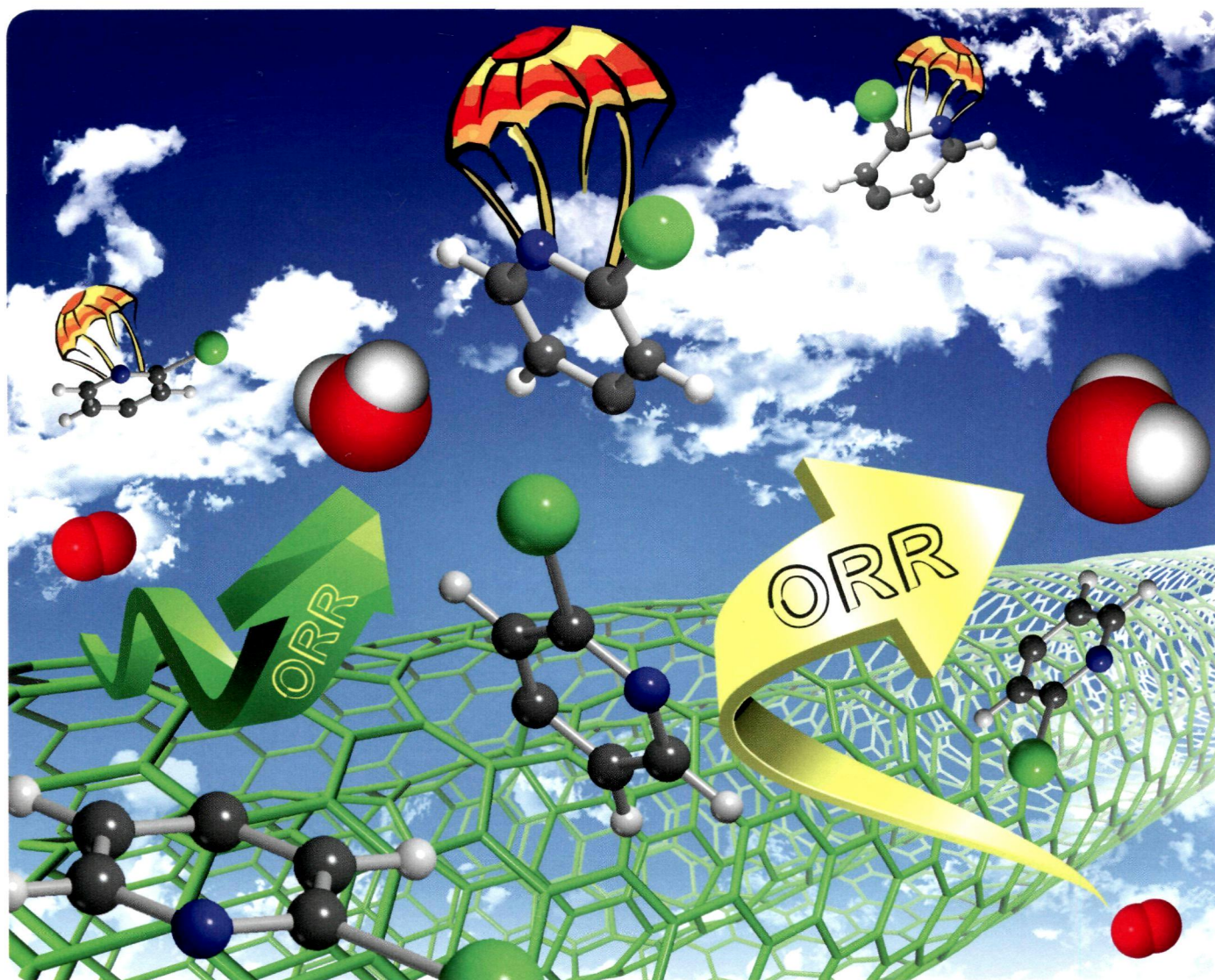


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ON THE COVER: The artwork describes the concept of chemical functionalization of carbon nanotubes with N-containing functionalities to catalyze efficiently the Oxygen Reduction Reaction (ORR). For more information, see “Chemically Functionalized Carbon Nanotubes with Pyridine Groups as Easily Tunable N-Decorated Nanomaterials for the Oxygen Reduction Reaction in Alkaline Medium” by Giulia Tuci, Claudio Zafferoni, Andrea Rossin, Antonella Milella, Lapo Luconi, Massimo Innocenti, Lai Truong Phuoc, Cuong Duong-Viet, Cuong Pham-Huu, and Giuliano Giambastiani* (*Chem. Mater.* 2014, 26, 3460–3470).

