Journal of Materials Chemistry A

Materials for energy and sustainability

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IN THIS ISSUE

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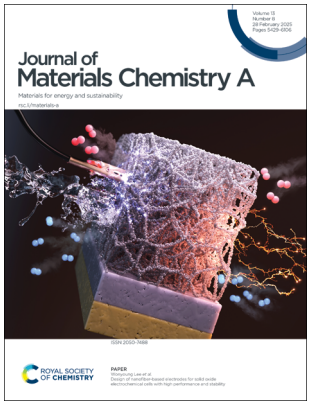

Cover
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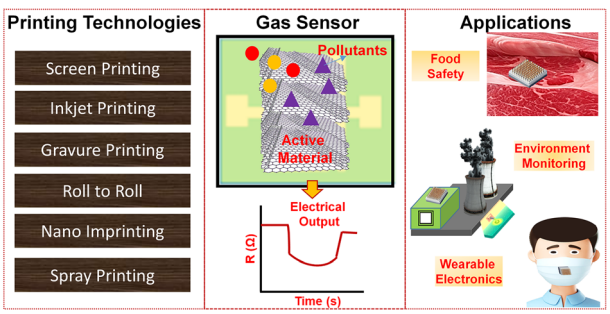
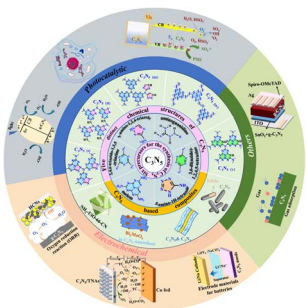
Inside cover
See Jaephil Cho, Hyungyeon Cha *et al.*, pp. 5599–5605. Image reproduced by permission of Hyungyeon Cha from *J. Mater. Chem. A*, 2025, **13**, 5599.

REVIEWS





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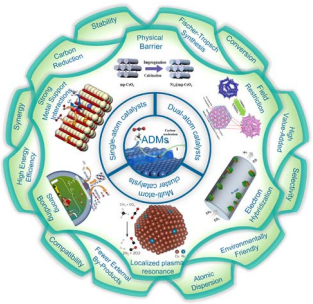

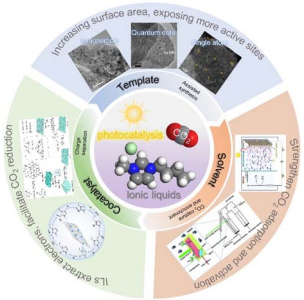

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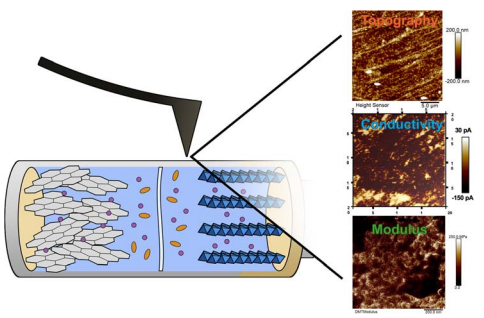
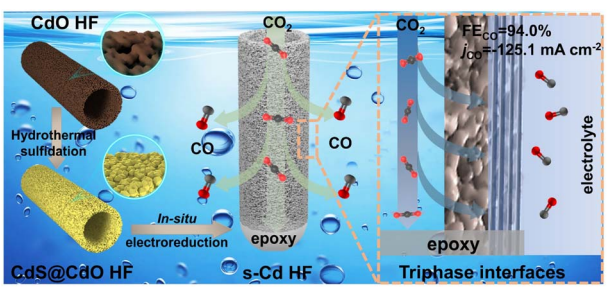


COMMUNICATION



PAPERS

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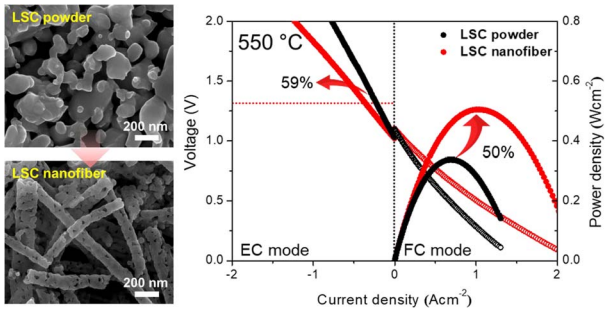
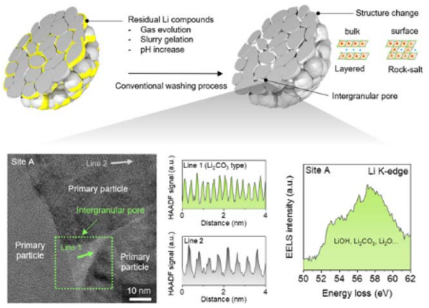


