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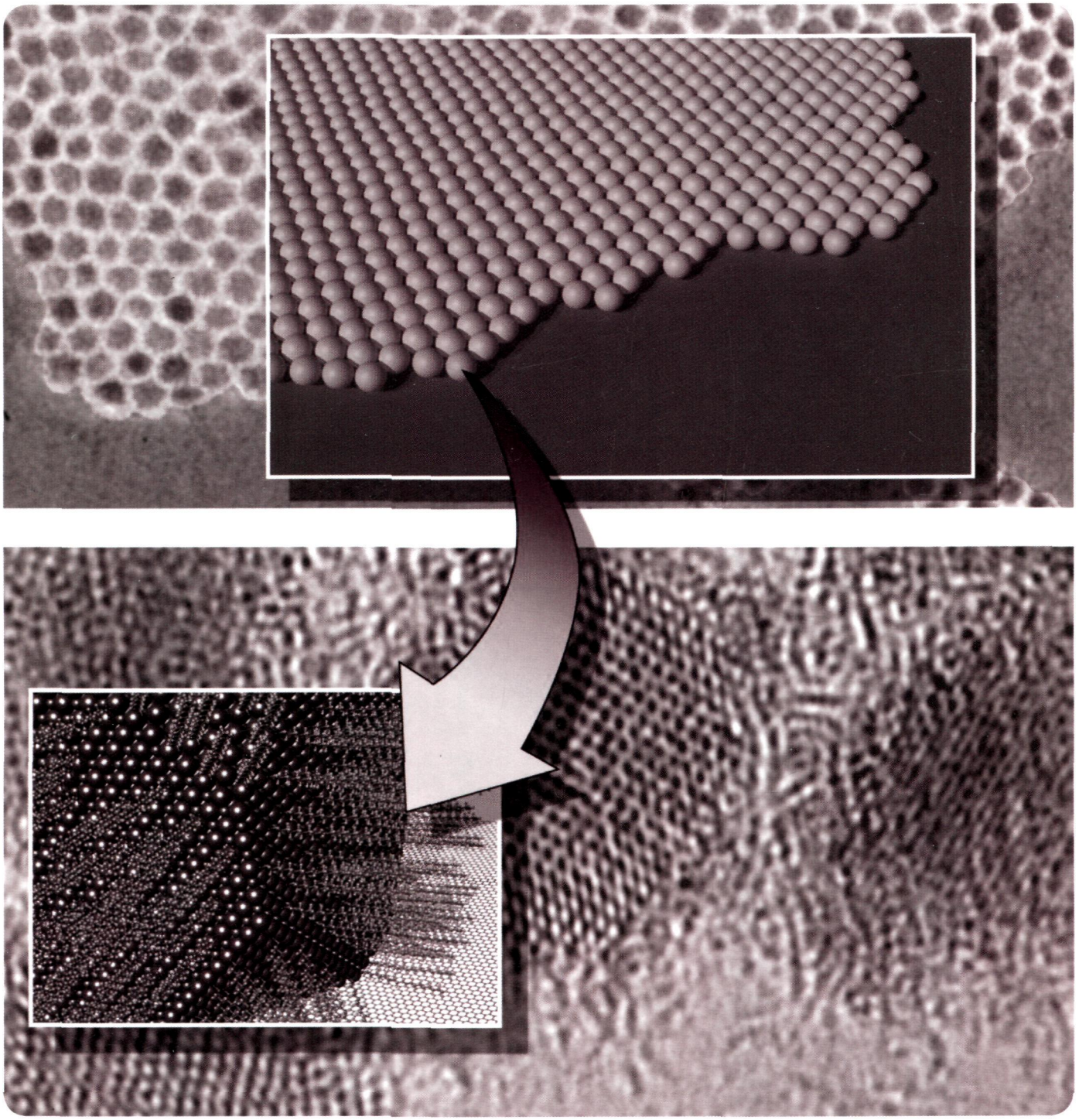

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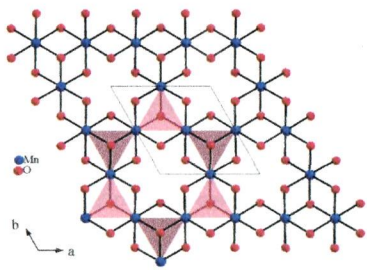
ON THE COVER: Lead telluride nanocrystals self-assembled into a close-packed monolayer when deposited onto graphene. This permitted their high resolution characterization by aberration corrected transmission electron microscopy. For more information, see "PbTe Nanocrystal Arrays on Graphene and the Structural Influence of Capping Ligands" by Alex W. Robertson, Camden Ford, Kuang He, Angus I. Kirkland, Andrew A. R. Watt, and Jamie H. Warner* (*Chem. Mater.* **2014**, *26*, 1567−1575).

