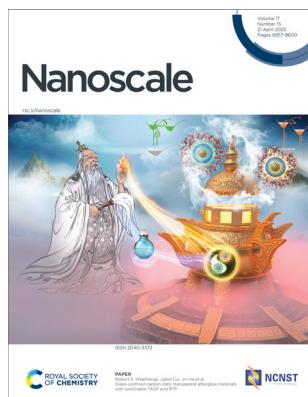


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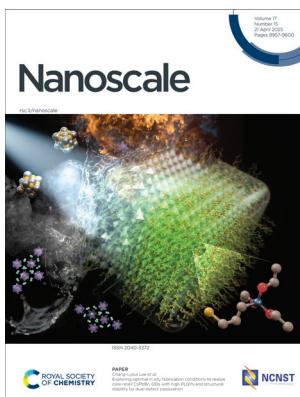
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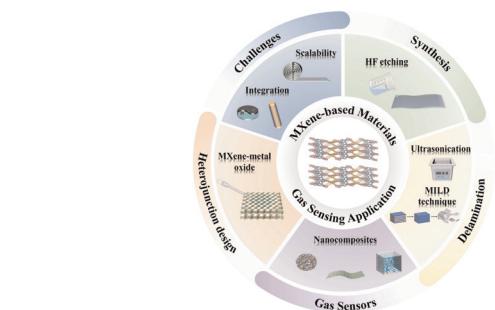
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Recent advances in 2D MXene-based heterostructures for gas sensing: mechanisms and applications in environmental and biomedical fields

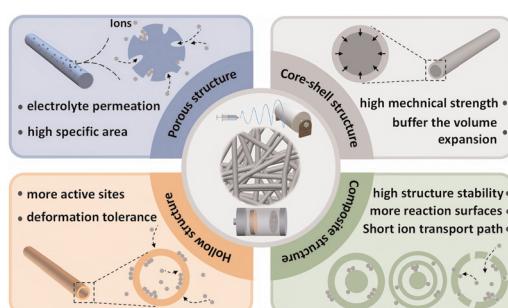
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Xinyu Li, Xunlong Zhang, Fangqin Su, Haoyue Zhao,
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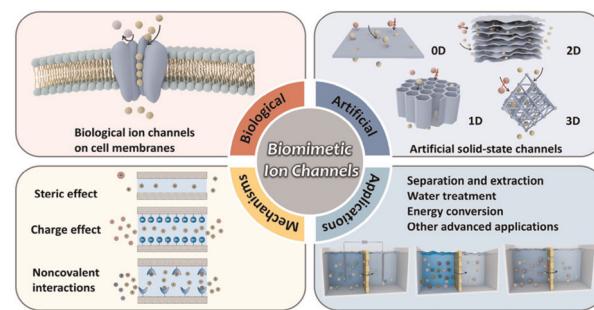


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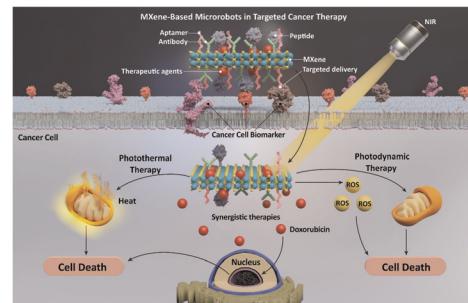
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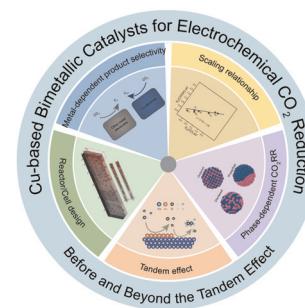
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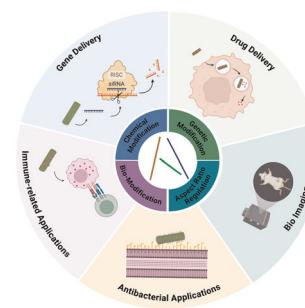
Dimiao Luo, Weidong Dai, Keying Wu, Siyuan Liu, Chiya Tang, Yanjuan Sun, Fan Dong and Chang Long*



