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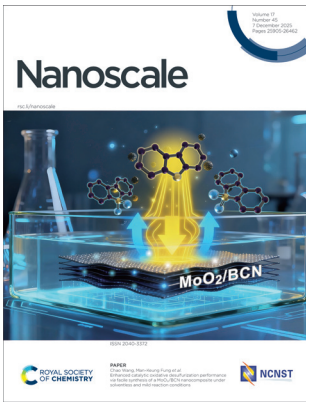

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See Chao Wang, Man-Keung Fung *et al.*, pp. 26068–26076.

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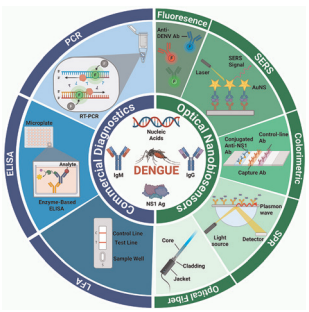
Dengue diagnostics: from commercial tests to optical nanosensors

Rhai-Anne A. C. Etienne, Yasuhiro Takeuchi, Xiaodi Su* and Nguyen Thi Kim Thanh*



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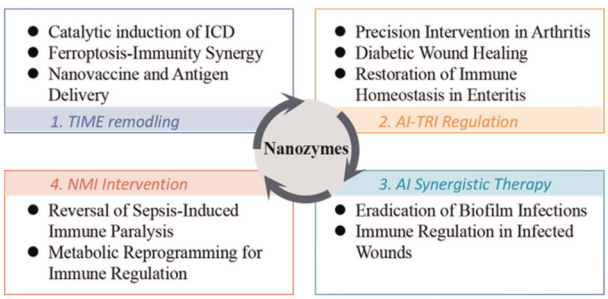
Nanozyme-driven remodeling of the immune microenvironment: from catalytic therapy to precise immune regulation

Qian He and Liyun Zhang*



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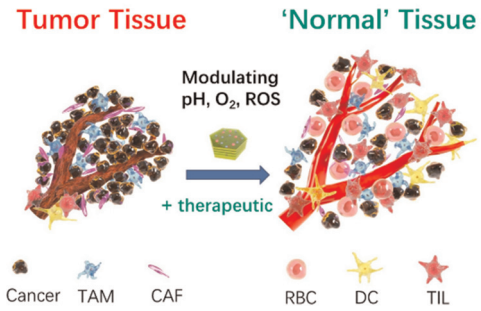
Recent advances in pH-sensitive clay nanomaterials for enhanced immunotherapy of solid tumors

Zhi Ping Xu



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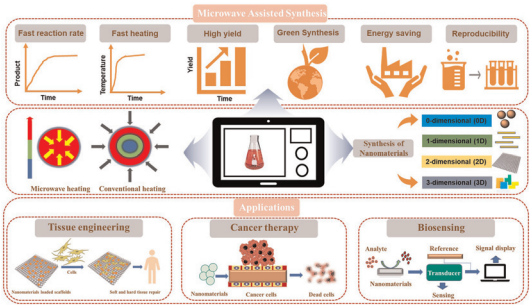
Microwave chemistry and microwave-assisted synthesis of nanomaterials in biomedicine: a focused review

Ankur Sood, Kanika, Arpita Roy, Shubham Mahajan, Sung Soo Han, Rehan Khan* and Sumanta Sahoo*



MINIREVIEWS

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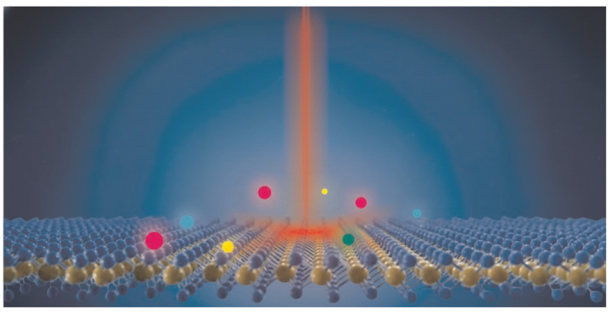
Unveiling quantum phases in two-dimensional materials with optical quasiparticle probes

Bruno R. Carvalho* and Victor Carozo*



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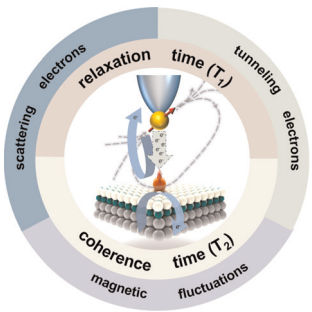
Quantum coherence and relaxation of single spins on surfaces probed by ESR-STM