Editorial

Communications

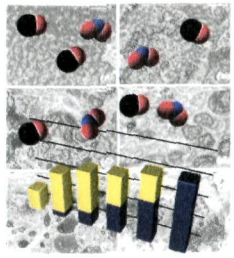


Articles

1505 $ dx.doi.org/10.1021/cm4018858

Chemical Tuning versus Microstructure Features in Solid-State Gas Sensors: $LaFe_{1-x}Ga_xO_3$, a Case Study

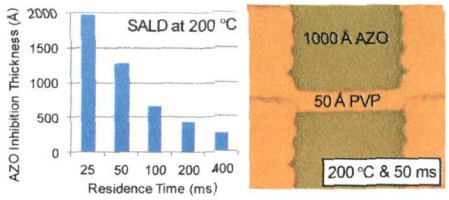
Marta Maria Natile,* Andrea Ponzoni, Isabella Concina, and Antonella Glisenti



1514 dx.doi.org/10.1021/cm402464z

Selective Area Spatial Atomic Layer Deposition of ZnO, Al_2O_3, and Aluminum-Doped ZnO Using Poly(vinyl pyrrolidone)

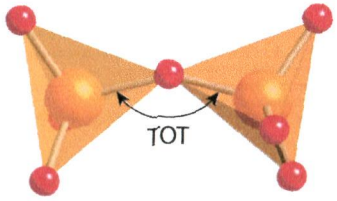
Carolyn R. Ellinger* and Shelby F. Nelson



1523 dx.doi.org/10.1021/cm402814v

Ab Initio Calculations of the Energy Dependence of Si–O–Si Angles in Silica and Ge–O–Ge Angles in Germania Crystalline Systems

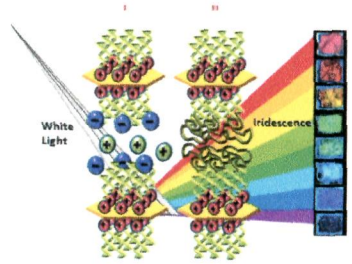
Colby J. Dawson, Rebeca Sanchez-Smith, Peter Rez, Michael O'Keeffe, and Michael M. J. Treacy*



1528 $ dx.doi.org/10.1021/cm402991c

Solution Processable Iridescent Self-Assembled Nanoplatelets with Finely Tunable Interlayer Distances Using Charge- and Sterically Stabilizing Oligomeric Polyoxyalkyleneamine Surfactants

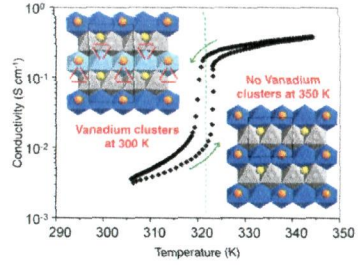
Minhao Wong, Ryohei Ishige, Taiki Hoshino, Spencer Hawkins, Peng Li, Atsushi Takahara, and Hung-Jue Sue*



1538 $ dx.doi.org/10.1021/cm403114k

Vanadium Clustering/Declustering in P2–$Na_{1/2}VO_2$ Layered Oxide

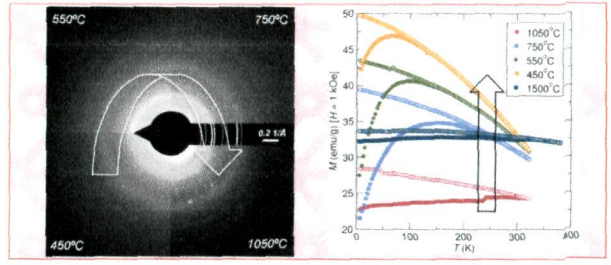
Marie Guignard,* Dany Carlier, Christophe Didier, Matthew R. Suchomel, Erik Elkaïm, Pierre Bordet, Rodolphe Decourt, Jacques Darriet, and Claude Delmas