Design of nanofiber-based electrodes for solid oxide electrochemical cells with high performance and stability

Seungwoo Han, Hyun Sik Yoo and Wonyoung Lee*

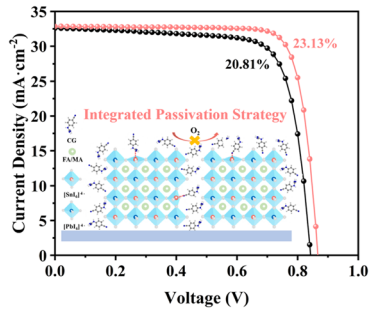
5599



Identifying the nanostructure of residual Li in high-Ni cathodes for lithium-ion batteries

Wooyoung Jin, Yujin Kim, Haeseong Jang, Yehyeon Gu, Namhyung Kim, Hyomyung Lee, Junhyeok Kim, Sinho Choi, Kyu-Nam Jung, Ki-Hun Nam, Jaephil Cho* and Hyungyeon Cha*

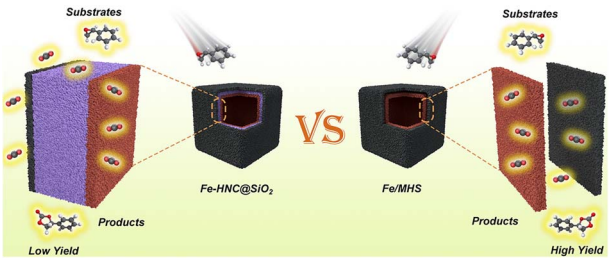
5606



Integrated passivation strategy using multifunctional additives for tin–lead mixed perovskite solar cells

Dong He, Gongcheng Zhou, Zeyu Niu, Guoqiang Guo, Tianle Cheng, Gangsen Su, Haojie Chen, Siyuan Tang, Jiacheng He, Wenhua Zhang and Zhubing He*

5615



Atomically dispersed iron sites on a multi-shelled hollow structure for highly efficient CO_2 fixation

Changsong Shi, Ruiming Xu, Ting Suo, Xiang Shi and Ruirui Yun*

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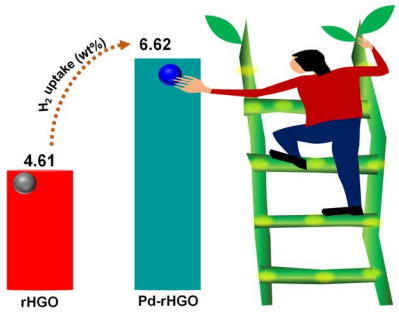

