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COMMUNICATIONS

Homochiral Metal–Organic Frameworks for Heterogeneous Asymmetric Catalysis

Dongbin Dang, Pengyan Wu, Cheng He, Zhong Xie, and Chunying Duan

pp 14321–14323

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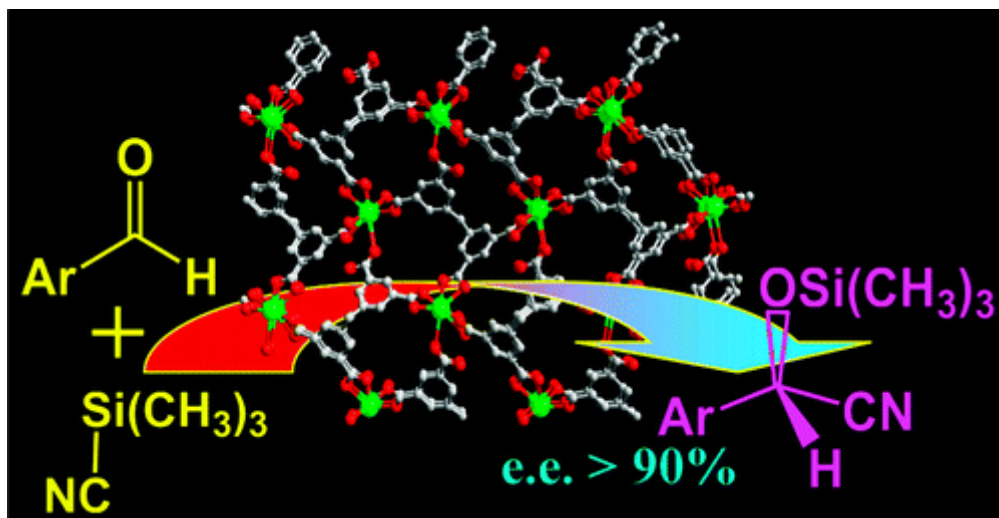


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Rhodium-Catalyzed Synthesis of Silafluorene Derivatives via Cleavage of Silicon–Hydrogen and Carbon–Hydrogen Bonds

Tomonari Ureshino, Takuya Yoshida, Yoichiro Kuninobu, and Kazuhiko Takai

pp 14324–14326

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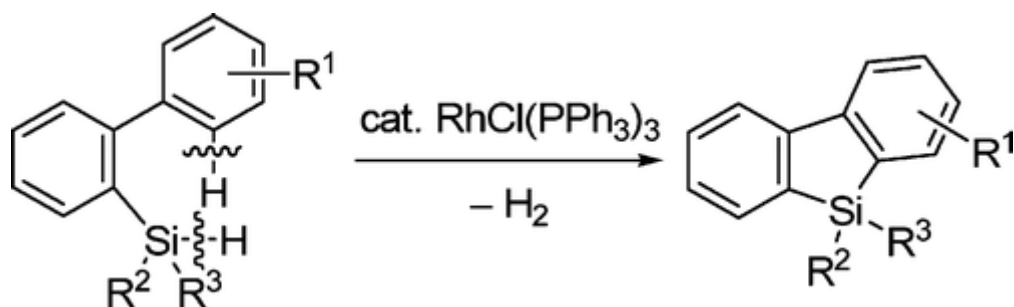


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Development of Stable Phosphohistidine Analogues

Jung-Min Kee, Bryeanna Villani, Laura R. Carpenter, and Tom W. Muir

pp 14327–14329

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DOI: 10.1021/ja104393t



A Straightforward Route to Functionalized *trans*-Diels–Alder Motifs

Jun Hee Lee, Yandong Zhang, and Samuel J. Danishefsky

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Caroline Bischof, Jessica Wahsner, Julia Scholten, Simon Trosien, and Michael Seitz

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DOI: 10.1021/ja107533m



Combination of Kinetically Selected Inhibitors *in Trans* Leads to Highly Effective Inhibition of Amyloid Formation

