Synlett

Accounts and
Rapid Communications
in Chemical Synthesis

2019
Vol. 30, No. 4
March I

Synlett

Nickel-Catalyzed Highly Atom-Economical C–C Coupling Reactions with π Components

Account

361

Synlett **2019**, *30*, 361–369
DOI: 10.1055/s-0037-1610410

L.-J. Xiao
M.-C. Ye*
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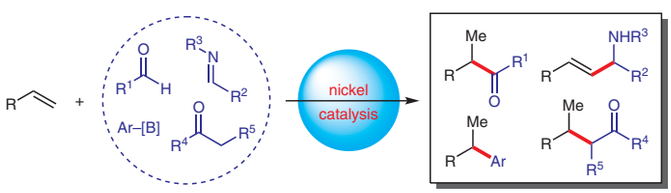
Nankai University, P. R. of China



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Symmetric Multiple Carbohelicenes

Account

370

Synlett **2019**, *30*, 370–377
DOI: 10.1055/s-0037-1610283

K. Kato
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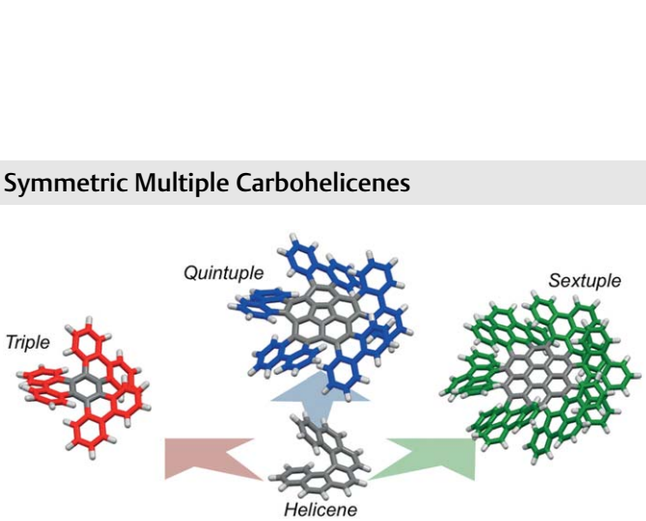

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Engineered Cytochrome *c*-Catalyzed Lactone-Carbene B–H Insertion

Letter

378

Synlett **2019**, *30*, 378–382
DOI: 10.1055/s-0037-1611662

K. Chen
X. Huang
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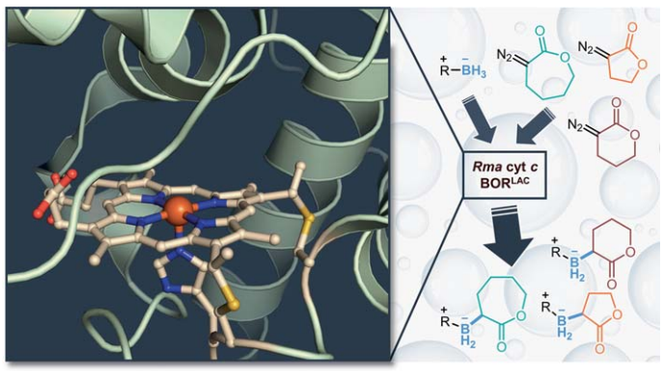
Zhejiang University, P. R. of China



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Concise Asymmetric Synthesis of Kweichowenol A

Letter

383

Synlett **2019**, *30*, 383–386
DOI: 10.1055/s-0037-1610390

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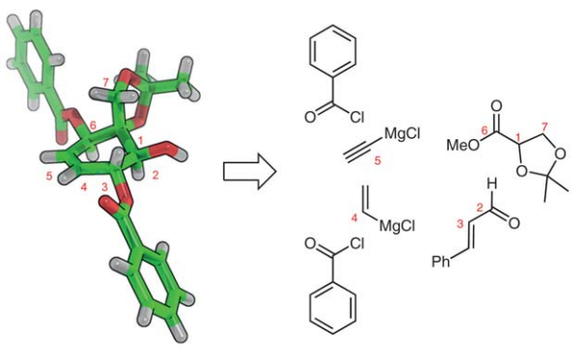
University Munich, Germany
New York University, USA