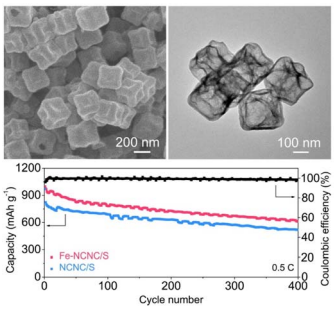

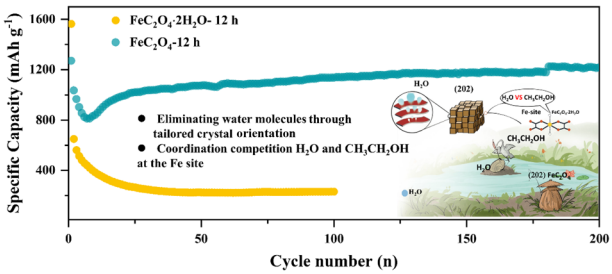

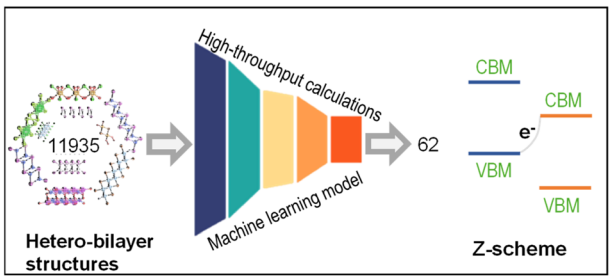

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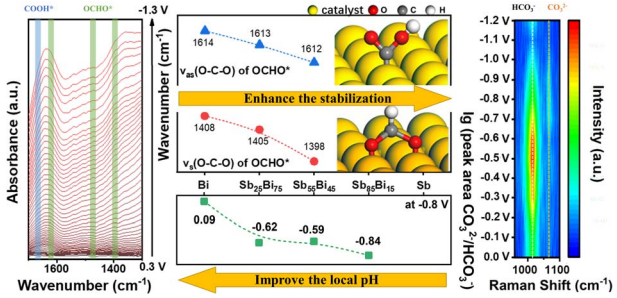
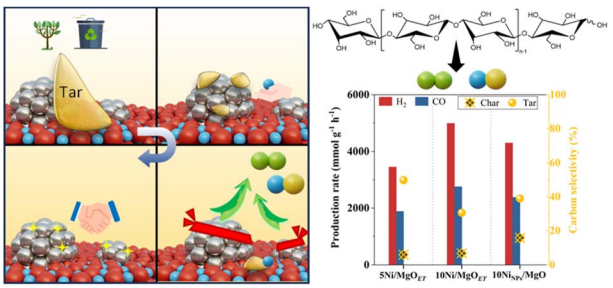


Mechanistic understanding of the antimony–bismuth alloy promoted electrocatalytic CO_2 reduction to formate

Jiameng Sun, Wanfeng Yang, Bin Yu, Yalong Liu, Yong Zhao,* Guanhua Cheng and Zhonghua Zhang*

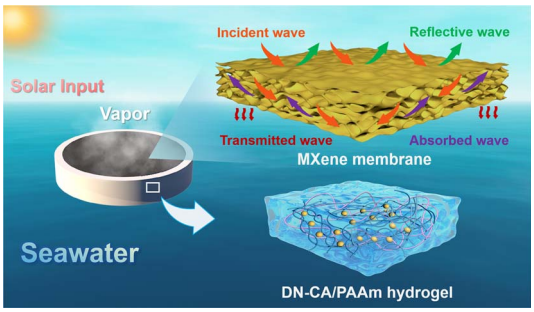
5670



Unraveling the light-promoted synergy between highly dispersed Ni and Ni nanoparticles for efficient photothermocatalytic cellulose steam reforming to syngas

Mengqi Zhong, Yuanzhi Li,* Jichun Wu, Cong Ji, Qing Du, Qianqian Hu and Lei Ji

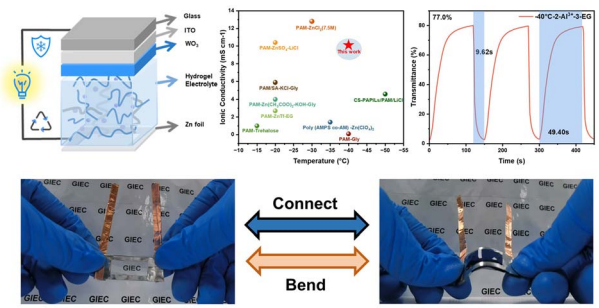
5684



A self-healing, deformation-resistant MXene double-network hydrogel for stable solar-driven interfacial evaporation

Ruiqi Zhao, Xushuai Chen, Xi Chen,* Panpan Zhang, Chunjia Luo, Pengfei Zhang,* Min Chao and Luke Yan*

5694



Anti-freezing polyacrylamide hydrogel electrolyte for rapid response self-powered electrochromic devices

Rui Ge, Xiudi Xiao,* Lirong Chen, Chengyu Jiang, Youliang Nie, Yanqing Zhu, Liuwen Zhong and Gang Xu*

