

Materials Horizons

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Cover

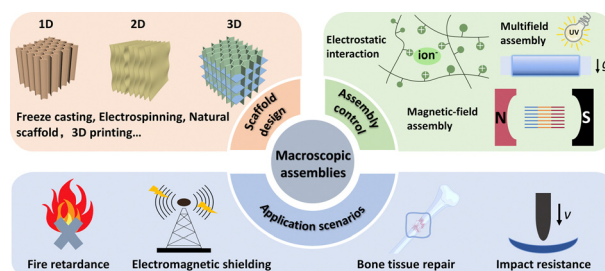
See Bing Li *et al.*, pp. 1658-1667. Image reproduced by permission of Bing Li from *Mater. Horiz.*, 2024, 11, 1658.

COMMENTARY

1608

A reflection on 'A shape-memory scaffold for macroscale assembly of functional nanoscale building blocks'

Xiang-Sen Meng, Li-Bo Mao and Shu-Hong Yu*

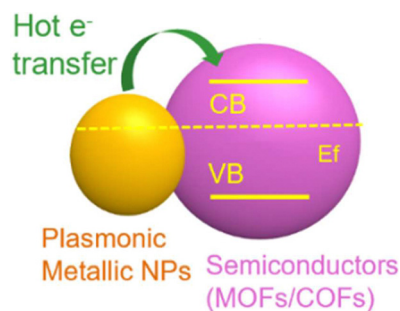


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Enhanced photocatalysis of metal/covalent organic frameworks by plasmonic nanoparticles and homo/hetero-junctions

Yannan Liu, Shengyun Huang,* Xing Huang and Dongling Ma*



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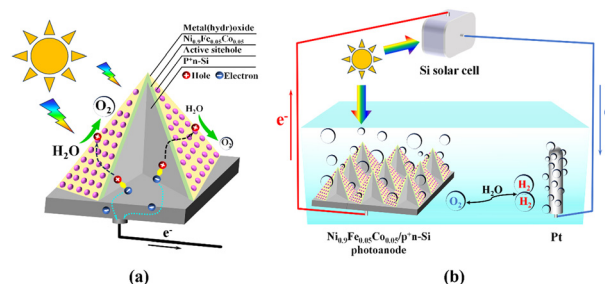


REVIEWS

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Advances and challenges in the modification of photoelectrode materials for photoelectrocatalytic water splitting

Longyue Yang, Fang Li and Quanjun Xiang*

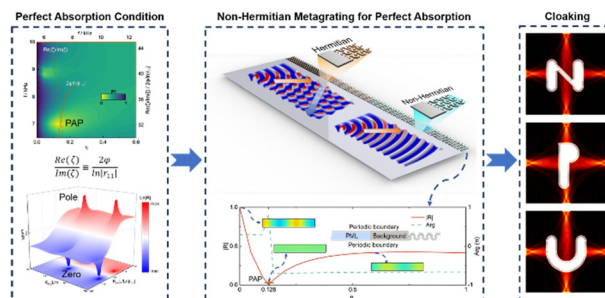


COMMUNICATIONS

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Non-Hermitian metagrating for perfect absorption of elastic waves

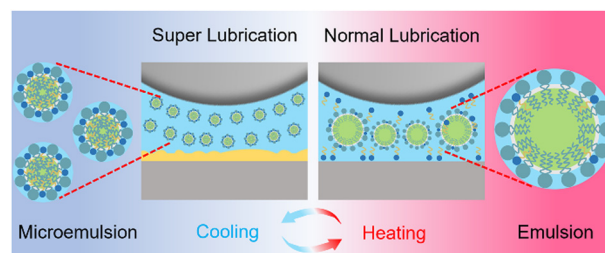
Jiali Cheng, Yabin Hu and Bing Li*



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A dual-responsive microemulsion with macroscale superlubricity and largely switchable friction

