical University,  
P. R. of China

## Iodine-Promoted Disproportionate Coupling Reaction of Arylsulfonyl Hydrazides: A Simple and Green Access to Thiosulfonates

Paper

1415



- ✓ Safe and available substrates
- ✓ Metal-free
- ✓ Mild conditions
- ✓ Gram-scale synthesis
- ✓ Green solvent
- ✓ Yield up to 96%

## Synthesis

Synthesis 2024, 56, 1422–1428  
DOI: 10.1055/s-0042-1751557

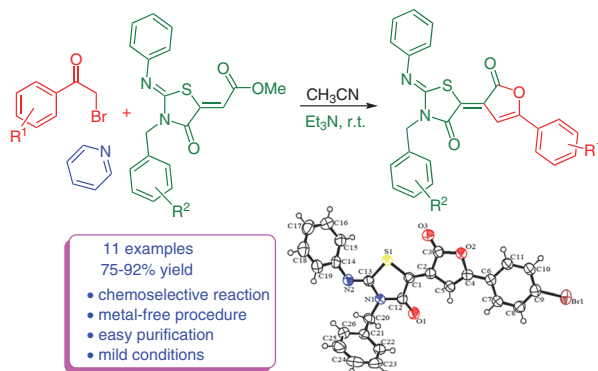
A. Alizadeh\*  
R. Moterassed

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### Efficient Synthesis of (2Z,5Z)-3-Benzyl/alkyl-5-(2-oxo-5-aryl-3 (2H)-furanylidene)-2-(phenylimino)-1,3-thiazolidin-4-ones via a One-Pot Three-Component Reaction

Paper

1422



## Synthesis

Synthesis 2024, 56, 1429–1437  
DOI: 10.1055/a-2231-4922

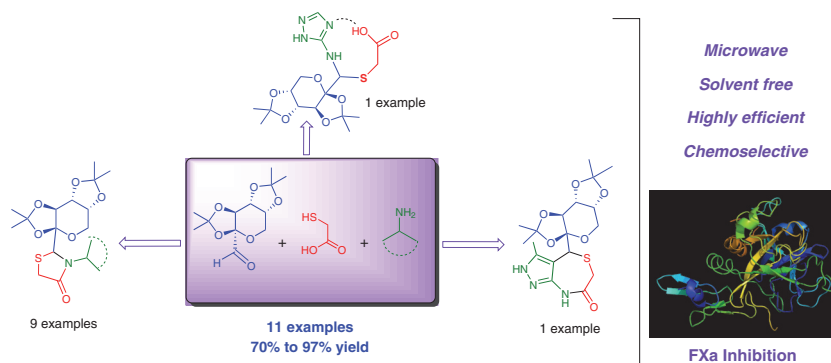
F. Lorenzo  
R. Ocampo\*  
D. F. Rodríguez  
F. Santana-Romo  
A. Galdamez  
F. C. Zacconi  
R. A. Burrow  
S. Mandolesi\*  
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Universidad Nacional del Sur,  
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### Solvent-Free Efficient Synthesis of New 4-Thiazolidinones with a Fructose Scaffold through a Microwave-Assisted Cascade Multicomponent Reaction

Paper

1429



## Synthesis

Synthesis 2024, 56, 1438–1448  
DOI: 10.1055/a-2236-0209

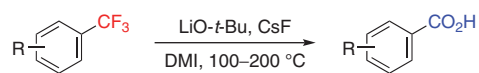
M. Shigeno\*  
M. Kiriya  
K. Izumi  
K. Sasaki  
O. Sasamoto  
K. Nozawa-Kumada  
Y. Kondo

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### LiO-t-Bu/CsF-Mediated Formal Hydrolysis of Trifluoromethyl Arenes

Paper

1438



- √ Non-anionically activated CF<sub>3</sub> group
- √ Single-electron transfer process
- √ Various substrates containing (hetero)aryl, t-Bu, Me, amide, and alkenyl functionalities

## Synthesis

Synthesis 2024, 56, 1449–1459  
DOI: 10.1055/a-2241-6697

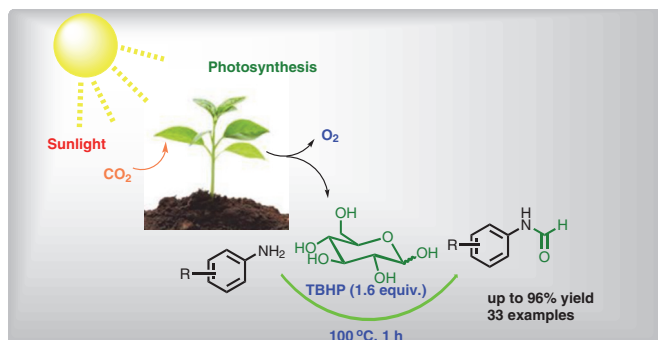
S. Atpadkar  
M. S. Gill\*

National Institute of Pharmaceutical Education and Research (NIPER) S.A.S., India

