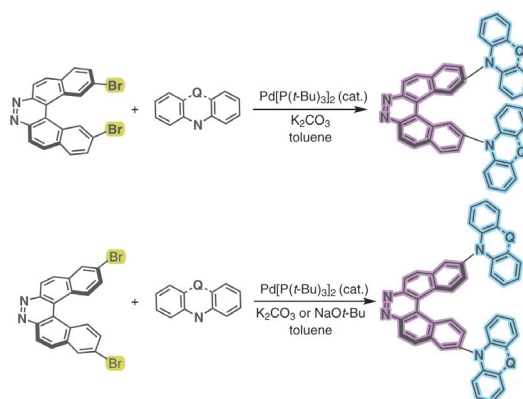


Synthesis

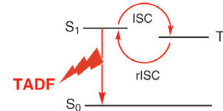
Reviews and Full Papers in Chemical Synthesis

May 4, 2021 • Vol. 53, 1531–1682



New Helical Luminophores featured with

- efficient photoluminescence
- mechanochromic luminescence (MCL)
- circularly polarized luminescence (CPL)
- thermally activated delayed fluorescence (TADF)



Peripherally Donor-Installed 7,8-Diaza[5]helicenes as a Platform for Helical Luminophores

Y. Ikari, T. Kaihara, S. Goto, M. Bovenkerk, D. C. Grenz, B. Esser, M. Ferreira, P. Stachelek, P. Data, T. Yoshida, T. Ikai, N. Tohnai, S. Minakata, Y. Takeda

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Synthesis

Recent Advancements in Pyrrole Synthesis

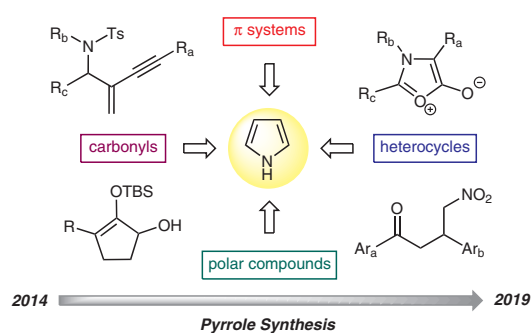
Review

1531

Synthesis 2021, 53, 1531–1555
DOI: 10.1055/s-0040-1706713

S. C. Philkhana
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Synthesis

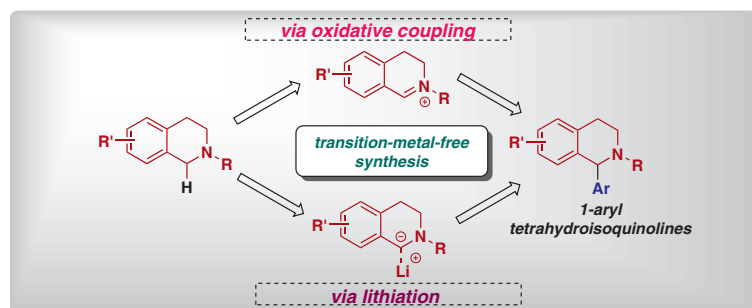
Transition-Metal-Free Strategies for the Synthesis of C-1 Aryl-Substituted Tetrahydroisoquinolines

Short Review

1556

Synthesis 2021, 53, 1556–1569
DOI: 10.1055/a-1344-2074

P. Singh*
A. Batra
K. N. Singh
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Synthesis

Synthesis 2021, 53, 1570–1583
DOI: 10.1055/a-1344-2473

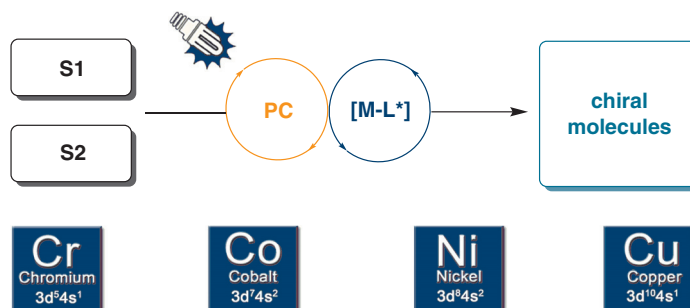
Y. Li
Z. Ye
J. Cai
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Visible-Light-Promoted Asymmetric Catalysis by Chiral Complexes of First-Row Transition Metals