Fanling Meng, Daniel P. Raleigh, and Andisheh Abedini

pp 14340–14342

Publication Date (Web): September 28, 2010 (Communication)

DOI: 10.1021/ja1046186



Reversible Two-Photon Optical Data Storage in Coumarin-Based Copolymers

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An Electrochemical Supersandwich Assay for Sensitive and Selective DNA Detection in Complex Matrices

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Copper-Catalyzed Enantioselective Synthesis of *trans*-1-Alkyl-2-substituted Cyclopropanes via Tandem Conjugate Addition–Intramolecular Enolate Trapping

Tim den Hartog, Alena Rudolph, Beatriz Maci , Adriaan J. Minnaard, and Ben L. Feringa

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DOI: 10.1021/ja105704m



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Sonication-Assisted Synthesis of Large, High-Quality Mercury Thiolate Single Crystals Directly from Liquid Mercury

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Redox-Active Ligand-Mediated Oxidative Addition and Reductive Elimination at Square Planar Cobalt(III): Multielectron Reactions for Cross-Coupling

Aubrey L. Smith, Kenneth I. Hardcastle, and Jake D. Soper

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The Distance Between Donor and Acceptor Affects the Proportion of C1' and C2' Oxidation Products of DNA in a ^{Br}U-Containing Excess Electron Transfer System

Ryu Tashiro, Akimichi Ohtsuki, and Hiroshi Sugiyama

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Platinum-Monolayer Shell on AuNi_{0.5}Fe Nanoparticle Core Electrocatalyst with High Activity and Stability for the Oxygen Reduction Reaction

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Conformationally Flexible Dimeric Salphen Complexes for Bifunctional Catalysis

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DOI: 10.1021/ja106484t



A Viable Anionic N-Heterocyclic Dicarbene

Yuzhong Wang, Yaoming Xie, Mariham Y. Abraham, Pingrong Wei, Henry F. Schaefer, III, Paul v. R. Schleyer, and Gregory H. Robinson

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DOI: 10.1021/ja106631r



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General Approach to Epipolythiodiketopiperazine Alkaloids: Total Synthesis of (+)-Chaetocins A and C and (+)-12,12'-Dideoxytetracin A

Justin Kim and Mohammad Movassaghi

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DOI: 10.1021/ja106869s



Regioselective C–H Activation and Sequential C–C and C–O Bond Formation Reactions of Aryl Ketones Promoted by an Yttrium Carbene

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Metal Insertion in a Microporous Metal–Organic Framework Lined with 2,2′-Bipyridine

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High-Yield Synthesis of Ultralong and Ultrathin Zn₂GeO₄ Nanoribbons toward Improved Photocatalytic Reduction of CO₂ into Renewable Hydrocarbon Fuel

Qi Liu, Yong Zhou, Jiahui Kou, Xiaoyu Chen, Zhongping Tian, Jun Gao, Shicheng Yan, and Zhigang Zou

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DOI: 10.1021/ja1068596



Direct Measurement of the Dynamics of Hole Hopping in Extended DNA G-Tracts. An Unbiased Random Walk

Sarah M. Mickley Conron, Arun K. Thazhathveetil, Michael R. Wasielewski, Alexander L. Burin, and Frederick D. Lewis

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DOI: 10.1021/ja106991f



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Rui Shang, Zhi-Wei Yang, Yan Wang, Song-Lin Zhang, and Lei Liu

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DOI: 10.1021/ja107103b



Synthesis of Streptolydigin, a Potent Bacterial RNA Polymerase Inhibitor

Sergey V. Pronin and Sergey A. Kozmin

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DOI: 10.1021/ja107190w



Highly Emitting Concomitant Polymorphic Crystals of a Dinuclear Rhenium Complex

Elsa Quartapelle Procopio, Matteo Mauro, Monica Panigati, Daniela Donghi, Pierluigi Mercandelli, Angelo Sironi, Giuseppe D'Alfonso, and Luisa De Cola

