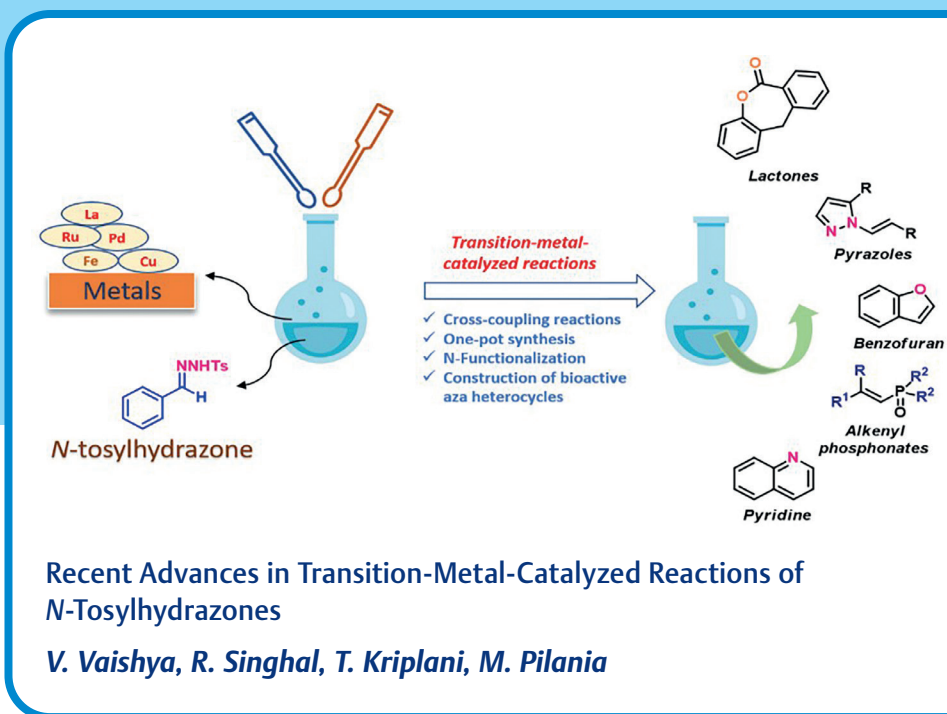


Synthesis

Reviews and Full Papers in Chemical Synthesis

September 16, 2022 • Vol. 54, 3907–4128



18

Synthesis

Activation Modes in Asymmetric Anion-Binding Catalysis

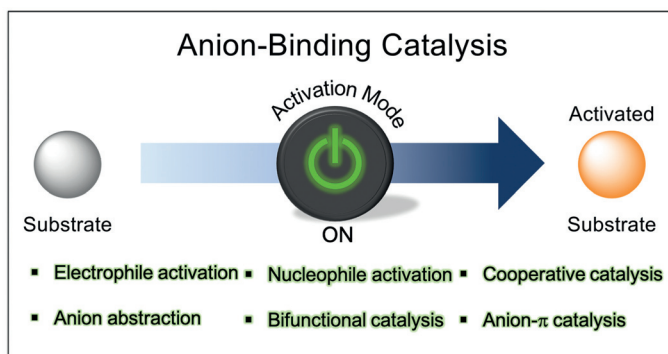
Review

Synthesis 2022, 54, 3907–3927
DOI: 10.1055/a-1846-6139

L.-M. Entgelmeier
O. García Mancheño*

Westfälische Wilhelms-Universität
Münster, Germany

3907



Synthesis

Recent Advances in Thianthrenation/Phenoxathiination Enabled Site-Selective Functionalization of Arenes

