

Energy & Environmental Science

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See Dong-Hwa Seo, Jinhyuk Lee *et al.*, pp. 3753–3764.
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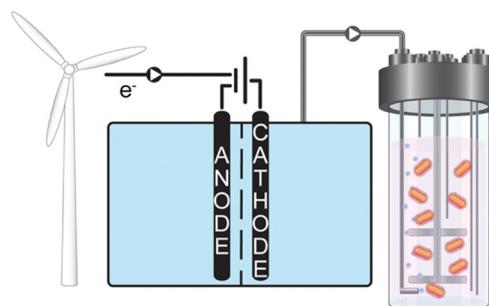
See Largus T. Angenent *et al.*, pp. 3682–3699.
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Electrical-energy storage into chemical-energy carriers by combining or integrating electrochemistry and biology

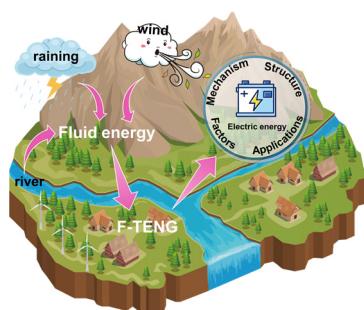
Largus T. Angenent,* Isabella Casini, Uwe Schröder, Falk Harnisch and Bastian Molitor

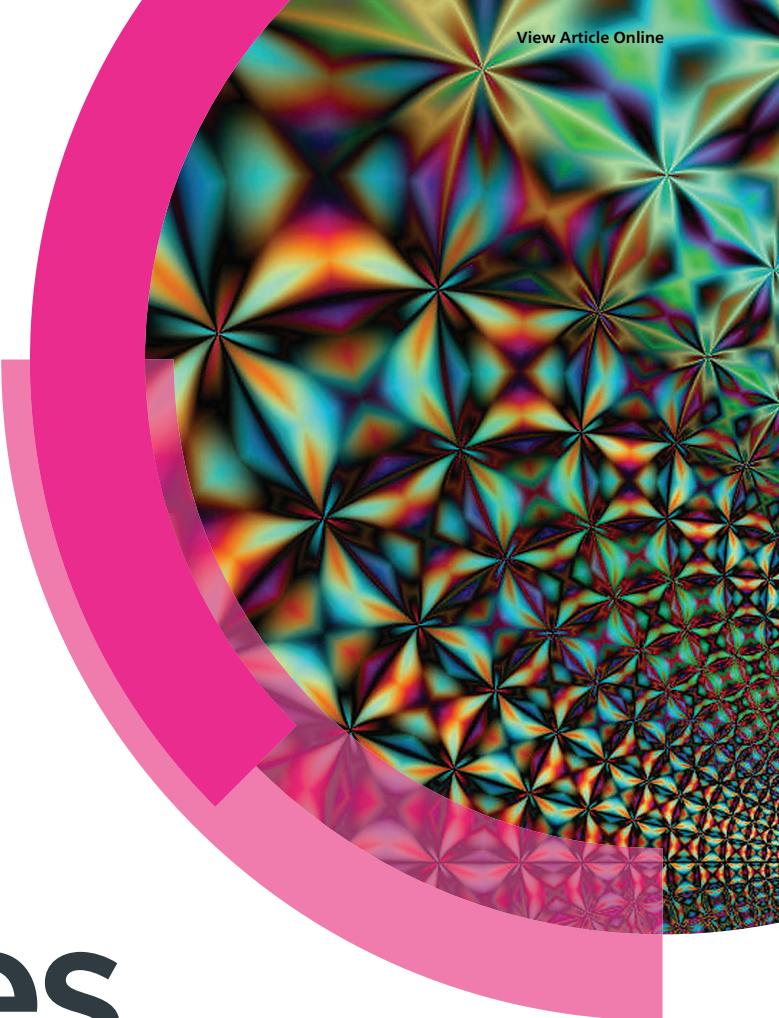


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Fluid-based triboelectric nanogenerators: unveiling the prolific landscape of renewable energy harvesting and beyond

Lihong Jiang, Xinlin Liu, Junling Lv, Gaojie Li, Peiyuan Yang, Yumeng Ma, Haiyang Zou* and Zhong Lin Wang*





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MINIREVIEW

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Electrochemical urea production using carbon dioxide and nitrate: state of the art and perspectives

