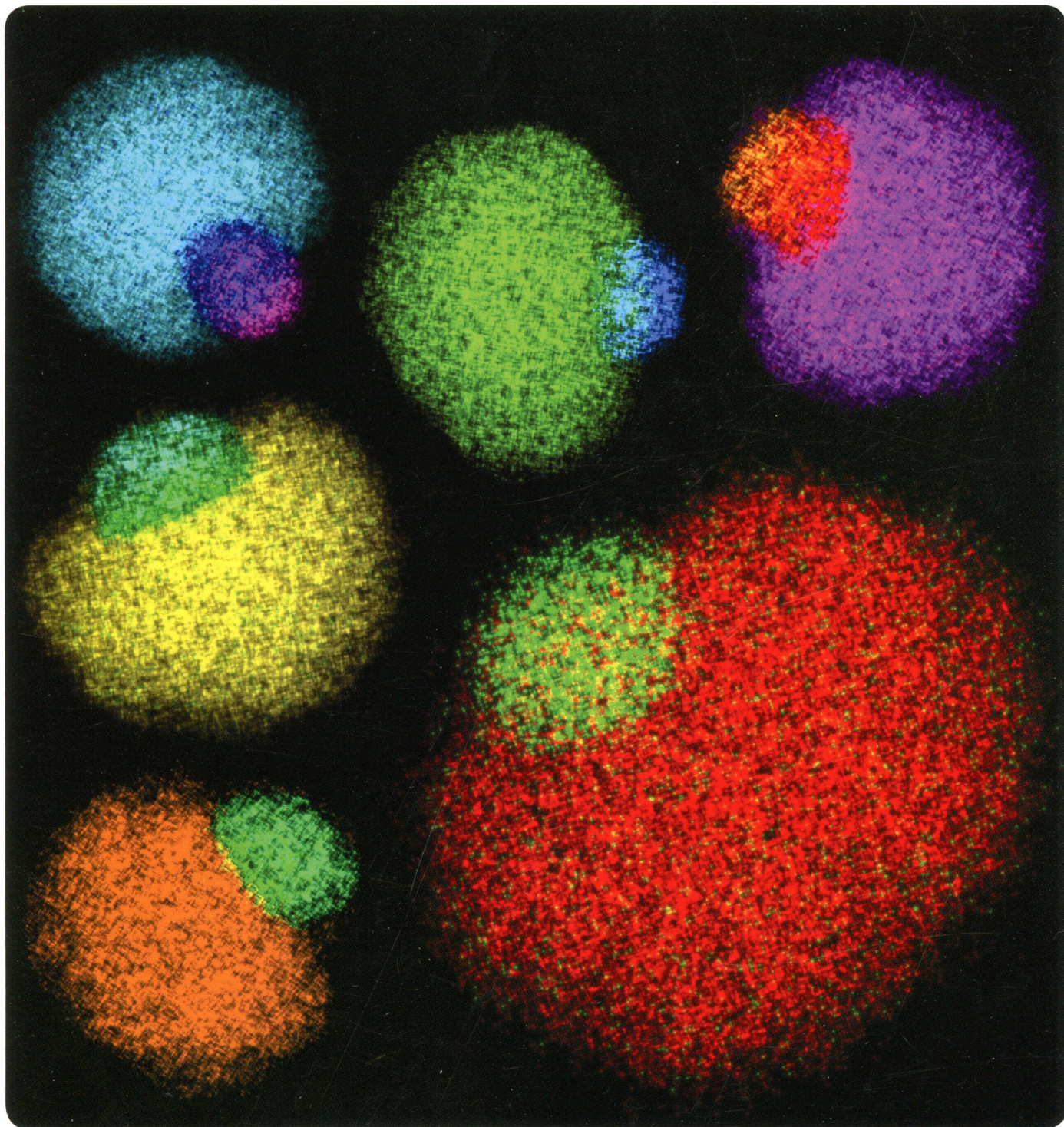


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C51/9m

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OCTOBER 28, 2014 | VOLUME 26 | NUMBER 20 | pubs.acs.org/cm



ON THE COVER: The cover displays several STEM-EDS element map images of dual-plasmonic Au-In₂O₃ hybrid nanoparticles, which form in solution through a multi-step pathway that involves Au seeds reacting with In(III) to form Au-In alloy and AuIn₂@In₂O₃ nanoparticle intermediates. The images were acquired by Dr. Jennifer Gray using an FEI Titan³ scanning/transmission electron microscope. For more information, see "Synthesis of Hybrid Au-In₂O₃ Nanoparticles Exhibiting Dual Plasmonic Resonance" by Thomas R. Gordon and Raymond E. Schaak* (*Chem. Mater.* 2014, 26, 5900–5904).