Kweichowenol A

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Highly Selective Reductive Cross-Amination between Aniline or Nitroarene Derivatives and Alkylamines Catalyzed by Polysilane-Immobilized Rh/Pt Bimetallic Nanoparticles

Letter

387

Synlett **2019**, *30*, 387–392
DOI: 10.1055/s-0037-1611341

A. Suzuki
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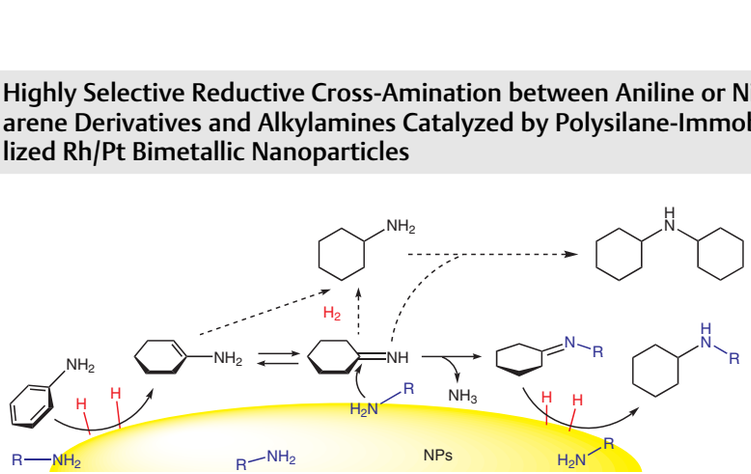

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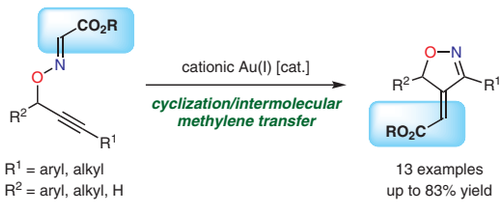
Synlett **2019**, *30*, 393–396
DOI: 10.1055/s-0037-1611640

Gold-Catalyzed Cyclization/Intermolecular Methylene Transfer Sequence of *O*-Propargylic Oximes Derived from Glyoxylates

Letter

393

S. Gima
K. Shiga
M. Terada
I. Nakamura*
Tohoku University, Japan



R^1 = aryl, alkyl
R^2 = aryl, alkyl, H

13 examples
up to 83% yield

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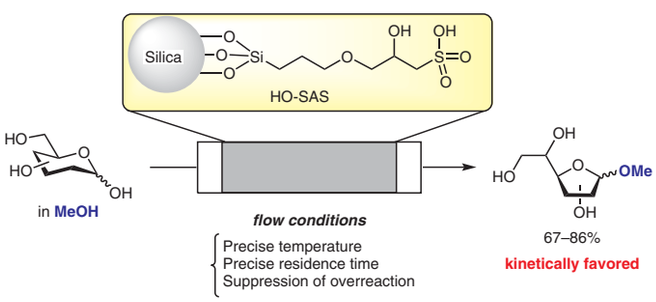
Synlett **2019**, *30*, 397–400
DOI: 10.1055/s-0037-1611643

Kinetically Controlled Fischer Glycosidation under Flow Conditions: A New Method for Preparing Furanosides

Letter

397

S. Masui
Y. Manabe
K. Hirao
A. Shimoyama
T. Fukuyama
I. Ryu
K. Fukase*
Osaka University, Japan



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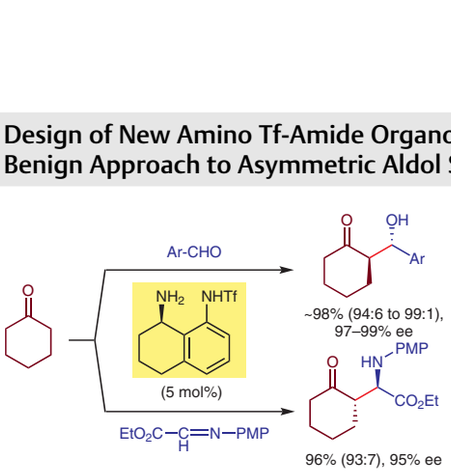
Synlett **2019**, *30*, 401–404
DOI: 10.1055/s-0037-1610408

