

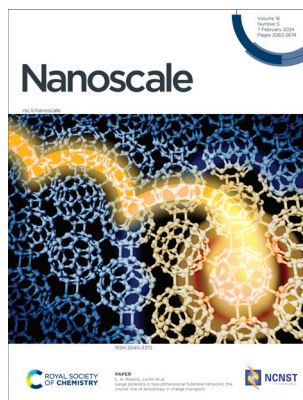
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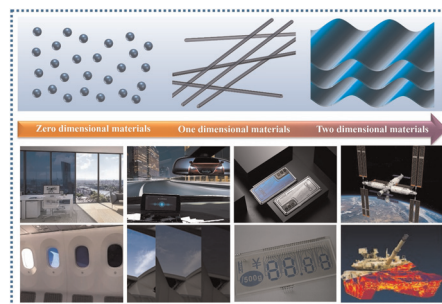
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Advanced inorganic nanomaterials for high-performance electrochromic applications

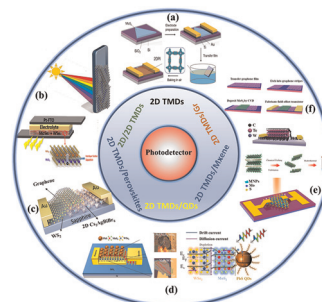
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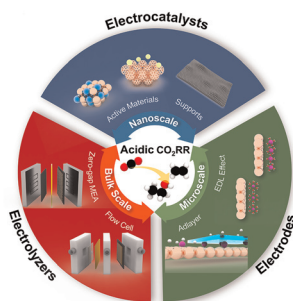
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Fundamental questions
Elemental answers



MINIREVIEWS

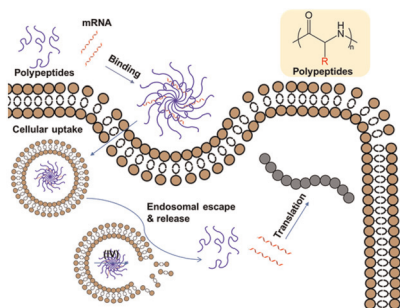
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Taemin Lee, Yujin Lee, Jungsu Eo and Dae-Hyun Nam*

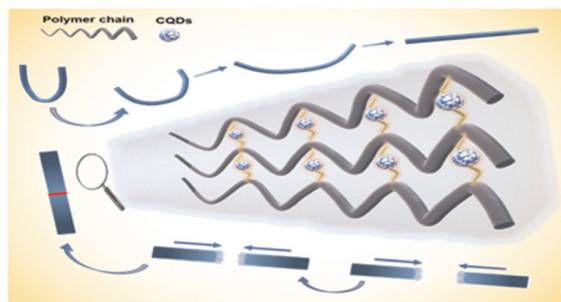
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Development of polypeptide-based materials toward messenger RNA delivery

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

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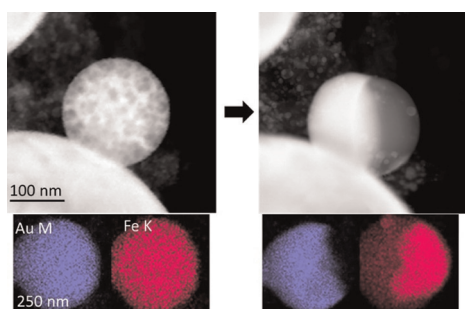


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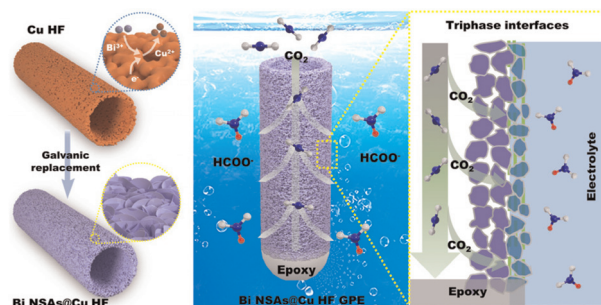