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DOI: 10.1021/ja106772v



Preparation and C–X Reductive Elimination Reactivity of Monoaryl Pd^{IV}–X Complexes in Water (X = OH, OH₂, Cl, Br)

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DOI: 10.1021/ja107185w



Magnetically Powered Flexible Metal Nanowire Motors

Wei Gao, Sirilak Sattayasamitsathit, Kalayil Manian Manesh, Daniel Weihs, and Joseph Wang

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TiO₂ Nanotube/CdS Hybrid Electrodes: Extraordinary Enhancement in the Inactivation of *Escherichia coli*

Steven C. Hayden, Nageh K. Allam, and Mostafa A. El-Sayed

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DOI: 10.1021/ja107034z



Alkene Syn Dihydroxylation with Malonoyl Peroxides

James C. Griffith, Kevin M. Jones, Sylvain Picon, Michael J. Rawling, Benson M. Kariuki, Matthew Campbell, and Nicholas C. O. Tomkinson

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DOI: 10.1021/ja1066674



Umpolung Direct Arylation Reactions: Facile Process Requiring Only Catalytic Palladium and Substoichiometric Amount of Silver Salts

James J. Mousseau, Frédéric Vallée, Melanie M. Lorion, and André B. Charette

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DOI: 10.1021/ja107541w



Open-Mouthed Metallic Microcapsules: Exploring Performance Improvements at Agglomeration-Free Interiors

Saikat Mandal, Marappan Sathish, Govindachetty Saravanan, K. K. R. Datta, Qingmin Ji, Jonathan P. Hill, Hideki Abe, Itaru Honma, and Katsuhiko Ariga

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DOI: 10.1021/ja107589m



Enantioselective Synthesis of Pyrroloindolines by a Formal [3 + 2] Cycloaddition Reaction

Lindsay M. Repka, Jane Ni, and Sarah E. Reisman

pp 14418–14420

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ARTICLES

Alternating Covalent Bonding Interactions in a One-Dimensional Chain of a Phenalenyl-Based Singlet Biradical Molecule Having Kekulé Structures

Akihiro Shimizu, Takashi Kubo, Mikio Uruichi, Kyuya Yakushi, Masayoshi Nakano, Daisuke Shiomi, Kazunobu Sato, Takeji Takui, Yasukazu Hirao, Kouzou Matsumoto, Hiroyuki Kurata, Yasushi Morita, and Kazuhiro Nakasuji

pp 14421–14428

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1D covalent bonding interaction

intramolecular < intermolecular



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Electro-oxidized Epitaxial Graphene Channel Field-Effect Transistors with Single-Walled Carbon Nanotube Thin Film Gate Electrode

Palanisamy Ramesh, Mikhail E. Itkis, Elena Bekyarova, Feihu Wang, Sandip Niyogi, Xiaoliu Chi, Claire Berger, Walt de Heer, and Robert C. Haddon

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Electro-Oxidation of Epitaxial Graphene

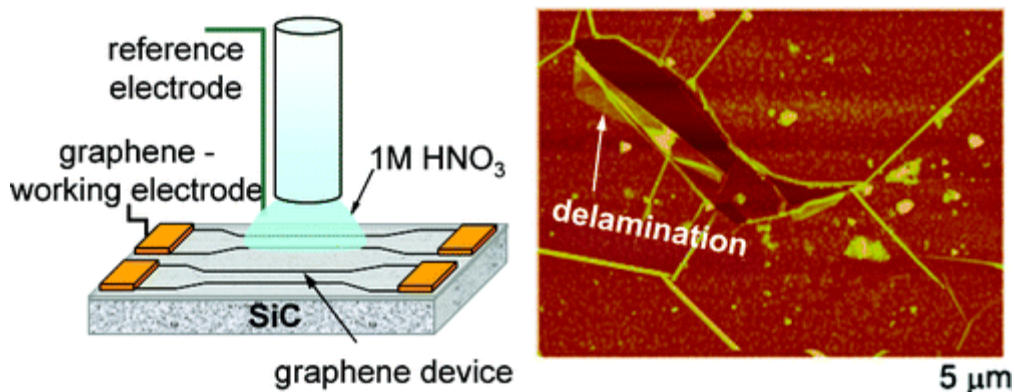


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Interaction of Charge Carriers with Lattice Vibrations in Oligoacene Crystals from Naphthalene to Pentacene

