

Nanoscale

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IN THIS ISSUE

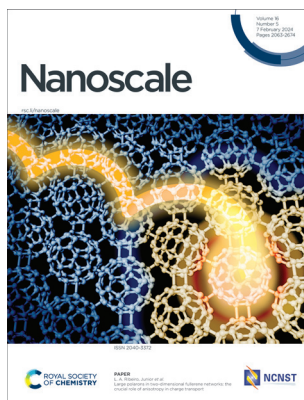
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Cover

See Zhenyu Zhang *et al.*,
pp. 2318–2336.

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Inside cover

See L. A. Ribeiro, Junior *et al.*,
pp. 2337–2346.

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REVIEWS

2078

Advanced inorganic nanomaterials for high-performance electrochromic applications

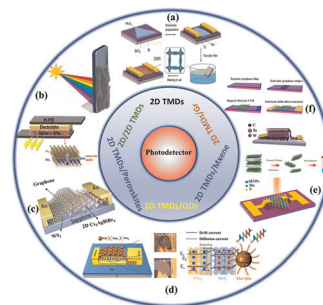
Zekun Huang, Liping Feng, Xianjie Xia, Jing Zhao,
Penglu Qi, Yiting Wang, Junhua Zhou, Laifa Shen,
Shengliang Zhang* and Xiaogang Zhang*



2097

Recent advances in 2D transition metal dichalcogenide-based photodetectors: a review

Anique Ahmed,* Muhammad Zahir Iqbal, Alaa Dahshan,
Sikandar Aftab, Hosameldin Helmy Hegazy and
El Sayed Yousef



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Fundamental questions
Elemental answers

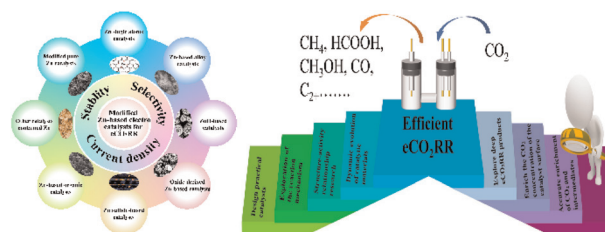


REVIEWS

2121

Recent insights on the use of modified Zn-based catalysts in eCO₂RR

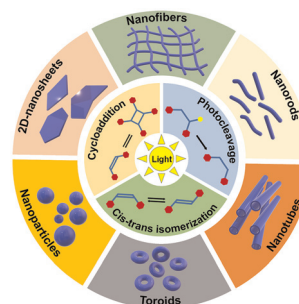
Hao Wang, Nanping Deng,* Xinyi Li, Yiyang Chen, Ying Tian, Bowen Cheng and Weimin Kang*



2169

Light-regulated morphology control in supramolecular polymers

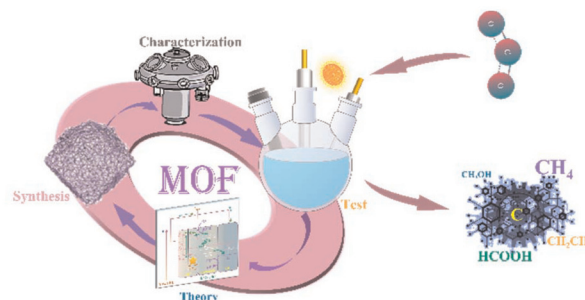
Anurag Mukherjee and Goutam Ghosh*



2185

Metal-organic frameworks (MOFs) for photoelectrocatalytic (PEC) reducing carbon dioxide (CO₂) to hydrocarbon fuels

Dou-dou Hu, Rui-tang Guo,* Ji-song Yan, Sheng-hui Guo and Wei-guo Pan*

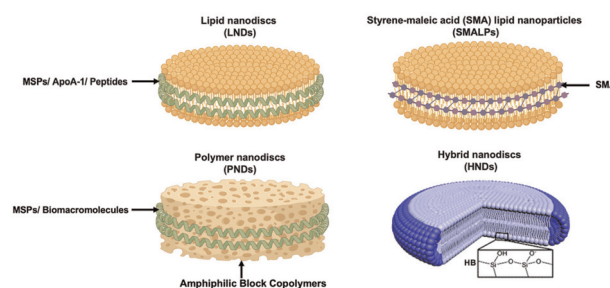


MINIREVIEWS

2220

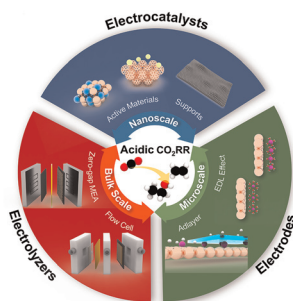
Designing nanodiscs as versatile platforms for on-demand therapy

