

Materials Horizons

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See Chen Yu Li, Si Yu Zheng *et al.*, pp. 1452–1462. Image reproduced by permission of Si Yu Zheng and Chen Yu Li from *Mater. Horiz.*, 2025, 12, 1452.



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Zhiyi Lu,* Tao Chen* and Liping Wang*



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NIMTE's rising young scientists: celebrating 20 years of Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences

Zhiyi Lu,* Tao Chen* and Liping Wang*



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Elemental answers



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Dr Katharina Ehrmann, Institute for Applied
Synthetic Chemistry, Technische Universität
Wien, Austria

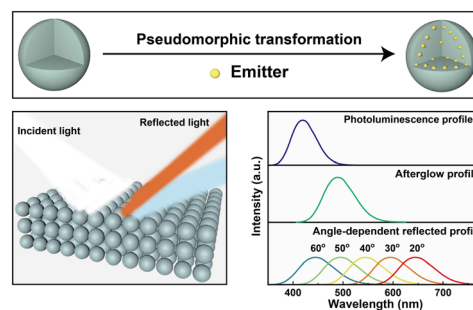


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**Rational design of uniform SiO₂-based
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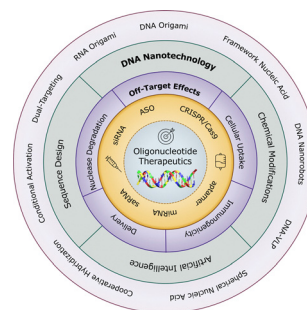


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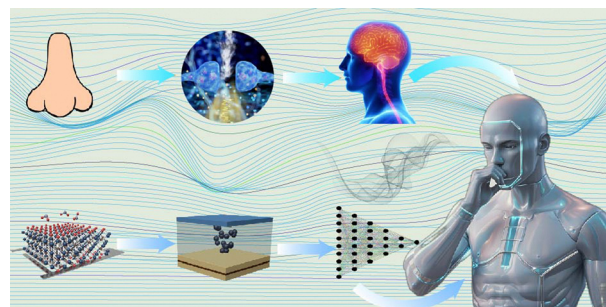
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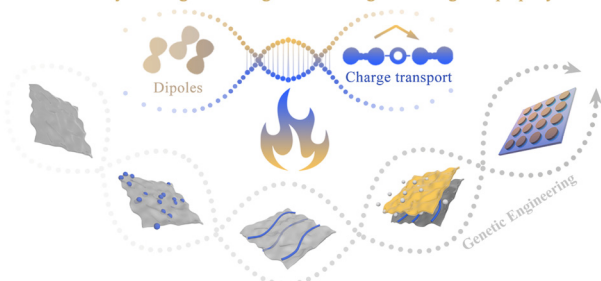
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Thermally tailoring dielectric genes for tuning electromagnetic property

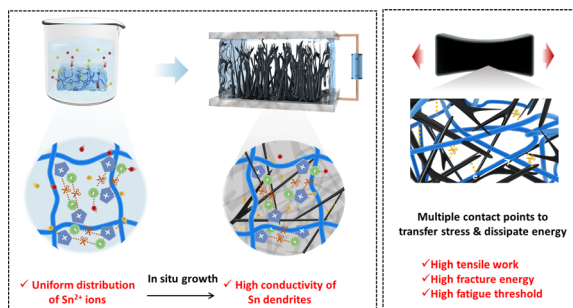


Thermally tailoring dielectric genes of graphene hybrids for tuning electromagnetic properties

