

Energy & Environmental Science

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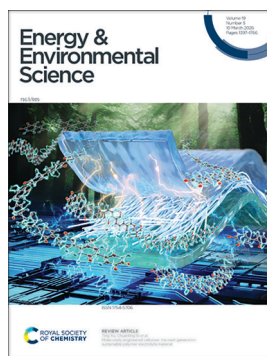
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See Mingxian Liu *et al.*, pp. 1508–1516. Image reproduced by permission of Mingxian Liu from *Energy Environ. Sci.*, 2026, 19, 1508.



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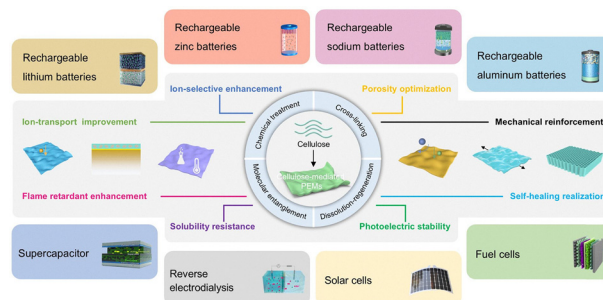
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Molecularly engineered cellulose: the next-generation sustainable polymer electrolyte material

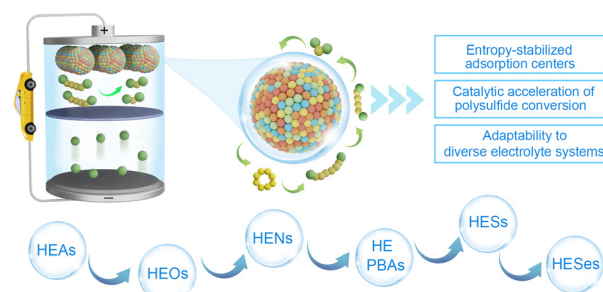
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Breaking the boundaries of Li–S batteries with high-entropy engineered multifunctional materials

Suo Li, Libo Li,* Hang Yang, Zhixuan Wang, Xiangrui Deng, Wenyi Lu and Wenhao Xu



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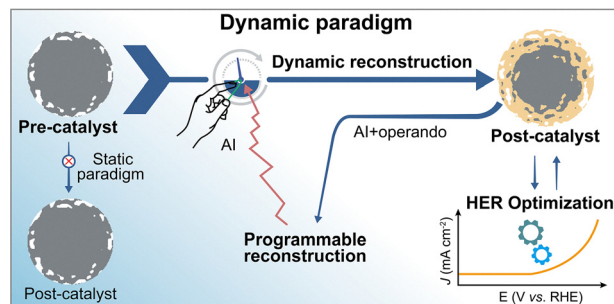
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Dynamic reconstruction defines true active states in the hydrogen evolution reaction

Xingyu Ding and Xianbiao Fu*

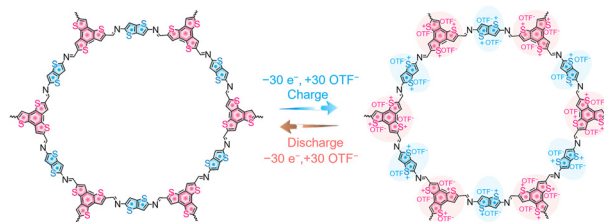


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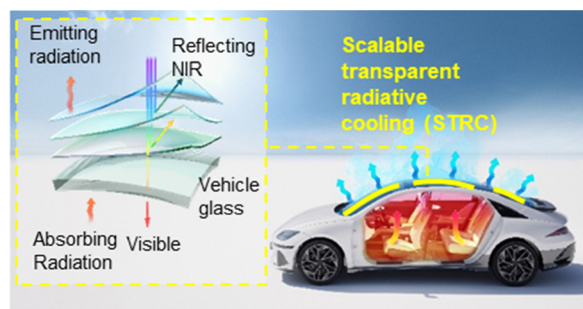
Wenyan Du, Qi Huang, Yaokang Lv, Ziyang Song, Lihua Gan and Mingxian Liu*



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Towards decarbonization in transportation: scalable transparent radiative cooling for enhanced vehicle energy efficiency

