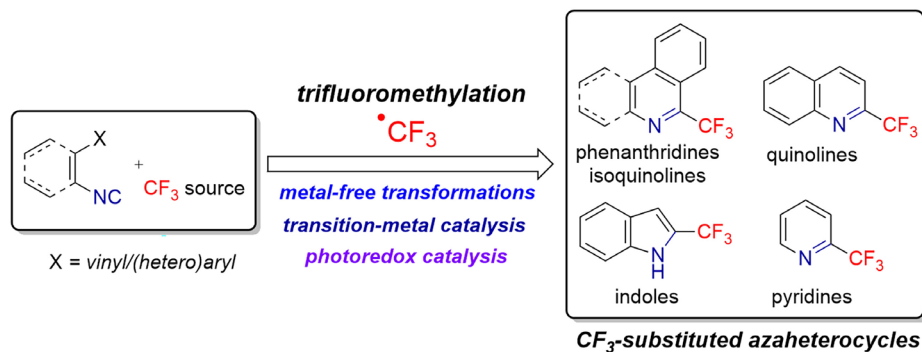


Synthesis

Reviews and Full Papers in Chemical Synthesis

June 16, 2023 • Vol. 55, 1799–1948



Recent Advances in the Trifluoromethylation Reactions of Isonitriles To Construct CF₃-Substituted N-Heterocycles

K. Aradi, L. Kiss

12

Synthesis

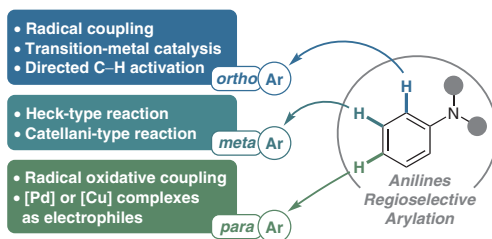
Direct Arylation of C(sp²)-H Bonds in Anilines

Review

Synthesis 2023, 55, 1799–1823
DOI: 10.1055/a-2039-7985

C. Jacob*
J. Annibaleto
B. U. W. Maes
G. Evano*

Université Libre de Bruxelles
(ULB), Belgium
University of Antwerp, Belgium



1799

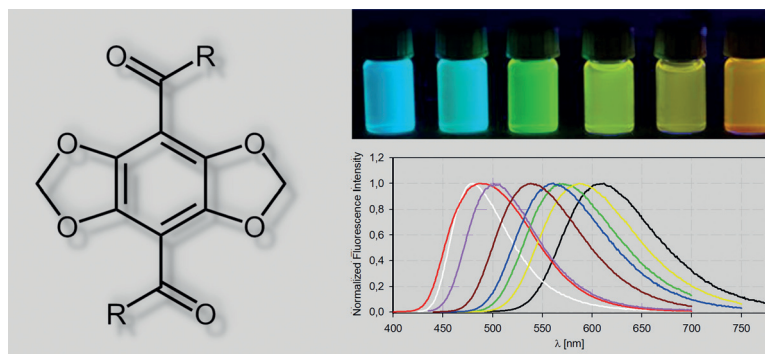
Synthesis

[1,3]-Dioxolo[4,5-f]benzodioxole (DBD) Fluorescent Dyes; Synthesis, Properties, and Applications

Short Review

Synthesis 2023, 55, 1824–1833
DOI: 10.1055/s-0042-1751428

P. Wessig*
M. Lehmann
Universität Potsdam, Germany



1824

Synthesis

Synthesis 2023, 55, 1834–1843
DOI: 10.1055/a-2020-9090

K. Aradi

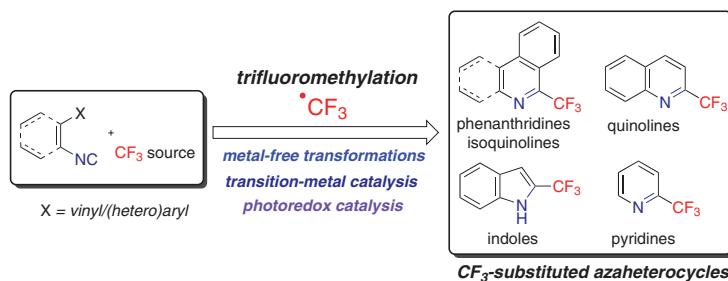
L. Kiss*

Research Centre for Natural Sciences, Hungary

Recent Advances in the Trifluoromethylation Reactions of Isonitriles To Construct CF₃-Substituted N-Heterocycles

Short Review

1834



Synthesis

Synthesis 2023, 55, 1844–1854
DOI: 10.1055/a-2042-3720

W. Zhou

Q.-W. Zhao

Y.-C. Luo

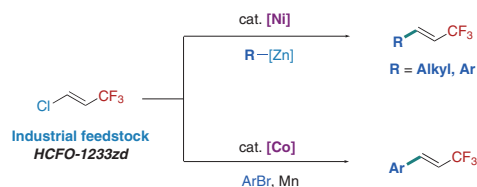
X. Zhang*

Zhengzhou University,
P. R. of China
Shanghai Institute of Organic
Chemistry, P. R. of China

