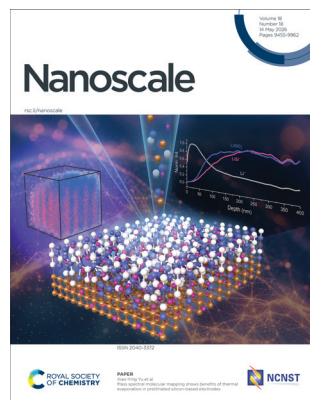


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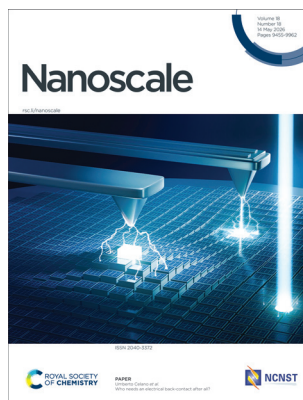


Cover

See Xiao-Ying Yu *et al.*, pp. 9626–9634.

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Inside cover

See Umberto Celano *et al.*, pp. 9635–9642.

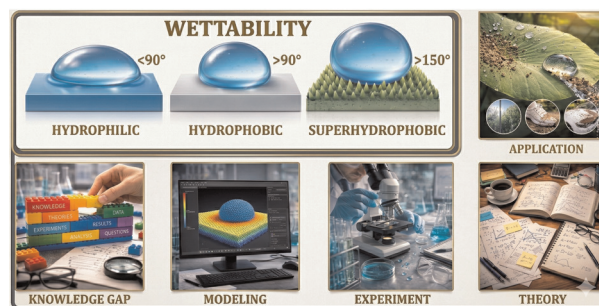
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REVIEWS

9469

Understanding surface wettability: insights from experiments, molecular simulations, and first-principles theory

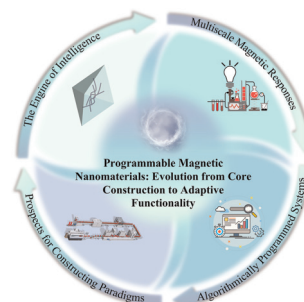
Emdadul Haque Chowdhury, Md Shahed Hossain Sohan, C. Ulises Gonzalez-Valle, Adri C. T. van Duin and Bladimir Ramos-Alvarado*



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Intelligent magnetic nanomaterials: a trinity framework of programmability, field-driven actuation, and data-guided intelligence

Ruoyu Wang, Shaoqing Liu, Bin Zuo,* Guoze Yan, Bingbing Shen, Pengde Li, Zheng Chen* and Xingtao Xu*



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ACCESS**

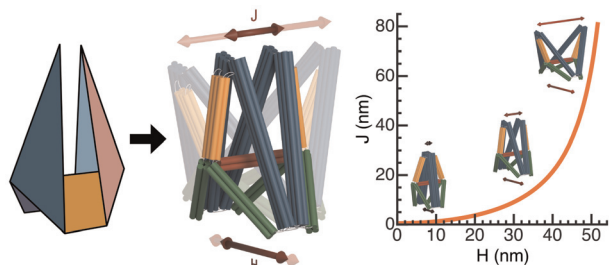
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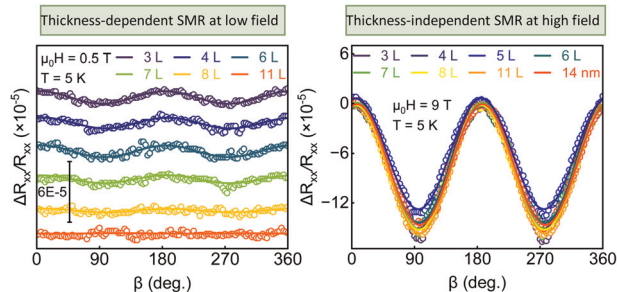
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Engineering non-linear mechanical advantage in DNA nanostructures: a wireframe adaptation of a lamina emergent mechanism

D. Sebastian Arias and Rebecca E. Taylor*

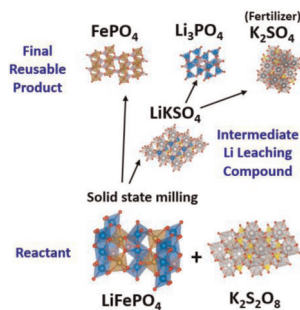
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Thickness-dependent spin Hall magnetoresistance in few-layer CrPS₄/Pt heterostructures