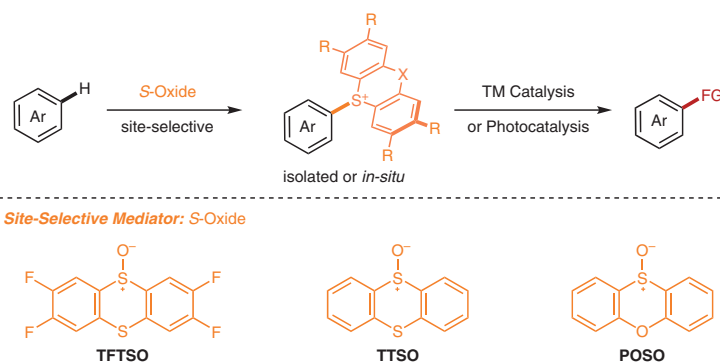
Short Review

Synthesis 2022, 54, 3928–3940
DOI: 10.1055/s-0041-1737493

X.-Y. Chen
Y. Wu
P. Wang*

Shanghai Institute of Organic
Chemistry, P. R. of China
University of Chinese Academy
of Sciences, P. R. of China

3928



Synthesis

Synthesis 2022, 54, 3941–3961
DOI: 10.1055/s-0040-1719930

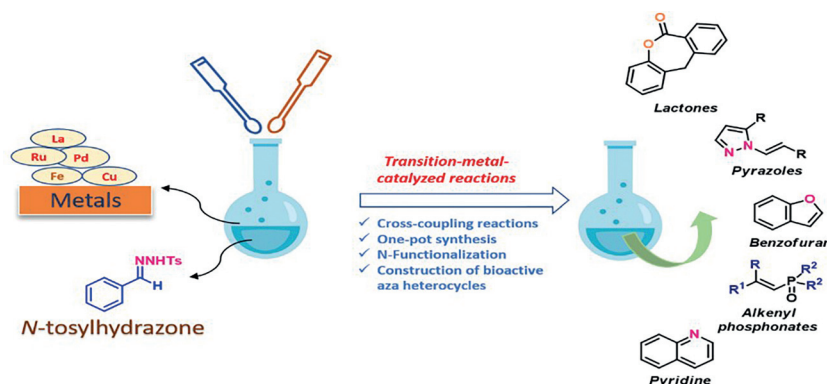
V. Vaishya
R. Singhal
T. Kriplani
M. Pilania*

Manipal University Jaipur, India

Recent Advances in Transition-Metal-Catalyzed Reactions of *N*-Tosylhydrazones

Short Review

3941



Synthesis

Synthesis 2022, 54, 3962–3976
DOI: 10.1055/a-1794-0770

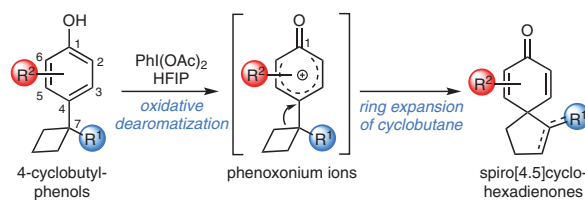
S. Xi
J. Zhang
Z. Guo
Y. Zu
Y. Liu
G. Wang
Y. Tang*

Tsinghua University,
P. R. of China

Facile Access to Spiro[4.5]decanes through Oxidative Dearomatization-Induced Ring Expansion of Cyclobutanes

Feature

3962



Synthesis

Synthesis 2022, 54, 3977–3988
DOI: 10.1055/s-0040-1719919

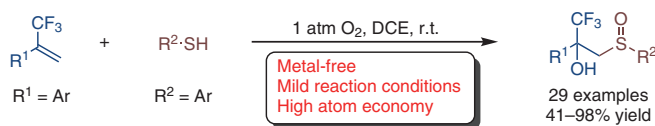
J. Niu
B. Liu
C. Zhang*

Tianjin University, P. R. of China
Haihe Laboratory of Sustainable
Chemical Transformations,
P. R. of China

Metal-Free Thiolation and Hydroxylation of CF_3 -Substituted Alkenes: A Practical Method to Synthesize Trifluoromethyl Tertiary Alcohols