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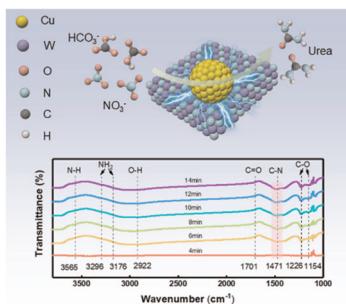
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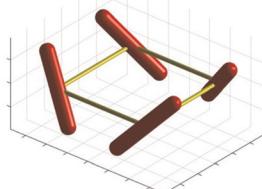
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Xue Wang, Lu-Kang Zhao, Siyao Li, Ran Wei, Xuan-Wen Gao,* Zhaomeng Liu and Wen-Bin Luo*

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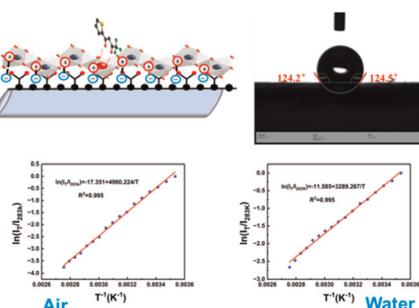
$$\boldsymbol{\epsilon} = \mathbf{I} + A_{mn} \mathbf{u}_m \mathbf{u}_n^T$$

$$\mathbf{g} = c^{-1} \omega A_{mn} (\mathbf{u}_n \times \mathbf{u}_m) \mathbf{r}_n^T$$

**Born–Kuhn coupled oscillator model for optical activity in ordered media**

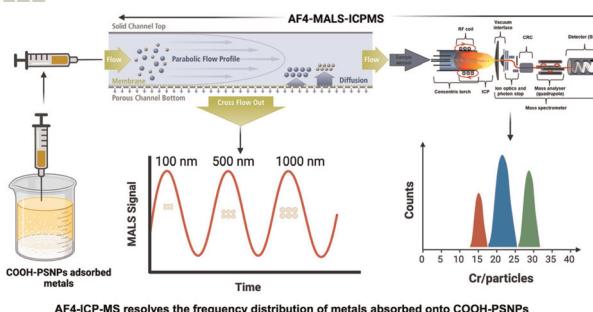
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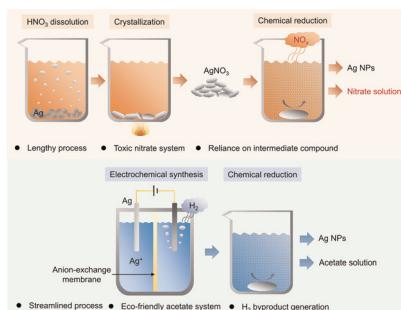
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Swaroop Chakraborty,* Roland Drexel, Prathmesh Bhadane, Nathan Langford, Pankti Dhumal, Florian Meier and Iseult Lynch



