

August 28, 2013

Volume 135, Issue 34

Pages 12479-12922

Order Print Issue

Spotlights on JACS Publications

ACS Contributing Correspondents

pp 12479-12479

Publication Date (Web): August 28, 2013 (Spotlights)

DOI: 10.1021/ja408622p

Perspectives

Biocatalysis in Organic Chemistry and Biotechnology: Past, Present, and Future

Manfred T. Reetz

pp 12480-12496

Publication Date (Web): August 9, 2013 (Perspective)

DOI: 10.1021/ja405051f

Section:

Fermentation and Bioindustrial Chemistry

Communications

$M_{12}L_{24}$ Spheres with Endo and Exo Coordination Sites: Scaffolds for Non-Covalent Functionalization

Kate Harris, Qing-Fu Sun, Sota Sato, and Makoto Fujita

pp 12497-12499

Publication Date (Web): August 9, 2013 (Communication)

DOI: 10.1021/ja4043609

Section:

Inorganic Chemicals and Reactions

Inverse Kinetic Isotope Effect in the Excited-State Relaxation of a Ru(II)–Aquo Complex: Revealing the Impact of Hydrogen-Bond Dynamics on Nonradiative Decay

Joshua T. Hewitt, Javier J. Concepcion, and Niels H. Damrauer

pp 12500-12503

Publication Date (Web): August 8, 2013 (Communication)

DOI: 10.1021/ja4037498

Section:

Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes

Neighboring-Cation Substitution Tuning of Photoluminescence by Remote-Controlled Activator in Phosphor Lattice

Siao-Shan Wang, Wei-Ting Chen, Ye Li, Jing Wang, Hwo-Shuenn Sheu, and Ru-Shi Liu

pp 12504-12507

Publication Date (Web): August 13, 2013 (Communication)

DOI: 10.1021/ja404510v

Section:

Optical, Electron, and Mass Spectroscopy and Other Related Properties

Autotransfecting Short Interfering RNA through Facile Covalent Polymer Escorts

Saadyah E. Averick, Eduardo Paredes, Sourav K. Dey, Kristin M. Snyder, Nikos Tapinos, Krzysztof Matyjaszewski, and Subha R. Das

pp 12508-12511

Publication Date (Web): August 12, 2013 (Communication)

DOI: 10.1021/ja404520j

Section:

Biochemical Genetics

Mg²⁺ Tunes the Wettability of Liquid Precursors of CaCO₃: Toward Controlling Mineralization Sites in Hybrid Materials

John K. Berg, Thomas Jordan, Yvonne Binder, Hans G. Börner, and Denis Gebauer

pp 12512-12515

Publication Date (Web): August 9, 2013 (Communication)

DOI: 10.1021/ja404979z

Section:

General Biochemistry

Design of a Photoswitchable Cadherin

Ryan S. Ritterson, Kristopher M. Kuchenbecker, Michael Michalik, and Tanja Kortemme

pp 12516-12519

Publication Date (Web): August 7, 2013 (Communication)

DOI: 10.1021/ja404992r

ACS AuthorChoice

Section:

Biochemical Methods

Site-Specific Chemistry on the Microtubule Polymer

Ralph E. Kleiner, Shih-Chieh Ti, and Tarun M. Kapoor

pp 12520-12523

Publication Date (Web): August 9, 2013 (Communication)

DOI: 10.1021/ja405199h

Section:

Biochemical Methods

Accessibility, Reactivity, and Selectivity of Side Chains within a Channel of de Novo Peptide Assembly

Antony J. Burton, Franziska Thomas, Christopher Agnew, Kieran L. Hudson, Stephen E. Halford, R. Leo Brady, and Derek N. Woolfson

pp 12524-12527

Publication Date (Web): August 7, 2013 (Communication)

DOI: 10.1021/ja4053027

Section:

General Biochemistry

Protein-like Tertiary Folding Behavior from Heterogeneous Backbones

Zachary E. Reinert, George A. Lengyel, and W. Seth Horne

pp 12528-12531

Publication Date (Web): August 12, 2013 (Communication)

DOI: 10.1021/ja405422v

Section:

General Biochemistry

Copper-Catalyzed Carboarylation of Alkynes via Vinyl Cations

Andrew J. Walkinshaw, Wenshu Xu, Marcos G. Suero, and Matthew J. Gaunt

pp 12532-12535

Publication Date (Web): August 15, 2013 (Communication)

DOI: 10.1021/ja405972h

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

A Pd(0)-Catalyzed Direct Dehydrative Coupling of Terminal Alkynes with Allylic Alcohols To Access 1,4-Enynes

Yang-Xiong Li, Qing-Qing Xuan, Li Liu, Dong Wang, Yong-Jun Chen, and Chao-Jun Li

pp 12536-12539

Publication Date (Web): August 15, 2013 (Communication)

DOI: 10.1021/ja406025p

Section:

General Organic Chemistry

A Genetically Encoded Fluorescent Probe in Mammalian Cells

Abhishek Chatterjee, Jiantao Guo, Hyun Soo Lee, and Peter G. Schultz

pp 12540-12543

Publication Date (Web): August 7, 2013 (Communication)

DOI: 10.1021/ja4059553

Section:

Biochemical Methods

Thickness-Controlled Synthesis of Ultrathin Au Sheets and Surface Plasmonic Property

Hai Li Qin, Dong Wang, Zeng Li Huang, Dong Min Wu, Zhi Cong Zeng, Bin Ren, Ke Xu, and Jian Jin

pp 12544-12547

Publication Date (Web): August 13, 2013 (Communication)

DOI: 10.1021/ja406107u

Section:

Surface Chemistry and Colloids

Facile Synthesis of Unsymmetrical Acridines and Phenazines by a Rh(III)-Catalyzed Amination/Cyclization/Aromatization Cascade

Yajing Lian, Joshua R. Hummel, Robert G. Bergman, and Jonathan A. Ellman

pp 12548-12551

Publication Date (Web): August 19, 2013 (Communication)

DOI: 10.1021/ja406131a

Section:

Heterocyclic Compounds (More than One Hetero Atom)

Protein-Mimetic, Molecularly Imprinted Nanoparticles for Selective Binding of Bile Salt Derivatives in Water

Joseph K. Awino and Yan Zhao

pp 12552-12555

Publication Date (Web): August 9, 2013 (Communication)

DOI: 10.1021/ja406089c

Section:

Biochemical Methods

Shaping Crystals with Light: Crystal-to-Crystal Isomerization and Photomechanical Effect in Fluorinated Azobenzenes

Oleksandr S. Bushuyev, Anna Tomberg, Tomislav Friščić, and Christopher J. Barrett

pp 12556-12559

Publication Date (Web): August 7, 2013 (Communication)

DOI: 10.1021/ja4063019

Section:

Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes

Structure and Chemical State of the Pt(557) Surface during Hydrogen Oxidation Reaction Studied by in Situ Scanning Tunneling Microscopy and X-ray Photoelectron Spectroscopy

Zhongwei Zhu, Gérôme Melaet, Stephanus Axnanda, Selim Alayoglu, Zhi Liu, Miquel Salmeron, and Gabor A Somorjai

pp 12560-12563

Publication Date (Web): August 16, 2013 (Communication)

DOI: 10.1021/ja406497s

Section:

Catalysis, Reaction Kinetics, and Inorganic Reaction Mechanisms

Multiplexed Imaging of Nanoparticles in Tissues Using Laser Desorption/Ionization Mass Spectrometry

Bo Yan, Sung Tae Kim, Chang Soo Kim, Krishnendu Saha, Daniel F. Moyano, Yuqing Xing, Ying Jiang, Amy L. Roberts, Felix S. Alfonso, Vincent M. Rotello, and Richard W. Vachet

pp 12564-12567

Publication Date (Web): August 9, 2013 (Communication)

DOI: 10.1021/ja406553f

Section:

Biochemical Methods

Asymmetric Total Synthesis of Neoxaline

Tetsuya Ideguchi, Takeshi Yamada, Tatsuya Shirahata, Tomoyasu Hirose, Akihiro Sugawara, Yoshinori Kobayashi, Satoshi Omura, and Toshiaki Sunazuka

pp 12568-12571

Publication Date (Web): August 11, 2013 (Communication)