1549 dx.doi.org/10.1021/cm403167a

Size and Crystallinity Dependence of Magnetism in Nanoscale Iron Boride, α-FeB

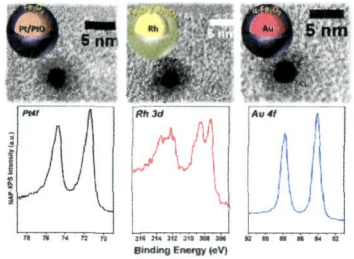
Steffi Rades, Stephan Kraemer, Ram Seshadri,* and Barbara Albert*



1553 (S) dx.doi.org/10.1021/cm403172a

Mixing Patterns and Redox Properties of Iron-Based Alloy Nanoparticles under Oxidation and Reduction Conditions

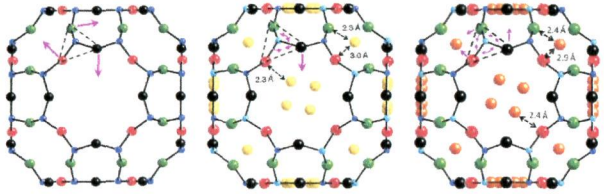
Vasiliki Papaefthimiou, Florent Tournus, Arnaud Hillion, Ghassan Khadra, Detre Teschner, Axel Knop-Gericke, Veronique Dupuis, and Spyridon Zafeiratos*



1561 (S) dx.doi.org/10.1021/cm403312q

Chemical Control of Thermal Expansion in Cation-Exchanged Zeolite A

Thomas Carey, Chiu C. Tang, Joseph A. Hriljac,* and Paul A. Anderson*

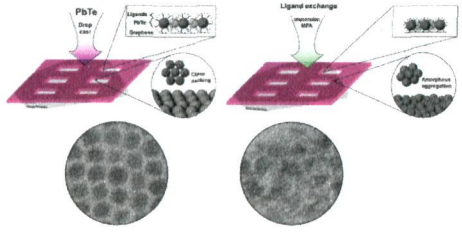


ITQ–29 Dehydrated Ag-A Dehydrated Na-A

1567 (S) dx.doi.org/10.1021/cm403373q

PbTe Nanocrystal Arrays on Graphene and the Structural Influence of Capping Ligands

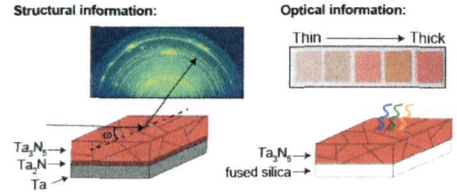
Alex W. Robertson, Camden Ford, Kuang He, Angus I. Kirkland, Andrew A. R. Watt, and Jamie H. Warner*



1576 (S) dx.doi.org/10.1021/cm403482s

Controlling the Structural and Optical Properties of Ta_3N_5 Films through Nitridation Temperature and the Nature of the Ta Metal

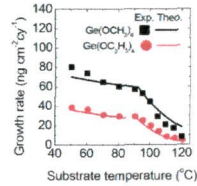
Blaise A. Pinaud, Arturas Vailionis, and Thomas F. Jaramillo*



1583 dx.doi.org/10.1021/cm4034885

Influence of the Kinetic Adsorption Process on the Atomic Layer Deposition Process of $(GeTe_2)_{(1-x)}(Sb_2Te_3)_x$ Layers Using Ge^{4+}–Alkoxide Precursors

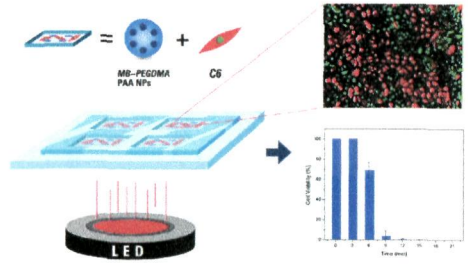
Taeyong Eom, Taehong Gwon, Sijung Yoo, Byung Joon Choi, Moo-Sung Kim, Iain Buchanan, Manchao Xiao, and Cheol Seong Hwang*



1592 dx.doi.org/10.1021/cm403505s

Nanophotosensitizers Engineered to Generate a Tunable Mix of Reactive Oxygen Species, for Optimizing Photodynamic Therapy, Using a Microfluidic Device