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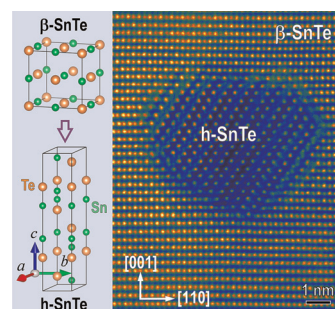
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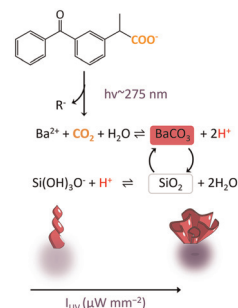
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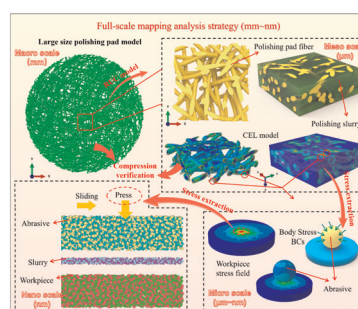


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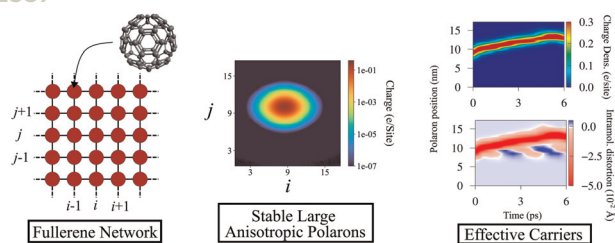
Atomic surface achieved through a novel cross-scale model from macroscale to nanoscale

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



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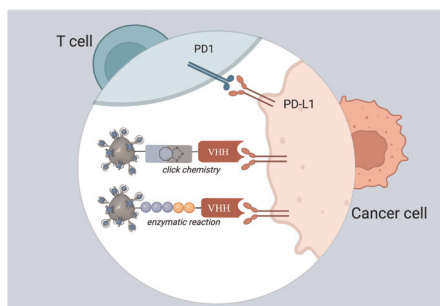
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Large polarons in two-dimensional fullerene networks: the crucial role of anisotropy in charge transport

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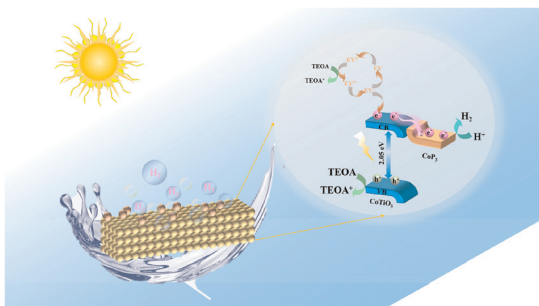
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AGuIX nanoparticle-nanobody bioconjugates to target immune checkpoint receptors

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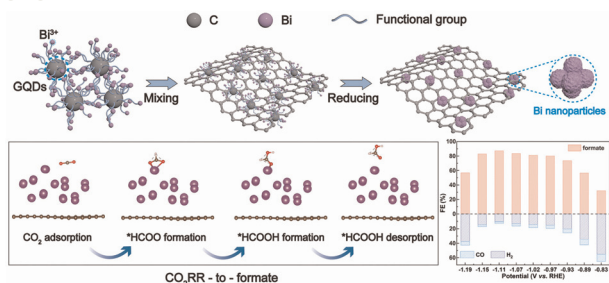
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Self-induced electron attraction center formation with pyrophosphorylation strategy for photocatalytic hydrogen evolution

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

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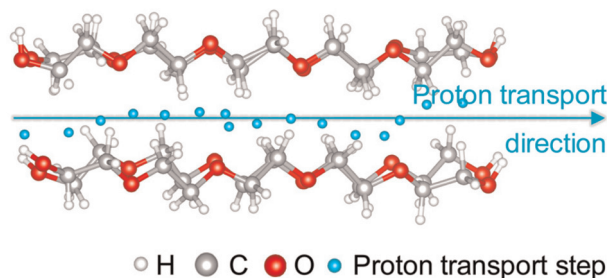


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Fast proton transport enables the magnetic relaxation response of graphene quantum dots for monitoring the oxidative environment *in vivo*