Editorial

5819

[dx.doi.org/10.1021/cm503557g](https://doi.org/10.1021/cm503557g)

Father of Mesoporous Materials: Galen D. Stucky
Carlos Toro* and Jillian M. Buriak

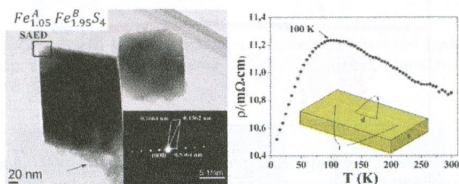
Articles

5821

[dx.doi.org/10.1021/cm501493m](https://doi.org/10.1021/cm501493m)

High-Purity Fe₃S₄ Greigite Microcrystals for Magnetic and Electrochemical Performance

Guowei Li, Baomin Zhang, Feng Yu, Alla A. Novakova, Maxim S. Krivenkov, Tatiana Y. Kiseleva, Liao Chang, Jiancun Rao, Alexey O. Polyakov, Graeme R. Blake, Robert A. de Groot, and Thomas T. M. Palstra*

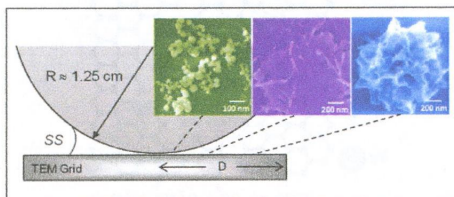


5830

[dx.doi.org/10.1021/cm501770r](https://doi.org/10.1021/cm501770r)

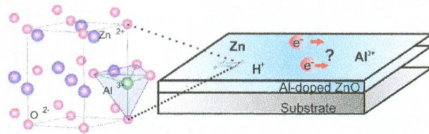
Confinement Increases the Lifetimes of Hydroxyapatite Precursors

Yun-Wei Wang, Hugo K. Christenson,* and Fiona C. Meldrum*



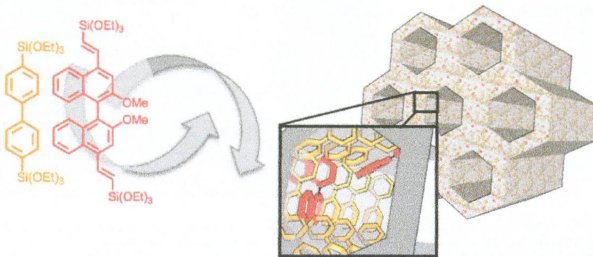
Factors Influencing the Conductivity of Aqueous Sol(ution)–Gel-Processed Al-Doped ZnO Films

Hanne Damm, Peter Adriaensens, Christopher De Dobbelaere, Boris Capon, Ken Elen, Jeroen Drijkoningen, Bert Conings, Jean V. Manca, Jan D'Haen, Christophe Detavernier, Pieter C. M. M. Magusin, Joke Hadermann, An Hardy, and Marlies K. Van Bael*



Chiral Periodic Mesoporous Organosilicas: Probing Chiral Induction in the Solid State

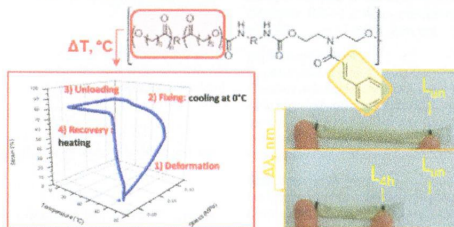
Michael W. A. MacLean, Thomas K. Wood, Gang Wu, Robert P. Lemieux, and Cathleen M. Crudden*



Design of Multistimuli-Responsive Shape-Memory Polymer Materials by Reactive Extrusion

