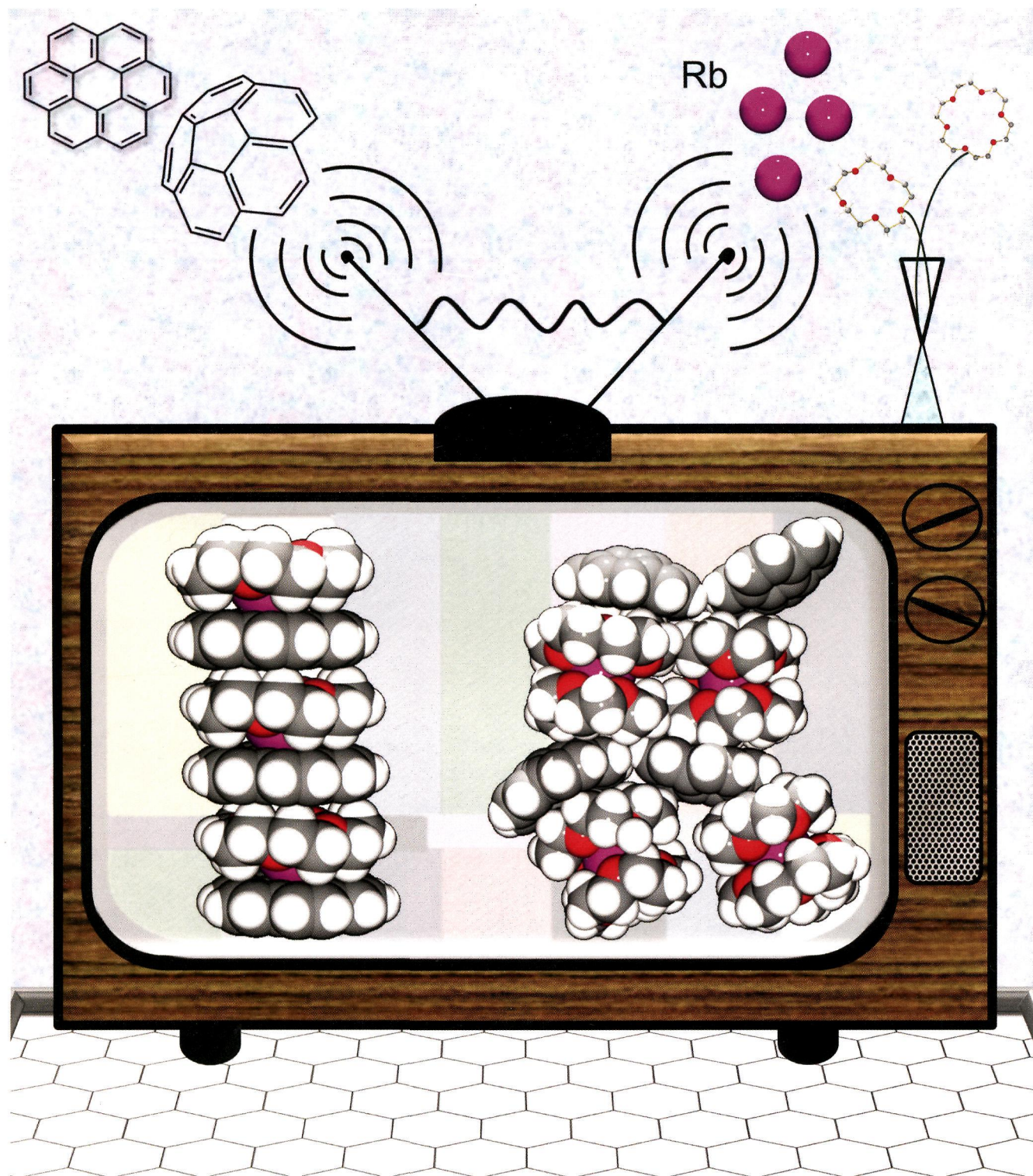


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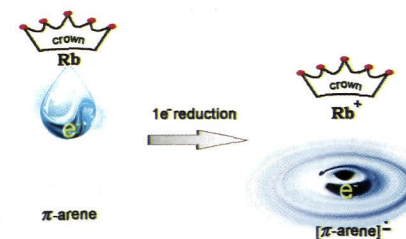
ON THE COVER: Petrukhina et al. demonstrate how the variations of macrocyclic crown ethers can be used to tune the binding of Rb^+ ions to planar and curved negatively charged π surfaces. This retro-style cover contemplates how the fine tuning of signals was necessary to achieve the desired image on the television screen. See the paper on pages 3773–3779.

Articles

 3773 
[dx.doi.org/10.1021/om4001617](https://doi.org/10.1021/om4001617)

Tuning Binding of Rubidium Ions to Planar and Curved Negatively Charged π Surfaces

Sarah N. Spisak, Natalie J. Sumner, Alexander V. Zabula, Alexander S. Filatov, Andrey Yu. Rogachev, and Marina A. Petrukhina*

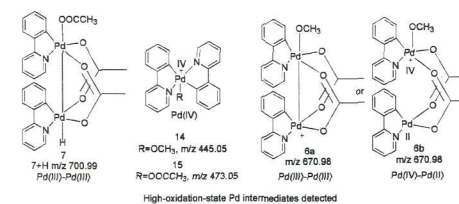


Communications

 3780 
[dx.doi.org/10.1021/om301195k](https://doi.org/10.1021/om301195k)

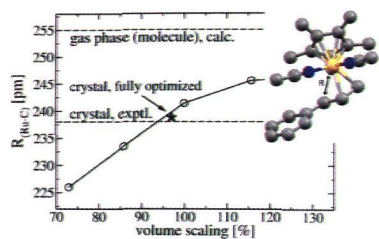