DOI: 10.1021/ja406657v

Section:

Alkaloids

Catalytic Synthesis of n-Alkyl Arenes through Alkyl Group Cross-Metathesis

Graham E. Dobereiner, Jian Yuan, Richard R. Schrock, Alan S. Goldman, and Jason D. Hackenberg

pp 12572-12575

Publication Date (Web): August 2, 2013 (Communication)

DOI: 10.1021/ja4066392

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Fe-Catalyzed Regiodivergent [1,2]-Shift of α -Aryl Aldehydes

Álvaro Gutiérrez-Bonet, Areli Flores-Gaspar, and Ruben Martin

pp 12576-12579

Publication Date (Web): August 8, 2013 (Communication)

DOI: 10.1021/ja4068707

Section:

Benzene, Its Derivatives, and Condensed Benzenoid Compounds

A CO-Derived Iron Dicarbyne That Releases Olefin upon Hydrogenation

Daniel L. M. Suess and Jonas C. Peters

pp 12580-12583

Publication Date (Web): August 9, 2013 (Communication)

DOI: 10.1021/ja406874k



Organometallic and Organometalloidal Compounds

Cupration of C_2F_5H : Isolation, Structure, and Synthetic Applications of $[K(DMF)_2][(t-BuO)Cu(C_2F_5)]$. Highly Efficient Pentafluoroethylation of Unactivated Aryl Bromides

Anton Lishchynskyi and Vladimir V. Grushin

pp 12584-12587

Publication Date (Web): August 19, 2013 (Communication)

DOI: 10.1021/ja407017j



Benzene, Its Derivatives, and Condensed Benzenoid Compounds

Volatile and Thermally Stable Mid to Late Transition Metal Complexes Containing α -Imino Alkoxide Ligands, a New Strongly Reducing Coreagent, and Thermal Atomic Layer Deposition of Ni, Co, Fe, and Cr Metal Films

Lakmal C. Kalutarage, Philip D. Martin, Mary Jane Heeg, and Charles H. Winter

pp 12588-12591

Publication Date (Web): August 15, 2013 (Communication)

DOI: 10.1021/ja407014w



Inorganic Chemicals and Reactions

Mono(imidazolin-2-iminato) Titanium Complexes for Ethylene Polymerization at Low Amounts of Methylaluminoxane

Dana Shoken, Manab Sharma, Mark Botoshansky, Matthias Tamm, and Moris S. Eisen

pp 12592-12595

Publication Date (Web): August 15, 2013 (Communication)

DOI: 10.1021/ja406925z



Organometallic and Organometalloidal Compounds

Symmetry-Amplified J Splittings for Quadrupolar Spin Pairs: A Solid-State NMR Probe of Homoatomic Covalent Bonds

Frédéric A. Perras and David L. Bryce

pp 12596-12599

Publication Date (Web): August 7, 2013 (Communication)

DOI: 10.1021/ja407138b

ACS AuthorChoice

Section:

Magnetic Phenomena

Gold(I)-Catalyzed Enantioselective Carboalkoxylation of Alkynes

Weiwei Zi and F. Dean Toste

pp 12600-12603

Publication Date (Web): August 19, 2013 (Communication)

DOI: 10.1021/ja407150h

Section:

General Organic Chemistry

Cell-Wall Remodeling by the Zinc-Protease AmpDh3 from Pseudomonas aeruginosa

Mijoon Lee, Cecilia Artola-Recolons, César Carrasco-López, Siseth Martínez-Caballero, Dusan Hesek, Edward Spink, Elena Lastochkin, Weilie Zhang, Lance M. Hellman, Bill Boggess, Juan A. Hermoso, and Shahriar Mobashery

pp 12604-12607

Publication Date (Web): August 9, 2013 (Communication)

DOI: 10.1021/ja407445x

Section:

Enzymes

Mechanistic Investigation of Photon Upconversion in Nd³+-Sensitized Core-Shell Nanoparticles

Xiaoji Xie, Nengyue Gao, Renren Deng, Qiang Sun, Qing-Hua Xu, and Xiaogang Liu

pp 12608-12611

Publication Date (Web): August 15, 2013 (Communication)

DOI: 10.1021/ja4075002

Section:

Optical, Electron, and Mass Spectroscopy and Other Related Properties

Sulfoxides as Response Elements for Fluorescent Chemosensors

Rahul S. Kathayat and Nathaniel S. Finney

pp 12612-12614

Publication Date (Web): August 8, 2013 (Communication)

DOI: 10.1021/ja407099a

Section:

Inorganic Analytical Chemistry

Articles

Water Cluster Confinement and Methane Adsorption in the Hydrophobic Cavities of a Fluorinated Metal-Organic Framework

Nour Nijem, Pieremanuele Canepa, Ushasree Kaipa, Kui Tan, Katy Roodenko, Sammer Tekarli, Jason Halbert, Iain W. H. Oswald, Ravi K. Arvapally, Chi Yang, Timo Thonhauser, Mohammad A. Omary, and Yves J. Chabal

pp 12615-12626

Publication Date (Web): June 27, 2013 (Article)

DOI: 10.1021/ja400754p

Section:

Surface Chemistry and Colloids

Ionic Conductor with High Conductivity as Single-Component Electrolyte for Efficient Solid-State Dye-Sensitized Solar Cells

Hong Wang, Juan Li, Feng Gong, Gang Zhou, and Zhong-Sheng Wang

pp 12627-12633

Publication Date (Web): August 2, 2013 (Article)

DOI: 10.1021/ja401827w

Section:

Electrochemical, Radiational, and Thermal Energy Technology

CO Oxidation on Supported Single Pt Atoms: Experimental and ab Initio Density Functional Studies of CO Interaction with Pt Atom on θ -Al₂O₃(010) Surface

Melanie Moses-DeBusk, Mina Yoon, Lawrence F. Allard, David R. Mullins, Zili Wu, Xiaofan Yang, Gabriel Veith, G. Malcolm Stocks, and Chaitanya K. Narula

pp 12634-12645

Publication Date (Web): August 2, 2013 (Article)

DOI: 10.1021/ja401847c



Air Pollution and Industrial Hygiene

Complete Protein Characterization Using Top-Down Mass Spectrometry and Ultraviolet Photodissociation

Jared B. Shaw, Wenzong Li, Dustin D. Holden, Yan Zhang, Jens Griep-Raming, Ryan T. Fellers, Bryan P. Early, Paul M. Thomas, Neil L. Kelleher, and Jennifer S. Brodbelt

pp 12646-12651

Publication Date (Web): May 22, 2013 (Article)

DOI: 10.1021/ja4029654

Section:

Biochemical Methods

X-ray Crystal Structure of rac-[Ru(phen)₂dppz]²⁺ with d(ATGCAT)₂ Shows Enantiomer Orientations and Water Ordering

James P. Hall, Daniel Cook, Sara Ruiz Morte, Patrick McIntyre, Katrin Buchner, Hanna Beer, David J. Cardin, John A. Brazier, Graeme Winter, John M. Kelly, and Christine J. Cardin

pp 12652-12659

Publication Date (Web): July 23, 2013 (Article)

DOI: 10.1021/ja403590e

Section:

General Biochemistry

Molecular Orientation of Enzymes Attached to Surfaces through Defined Chemical Linkages at the Solid-Liquid Interface

Yuwei Liu, Tadeusz L. Ogorzalek, Pei Yang, McKenna M. Schroeder, E. Neil G. Marsh, and Zhan Chen

pp 12660-12669

Publication Date (Web): July 24, 2013 (Article)

DOI: 10.1021/ja403672s

Section:

Enzymes

Mechanisms of the Thermal and Catalytic Redistributions, Oligomerizations, and Polymerizations of Linear Diborazanes

Alasdair P. M. Robertson, Erin M. Leitao, Titel Jurca, Mairi F. Haddow, Holger Helten, Guy C. Lloyd-Jones, and Ian Manners

pp 12670-12683

Publication Date (Web): August 13, 2013 (Article)

DOI: 10.1021/ja404247r



Inorganic Chemicals and Reactions

Synthetic Self-Localizing Ligands That Control the Spatial Location of Proteins in Living Cells