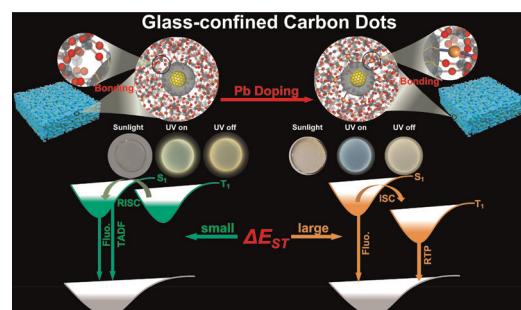
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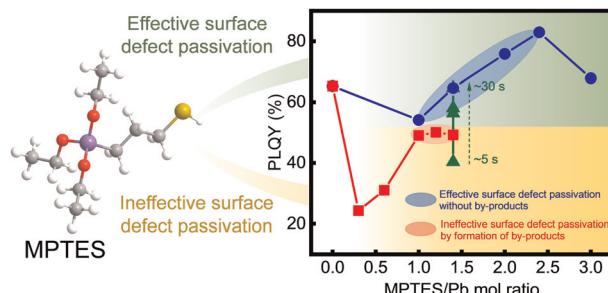
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Huaiyuan Cao, Qi Yue, Zixiao Xue, Junji Zhang,
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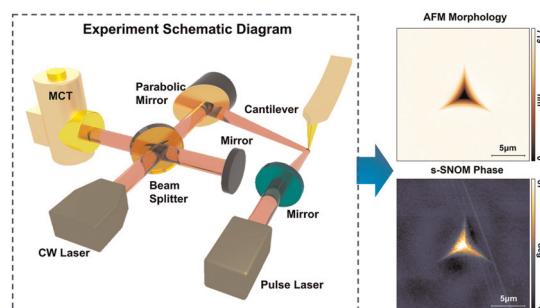
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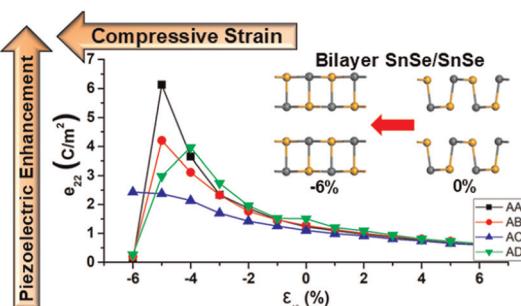
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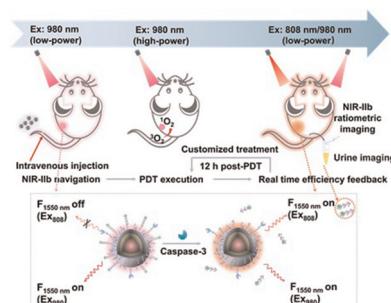
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Kevin Tran and Michelle J. S. Spencer*

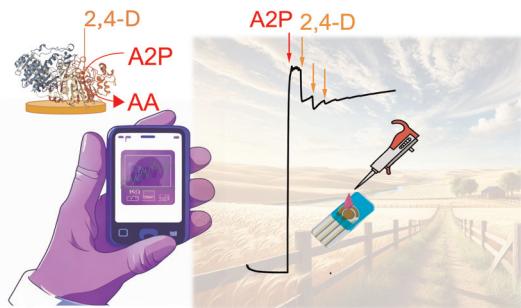
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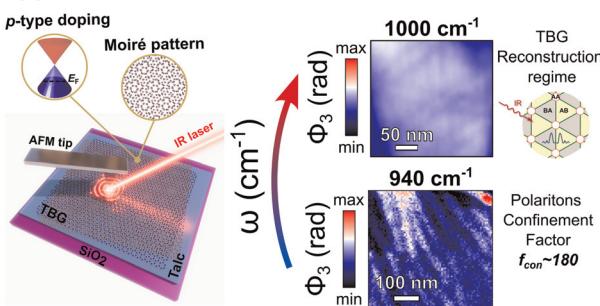
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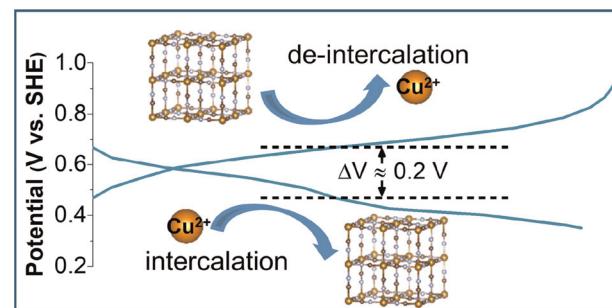