Caiqiong Xu, Xue He, Jicheng Wang, Wenxing Chen, Shilei Ding,* Jinbo Yang, Yanglong Hou and Rui Wu*

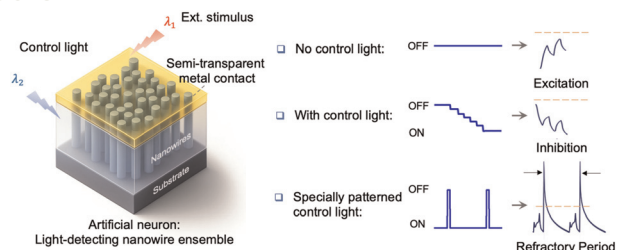
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Sustainable lithium recovery from a spent LiFePO₄ cathode via K₂S₂O₈-assisted solid state oxidation through mechanochemistry

Junhee Kim, Min Hyuk Choi, Dong Won Kim, Inji Choi, Yoo Sei Park and Kyeong-Ho Kim*

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Nanowire photodetectors: path to single physical artificial neurons

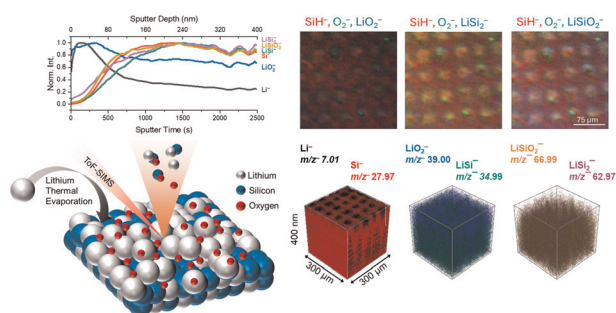
Yunqiu Chen, Milad Fathabadi, Mohammad Fazel Vafadar and Songrui Zhao*



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Mass spectral molecular mapping shows benefits of thermal evaporation in prelithiated silicon-based electrodes

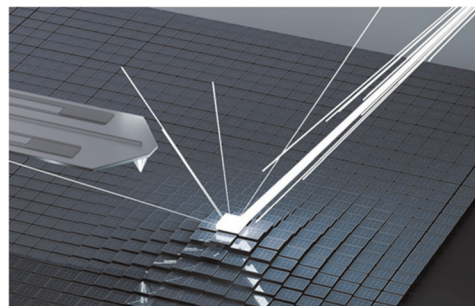
Gabriel D. Parker, Amanda L. Musgrove, Gabriel M. Veith, Ivan Matyushov and Xiao-Ying Yu*



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Who needs an electrical back-contact after all?

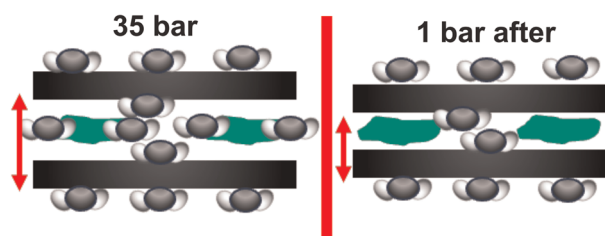
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9643

High capture capacity of CO₂ in a nickel intercalated Ti₃C₂T_x MXene–fluorohectorite clay heterostructure

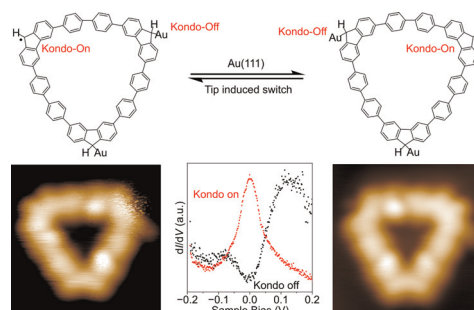
Barbara Pacakova,* Anupma Thakur, Nithin Chandran B. S., Nicolas Heymans, Irena Matulkova, Hanna Demchenko, Alexander Harold Sexton, Kristoffer William Bø Hunvik, Guy De Weireld, Babak Anasori, Steinar Raaen and Jon Otto Fossum



