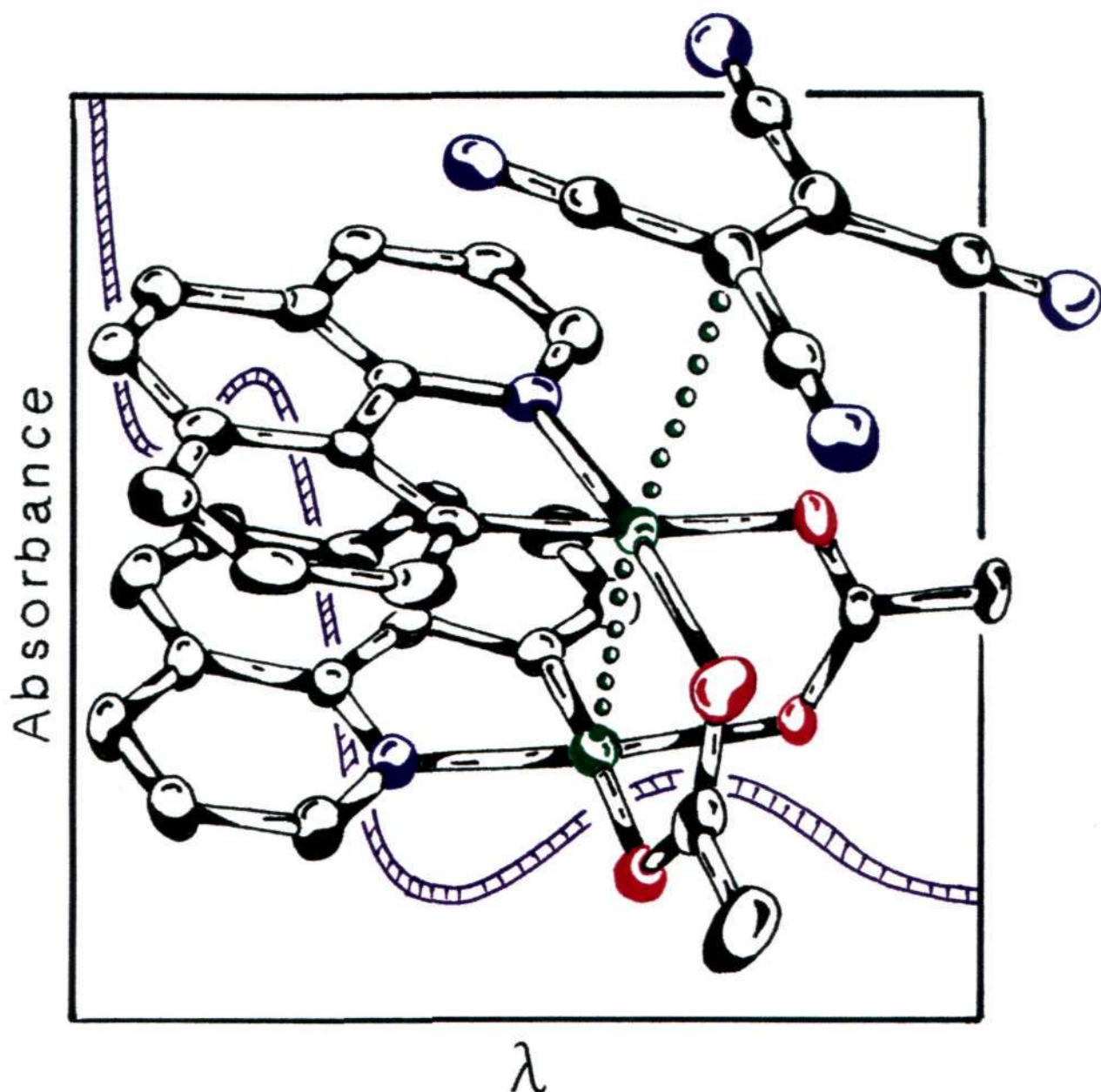


ORGANOMETALLICS



ON THE COVER: A charge-transfer complex between tetracyanoethylene and a dipalladium complex is reported and demonstrates that Pd–Pd bond formation accompanies oxidation during the conversion of binuclear Pd(II) complexes to binuclear Pd(III) complexes. See the paper by Ritter and Powers on pages 2042–2045. Image credit: Tamara M. Powers