## Metal-Free *N*-Formylation of Amines Using Carbohydrates as C1 Synthon via C–C Bond Cleavage

Paper

1449



- Use of renewable bio-based feedstock as a C1 synthon
- Broad substrate scope
- Environment friendly
- Easy operation and scalability
- Metal-free reaction conditions

## Synthesis

Synthesis 2024, 56, 1460–1464  
DOI: 10.1055/a-2236-0413

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S. Mototani  
Y. Takemoto  
M. Uesugi  
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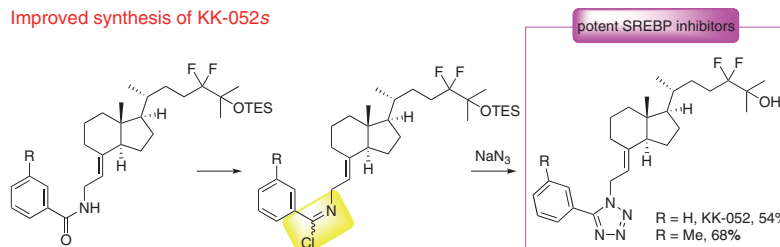
Teikyo University, Japan

## An Improved and Scalable Synthesis of the Potent SREBP Inhibitor KK-052 via [3+2] Cycloaddition

Paper

1460

Improved synthesis of KK-052s



## Synthesis

Synthesis 2024, 56, 1465–1475  
DOI: 10.1055/s-0042-1751555

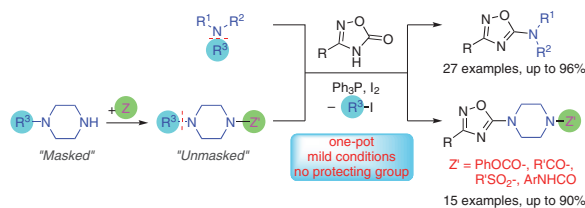
M. Alfiadhi  
M. Pattarawarapan  
S. Hongsibsong  
N. Wiriya  
W. Phakhodee\*

Chiang Mai University, Thailand

## Tertiary Amines as Temporary Masked Secondary Amines: A Direct Access to 5-Dialkylamino-1,2,4-oxadiazoles from 1,2,4-Oxadiazol-5(4*H*)-ones

Paper

1465



## Synthesis

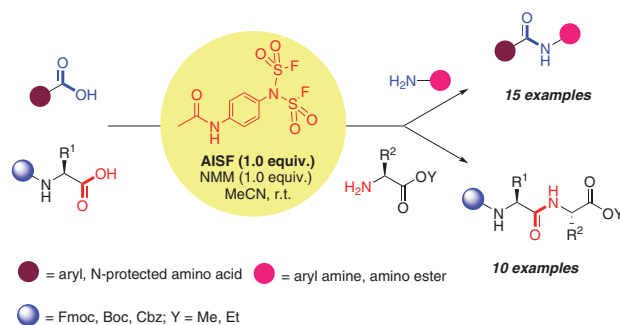
Synthesis 2024, 56, 1476–1484  
DOI: 10.1055/s-0043-1763675

S. Bharamawadeyar  
E. Chetankumar  
C. Srinivasulu  
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### Synthesis of Amides and Peptides by Employing [4-(Acetylamino)phenyl]imidodisulfuryl Difluoride (AISF) as a Coupling Reagent

Paper

1476



## Synthesis

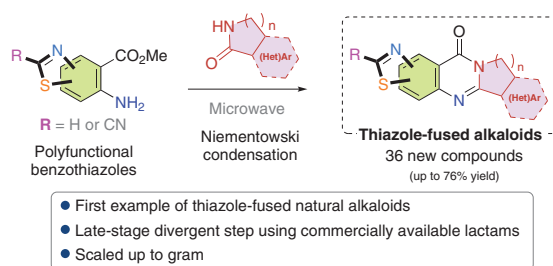
Synthesis 2024, 56, 1485–1497  
DOI: 10.1055/a-2243-4727

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### Synthesis of Thiazole-fused Tricyclic Quinazolinone Alkaloids and Their Derivatives

Paper

1485



## Synthesis

Synthesis 2024, 56, 1498–1504  
DOI: 10.1055/a-2236-8874

X. A. Barashkova  
M. J. Parulava  
Y. N. Kotovshchikov  
G. V. Latyshev\*  
N. V. Lukashev  
I. P. Beletskaya

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University, Russian Federation

### Alumina-Promoted Copper-Catalyzed Hydroboration of Alkynes

Paper

1498