Dalong Xuan, Di'an Wu, Xiaobin Geng, Sihao Li, Xianglong Wu, Yu Wang* and Xue Zhang*



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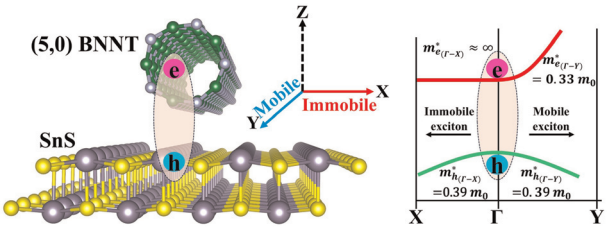

Interfacial excitons across dimensional boundaries: a mixed-dimensional SnS/BNNT heterostructure

Dhanjit Talukdar,* Dambarudhar Mohanta and Gazi A. Ahmed

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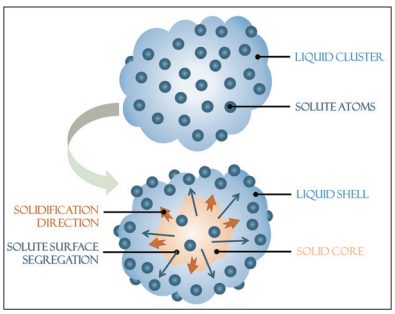

A corus line: nanophase diagrams of miscible bimetallic nanoparticles

Zhixuan Lin, E. Toulkeridou, Junlei Zhao, Yue Wang, Jeffrey E. Shield and P. Grammatikopoulos*

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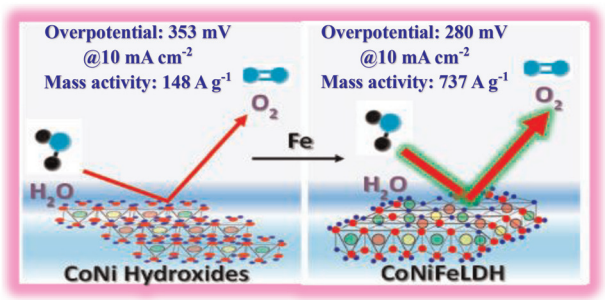

Unveiling the transformation of CoNi hydroxides to CoNiFe layered double hydroxides with implications for electron modulation in one-step coprecipitation for efficient oxygen evolution electrocatalysis

Jony Saha* and Firdosh Alam Molla

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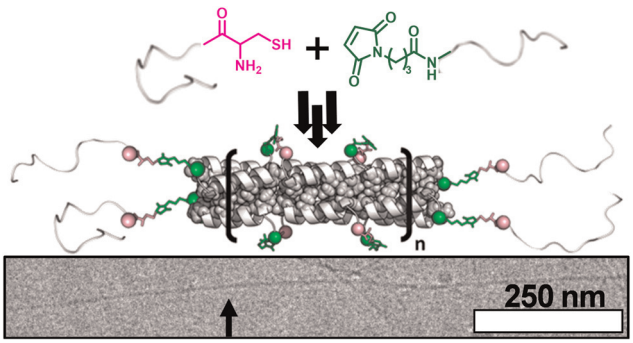

Supramolecular assembly of unstructured peptides into rigid bundlemer polymers

Joshua E. Meisenhelter, Matthew Langenstein, Jacquelyn E. Blum, Dai-Bei Yang, Darrin J. Pochan, Jeffery G. Saven* and Christopher J. Kloxin*

COMMUNICATIONS

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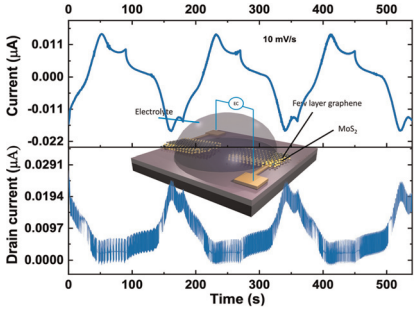
Planar supercapacitor devices with nanometer electrodes