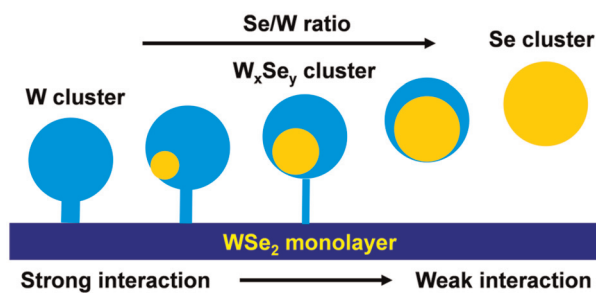
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Atomic insight into the effects of precursor clusters on monolayer WSe₂

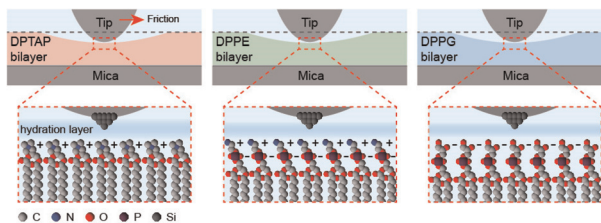
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Insight into the hydration friction of lipid bilayers

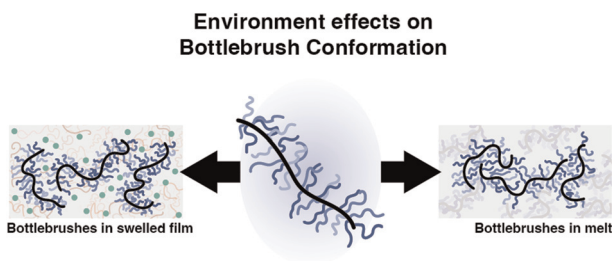
Xiaoxue Qin, Mingdong Dong* and Qiang Li*



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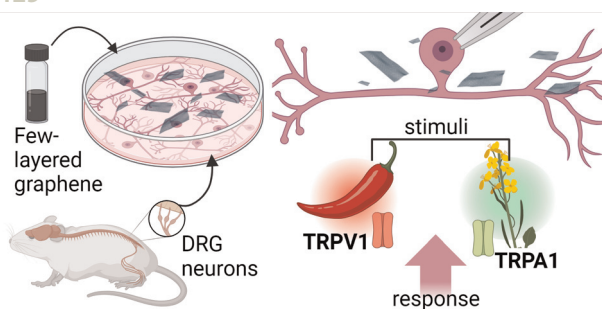
Investigating the effects of the local environment on bottlebrush conformations using super-resolution microscopy

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



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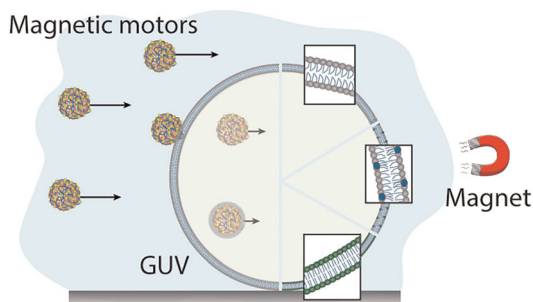
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Few-layered graphene increases the response of nociceptive neurons to irritant stimuli

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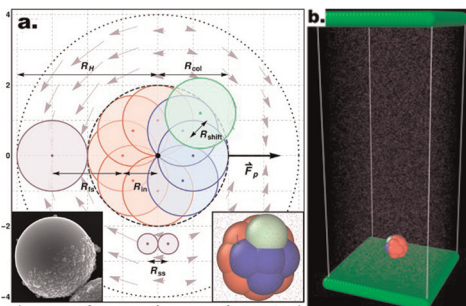
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Magnetic micromotors crossing lipid membranes

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

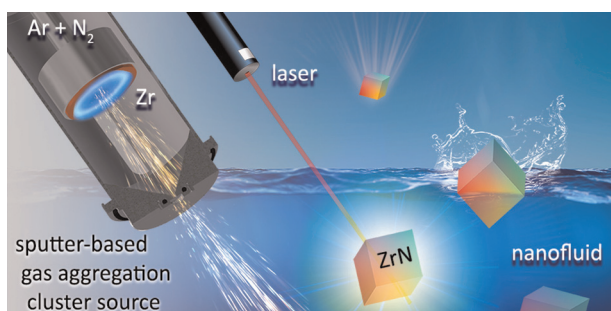
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Minimal numerical ingredients describe chemical microswimmers' 3-D motion

