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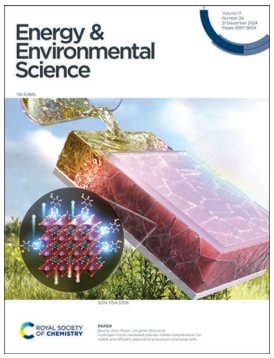

Cover
See Byung Joon Moon, Jongmin Choi *et al.*, pp. 9443–9454.
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Inside cover
See M. Mercedes Maroto-Valer, Steve Griffiths *et al.*, pp. 9425–9434.
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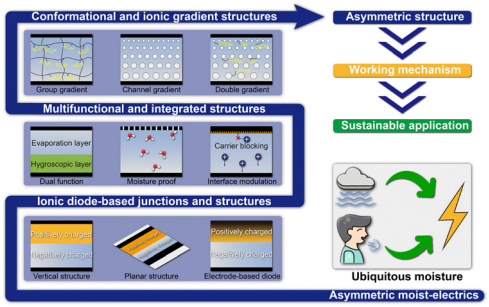
REVIEW

9406

Advances in asymmetric moist-electric generators with innovative heterogeneous structures

Kun Ni, Qinyi Ren, Shanfei Liu, Baoquan Sun, Ying-Chih Lai, Xiaohong Zhang and Ruiyuan Liu*



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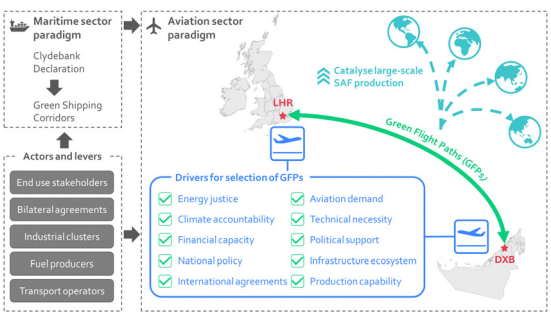
Green flight paths: a catalyst for net-zero aviation by 2050

Steve Griffiths, Joao M. Uratani, Alejandro Ríos-Galván, John M. Andresen and M. Mercedes Maroto-Valer*



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COMMUNICATION

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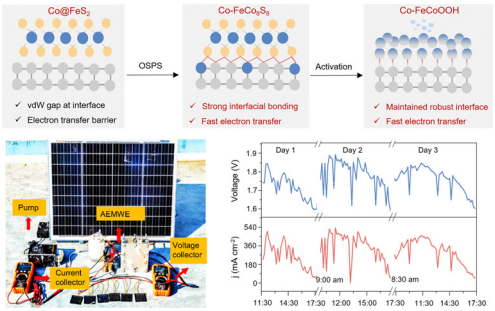
A monolithic Co–$FeCo_8S_8$ electrode for a stable anion exchange membrane water electrolyzer driven by a fluctuating power supply

Jahangir Khan, Heming Liu, Tianhao Zhang, Xin Kang, Zhiyuan Zhang, Yuxiao Dong, Shanlin Li, Jiarong Liu, Qiangmin Yu* and Bilu Liu



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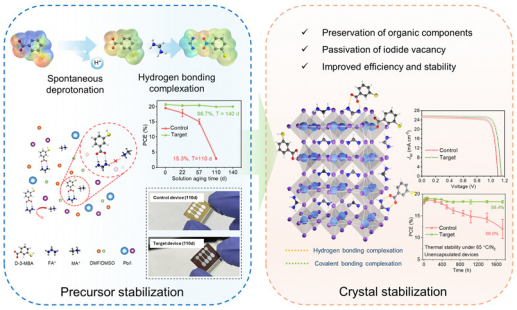
Hydrogen bond-mediated pseudo-halide complexation for stable and efficient perovskite precursors and solar cells