Qianwen Mu, Haolan Deng, Xiaoyu An, Gang Liu and Chao Liu*



MINIREVIEWS

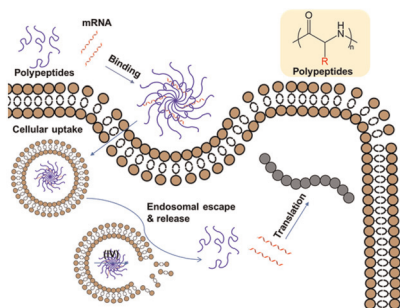
2235



Acidic CO₂ electroreduction for high CO₂ utilization: catalysts, electrodes, and electrolyzers

Taemin Lee, Yujin Lee, Jungsu Eo and Dae-Hyun Nam*

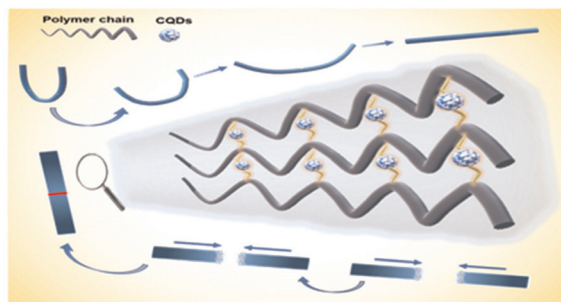
2250



Development of polypeptide-based materials toward messenger RNA delivery

Bowen Zhao, Xiao Zhang, Molly S. Bickle, Shiwei Fu, Qingchun Li and Fuwu Zhang*

2265

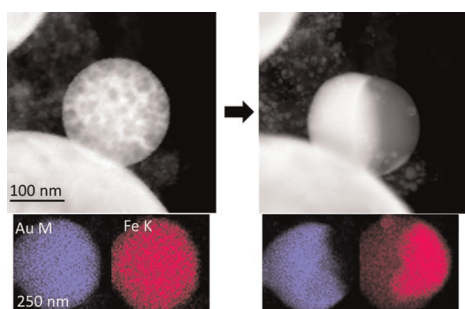


Carbon quantum dots (CQDs)-modified polymers: a review of non-optical applications

Zeeshan Latif, Kinza Shahid, Hassan Anwer, Raghisa Shahid, Mumtaz Ali,* Kang Hoon Lee* and Mubark Alshareef

COMMUNICATIONS

2289



FeAu mixing for high-temperature control of light scattering at the nanometer scale

Anna V. Nominé, Ekaterina V. Gunina, Semyon V. Bachinin, Alexander I. Solomonov, Mikhail V. Rybin, Sergei A. Shipilovskikh, Salah-Eddine Benrazzouq, Jaafar Ghanbaja, Thomas Gries, Stephanie Bruyère, Alexandre Nominé, Thierry Belmonte* and Valentin A. Milichko*

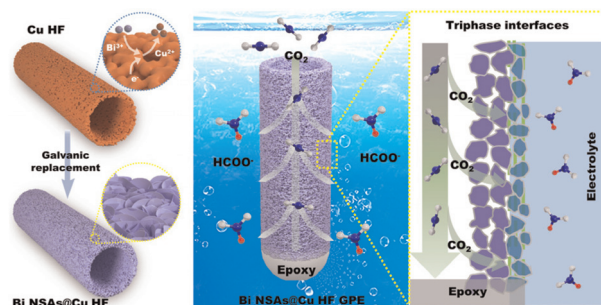


COMMUNICATIONS

2295

A Cu hollow fiber with coaxially grown Bi nanosheet arrays as an integrated gas-penetrable electrode enables high current density and durable formate electrosynthesis

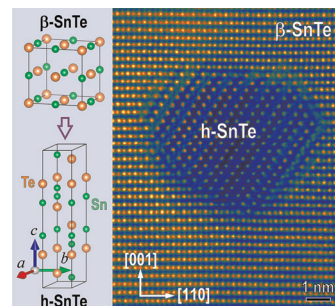
Zhe Meng, Fang Wang, Zhengguo Zhang and Shixiong Min*