Manabu Ishida, Hideaki Watanabe, Kazumasa Takigawa, Yasutaka Kurishita, Choji Oki, Akinobu Nakamura, Itaru Hamachi, and Shinya Tsukiji

pp 12684-12689

Publication Date (Web): August 14, 2013 (Article)

DOI: 10.1021/ja4046907



Biochemical Methods

A Reductant-Resistant and Metal-Free Fluorescent Probe for Nitroxyl Applicable to Living Cells

Kodai Kawai, Naoya Ieda, Kazuyuki Aizawa, Takayoshi Suzuki, Naoki Miyata, and Hidehiko Nakagawa

pp 12690-12696

Publication Date (Web): July 18, 2013 (Article)

DOI: 10.1021/ja404757s

Section:

Biochemical Methods

DNA Switches on the Two-Photon Efficiency of an Ultrabright Triphenylamine Fluorescent Probe Specific of AT Regions

Blaise Dumat, Guillaume Bordeau, Elodie Faurel-Paul, Florence Mahuteau-Betzer, Nicolas Saettel, Germain Metge, Céline Fiorini-Debuisschert, Fabrice Charra, and Marie-Paule Teulade-Fichou

pp 12697-12706

Publication Date (Web): August 5, 2013 (Article)

DOI: 10.1021/ja404422z

Section:

Biochemical Methods

H_4 octapa-Trastuzumab: Versatile Acyclic Chelate System for 111 In and 177 Lu Imaging and Therapy

Eric W. Price, Brian M. Zeglis, Jacqueline F. Cawthray, Caterina F. Ramogida, Nicholas Ramos, Jason S. Lewis, Michael J. Adam, and Chris Orvig

pp 12707-12721

Publication Date (Web): July 31, 2013 (Article)

DOI: 10.1021/ja4049493

Section:

Radiation Biochemistry

Molecular Catch Bonds and the Anti-Hammond Effect in Polymer Mechanochemistry

Sai Sriharsha M. Konda, Johnathan N. Brantley, Bibin T. Varghese, Kelly M. Wiggins, Christopher W. Bielawski, and Dmitrii E. Makarov

pp 12722-12729

Publication Date (Web): August 2, 2013 (Article)

DOI: 10.1021/ja4051108

Section:

Chemistry of Synthetic High Polymers

Molecular Structure and Chemical Property of a Divalent Metallofullerene $Yb@C_2(13)-C_{84}$

Wenjun Zhang, Mitsuaki Suzuki, Yunpeng Xie, Lipiao Bao, Wenting Cai, Zdenek Slanina, Shigeru Nagase, Ming Xu, Takeshi Akasaka, and Xing Lu

pp 12730-12735

Publication Date (Web): August 1, 2013 (Article)

DOI: 10.1021/ja405223t

Section:

Inorganic Chemicals and Reactions

Ex²Box: Interdependent Modes of Binding in a Two-Nanometer-Long Synthetic Receptor

Michal Juríček, Jonathan C. Barnes, Edward J. Dale, Wei-Guang Liu, Nathan L. Strutt, Carson J. Bruns, Nicolaas A. Vermeulen, Kala C. Ghooray, Amy A. Sarjeant, Charlotte L. Stern, Youssry Y. Botros, William A. Goddard, III, and J. Fraser Stoddart

pp 12736-12746

Publication Date (Web): July 18, 2013 (Article)

DOI: 10.1021/ja4052763

Section:

Physical Organic Chemistry

Activated Singlet Exciton Fission in a Semiconducting Polymer

Andrew J. Musser, Mohammed Al-Hashimi, Margherita Maiuri, Daniele Brida, Martin Heeney, Giulio Cerullo, Richard H. Friend, and Jenny Clark

pp 12747-12754

Publication Date (Web): July 24, 2013 (Article)

DOI: 10.1021/ja405427j

Section:

Optical, Electron, and Mass Spectroscopy and Other Related Properties

End Group Characterization of Poly(phthalaldehyde): Surprising Discovery of a Reversible, Cationic Macrocyclization Mechanism

Joshua A. Kaitz, Charles E. Diesendruck, and Jeffrey S. Moore

pp 12755-12761

Publication Date (Web): August 7, 2013 (Article)

DOI: 10.1021/ja405628g

Section:

Chemistry of Synthetic High Polymers

Nanomechanics of HaloTag Tethers

Ionel Popa, Ronen Berkovich, Jorge Alegre-Cebollada, Carmen L. Badilla, Jaime Andrés Rivas-Pardo, Yukinori Taniguchi, Masaru Kawakami, and Julio M. Fernandez

pp 12762-12771

Publication Date (Web): August 2, 2013 (Article)

DOI: 10.1021/ja4056382

Section:

General Biochemistry

Dynamics of the His79-Heme Alkaline Transition of Yeast Iso-1-cytochrome c Probed by Conformationally Gated Electron Transfer with Co(II)bis(terpyridine)

Melisa M. Cherney, Carolyn C. Junior, Bryan B. Bergquist, and Bruce E. Bowler

pp 12772-12782

Publication Date (Web): July 30, 2013 (Article)

DOI: 10.1021/ja405725f

Section:

Enzymes

Threading Polyintercalators with Extremely Slow Dissociation Rates and Extended DNA Binding Sites

Amy Rhoden Smith and Brent L. Iverson

pp 12783-12789

Publication Date (Web): August 6, 2013 (Article)

DOI: 10.1021/ja4057344

Section:

General Biochemistry

Large Molecular Weight Nitroxide Biradicals Providing Efficient Dynamic Nuclear Polarization at Temperatures up to 200 K

Alexandre Zagdoun, Gilles Casano, Olivier Ouari, Martin Schwarzwälder, Aaron J. Rossini, Fabien Aussenac, Maxim Yulikov, Gunnar Jeschke, Christophe Copéret, Anne Lesage, Paul Tordo, and Lyndon Emsley

pp 12790-12797

Publication Date (Web): July 24, 2013 (Article)

DOI: 10.1021/ja405813t

Section:

Physical Organic Chemistry

A Discrete Three-Layer Stack Aggregate of a Linear Porphyrin Tetramer: Solution-Phase Structure Elucidation by NMR and X-ray Scattering

Marie Hutin, Johannes K. Sprafke, Barbara Odell, Harry L. Anderson, and Tim D. W. Claridge

pp 12798-12807

Publication Date (Web): August 2, 2013 (Article)

DOI: 10.1021/ja406015r

Section:

Electric Phenomena

Random Walk on a Leash: A Simple Single-Molecule Diffusion Model for Surface-Tethered Redox Molecules with Flexible Linkers

Kuan-Chun Huang and Ryan J. White

pp 12808-12817

Publication Date (Web): August 6, 2013 (Article)

DOI: 10.1021/ja4060788

Section:

Electrochemistry

Ion Dynamics in Porous Carbon Electrodes in Supercapacitors Using in Situ Infrared Spectroelectrochemistry

Francis W. Richey, Boris Dyatkin, Yury Gogotsi, and Yossef A. Elabd

pp 12818-12826

Publication Date (Web): August 5, 2013 (Article)

DOI: 10.1021/ja406120e

Section:

Electrochemical, Radiational, and Thermal Energy Technology

Formation of S–Cl Phosphorothioate Adduct Radicals in dsDNA S-Oligomers: Hole Transfer to Guanine vs Disulfide Anion Radical Formation

Amitava Adhikary, Anil Kumar, Brian J. Palmer, Andrew D. Todd, and Michael D. Sevilla

pp 12827-12838

Publication Date (Web): July 25, 2013 (Article)

DOI: 10.1021/ja406121x

Section:

Radiation Biochemistry

Lanthanide Cofactors Accelerate DNA-Catalyzed Synthesis of Branched RNA

Fatemeh Javadi-Zarnaghi and Claudia Höbartner

pp 12839-12848

Publication Date (Web): July 28, 2013 (Article)

DOI: 10.1021/ja406162z

Section:

Enzymes

Systematic and Controllable Negative, Zero, and Positive Thermal Expansion in Cubic $Zr_{1-x}Sn_xMo_2O_8$

Sarah E. Tallentire, Felicity Child, Ian Fall, Liana Vella-Zarb, Ivana Radosavljević Evans, Matthew G. Tucker, David A. Keen, Claire Wilson, and John S. O. Evans

pp 12849-12856

Publication Date (Web): July 29, 2013 (Article)