Sumana Kumar, Rahul Tripathi, Rajesh P. Achary and Abha Misra*



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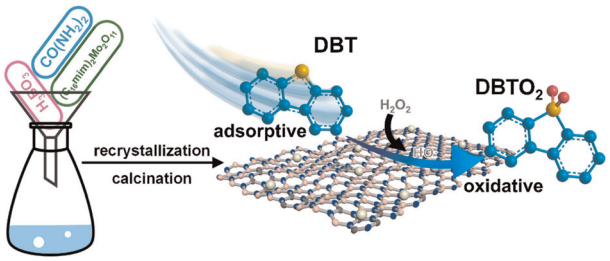
Enhanced catalytic oxidative desulfurization performance *via* facile synthesis of a MoO_2/BCN nanocomposite under solventless and mild reaction conditions

Chao Wang,* Xiaoyu Yao, Qi Sun, Hui Liu, Man-Keung Fung,* Ming Zhang and Huaming Li



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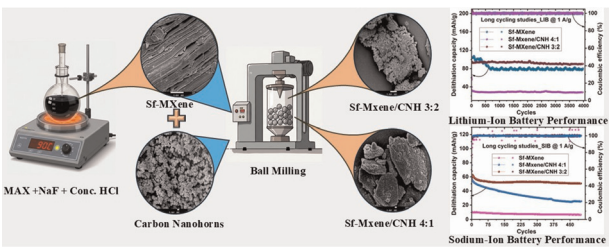
Synergistic enhancement in energy storage in lithium/sodium ion batteries using engineered composites of MXenes and carbon nanohorns

Mukul Swain, Saibrata Punyasloka, Sameer Nirupam Mishra, Kottisa Sumala Patnaik, Chinmay Ghoroi* and Noriyoshi Matsumi*



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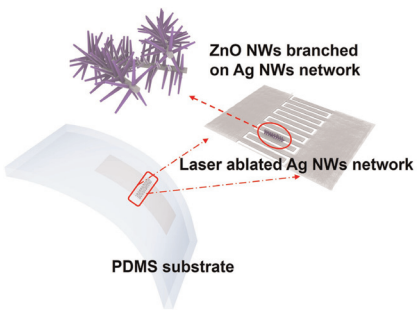
Flexible piezo-responsive photodetector based on hierarchical zinc oxide nanowire branches on a silver nanowire backbone

Changwook Lee, Taeseung Hwang, Hee Jin Lee, Jehoon Lee, Seonmi Ko, Hoon Eui Jeong* and Junyeob Yeo*



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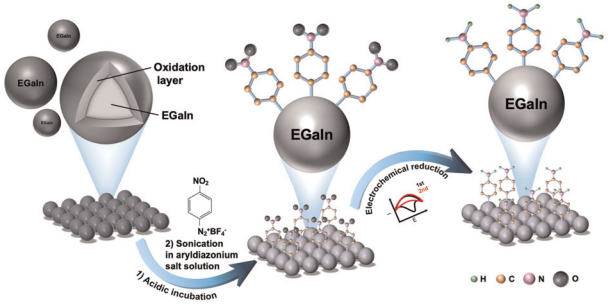

Formation of covalent Ga–C bonds on liquid metal nanoparticles with enhanced stability and anti-oxidation

Chuangxin Zhou, Zhiheng Zhang, Yuan Gao, Weize Diao, Siyi Zou, Jun Zhu, Jiangtao Xu and Guozhen Liu*

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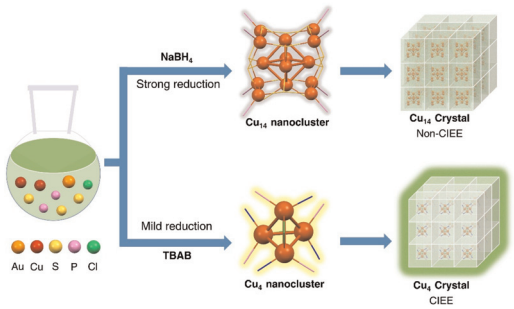

Reductant-selected formation of copper nanoclusters with crystallization-induced emission enhancement performance

Ye Tian, Wenlong Xu, Jian Zhu, Jiayu Lu, Zhaohang Chen, Fakhari Alam, Honglei Shen,* Xi Kang* and Manzhou Zhu

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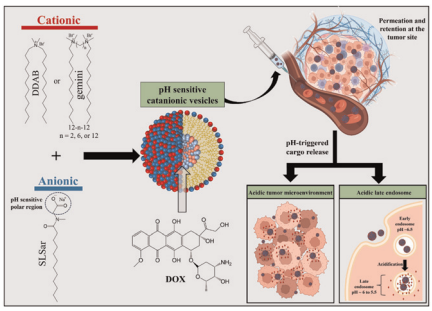

Smart sarcosinate-based catanionic vesicles for efficient doxorubicin delivery in tumor microenvironments