Design of New Amino Tf-Amide Organocatalysts: Environmentally Benign Approach to Asymmetric Aldol Synthesis

Letter

401

H.-J. Lee
N. Arumugam
A. I. Almansour
R. S. Kumar
K. Maruoka*
Kyoto University, Japan



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Synlett **2019**, *30*, 405–412
DOI: 10.1055/s-0037-1611678

S. Rengshausen
F. Etscheidt
J. Großkurth
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A. Bordet
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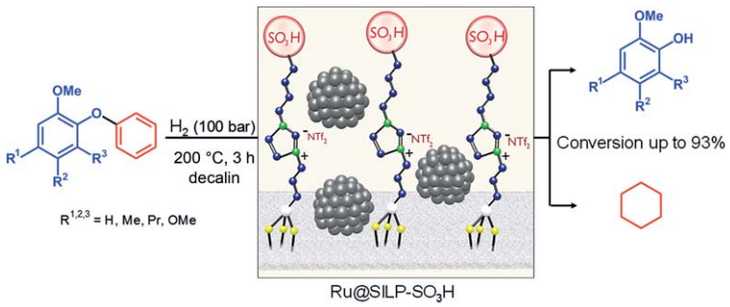
Max-Planck-Institut für Chemische Energiekonversion, Germany
RWTH Aachen University, Germany

Catalytic Hydrogenolysis of Substituted Diaryl Ethers by Using Ruthenium Nanoparticles on an Acidic Supported Ionic Liquid Phase (Ru@SILP-SO_3H)

Letter

405



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Synlett **2019**, *30*, 413–416
DOI: 10.1055/s-0037-1611652

A. Bauer
J.-H. Nam
N. Maulide*
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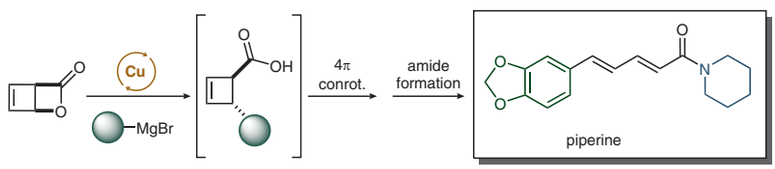
A Short, Efficient, and Stereoselective Synthesis of Piperine and its Analogues

Letter

413



- ✓Piperine synthesized in quantitative yield
- ✓Full stereocontrol
- ✓Modulation of the aryl and the amide moiety

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Synlett **2019**, *30*, 417–422
DOI: 10.1055/s-0037-1610861

M. Lee
A. Adams
P. B. Cox
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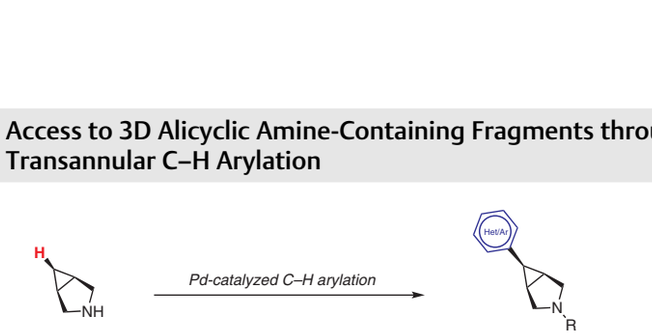
Access to 3D Alicyclic Amine-Containing Fragments through Transannular C–H Arylation

Letter

417



starting fragment
core amine

diverse fragment set
14 examples
high 3D character
optimal physicochemical properties