Taeyeong Yong, Seongmin Choi, Soo-Kwan Kim, Sanghun Han, Gayoung Seo, Hae Jeong Kim, Jin Young Park, Han Na Yu, Hyung Ryul You, Eon Ji Lee, Gyudong Lee, Wonjong Lee, Sunkyu Kim, Siwon Yun, Yujin Lee, Jaebaek Lee, Dae-Hwan Kim, Sung Jun Lim, Dae-Hyun Nam, Younghoon Kim, Jongchul Lim, Byung Joon Moon* and Jongmin Choi*



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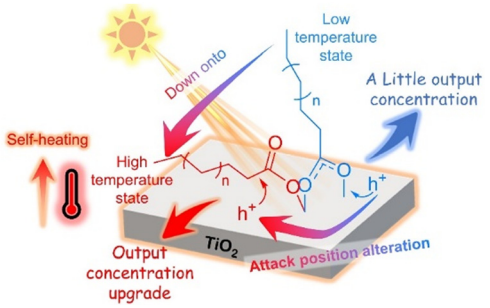
Exponentially enhanced photocatalytic alkane production from biomass-derived fatty acid decarboxylation *via* self-heating-induced conformational inversion

Qiang Huang, Chunlin Hao, Guibao Guo,* Hongwei Ji, Shengli An,* Wanhong Ma* and Jincai Zhao



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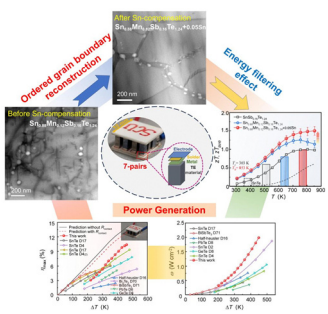
Ordered grain boundary reconstruction induces high-efficiency thermoelectric power generation in SnTe

Qian Deng, Fujie Zhang, Xiaoyu Yang, Ruiheng Li, Chengliang Xia, Pengfei Nan,* Yue Chen, Binghui Ge, Ran Ang* and Jiaqing He*



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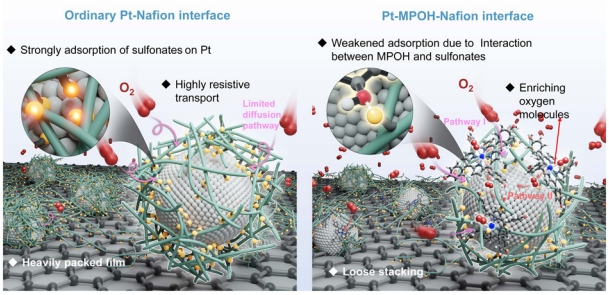

A dual promotion of oxygen reduction on Pt in membrane electrode assemblies by hydroxyphenyl metal porphyrins

Meihua Tang, Chunping Wang, Zhenying Zheng, Xiaoxiao Wang, Fulong Zhu and Shengli Chen*

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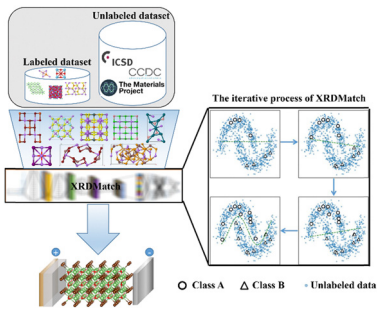

XRDMatch: a semi-supervised learning framework to efficiently discover room temperature lithium superionic conductors

Zheng Wan, Zhenying Chen, Hao Chen, Yizhi Jiang, Jinhuan Zhang, Yidong Wang, Jindong Wang, Hao Sun, Zhongjie Zhu, Jinhui Zhu, Linyi Yang, Wei Ye, Shikun Zhang, Xing Xie, Yue Zhang, Xiaodong Zhuang,* Xiao He* and Jinrong Yang*

