

## Spotlights

### Spotlights on Recent *JACS* Publications

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**Publication Date (Web):** February 11, 2013 (Spotlights)

**DOI:** 10.1021/ja401254p

## Perspectives

### Fluorescent Proteins: Shine on, You Crazy Diamond

Peter Dedecker, Frans C. De Schryver, and Johan Hofkens

pp 2387–2402

**Publication Date (Web):** January 14, 2013 (Perspective)

**DOI:** 10.1021/ja309768d

 Section:

Biochemical Methods

## Communications

### Photoinduced Electron Transfer of DNA/Ag Nanoclusters Modulated by G-Quadruplex/Hemin Complex for the Construction of Versatile Biosensors

Libing Zhang, Jinbo Zhu, Shaojun Guo, Tao Li, Jing Li, and Erkang Wang

pp 2403–2406

**Publication Date (Web):** February 1, 2013 (Communication)

**DOI:** 10.1021/ja3089857

 Section:

Biochemical Methods

### Sizing by Weighing: Characterizing Sizes of Ultrasmall-Sized Iron Oxide Nanocrystals Using MALDI-TOF Mass Spectrometry

Byung Hyo Kim, Kwangsoo Shin, Soon Gu Kwon, Youngjin Jang, Hyun-Seok Lee, Hyunjae Lee, Samuel Woojoo Jun, Jisoo Lee, Sang Yun Han, Yong-Hyeon Yim, Dae-Hyeong Kim, and Taeghwan Hyeon

pp 2407–2410

**Publication Date (Web):** January 28, 2013 (Communication)

**DOI:** 10.1021/ja310030c

 Section:

Optical, Electron, and Mass Spectroscopy and Other Related Properties

## **An Exceptionally Simple Strategy for DNA-Functionalized Up-Conversion Nanoparticles as Biocompatible Agents for Nanoassembly, DNA Delivery, and Imaging**

Le-Le Li, Peiwen Wu, Kevin Hwang, and Yi Lu

pp 2411–2414

**Publication Date (Web):** January 28, 2013 (Communication)

**DOI:** 10.1021/ja310432u

 Section:

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## **An Arsenical–Maleimide for the Generation of New Targeted Biochemical Reagents**

Aparna Sapra and Colin Thorpe

pp 2415–2418

**Publication Date (Web):** February 5, 2013 (Communication)

**DOI:** 10.1021/ja310553h

 Section:

Enzymes

## **Cleavage of DNA by Proton-Coupled Electron Transfer to a Photoexcited, Hydrated Ru(II) 1,10-Phenanthroline-5,6-dione Complex**

Steven A. Poteet, Marek B. Majewski, Zachary S. Breitbach, Cynthia A. Griffith, Shreeyukta Singh, Daniel W. Armstrong, Michael O. Wolf, and Frederick M. MacDonnell

pp 2419–2422

**Publication Date (Web):** January 27, 2013 (Communication)

**DOI:** 10.1021/ja3106863

 Section:

Radiation Biochemistry

## **A Locked Nucleic Acid-Based Nanocrawler: Designed and Reversible Movement Detected by Multicolor Fluorescence**

I. Kira Astakhova, Karol Pasternak, Meghan A. Campbell, Pankaj Gupta, and Jesper Wengel

pp 2423–2426

**Publication Date (Web):** February 4, 2013 (Communication)

**DOI:** 10.1021/ja311250w

 Section:

Biochemical Methods

## Facile Large-Scale Synthesis of Monodisperse Mesoporous Silica Nanospheres with Tunable Pore Structure

Kun Zhang, Lang-Lang Xu, Jin-Gang Jiang, Nathalie Calin, Koon-Fung Lam, San-Jun Zhang, Hai-Hong Wu, Guang-Dong Wu, Bélen Albela, Laurent Bonneviot, and Peng Wu

pp 2427–2430

**Publication Date (Web):** January 30, 2013 (Communication)

**DOI:** 10.1021/ja3116873

 Section:

Inorganic Chemicals and Reactions

## Inner-Sphere Electron-Transfer Single Iodide Mechanism for Dye Regeneration in Dye-Sensitized Solar Cells

Jiwon Jeon, William A. Goddard, III, and Hyungjun Kim

pp 2431–2434

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**DOI:** 10.1021/ja311714a

 Section:

Electrochemical, Radiational, and Thermal Energy Technology

## How “Hollow” Are Hollow Nanoparticles?

Paul Podsiadlo, Soon Gu Kwon, Bonil Koo, Byeongdu Lee, Vitali B. Prakapenka, Przemyslaw Dera, Kirill K. Zhuravlev, Galyna Krylova, and Elena V. Shevchenko

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**DOI:** 10.1021/ja311926r

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Surface Chemistry and Colloids

## Homopolar Dihydrogen Bonding in Alkali Metal Amidoboranes: Crystal Engineering of Low-Dimensional Molecular Materials

David J. Wolstenholme, Jenna Flogeras, Franklin N. Che, Andreas Decken, and G. Sean McGrady

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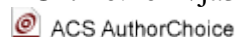
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## **Dynamic DNA Assemblies Mediated by Binding-Induced DNA Strand Displacement**

Feng Li, Hongquan Zhang, Zhixin Wang, Xukun Li, Xing-Fang Li, and X. Chris Le  
pp 2443–2446

**Publication Date (Web):** January 29, 2013 (Communication)

**DOI:** 10.1021/ja311990w



 Section:

Biochemical Methods

## **Efficient Self-Assembly in Water of Long Noncovalent Polymers by Nucleobase Analogues**

Brian J. Cafferty, Isaac Gállego, Michael C. Chen, Katherine I. Farley, Ramon Eritja, and Nicholas V. Hud

pp 2447–2450

**Publication Date (Web):** February 8, 2013 (Communication)

**DOI:** 10.1021/ja312155v

 Section:

General Biochemistry

## **Site-Specific Immobilization of Single-Walled Carbon Nanotubes onto Single and One-Dimensional DNA Origami**

Anshuman Mangalum, Masudur Rahman, and Michael L. Norton

pp 2451–2454

**Publication Date (Web):** February 5, 2013 (Communication)

**DOI:** 10.1021/ja312191a

 Section:

Biochemical Methods

## **Tetragonal and Helical Morphologies from Polyferrocenyldisilane Block Polyelectrolytes via Ionic Self-Assembly**

Rumman Ahmed, Sanjib K. Patra, Ian W. Hamley, Ian Manners, and Charl F. J. Faul

pp 2455–2458

**Publication Date (Web):** January 22, 2013 (Communication)

**DOI:** 10.1021/ja312318d

 Section:

Physical Properties of Synthetic High Polymers

# Regio- and Enantioselective Synthesis of Pyrrolidines Bearing a Quaternary Center by Palladium-Catalyzed Asymmetric [3 + 2] Cycloaddition of Trimethylenemethanes

Barry M. Trost, Tom M. Lam, and Melissa A. Herbage

pp 2459–2461

**Publication Date (Web):** January 30, 2013 (Communication)

**DOI:** 10.1021/ja312351s

 Section:

Heterocyclic Compounds (One Hetero Atom)

## $\pi$ -Conjugated Nickel Bis(dithiolene) Complex Nanosheet

Tetsuya Kambe, Ryota Sakamoto, Ken Hoshiko, Kenji Takada, Mariko Miyachi, Ji-Heun Ryu, Sono Sasaki, Jungeun Kim, Kazuo Nakazato, Masaki Takata, and Hiroshi Nishihara

pp 2462–2465

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**DOI:** 10.1021/ja312380b

 Section:

Surface Chemistry and Colloids

## Redox-Controlled Selective Docking in a [2]Catenane Host

Gokhan Barin, Marco Frasconi, Scott M. Dyar, Julien Iehl, Onur Buyukcakir, Amy A. Sarjeant, Raanan Carmieli, Ali Coskun, Michael R. Wasielewski, and J. Fraser Stoddart

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**DOI:** 10.1021/ja3125004

 Section:

Physical Organic Chemistry

## Late-Stage Deoxyfluorination of Alcohols with PhenoFluor

Filippo Sladojevich, Sophie I. Arlow, Pingping Tang, and Tobias Ritter

pp 2470–2473

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**DOI:** 10.1021/ja3125405

 Section:

Biomolecules and Their Synthetic Analogs

## Efficient Asymmetric Synthesis of *P*-Chiral Phosphine Oxides via Properly Designed and Activated Benzoxazaphosphinine-2-oxide Agents

Zhengxu S. Han, Navneet Goyal, Melissa A. Herbage, Joshua D. Sieber, Bo Qu, Yibo Xu, Zhibin, Li, Jonathan T. Reeves, Jean-Nicolas Desrosiers, Shengli Ma, Nelu Grinberg, Heewon

Lee, Hari P. R. Mangunuru, Yongda Zhang, Dhileep Krishnamurthy, Bruce Z. Lu, Jinhua J. Song, Guijun Wang, and Chris H. Senanayake  
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**DOI:** 10.1021/ja312352p

 Section:

Organometallic and Organometalloidal Compounds

## **Unstabilized Azomethine Ylides for the Stereoselective Synthesis of Substituted Piperidines, Tropanes, and Azabicyclo[3.1.0] Systems**

Michael A. Ischay, Michael K. Takase, Robert G. Bergman, and Jonathan A. Ellman  
pp 2478–2481

**Publication Date (Web):** February 11, 2013 (Communication)

**DOI:** 10.1021/ja312311k

 Section:

Alkaloids

## **Prediction of Catalyst and Substrate Performance in the Enantioselective Propargylation of Aliphatic Ketones by a Multidimensional Model of Steric Effects**

Kaid C. Harper, Sarah C. Vilardi, and Matthew S. Sigman  
pp 2482–2485

**Publication Date (Web):** February 6, 2013 (Communication)

**DOI:** 10.1021/ja4001807

 Section:

Physical Organic Chemistry

## **Oxidation of Carbene-Stabilized Diarsenic: Diarsene Dications and Diarsenic Radical Cations**

Mariham Y. Abraham, Yuzhong Wang, Yaoming Xie, Robert J. Gilliard, Jr., Pingrong Wei, Brian J. Vaccaro, Michael K. Johnson, Henry F. Schaefer, III, Paul v. R. Schleyer, and Gregory H. Robinson  
pp 2486–2488

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**DOI:** 10.1021/ja400219d

 Section:

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## **Post-Polyketide Synthase Steps in Iso-migrastatin Biosynthesis, Featuring Tailoring Enzymes with Broad Substrate Specificity**

Ming Ma, Thomas Kwong, Si-Kyu Lim, Jianhua Ju, Jeremy R. Lohman, and Ben Shen  
pp 2489–2492

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**DOI:** 10.1021/ja4002635

 Section:

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## **Two Reversible $\sigma$ -Bond Metathesis Pathways for Boron–Palladium Bond Formation: Selective Synthesis of Isomeric Five-Coordinate Borylpalladium Complexes**

Naohiro Kirai, Jun Takaya, and Nobuharu Iwasawa

pp 2493–2496

**Publication Date (Web):** February 5, 2013 (Communication)

**DOI:** 10.1021/ja400294m

 Section:

Organometallic and Organometalloidal Compounds

## **1,3,5-Triazine as a Modular Scaffold for Covalent Inhibitors with Streamlined Target Identification**

Ranjan Banerjee, Nicholas J. Pace, Douglas R. Brown, and Eranthie Weerapana

pp 2497–2500

**Publication Date (Web):** February 4, 2013 (Communication)

**DOI:** 10.1021/ja400427e

 Section:

Biochemical Methods

## **A Catalytic Enantioselective Tandem Allylation Strategy for Rapid Terpene Construction: Application to the Synthesis of Pumilaside Aglycon**

Grace E. Ferris, Kai Hong, Ian A. Roundtree, and James P. Morken

pp 2501–2504

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**DOI:** 10.1021/ja400506j

 Section:

Terpenes and Terpenoids

## **Catalytic Hydrotrifluoromethylation of Unactivated Alkenes**

Satoshi Mizuta, Stefan Verhoog, Keary M. Engle, Tanatorn Khotavivattana, Miriam O’Duill,

Katherine Wheelhouse, Gerasimos Rassias, Maurice Médebielle, and Véronique Gouverneur

pp 2505–2508

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**DOI:** 10.1021/ja401022x

 Section:

## Heavy-Enzyme Kinetic Isotope Effects on Proton Transfer in Alanine Racemase

Michael D. Toney, Joan Nieto Castro, and Trevor A. Addington

pp 2509–2511

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**DOI:** 10.1021/ja3101243

 Section:

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### Articles

## Fast Protein Motions Are Coupled to Enzyme H-Transfer Reactions

Christopher R. Pudney, Andrew Guerriero, Nicola J. Baxter, Linus O. Johannissen, Jonathan P. Waltho, Sam Hay, and Nigel S. Scrutton

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**DOI:** 10.1021/ja311277k

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## Structure of a Glycomimetic Ligand in the Carbohydrate Recognition Domain of C-type Lectin DC-SIGN. Structural Requirements for Selectivity and Ligand Design

Michel Thépaut, Cinzia Guzzi, Ieva Sutkeviciute, Sara Sattin, Renato Ribeiro-Viana, Norbert Varga, Eric Chabrol, Javier Rojo, Anna Bernardi, Jesus Angulo, Pedro M. Nieto, and Franck Fieschi

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**DOI:** 10.1021/ja3053305

 Section:

Immunochemistry

## Characterization of [4Fe-4S] Cluster Vibrations and Structure in Nitrogenase Fe Protein at Three Oxidation Levels via Combined NRVS, EXAFS, and DFT Analyses

Devrani Mitra, Simon J. George, Yisong Guo, Saeed Kamali, Stephen Keable, John W. Peters, Vladimir Pelmenschikov, David A. Case, and Stephen P. Cramer

pp 2530–2543

**Publication Date (Web):** January 1, 2013 (Article)



DOI: 10.1021/ja307027n

 Section:

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## Drug Delivery with a Calixpyrrole–*trans*-Pt(II) Complex

Grazia Cafeo, Grazia Carbotti, Angela Cuzzola, Marina Fabbi, Silvano Ferrini, Franz H. Kohnke, Georgia Papanikolaou, Maria Rosaria Plutino, Camillo Rosano, and Andrew J. P. White  
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DOI: 10.1021/ja307791j

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## Copper-Mediated Fluorination of Arylboronate Esters. Identification of a Copper(III) Fluoride Complex

Patrick S. Fier, Jingwei Luo, and John F. Hartwig  
pp 2552–2559

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DOI: 10.1021/ja310909q

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Benzene, Its Derivatives, and Condensed Benzenoid Compounds

## Distinct CCK-2 Receptor Conformations Associated with $\beta$ -Arrestin-2 Recruitment or Phospholipase-C Activation Revealed by a Biased Antagonist

Rémi Magnan, Chantal Escrieut, Véronique Gigoux, Kavita De, Pascal Clerc, Fan Niu, Joelle Azema, Bernard Masri, Arnau Cordero, Michel Baltas, Irina G. Tikhonova, and Daniel Fourmy  
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**Publication Date (Web):** January 16, 2013 (Article)

DOI: 10.1021/ja308784w

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Mammalian Hormones

## Hydrophobic Molecules Infiltrating into the Poly(ethylene glycol) Domain of the Core/Shell Interface of a Polymeric Micelle: Evidence Obtained with Anomalous Small-Angle X-ray Scattering

Yusuke Sanada, Isamu Akiba, Kazuo Sakurai, Kouichi Shiraishi, Masayuki Yokoyama, Efstratios Mylonas, Noboru Ohta, Naoto Yagi, Yuya Shinohara, and Yoshiyuki Amemiya  
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DOI: 10.1021/ja308965j

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Pharmaceuticals

## **CO Self-Promoting Oxidation on Nanosized Gold Clusters: Triangular Au<sub>3</sub> Active Site and CO Induced O–O Scission**

Chunyan Liu, Yingzi Tan, Sisi Lin, Hui Li, Xiaojun Wu, Lei Li, Yong Pei, and Xiao Cheng Zeng

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**Publication Date (Web):** January 23, 2013 (Article)

**DOI:** 10.1021/ja309460v

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## **Catalytic DNAs That Harness Violet Light To Repair Thymine Dimers in a DNA Substrate**