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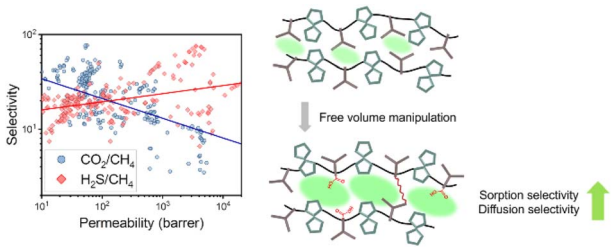

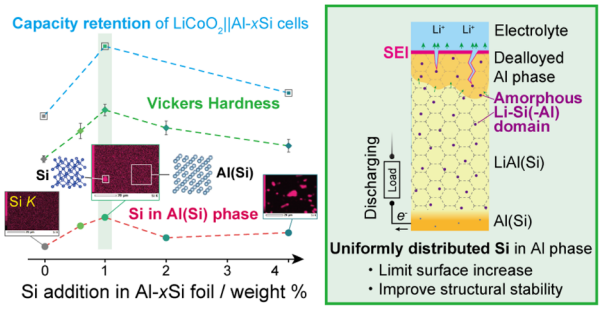

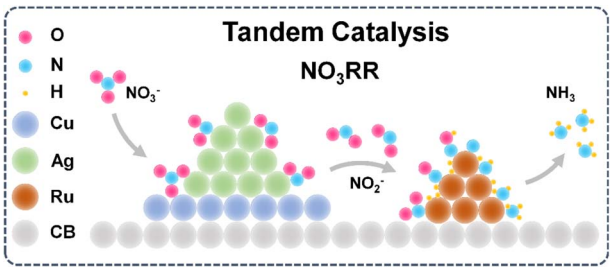

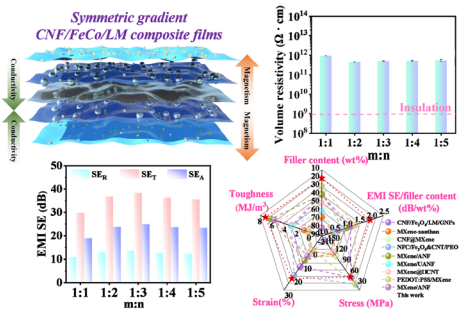

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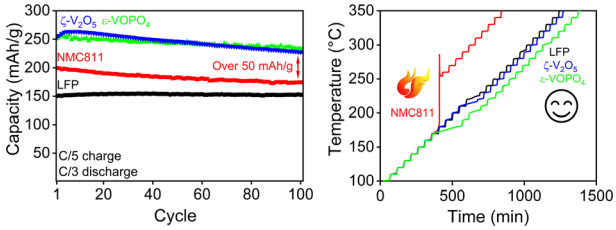

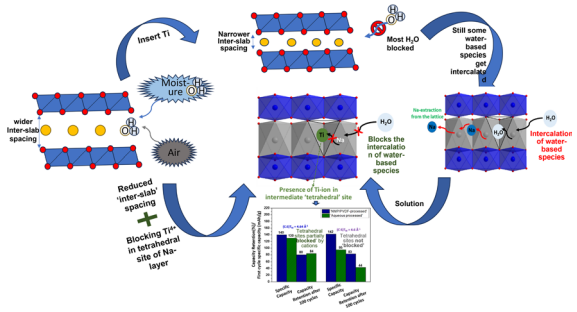

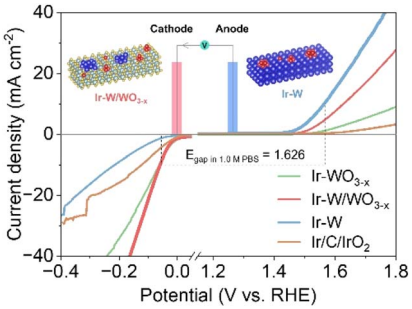

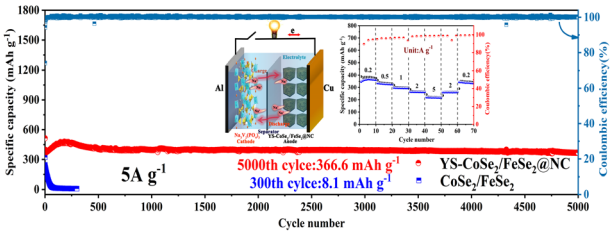

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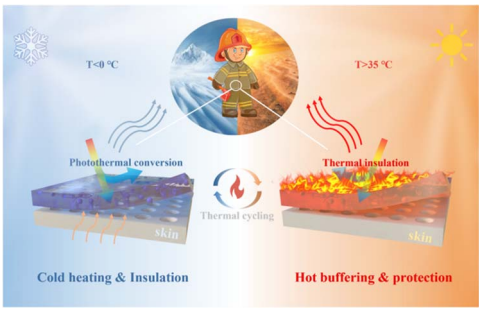