Investigation of the Mechanisms of Palladium-Catalyzed C–H Acetoxylation and Methoxylation by Electrospray Ionization Mass Spectrometry

Lijuan Guo, Yu Xu,* Xiaojing Wang, Wenjing Liu, and Dapeng Lu



Influence of Crystal Packing on an Organometallic Ruthenium(IV) Complex Structure: The Right Distance for the Right Reason

Jonas Moellmann and Stefan Grimme*

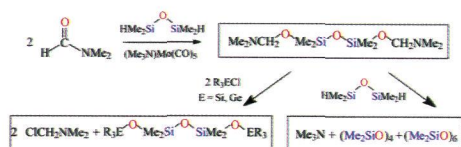


Articles

3788 5

dx.doi.org/10.1021/om301206c

(Me₃N)Mo(CO)₅-Catalyzed Reduction of DMF by Disiloxane and Disilane Moieties: Fate of the Silicon-Containing Fragments
Hemant K. Sharma, Renzo Arias-Ugarte, David Tomlinson, Rie Gappa, Alejandro J. Metta-Magaña, Haruhiko Ito, and Keith H. Pannell*

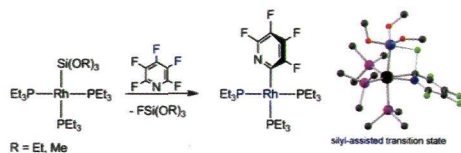


3795 5

dx.doi.org/10.1021/om400150p

Rhodium(I) Silyl Complexes for C–F Bond Activation Reactions of Aromatic Compounds: Experimental and Computational Studies

Anna Lena Raza, Julien A. Panetier, Michael Teltewskoi, Stuart A. Macgregor,* and Thomas Braun*