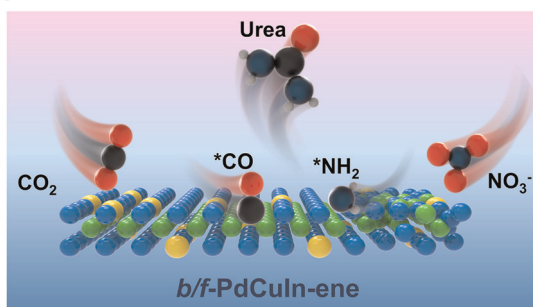
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Conformation-induced Kondo switch of fluorenyl radicals on a metal surface through adsorption

Jia Liu, Yanbo Li, Jianmin Huang, Shijing Tan, Chuanxu Ma, Qitang Fan* and Bing Wang*



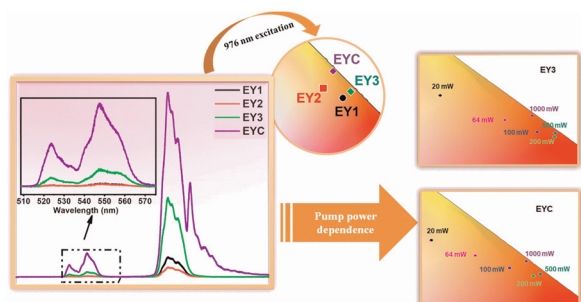
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Dual-site adsorption regulation on a bcc/fcc heterophase PdCuIn metallene for efficient urea electro-synthesis

You Xu,* Jiwei Zhang, Youwei Sheng, Jiabing Geng, Kai Deng, Ziqiang Wang, Hongjie Yu, Liang Wang* and Hongjing Wang*

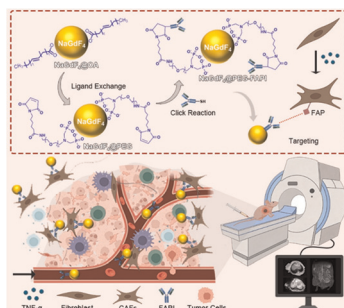
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Lattice distortion induced enhanced up-conversion luminescence from Er³⁺, Yb³⁺ codoped MgAl₂O₄ nanocrystals through Cr³⁺ incorporation

Savita, Madan M. Upadhyay, Deepali Jagga, Priyanka Bishnoi, Kaushal Kumar, Ankush Vij* and Anup Thakur*

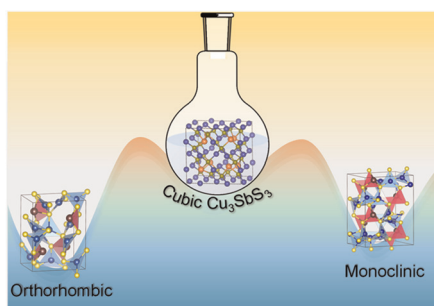
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A synergistic multiparametric MRI strategy for FAP α -targeted tumor fibrosis based on NaGdF₄@PEG-FAPI nanoprobes

Yuqiang Ma, Ni Zhang, Shuai Wu, Jingwen He, YuHang Jiang, Meng Qin, Hongxiang Feng,* Wenyue Li* and Yi Hou*

9689



Metastable cubic Cu₃SbS₃: a facile solution-phase access to a kinetic polymorph

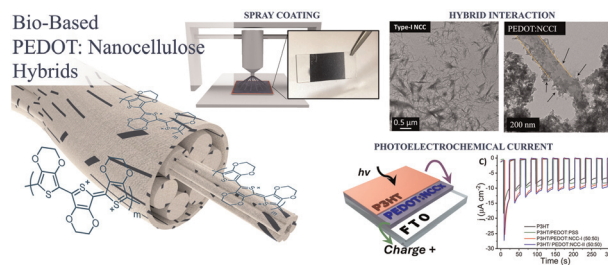
Rittika Dhar, Anil Kumar B. M., Pranav Negi, Shuva Biswas, Dirtha Sanyal and Satya N. Guin*



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Bio-based PEDOT: nanocellulose hybrids as efficient hole-transport layers for photoelectrochemical devices

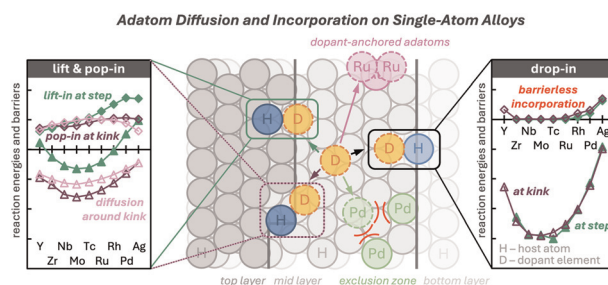
Antonio Domínguez-Alfaro,*
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Eduardo Colom, Jose M. González-Domínguez,
Bernabé Linares-Barranco, Wolfgang K. Maser and
Ana M. Benito*