Editor's Page

2041

Award-Winning Organometallic Chemistry: The 2012 Klung-Wilhelmy-Weberbank-Preis
John A. Gladysz

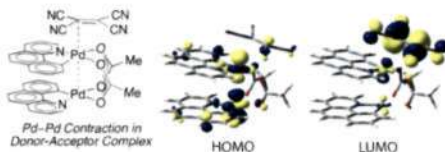
dx.doi.org/10.1021/om400203h


Communications

2042

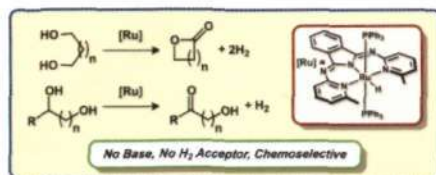


A Transition State Analogue for the Oxidation of Binuclear Palladium(II) to Binuclear Palladium(III) Complexes
David C. Powers and Tobias Ritter*

dx.doi.org/10.1021/om4000456


Base-Free, Acceptorless, and Chemoselective Alcohol Dehydrogenation Catalyzed by an Amide-Derived *NNN*-Ruthenium(II) Hydride Complex

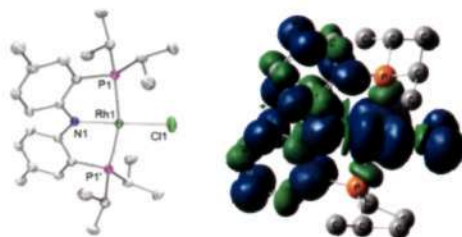
Kuei-Nin T. Tseng, Jeff W. Kampf, and Nathaniel K. Szymczak*



Articles

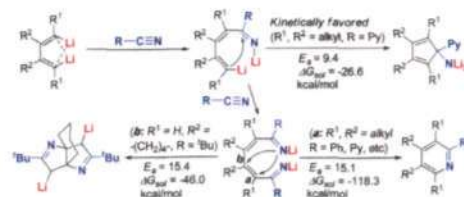
Monomeric Rhodium(II) Complexes Supported by a Diarylamido/Bis(phosphine) PNP Pincer Ligand and Their Reactivity Toward Dihydrogen

Dan A. Smith, David E. Herbert, Justin R. Walensky, and Oleg V. Ozerov*



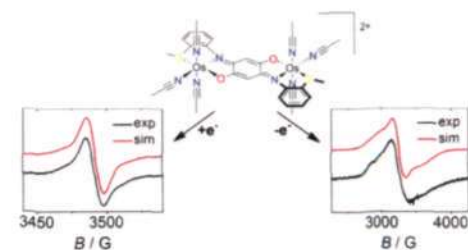
DFT Studies on the Reaction Mechanisms of 1,4-Dithio 1,3-Dienes with Nitriles

Fei Zhao, Ming Zhan, Wen-Xiong Zhang, and Zhenfeng Xi*



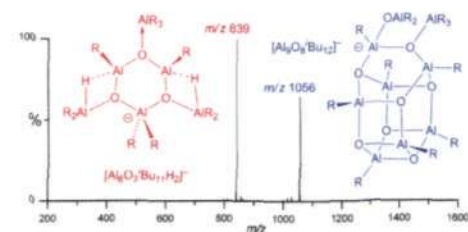
Substituent-Induced Reactivity in Quinonoid-Bridged Dinuclear Complexes: Comparison between the Ruthenium and Osmium Systems

Michael G. Sommer, David Schweinfurth, Fritz Weisser, Stephan Hohloch, and Biprajit Sarkar*



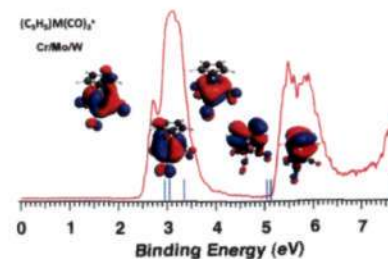
Characterization of Isobutylaluminoxanes by Electrospray Ionization Mass Spectrometry

Matthew A. Henderson, Tyler K. Trefz, Scott Collins, Miles Y. Wang, and J. Scott McIndoe*