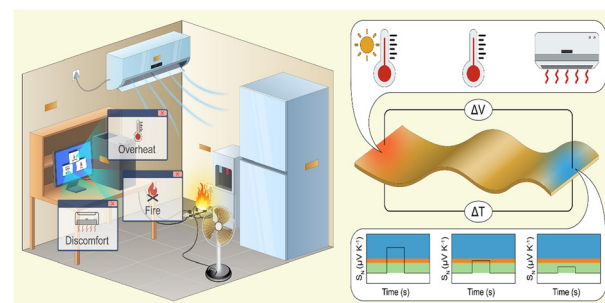
Siwei Chen, Hong Sun, Jian Liu, Jinyu Wang, Hongsheng Lu, Jingcheng Hao,* Lu Xu* and Weimin Liu



1679

Distinguishing thermoelectric and photoelectric modes enables intelligent real-time detection of indoor electrical safety hazards

Gang Li, Chengzhi Chen, Zijian Liu, Qi Sun, Lirong Liang, Chunyu Du* and Guangming Chen*



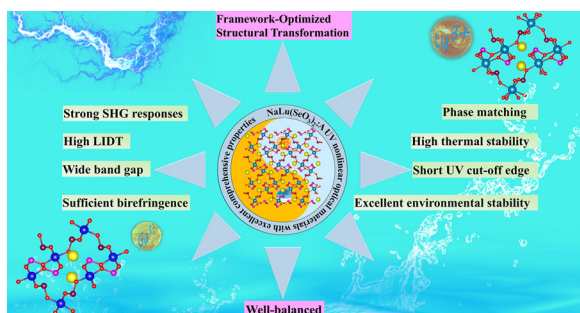
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Robust myco-composites: a biocomposite platform for versatile hybrid-living materials

Sabrina C. Shen, Nicolas A. Lee, William J. Lockett, Aliai D. Acuil, Hannah B. Gazdus, Branden N. Spitzer and Markus J. Buehler*

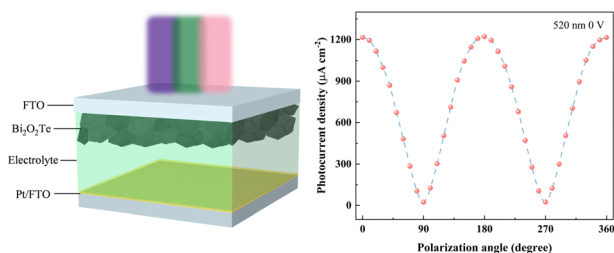
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A UV non-hydrogen pure selenite nonlinear optical material for achieving balanced properties through framework-optimized structural transformation

Peng-Fei Li, Chun-Li Hu, Jiang-Gao Mao and Fang Kong*

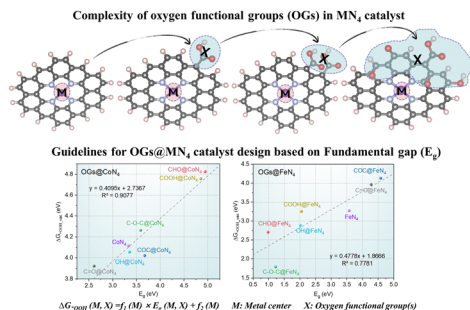
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A high-performance and self-powered polarization-sensitive photoelectrochemical-type $\text{Bi}_2\text{O}_2\text{Te}$ photodetector based on a quasi-solid-state gel electrolyte

Song Yang, Shujie Jiao,* Yiyin Nie, Yue Zhao, Shiyong Gao, Dongbo Wang and Jinzhong Wang

1719



Elucidating the impact of oxygen functional groups on the catalytic activity of $\text{M}-\text{N}_4-\text{C}$ catalysts for the oxygen reduction reaction: a density functional theory and machine learning approach