2303

Nanoscale fabrication of heterostructures in thermoelectric SnTe

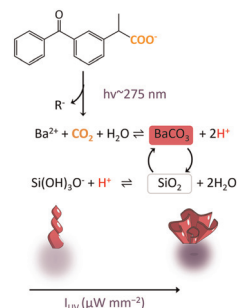
Hu Zhang, Lu Lu, Weiwei Meng,* Shao-Dong Cheng and Shao-Bo Mi*



2310

Light-controlled morphological development of self-organizing bioinspired nanocomposites

Marloes H. Bistervels, Niels T. Hoogendoorn, Marko Kamp, Hinc Schoenmaker, Albert M. Brouwer and Willem L. Noorduin*

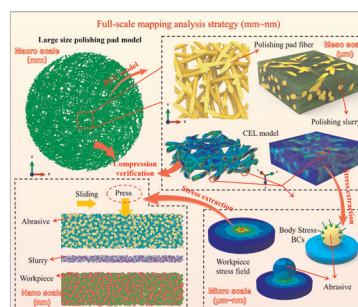


PAPERS

2318

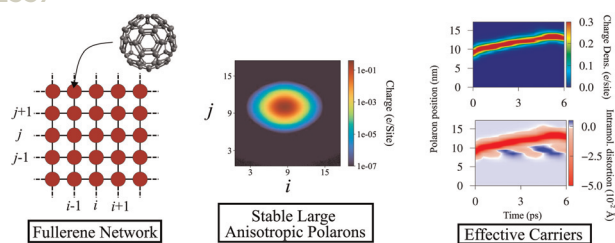
Atomic surface achieved through a novel cross-scale model from macroscale to nanoscale

Feng Zhao, Zhenyu Zhang,* Xingqiao Deng, Junyuan Feng, Hongxiu Zhou, Zhensong Liu, Fanning Meng and Chunjing Shi



PAPERS

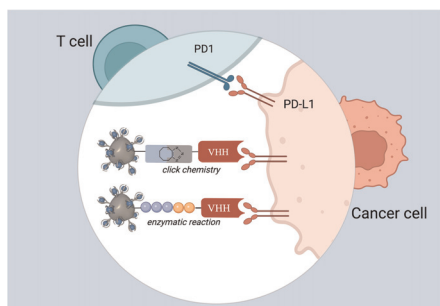
2337



Large polarons in two-dimensional fullerene networks: the crucial role of anisotropy in charge transport

T. S. A. Cassiano, M. L. Pereira, Junior, G. M. e Silva, P. H. de Oliveira Neto and L. A. Ribeiro, Junior*

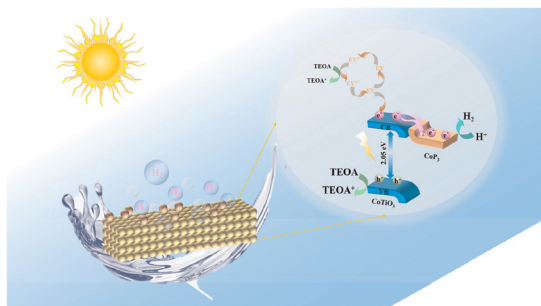
2347



AGuIX nanoparticle-nanobody bioconjugates to target immune checkpoint receptors

Léna Carmès, Guillaume Bort, François Lux,* Léa Seban, Paul Rocchi, Zeinaf Muradova, Agnès Hagège, Laurence Heinrich-Balard, Frédéric Delolme, Virginie Gueguen-Chaignon, Charles Truillet, Stephanie Crowley, Elisa Bello, Tristan Doussineau, Michael Dougan, Olivier Tillement, Jonathan D. Schoenfeld, Needa Brown* and Ross Berbeco*

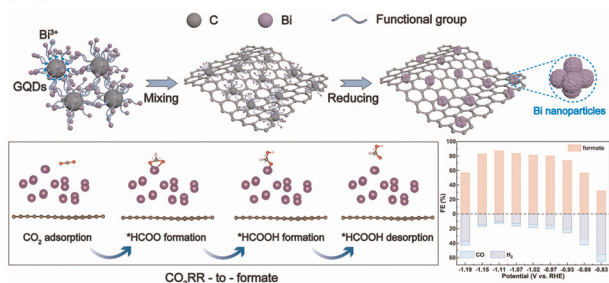
2361



Self-induced electron attraction center formation with pyrophosphorylation strategy for photocatalytic hydrogen evolution

