

Metal Catalysts

Rh-catalyzed Cycloaddition; Chiral Helicene



Accounts for C–C Bond Formation

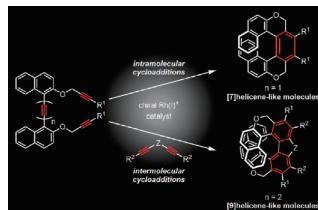
doi:10.1246/bcsj.20140291



Enantioselective Helicene Synthesis by Rhodium-Catalyzed [2+2+2] Cycloadditions

K. Tanaka

Ken Tanaka,* Yuki Kimura, and Koichi Murayama
Bull. Chem. Soc. Jpn. **2015**, *88*, 375–385



Fe Catalysis; Cross-coupling Reaction; X-ray Absorption Spectroscopy



BCSJ Award Article

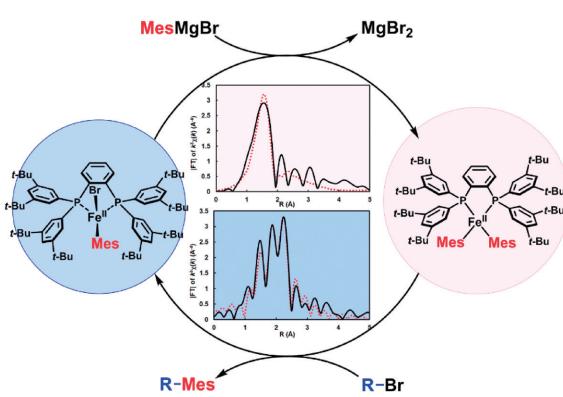
doi:10.1246/bcsj.20140376



Investigation of Organoiron Catalysis in Kumada–Tamao–Corriu-Type Cross-Coupling Reaction Assisted by Solution-Phase X-ray Absorption Spectroscopy

H. Takaya

Hikaru Takaya,* Sho Nakajima, Naohisa Nakagawa, Katsuhiro Itozaki, Takahiro Iwamoto, Ryuji Imaiishi, Nicholas J. Gower, Laksmitkanta Adak, Takuji Hatakeyama, Tetsuo Honma, Masafumi Takagaki, Yusuke Sunada, Hideo Nagashima, Daisuke Hashizume, Osamu Takahashi, and Masaharu Nakamura*
Bull. Chem. Soc. Jpn. **2015**, *88*, 410–418



Hollow-shaped Triethynylphosphine Ligands; Rh, Au Catalysts



Award Accounts

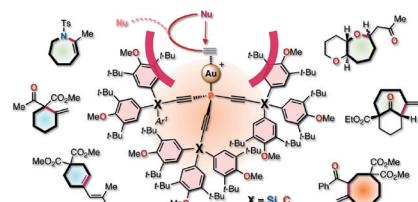
doi:10.1246/bcsj.20140186



Transition-Metal Catalysis with Hollow-Shaped Triethynylphosphine Ligands

M. Sawamura

Tomohiro Iwai and Masaya Sawamura*
Bull. Chem. Soc. Jpn. **2014**, *87*, 1147–1160



C–C Bond Formation; Ni Catalyst



Award Accounts

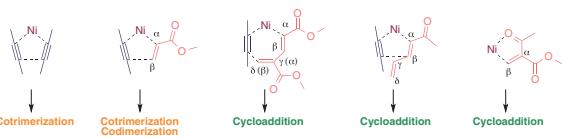
doi:10.1246/bcsj.20140158



Ni-Catalyzed C–C Bond Formation with α,β -Unsaturated Carbonyl Compounds and Alkynes

T. Kurahashi

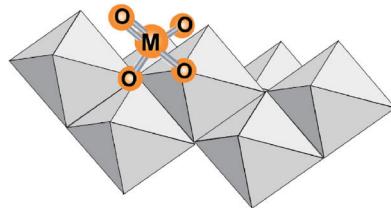
Takuya Kurahashi
Bull. Chem. Soc. Jpn. **2014**, *87*, 1058–1070