DOI: 10.1021/ja4060564

Section:

Thermodynamics, Thermochemistry, and Thermal Properties

Quadruple Anionic Buckybowls by Solid-State Chemistry of Corannulene and Cesium

Tobias Bauert, Laura Zoppi, Georg Koller, Jay S. Siegel, Kim K. Baldridge, and Karl-Heinz Ernst

pp 12857-12860

Publication Date (Web): July 27, 2013 (Article)

DOI: 10.1021/ja4063103

ACS AuthorChoice

Section:

Surface Chemistry and Colloids

Ir(III)-Catalyzed Mild C-H Amidation of Arenes and Alkenes: An Efficient Usage of Acyl Azides as the Nitrogen Source

Jaeyune Ryu, Jaesung Kwak, Kwangmin Shin, Donggun Lee, and Sukbok Chang

pp 12861-12868

Publication Date (Web): August 19, 2013 (Article)

DOI: 10.1021/ja406383h

Section:

General Organic Chemistry

Selective Detection and Inhibition of Active Caspase-3 in Cells with Optimized Peptides

Chris J. Vickers, Gonzalo E. González-Páez, and Dennis W. Wolan

pp 12869-12876

Publication Date (Web): August 5, 2013 (Article)

DOI: 10.1021/ja406399r

Section:

Enzymes

Suzuki-Miyaura Cross-Coupling of Unprotected, Nitrogen-Rich Heterocycles: Substrate Scope and Mechanistic Investigation

M. Alexander Düfert, Kelvin L. Billingsley, and Stephen L. Buchwald

pp 12877-12885

Publication Date (Web): August 2, 2013 (Article)

DOI: 10.1021/ja4064469

Section:

Physical Organic Chemistry

Ti^{3+-} , $V^{2+/3+-}$, $Cr^{2+/3+-}$, Mn^{2+-} , and Fe^{2+-} Substituted MOF-5 and Redox Reactivity in Cr- and Fe-MOF-5

Carl K. Brozek and Mircea Dincă

pp 12886-12891

Publication Date (Web): July 31, 2013 (Article)

DOI: 10.1021/ja4064475

Section:

Catalysis, Reaction Kinetics, and Inorganic Reaction Mechanisms

C-Functionalized, Air- and Water-Stable 9,10-Dihydro-9,10-diboraanthracenes: Efficient Blue to Red Emitting Luminophores

Christian Reus, Sabine Weidlich, Michael Bolte, Hans-Wolfram Lerner, and Matthias Wagner

pp 12892-12907

Publication Date (Web): July 30, 2013 (Article)

DOI: 10.1021/ja406766e

Section:

Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers

Protecting Group-Free Synthesis of 1,2-Azaborines: A Simple Approach to the Construction of BN-Benzenoids

Eric R. Abbey, Ashley N. Lamm, Andrew W. Baggett, Lev N. Zakharov, and Shih-Yuan Liu

pp 12908-12913

Publication Date (Web): August 6, 2013 (Article)

DOI: 10.1021/ja4073436

Section:

Organometallic and Organometalloidal Compounds

Functionalization Based on the Substitutional Flexibility: Strong Middle IR Nonlinear Optical Selenides $AX^{II}_{4}X^{III}_{5}Se_{12}$

Hua Lin, Ling Chen, Liu-Jiang Zhou, and Li-Ming Wu

pp 12914-12921

Publication Date (Web): July 31, 2013 (Article)

DOI: 10.1021/ja4074084

Section:

Optical, Electron, and Mass Spectroscopy and Other Related Properties

Additions and Corrections Correction to "Tandem Facial Amphiphiles for Membrane Protein Stabilization"

Pil Seok Chae, Kamil Gotfryd, Jennifer Pacyna, Larry J. W. Miercke, Søren G. F. Rasmussen, Rebecca A. Robbins, Rohini R. Rana, Claus J. Loland, Brian Kobilka, Robert Stroud, Bernadette Byrne, Ulrik Gether, and Samuel H. Gellman

pp 12922-12922

Publication Date (Web): August 13, 2013 (Addition/Correction)

DOI: 10.1021/ja407245m

Section:

Biochemical Methods