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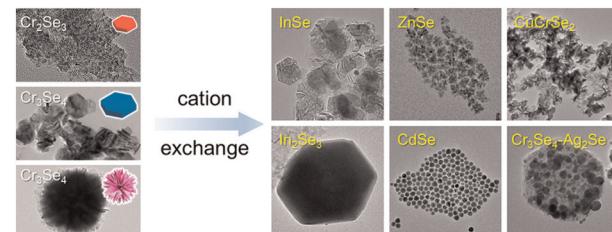
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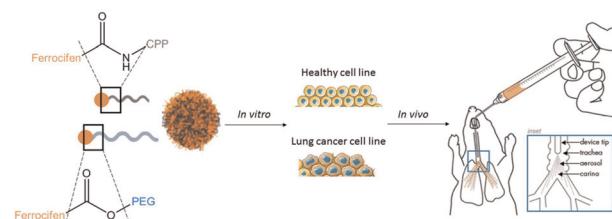
Yifan Wang, Wei Zhao, Bin Wang, Zhendong Song, Huan Yang, Fang Wang, Xiaohong Xu and Yang Liu*



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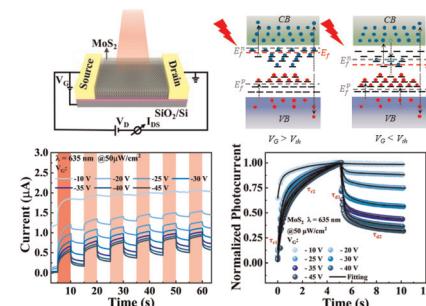
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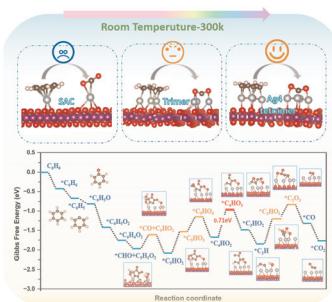
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Yuhang Xu, Yuxin Wang, Chunchi Zhang, Haijuan Wu, Chao Tan, Guohua Hu and Zegao Wang*



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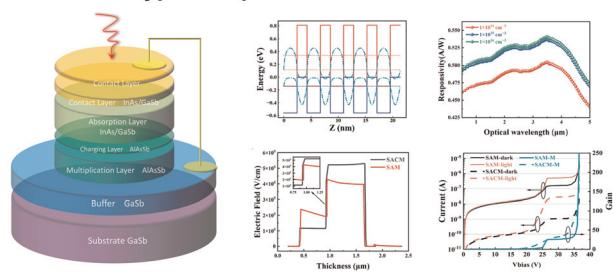


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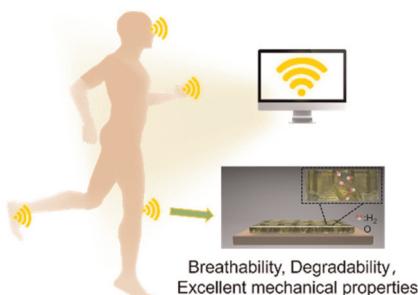
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Gad Licht, Kyle Hofstetter and Stuart Licht*

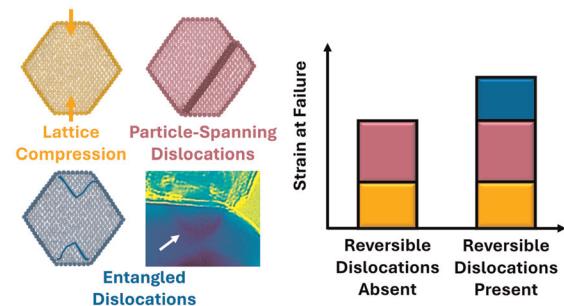


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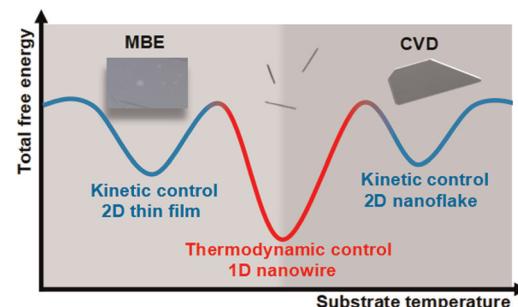
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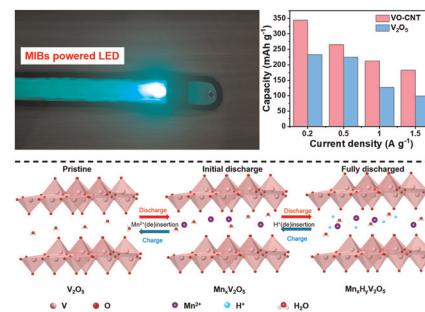
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Binder-free V₂O₅-carbon nanotube composite films for high-performance aqueous manganese-ion batteries