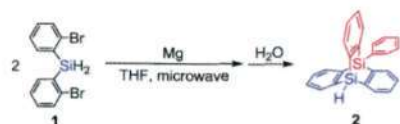
Metal-Centered 17-Electron Radicals CpM(CO)₃[•] (M = Cr, Mo, W): A Combined Negative Ion Photoelectron Spectroscopic and Theoretical Study

Edwin F. van der Eide, Gao-Lei Hou, S. H. M. Deng, Hui Wen, Ping Yang,* R. Morris Bullock,* and Xue-Bin Wang*



2092 **5** dx.doi.org/10.1021/om301170r

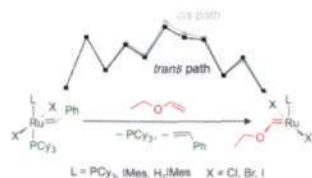
Microwave-Assisted Efficient One-Pot Synthesis of 9-Phenyl-9,10-disilatriptycene and Its Bridgehead Functionalization
Takayoshi Kuribara, Shintaro Ishida,* Takako Kudo, and Soichiro Kyushin*



2099 **5** dx.doi.org/10.1021/om301192a

Complete Reaction Pathway of Ruthenium-Catalyzed Olefin Metathesis of Ethyl Vinyl Ether: Kinetics and Mechanistic Insight from DFT

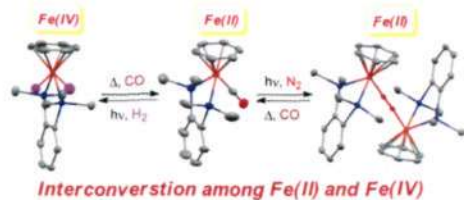
Yury Minenkov, Giovanni Occhipinti, and Vidar R. Jensen*



2112 **5** dx.doi.org/10.1021/om3012322

Disilametallacycles as a Platform for Stabilizing M(II) and M(IV) (M = Fe, Ru) Centers: Synthesis and Characterization of Half-Sandwich Complexes and Their Application to Catalytic Double Silylation of Alkenes and Alkynes

Yusuke Sunada,* Tsuyoshi Imaoka, and Hideo Nagashima

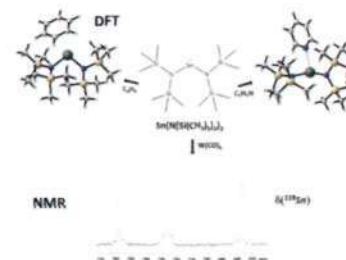


Interconversion among Fe(II) and Fe(IV)

2121 **5** dx.doi.org/10.1021/om3012344

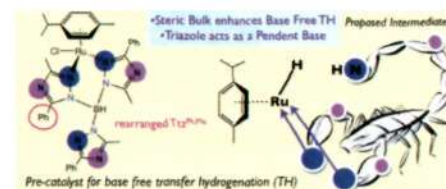
Combined NMR and DFT Study on the Complexation Behavior of Lappert's Tin(II) Amide

Lies Broeckart, Jan Turek, Roman Olejnik, Aleš Růžička, Monique Biesemans, Paul Geerlings, Rudolph Willem, and Frank De Proft*



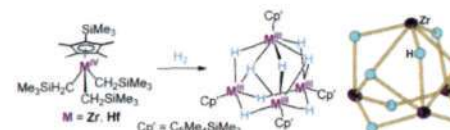
2135 **5** dx.doi.org/10.1021/om301260j

Ruthenium Complexes of Triazole-Based Scorpionate Ligands Transfer Hydrogen to Substrates under Base-Free Conditions
Mukesh Kumar, Joseph DePasquale, Nicholas J. White, Matthias Zeller, and Elizabeth T. Papish*



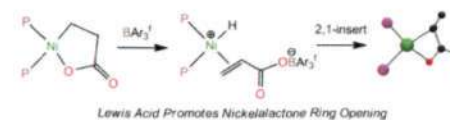
2145 **5** dx.doi.org/10.1021/om400012a

Tetranuclear Zirconium and Hafnium Polyhydride Complexes Composed of the "CpMH₂" Units
Shaowei Hu, Takanori Shima,* Yi Luo,* and Zhaomin Hou*



2152 **5** dx.doi.org/10.1021/om400025h

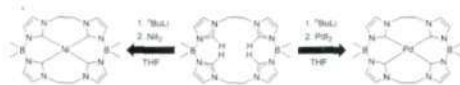
Lewis Acid Induced β -Elimination from a Nickelalactone: Efforts toward Acrylate Production from CO₂ and Ethylene
Dong Jin, Timothy J. Schmeier, Paul G. Williard, Nilay Hazari, and Wesley H. Bernskoetter*