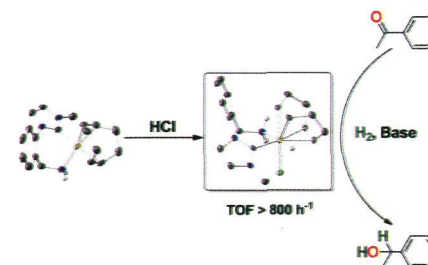


3808 5

dx.doi.org/10.1021/om400180h

Primary Amine Functionalized N-Heterocyclic Carbene Complexes of Iridium: Synthesis, Structure, and Catalysis

Wylie W. N. O, Alan J. Lough, and Robert H. Morris*

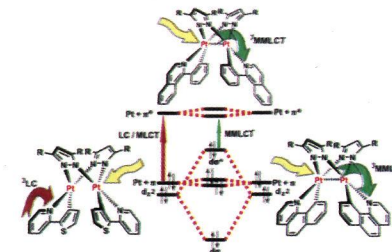


3819 5

dx.doi.org/10.1021/om400276v

Charge-Transfer and Ligand-Localized Photophysics in Luminescent Cyclometalated Pyrazolate-Bridged Dinuclear Platinum(II) Complexes

Arnab Chakraborty, Joseph C. Deaton, Alexandre Haefele, and Felix N. Castellano*

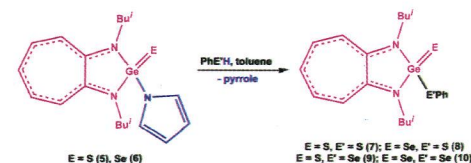


3830 5

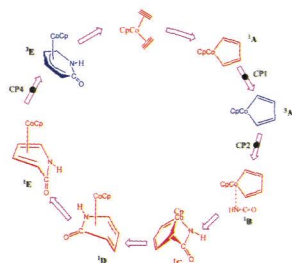
dx.doi.org/10.1021/om4003158

Synthesis and Reactivity of N-Aminotroponiminatogermolenepyrrole and Its Derivatives

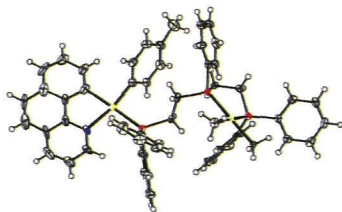
Surendar Karwasara, Mahendra Kumar Sharma, Rupali Tripathi, and Selvarajan Nagendran*



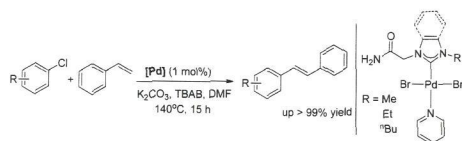
3837  dx.doi.org/10.1021/om400301y
Theoretical Study on the Two-State Reaction Mechanism for the Formation of a Pyridin-2-one Cobalt Complex from Cobaltacyclopentadiene and Isocyanate
 LingLing Lv,* XiaoFang Wang, YuanCheng Zhu, XinWen Liu, XianQiang Huang, and YongCheng Wang



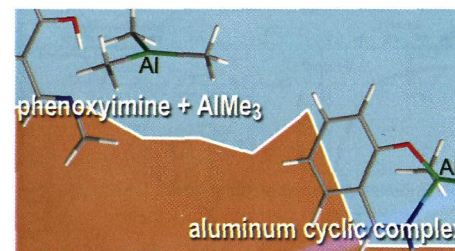
3850 dx.doi.org/10.1021/om400322s
Bridging and Chelating Roles of Bis(2-(diphenylphosphino)ethyl)phenylphosphine in Stabilizing Binuclear Platinum(II) Complexes
 Fatemeh Raof, Ahmad R. Esmailbeig,* S. Masoud Nabavizadeh,* Fatemeh Niroomand Hosseini, and Maciej Kubicki