Synthesis of 1-(Trifluoromethyl)alkenes through Transition-Metal-Catalyzed Alkylation and Arylation of 1-Chloro-3,3,3-trifluoroprop-1-ene (HCFO-1233zd)

Feature

1844



Synthesis

Synthesis 2023, 55, 1855–1862
DOI: 10.1055/a-2012-5078

V. Magné

C. Bellanger

A. A. Hussein

N. Saffon-Merceron

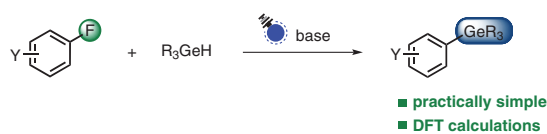
S. Lakhdar*

CNRS/Université Paul Sabatier,
France

Visible-Light-Mediated Germanylation of Aryl Fluorides: Synthetic and Mechanistic Insights

Paper

1855



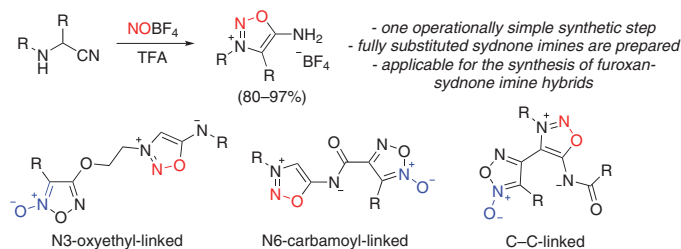
Synthesis

Synthesis 2023, 55, 1863–1874
DOI: 10.1055/a-2011-7264

A. D. Shuvaev
E. S. Zhilin
L. L. Fershtat*

N.D. Zelinsky Institute of Organic Chemistry,
Russian Federation

NOBF₄-Mediated Assembly of the Sydnone Imine Scaffold in the Synthesis of Double Nitric Oxide Donors



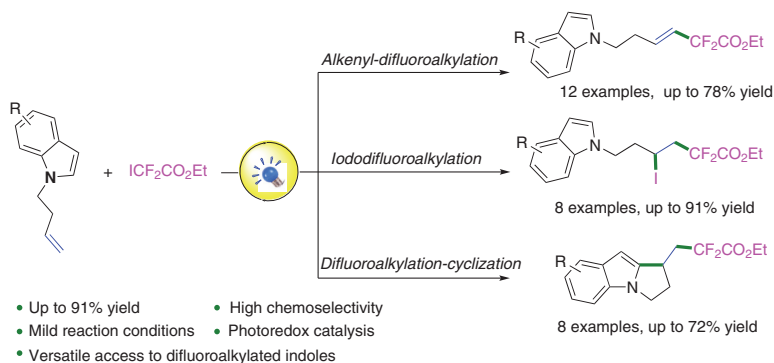
Synthesis

Synthesis 2023, 55, 1875–1885
DOI: 10.1055/a-2039-5229

J. Tong
R. Luo
L. Liu
X. Yang
J. Liao*

Gannan Medical University,
P. R. China
Shaoguan University, P. R. China

Photo-Induced Selective Difluoroalkylation of Unactivated Alkenes to Access Difluoroalkylated Indoles



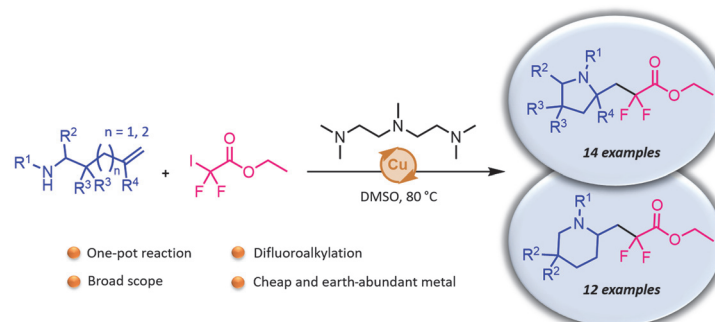
Synthesis

Synthesis 2023, 55, 1886–1892
DOI: 10.1055/a-2004-6031

M. M. Marchese
S. Strähler
L. Ghiba
O. Riant*

Université catholique de Louvain
UCLouvain, Belgium

Copper-Catalyzed Radical Cascade Annulation for the Preparation of Difluorinated Pyrrolidines and Piperidines