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Mechanisms for the formation of active sites in single-atom alloys

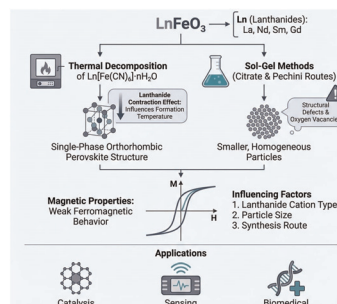
Ioannis Karageorgiou, Angelos Michaelides* and
Fabian Berger*



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Effect of synthesis method on the structural properties and magnetic behavior of LnFeO₃ (Ln = La, Nd, Sm, and Gd) nanoparticles

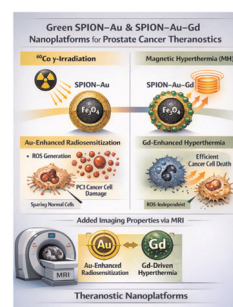
Gonzalo A. Lascano, Martín E. Saleta,
Rodolfo D. Sánchez, María I. Gómez, Andrés H. Morales,
María C. Navarro and Cintia M. Romero*



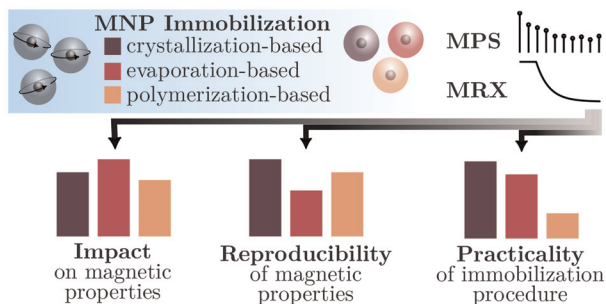
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Integrating green chemistry into SPION development: a theranostic study on prostate cell models

Beatriz Morais, Vital Filho, Célia T. Sousa,
Fernanda Marques, Sara Lacerda,
João Carlos Waerenborgh, Bruno J. C. Vieira,
Teresa Pinheiro, Rodica Mihaela Dinica,
Maria J. Carmezim, Pedro M. P. Santos, Sandra Même,
Dirk H. Ortgies, Laura C. J. Pereira* and
Maria Paula Cabral Campello*



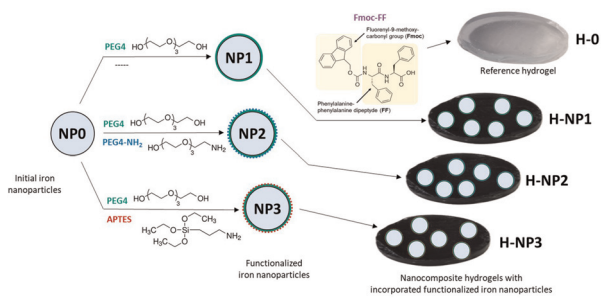
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Comparison of magnetic nanoparticle immobilization methods using MPS and MRX

Kerstin Pansegrau,* Patricia Radon, Aaron Jaufenthaler, Frank Wiekhorst and Daniel Baumgarten

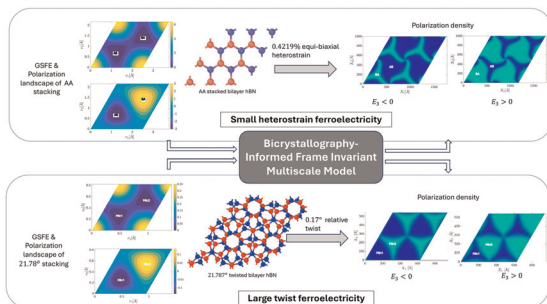
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Amine- and hydroxyl-functionalization of iron nanoparticles for tailoring the properties of Fmoc-FF-based magnetic hydrogels: interfacial design toward biocompatible materials

Mariusz Barczak,* Cristina Gila-Vilchez, Maria Powęzka, Anna Michalicha, Fernando González-Caballero, Miguel Alaminos, Olimpia Ortiz-Arrabal, Luis Álvarez de Cienfuegos and Modesto T. López-López*