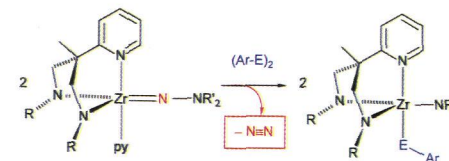
3859  dx.doi.org/10.1021/om4003297
Efficient PEPPSI-Themed Palladium N-Heterocyclic Carbene Precatalysts for the Mizoroki–Heck Reaction
 Yong-Chieh Lin, Hsin-Hsueh Hsueh, Shanker Kanne, Li-Kuang Chang, Fu-Chen Liu,* Ivan J. B. Lin,* Gene-Hsiang Lee, and Shie-Ming Peng



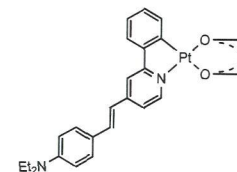
3870  dx.doi.org/10.1021/om4003347
Impact of Organoaluminum Compounds on Phenoxyimine Ligands in Coordinative Olefin Polymerization. A Theoretical Study
 Zygmunt Flisak,* Grzegorz P. Spaleniak, and Maria Bremmek



3877  dx.doi.org/10.1021/om400337g
Zirconium Hydrazides as Metallanitrene Synthons: Release of Molecular N₂ from a Hydrazinediido Complex Induced by Oxidative N–N Bond Cleavage
 Thorsten Gehrmann, Julio Lloret-Fillol, Heike Herrmann, Hubert Wadeppohl, and Lutz H. Gade*

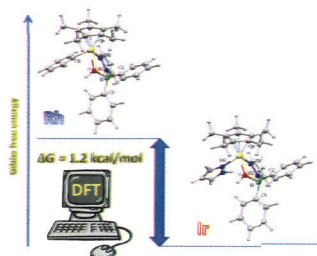


3890  dx.doi.org/10.1021/om4003472
Cyclometalated 4-Styryl-2-phenylpyridine Platinum(II) Acetylacetonate Complexes as Second-Order NLO Building Blocks for SHG Active Polymeric Films
 Alessia Colombo, Claudia Dragonetti, Daniele Marinotto, Stefania Righetto, Dominique Roberto,* Silvia Tavazzi, Muriel Escadeillas, Véronique Guerchais,* Hubert Le Bozec, Abdou Boucekkine, and Camille Latouche

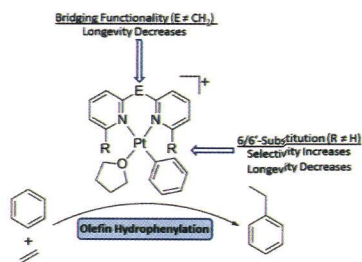


Boron Functionalization and Unusual B–C Bond Activation in Rhodium(III) and Iridium(III) Complexes with Diphenylbis(pyrazolylborate) Ligands (Ph₂Bp)

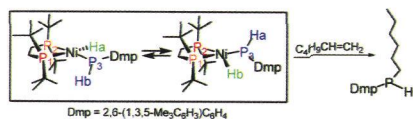
Riccardo Pettinari,* Claudio Pettinari, Fabio Marchetti, Magda Monari, Edoardo Mosconi, and Filippo De Angelis


Control of Olefin Hydroarylation Catalysis via a Sterically and Electronically Flexible Platinum(II) Catalyst Scaffold

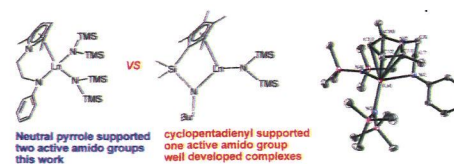
Bradley A. McKeown, Hector Emanuel Gonzalez, Thoe Michaelos, T. Brent Gunnoe,* Thomas R. Cundari,* Robert H. Crabtree, and Michal Sabat


Nickel Phosphanido Hydride Complex: An Intermediate in the Hydrophosphination of Unactivated Alkenes by Primary Phosphine