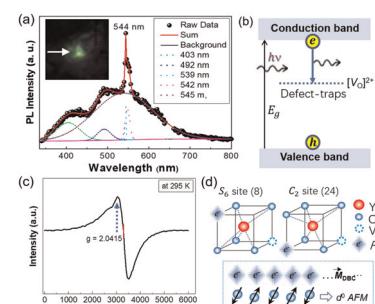
Jianan Zhao, Xinyu Wang,* Xinqi Xie and Hongmei Cao*



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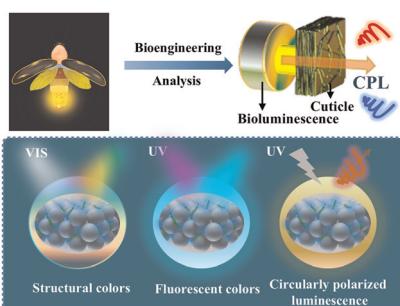
Unexpected green-light emission and correlating room-temperature diluted magnetism in pristine non-magnetic closed-shell 4d⁰ yttria nanowires

Jian-Min Li* and Yunbing Hu



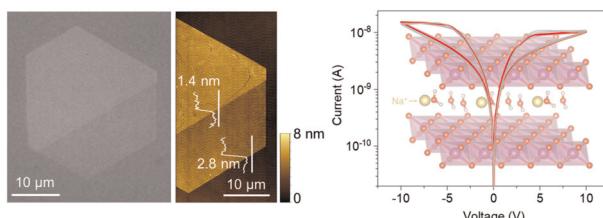
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**Optically active chiral photonic crystals exhibiting enhanced fluorescence and circularly polarized luminescence**

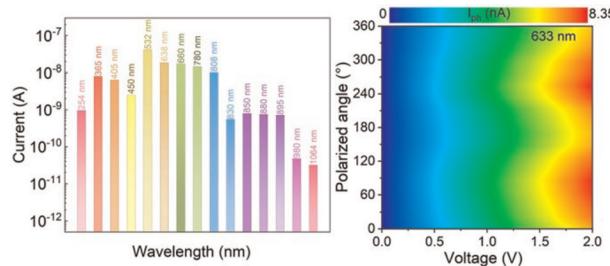
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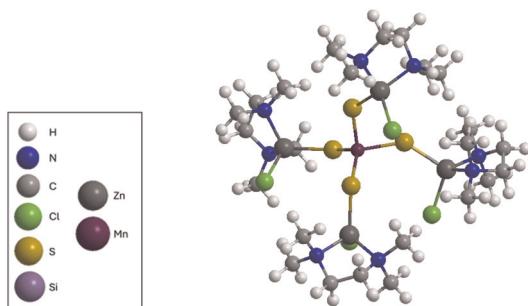
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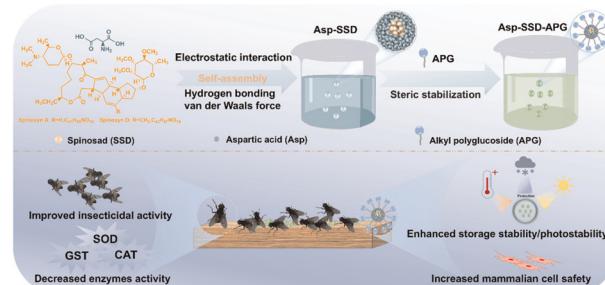