Heterogeneous Lewis Acid Catalysts Workable in Water

Michikazu Hara

Bull. Chem. Soc. Jpn. **2014**, *87*, 931-941

Indium(III)-Catalyzed Cationic Cyclization of 1,1-Difluoroallenes: Regioselective Synthesis of 1-Fluoronaphthalenes

J. Ichikawa

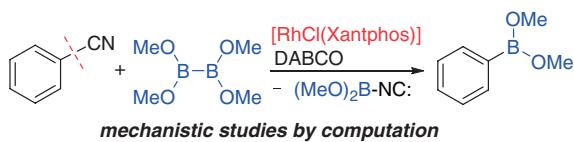
Kohei Fuchibe, Yuka Mayumi, Misaki Yokota, Hiromichi Aihara, and Junji Ichikawa*

Bull. Chem. Soc. Jpn. **2014**, *87*, 942-949

Theoretical Studies of Rhodium-Catalyzed Borylation of Nitriles through Cleavage of Carbon–Cyano Bonds

S. Mori

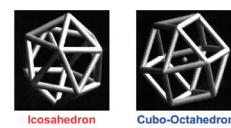
Hirotaka Kinuta, Hiroaki Takahashi, Mamoru Tobisu,* Seiji Mori,* and Naoto Chatani*

Bull. Chem. Soc. Jpn. **2014**, *87*, 655-669

Size- and Structure-specificity in Catalysis by Gold Clusters

M. Haruta

Ayako Taketoshi and Masatake Haruta*

Chem. Lett. **2014**, *43*, 380-387 $N_{\text{Icosahedron}} : N_{\text{Cubo-Octahedron}}$

58 : 42 7 : 93

CO Oxidation Efficiency (200 K)

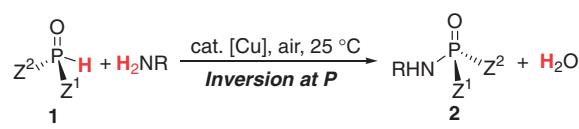
100% 4-6%



Stereospecific Aerobic Oxidative Dehydrocoupling of P(O)–H Bonds with Amines Catalyzed by Copper

L.-B. Han

Yongbo Zhou,* Jia Yang, Tieqiao Chen, Shuang-Feng Yin, Daoqing Han, and Li-Biao Han*

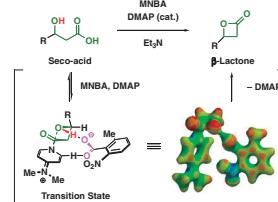
Bull. Chem. Soc. Jpn. **2014**, *87*, 400-402



An Adventurous Synthetic Journey with MNBA from Its Reaction Chemistry to the Total Synthesis of Natural Products

I. Shiina

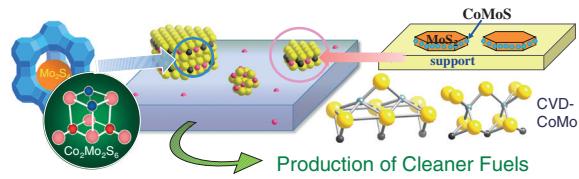
Isamu Shiina

Bull. Chem. Soc. Jpn. **2014**, *87*, 196-233

Novel Molecular Approaches to the Structure–Activity Relationships and Unique Characterizations of Co–Mo Sulfide Hydrodesulfurization Catalysts for the Production of Ultraclean Fuels

Y. Okamoto

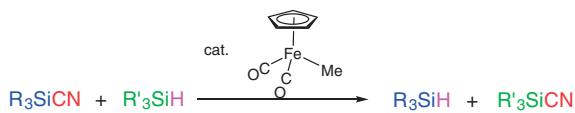
Yasuaki Okamoto

Bull. Chem. Soc. Jpn. **2014**, *87*, 20-58

Si–CN Bond Cleavage of Silyl Cyanides by an Iron Catalyst. A New Route of Silyl Cyanide Formation

H. Nakazawa

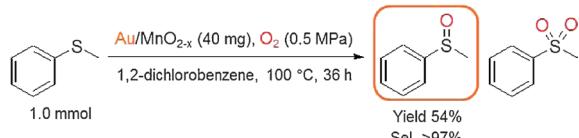
Andrea Renzetti, Nobuaki Koga, and Hiroshi Nakazawa*