Feature

3977



Synthesis

Synthesis 2022, 54, 3989–3998
DOI: 10.1055/a-1824-6352

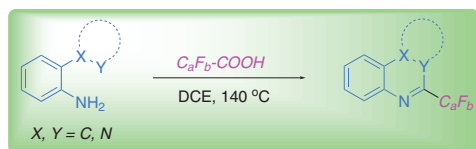
S. Li
X. Lv
J. Ren
L. Feng
C. Ma*

Shandong University,
P. R. of China

A Direct Method for Synthesis of Fluorinated Quinazolines and Quinoxalines Using Fluorinated Acids without Metals or Additives

Paper

3989



- ✓ metal-free
- ✓ two categories
- ✓ high-economy
- ✓ broad scope

Synthesis

Synthesis 2022, 54, 3999–4004
DOI: 10.1055/s-0041-1737490

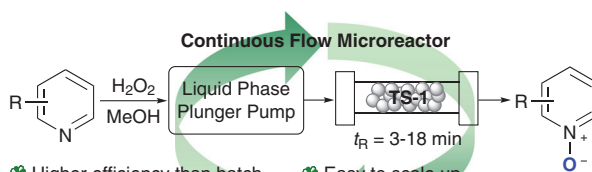
S. Chen
S. Yang
H. Wang
Y. Niu
Z. Zhang*
B. Qian*

Northwest Normal University,
P. R. China
Lanzhou Institute of Chemical
Physics, P. R. China

Continuous Flow Microreactor Promoted the Catalytic *N*-Oxidation Reaction of Pyridine Derivatives

Paper

3999



- ✪ Higher efficiency than batch
- ✪ Easy to scale up
- ✪ Green and safe process
- ✪ Convenient operation
- ✪ 19 Examples, up to 99% yield
- ✪ Continuously run over 800 hours

Synthesis

Synthesis 2022, 54, 4005–4014
DOI: 10.1055/a-1828-1767

L. Guo
Y. Gao
Y. Li
Y. Wang
W. Li
S. Chen*

Inner Mongolia University,
P. R. of China

CsF-Promoted Iodocyclization of Allenylphosphonates: A Convenient Approach to Highly Functionalized Oxaphospholenes

Paper

4005



- 🔍 29 examples, yield up to 86%
- 🔍 FG = ferrocenyl, aromatic and alkyl groups
- 🔍 novel ferrocene-containing oxaphospholenes

Synthesis

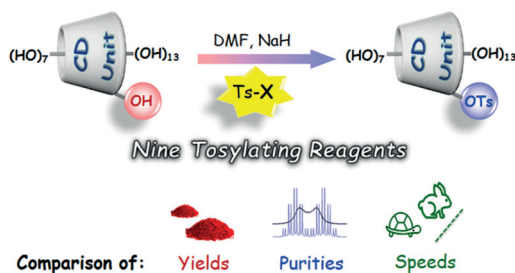
Synthesis 2022, 54, 4015–4024
DOI: 10.1055/s-0040-1719927

G. G. Kordopati
N.-M. Konstantinou
G. M. Tsivgoulis*
University of Patras, Greece

Comparison of Various Tosylating Reagents for the Synthesis of Mono-2-O-tosyl- β -cyclodextrin

Paper

4015



Synthesis

Synthesis 2022, 54, 4025–4032
DOI: 10.1055/a-1838-8958

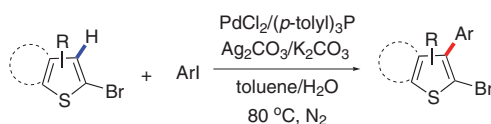
C.-X. Wang
F.-F. Sheng
K.-H. Liu
J.-G. Gu
K. Shen
Z.-Y. Sun
K. Hong
H.-H. Zhang*