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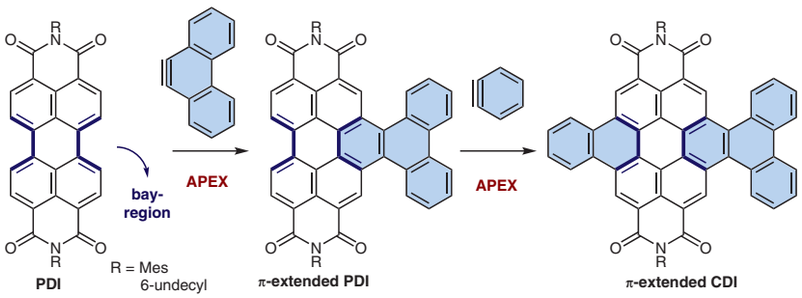
Synlett **2019**, *30*, 423–428
DOI: 10.1055/s-0037-1611668

T. Nakamuro
K. Kumazawa
H. Ito*
K. Itami*
Nagoya University, Japan

Bay-Region-Selective Annulative π-Extension (APEX) of Perylene Diimides with Arynes

Letter



Bay-region-selective annulative π-extension (APEX)
- One-step π-extension at unfunctionalized bay-region
- No halogenation/oxidation
- Two-directional APEX
- 5 examples of π-extended PDI and CDI with moderate yields

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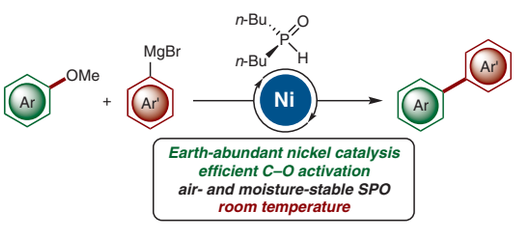
Synlett **2019**, *30*, 429–432
DOI: 10.1055/s-0037-1611663

D. Ghorai
J. Loup
G. Zanoni
L. Ackermann*
Georg-August-Universität, Germany

Air-Stable Secondary Phosphine Oxides for Nickel-Catalyzed Cross-Couplings of Aryl Ethers by C–O Activation

Letter



Earth-abundant nickel catalysis
efficient C–O activation
air- and moisture-stable SPO
room temperature

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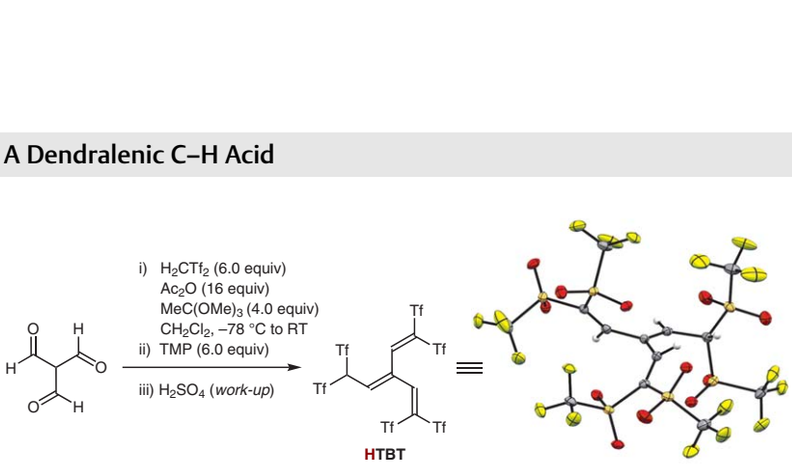
Synlett **2019**, *30*, 433–436
DOI: 10.1055/s-0037-1612246

D. Höfler
R. Goddard
N. Nöthling
B. List*
Max-Planck-Institut für Kohlenforschung, Germany

A Dendralenic C–H Acid

Letter



Synlett

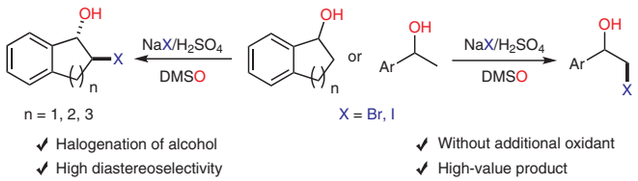
Synlett **2019**, *30*, 437–441
DOI: 10.1055/s-0037-1610385