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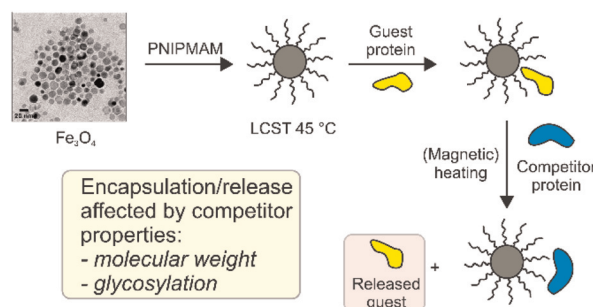


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Functional magnetic nanoparticles for protein delivery applications: understanding protein–nanoparticle interactions

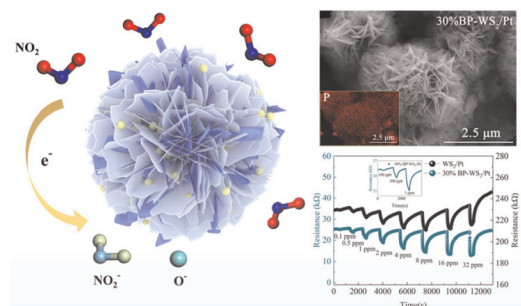
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Pt and black phosphorus co-modified flower-like WS₂ composites for fast NO₂ gas detection at low temperature

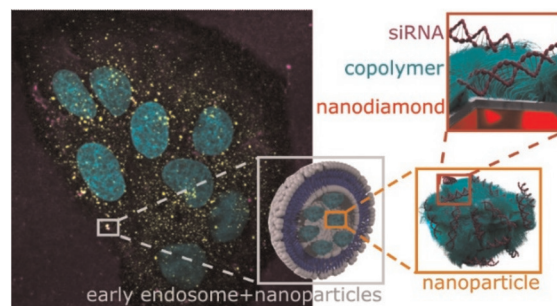
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Cellular uptake and fate of cationic polymer-coated nanodiamonds delivering siRNA: a mechanistic study

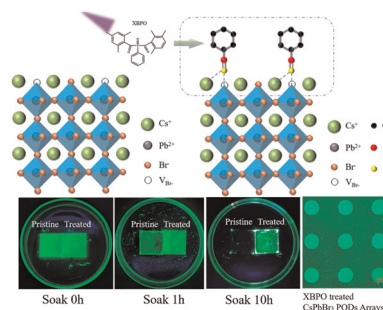
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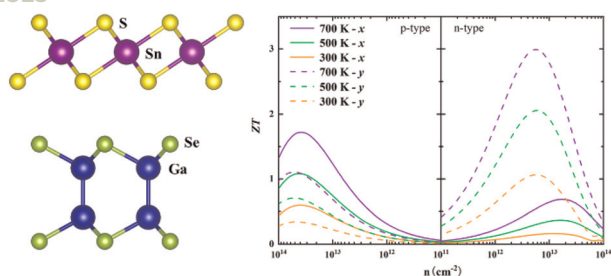
Direct *in situ* photolithography of ultra-stable CsPbBr₃ quantum dot arrays based on crosslinking polymerization

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



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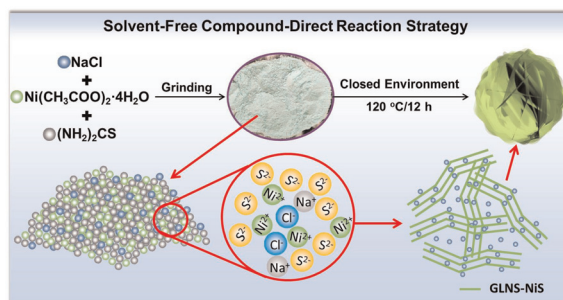
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A van der Waals p–n heterostructure of GaSe/SnS₂: a high thermoelectric figure of merit and strong anisotropy