Nanjing Tech. University (Nanjing Tech.), P. R. of China

Bromide as the Directing Group for β -Arylation of Thiophenes

Paper

4025



Synthesis

Synthesis 2022, 54, 4033–4048
DOI: 10.1055/a-1820-6160

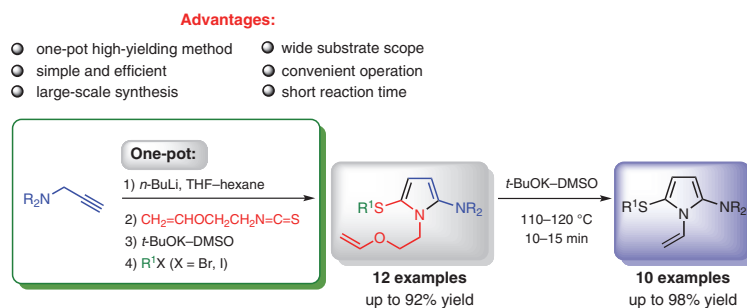
O. A. Tarasova
N. A. Nedolya*
A. I. Albanov
B. A. Trofimov*

A. E. Favorsky Irkutsk Institute of Chemistry, Russian Federation

An Efficient One-Pot Synthesis of 5-Sulfanyl-1-[2-(vinyloxy)ethyl]-1H-pyrrol-2-amines as Precursors of 1-Vinylpyrroles

Paper

4033



Synthesis

Synthesis 2022, 54, 4049–4058
DOI: 10.1055/a-1828-5837

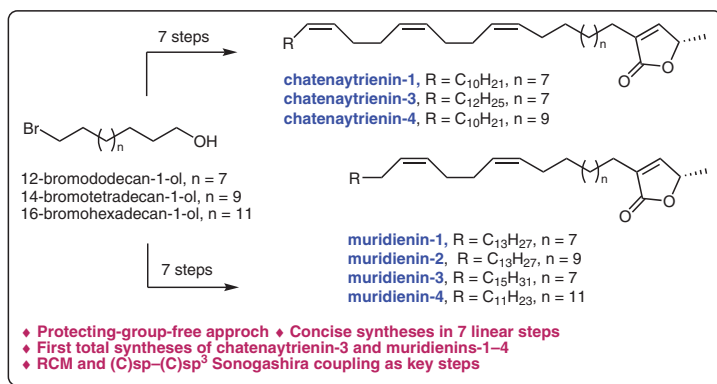
N. Chandra
R. A. Fernandes*

Indian Institute of Technology-
Bombay, India

Total Synthesis of Chatenaytrienins-1, -3 and -4 and Muridienins-1–4 Enabled by C(sp)–C(sp³) Sonogashira Coupling

Paper

4049



Synthesis

Synthesis 2022, 54, 4059–4094
DOI: 10.1055/a-1830-3962

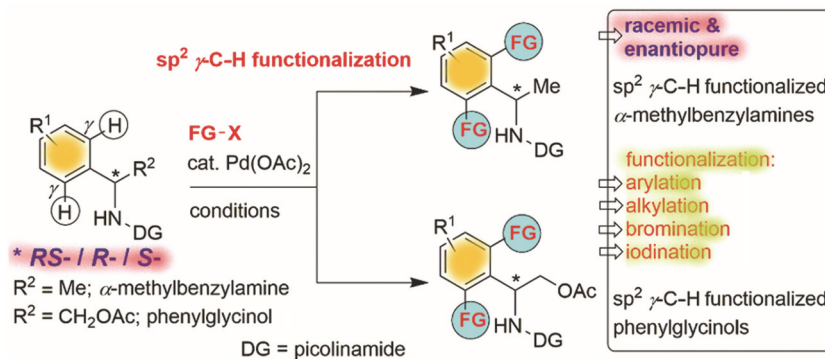
N. Bisht
P. Singh
S. A. Babu*

Indian Institute of Science Edu-
cation and Research (IISER) Mo-
hali, India

Pd(II)-Catalyzed, Picolinamide-Aided γ -(sp²)-C–H Functionalization of Racemic and Enantiopure α -Methylbenzylamine and Phenylglycinol Scaffolds