Lewis Acid Promotes Nickelalactone Ring Opening

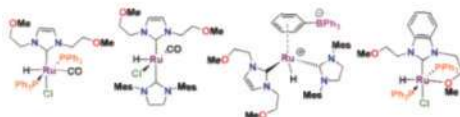
Employing Dianionic Macrocyclic Tetracarbenes To Synthesize Neutral Divalent Metal Complexes

Heather M. Bass, S. Alan Cramer, Alexander S. McCullough, Karl J. Bernstein, Christopher R. Murdock, and David M. Jenkins*

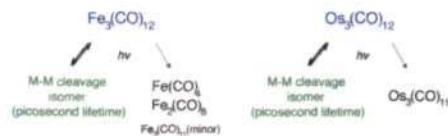


Ruthenium Carbene–Diether Ligand Complexes: Catalysts for Hydrogenation of Olefins

Tongren Wang, Conor Prankevicus, Clinton L. Lund, Michael J. Sgro, and Douglas W. Stephan*

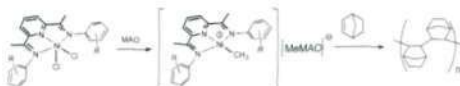
Picosecond TRIR Studies of $M_3(\text{CO})_{12}$ ($M = \text{Fe}, \text{Os}$) Clusters in Solution

Justin P. Lomont, Alex J. Shearer, Son C. Nguyen, and Charles B. Harris*



Formation of Cationic Intermediates upon the Activation of Bis(imino)pyridine Nickel Catalysts

Artem A. Antonov, Denis G. Samsonenko, Evgenii P. Talsi, and Konstantin P. Bryliakov*



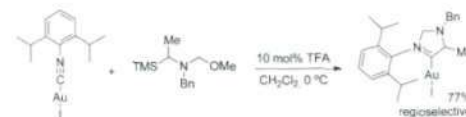
3-Bromopyridine As a Sixth Ligand in Sulfoxide-Based Hoveyda Complexes: A Study on Catalytic Properties

Karolina Żukowska, Anna Szadkowska, Bartosz Trzaskowski,* Aleksandra Pazio, Łukasz Pączek, Krzysztof Woźniak, and Karol Grela*



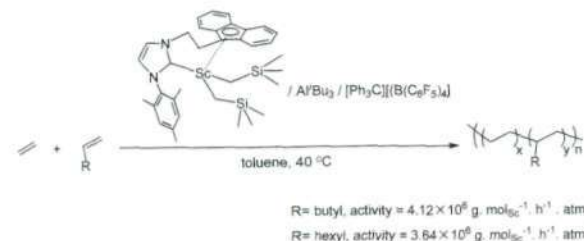
Saturated Abnormal NHC–Gold(I) Complexes: Synthesis and Catalytic Activity

Rubén Manzano, Frank Rominger, and A. Stephen K. Hashmi*

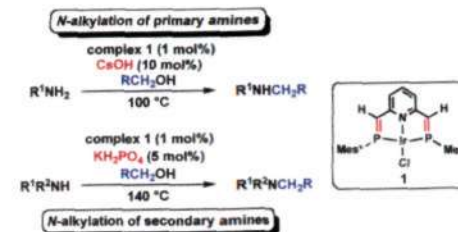


Copolymerization of Ethylene with 1-Hexene and 1-Octene Catalyzed by Fluorenyl N-Heterocyclic Carbene Ligated Rare-Earth Metal Precursors

Changguang Yao, Chunji Wu, Baoli Wang, and Dongmei Cui*

A Bis(phosphaethenyl)pyridine Complex of Iridium(I): Synthesis and Catalytic Application to *N*-Alkylation of Amines with Alcohols

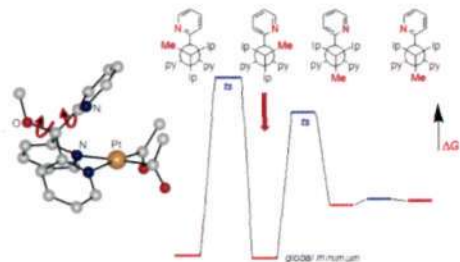
Yung-Hung Chang, Yumiko Nakajima, and Fumiyuki Ozawa*