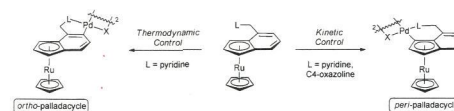
Yulia S. Ganushevich, Vasily A. Miluykov,* Fedor M. Polyancev, Shamil K. Latypov,* Peter Lönnecke, Evamarie Hey-Hawkins, Dmitry G. Yakhvarov, and Oleg G. Sinyashin


Novel Lanthanide Amides Incorporating Neutral Pyrrole Ligand in a Constrained Geometry Architecture: Synthesis, Characterization, Reaction, and Catalytic Activity

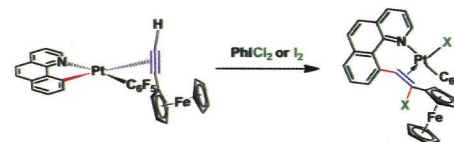
Fenhua Wang, Shaowu Wang,* Xiancui Zhu, Shuangliu Zhou,* Hui Miao, Xiaoxia Gu, Yun Wei, and Qingbing Yuan


Regioselective Cyclometalation of Planar Chiral Pyridine and Oxazoline Derivatives: *peri*- versus *ortho*-C–H Functionalization

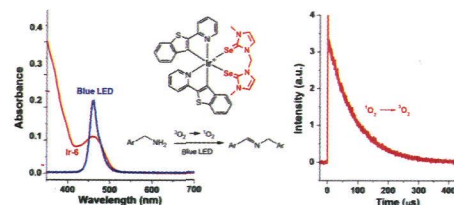
Audrey Mercier, Simon Wagschal, Laure Guénee, Céline Besnard, and E. Peter Kündig*


Unexpected Formation of Ferrocenyl(vinyl)benzoquinoline Ligands by Oxidation of an Alkyne Benzoquinolate Platinum(II) Complex

Jesús R. Berenguer, Julio Fernández, Nora Giménez, Elena Lalinde,* M. Teresa Moreno, and Sergio Sánchez*


Iridium Complexes Containing Bis(imidazoline thione) and Bis(imidazoline selone) Ligands for Visible-Light-Induced Oxidative Coupling of Benzylamines to Imines

Jaewon Jin, Hee-Won Shin, Joon Hyun Park, Ji Hoon Park, Eunuch Kim, Tae Kyu Ahn,* Do Hyun Ryu,* and Seung Uk Son*



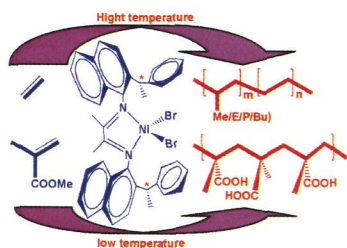
3960

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dx.doi.org/10.1021/om400433t

Chiral Naphthyl- α -diimine Nickel(II) Catalysts Bearing *sec*-Phenethyl Groups: Chain-Walking Polymerization of Ethylene at High Temperature and Stereoselective Polymerization of Methyl Methacrylate at Low Temperature

Jianchao Yuan,* Fuzhou Wang, Weibing Xu, Tongjian Mei, Jing Li, Bingnian Yuan, Fengying Song, and Zong Jia



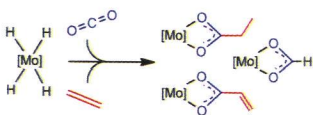
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dx.doi.org/10.1021/om400448m

Functionalization of Carbon Dioxide with Ethylene at Molybdenum Hydride Complexes

Yuanyuan Zhang, Brian S. Hanna, Andrew Dineen, Paul G. Williard, and Wesley H. Bernskoetter*



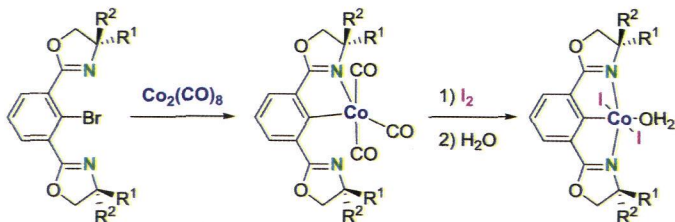
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dx.doi.org/10.1021/om400450u