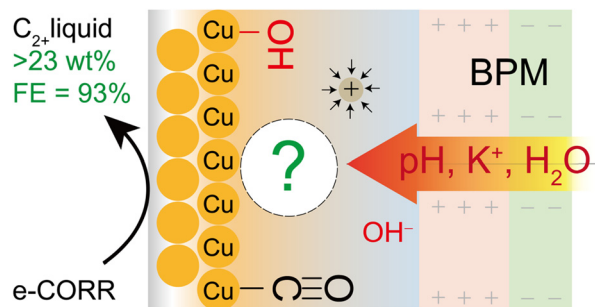
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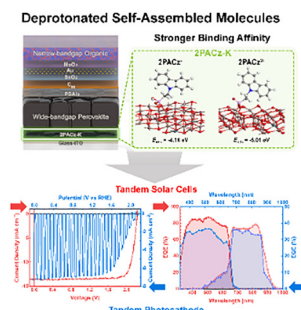
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High-asymmetry bipolar membrane electrode assemblies generate a superconcentration of cations and hydroxide at a catalyst surface

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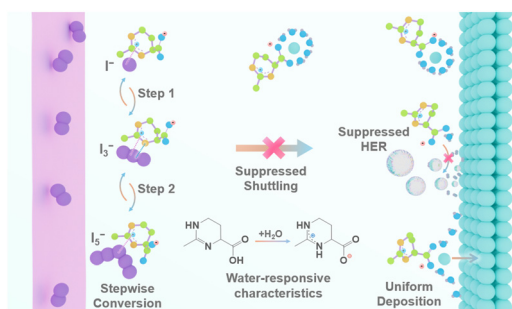
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Deprotonated self-assembled molecules as robust hole-selective layers for perovskite/organic tandem solar cells and photocathodes

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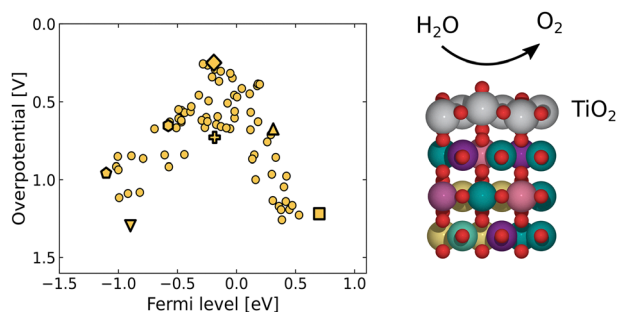
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A water-responsive molecule realizes stable Ah-scale Zn–I₂ pouch cells with high Zn utilization

Yiyang Hu, Shao-Jian Zhang, Han Wu, Qianru Chen, Pengfang Zhang, Junnan Hao* and Shi-Zhang Qiao*

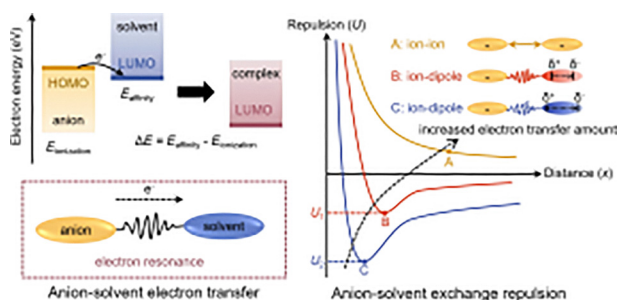
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TiO₂-coated rutile oxide catalysts for acidic oxygen evolution: a design principle

Georgios K. Stavroglou, Adrian M. Frandsen, Henrik H. Kristoffersen, Katrine L. Svane and Jan Rossmeisl*

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A stable 15-Ah anode-free Li pouch cell enabled by the electron resonance effect

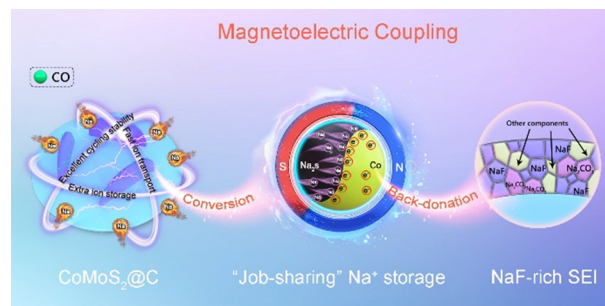
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Magnetoelectric coupling drives ultrafast-charging MoS₂ anodes for sodium-ion batteries