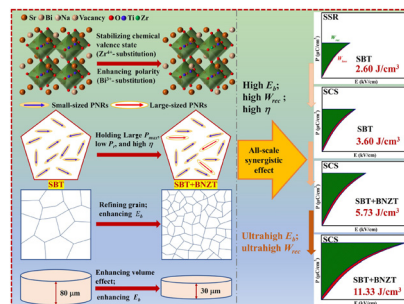
Liang Xie, Wei Zhou,* Yuming Huang, Zhibin Qu, Longhao Li, Chaowei Yang, Yani Ding, Junfeng Li, Xiaoxiao Meng, Fei Sun, Jihui Gao,* Guangbo Zhao and Yukun Qin



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Superior energy storage properties in SrTiO₃-based dielectric ceramics through all-scale hierarchical architecture

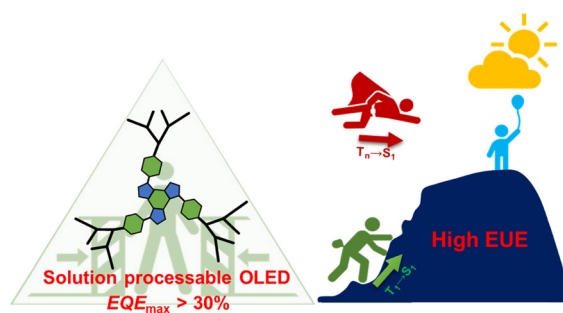
Chengyang Zuo, Jialing Xu, Shilin Yang, Zhiqin Cao, Hongtao Yu, Jingsong Liu and Xianhua Wei*



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Hybridized local and charge transfer dendrimers with near-unity exciton utilization for enabling high-efficiency solution-processed hyperfluorescent OLEDs

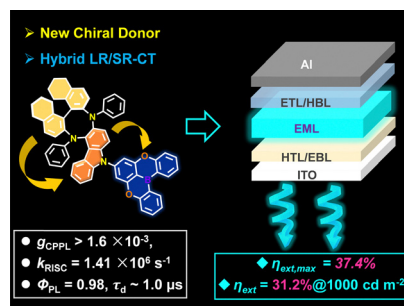
Yixiao Yin, Songkun Zeng, Chen Xiao, Peng Fan, Dong Jin Shin, Ki Ju Kim, Hyewon Nam, Qian Ma, Huili Ma,* Weiguo Zhu, Taekyung Kim,* Jun Yeob Lee* and Yafei Wang*



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Integration of fine-tuned chiral donor with hybrid long/short-range charge-transfer for high-performance circularly polarized electroluminescence

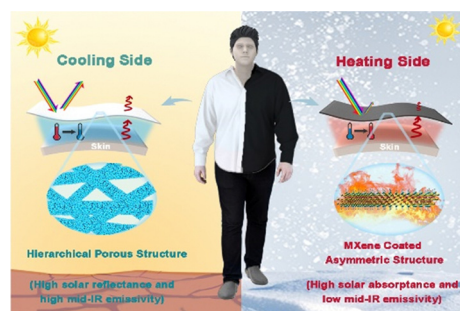
Xiaojun Yin,* Haoxin Huang, Nengquan Li, Wendi Li, Xuechao Mo, Manli Huang, Guohao Chen, Jingsheng Miao and Chuluo Yang*



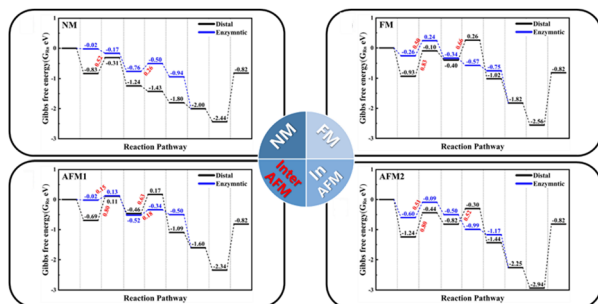
1760

Hierarchical porous dual-mode thermal management fabrics achieved by regulating solar and body radiations