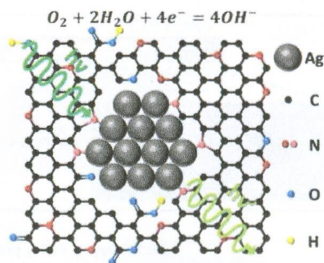
Florence Pilate, Rosica Mincheva, Julien De Winter, Pascal Gerbaux, Linbo Wu, Richard Todd, Jean-Marie Raquez,* and Philippe Dubois

Dual-stimuli-responsive shape-memory polymers

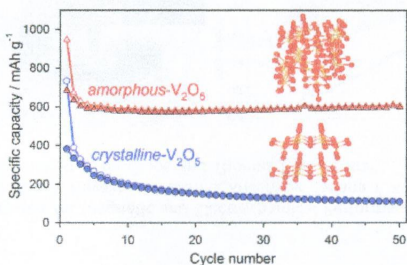


Silver/Nitrogen-Doped Graphene Interaction and Its Effect on Electrocatalytic Oxygen Reduction

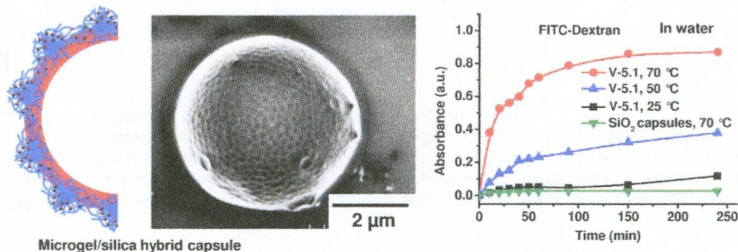
Ruifeng Zhou and Shi Zhang Qiao*

**Reversible Lithium Storage at Highly Populated Vacant Sites in an Amorphous Vanadium Pentoxide Electrode**

Oh B. Chae, Jisun Kim, Inchul Park, Hyejeong Jeong, Jun H. Ku, Ji Heon Ryu, Kisuk Kang, and Seung M. Oh*

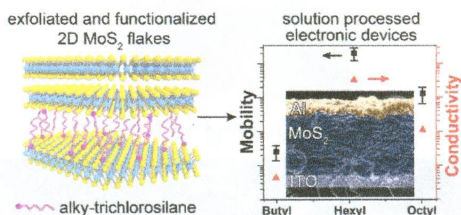
**Microgel-Based Adaptive Hybrid Capsules with Tunable Shell Permeability**

Garima Agrawal, Andreas Ülpenich, Xiaomin Zhu, Martin Möller, and Andrij Pich*



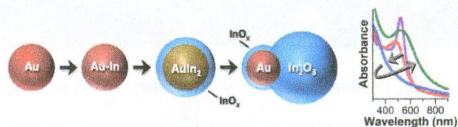
Multiflake Thin Film Electronic Devices of Solution Processed 2D MoS₂ Enabled by Sonopolymer Assisted Exfoliation and Surface Modification

Xiaoyun Yu, Mathieu S. Prévot, and Kevin Sivula*



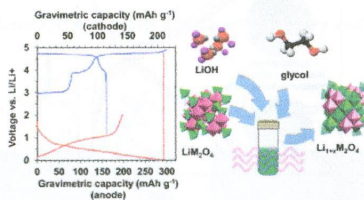
Synthesis of Hybrid Au-In₂O₃ Nanoparticles Exhibiting Dual Plasmonic Resonance

Thomas R. Gordon and Raymond E. Schaak*



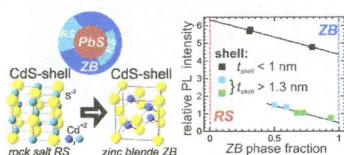
In Situ Mitigation of First-Cycle Anode Irreversibility in a New Spinel/FeSb Lithium-Ion Cell Enabled via a Microwave-Assisted Chemical Lithiation Process

Zachary Moorhead-Rosenberg, Eric Allcorn, and Arumugam Manthiram*



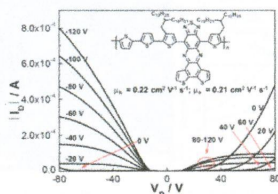
Crystal Phase Transitions in the Shell of PbS/CdS Core/Shell Nanocrystals Influences Photoluminescence Intensity