Editorial

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The Art of Writing the Title of Your Paper

Jillian M. Buriak

[dx.doi.org/10.1021/cm5017917](https://doi.org/10.1021/cm5017917)

Communications

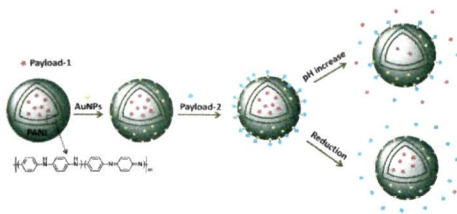
3351



Stimuli-Selective Delivery of two Payloads from Dual Responsive Nanocontainers

Li-Ping Lv, Katharina Landfester, and Daniel Crespy*

[dx.doi.org/10.1021/cm500923d](https://doi.org/10.1021/cm500923d)



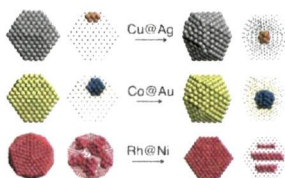
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Tuning the Structure of Nanoparticles by Small Concentrations of Impurities

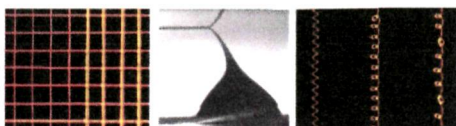
Emanuele Panizon, Davide Bochicchio, Giulia Rossi, and Riccardo Ferrando*

[dx.doi.org/10.1021/cm501001f](https://doi.org/10.1021/cm501001f)

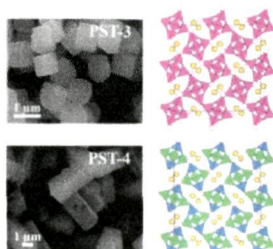


Tethered Pyro-Electrohydrodynamic Spinning for Patterning Well-Ordered Structures at Micro- and Nanoscale

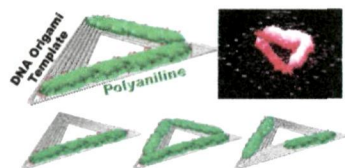
Sara Coppola, Veronica Vespini, Giuseppe Nasti, Oriella Gennari, Simonetta Grilli, Maurizio Ventre, Maria Iannone, Paolo A. Netti, and Pietro Ferraro*

**Synthesis of Aluminosilicate Natrolites and Control of Their Tetrahedral Atom Ordering**

Jiho Shin, Nak Ho Ahn, Miguel A. Cambor, Claudio M. Zicovich-Wilson, and Suk Bong Hong*

**Shape-Controlled Nanofabrication of Conducting Polymer on Planar DNA Templates**

Zhen-Gang Wang,* Qing Liu, and Baoquan Ding*

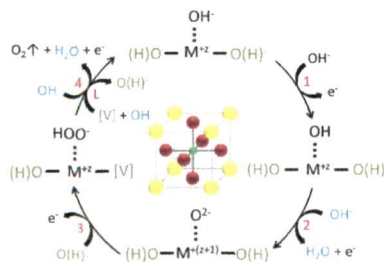


3368 **S**

dx.doi.org/10.1021/cm403785q

Tuning the Electrocatalytic Activity of Perovskites through Active Site Variation and Support Interactions

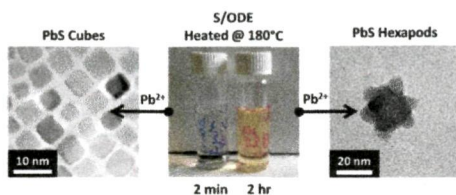
William G. Hardin, J. Tyler Mefford, Daniel A. Slanac, Bijal B. Patel, Xiqing Wang, Sheng Dai, Xin Zhao, Rodney S. Ruoff, Keith P. Johnston,* and Keith J. Stevenson*