Mohsin Muhyuddin, Giovanni Zuccante, Piercarlo Mustarelli, Jonathan Filippi, Alessandro Lavacchi, Lior Elbaz, Yu-Han Chen, Plamen Atanassov and Carlo Santoro*

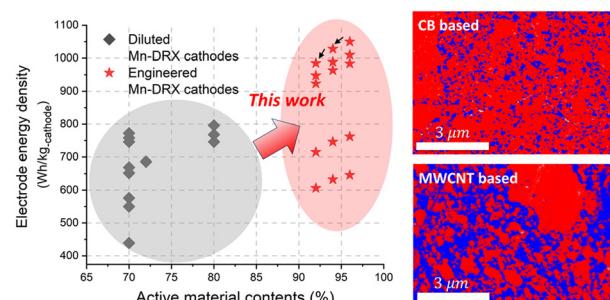


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Nearly all-active-material cathodes free of nickel and cobalt for Li-ion batteries

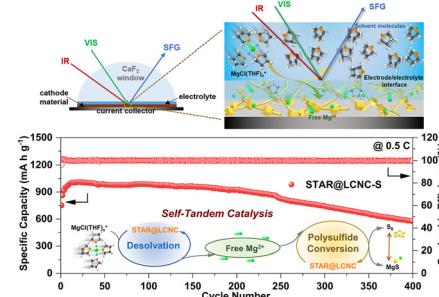
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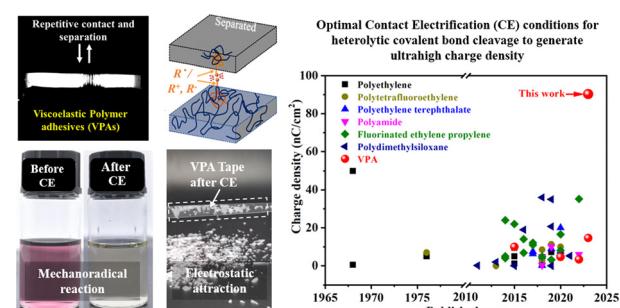
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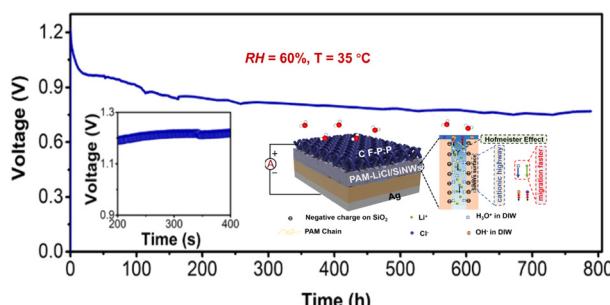
Understanding contact electrification via direct covalent bond cleavage of polymer chains for ultrahigh electrostatic charge density

Haiyan Fu, Jianliang Gong,* Junhao Cao, Zehua Zhang, Zuchang Long, Bao Yang, Jianzhuang Chen, Yiwang Chen* and Xiaoming Tao



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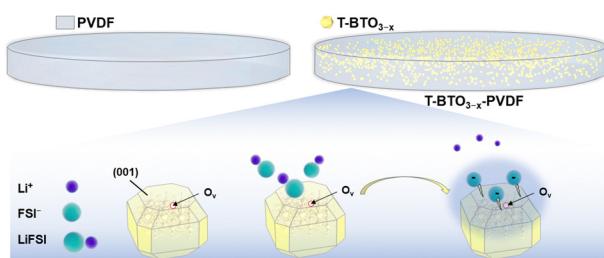
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Silicon nanowire/ionic hydrogel-based hybrid moist-electric generators with enhanced voltage output and operational stability

Wenjing Duan, Beibei Shao, Zhiqi Wang, Kun Ni, Shanfei Liu, Xianrong Yuan, Yusheng Wang, Baoquan Sun, Xiaohong Zhang and Ruiyuan Liu*

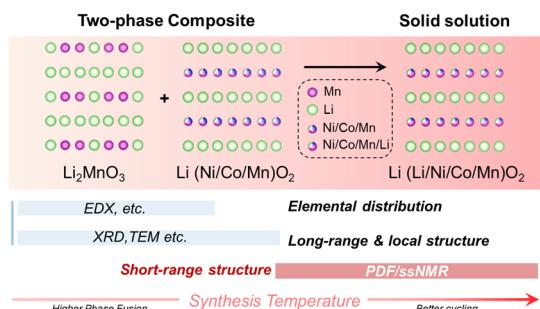
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Dissociation mechanism of lithium salt by BaTiO_3 with spontaneous polarization