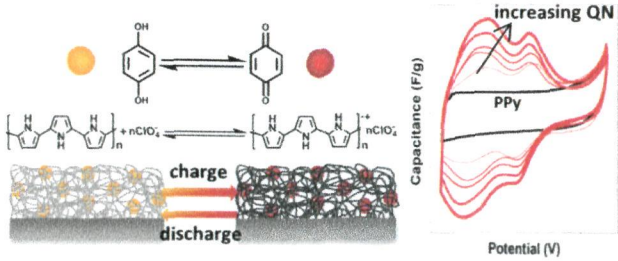
Hyung Ki Yoon, Xia Lou, Yu-Chih Chen, Yong-Eun Koo Lee, Euisik Yoon, and Raoul Kopelman*



1601 dx.doi.org/10.1021/cm403630h

Redox Solute Doped Polypyrrole for High-Charge Capacity Polymer Electrodes

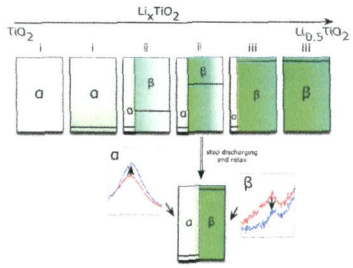
Margarita R. Arcila-Velez and Mark E. Roberts*



1608 dx.doi.org/10.1021/cm4037346

Impact of Particle Size on the Non-Equilibrium Phase Transition of Lithium-Inserted Anatase TiO_2

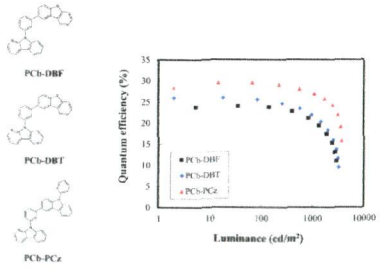
Kun Shen, Hao Chen, Frits Klaver, Fokko M. Mulder, and Marnix Wagemaker*



1616 dx.doi.org/10.1021/cm403750p

Structure–Property Relationship of Pyridoindole-Type Host Materials for High-Efficiency Blue Phosphorescent Organic Light-Emitting Diodes

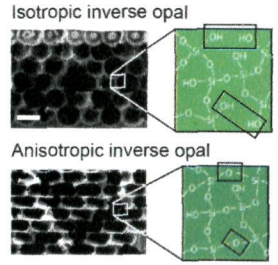
Chil Won Lee and Jun Yeob Lee*



1622 S dx.doi.org/10.1021/cm403812y

Tunable Anisotropy in Inverse Opals and Emerging Optical Properties

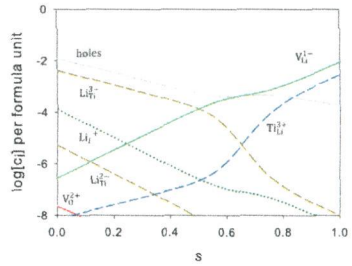
Katherine R. Phillips, Nicolas Vogel, Yuhang Hu, Mathias Kolle, Carole C. Perry, and Joanna Aizenberg*



1629 dx.doi.org/10.1021/cm4038473

Point Defects and Non-stoichiometry in Li_2TiO_3

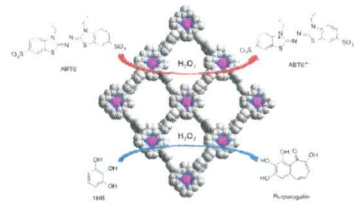
Samuel T. Murphy* and Nicholas D. M. Hine



1639 S dx.doi.org/10.1021/cm403860t

Covalent Heme Framework as a Highly Active Heterogeneous Biomimetic Oxidation Catalyst

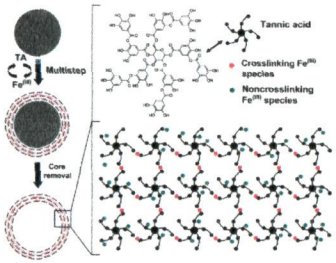
Xi-Sen Wang, Matthew Chrzanowski, Daqiang Yuan, Brandon S. Sweeting, and Shengqian Ma*