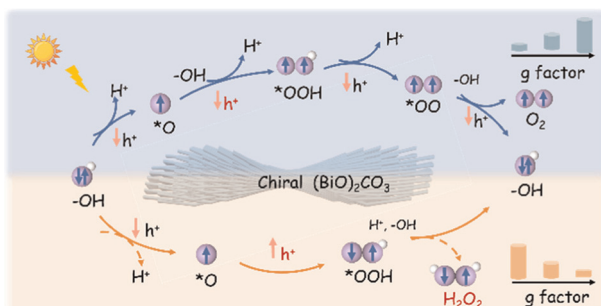
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Multiscale analysis of large twist ferroelectricity and swirling dislocations in bilayer hexagonal boron nitride

Md Tusher Ahmed, Chenhaoyue Wang, Amartya S. Banerjee and Nikhil Chandra Admal*

9801



Chiral (BiO)₂CO₃ catalysts with spin-selective charge transport enhance photocatalytic oxygen evolution

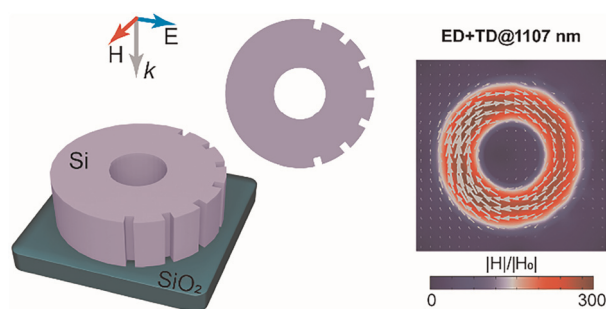
Yuqiang Shi, Zhiwei Sun, Yige Wang, Xiaoxiao Fu, Zhijia Song, Zhaoxiong Xie and Haixin Lin*



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Nonlinear generation control with torus metasurfaces

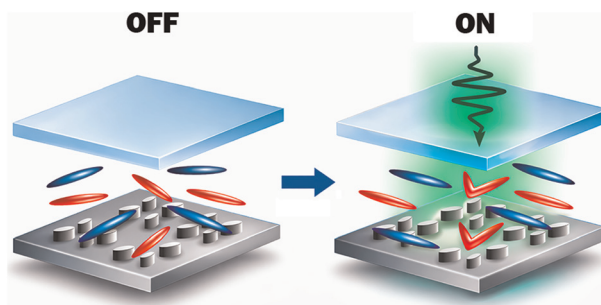
Lei Kang,* Charles F. Nalatury and Douglas H. Werner*



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All-optical tuning of dielectric metasurfaces infiltrated with dye-doped liquid crystals

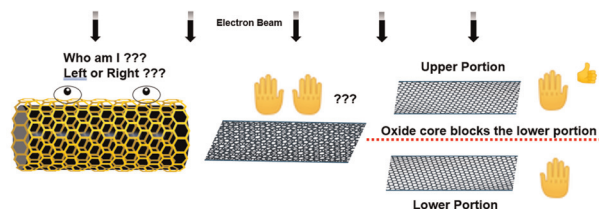
Yana V. Izdebskaya,* Andrey G. Iljin, Oleg E. Kameshkov, Vladlen G. Shvedov and Ilya V. Shadrivov*



9826

Quantifying chiral handedness of core-shell inorganic nanotubes via electron microscopy and diffraction

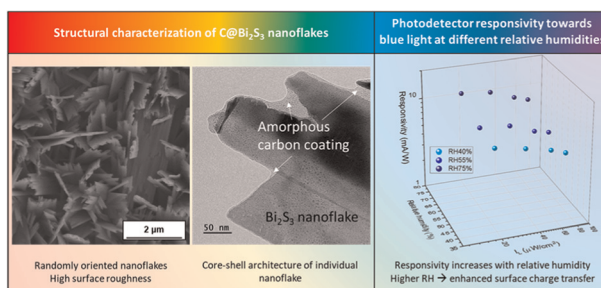
Kaiyuan Wang, Beilynn Geiss, Roy Geiss, James R. Neilson, Alla Zak and Justin B. Sambur*