L. Ai
W. Wang
J. Wei
Q. Li
S. Song*
N. Jiao*
Peking University, P. R. of China

Oxidative β-Halogenation of Alcohols: A Concise and Diastereoselective Approach to Halohydrins

Letter

437



Synlett

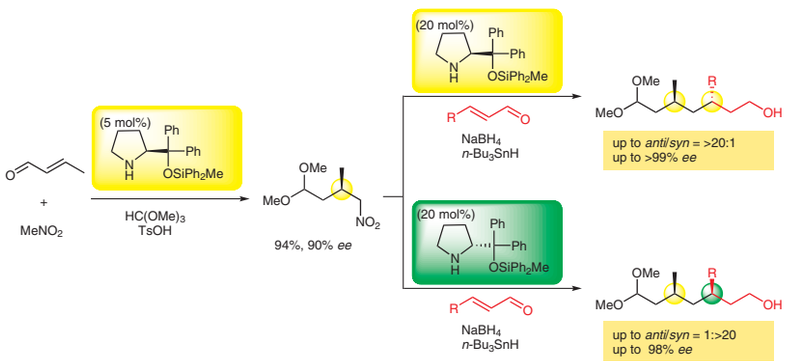
Synlett **2019**, *30*, 442–448
DOI: 10.1055/s-0037-1611644

Y. Hayashi*
S. Toda
Tohoku University, Japan

Asymmetric Synthesis of Chiral 1,3-Dimethyl Units Through a Double Michael Reaction of Nitromethane and Crotonaldehyde Catalyzed by Diphenylprolinol Silyl Ether

Letter

442



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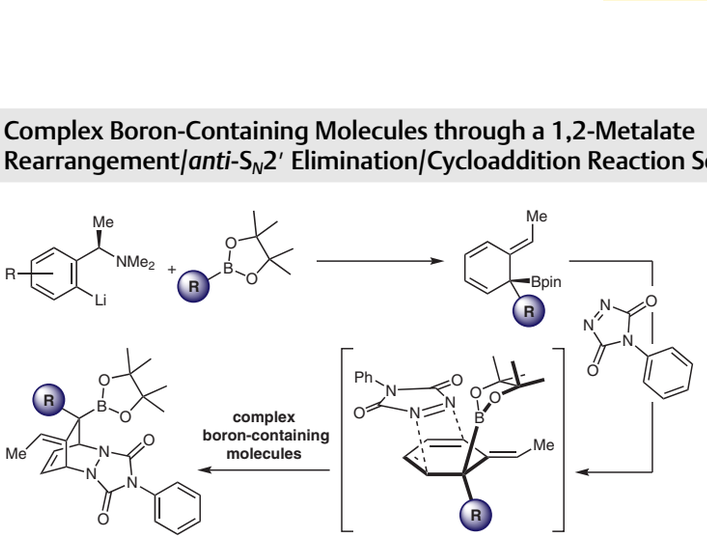
Synlett **2019**, *30*, 449–453
DOI: 10.1055/s-0037-1610389

C. Tillin
R. Bigler
R. Calo-Lapido
B. S. L. Collins
A. Noble
V. K. Aggarwal*
University of Bristol, UK

Complex Boron-Containing Molecules through a 1,2-Metalate Rearrangement/*anti*-S_N2' Elimination/Cycloaddition Reaction Sequence

Letter

449



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Palladium(II)-Catalyzed C(sp^3)–H Activation of N,O-Ketals towards a Method for the β-Functionalization of Ketones

Letter

454

Synlett **2019**, *30*, 454–458
DOI: 10.1055/s-0037-1611664

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J. Calleja
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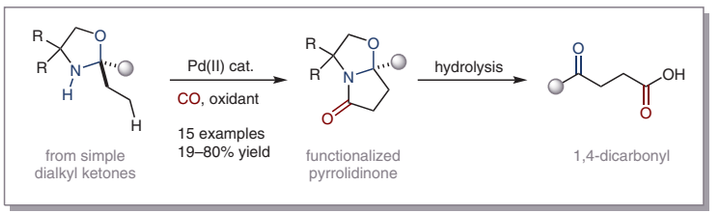
University of Cambridge, UK