3377 **S**

dx.doi.org/10.1021/cm4040819

Role of Organosulfur Compounds in the Growth and Final Surface Chemistry of PbS Quantum Dots

Martin R. McPhail and Emily A. Weiss*

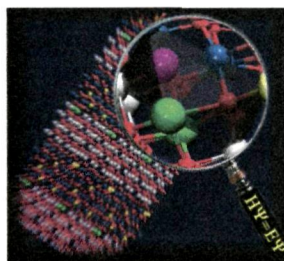


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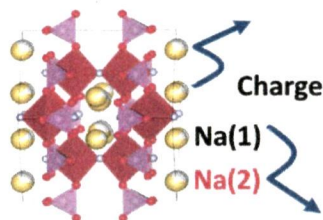
Understanding the Interplay of Dopants, Interfaces, and Anionic Conductivity in Doped Ceria/Zirconia Heteroepitaxial Structures

José J. Plata, Antonio M. Márquez,* and Javier Fdez. Sanz

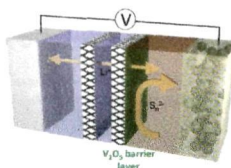


Sodium Distribution and Reaction Mechanisms of a $\text{Na}_3\text{V}_2\text{O}_7(\text{PO}_4)_2\text{F}$ Electrode during Use in a Sodium-Ion Battery

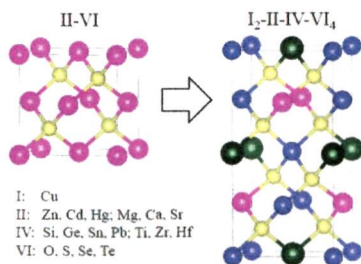
Neeraj Sharma,* Paula Serras, Veronica Palomares, Helen E. A. Brand, Javier Alonso, Pierre Kubiak, M. Luisa Fdez-Gubieda, and Teófilo Rojo

 **V_2O_5 Polysulfide Anion Barrier for Long-Lived Li-S Batteries**

Wen Li, Jocelyn Hicks-Garner, John Wang, Jun Liu, Adam F. Gross, Elena Sherman, Jason Graetz, John J. Vajo,* and Ping Liu

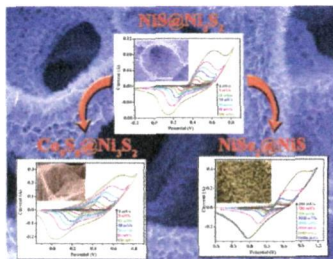
**Design of $\text{I}_2\text{-II-IV-VI}_4$ Semiconductors through Element Substitution: The Thermodynamic Stability Limit and Chemical Trend**

Congcong Wang, Shiyu Chen,* Ji-Hui Yang, Li Lang, Hong-Jun Xiang, Xin-Gao Gong,* Aron Walsh, and Su-Huai Wei*



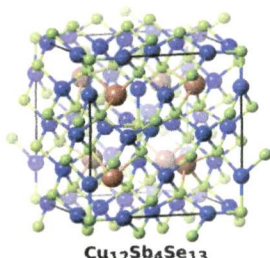
Partial Ion-Exchange of Nickel-Sulfide-Derived Electrodes for High Performance Supercapacitors

Wutao Wei, Liwei Mi,* Yang Gao, Zhi Zheng, Weihua Chen,* and Xinxin Guan*



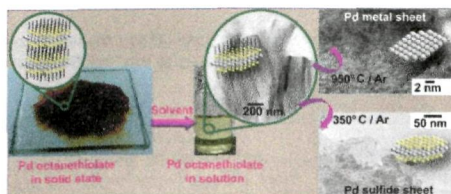
Prediction of New Stable Compounds and Promising Thermoelectrics in the Cu–Sb–Se System

Yongsheng Zhang,* Vidvuds Ozoliņš, Donald Morelli, and C. Wolverton



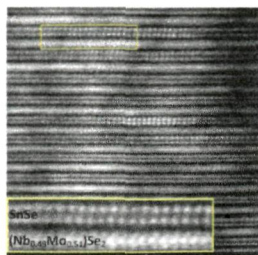
Ultrathin Sheets of Metal or Metal Sulfide from Molecularly Thin Sheets of Metal Thioliates in Solution