Roel S. Sánchez-Carrera, Pavel Paramonov, Graeme M. Day, Veaceslav Coropceanu, and Jean-Luc Brédas

pp 14437–14446

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DOI: 10.1021/ja1040732



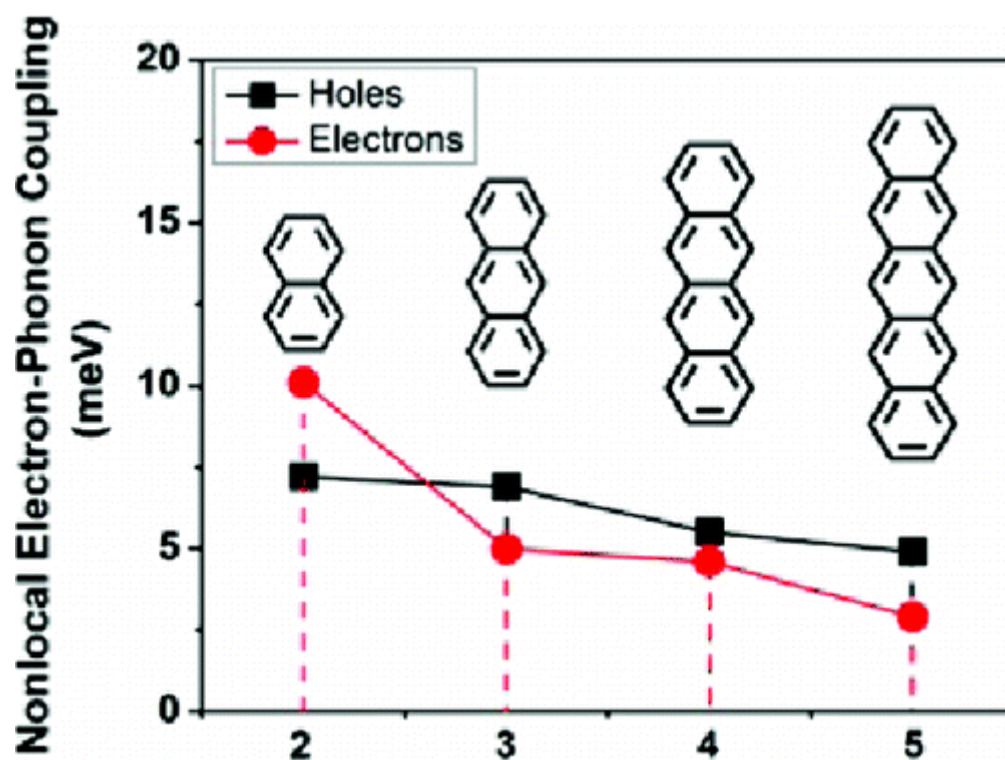


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Holo-Ni(II)*Hp*NikR Is an Asymmetric Tetramer Containing Two Different Nickel-Binding Sites

Abby L. West, Franz St. John, Pedro E. M. Lopes, Alexander D. MacKerell, Jr., Edwin Pozharski, and Sarah L. J. Michel

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Exceptional Thermal Stability in a Supramolecular Organic Framework: Porosity and Gas Storage

Wenbin Yang, Alex Greenaway, Xiang Lin, Ryotaro Matsuda, Alexander J. Blake, Claire Wilson, William Lewis, Peter Hubberstey, Susumu Kitagawa, Neil R. Champness, and Martin Schröder