2216 **5** dx.doi.org/10.1021/om400091h

Diacetylplatinum(II) Complexes with κ^2 -Coordinated Tris(pyridyl)methanol and Tris(pyridyl)methyl Ether Ligands: Structural Insight into the Ligand Dynamics in Solution

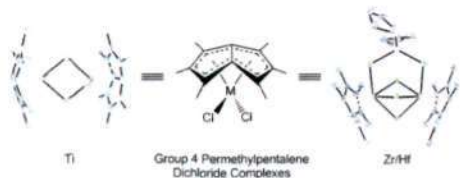
Martin Bette, Tim Kluge, Jürgen Schmidt, and Dirk Steinborn*



2228 **5** dx.doi.org/10.1021/om400103g

Synthesis and Characterization of Group 4 Permethylpentalene Dichloride Complexes

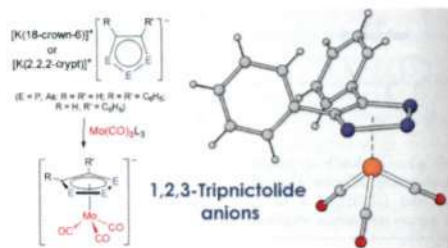
Robert T. Cooper, F. Mark Chadwick, Andrew E. Ashley, and Dermot O'Hare*



2234 **5** dx.doi.org/10.1021/om4001296

Synthesis and Characterization of Free and Coordinated 1,2,3-Tripnictolide Anions

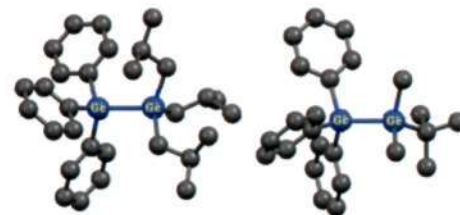
Robert S. P. Turbevill, Andrew R. Jupp, Phillip S. B. McCullough, Doruk Ergöçmen, and Jose M. Goicoechea*



2245 **5** dx.doi.org/10.1021/om400132z

Substituent Effects in Digermanes: Electrochemical, Theoretical, and Structural Investigations

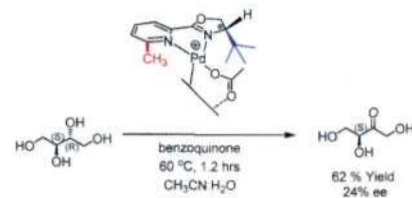
Erin K. Schrick, Trevor J. Forget, Kimberly D. Roewe, Aaron C. Schrick, Curtis E. Moore, James A. Golen, Arnold L. Rheingold, Nicholas F. Materer, and Charles S. Weinert*



2257 **5** dx.doi.org/10.1021/om4001549

Chemoselective Oxidation of Polyols with Chiral Palladium Catalysts

Antonio G. De Crisci, Kevin Chung, Allen G. Oliver, Diego Solis-Ibarra, and Robert M. Waymouth*



Notes

2267 **5** dx.doi.org/10.1021/om301175p

A Base-Stabilized 2-Silaallene

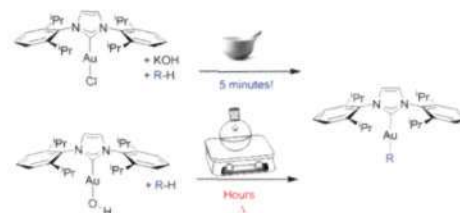
Yi-Fan Yang, Cechao Foo, Hong-Wei Xi, Yongxin Li, Kok Hwa Lim, and Cheuk-Wai So*



2271 **5** dx.doi.org/10.1021/om301187a

Synthesis of *N*-Heterocyclic Carbene Gold Complexes Using Solution-Phase and Solid-State Protocols

Jonathan D. Egbert, Alexandra M. Z. Slawin, and Steven P. Nolan*



2275

[dx.doi.org/10.1021/om4001692](https://doi.org/10.1021/om4001692)

Correction to Synthesis and Characterization of Paramagnetic Lanthanide Benzyl Complexes

Wenliang Huang, Brianna M. Upton, Saeed I. Khan, and Paula L. Diaconescu*