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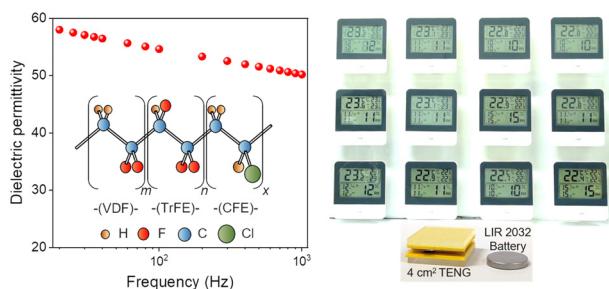
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Multi-angle tracking synthetic kinetics of phase evolution in Li-rich Mn-based cathodes

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Xiaoru Liu, Zhihao Zhao,* Yikui Gao, Yang Nan, Yuexiao Hu, Ziting Guo, Wenyan Qiao, Jing Wang, Linglin Zhou, Zhong Lin Wang* and Jie Wang*

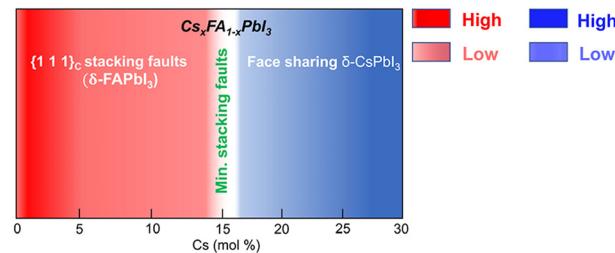


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Alleviating nanostructural phase impurities enhances the optoelectronic properties, device performance and stability of cesium-formamidinium metal–halide perovskites

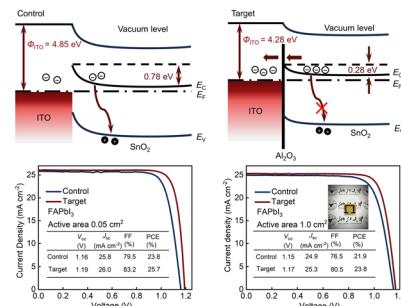
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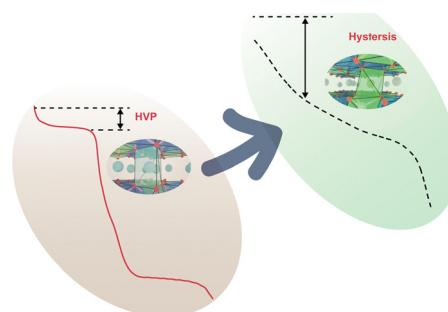
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A prismatic alkali-ion environment suppresses plateau hysteresis in lattice oxygen redox reactions

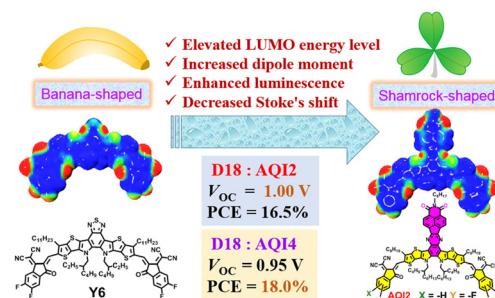
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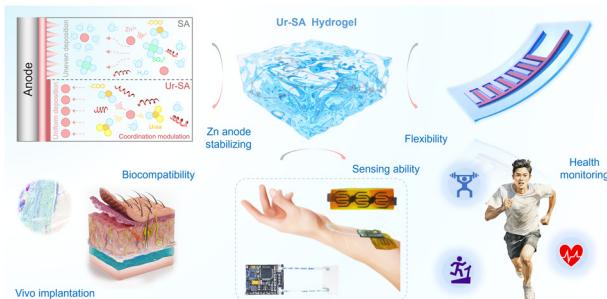
Shamrock-shaped non-fullerene acceptors enable high-efficiency and high-voltage organic photovoltaics

Zongtao Wang, Mengwei Ji, Ailing Tang, Mengzhen Du, Chenyu Mu, Yingliang Liu, Ergang Wang and Erjun Zhou*