Rui L. Machado, Isabel S. Oliveira,* Karenina Santos, Andreia C. Gomes and Eduardo F. Marques*

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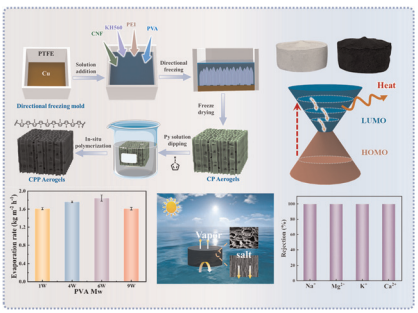

Synergistic engineering of polypyrrole-cellulose aerogels with vertical channels for salt-resistant solar evaporation and multipollutant water purification

Xin Zhao, Ling Niu, Yuchen Jin, Di Wu,* Zheng Sun* and Zhiqiang Su*

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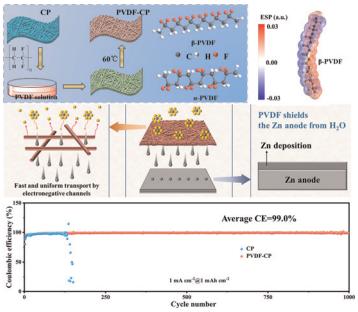
Bifunctional interface engineering of fluorinated cosmetic cotton separators: synergistic Zn^{2+} kinetics and hydrophobic shielding for ultra-stable Zn anodes

Suhong Li, Yanyan Qin, Ke Su, Jianyong Ren, Lin Li, Zhouyang Long* and Lingdi Shen*



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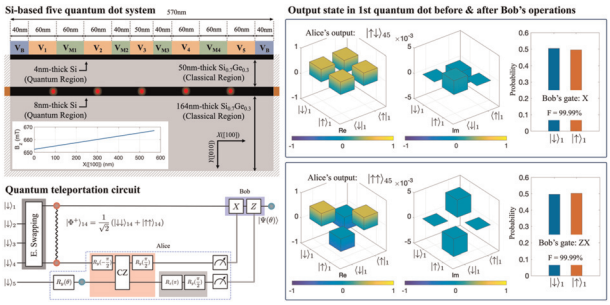
On the feasibility of quantum teleportation protocols implemented with silicon devices

Junghee Ryu and Hoon Ryu*



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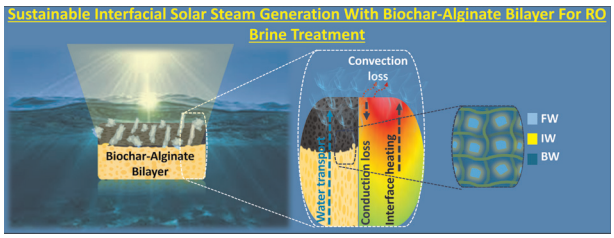
Sustainable interfacial solar steam generation with a biochar–alginate bilayer for RO brine treatment

Sumina Namboorimadathil Backer,*
Ismail W. Almanassra, Alaa Abushawish, Muataz Ali Atieh and Abdallah Shanableh*



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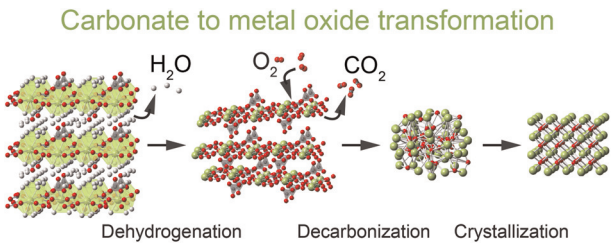
Nucleation and crystallization of metal oxides from carbonates

Yingying Jiang, Guoming Lin and Utkur Mirsaidov*



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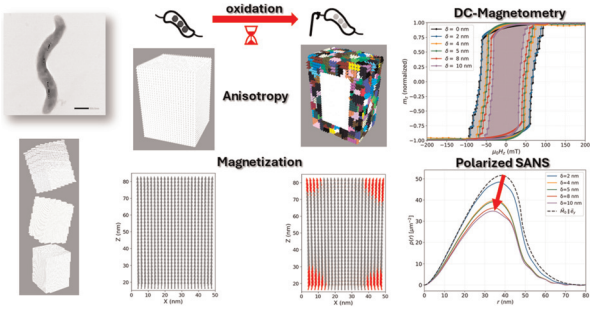

Micromagnetic structure of oxidized magnetite nanoparticles: sharp structural *versus* diffuse magnetic interface