Bull. Chem. Soc. Jpn. **2014**, *87*, 59-68

Aerobic Oxidation of Sulfides to Sulfoxides Catalyzed by Gold/Manganese Oxides

M. Haruta

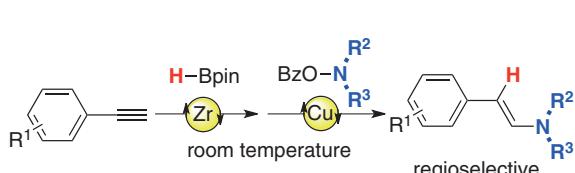
Ayako Taketoshi, Patricia Concepción, Hermenegildo García, Avelino Corma, and Masatake Haruta*

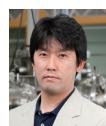
Bull. Chem. Soc. Jpn. **2013**, *86*, 1412-1418

Formal anti-Markovnikov Hydroamination of Terminal Aryl Alkynes with Pinacolborane and Hydroxylamines via Zr/Cu Sequential Catalysis

K. Hirano

Ryosuke Sakae, Koji Hirano,* Tetsuya Satoh, and Masahiro Miura*

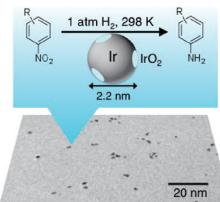
Chem. Lett. **2013**, *42*, 1128-1130



Selective Hydrogenation of Nitroaromatics by Colloidal Iridium Nanoparticles

T. Tsukuda

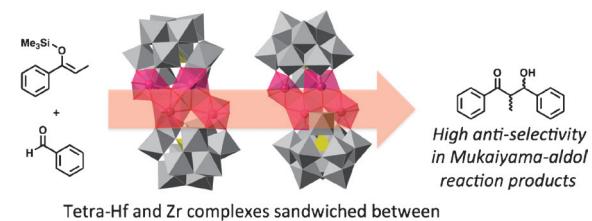
Md. J. Sharif, Prasenjit Maity,
Seiji Yamazoe, and Tatsuya Tsukuda*
Chem. Lett. 2013, 42, 1023-1025



Tetranuclear Hafnium(IV) and Zirconium(IV) Cationic Complexes Sandwiched between Two Di-Lacunary Species of α -Keggin Polyoxometalates: Lewis Acid Catalysis of the Mukaiyama–Aldol Reaction

K. Nomiya

Kenji Nomiya,* Kazuaki Ohta, Yoshitaka Sakai,
Taka-aki Hosoya, Atsushi Ohtake,
Akira Takakura, and Satoshi Matsunaga
Bull. Chem. Soc. Jpn. 2013, 86, 800-812



High anti-selectivity in Mukaiyama-aldo reaction products

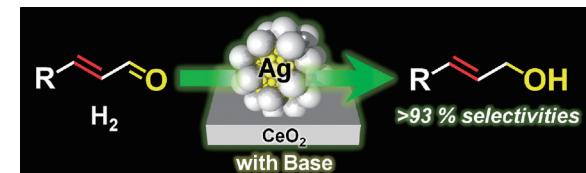
Tetra-Hf and Zr complexes sandwiched between two di-lacunary α -Keggin POMs



Remarkable Effect of Bases on Core–Shell AgNP@CeO₂ Nanocomposite-catalyzed Highly Chemoselective Reduction of Unsaturated Aldehydes

K. Kaneda

Takato Mitsudome, Motoshi Matoba,
Masaaki Yamamoto, Tomoo Mizugaki,
Koichiro Jitsukawa, and Kiyotomi Kaneda*
Chem. Lett. 2013, 42, 660-662



>93 % selectivities



Heterocyclic Carbene–Metal-catalyzed Csp²–Csp² and Csp–Csp² Couplings Using Nonmetallic Substrates

M. Yus

Miguel Yus* and Isidro M. Pastor*
Chem. Lett. 2013, 42, 94-108