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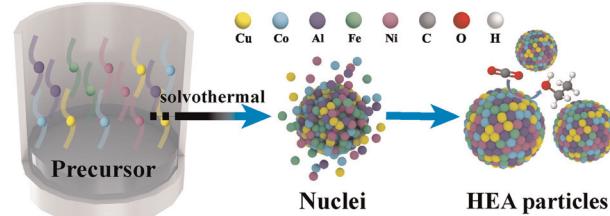
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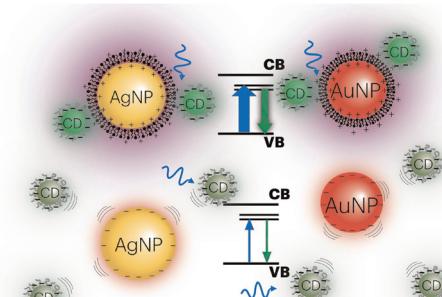
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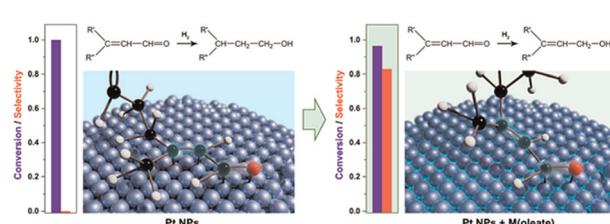
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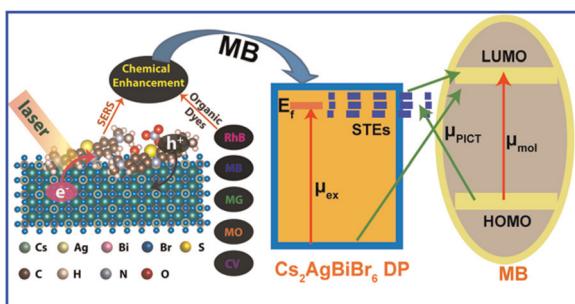
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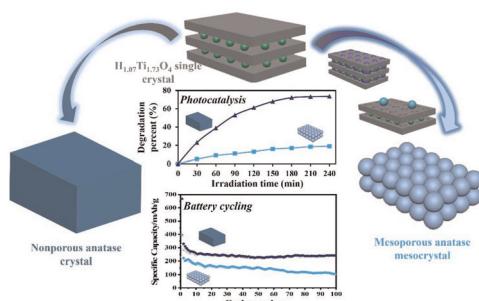
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Ravinder Chahal, Sirsendu Ghosal, Joydip Ghosh and P. K. Giri*

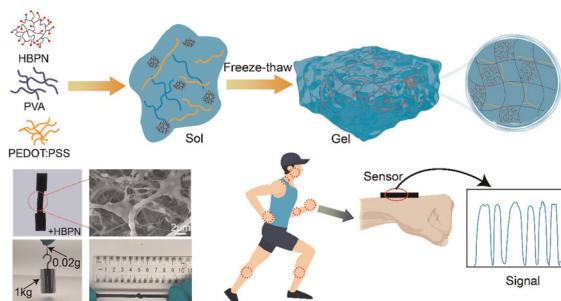
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Wenxiong Zhang,* Fangyi Yao, Mustafa Al Samarai and Qi Feng*

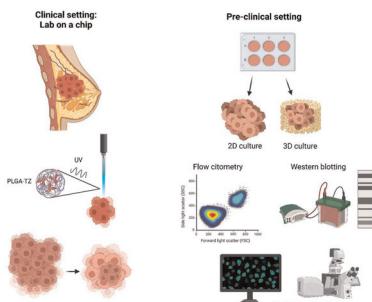
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Engineered anti-HER2 drug delivery nanosystems for the treatment of breast cancer

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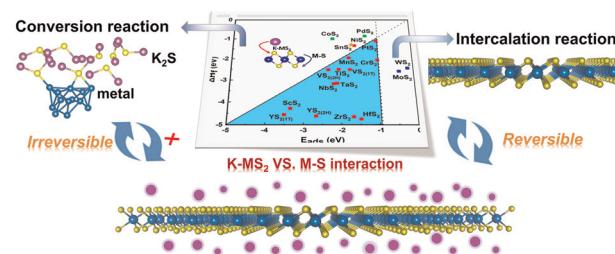