Synthesis

Synthesis 2023, 55, 1893–1903
DOI: 10.1055/a-2013-5801

S. Singh

G. Shukla

S. Ray

M. S. Singh*

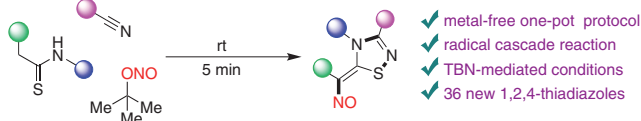
Banaras Hindu University, India

Metal-Free Cascade Synthesis of 1,2,4-Thiadiazoles from β -Ketothioamides and Alkyl/Aryl Cyanides under TBN Enabling Conditions at Room Temperature

Paper

1893

Cascade formation of 3 new bonds (2 C–N & 1 S–N)



Synthesis

Synthesis 2023, 55, 1904–1914
DOI: 10.1055/s-0042-1752403

R. Budhwan

M. Rawat

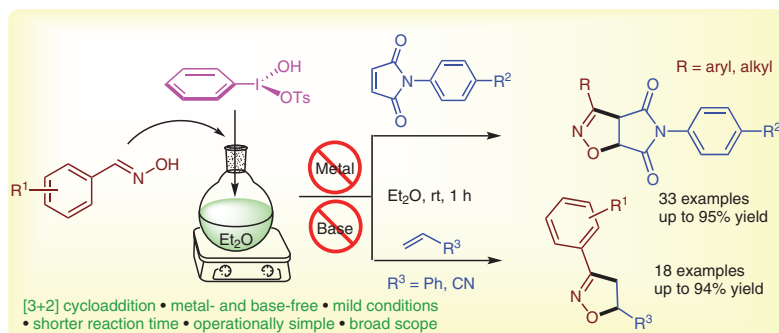
R. K. Peddinti*

Indian Institute of Technology
Roorkee, India

Koser's Reagent Mediated Oxidation of Aldoximes: Synthesis of Isoxazolines by 1,3-Dipolar Cycloadditions

Paper

1904



Synthesis

Synthesis 2023, 55, 1915–1921
DOI: 10.1055/a-2014-3203

N. Sakai*

K. Fukuda

Y. Ogiwara

K. Ishida

Tokyo University of Science
(RIKADAI), Japan

Synthesis of Dithioacetals through Iodine-Promoted Insertion Reactions of Vinylsilane to Disulfides and its Application to Diselenoacetalization

Paper

1915



- metal-free conditions
- 1,1'-addition of disulfides and thiols
- application to 1,1'-addition of a diaryl selenide

Synthesis

Synthesis of 1,1-Disubstituted Indenes via Palladium-Catalyzed Cross-Coupling of *ortho*-Alkenyl Bromobenzenes and α -Aryl- α -diazoesters

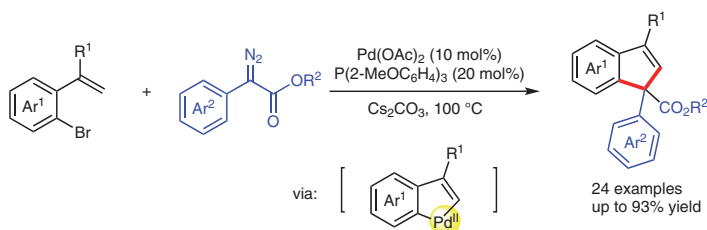
Paper

1922

Synthesis 2023, 55, 1922–1928
DOI: 10.1055/a-2039-6271

X.-J. Feng
J.-G. Fu
Q. Zhao
Y.-H. Lu
S.-S. Zhang*
C.-G. Feng*

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P. R. of China



Synthesis

Enantioselective Synthesis of Dispirooxindole Derivatives via Asymmetric Catalytic Cascade Reactions

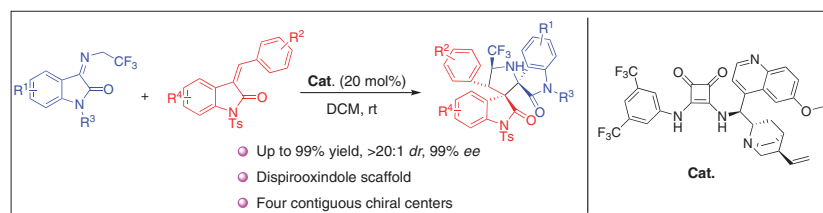
Paper

1929

Synthesis 2023, 55, 1929–1939
DOI: 10.1055/a-2017-4738

R. Ma
J.-L. Zhang
X.-Q. Hu*
P.-F. Xu*

Lanzhou University,
P. R. of China
Lanzhou Veterinary Research Institute, P. R. of China



Synthesis

Aza-Wacker Cyclization Toward the Bridged Core of FR901483

Paper

1940

Synthesis 2023, 55, 1940–1948
DOI: 10.1055/a-2012-5187

D. Shen
C. Xie
Z. Ruan
C. Yang
S.-H. Huang
L. Zhu*
R. Hong*

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