Balanagulu Busupalli, Sreenivas Kummara, Guruswamy Kumaraswamy,* and Bhagavatula L. V. Prasad*



Synthesis of $[(\text{SnSe})_{1.16-1.09}]_1[(\text{Nb}_x\text{Mo}_{1-x})\text{Se}_2]_1$ Fecrystal Alloys

Richard D. Westover, Ryan A. Atkins, Jeffrey J. Ditto, and David C. Johnson*

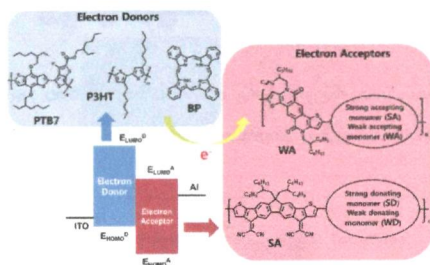


3450 5

dx.doi.org/10.1021/cm500832h

Synthesis and Search for Design Principles of New Electron Accepting Polymers for All-Polymer Solar Cells

In Hwan Jung, Wai-Yip Lo, Jaeyoung Jang, Wei Chen, Donglin Zhao, Erik S. Landry, Luyao Lu, Dmitri V. Talapin, and Luping Yu*

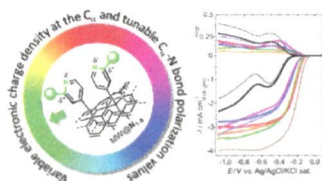


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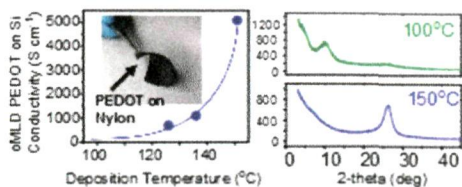
Chemically Functionalized Carbon Nanotubes with Pyridine Groups as Easily Tunable N-Decorated Nanomaterials for the Oxygen Reduction Reaction in Alkaline Medium

Giulia Tuci, Claudio Zafferoni, Andrea Rossin, Antonella Milella, Lapo Luconi, Massimo Innocenti, Lai Truong Phuoc, Cuong Duong-Viet, Cuong Pham-Huu, and Giuliano Giambastiani*



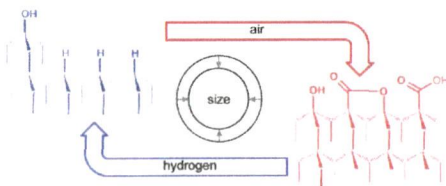
Highly Conductive and Conformal Poly(3,4-ethylenedioxythiophene) (PEDOT) Thin Films via Oxidative Molecular Layer Deposition

Sarah E. Atanasov, Mark D. Losego, Bo Gong, Edward Sachet, Jon-Paul Maria, Philip S. Williams, and Gregory N. Parsons*



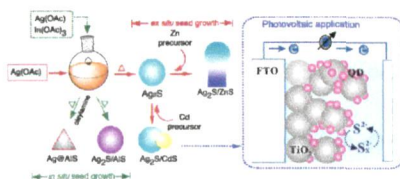
Layer-by-Layer Oxidation for Decreasing the Size of Detonation Nanodiamond

Bastian J. M. Etzold,* Ioannis Neitzel, Manfred Kett, Florian Strobl, Vadym N. Mochalin, and Yury Gogotsi



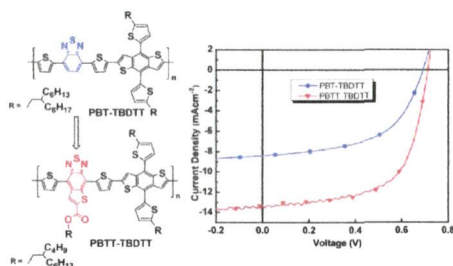
Silver-Based Metal Sulfide Heterostructures: Synthetic Approaches, Characterization, and Application Prospects

Pei-Jung Wu, Jhe-Wei Yu, His-Jung Chao, and Jia-Yaw Chang*



Thiophene-Fused Benzothiadiazole: A Strong Electron-Acceptor Unit to Build D–A Copolymer for Highly Efficient Polymer Solar Cells