Rainer T. Lechner,* Gerhard Fritz-Popovski, Maksym Yarema, Wolfgang Heiss, Armin Hoell, Tobias U. Schüllli, Daniel Primetzhofer, Martin Eibelhuber, and Oskar Paris



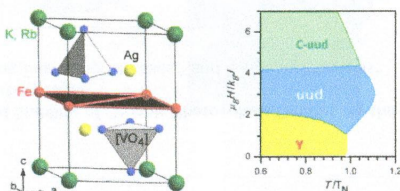
Thiadizoloquinoline-Based Low-Bandgap Conjugated Polymers as Ambipolar Semiconductors for Organic Field Effect Transistors

Cunbin An, Mengmeng Li, Tomasz Marszalek, Dan Li, Rüdiger Berger, Wojciech Pisula, and Martin Baumgarten*



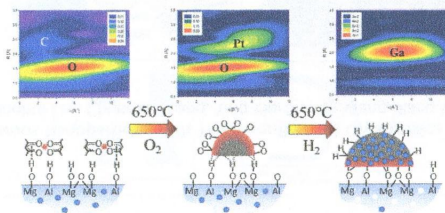
Experimental Realization of a Unique Class of Compounds: XY-Antiferromagnetic Triangular Lattices, $KAg_2Fe[VO_4]_2$ and $RbAg_2Fe[VO_4]_2$, with Ferroelectric Ground States

Ngozi E. Amunke, Joshua Tapp, Clarina R. de la Cruz, and Angela Möller*



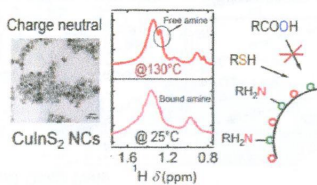
Unravelling the Formation of Pt–Ga Alloyed Nanoparticles on Calcined Ga-Modified Hydrotalcites by *in Situ* XAS

Matthias Filez, Evgeniy A. Redekop, Hilde Poelman,* Vladimir V. Galvita, Ranjith K. Ramachandran, Jolien Dendooven, Christophe Detavernier, and Guy B. Marin



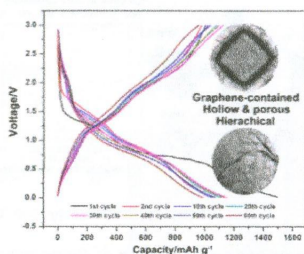
Surface Chemistry of CuInS_2 Colloidal Nanocrystals, Tight Binding of L-Type Ligands

Ruben Dierick, Freya Van den Broeck, Kim De Nolf, Qiang Zhao, André Vantomme, José C. Martins, and Zeger Hens*



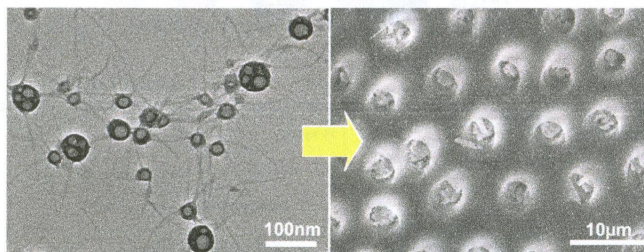
CoO Hollow Cube/Reduced Graphene Oxide Composites with Enhanced Lithium Storage Capability

Xin Guan, Jianwei Nai,* Yuping Zhang, Pengxi Wang, Jie Yang, Lirong Zheng, Jing Zhang, and Lin Guo*



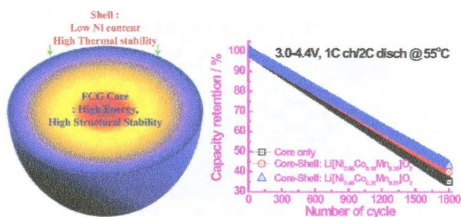
Bioactive Hybrid Organogels Based on Miniemulsion Synthesis of Morphologically Complex Polymer/Surfactant/Calcium Phosphate Nanostructures

Khongkhan Akkarachaneyakorn, Mei Li, Joe Harris, Sean A. Davis, and Stephen Mann*