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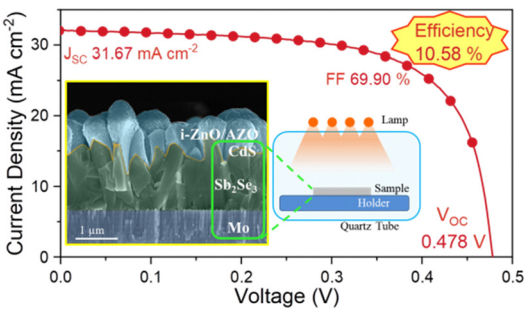

Reduction of bulk and interface defects *via* photo-annealing treatment for high-efficiency antimony selenide solar cells

Xiaoyang Liang,* Xinhua Wang, Qiwei Chang, Bingxin Yang, Wei Dang, Zheng Zhang, Yingnan Guo, Lin Yang and Zhiqiang Li*

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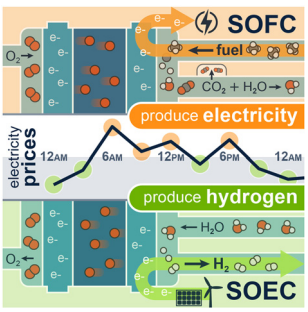

Market optimization and technoeconomic analysis of hydrogen-electricity coproduction systems

Daniel J. Laky, Nicole P. Cortes, John C. Eslick, Alexander A. Noring, Naresh Susarla, Chinedu Okoli, Miguel A. Zamarripa, Douglas A. Allan, John H. Brewer, Arun K. S. Iyengar, Maojian Wang, Anthony P. Burgard, David C. Miller and Alexander W. Dowling*

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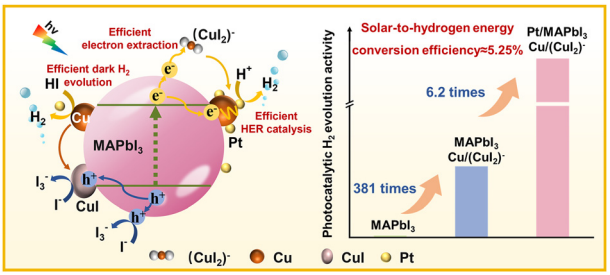
Depressing charge recombination in hybrid perovskites by introducing a dynamic electron/energy relay couple towards enhanced photocatalytic hydrogen production

Jiaqi Liu, Yuxin Xie, Yongxin Jiao, Hefeng Zhang, Junhui Wang, Yuying Gao and Xu Zong*



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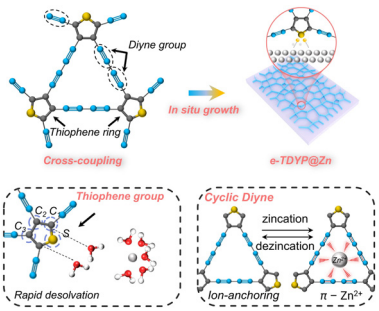
Weaving electron-rich alkynes: a durable *in situ* skin for stabilizing zinc anodes

Xin Liu, Weimian Zhang, Ying Liu, Xiaodong Li, Deyi Zhang, Kun Wang, Lifeng Liu and Changshui Huang*



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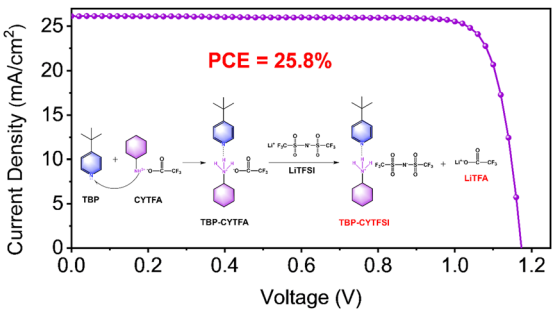
Stabilizing doped Spiro-OMeTAD with an organic molten salt for efficient and stable perovskite solar cells

Tengfei Pan, Zhiwei Li, Biyun Ren, Wan Yang, Xueqin Ran, Yajing Li, Yutian Xu, Yue Wang, Deli Li, Yingdong Xia, Xingyu Gao, Lingfeng Chao* and Yonghua Chen*