Min Zhang, Qi Zheng, Wen-Qiang Cao* and Mao-Sheng Cao*

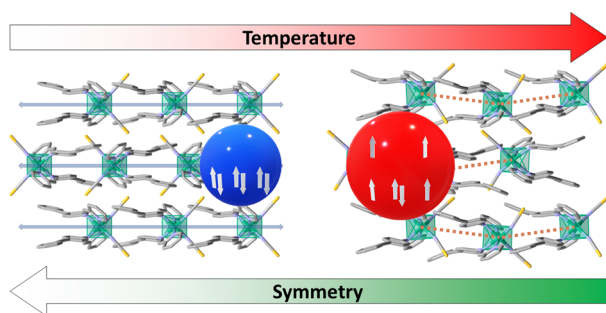
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Developing tough, fatigue-resistant and conductive hydrogels via *in situ* growth of metal dendrites

Mengjie Si, Yueman Tang, Chen Xu, Chen Yu Li,* Kaishun Xia, Wei Xu, Ji Lin, Zhen Jiang, Jintao Yang and Si Yu Zheng*

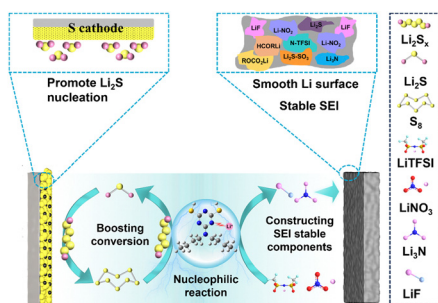
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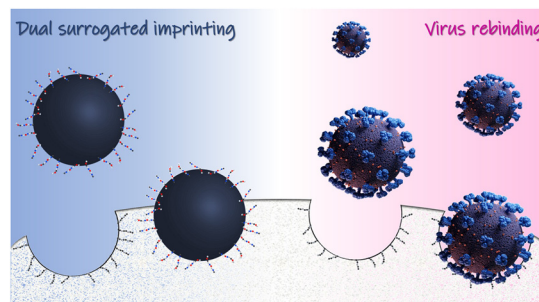


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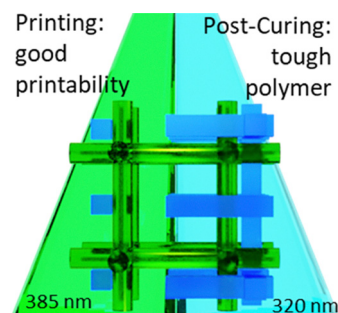
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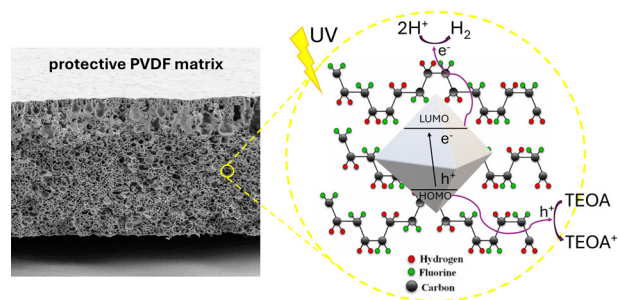
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Photocatalytic membranes based on Cu–NH₂–MIL-125(Ti) protected by poly(vinylidene fluoride) for high and stable hydrogen production

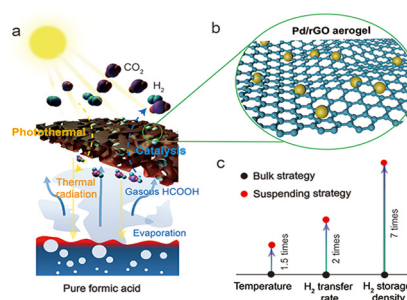
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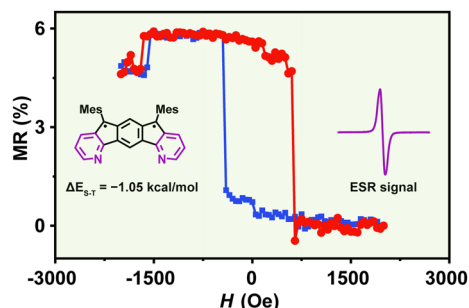
Photothermally-activated suspended aerogel triggers a biphasic interface reaction for high-efficiency and additive-free hydrogen generation