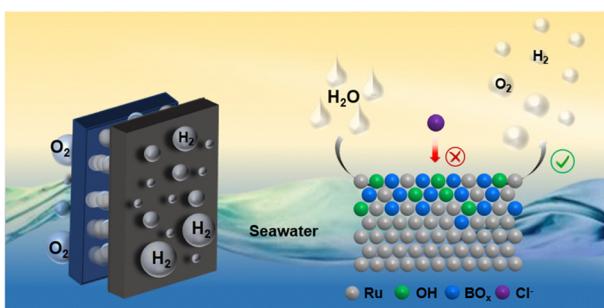
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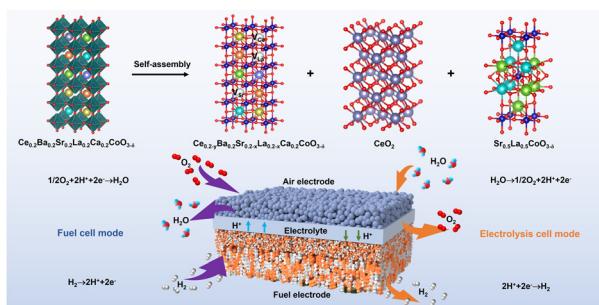
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**Ruthenium nanoparticles decorated with surface hydroxyl and borate species boost overall seawater splitting via increased hydrophilicity**

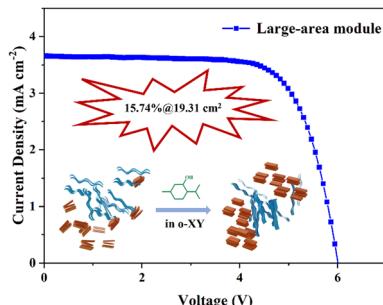
Le-Wei Shen, Yong Wang, Ling Shen, Jiang-Bo Chen, Yu Liu, Ming-Xia Hu, Wen-Ying Zhao, Kang-Yi Xiong, Si-Ming Wu, Yi Lu, Jie Ying, Maria Magdalena Titirici, Christoph Janiak, Ge Tian* and Xiao-Yu Yang*

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**Phase segregation of a composite air electrode unlocks the high performance of reversible protonic ceramic electrochemical cells**

Fan He, Mingyang Hou, Dongliang Liu, Yong Ding, Kotaro Sasaki, YongMan Choi*, Shihang Guo, Donglin Han, Ying Liu, Meilin Liu and Yu Chen*

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Ziyan Jia, Jiannan Pan, Xu Chen, Yaohui Li, Tianyu Liu, Hanbo Zhu, Jizhong Yao, Buyi Yan and Yang (Michael) Yang*

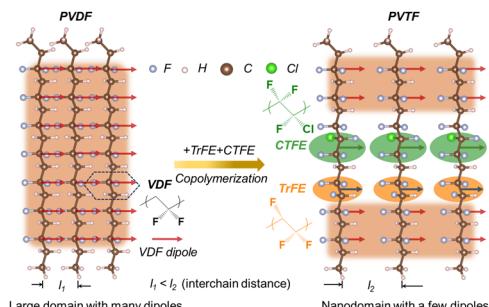


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Regulating dielectricity of a polymer electrolyte to promote cation mobility for high-performance solid zinc hybrid batteries

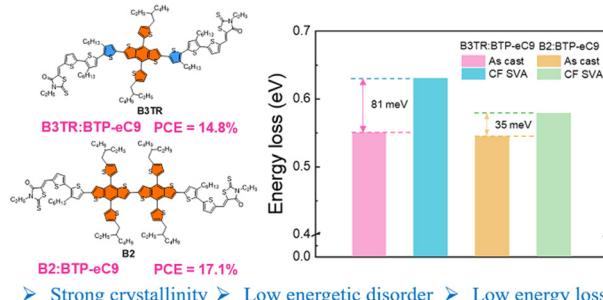
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A highly crystalline donor enables over 17% efficiency for small-molecule organic solar cells

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Hole-transporting alternating copolymers for perovskite solar cells: thia[5]helicene comonomer outperforms planar perylothiophene analog

Lifei He, Yuyan Zhang,* Bing Zhang, Tianyu Li, Yaohang Cai, Ming Ren, Jing Zhang, Peng Wang* and Yi Yuan*