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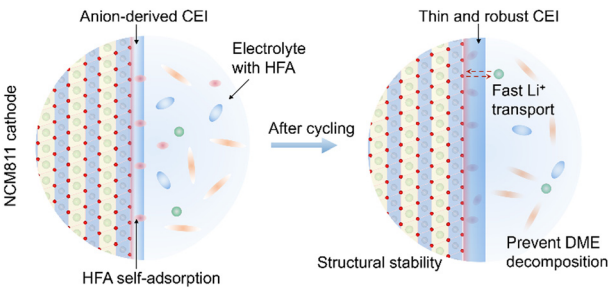
A self-adsorption molecule passivated interface enables efficient and stable lithium metal batteries

Gongxun Lu, Xinru Wu, Miaofei Huang, Mengtian Zhang, Zhihong Piao, Xiongwei Zhong, Chuang Li, Yanze Song, Chengshuai Chang, Kuang Yu and Guangmin Zhou*



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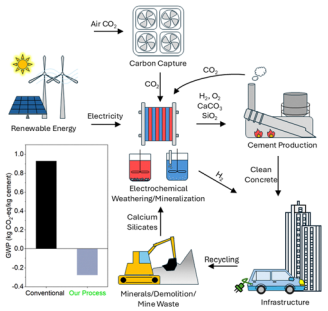

Scalable electrified cementitious materials production and recycling

Xiao Kun Lu, Wenxin Zhang, Brianna N. Ruggiero, Linsey C. Seitz* and Jiaqi Li*

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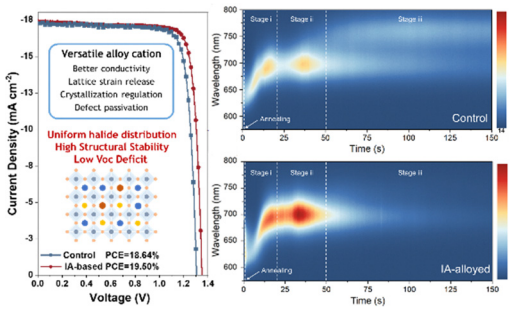

Regulating the crystallization of mixed-halide perovskites by cation alloying for perovskite–organic tandem solar cells

Mingqian Chen, Yanxun Li, Zixin Zeng, Ming Liu, Tao Du, Xiaofeng Huang, Leyu Bi, Jiarong Wang, Wenlin Jiang, Yidan An, Sai-Wing Tsang, Jun Yin,* Shengfan Wu* and Alex K.-Y. Jen*

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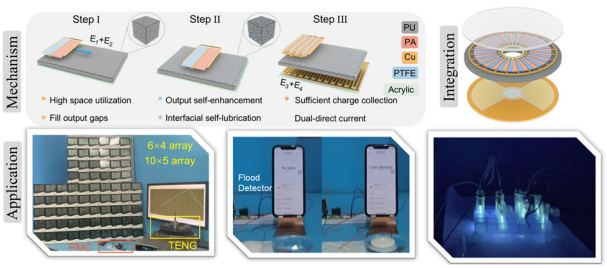

High triboelectrification and charge collection efficiency of a direct current triboelectric nanogenerator achieved by a tri-synergistic enhancement strategy

Shuyan Xu, Jian Wang,* Chuncai Shan, Kaixian Li, Huiyuan Wu, Gui Li, Shaoke Fu, Qionghua Zhao, Yi Xi* and Chenguo Hu*

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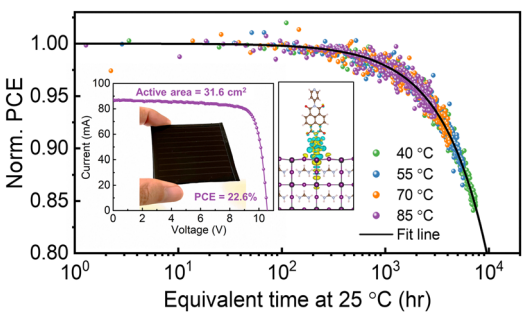