Paper

4059



Synthesis

Synthesis 2022, 54, 4095–4103
DOI: 10.1055/a-1835-2188

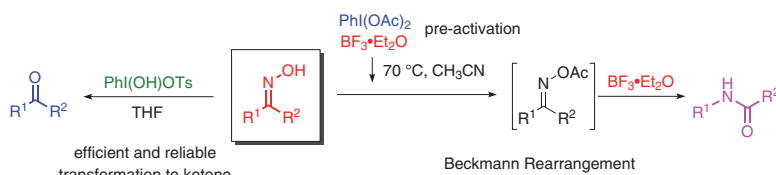
T. Maegawa*
R. Oishi
A. Maekawa
K. Segi
H. Hamamoto
A. Nakamura
Y. Miki*

Kindai University, Japan

The Reaction of Ketoximes with Hypervalent Iodine Reagents: Beckmann Rearrangement and Hydrolysis to Ketones

Paper

4095



Synthesis

Synthesis 2022, 54, 4104–4110
DOI: 10.1055/a-1817-2079

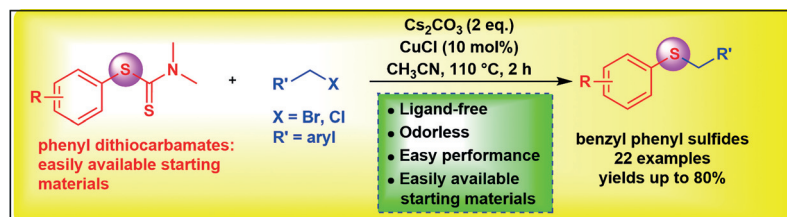
Y. Zhou
C.-L. Yang
L. Ye
Z.-B. Dong*

Wuhan Institute of Technology,
P. R. of China
Hubei Minzu University,
P. R. of China

Copper-Catalyzed C–S Formation for the Synthesis of Benzyl Phenyl Sulfides from Dithiocarbamates

Paper

4104



Synthesis

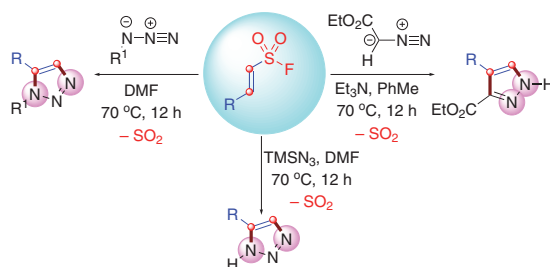
Synthesis 2022, 54, 4111–4119
DOI: 10.1055/s-0041-1737485

K. Sandeep
A. Sanjeeva Kumar
A. A. Qureshi
K. C. Kumara Swamy*
University of Hyderabad, India

(3+2) Cycloadditions of Vinyl Sulfonyl Fluorides with Ethyl Diazoacetate or Azides: Metal-Free Synthesis of Pyrazole and Triazole Scaffolds via SO_2 Elimination

Paper

4111



Synthesis

Synthesis 2022, 54, 4120–4128
DOI: 10.1055/a-1823-3604

M. Kirihara*
S. Yamahara
T. Okada
H. Matsumuro
Y. Kinoshita
A. Kitajima
Y. Takamura
T. Odagiri
T. Asawa
Y. Sugiyama
Y. Kimura*

Shizuoka Institute of Science and
Technology, Japan
Iharanikkei Chemical Industry
Co. Ltd., Japan

Synthesis of Sulfonyl Halides from Disulfides or Thiols Using Sodium Hypochlorite Pentahydrate ($\text{NaOCl}\cdot 5\text{H}_2\text{O}$) Crystals

Paper

4120