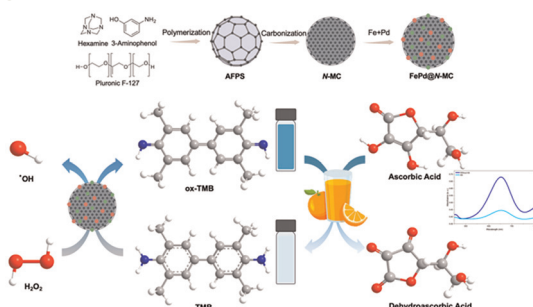
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One-pot microwave synthesis of core-shell C@Bi2S3 nanoflake-like structure for humidity-dependent photodetection applications

Marcin Godzierz,* Sonia Gorawska, Krystian Mistewicz, Łukasz Otulakowski, Karolina Olszowska, Viktoriia Talaniuk, Anna Gawron, Mirosława Pawlyta and Urszula Szeluga



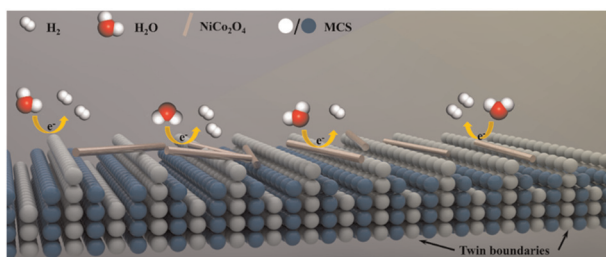
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Enhanced peroxidase-like activity of palladium–iron bimetallic nanoparticles supported on N-doped mesoporous carbon for colorimetric detection of ascorbic acid and dopamine

Zahra Bahreini, Siyavash Kazemi Movahed,*
Keun Hwa Chae* and Cheol-Hwee Shim

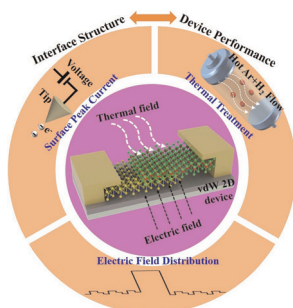
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Enhancing charge separation efficiency in photocatalytic hydrogen evolution via a synergistic strategy based on point/interface dual-defect engineering in Schottky heterojunctions

Xianglong Lyu, Mei Li,* Ziyu Li, Jingyi Nie, Chaoqi Ding,
Aohui Ping, Meijuan Ding and Zhiliang Jin

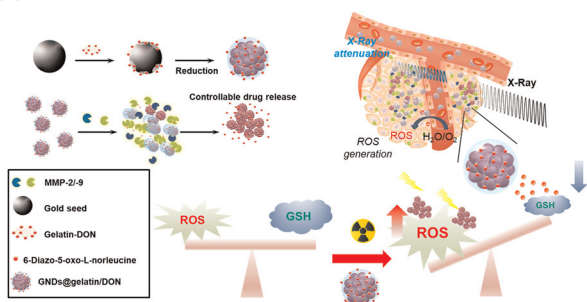
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Interface carrier transport in van der Waals heterostructures: roles of bubbles, annealing, and electric field screening

Jianwei Chen, Yike Zhao, Wuwei Feng, Yajie Guo,*
Bo Tian* and Jun Jiang*

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Targeting glutamine metabolism combined with a nanoradioenhancer in radioresistant hepatocellular carcinoma

Chia-Chun Kuo, Yao-Chen Chuang, Ping-Hsiu Wu,
Wei-Min Chang, Leu-Wei Lo, Hsuan-Yu Chen,
Kuen-Haur Lee, Hsin-Lun Lee,* Jeng-Fong Chiou* and
Yao-An Shen*

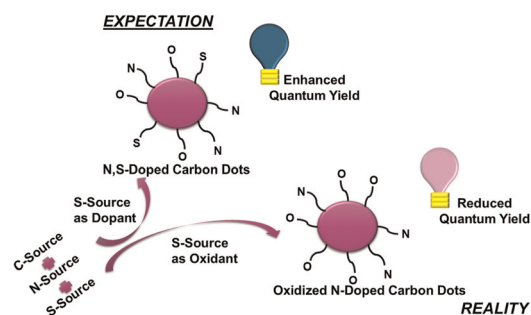


PAPERS

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Insights into the role of common sulfur precursors in hydrothermally synthesized N,S-doped carbon dots: fluorescence modulation *via* surface oxidation rather than sulfur doping