Adam Barlev and Dipankar Sen

pp 2596–2603

**Publication Date (Web):** January 24, 2013 (Article)

**DOI:** 10.1021/ja309638j

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## **Quantum Chemical Calculations with the Inclusion of Nonspecific and Specific Solvation: Asymmetric Transfer Hydrogenation with Bifunctional Ruthenium Catalysts**

Pavel A. Dub and Takao Ikariya

pp 2604–2619

**Publication Date (Web):** January 21, 2013 (Article)

**DOI:** 10.1021/ja3097674

 Section:

Physical Organic Chemistry

## **Different Nature of the Interactions between Anions and HAT(CN)<sub>6</sub>: From Reversible Anion– $\pi$ Complexes to Irreversible Electron-Transfer Processes (HAT(CN)<sub>6</sub> = 1,4,5,8,9,12-Hexaazatriphenylene)**

Gemma Aragay, Antonio Frontera, Vega Lloveras, José Vidal-Gancedo, and Pablo Ballester

pp 2620–2627

**Publication Date (Web):** January 22, 2013 (Article)

**DOI:** 10.1021/ja309960m

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Physical Organic Chemistry

## Directly Probing the Effects of Ions on Hydration Forces at Interfaces

Jason I. Kilpatrick, Siu-Hong Loh, and Suzanne P. Jarvis

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**DOI:** 10.1021/ja310255s

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## Copper(I)-Catalyzed Borylative *exo*-Cyclization of Alkenyl Halides Containing Unactivated Double Bond

Koji Kubota, Eiji Yamamoto, and Hajime Ito

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**DOI:** 10.1021/ja3104582

 Section:

Organometallic and Organometalloidal Compounds

## Controlling Crystal Polymorphism in Organic-Free Synthesis of Na-Zeolites

Miguel Maldonado, Matthew D. Oleksiak, Sivadinarayana Chinta, and Jeffrey D. Rimer

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**Publication Date (Web):** December 24, 2012 (Article)

**DOI:** 10.1021/ja3105939

 Section:

Industrial Inorganic Chemicals

## Enantioselective Liquid–Liquid Extractions of Underivatized General Amino Acids with a Chiral Ketone Extractant

Haofei Huang, Raju Nandhakumar, Misun Choi, Zhishan Su, and Kwan Mook Kim

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**DOI:** 10.1021/ja3105945

 Section:

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## Effective Optical Faraday Rotations of Semiconductor EuS Nanocrystals with Paramagnetic Transition-Metal Ions

Yasuchika Hasegawa, Masashi Maeda, Takayuki Nakanishi, Yoshihiro Doi, Yukio Hinatsu, Koji Fujita, Katsuhisa Tanaka, Hitoshi Koizumi, and Koji Fushimi

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**DOI:** 10.1021/ja3106253

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Optical, Electron, and Mass Spectroscopy and Other Related Properties

## **Molecular Recognition of Complex-Type Biantennary *N*-Glycans by Protein Receptors: a Three-Dimensional View on Epitope Selection by NMR**

Ana Ardá, Pilar Blasco, Daniel Varón Silva, Volker Schubert, Sabine André, Marta Bruix, F. Javier Cañada, Hans-Joachim Gabius, Carlo Unverzagt, and Jesús Jiménez-Barbero  
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**Publication Date (Web):** January 29, 2013 (Article)

**DOI:** 10.1021/ja3104928

Section:

General Biochemistry

## **Sensitizing Curium Luminescence through an Antenna Protein To Investigate Biological Actinide Transport Mechanisms**

Manuel Sturzbecher-Hoehne, Christophe Goujon, Gauthier J.-P. Deblonde, Anne B. Mason, and Rebecca J. Abergel

pp 2676–2683

**Publication Date (Web):** January 30, 2013 (Article)

**DOI:** 10.1021/ja310957f

Section:

Radiation Biochemistry

## **Formation of Diverse Supercrystals from Self-Assembly of a Variety of Polyhedral Gold Nanocrystals**

Ching-Wen Liao, Yeh-Sheng Lin, Kaushik Chanda, Yen-Fang Song, and Michael H. Huang  
pp 2684–2693

**Publication Date (Web):** February 8, 2013 (Article)

**DOI:** 10.1021/ja311008r

Section:

Crystallography and Liquid Crystals

## **Principles of Sustained Enzymatic Hydrogen Oxidation in the Presence of Oxygen – The Crucial Influence of High Potential Fe–S Clusters in the Electron Relay of [NiFe]-Hydrogenases**

Rhiannon M. Evans, Alison Parkin, Maxie M. Roessler, Bonnie J. Murphy, Hope Adamson, Michael J. Lukey, Frank Sargent, Anne Volbeda, Juan C. Fontecilla-Camps, and Fraser A. Armstrong

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**Publication Date (Web):** February 11, 2013 (Article)

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Section:

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## **Supramolecular Organization and Magnetic Properties of Mesogen-Hybridized Mixed-Valent Manganese Single Molecule Magnets $[\text{Mn}^{\text{III}}_8\text{Mn}^{\text{IV}}_4\text{O}_{12}(\text{L}_{x,y,z}\text{-CB})_{16}(\text{H}_2\text{O})_4]$**

Emmanuel Terazzi, Guillaume Rogez, Jean-Louis Gallani, and Bertrand Donnio

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**Publication Date (Web):** January 22, 2013 (Article)

**DOI:** 10.1021/ja311190a



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Imogen A. Riddell, Yana R. Hristova, Jack K. Clegg, Christopher S. Wood, Boris Breiner, and Jonathan R. Nitschke

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**DOI:** 10.1021/ja311285b



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Emmanuel Anim-Danso, Yu Zhang, Azar Alizadeh, and Ali Dhinojwala

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**DOI:** 10.1021/ja311648q



Section:

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## **Heterogeneous Catalysts Need Not Be so “Heterogeneous”: Monodisperse Pt Nanocrystals by Combining Shape-Controlled Synthesis and Purification by Colloidal Recrystallization**

Yijin Kang, Meng Li, Yun Cai, Matteo Cargnello, Rosa E. Diaz, Thomas R. Gordon, Noah L. Wieder, Radoslav R. Adzic, Raymond J. Gorte, Eric A. Stach, and Christopher B. Murray  
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**DOI:** 10.1021/ja3116839

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Catalysis, Reaction Kinetics, and Inorganic Reaction Mechanisms

## **Structural Complexity Meets Transport and Magnetic Anisotropy in Single Crystalline $\text{Ln}_{30}\text{Ru}_4\text{Sn}_{31}$ (Ln = Gd, Dy)**

Devin C. Schmitt, Neel Haldolaarachchige, Joseph Prestigiacomo, Amar Karki, David P. Young, Shane Stadler, Rongying Jin, and Julia Y. Chan

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**Publication Date (Web):** January 25, 2013 (Article)

**DOI:** 10.1021/ja311779t

 Section:

Magnetic Phenomena

## **Self-Assembled Nanoscale DNA–Porphyrin Complex for Artificial Light Harvesting**

Jakob G. Woller, Jonas K. Hannestad, and Bo Albinsson

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**Publication Date (Web):** January 25, 2013 (Article)

**DOI:** 10.1021/ja311828v

 Section:

Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes

## **From Yellow to Black: Dramatic Changes between Cerium(IV) and Plutonium(IV) Molybdates**

Justin N. Cross, Patrick M. Duncan, Eric M. Villa, Matthew J. Polinski, Jean-Marie Babo, Evgeny V. Alekseev, Corwin H. Booth, and Thomas E. Albrecht-Schmitt

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**Publication Date (Web):** January 29, 2013 (Article)

**DOI:** 10.1021/ja311910h

 Section:

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## **Crystal and Magnetic Structures and Physical Properties of a New Pyroxene $\text{NaMnGe}_2\text{O}_6$ Synthesized under High Pressure**

Jinguang Cheng, Wei Tian, Jianshi Zhou, Vincent M. Lynch, Hugo Steinfink, Arumugam Manthiram, Andrew F. May, Vasile O. Garlea, Joerg C. Neuefeind, and Jiaqiang Yan

pp 2776–2786

**Publication Date (Web):** January 18, 2013 (Article)

**DOI:** 10.1021/ja312038g

 Section:

Inorganic Chemicals and Reactions

## **Anomalous Manganese Activation of a Pyrophosphate Cathode in Sodium Ion Batteries: A Combined Experimental and Theoretical Study**

