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See Yu Wang, Zaiping Guo *et al.*, pp. 123–133.
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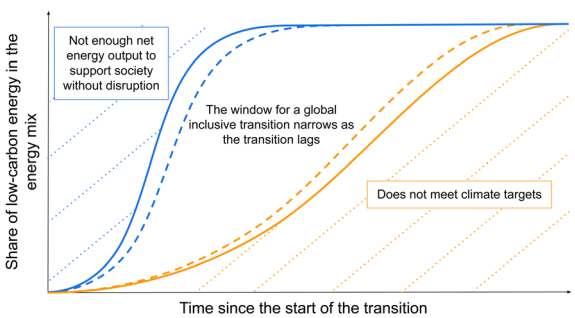
Emerging consensus on net energy paves the way for improved integrated assessment modeling

Louis Delannoy,* Matthieu Auzanneau, Baptiste Andrieu, Olivier Vidal, Pierre-Yves Longaretti, Emmanuel Prados, David J. Murphy, Roger W. Bentley, Michael Carbajales-Dale, Marco Raugei, Mikael Höök, Victor Court, Carey W. King, Florian Fizaine, Pierre Jacques, Matthew Kuperus Heun, Andrew Jackson, Charles Guay-Boutet, Emmanuel Aramendia, Jianliang Wang, Hugo Le Boulzec and Charles A.S. Hall



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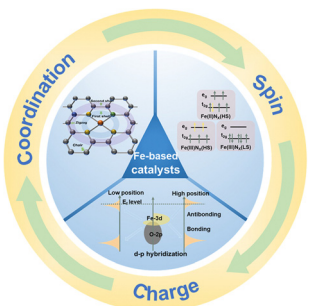
Unified ORR mechanism criteria *via* charge–spin–coordination of Fe functional units

Kexin Song, Binbin Yang, Xu Zou, Wei Zhang* and Weitao Zheng*



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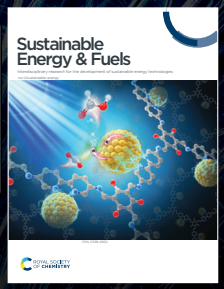

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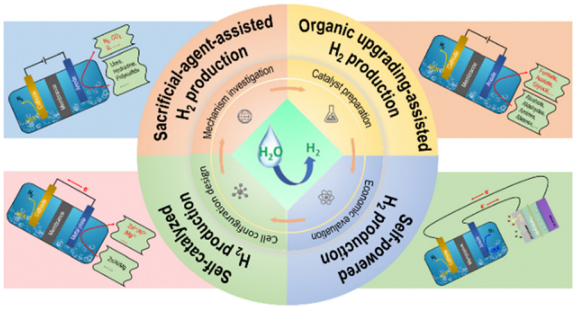
Water electrolysis for hydrogen production: from hybrid systems to self-powered/catalyzed devices

Jin-Tao Ren, Lei Chen, Hao-Yu Wang, Wen-Wen Tian and Zhong-Yong Yuan*



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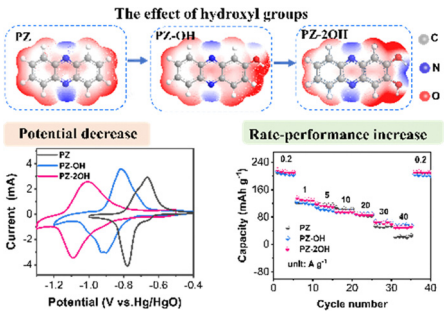

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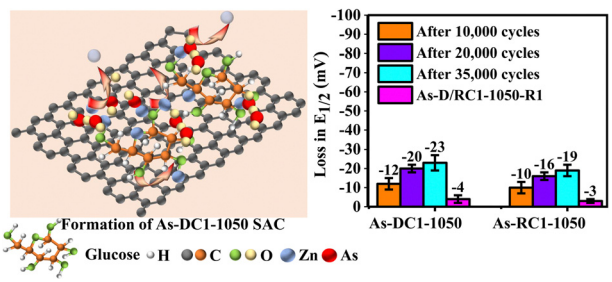
Yangjun Luo, Yanwei Wang, Huijuan Zhang, Youyuan Wang, Jin Wan, Chuanzhen Feng, Lingmei Liu, Zaiping Guo,* Jian Li and Yu Wang*



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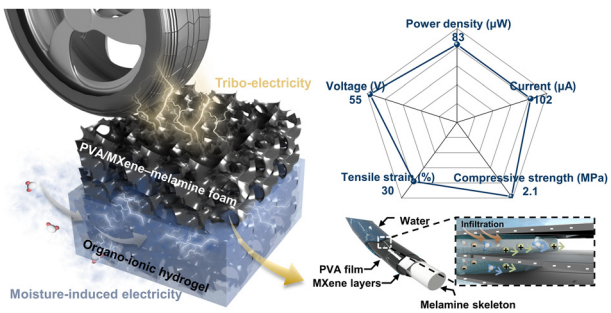