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

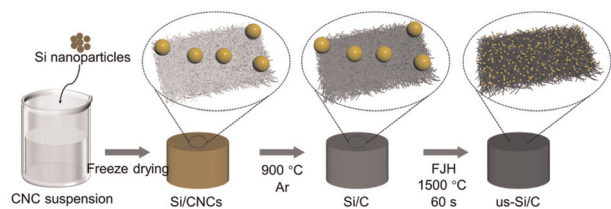
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Innovative solvent-free compound-direct synthesis of defect-rich ultra-thin NiS nanosheets for high-performance supercapacitors

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

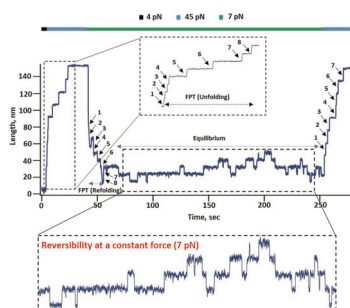
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Rapid, *in situ* synthesis of ultra-small silicon particles for boosted lithium storage capability through ultrafast Joule heating

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

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

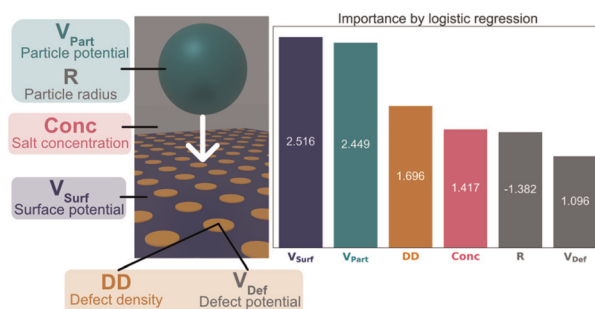
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The multivariate interaction between Au and TiO₂ colloids: the role of surface potential, concentration, and defects

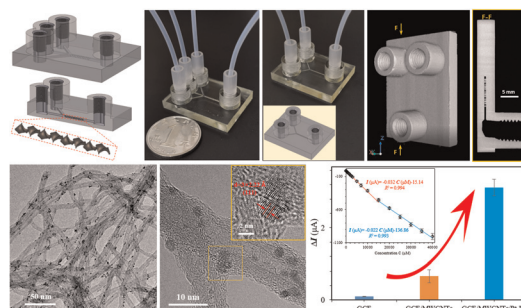
Kinran Lau, Brian Giera, Stephan Barcikowski* and Sven Reichenberger*



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

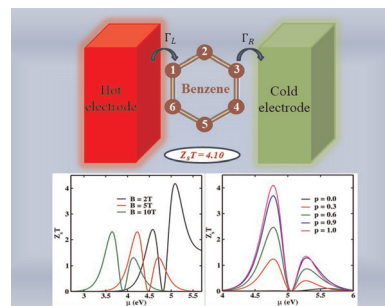
Bo Liu, Jing Jin,* Bin Ran, Chaozhan Chen, Jiaqian Li, Ning Qin and Yonggang Zhu*



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

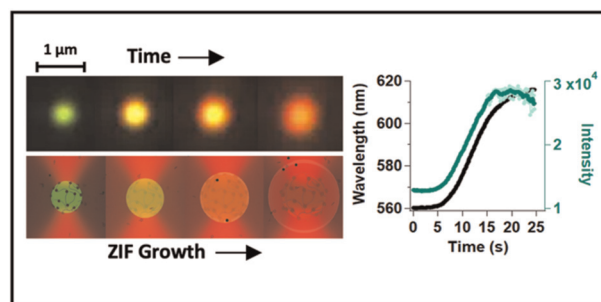
Parbati Senapati and Prakash Parida*



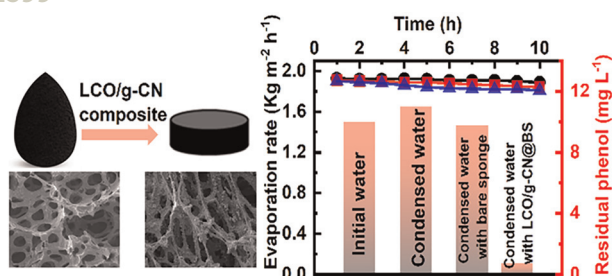
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Tunable growth of a single high-density ZIF nanoshell on a gold nanoparticle isolated in an optical trap