Elizabeth M. Jefremovas,* Michael P. Adams, Lucía Gandarias, Lourdes Marcano, Javier Alonso, Andreas Michels and Jonathan Leliaert

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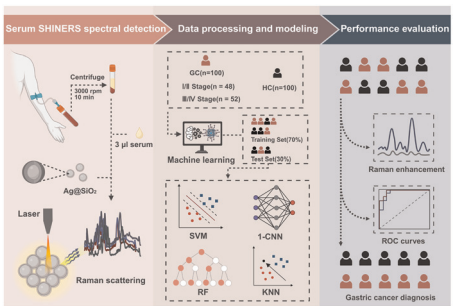

A machine learning-enhanced gastric cancer diagnostic method based on shell-isolated nanoparticle-enhanced Raman spectroscopy

Mengya Li, Liyi Li, Pan Yang, Jiangnan Zeng, Ruijia Ma, Jingzhe Peng, Yongzhong Wu, Wei Zhou,* Weiling Fu* and Yang Zhang*

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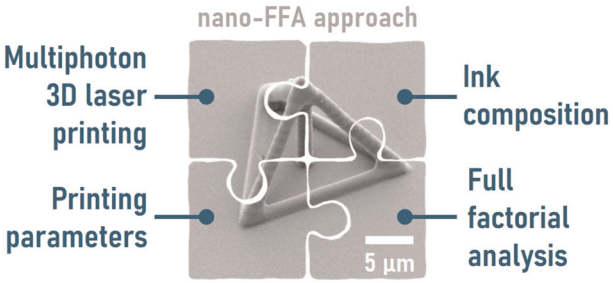

nano-FFA: ink formulation and process optimization in multiphoton 3D laser printing using full factorial analysis

Clara Vazquez-Martel, Samantha O. Catt and Eva Blasco*

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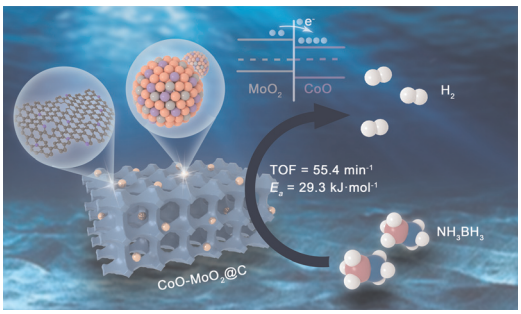

$\pi-\pi$ electron conjugation-assisted synthesis of a robust heterostructured CoO–MoO_2 catalyst: accelerated ammonia borane hydrolysis for hydrogen evolution

Junrui Zhang, Nuo Lei, Yunqi Jia, Shengrong Guo, Liuzhang Ouyang* and Xuezhang Xiao*

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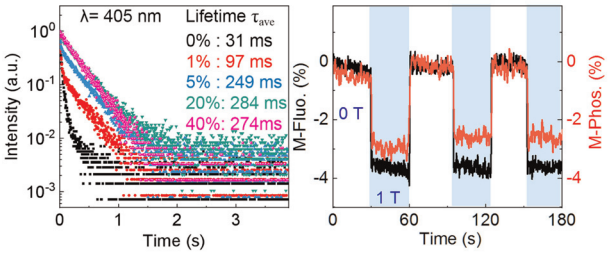
Abnormal homodirectional responses of magneto-phosphorescence and magneto-fluorescence in organic phosphorescent crystals under third-component doping

Wanlong Zhang, Yongcheng Zhang,* Zhiyan Chen* and Wei Qin*



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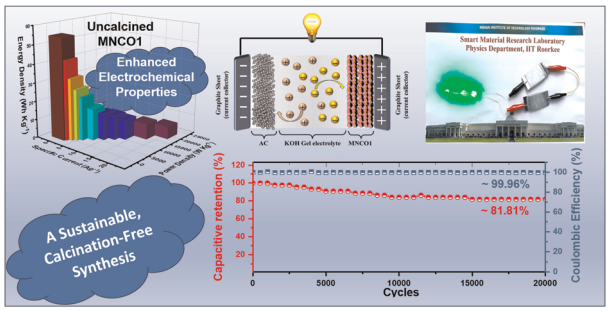
A sustainable synthesis of mesoporous $Mn_{1-x}Ni_xCo_2O_4$ nanoparticles: exploring calcination effects on supercapacitor performance