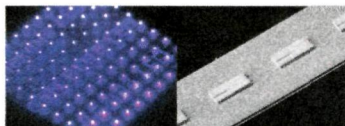
Pengcheng Zhou, Zhi-Guo Zhang,* Yongfang Li, Xingguo Chen,* and Jingui Qin



Thin Film Receiver Materials for Deterministic Assembly by Transfer Printing

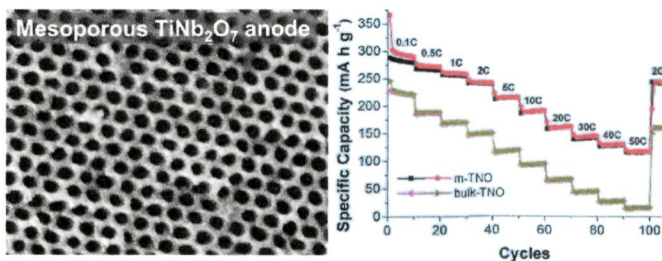
Tae-il Kim,* Mo Joon Kim, Yeil Hwan Jung, Hyejin Jang, Canan Dagdeviren, Hsuan An Pao, Sang June Cho, Andrew Carlson, Ki Jun Yu, Abid Ameen, Hyun-joong Chung, Sung Hun Jin, Zhenqiang Ma, and John A. Rogers*

Adhesive Materials for Flexible Electronics

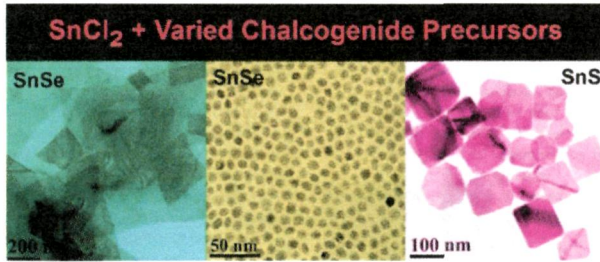


Block Copolymer Directed Ordered Mesostructured TiNb₂O₇ Multimetallic Oxide Constructed of Nanocrystals as High Power Li-Ion Battery Anodes

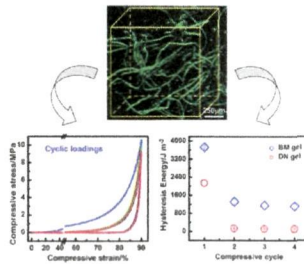
Changshin Jo, Youngsik Kim, Jongkook Hwang, Jongmin Shim, Jinyoung Chun, and Jinwoo Lee*



Shape-Controlled Synthesis of SnE (E = S, Se) Semiconductor Nanocrystals for Optoelectronics
Xin Liu, Yue Li, Bin Zhou, Xianliang Wang, Alexander N. Cartwright, and Mark T. Swihart*

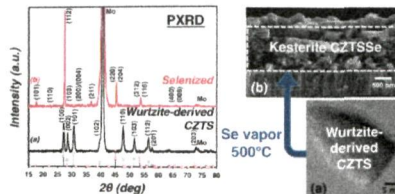


Tough and Fatigue Resistant Biomimetic Hydrogels of Interlaced Self-Assembled Conjugated Polymer Belts with a Polyelectrolyte Network
Gaolai Du, Guorong Gao, Ruixia Hou, Yajun Cheng, Tao Chen, Jun Fu,* and Bin Fei



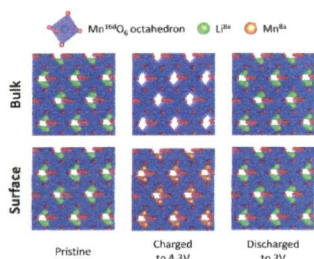
Kesterite $\text{Cu}_2\text{ZnSn}(\text{S},\text{Se})_4$ Absorbers Converted from Metastable, Wurtzite-Derived $\text{Cu}_2\text{ZnSnS}_4$ Nanoparticles

Wei-Chang Yang, Caleb K. Miskin, Charles J. Hages, Evan C. Hanley, Carol Handwerker, Eric A. Stach,* and Rakesh Agrawal*