Short Review

1570



Synthesis

Synthesis 2021, 53, 1584–1596
DOI: 10.1055/a-1343-5810

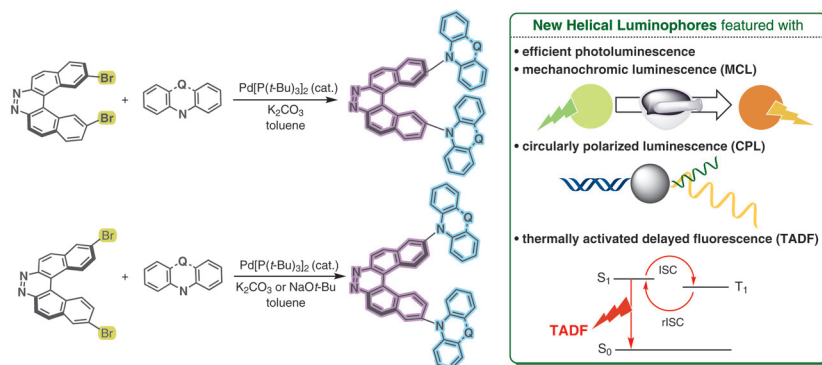
Y. Ikari, T. Kaihara
S. Goto, M. Bovenkerk
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Peripherally Donor-Installed 7,8-Diaza[5]helicenes as a Platform for Helical Luminophores

Feature

1584



Synthesis

Synthesis 2021, 53, 1597–1604
DOI: 10.1055/s-0040-1705976

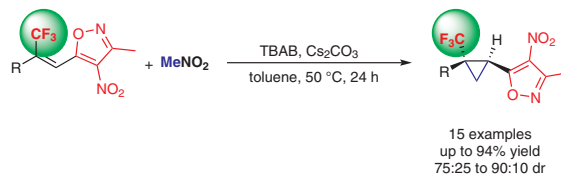
Q.-h. Zhao
G.-h. Yu
Y.-c. Meng
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An Efficient Substrate-Induced Method for the Synthesis of CF₃-Substituted Cyclopropanes by Metal-Free Reaction of Trifluoromethyl Styrylisoxazoles with Nitromethane

Paper

1597



Synthesis

Synthesis 2021, 53, 1605–1618
DOI: 10.1055/a-1337-5153

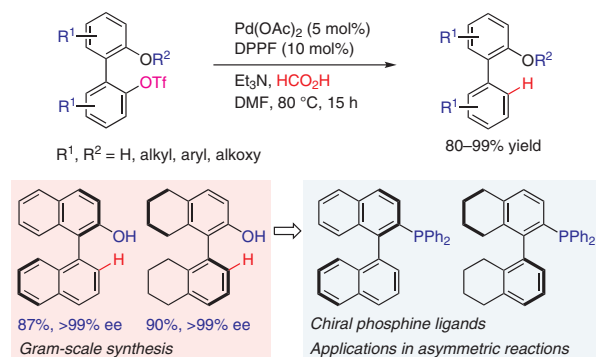
R. Li
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Homogeneous Palladium-Catalyzed Selective Reduction of 2,2'-Biphenols Using HCO₂H as Hydrogen Source

Paper

1605



Synthesis

Synthesis 2021, 53, 1619–1628
DOI: 10.1055/s-0040-1706000

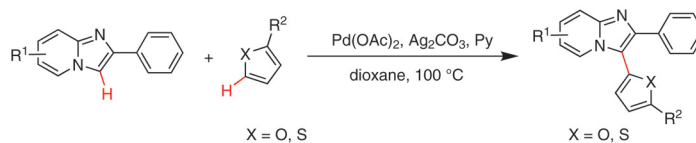
X. Chu
Y. Niu
X. Wang
Y. Lin
F. Li
C. Ma*