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DOI: 10.1021/ja1042935



An Original Polymorph Sequence in the High-Temperature Evolution of the Perovskite $\text{Pb}_2\text{TmSbO}_6$

En A. Larraga, Jos A. Alonso, Denis Sheptyakov, Miguel Algueró, Angel Muñoz, Vladimir Pomjakushin, and Jos C. Pedregosa

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DOI: 10.1021/ja104417f

Weave Tile Architecture Construction Strategy for DNA Nanotechnology

Majken N. Hansen, Alex M. Zhang, Abhijit Rangnekar, Kristin M. Bompiani, Joshua D. Carter, Kurt V. Gothelf, and Thomas H. LaBean

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Structure-Directing Role of Graphene in the Synthesis of Metal–Organic Framework Nanowire

Maryam Jahan, Qiaoliang Bao, Jia-Xiang Yang, and Kian Ping Loh

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DOI: 10.1021/ja105089w

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Christine M. Andres and Nicholas A. Kotov

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DOI: 10.1021/ja104735a

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Bess Vlasisavljevich, Laura Gagliardi, and Peter C. Burns

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Paramagnetic Intermediates of (*E*)-4-Hydroxy-3-methylbut-2-enyl Diphosphate Synthase (GcpE/IspG) under Steady-State and Pre-Steady-State Conditions

Weiya Xu, Nicholas S. Lees, Dolapo Adedeji, Jochen Wiesner, Hassan Jomaa, Brian M. Hoffman, and Evert C. Duin

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DOI: 10.1021/ja101764w

Structural Basis for Cyclic Py-Im Polyamide Allosteric Inhibition of Nuclear Receptor Binding

David M. Chenoweth and Peter B. Dervan

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DOI: 10.1021/ja105068b

On the Mechanism of Palladium-Catalyzed Aromatic C–H Oxidation

David C. Powers, Daphne Y. Xiao, Matthias A. L. Geibel, and Tobias Ritter

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DOI: 10.1021/ja1054274

Amicyanin Transfers Electrons from Methylamine Dehydrogenase to Cytochrome *c*-551i via a Ping-Pong Mechanism, not a Ternary Complex

Francesca Meschi, Frank Wiertz, Linda Klauss, Chiara Cavalieri, Anneloes Blok, Bernd Ludwig, Hendrik A. Heering, Angelo Merli, Gian Luigi Rossi, and Marcellus Ubbink

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Au Nanocube-Directed Fabrication of Au–Pd Core–Shell Nanocrystals with Tetrahedral, Concave Octahedral, and Octahedral Structures and Their Electrocatalytic Activity

Chun-Lun Lu, Kariate Sudhakara Prasad, Hsin-Lun Wu, Ja-an Annie Ho, and Michael H. Huang

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DOI: 10.1021/ja105401p **Stepwise Assembly of Coordination-Based Metal–Organic Networks**

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Moving Metal Ions through Ferritin–Protein Nanocages from Three-Fold Pores to Catalytic Sites

Takehiko Tosha, Ho-Leung Ng, Onita Bhattasali, Tom Alber, and Elizabeth C. Theil

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Tailored Ligand Acceleration of the Cu-Catalyzed Azide–Alkyne Cycloaddition Reaction: Practical and Mechanistic Implications

Stanislav I. Presolski, Vu Hong, So-Hye Cho, and M.G. Finn

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Protein Flexibility and Conformational Entropy in Ligand Design Targeting the Carbohydrate Recognition Domain of Galectin-3

Carl Diehl, Olof Engström, Tamara Delaine, Maria Håkansson, Samuel Genheden, Kristofer Modig, Hakon Leffler, Ulf Ryde, Ulf J. Nilsson, and Mikael Akke

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Outer-Sphere Effects on Reduction Potentials of Copper Sites in Proteins: The Curious Case of High Potential Type 2 C112D/M121E Pseudomonas aeruginosa Azurin