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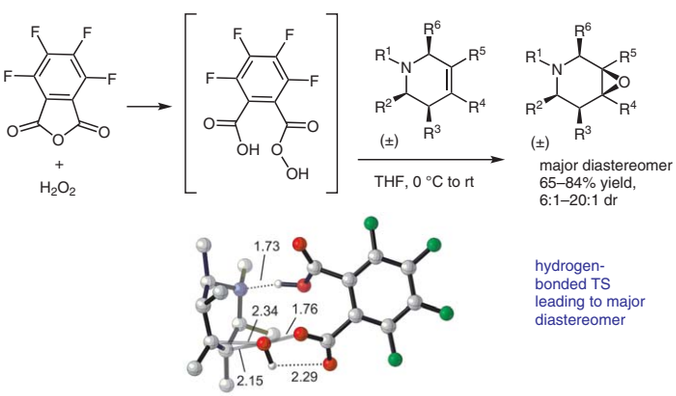
Origins of Contrasteric π-Facial Selectivity in Epoxidations of Encumbered Tetrahydropyridines by a Bifunctional Peracid

Letter

459

Synlett **2019**, *30*, 459–463
DOI: 10.1055/s-0037-1611674

S. Chen*
S. Wang
K. N. Houk*
University of California, USA



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Evidence for a Radical Mechanism in Cu(II)-Promoted SnAP Reactions

Letter

464

Synlett **2019**, *30*, 464–470
DOI: 10.1055/s-0037-1611670

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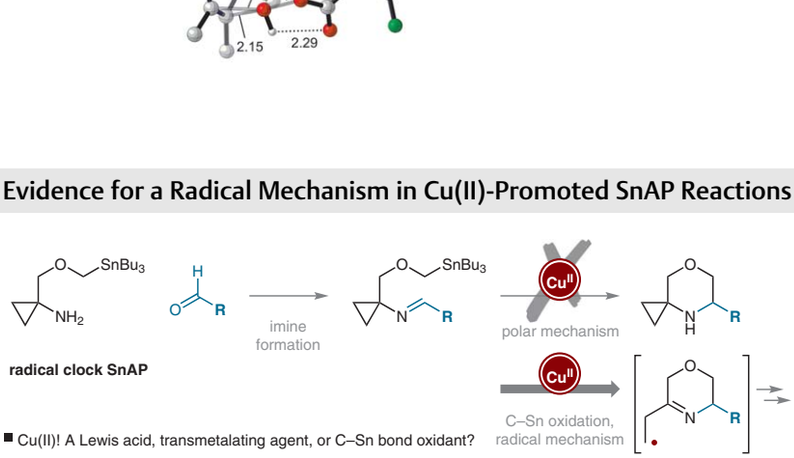
ETH Zurich, Switzerland



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A New Synthesis of Gefitinib

Letter

471

Synlett **2019**, *30*, 471–476
DOI: 10.1055/s-0037-1610375

T. S. Maskrey
T. Kristufek
M. G. LaPorte
P. R. Nyalapatla
P. Wipf*
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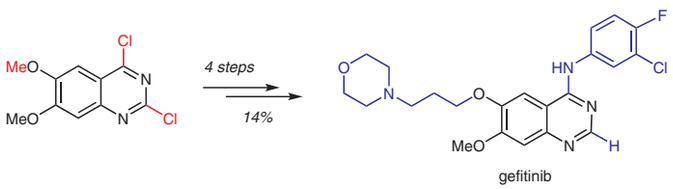

gefitinib

Synlett

Copper(I) Iodide-Catalyzed Asymmetric Synthesis of Optically Active Tertiary α-Allenols