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Highly stable rare earth YS_2 and ScS_2 monolayers for potassium-ion batteries: first-principles calculations

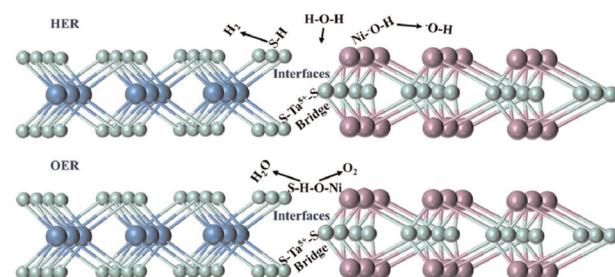
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Catalytic synergism in heterostructural Ta-doped Mo–Ni–S nanospheres: an efficient bifunctional catalyst for water splitting

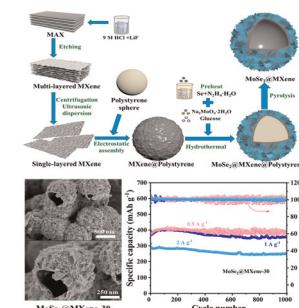
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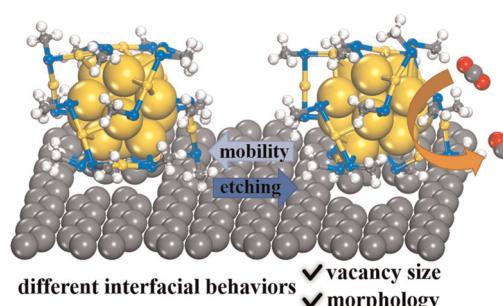
Hanbo Zou,* Shaohao Li, Wei Yang, Quanbing Liu and Shengzhou Chen*



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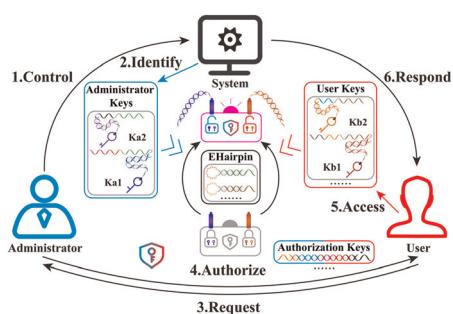
Vacancy-induced modulation of the interfacial properties of $\text{Au}_{25}(\text{SCH}_3)_{18}$ nanoclusters supported on defective graphene

Pan Zhu, Yuping Chen and Qing Tang*



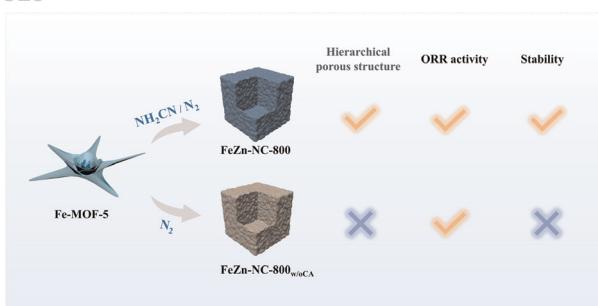
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**An EHairpin-driven double-stem-loop programmable allosteric strategy for molecular security access control**

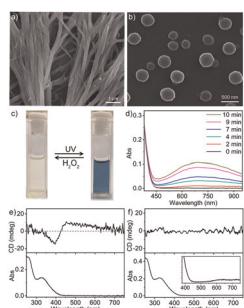
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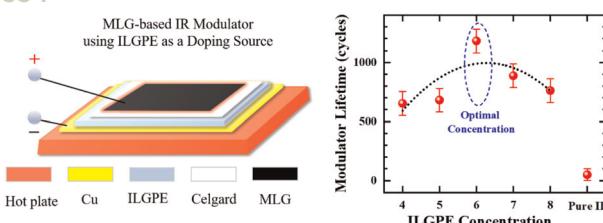
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**Tuning infrared emissivity of multilayer graphene using ionic liquid gel electrolytes**