Shivam Kumar Mittal and K. L. Yadav*



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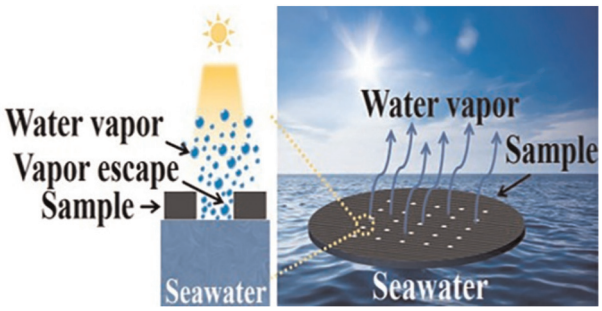
A PDMS@Fe_3O_4 nanocomposite material-based solar interfacial evaporator prepared using a picosecond laser

Shuangshuang Hu, Zhiliang Tang, Dongkai Chu,* Ming Li,* Jun Huang, Fangyu Yang, Shouyu Shao, Shuoshuo Qu and Peng Yao



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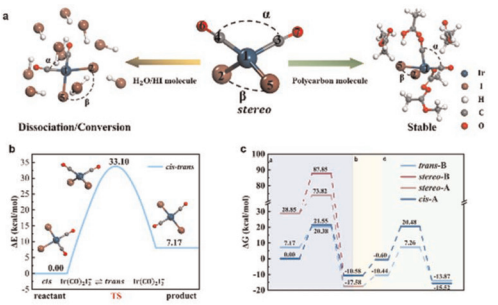
Solvent stabilization mechanisms and deactivation pathways of the inert *stereo*-configuration in iridium carbonyl iodide complexes ($Ir(CO)_2I_2^-$)

Qiyue Wei, Yue Li, Jinhui Xie, Yanxun Wu, Xiaokun Zhou, Shiyu Lv, Ruifeng Wang, Zengxi Wei* and Shuangliang Zhao*



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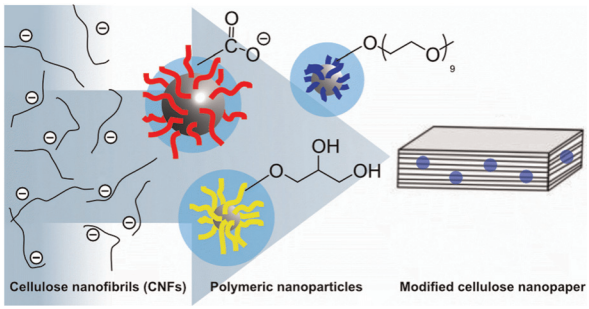

Cellulose nanopaper with polymeric nanoparticle additives – what is the role of nanoparticle surface functionality?

Åsa Jerlhagen, Korneliya Gordeyeva, Vishnu Arumughan, Lars Berglund and Eva Malmström*

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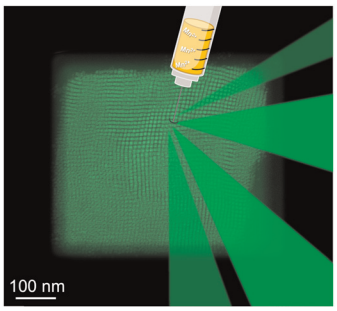

Mn^{2+}-doped $CsPbBr_3$ perovskite supercrystals: enhancing morphology and substrate variation

Victoria Lapointe and Marek B. Majewski*

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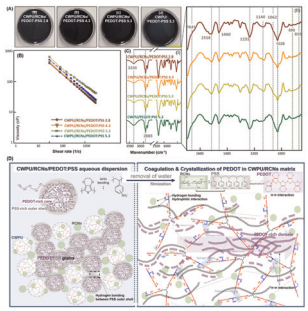

Mechanistic insight into RCNs-induced conductivity enhancement in sustainable CWPU/PEDOT:PSS nanocomposites for flexible and biocompatible electronics

Soon Mo Choi, Chul Min Kim, Ankur Sood, Sun Mi Zo, V. Govinda, Sung Soo Han* and Eun Joo Shin*

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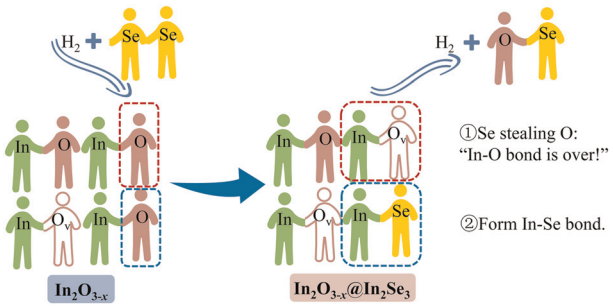