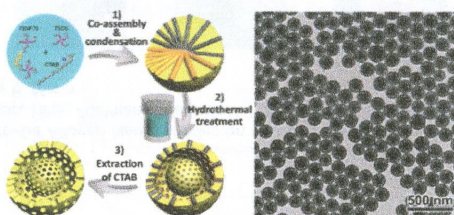
High-Energy Layered Oxide Cathodes with Thin Shells for Improved Surface Stability

Hyung-Joo Noh, Seung-Taek Myung, Yun Jung Lee,* and Yang-Kook Sun*



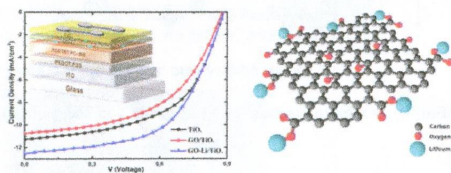
Yolk-Shell Structured Mesoporous Nanoparticles with Thioether-Bridged Organosilica Frameworks

Zhaogang Teng, Xiaodan Su, Binghui Lee, Chungui Huang, Ying Liu, Shouju Wang, Jiang Wu, Peng Xu, Jia Sun, Dengke Shen, Wei Li, and Guangming Lu*

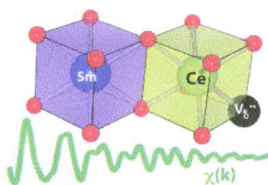


Enhancement of the Efficiency and Stability of Organic Photovoltaic Devices via the Addition of a Lithium-Neutralized Graphene Oxide Electron-Transporting Layer

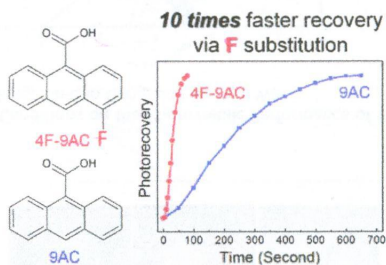
George Kakavelakis, Dimitrios Konios, Emmanuel Stratakis,* and Emmanuel Kymakis*



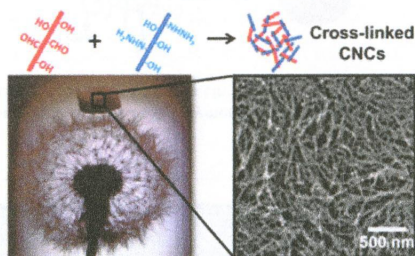
Structure and Oxide Ion Conductivity: Local Order, Defect Interactions and Grain Boundary Effects in Acceptor-Doped Ceria
 Francesco Giannici,* Giuliano Gregori, Chiara Aliotta, Alessandro Longo, Joachim Maier, and Antonino Martorana



Improved Solid-State Photomechanical Materials by Fluorine Substitution of 9-Anthracene Carboxylic Acid
 Lingyan Zhu, Fei Tong, Christopher Salinas, Muhanna K. Al-Muhanna, Fook S. Tham, David Kisailus, Rabih O. Al-Kaysi,* and Christopher J. Bardeen*

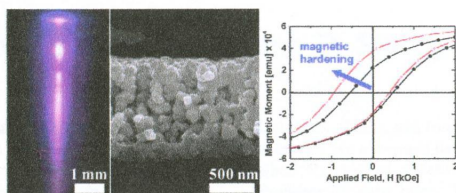


Chemically Cross-Linked Cellulose Nanocrystal Aerogels with Shape Recovery and Superabsorbent Properties
 Xuan Yang and Emily D. Cranston*



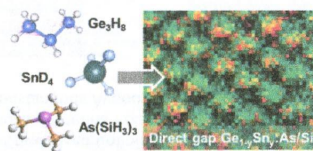
Microplasma-Based Growth of Biphasic NiFe₂O₄/NiO Nanogranel Films for Exchange Bias Applications

Andrew C. Pebley, Alex Peek, Tresa M. Pollock, and Michael J. Gordon*



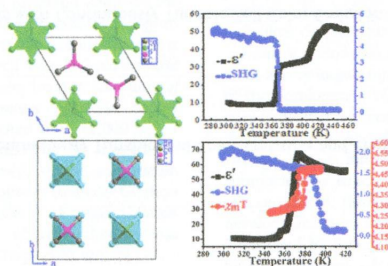
Advances in Light Emission from Group-IV Alloys via Lattice Engineering and n-Type Doping Based on Custom-Designed Chemistries