Ying Cao, Kaiyu Yang, Haibo Ke, Lishi Fu, Xitong Yan, Jinghuan Xian, Mingyuan Lin, Weiwei Cai, Xue-ao Zhang, Rui Mu* and Yufeng Zhang*

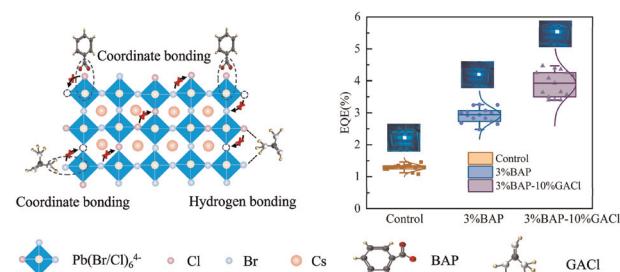


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9541

Efficient and stable blue perovskite light-emitting diodes enabled by the synergistic incorporation of dual additives

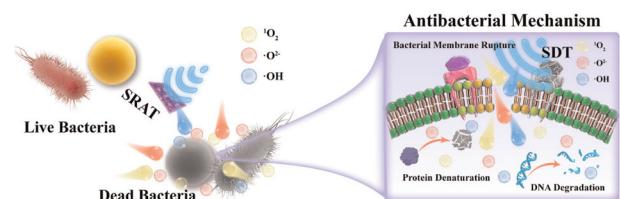
Dandan Li, Yan Bao, Run Wang, Jinjiang Wang, Yu Liu, Lei Cao, Yanhong Deng* and Hengyang Xiang*



9552

A nanocatalytic membrane with sono-responsive antibacterial therapy (SRAT) for rapid sterilization and enhanced chronic wound healing

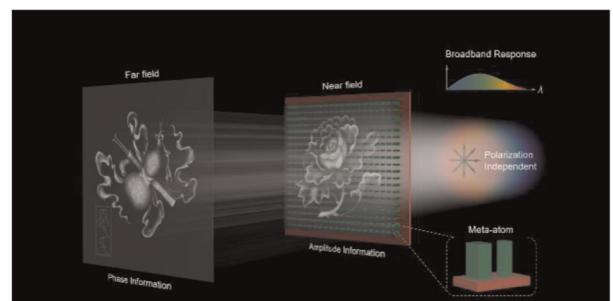
Shuai He, Lu Xie, Daiquan Zhang, Shihao Han, Hongxing Shi, Sheng Yu, Yi Deng,* Song Wang* and Chao Wu*



9562

Broadband and polarization-independent complex amplitude modulation using a single layer dielectric metasurface

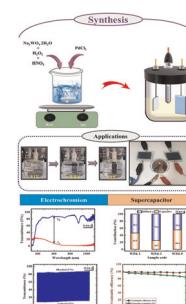
Na Zhang, Fei Wang, Qixuan Min, Xin Liu, Haiming Yuan, Jinying Guo* and Guohai Situ*



9569

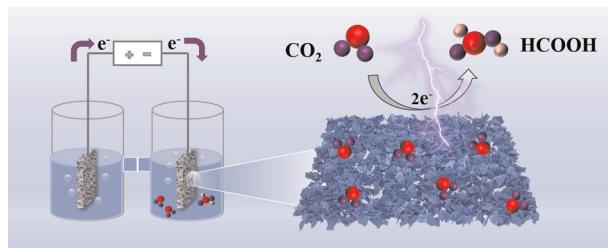
Catalytic synergy in palladium-enriched tungsten oxide nanogranelles: redefining electrochromic dynamics and energy storage capabilities

Pritam J. Morankar, Rutuja U. Amate, Aviraj M. Teli, Iftikhar Hussain, Sonali A. Beknalkar and Chan-Wook Jeon*



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**Bismuth oxycarbonates loaded on nitrogen-doped carbon: an efficient nanocomposite catalyst for electrochemical reduction of CO₂ to formate**

Qingqing Xu, Kaixuan Su, Jiayong Chen,
Yuanhong Zhong,* Yingxia Zhao, Ming Sun and Lin Yu