Cheng Yang, Huiqin Yao,* Tingting Yang, Xiaohong Li, Pengfei Zhu* and Zhiliang Jin*

2373



Graphene quantum dot-mediated anchoring of highly dispersed bismuth nanoparticles on porous graphene for enhanced electrocatalytic CO₂ reduction to formate

Yi Cheng, Ruizhe Yang, Lu Xia, Xiaoli Zhao,* Yuwei Tan, Ming Sun, Suming Li, Fei Li* and Ming Huang*

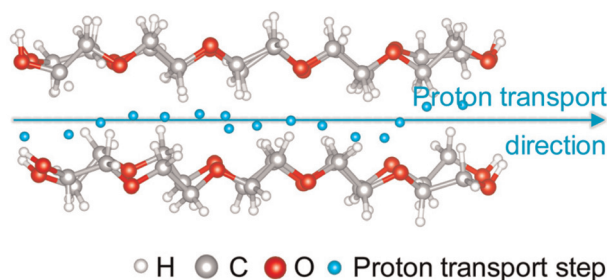


PAPERS

2382

Fast proton transport enables the magnetic relaxation response of graphene quantum dots for monitoring the oxidative environment *in vivo*

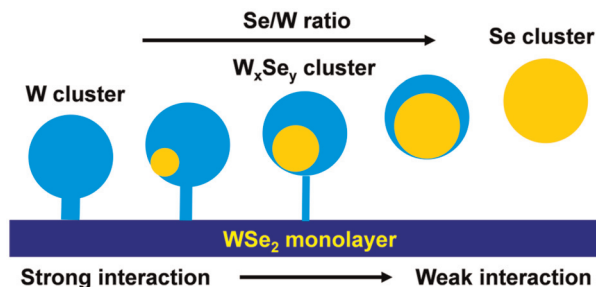
Yongqiang Li, Hang Wang, Caichao Ye, Xuelian Wang, Peng He, Siwei Yang,* Hui Dong* and Guqiao Ding*



2391

Atomic insight into the effects of precursor clusters on monolayer WSe₂

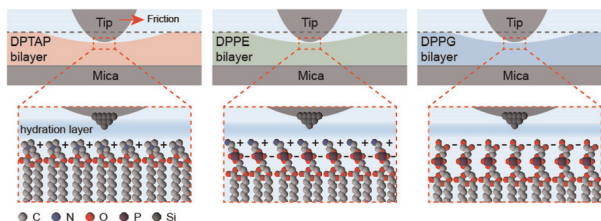
Yanxue Zhang, Yuan Chang, Luneng Zhao, Hongsheng Liu* and Junfeng Gao



2402

Insight into the hydration friction of lipid bilayers

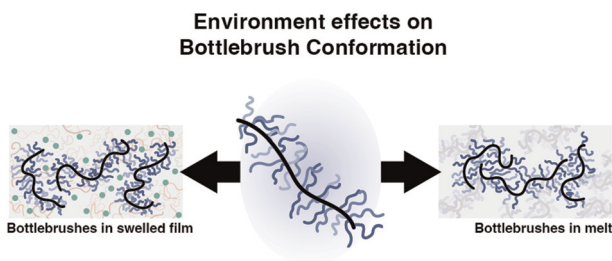
Xiaoxue Qin, Mingdong Dong* and Qiang Li*



2409

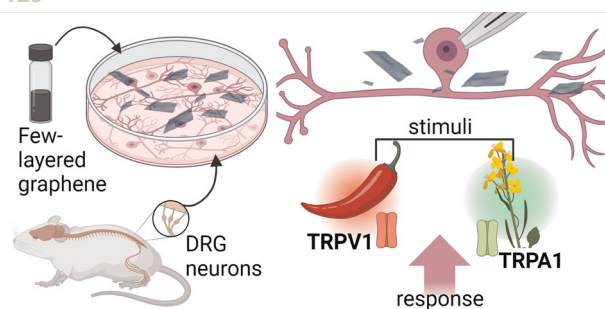
Investigating the effects of the local environment on bottlebrush conformations using super-resolution microscopy