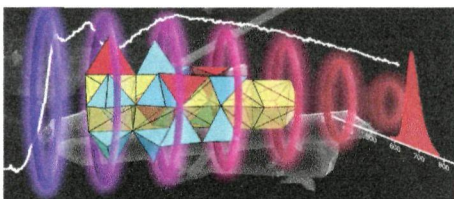
Surface Structure Evolution of LiMn_2O_4 Cathode Material upon Charge/Discharge

Daichun Tang, Yang Sun, Zhenzhong Yang, Liubin Ben, Lin Gu,* and Xuejie Huang*



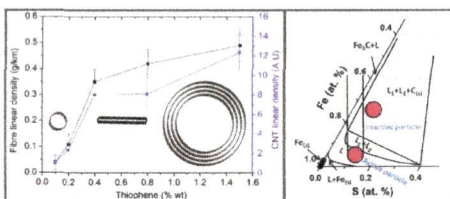
$\text{Ca}[\text{LiAl}_3\text{N}_4]:\text{Eu}^{2+}$ —A Narrow-Band Red-Emitting Nitridolithoaluminate

Philipp Pust, Angela S. Wochnik, Elen Baumann, Peter J. Schmidt, Detlef Wiechert, Christina Scheu, and Wolfgang Schnick*

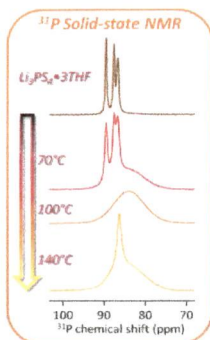


Controlling Carbon Nanotube Type in Macroscopic Fibers Synthesized by the Direct Spinning Process

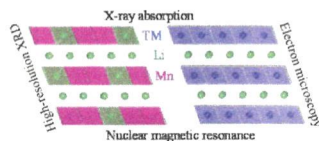
Victor Reguero, Belén Alemán, Bartolomé Mas, and Juan José Vilatela*



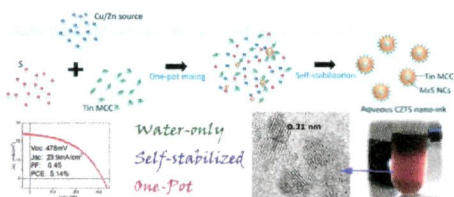
Structural Evolution and Li Dynamics in Nanophase Li_3PS_4 by Solid-State and Pulsed-Field Gradient NMR
Mallory Gobet, Steve Greenbaum,* Gayatri Sahu, and Chengdu Liang



Effect of Cooling Rates on Phase Separation in $0.5\text{Li}_2\text{MnO}_3\text{-}0.5\text{LiCoO}_2$ Electrode Materials for Li-Ion Batteries
Brandon R. Long, Jason R. Croy,* Fulya Dogan, Matthew R. Suchomel, Baris Key, Jianguo Wen, Dean J. Miller, Michael M. Thackeray, and Mahalingam Balasubramanian*

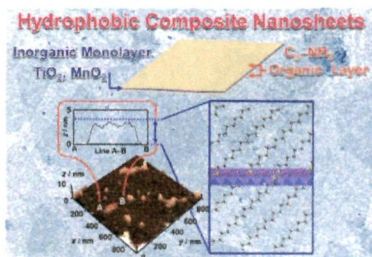


One-Pot Synthesis of Self-Stabilized Aqueous Nanoinks for $\text{Cu}_2\text{ZnSn(S,Se)}_4$ Solar Cells
Jie Zhong, Zhe Xia, Cheng Zhang, Bing Li, Xinsheng Liu, Yi-Bing Cheng, and Jiang Tang*



Hydrophobic Inorganic–Organic Composite Nanosheets Based on Monolayers of Transition Metal Oxides

Masashi Honda, Yuya Oaki,* and Hiroaki Imai*



B-Doped Graphene as an Electrochemically Superior Metal-Free Cathode Material As Compared to Pt over a Co(II)/Co(III) Electrolyte for Dye-Sensitized Solar Cell

Sun-Min Jung, In Taek Choi, Kimin Lim, Jaejung Ko, Jae Cheon Kim, Jae-Joon Lee,* Myung Jong Ju,* Hwan Kyu Kim,* and Jong-Beom Baek*