C. L. Senaratne, J. D. Gallagher, T. Aoki, J. Kouvetakis,* and J. Menéndez



Novel Phase-Transition Materials Coupled with Switchable Dielectric, Magnetic, and Optical Properties: [(CH₃)₄P][FeCl₄] and [(CH₃)₄P][FeBr₄]

Ping-Ping Shi, Qiong Ye,* Qiang Li, Hui-Ting Wang, Da-Wei Fu, Yi Zhang, and Ren-Gen Xiong*



6050 **S**

dx.doi.org/10.1021/cm503020y

Molten Salt Assisted Self Assembly (MASA): Synthesis of Mesoporous Metal Titanate (CoTiO_3 , MnTiO_3 , and $\text{Li}_4\text{Ti}_5\text{O}_{12}$) Thin Films and Monoliths

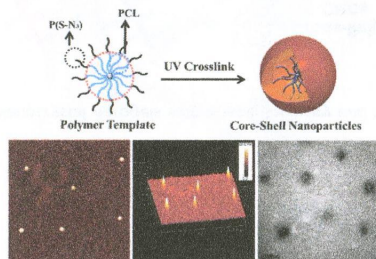
Civan Avci, Aykut Aydın, Zeynep Tuna, Zelal Yavuz, Yusuke Yamauchi, Norihiro Suzuki, and Ömer Dag*

6058 **S**

dx.doi.org/10.1021/cm503108z

Robust Route to Unimolecular Core–Shell and Hollow Polymer Nanoparticles

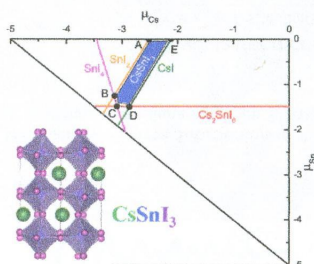
Chaowei Feng, Xinchang Pang, Yanjie He, Bo Li, and Zhiqun Lin*

6068 **S**

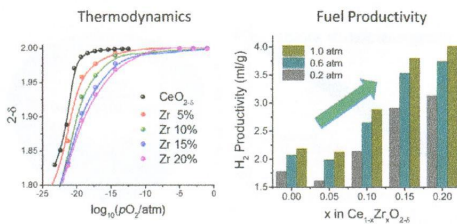
dx.doi.org/10.1021/cm503122j

Influence of Defects and Synthesis Conditions on the Photovoltaic Performance of Perovskite Semiconductor CsSnI_3

Peng Xu, Shiyu Chen,* Hong-Jun Xiang, Xin-Gao Gong, and Su-Huai Wei



Ceria–Zirconia Solid Solutions ($\text{Ce}_{1-x}\text{Zr}_x\text{O}_{2-6x}$, $x \leq 0.2$) for Solar Thermochemical Water Splitting: A Thermodynamic Study
Yong Hao, Chih-Kai Yang, and Sossina M. Haile*



Comments

6083

dx.doi.org/10.1021/cm5028157

Comment on "Carbon Dots with Continuously Tunable Full-Color Emission and Their Application in Ratiometric pH Sensing"

Edwin A. Chandross

6084

dx.doi.org/10.1021/cm503256m

Reply to Comment on "Carbon Dots with Continuously Tunable Full-Color Emission and Their Application in Ratiometric pH Sensing"

Minjie Li* and Sean Xiao-An Zhang

Additions and Corrections

6085

dx.doi.org/10.1021/cm503591z

Correction to **Theranostics of Epitaxially Condensed Colloidal Nanocrystal Clusters, through a Soft Biomineralization Route**
Giorgio Zoppellaro, Argiris Kolokithas-Ntoukas, Katerina Polakova, Jiri Tucek, Radek Zboril, George Loudos, Eirini Fragogeorgi, Clemens Diwoy, Katerina Tomankova, Konstantinos Avgoustakis, Dimitris Kouzoudis, and Aristides Bakandritsos*