Daniel Jackson, Maitreya Rose and Maria Kamenetska*



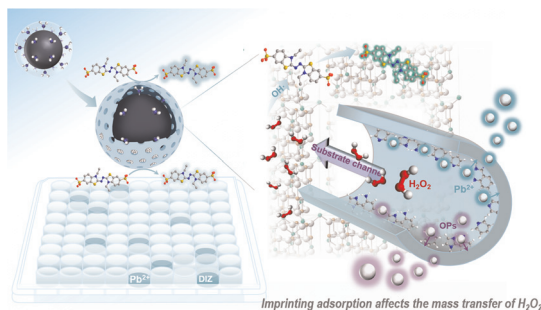
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Super-hydrophilic $\text{LaCoO}_3/\text{g-C}_3\text{N}_4$ nanocomposite coated beauty sponge for solar-driven seawater desalination with simultaneous volatile organic compound removal

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

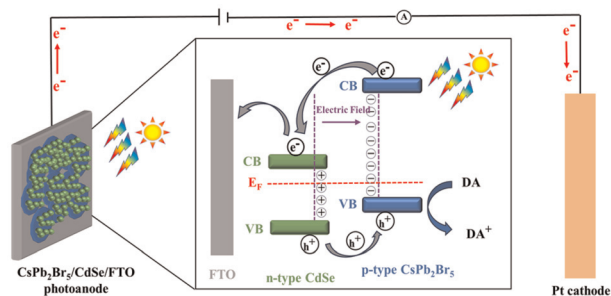
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Multifunctional molecularly imprinted nanozymes with improved enrichment and specificity for organic and inorganic trace compounds

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

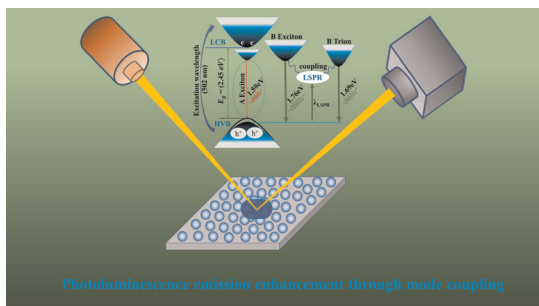
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Water-stable perovskite $\text{CsPb}_2\text{Br}_5/\text{CdSe}$ quantum dot-based photoelectrochemical sensors for the sensitive determination of dopamine

Gang Zhao, Xinhang Sun, Songyan Li, Jiale Zheng, Junhui Liu* and Mingju Huang*

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On the unique temperature-dependent interplay of a B-exciton and its trion in monolayer MoSe_2

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

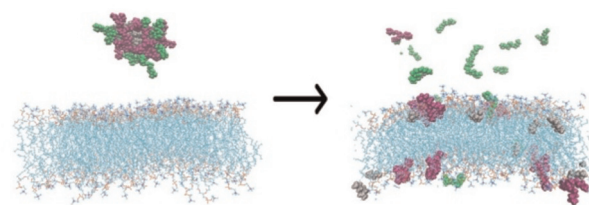


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Digestion of lipid micelles leads to increased membrane permeability

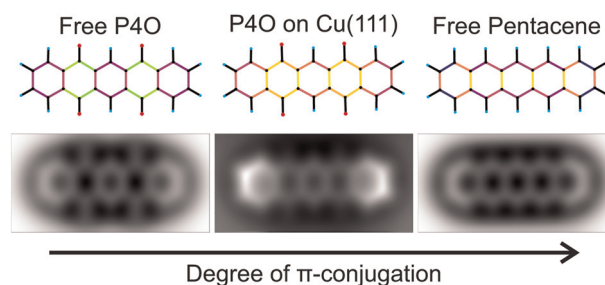
Jun Xie, Demi L. Pink, M. Jayne Lawrence and Christian D. Lorenz*



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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*



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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*