Qian Zhang, Bo Jiang, Yuming Gao, Lin Li* and
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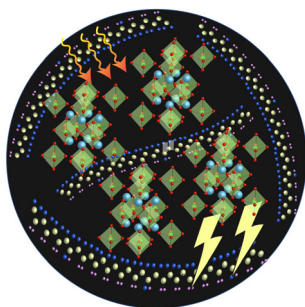
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Magnetoresistance effect of pyridine-capped s-indacene-based conjugated radicals

Xuyang Wei, Dong Li, Xitong Liu, Weifeng Zhang,*
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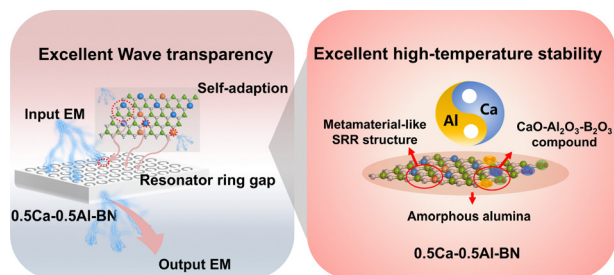
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Light-regulated pyro-phototronic effects in a perovskite Cs_2SnI_6 -reinforced ferroelectric polymer hybrid nanostructure

Zinnia Mallick, Sudip Naskar, Shanker Ram* and
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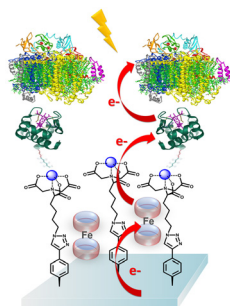
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Dual metal synergistic modulation of boron nitride for high-temperature wave-transparent metamaterials

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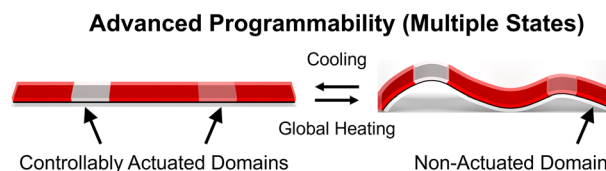
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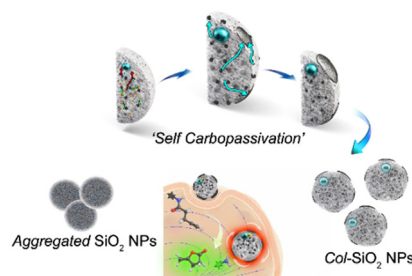
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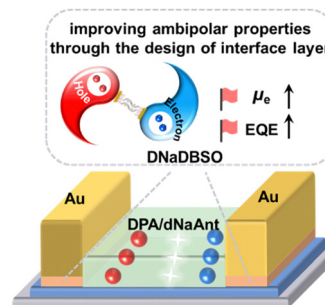
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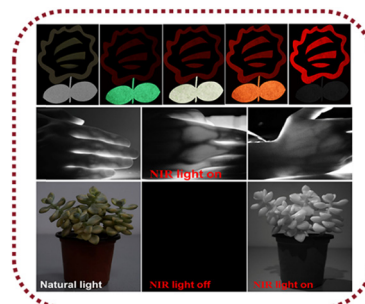
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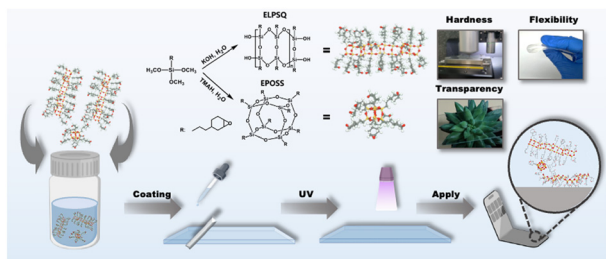
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Large-scale preparation of Sb³⁺-activated hybrid metal halides with efficient tunable emission from visible to near-infrared regions for advanced photonic applications