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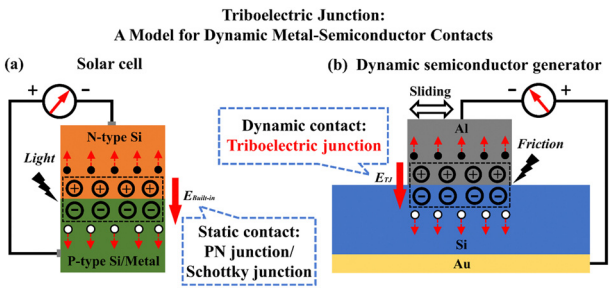

Triboelectric junction: a model for dynamic metal–semiconductor contacts

Xiaote Xu, Zhong Lin Wang* and Zhengbao Yang*

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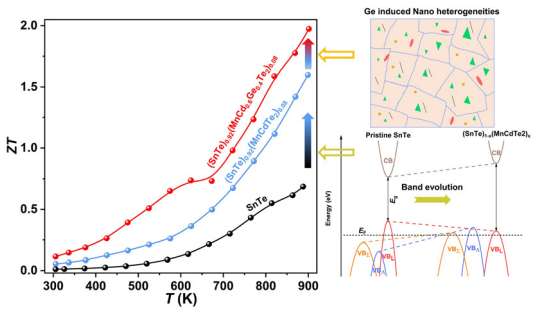

Rare three-valence-band convergence leading to ultrahigh thermoelectric performance in all-scale hierarchical cubic SnTe

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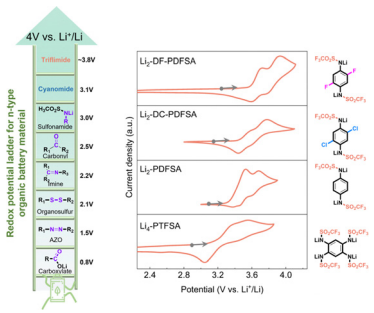

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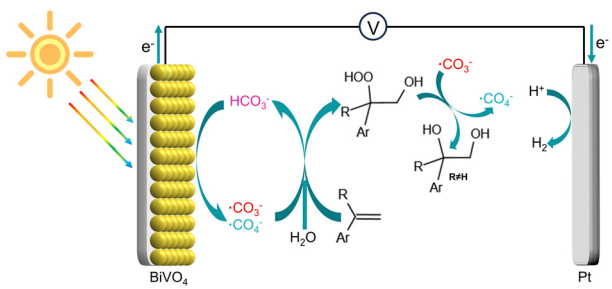

HCO_3^--mediated highly efficient photoelectrochemical dioxygenation of arylalkenes: triple roles of HCO_3^--derived radicals

Jie Yang, Yukun Zhao, Mengyu Duan, Chaoyuan Deng, Yufan Zhang, Yu Lei, Jikun Li, Wenjing Song, Chuncheng Chen* and Jincai Zhao

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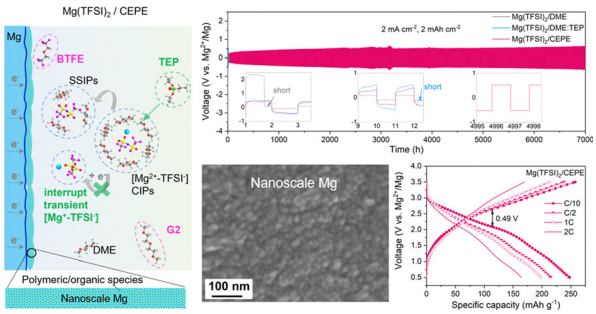
A weakly ion pairing electrolyte designed for high voltage magnesium batteries

Chang Li, Rishabh D. Guha, Abhinandan Shyamsunder, Kristin A. Persson* and Linda F. Nazar*



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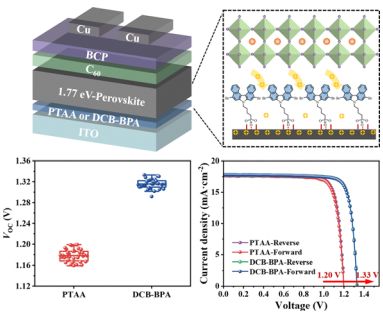

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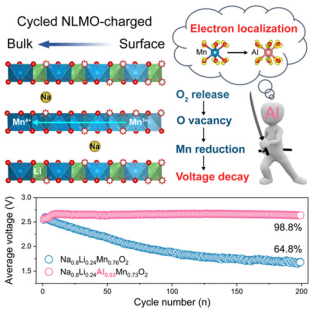