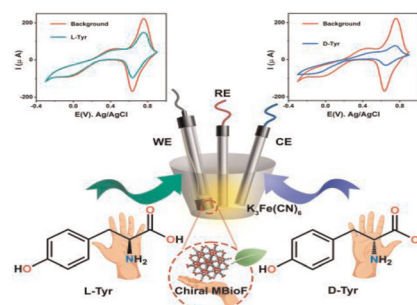
Sónia Fernandes, Manuel Algarra,*
Ana T. S. C. Brandão, Antonio Gil, Carlos M. Pereira,
Joaquim C. G. Esteves da Silva and
Luís Pinto da Silva*



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Novel synthesis approach for metal–biomolecule–framework–hexacyanoferrate composite nanofibers, besides developing a chiral sensing probe

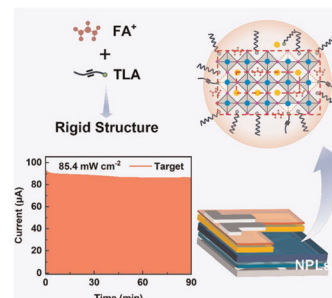
Seyedeh Fatemeh Nami-Ana, Javad Tashkhourian* and
Mojtaba Shamsipur



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Enhanced stability and ultraviolet photodetection performance in CsPbBr₃ nanoplatelets *via* FA doping

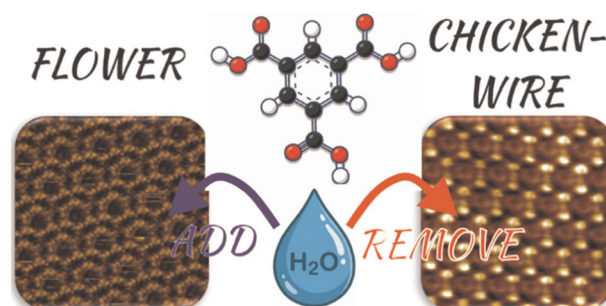
Le Luo, Xiaoming Mo,* Yusheng Song, Zhentao Du,
Sheng Cao, Jinju Zheng,* Bingsuo Zou and
Jialong Zhao*



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The water, of course! Impurity-induced polymorphism in the self-assembly of interfacial trimesic acid monolayers

Manuela Hocke, Natalia Martsinovich and
Markus Lackinger*



PAPERS

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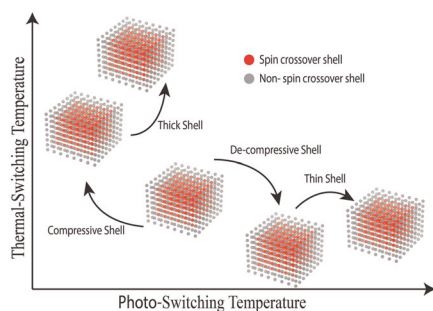
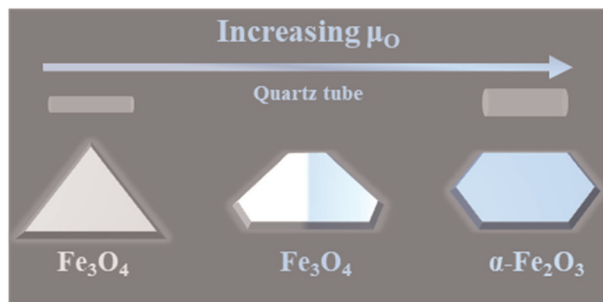


Photo-induced and thermal bistability of spin crossover nanoparticles

Nadeem Natt and Benjamin J. Powell*

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Morphology–phase coevolution driven by oxygen chemical potential in $\text{Fe}_3\text{O}_4/\alpha\text{-Fe}_2\text{O}_3$ nanosheets

Wenkai Liu, Huawei Zhao, Dongqi Zhao, Yupeng Zhao, Muhammad Hamza Tariq, Jinhong Du, Ruotong Zhao, Yanqing Ma* and Lei Ma*

CORRECTION

9957

Correction: Photosensitized reactive chlorine species-mediated therapeutic destruction of drug-resistant bacteria using plasmonic core–shell Ag@AgCl nanocubes as an external nanomedicine

Suresh Thangudu, Sagar Sunil Kulkarni, Raviraj Vankayala, Chi-Shiun Chiang and Kuo Chu Hwang*