1645 S dx.doi.org/10.1021/cm403903m

Coordination-Driven Multistep Assembly of Metal–Polyphenol Films and Capsules

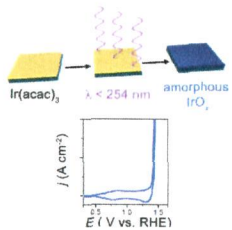
Md. Arifur Rahim, Hirotaka Ejima, Kwun Lun Cho, Kristian Kempe, Markus Müllner, James P. Best, and Frank Caruso*



1654 S dx.doi.org/10.1021/cm4041715

Facile Photochemical Preparation of Amorphous Iridium Oxide Films for Water Oxidation Catalysis

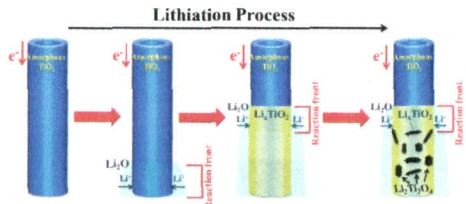
Rodney D. L. Smith, Barbora Sporinova, Randal D. Fagan, Simon Trudel,* and Curtis P. Berlinguette*



1660 S dx.doi.org/10.1021/cm403951b

Direct Evidence of Lithium-Induced Atomic Ordering in Amorphous TiO_2 Nanotubes

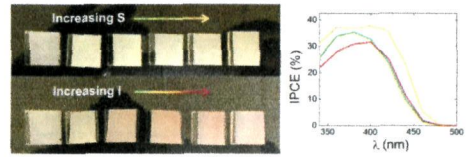
Qi Gao, Meng Gu, Anmin Nie, Farzad Mashayek, Chongmin Wang,* Gregory M. Odegard, and Reza Shahbazian-Yassar*



1670 S dx.doi.org/10.1021/cm403969r

Improved Visible Light Harvesting of WO_3 by Incorporation of Sulfur or Iodine: A Tale of Two Impurities

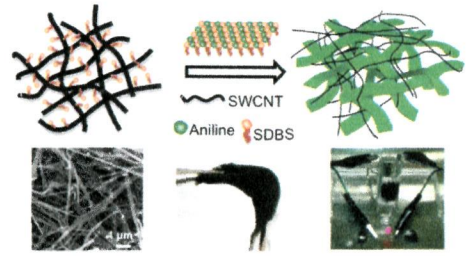
Alexander J. E. Rettie, Kyle C. Klavetter, Jung-Fu Lin, Andrei Dolocan, Hugo Celio, Ashioma Ishiekwene, Heather L. Bolton, Kristen N. Pearson, Nathan T. Hahn, and C. Buddie Mullins*



1678 S dx.doi.org/10.1021/cm404025g

In Situ Synthesis of Hybrid Aerogels from Single-Walled Carbon Nanotubes and Polyaniline Nanoribbons as Free-Standing, Flexible Energy Storage Electrodes

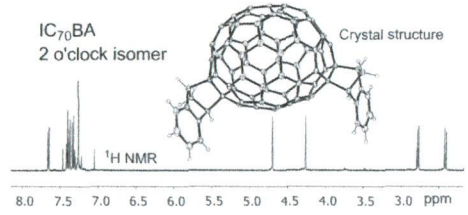
Dengteng Ge, Lili Yang,* Apiradee Honglawan, Jie Li, and Shu Yang*



1686 S dx.doi.org/10.1021/cm404054z

Single Isomer of Indene-C_{70} Bisadduct—Isolation and Performance in Bulk Heterojunction Solar Cells

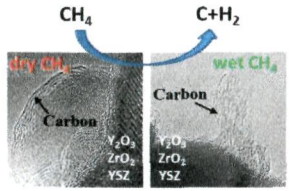
Wallace W. H. Wong,* Jegadesan Subbiah, Jonathan M. White, Helga Seyler, Bolong Zhang, David J. Jones, and Andrew B. Holmes



1690 S dx.doi.org/10.1021/cm404062r

Methane Decomposition and Carbon Growth on Y_2O_3, Yttria-Stabilized Zirconia, and ZrO_2Author: ACS style guidelines allow only certain abbreviations in the title. To comply with the guidelines, YSZ has been spelled out.