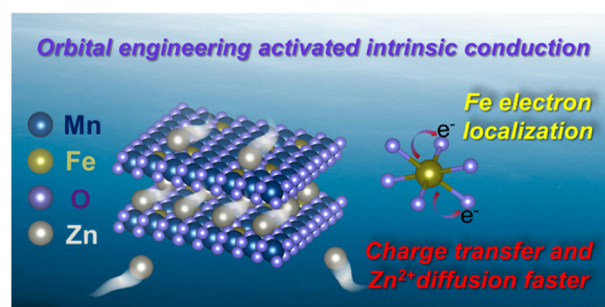
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Orbital engineering-activated intrinsic conduction enables ultra-high-rate performance zinc storage in manganese dioxide

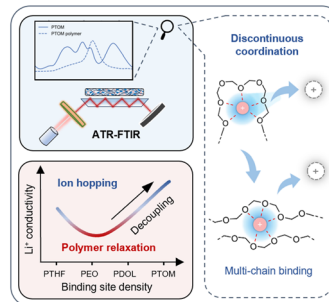
Huihui Hu, Yanhong Feng,* Zhiwei Wang, Longchao Zhuo, Cejun Hu,* Imran Shakir, Dingsheng Wang and Xijun Liu*



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Discontinuous coordination boosting ion transport in solid polymer electrolytes

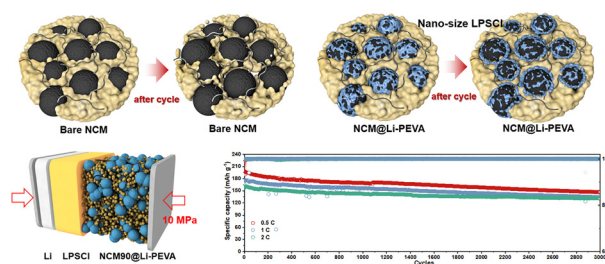
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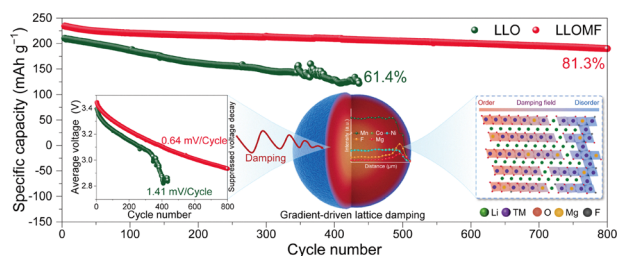
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Self-adaptive interfacial glue for low-pressure sulfide-based all-solid-state lithium metal batteries

Dengxu Wu, Ziqi Zhang, Lutong Wang, Lei Zhu, Hong Li, Liqian Chen and Fan Wu*



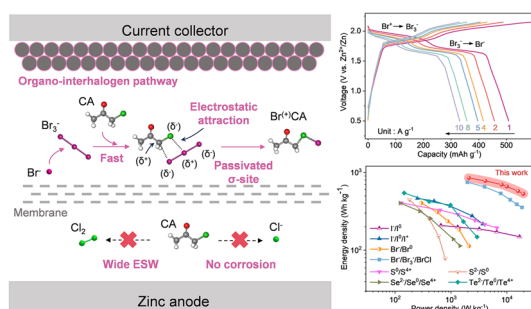
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Lattice chemistry damping stabilizes voltage and oxygen redox reversibility in Li-rich layered oxides

Lingcai Zeng, Yaqian Wang, Tong Li, Bao Qiu,* Jiajie Pan, Haoyan Liang, Junhao Li,* Xiaolei Sun, Jianrong Zeng, Kaixiang Shi, Zhaoping Liu* and Quanbing Liu*

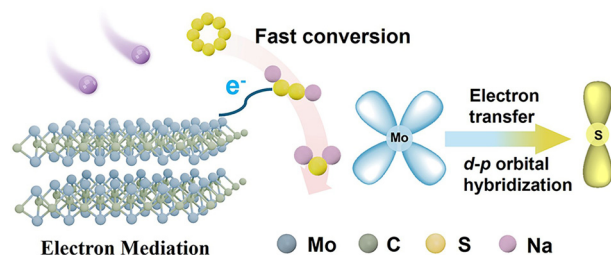
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Organo-interhalogen chemistry enables high-voltage bromine redox for stable zinc batteries

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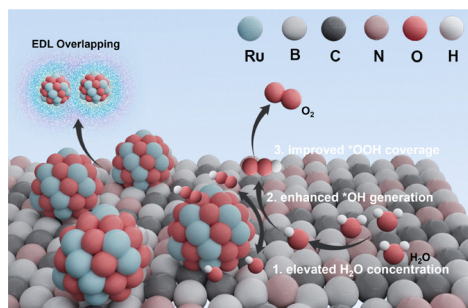
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Electric double layer overlapping effect in high-density sub-nanoclusters for enhanced acidic oxygen evolution reaction