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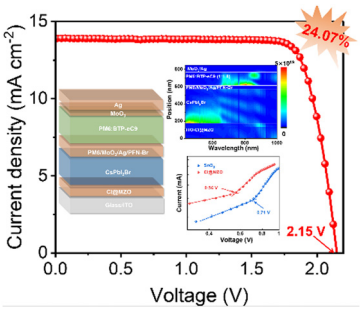
Shan Jiang, Ruyue Wang, Minghua Li,* Runnan Yu, Fuzhi Wang and Zhan'ao Tan*



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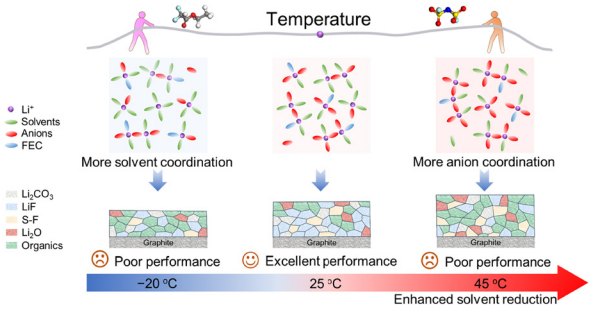

Unraveling the temperature-responsive solvation structure and interfacial chemistry for graphite anodes

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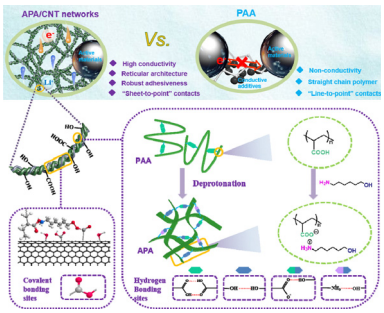

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Farong Zhang, Hongyu Xia, Tongye Wei,* Huaming Li, Mei Yang* and An-Min Cao*

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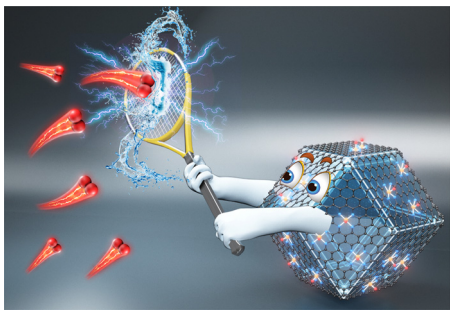

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Jiaqi Liu, Weibin Chen, Shuang Yuan,* Tie Liu and Qiang Wang*

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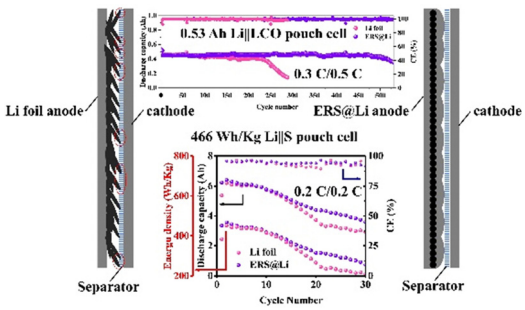

Green mechanochemical Li foil surface reconstruction toward long-life Li–metal pouch cells

Kecheng Long, Shaozhen Huang, Han Wang, Anbang Wang, Yuejiao Chen, Zhijian Liu, Yu Zhang, Zhibin Wu, Weikun Wang* and Libao Chen*

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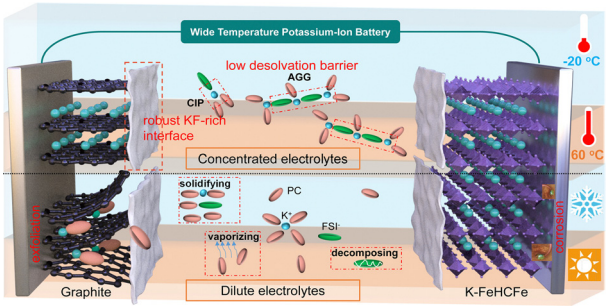
Rejuvenating propylene carbonate-based electrolytes by regulating the coordinated structure toward all-climate potassium-ion batteries

Zixing Wang, Kang Luo, Jian-Fang Wu, Peng Gao, Kexuan Wang, Shi Chen, Jian Tu, Xiulin Fan and Jilei Liu*