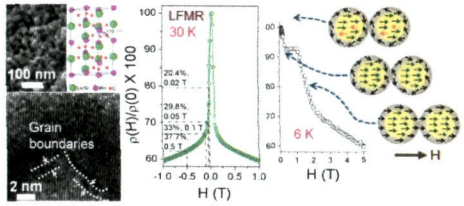
Michaela Kogler, Eva-Maria Köck, Lukas Perfler, Thomas Bielz, Michael Stöger-Pollach, Walid Hetaba, Marc Willinger, Xing Huang, Manfred Schuster, Bernhard Klötzer, and Simon Penner*



1702 S dx.doi.org/10.1021/cm4041665

Enhanced Low-Field Magnetoresistance in $La_{0.71}Sr_{0.29}MnO_3$ Nanoparticles Synthesized by the Nonaqueous Sol–Gel Route

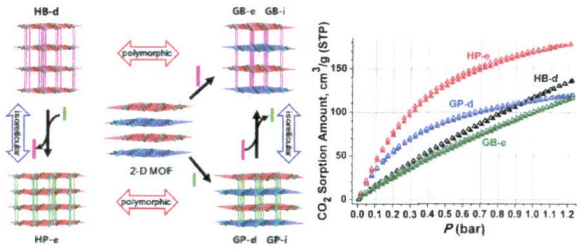
Anustup Sadhu and Sayan Bhattacharyya*



1711 S dx.doi.org/10.1021/cm404239s

Combinational Synthetic Approaches for Isoreticular and Polymorphic Metal–Organic Frameworks with Tuned Pore Geometries and Surface Properties

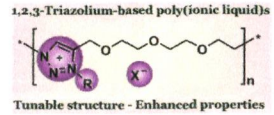
Seok Jeong, Dongwook Kim, Sunyoung Shin, Dohyun Moon, Sung June Cho, and Myoung Soo Lah*



1720 S dx.doi.org/10.1021/cm500021z

1,2,3-Triazolium-Based Poly(ionic liquid)s with Enhanced Ion Conducting Properties Obtained through a Click Chemistry Polyaddition Strategy

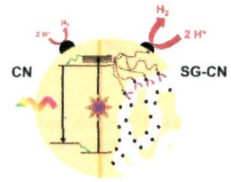
Bhanu P. Mudraboyina, Mona M. Obadia, Imène Allaoua, Rakhi Sood, Anatoli Serghei, and Eric Drockenmuller*



1727 S dx.doi.org/10.1021/cm500034p

Structure–Activity Relationships in Bulk Polymeric and Sol–Gel-Derived Carbon Nitrides during Photocatalytic Hydrogen Production

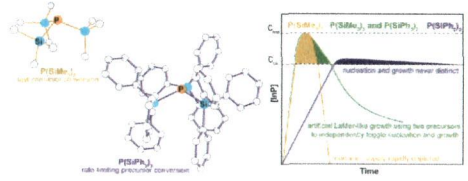
Dirk Hollmann,* Michael Karnahl, Stefanie Tschierlei, Kamalakannan Kailasam, Matthias Schneider, Jörg Radnik, Kathleen Grabow, Ursula Bentrup, Henrik Junge, Matthias Beller, Stefan Lochbrunner, Arne Thomas,* and Angelika Brückner*



1734 S dx.doi.org/10.1021/cm500102q

Investigation of Indium Phosphide Quantum Dot Nucleation and Growth Utilizing Triarylsilylphosphine Precursors

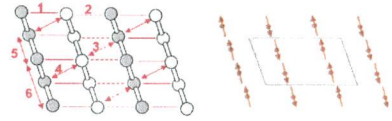
Dylan C. Gary, Benjamin A. Glassy, and Brandi M. Cossairt*

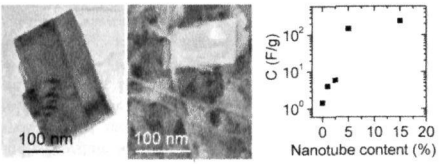


1745 S dx.doi.org/10.1021/cm5001413

Analysis of the Difference between the Pyroxenes $LiFeSi_2O_6$ and $LiFeGe_2O_6$ in Their Spin Order, Spin Orientation, and Ferrotoroidal Order

Changhoon Lee, Jinhee Kang, Jisook Hong, Ji Hoon Shim,* and Myung-Hwan Whangbo*





Additions and Corrections

Supporting Information available via online article