Kyle M. Lancaster, Stephen Sproules, Joshua H. Palmer, John H. Richards, and Harry B. Gray

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Development of a General Palladium-Catalyzed Carbonylative Heck Reaction of Aryl Halides

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Controlled Orientation of Polyconjugated Guest Molecules in Tunable Host Cavities

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Through-Bond Interactions in the Diradical Intermediates Formed in the Rearrangements of Bicyclo[*n.m.0*]alkatetraenes

Charity Flener Lovitt, Hao Dong, David A. Hrovat, Rolf Gleiter, and Weston Thatcher Borden

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Photogeneration and Reactivity of Naphthoquinone Methides as Purine Selective DNA Alkylating Agents

Daniela Verga, Matteo Nadai, Filippo Doria, Claudia Percivalle, Marco Di Antonio, Manlio Palumbo, Sara N. Richter, and Mauro Freccero

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Understanding the Stabilization of Liquid-Phase-Exfoliated Graphene in Polar Solvents: Molecular Dynamics Simulations and Kinetic Theory of Colloid Aggregation

Chih-Jen Shih, Shangchao Lin, Michael S. Strano, and Daniel Blankschtein

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Spectroscopic and Computational Studies on the Rearrangement of Ionized [1.1.1]Propellane and Some of its Valence Isomers: The Key Role of Vibronic Coupling

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When the Solute Becomes the Solvent: Orientation, Ordering, and Structure of Binary Mixtures of 1-Hexanol and Cyclohexane over the (0001) α -Al₂O₃ Surface

Avram M. Buchbinder, Eric Weitz, and Franz M. Geiger

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Substrate-Induced Covalent Assembly of a Chemzyme and Crystallographic Characterization of a Chemzyme–Substrate Complex

Gang Hu, Anil K. Gupta, Rui H. Huang, Munmun Mukherjee, and William D. Wulff

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DOI: 10.1021/ja1070224



Regioselective Oxidative Arylation of Indoles Bearing *N*-Alkyl Protecting Groups: Dual C–H Functionalization via a Concerted Metalation–Deprotonation Mechanism

Shathaverdhan Potavathri, Kyle C. Pereira, Serge I. Gorelsky, Andrew Pike, Alexis P. LeBris, and Brenton DeBoef

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Oxidation of a Cyclometalated Pd(II) Dimer with “CF₃⁺”: Formation and Reactivity of a Catalytically Competent Monomeric Pd(IV) Aquo Complex

Yingda Ye, Nicholas D. Ball, Jeff W. Kampf, and Melanie S. Sanford

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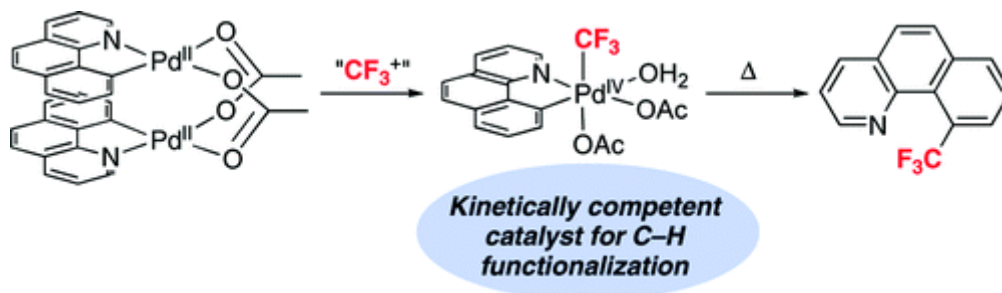


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ADDITIONS AND CORRECTIONS

Unexpected Binding Modes of Nitric Oxide Synthase Inhibitors Effective in the Prevention of a Cerebral Palsy Phenotype in an Animal Model

Silvia L Delker, Haitao Ji, Huiying Li, Joumana Jamal, Jianguo Fang, Fengtian Xue, Richard B. Silverman, and Thomas L. Poulos

p 14688

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