Ou Xu, Hui Peng,* Qilin Wei, Linghang Kong, Xiao Wang, Heng Zhang, Jialong Zhao and Bingsuo Zou



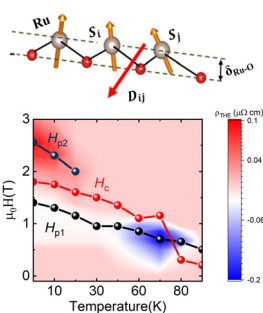
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Topological regulation in polysilsesquioxanes for achieving super-hard and flexible membranes: insights from molecular simulation

Peng Xu, Yuxin Sun, Song Yang, Guangxin Chen, Jiali Qu, Qifang Li* and Zheng Zhou*

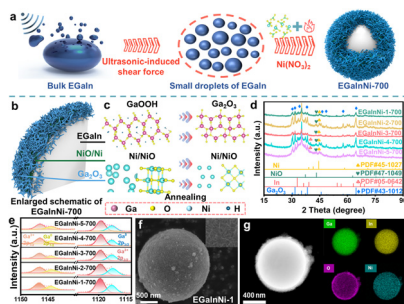
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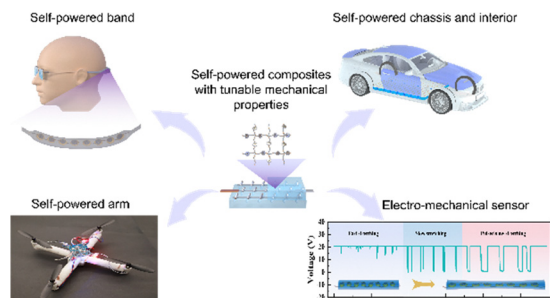
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Dual relaxation behaviors driven by a homogeneous and stable dual-interface charge layer based on an EGaIn absorber

Geng Chen, Tao Zhang, Limin Zhang,* Kai Tao,* Qiang Chen* and Hongjing Wu*

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Self-powered composites by bioinspired device-to-material integration

Guojiang Wen, Zhiwei Zhu, Wenrui Cai, Zhongfeng Ji, Hua Li, Chengye Ma, Ziyu Zhao, Shanshan Lv, Jiarui Yang, Xuewei Fu,* Wei Yang and Yu Wang*

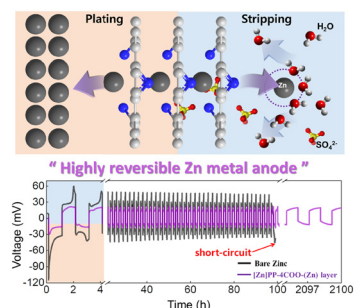


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Porphyrinic N₄ channels of zinc ions for the electrochemical reversibility of zinc plating/stripping

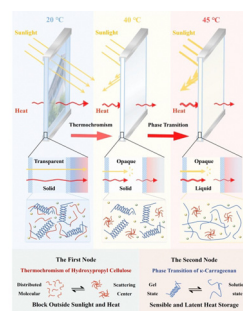
Hyun-Woo Kim, Eunyoung Cho, Myung-Jun Kwak, Jeongin Lee, Hosik Lee, Chihyun Hwang* and Hyun-Kon Song*



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Multi-gradient energy-saving smart windows with thermo-response and multimodal thermal energy storage

Yang Zhou,* Yiqi He, Sisi Zhao, Simeng Qi, Lulu Wang, Yingchun Niu,* Quan Xu, Chunming Xu and Juncheng Wang*



CORRECTION

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Correction: Photocatalytic membranes based on Cu–NH₂–MIL-125(Ti) protected by poly(vinylidene fluoride) for high and stable hydrogen production

Emilia Gontarek-Castro,* Anna Pancielejko, Mateusz Adam Baluk, Malwina Kroczevska-Gnatowska, Przemysław Gnatowski, Krzysztof Matus, Justyna Łuczak and Adriana Zaleska-Medynska