Interfacial coordination utilizing chelating ligands for operationally stable perovskite solar modules

Bingkun Tian, Peikun Zhang, Tianjun Liu, Weicun Chu, Yuyang Long, Peng Xu, Ying Jiang, Jinping Zhang, Yajing Tang, Xiangnan Sun, Riming Nie, Xiaoming Zhao,* Wanlin Guo* and Zhuhua Zhang*

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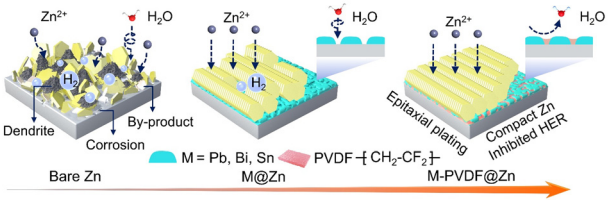
Superhydrophobic and robust hetero-metal-polymer hybrid interphase enables deep-cycling zinc metal anodes

Mengyu Liu, Wentao Yuan, Xinghan Qu, Xianghao Ru, Xiaotong Li, Tingxuan Wang, Xinke Wang, Yuanyuan Wang, Yongchang Liu* and Ning Zhang*



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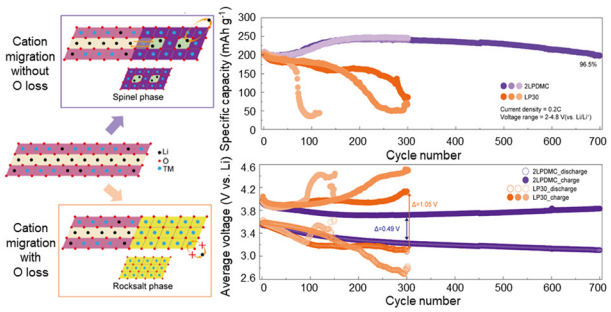
Decoupling capacity fade and voltage decay of Li-rich Mn-rich cathodes by tailoring surface reconstruction pathways

Gukhyun Lim, Min Kyung Cho, Jaewon Choi, Ke-Jin Zhou, Dongki Shin, Seungyun Jeon, Minhyung Kwon, A-Re Jeon, Jinkwan Choi, Seok Su Sohn, Minah Lee and Jihyun Hong*



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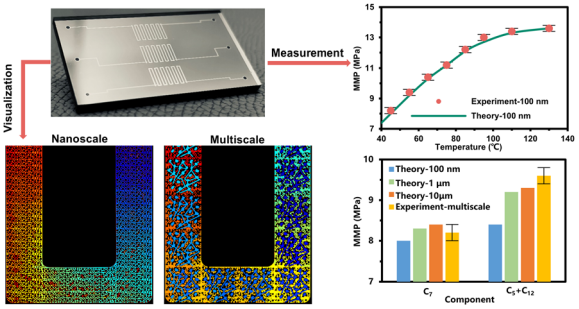
Unveiling nanoscale fluid miscible behaviors with nanofluidic slim-tube

Zengding Wang, Tianjiang Zhang, Shanchao Liu, Keli Ding, Tengyu Liu, Jun Yao, Hai Sun, Yongfei Yang, Lei Zhang, Wendong Wang, Cunqi Jia, Mojdeh Delshad, Kamy Sepehrnoori and Junjie Zhong*



CORRECTION

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Correction: Spins at work: probing charging and discharging of organic radical batteries by electron paramagnetic resonance spectroscopy

Ilia Kulikov, Naitik A. Panjwani, Anatoliy A. Vereshchagin, Domenik Spallek, Daniil A. Lukyanov, Elena V. Alekseeva, Oleg V. Levin and Jan Behrends*