Letter

477

Synlett **2019**, *30*, 477–482
DOI: 10.1055/s-0037-1611641

Q. Liu
T. Cao
Y. Han
X. Jiang
Y. Tang
Y. Zhai
S. Ma*
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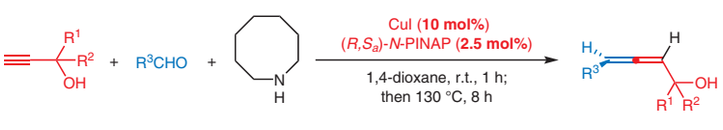

40–73%
up to 95% ee
(12 examples)

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Catalytic Enantioselective Synthesis of 4-Amino-1,2,3,4-tetrahydropyridine Derivatives from Intramolecular Nucleophilic Addition Reaction of Tertiary Enamides

Letter

483

Synlett **2019**, *30*, 483–487
DOI: 10.1055/s-0037-1610384

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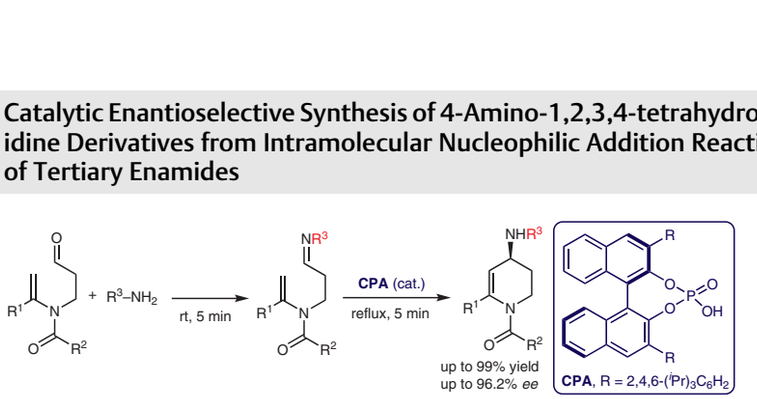
Tsinghua University, P. R. of China



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Synlett **2019**, *30*, 488–492
DOI: 10.1055/s-0037-1611642

J.-S. Yu
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N. Kumagai*
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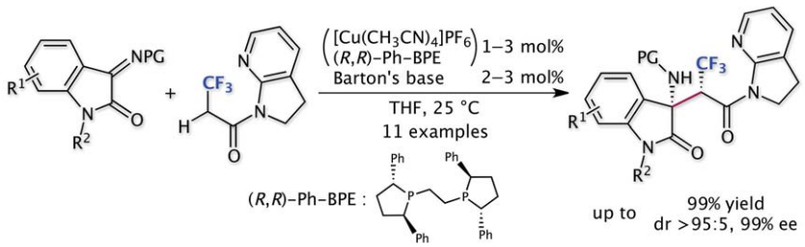
Institute of Microbial Chemistry (BIKAKEN), Japan

Direct Catalytic Asymmetric Mannich-Type Reaction of an α-CF_3 Amide to Isatin Imines

Letter

488



Synlett

Synlett **2019**, *30*, 493–498
DOI: 10.1055/s-0037-1610403

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L. Ochmann
J. Beppler
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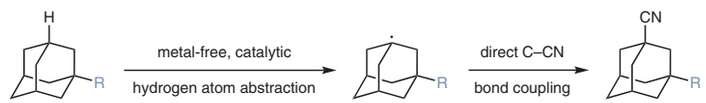
Selective Phthalimido-*N*-oxyl (PINO)-Catalyzed C–H Cyanation of Adamantane Derivatives

Letter

493



R = CH_3, Ph, CO_2Me, N_3, C≡C, CN, OR, NHR, Br

17 examples • up to 71% yield • high selectivity • cheap • substrate (1 equiv)

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Synlett **2019**, *30*, 499–502
DOI: 10.1055/s-0037-1611639