Chan Sun Park, Heejin Kim, Rana A. Shakoor, Eunjeong Yang, Soo Yeon Lim, Ramazan Kahraman, Yousung Jung, and Jang Wook Choi

pp 2787–2792

**Publication Date (Web):** January 27, 2013 (Article)

**DOI:** 10.1021/ja312044k

 Section:

Electrochemical, Radiational, and Thermal Energy Technology

## **Bimetallic Cyanide-Bridged Coordination Polymers as Lithium Ion Cathode Materials: Core@Shell Nanoparticles with Enhanced Cyclability**

Daisuke Asakura, Carissa H. Li, Yoshifumi Mizuno, Masashi Okubo, Haoshen Zhou, and Daniel R. Talham

pp 2793–2799

**Publication Date (Web):** February 7, 2013 (Article)

**DOI:** 10.1021/ja312160v

 Section:

Electrochemical, Radiational, and Thermal Energy Technology

## **Efficient Two-Electron Reduction of Dioxygen to Hydrogen Peroxide with One-Electron Reductants with a Small Overpotential Catalyzed by a Cobalt Chlorin Complex**

Kentaro Mase, Kei Ohkubo, and Shunichi Fukuzumi

pp 2800–2808

**Publication Date (Web):** January 23, 2013 (Article)

**DOI:** 10.1021/ja312199h

 Section:

Electrochemistry

## **Strong Correlation between Molecular Configurations and Charge-Transfer Processes Probed at the Single-Molecule Level by Surface-Enhanced Raman Scattering**

Emiliano Cortés, Pablo G. Etchegoin, Eric C. Le Ru, Alejandro Fainstein, María E. Vela, and Roberto C. Salvarezza  
pp 2809–2815

**Publication Date (Web):** February 5, 2013 (Article)

**DOI:** 10.1021/ja312236y

 Section:

Surface Chemistry and Colloids

## High-Resolution Insight into G-Overhang Architecture

Robert Hänsel, Frank Löhr, Lukáš Trantírek, and Volker Dötsch  
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**Publication Date (Web):** January 22, 2013 (Article)

**DOI:** 10.1021/ja312403b

 Section:

General Biochemistry

## Temperature-Independent Catalytic Two-Electron Reduction of Dioxygen by Ferrocenes with a Copper(II) Tris[2-(2-pyridyl)ethyl]amine Catalyst in the Presence of Perchloric Acid

Dipanwita Das, Yong-Min Lee, Kei Ohkubo, Wonwoo Nam, Kenneth D. Karlin, and Shunichi Fukuzumi  
pp 2825–2834

**Publication Date (Web):** February 8, 2013 (Article)

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Electrochemistry

## *Cis–Trans* Amide Bond Rotamers in $\beta$ -Peptoids and Peptoids: Evaluation of Stereoelectronic Effects in Backbone and Side Chains

Jonas S. Laursen, Jens Engel-Andreasen, Peter Fristrup, Pernille Harris, and Christian A. Olsen  
pp 2835–2844

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Physical Organic Chemistry

## Free Fructose Is Conformationally Locked

Emilio J. Cocinero, Alberto Lesarri, Patricia Écija, Álvaro Cimas, Benjamin G. Davis, Francisco J. Basterretxea, José A. Fernández, and Fernando Castaño  
pp 2845–2852

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Physical Organic Chemistry

## **Inhibition of Tau Filament Formation by Conformational Modulation**

Elias Akoury, Michal Gajda, Marcus Pickhardt, Jacek Biernat, Pornsuwan Soraya, Christian Griesinger, Eckhard Mandelkow, and Markus Zweckstetter  
pp 2853–2862

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Pharmacology

### **Additions and Corrections**

## **Correction to Cell-Selective Biological Activity of Rhodium Metalloinsertors Correlates with Subcellular Localization**

Alexis C. Komor, Curtis J. Schneider, Alyson G. Weidmann, and Jacqueline K. Barton  
pp 2863–2863

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Pharmacology

## **Correction to “Design and Characterization of Programmable DNA Nanotubes”**

Paul W. K. Rothmund, Axel Ekani-Nkodo, Nick Papadakis, Ashish Kumar, Deborah Kuchnir Fygenson, and Erik Winfree  
pp 2864–2864

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Biochemical Methods