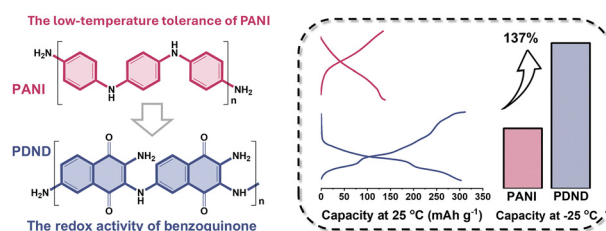
Jiahui Yang, Yixin Hao, Liming Deng, Sung-Fu Hung, Luqi Wang, Gengyu Xing, Feng Hu, Linlin Li,* Tao Wang,* Jianwei Ren, Yuping Wu and Shengjie Peng*



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Continuous-flow organic electrosynthesis of a conjugated bipolar polymer cathode for high-performance low-temperature aqueous aluminum-ion batteries

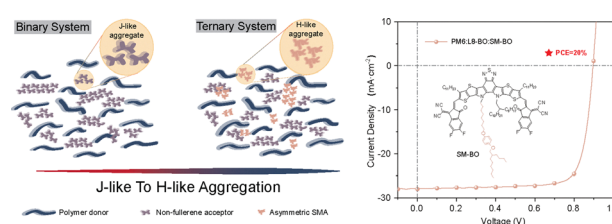
Longhai Zhang, Cheng Ji, Quanwei Ma, Hongbao Li, Rui Wang, Lin Zhang, Shilin Zhang, Qingyu Yan, Dongliang Chao and Chaofeng Zhang*



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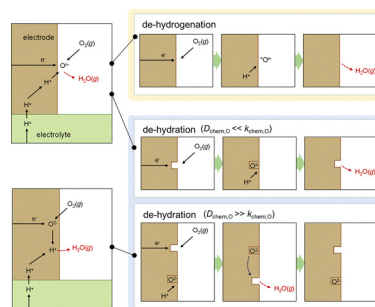
Han Song, Yuchen Yue,* Xiaoman Gui, Shisong Sun, Zhibin Yang,* Bing Zheng, Han Shen, Jingxia Wang, Jianqi Zhang and Lijun Huo*



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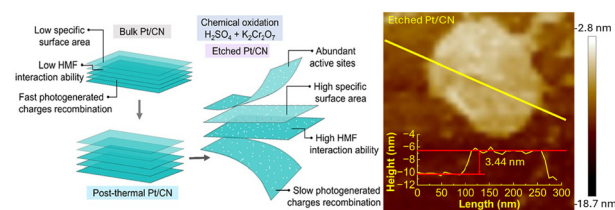
Seulchan Kim, Dogeun Yoon, Jinwoong Chae, Hyeonwoo Kim, Jongsup Hong, Ji-Won Son, Jong-Ho Lee, Sungwoo Kang and Ho-Il Ji*



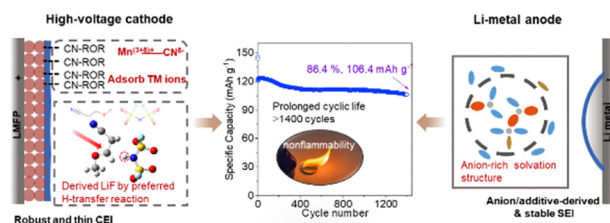
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Efficient photoreforming of biomass derived 5-(hydroxymethyl)furfural and simultaneous green hydrogen production by defective graphitic carbon nitride photocatalysts

Thi Kim Anh Nguyen, Thành Trần-Phú,* Xuan Minh Chau Ta, Biswaranjan Mohanty, Jodie A. Yuwono, Silvia Nappini, Ilargi Napal Azcona, Qi Wang, Anita Ho-Baillie, Christopher G. Bailey, Elena Magnano and Antonio Tricoli*



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Molecular engineering of an ether–nitrile constructs robust dual-interphases for ultra-stable 4.5 V lithium metal batteries

Yongchuan Liu, Hengyang Zhu, Chenyu Wang, Guihuang Fang,* Xiangxin Zhang, Baisheng Sa, Yuanqiang Chen, Ying Liu,* Lunhui Guan* and Yining Zhang*