M. Miyagawa
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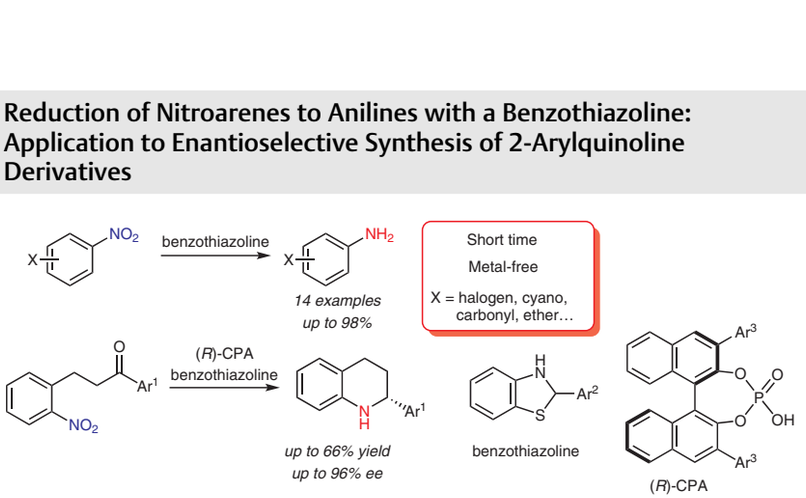
N. Kobayashi
T. Akiyama*
Gakushuin University, Japan

Reduction of Nitroarenes to Anilines with a Benzothiazoline: Application to Enantioselective Synthesis of 2-Arylquinoline Derivatives

Letter

499



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Manganese Catalyzed Asymmetric Transfer Hydrogenation of Ketones Using Chiral Oxamide Ligands

Letter

503

Synlett **2019**, *30*, 503–507
DOI: 10.1055/s-0037-1611669

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K. Junge
M. Beller*
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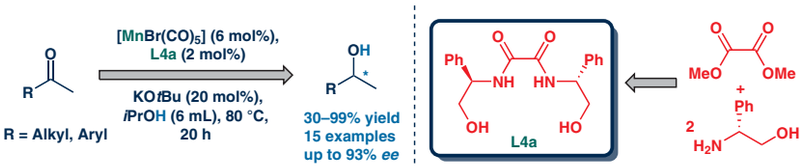

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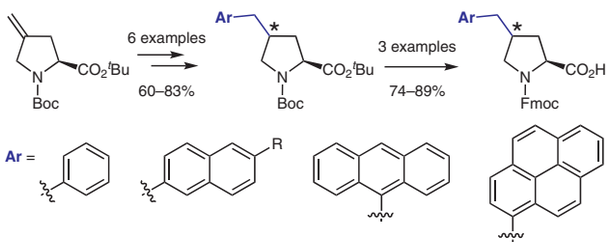
Synthesis of 4-(Arylmethyl)proline Derivatives

Letter

508

Synlett **2019**, *30*, 508–510
DOI: 10.1055/s-0037-1611672

S. Loosli
C. Foletti
M. Papmeyer
H. Wennemers*
ETH Zürich, Switzerland



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Photoinduced 1,2-Hydro(cyanomethylation) of Alkenes with a Cyanomethylphosphonium Ylide

Letter

511

Synlett **2019**, *30*, 511–514
DOI: 10.1055/s-0037-1612230

T. Miura*
D. Moriyama
Y. Funakoshi
M. Murakami*
Kyoto University, Japan

R = -$(CH_2)_2$Ph, -$(CH_2)_2$Ac, -$(CH_2)_3CO_2H$, -$(CH_2)_3$CN, -$(CH_2)_4$OH, -$(CH_2)_4$OBz, -$(CH_2)_5$Cl
ppy = 2-phenylpyridinato

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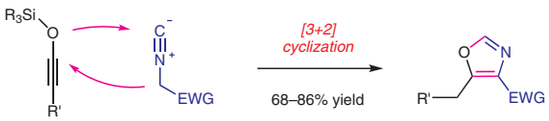
Synlett **2019**, *30*, 515–518
DOI: 10.1055/s-0037-1610402

A [3+2] Cyclization of Siloxyalkynes and Isocyanides for the Synthesis of Oxazoles

A. Wu
J. Sun*
The Hong Kong University of Science and Technology, P. R. of China



• mild conditions • high efficiency • metal-free