NCN-Pincer Cobalt Complexes Containing Bis(oxazolinyl)phenyl Ligands

Satomi Hosokawa, Jun-ichi Ito,* and Hisao Nishiyama*



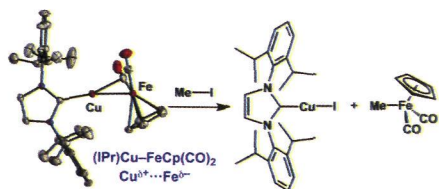
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dx.doi.org/10.1021/om400471u

Heterobimetallic Complexes with Polar, Unsupported Cu–Fe and Zn–Fe Bonds Stabilized by N-Heterocyclic Carbenes

Upul Jayarathne, Thomas J. Mazzacano, Sharareh Bagherzadeh, and Neal P. Mankad*



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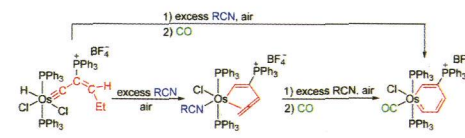
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dx.doi.org/10.1021/om400469e

Conversion of a Hydrido–Butenylcarbyne Complex to η^2 -Allene-Coordinated Complexes and Metallabenzenes

Jinxiang Chen, Chunhong Zhang, Tingwan Xie, Ting Bin Wen, Hong Zhang,* and Haiping Xia*



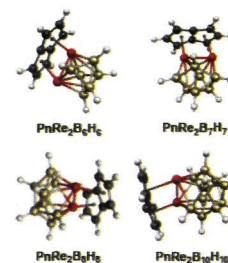
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dx.doi.org/10.1021/om400481c

Dimetallaboranes with Polyhedral Surface Metal–Metal Multiple Bonds: Deltahedral Dirhenaboranes with Pentanedirhenium Vertices

Alexandru Lupan and R. Bruce King*



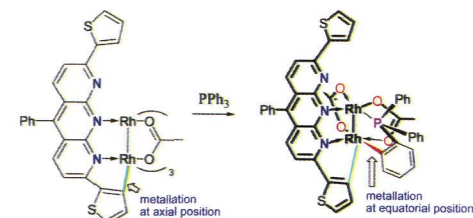
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dx.doi.org/10.1021/om400508a

Cyclometalation of Anthridine-Based Ligands with Dirhodium Acetates: Structure and Catalytic Activity

Da-wei Huang, Ying-Hao Lo, Yi-Hung Liu, Shie-Ming Peng, and Shih-Tzung Liu*



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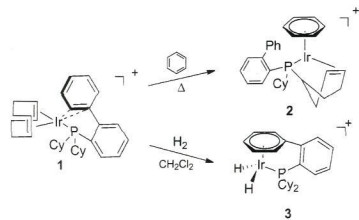
Notes

4016 

[dx.doi.org/10.1021/om400266d](https://doi.org/10.1021/om400266d)

Synthesis and Characterization of Iridium(I) and Iridium(III) Complexes Containing Dialkylbiphenylphosphines

Abby R. O'Connor,* Werner Kaminsky, Benny C. Chan, D. M. Heinekey, and Karen I. Goldberg

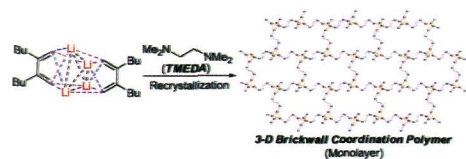



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[dx.doi.org/10.1021/om400531h](https://doi.org/10.1021/om400531h)

3-D Brick-Wall Polymeric Structure of TMEDA-Supported 1,4-Dithio-1,3-Butadiene

Shaoguang Zhang, Ming Zhan, Wen-Xiong Zhang,* and Zhenfeng Xi*



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