Jonathan M. Chan, Avram C. Kordon and Muzhou Wang*



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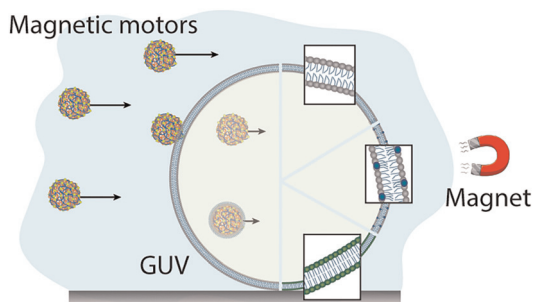
2419



Few-layered graphene increases the response of nociceptive neurons to irritant stimuli

Lieselot Deleye, Francesca Franchi, Martina Trevisani, Fabrizio Loiacono, Silvia Vercellino, Doriana Debellis, Nara Liessi, Andrea Armirotti, Ester Vázquez, Pierluigi Valente,* Valentina Castagnola* and Fabio Benfenati*

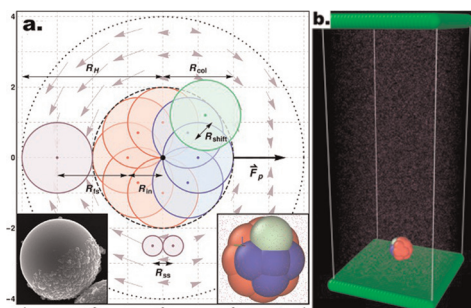
2432



Magnetic micromotors crossing lipid membranes

Miguel A. Ramos Docampo, Ondrej Hovorka and Brigitte Städler*

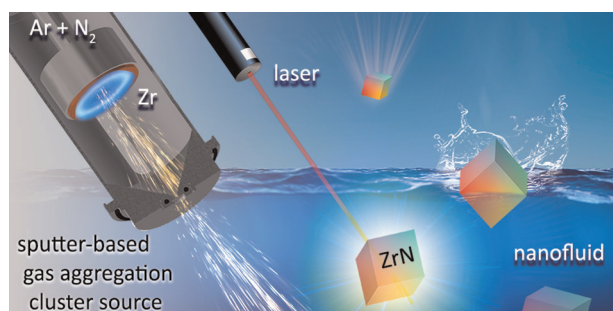
2444



Minimal numerical ingredients describe chemical microswimmers' 3-D motion

Maximilian R. Bailey, C. Miguel Barriuso Gutiérrez, José Martín-Roca, Vincent Niggel, Virginia Carrasco-Fadanelli, Ivo Buttinoni, Ignacio Pagonabarraga, Lucio Isa and Chantal Valeriani*

2452



One-step synthesis of photoluminescent nanofluids by direct loading of reactively sputtered cubic ZrN nanoparticles into organic liquids

Mariia Protsak, Kateryna Biliak, Daniil Nikitin, Pavel Pleskunov, Marco Tosca, Suren Ali-Ogly, Jan Hanuš, Lenka Hanyková, Veronika Červenková, Anastasiya Sergievskaya, Stephanos Konstantinidis, David Cornil, Jérôme Cornil, Miroslav Cieslar, Tereza Košutová, Tomáš Popelář, Lukáš Ondič and Andrei Choukourov*

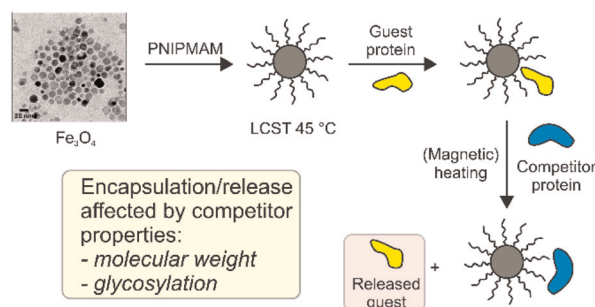


PAPERS

2466

Functional magnetic nanoparticles for protein delivery applications: understanding protein–nanoparticle interactions

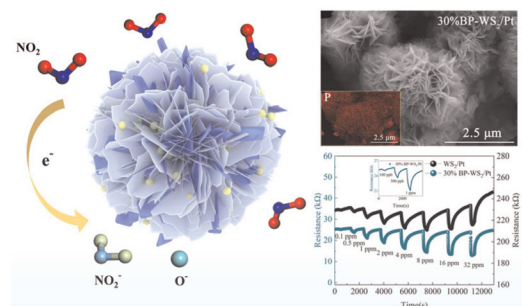
Rajat Sharma, Daniel Ungar, Edward Dyson, Stephen Rimmer and Victor Chechik*