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Regioselective Oxidative Cross-Coupling Reaction: Synthesis of Imidazo[1,2-*a*]pyridine Fluorophores

Paper

1619



Synthesis

Synthesis 2021, 53, 1629–1635
DOI: 10.1055/a-1334-6982

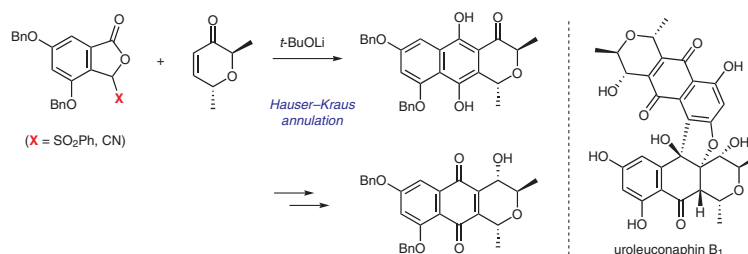
K. Kitamura*
H. Kanagawa
C. Ozakai
T. Nishimura
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T. Tsunoda
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Synthesis of the Common Monomeric Unit of Uroleuconaphins and Viridaphins via Hauser–Kraus Annulation

Paper

1629



Synthesis

Synthesis **2021**, 53, 1636–1644
DOI: 10.1055/a-1343-5642

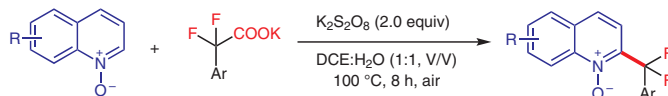
Y. Gao
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J. Liu*
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C2-gem-Aryldifluoromethylation of Quinoline N-Oxides with Potassium 2,2-Difluoro-2-arylacrylates under Transition-Metal-Free Conditions

Paper

1636



- rapid reaction
- simple operation
- 28 examples
- mild conditions
- wide substrate scope
- high yields up to 89%

Synthesis

Synthesis **2021**, 53, 1645–1653
DOI: 10.1055/s-0040-1706602

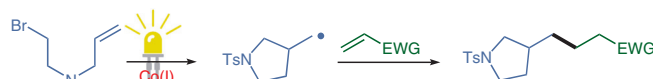
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Vitamin B₁₂-Catalyzed Dicarbofunctionalization of Bromoalkenes Under Visible Light Irradiation

Paper

1645



- 22 examples
- up to 95% yield
- natural, non-toxic catalyst
- short reaction time

Synthesis

Synthesis **2021**, 53, 1654–1662
DOI: 10.1055/a-1336-5720

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Oxidative C–H Acyloxylation of Acetone with Carboxylic Acids under Iodine Catalysis

Paper

1654



43 examples
56 to >99% yields

Synthesis

Synthesis 2021, 53, 1663–1671
DOI: 10.1055/s-0040-1706010

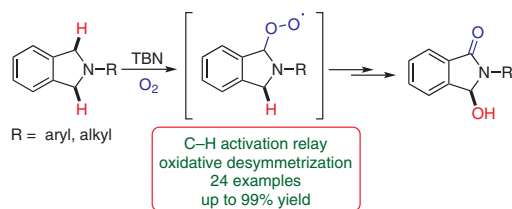
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S. Zhang
Y. Zhang
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Oxidative Desymmetrization of Isoindolines Realized by *tert*-Butyl Nitrite (TBN) Initiated Radical sp^3 C–H Activation Relay (CHAR)

Paper

1663



Synthesis

Synthesis 2021, 53, 1672–1682
DOI: 10.1055/a-1334-6916

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Synthesis of Amidation Agents and Their Reactivity in Condensation Reactions

Paper

1672