Selenium-modified In_2O_3 photoanode: oxygen vacancy-mediated "defect capture-interface transport" and extended light absorption for efficient photoelectrochemical water splitting

Changxue Dong, Jinwei Chen,* Qiuyan Chen, Han Tan, Kun Jiang* and Ruilin Wang*

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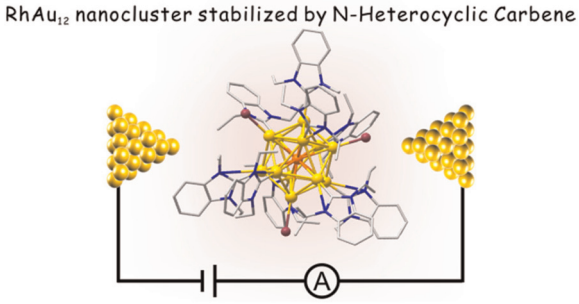
An Rh–Au nanocluster protected by an N-heterocyclic carbene: synthesis, structure, and single-molecule conductance properties

Dan Qiao, Chaochao Pan, Dongjie Zuo, Rong Huo, Simin Li, Jianyu Wei, Zhibing Tan,* Nanfeng Zheng* and Hui Shen*



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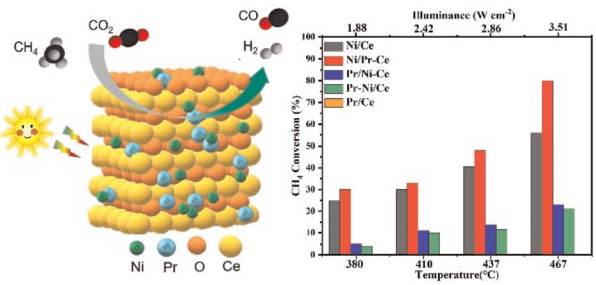
Role of the Pr/Ni loading sequence in boosting the photothermal catalytic activity of CeO_2 for methane dry reforming

Zeai Huang,* Jing Liu, Yi He, Wei Hu, Jundao Wu, Rustem Zairov, Oleg G. Sinyashin, Weiyao Hu and Ying Zhou*



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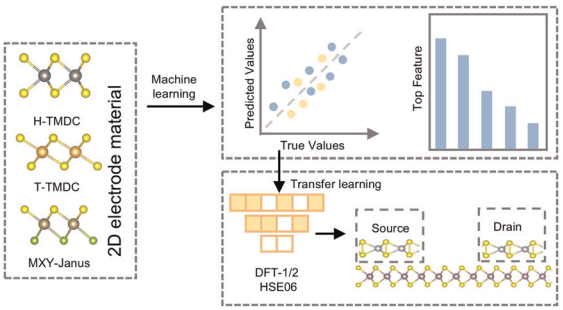
A study on the prediction of MoS_2 transistor electrode contact characteristics based on transfer learning methods

Yan Li, Furui Zhang* and Jie Zhao



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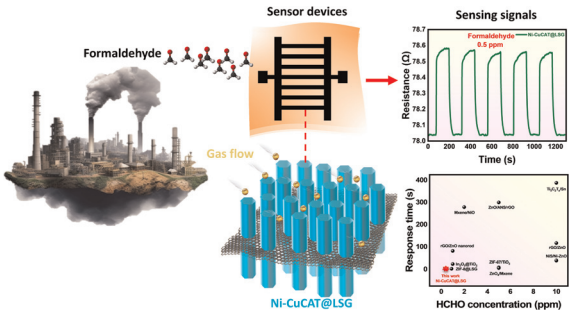
***In situ* growth of conductive bimetallic catecholate MOFs on porous graphene for high-performance formaldehyde gas sensing**

Anh Tuan Trong Tran, Kamrul Hassan, M. A. Jalil, Tran Thanh Tung, Tetsuya Kida and Dusan Losic*



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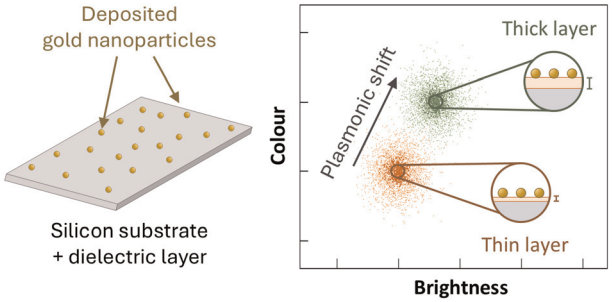