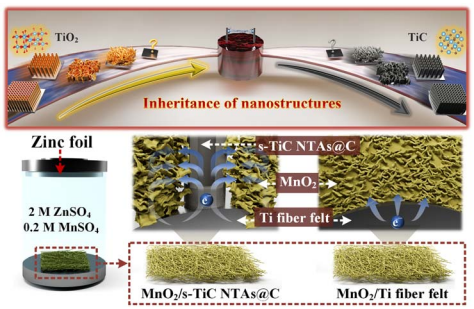

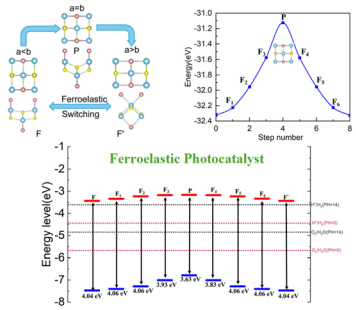

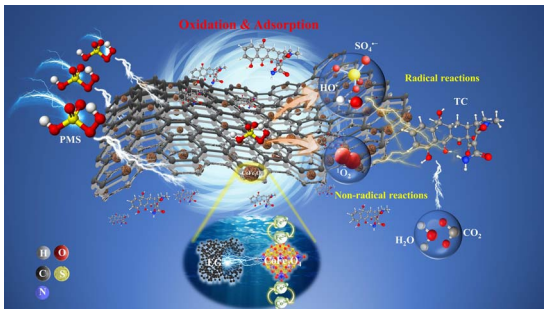

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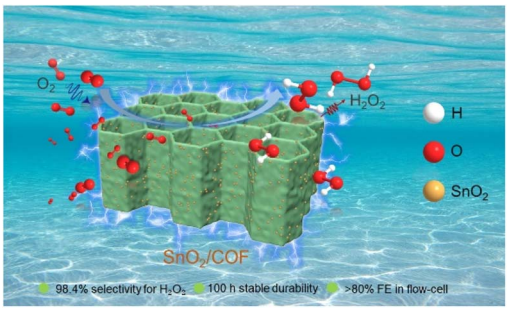

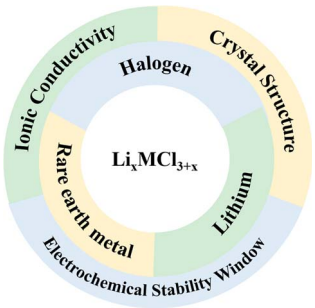

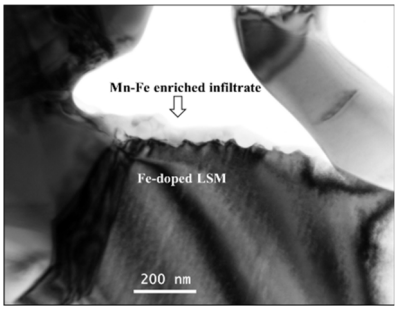

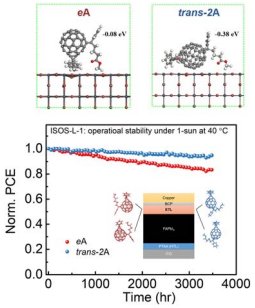

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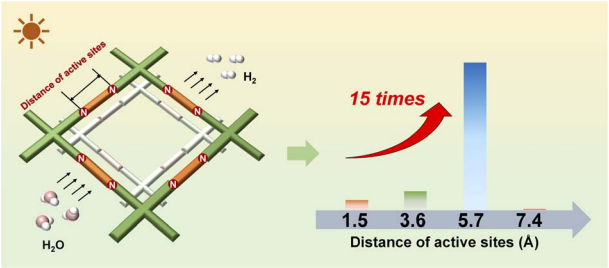

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