2478

Pt and black phosphorus co-modified flower-like WS₂ composites for fast NO₂ gas detection at low temperature

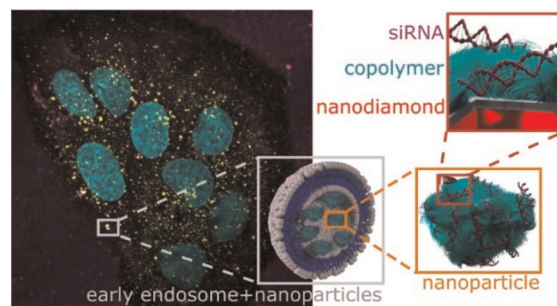
Xiaoyang Duan, Dan Xu,* Wenjun Jia, Bohao Sun, Ran Li, Ruitian Yan and Wenjie Zhao*



2490

Cellular uptake and fate of cationic polymer-coated nanodiamonds delivering siRNA: a mechanistic study

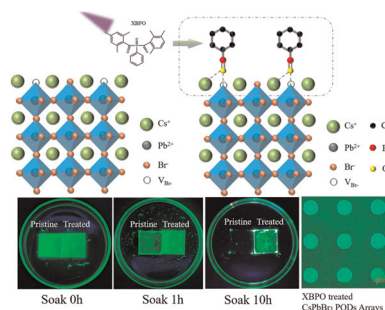
Jan Majer, Marek Kindermann, Dominik Pinkas, David Chvatil, Petr Cigler* and Lenka Libusova*



2504

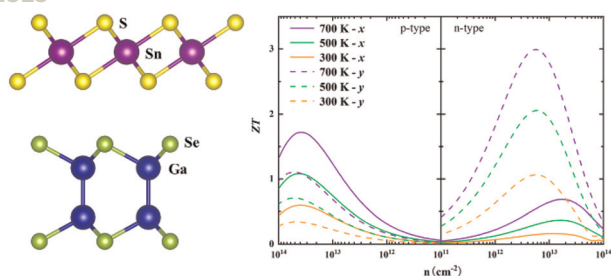
Direct *in situ* photolithography of ultra-stable CsPbBr₃ quantum dot arrays based on crosslinking polymerization

Yanli Wan, Yixing Zhao, Yaling Li, Zhenwei Zhang, Sen Li, Tingfang Tian* and Li Wang*



PAPERS

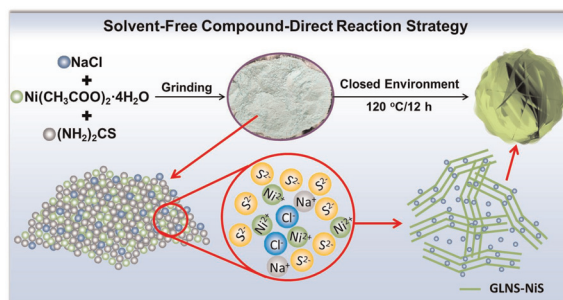
2513



A van der Waals p–n heterostructure of GaSe/SnS₂: a high thermoelectric figure of merit and strong anisotropy

Zhiyuan Xu, Qiong Xia, Long Zhang and Guoying Gao*

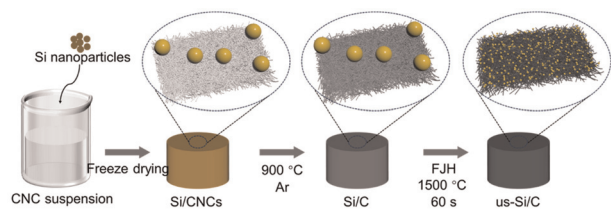
2522



Innovative solvent-free compound-direct synthesis of defect-rich ultra-thin NiS nanosheets for high-performance supercapacitors

Wutao Wei, Zijie Guo, Xuyan Qin and Liwei Mi*

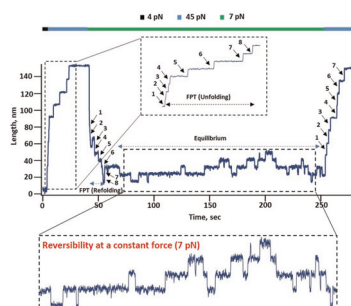
2531



Rapid, *in situ* synthesis of ultra-small silicon particles for boosted lithium storage capability through ultrafast Joule heating