Chuntao Lan, Jia Meng, Chongxiang Pan, Luyao Jia and Xiong Pu*



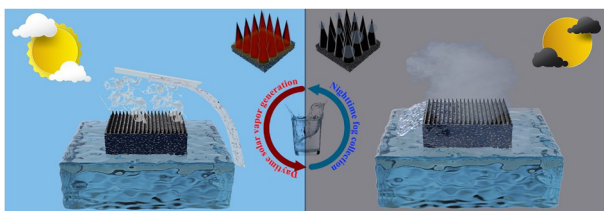
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Novel magneto-electrocatalyst Cr_2CO_2 -MXene for boosting nitrogen reduction to ammonia

Neng Li,* Zhongyong Zhang, Zheng Wang, Bin Liu, Deyong Zhou, Xing Zhou, Peng Zhang and Xiujian Zhao

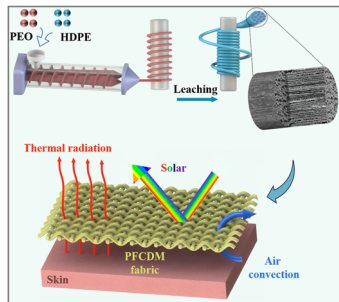
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Magnetically driven Janus conical vertical array for all-weather freshwater collection

Xiangyi Zhang, Mengyao Zhu, Junhao Chen, Zongwei Wang, Sanchuan Li, Huiyu Yang,* Hongman Xu, Guang He, Ziwei Deng,* Shaojin Gu, Xin Liu and Bin Shang*

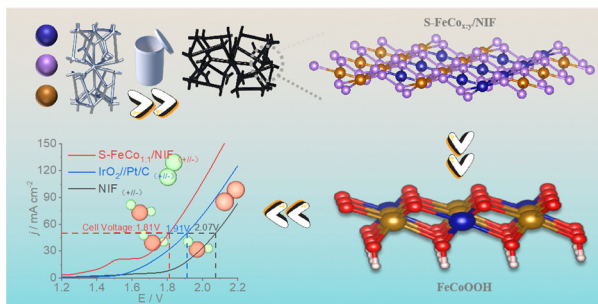
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Polyethylene fibers containing directional microchannels for passive radiative cooling

Mengxia Sun, Fei Peng, Shanshan Xu, Xianhu Liu, Kun Dai, Guoqiang Zheng,* Chuntai Liu and Changyu Shen

1797



In situ self-reconstructed hierarchical bimetallic oxyhydroxide nanosheets of metallic sulfides for high-efficiency electrochemical water splitting

Yaning Fan, Junjun Zhang,* Jie Han,* Mengyuan Zhang, Weiwei Bao, Hui Su, Nailiang Wang, Pengfei Zhang* and Zhenghong Luo

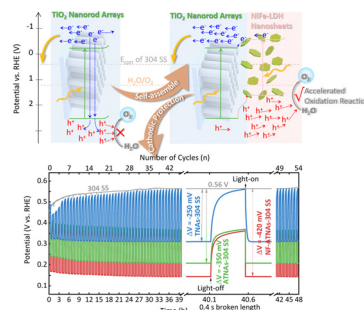


COMMUNICATIONS

1808

Heterostructured grafting of NiFe-layered double hydroxide@TiO₂ for boosting photoelectrochemical cathodic protection

Zhi-Jun Wang, Hui Xie, Seong Chan Jun, Jiang Li, Li Cheng Wei, Yu Chen Fang, Shude Liu,* Ming Ma* and Zheng Xing*



CORRECTION

1817

Correction: Solution-processed white OLEDs with power efficiency over 90 lm W⁻¹ by triplet exciton management with a high triplet energy level interfacial exciplex host and a high reverse intersystem crossing rate blue TADF emitter

Liang Chen, Yufei Chang, Song Shi, Shumeng Wang* and Lixiang Wang*