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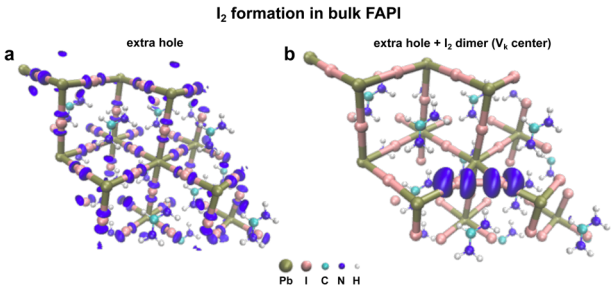

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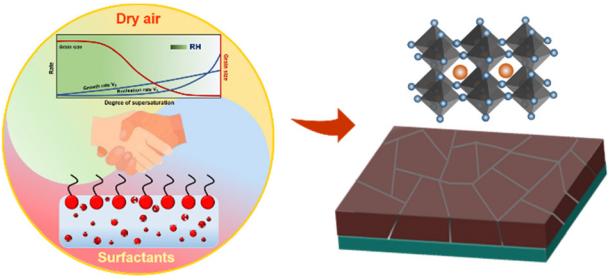
Yanrui Zhang, Lixia Ren, Peng Zhai,* Jingjing Xin, Jiarong Wu, Qi Zhang, Xin Chen, Kui Zhao, Lu Zhang and Shengzhong (Frank) Liu*



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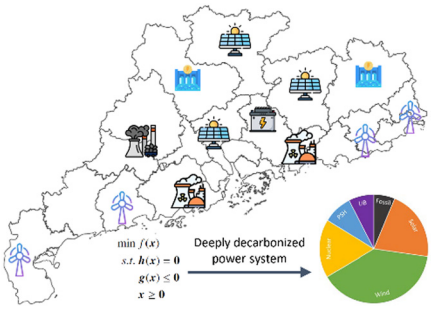
Low-carbon transition pathways of power systems for Guangdong–Hongkong–Macau region in China

Zuming Liu,* Mingquan Li, Edgar Virguez and Xiaomin Xie*



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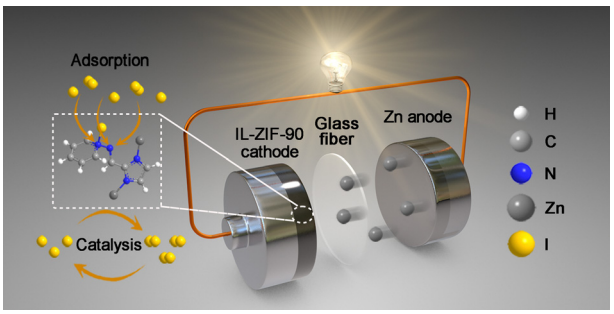

Synergistic effects of Lewis acid–base and Coulombic interactions for high-performance Zn–I_2 batteries

Jiafeng He, Yongbiao Mu, Buke Wu, Fuhai Wu, Ruixi Liao, Hongfei Li, Tianshou Zhao* and Lin Zeng*

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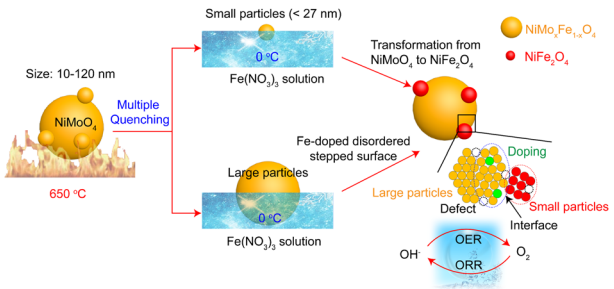

Heterostructured metal oxides realized by quenching-induced structural transformation

Changchun Ye, Zhenghui Pan,* Qinghua Zhang, Fang Yin, Yanan Wang, Yifei Li, Guangxu Chen, Jia Li,* Yongcai Qiu,* Geoffrey I. N. Waterhouse, Lin Gu,* Zhang Lin and Lin Guo*

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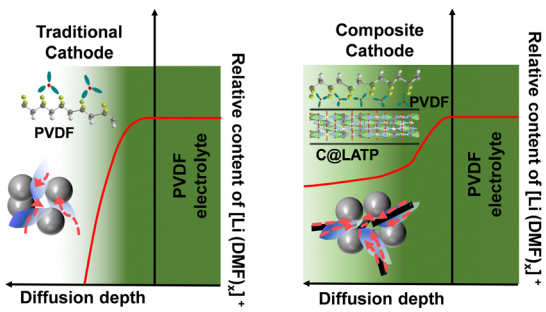

Achieving a high loading of cathode in PVDF-based solid-state battery

Yang Liu, Xufei An, Ke Yang, Jiabin Ma, Jinshuo Mi, Danfeng Zhang, Xing Cheng, Yuhang Li, Yuetao Ma, Ming Liu,* Feiyu Kang and Yan-Bing He*

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