Shigang Liu, Bowen Liu, Ming Liu, Junjie Xiong, Yang Gao,* Bin Wang* and Yingcheng Hu*

2540



Structurally different chemical chaperones show similar mechanical roles with independent molecular mechanisms

Deep Chaudhuri, Debojyoti Chowdhury, Soham Chakraborty, Madhu Bhatt, Rudranil Chowdhury, Aakashdeep Dutta, Ayush Mistry and Shubhasis Halder*

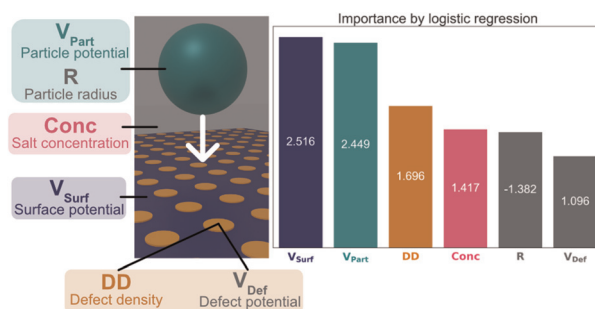


PAPERS

2552

The multivariate interaction between Au and TiO₂ colloids: the role of surface potential, concentration, and defects

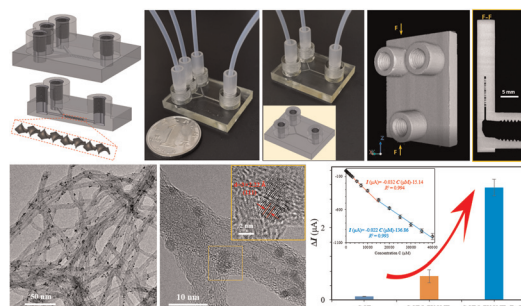
Kinran Lau, Brian Giera, Stephan Barcikowski* and Sven Reichenberger*



2565

Continuous production of bimetallic nanoparticles on carbon nanotubes based on 3D-printed microfluidics

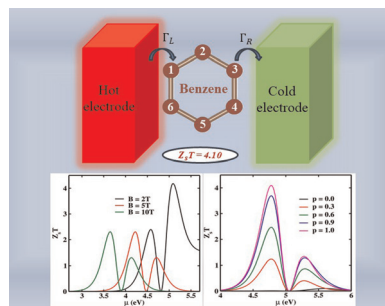
Bo Liu, Jing Jin,* Bin Ran, Chaozhan Chen, Jiaqian Li, Ning Qin and Yonggang Zhu*



2574

Charge and spin thermoelectric transport in benzene-based molecular nano-junctions: a quantum many-body study

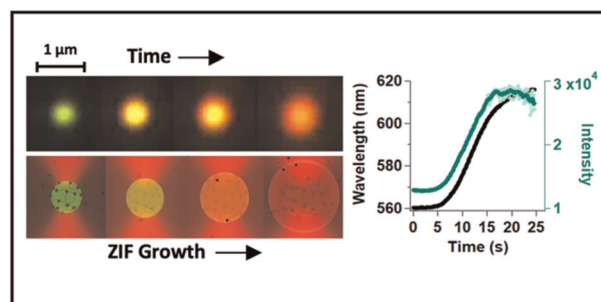
Parbati Senapati and Prakash Parida*



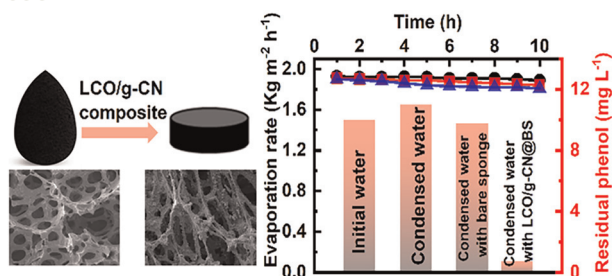
2591

Tunable growth of a single high-density ZIF nanoshell on a gold nanoparticle isolated in an optical trap

Daniel Jackson, Maitreya Rose and Maria Kamenetska*



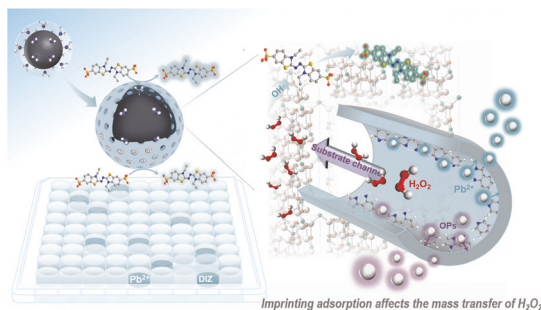
2599



Super-hydrophilic LaCoO₃/g-C₃N₄ nanocomposite coated beauty sponge for solar-driven seawater desalination with simultaneous volatile organic compound removal