High-throughput nanoscale metrology of ultrathin inert and functionalized dielectric substrates using plasmonic nanoparticles

Tamara Muñoz-Ortiz,* Valerio Pini, Andreas Thon, Carmen Linares, Teresa Ramón, Virginia Cebrián and Óscar Ahumada

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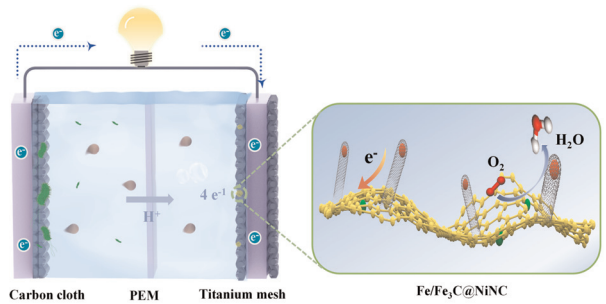

Fe/Fe_3C nanoparticles encapsulated in ZIF-8-derived carbon nanotubes as a cathode oxygen reduction catalyst for microbial fuel cells

Xinyi Wang, Xinlu Lin, Jie Zhou, Yinhua Jiang and Yuqiao Wang*

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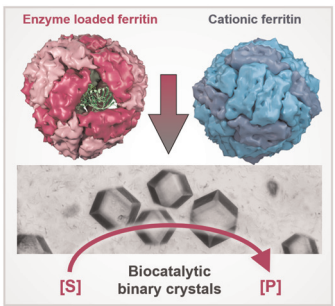

Biocatalytic 3D binary crystals formed through the self-assembly of enzyme-embedded ferritin

Yu Zhou, Lotta Rosenlöf, Boxuan Shen and Mauri A. Kostiainen*

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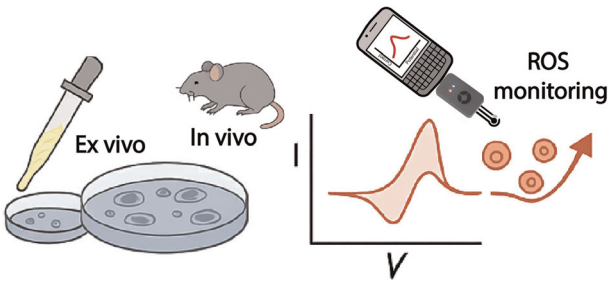

A portable and versatile rGO-Co_3O_4-Pt nanocomposite-based electrochemical sensor for *ex vivo* and *in vivo* cardiac oxidative stress monitoring

Sima Singh, Stefania Melini, Ada Raucci, Arshid Numan,* Mohammad Khalid, Bey Hing Goh, Rosaria Meli, Claudio Pirozzi* and Stefano Cinti*

PAPERS

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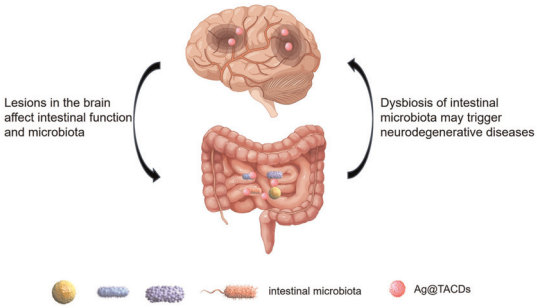
Silver-functionalized carbon dots regulate amyloid aggregation and microbial infection

Chao Wang, Xu Shao, Xiuyun Cao, Tiange Fan, Zhuotai Li, Keran Wang, Muqiong Li,* Xin Wang,* Ping Guan* and Xiaoling Hu*



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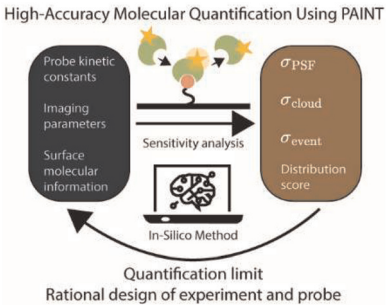
Simulation-guided exploration of PAINT parameter space for accurate molecular quantification

Wei Shan Tan, Arthur M. de Jong and Menno W. J. Prins*



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Stimulated Raman scattering imaging of atomically thin layers and a strained nanotent of hexagonal boron nitride

Kazuhiro Kuruma,* Momoko Onodera, Shun Takahashi, Ichiro Takahashi, Yijin Zhang, Tomoki Machida and Yasuyuki Ozeki