Lokesh Kumar Rathore, Parul Garg, Piyush Kumar and Ashok Bera*

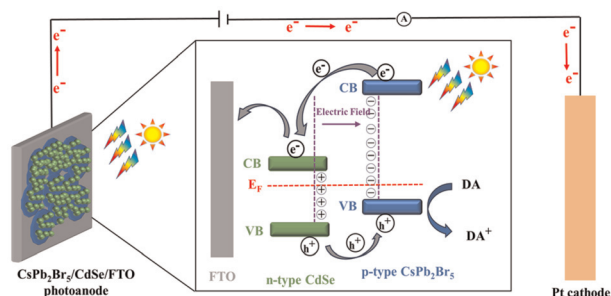
2608



Multifunctional molecularly imprinted nanozymes with improved enrichment and specificity for organic and inorganic trace compounds

Zhanyi Ge, Yilin Zhao,* Jiayi Li, Zhaobo Si, Wenbo Du and Haijia Su*

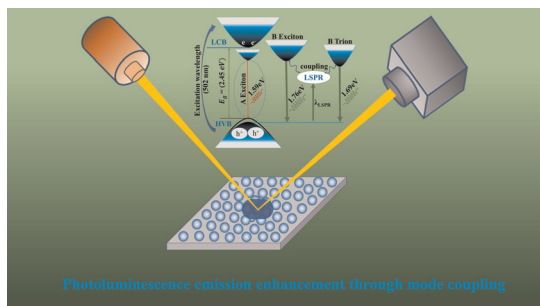
2621



Water-stable perovskite CsPb₂Br₅/CdSe quantum dot-based photoelectrochemical sensors for the sensitive determination of dopamine

Gang Zhao, Xinhao Sun, Songyuan Li, Jiale Zheng, Junhui Liu* and Mingju Huang*

2632



On the unique temperature-dependent interplay of a B-exciton and its trion in monolayer MoSe₂

Durgesh Banswar, Renu Raman Sahu, Rupali Srivatsava, Md. Samim Hassan, Sahil Singh, Sameer Sapra, Tapajyoti Das Gupta, Ankur Goswami and Krishna Balasubramanian*

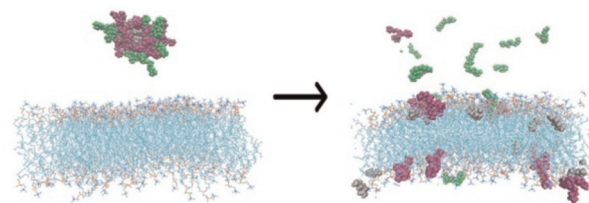


PAPERS

2642

Digestion of lipid micelles leads to increased membrane permeability

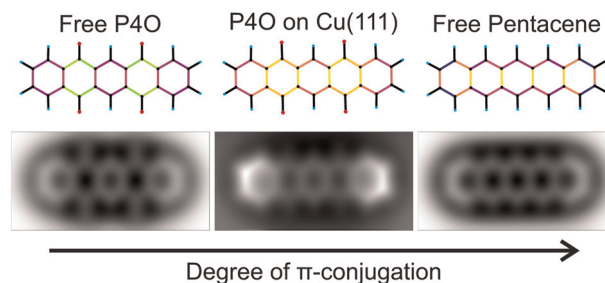
Jun Xie, Demi L. Pink, M. Jayne Lawrence and Christian D. Lorenz*



2654

Partial restoration of aromaticity of pentacene-5,7,12,14-tetrone on Cu(111)

Lorenz Brill, Jonas Brandhoff, Marco Gruenewald, Fabio Calcinelli, Oliver T. Hofmann,* Roman Forker and Torsten Fritz*



2662

X-ray-triggered through-space charge transfer and photochromism in silver nanoclusters

Zhen Ren, Jun-Jun Sun, Long Xu, Peng Luo, Zi-Wei Ma, Si Li, Yu-Bing Si, Xi-Yan Dong* and Fangfang Pan*

