

Energy & Environmental Science

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See Yousheng Wang, Yaohua Mai *et al.*, pp. 1637–1644. Image reproduced by permission of Yousheng Wang from *Energy Environ. Sci.*, 2024, 17, 1637.



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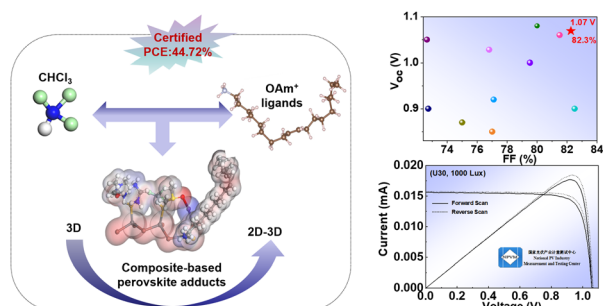
See Ulrich Paetzold, Tobias Abzieher and Beom-Soo Kim, pp. 1645–1663. Image reproduced by permission of Ulrich Paetzold from *Energy Environ. Sci.*, 2024, 17, 1645.

COMMUNICATION

1637

One-step dual-additive passivated wide-bandgap perovskites to realize 44.72%-efficient indoor photovoltaics

Qiaoyan Ma, Yousheng Wang,* Liming Liu, Peng Yang, Wujie He, Xing Zhang, Jianzha Zheng, Mengen Ma, Meixiu Wan, Yuzhao Yang, Cuiling Zhang, Tahmineh Mahmoudi, Shaohang Wu, Chong Liu, Yoon-Bong Hahn and Yaohua Mai*

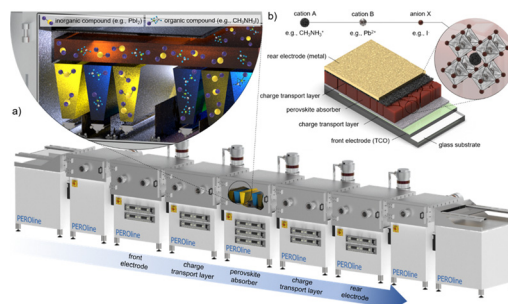


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1645

Vapor phase deposition of perovskite photovoltaics: short track to commercialization?

Tobias Abzieher,* David T. Moore,* Marcel Roß, Steve Albrecht, Jared Silvia, Hairen Tan, Quentin Jeangros, Christophe Ballif, Maximilian T. Hoerantner, Beom-Soo Kim, Henk J. Bolink, Paul Pistor, Jan Christoph Goldschmidt, Yu-Hsien Chiang, Samuel D. Stranks, Juliane Borchert, Michael D. McGehee, Monica Morales-Masis, Jay B. Patel, Annalisa Bruno and Ulrich W. Paetzold*



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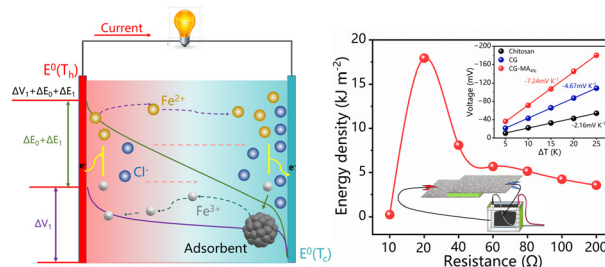


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1664

Double selective ionic gel with excellent thermopower and ultra-high energy density for low-quality thermal energy harvesting

Jindong Hu, Jiuyang Wei, Jinming Li, Long Bai,*
Yang Liu* and Zhiguo Li*



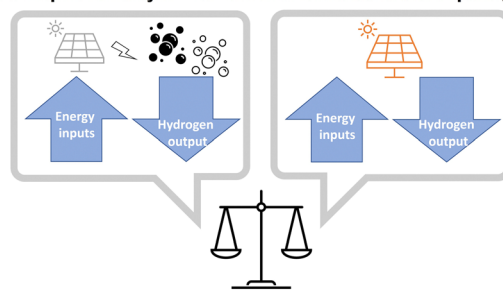
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1677

Comparing the net-energy balance of standalone photovoltaic-coupled electrolysis and photoelectrochemical hydrogen production

Brian Tam,* Oytun Babacan, Andreas Kafizas and
Jenny Nelson*

PV-coupled electrolysis OR Photoelectrochemical water splitting?

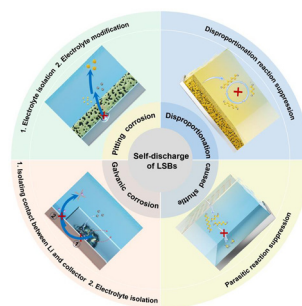


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Shelf life of lithium–sulfur batteries under lean electrolytes: status and challenges

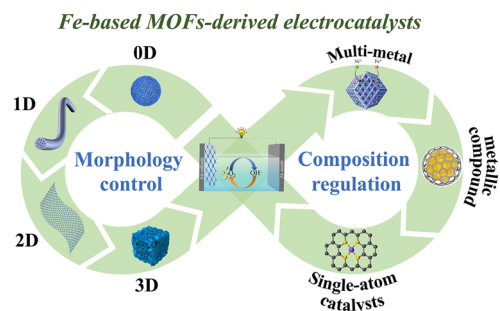
Junling Guo,* Quan Yang, Ying Dou, Xin Ba, Wei Wei
and Jinping Liu*



1725

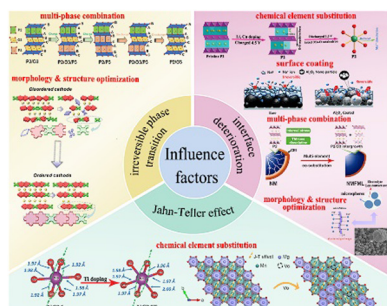
Advanced design strategies for Fe-based metal–organic framework-derived electrocatalysts toward high-performance Zn–air batteries

Ya-Fei Guo, Shan Zhao, Nan Zhang, Zong-Lin Liu,
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Improvement of cycle life for layered oxide cathodes in sodium-ion batteries

Huan Yang, Dong Wang, Yalan Liu, Yihua Liu, Benhe Zhong, Yang Song, Qingquan Kong, Zhenguo Wu* and Xiaodong Guo*

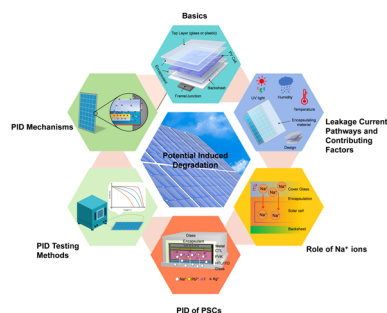
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Recent progress in monolithic two-terminal perovskite-based triple-junction solar cells

Minasadat Heydarian,* Maryamsadat Heydarian,* Patrick Schygulla, S. Kasimir Reichmuth, Alexander J. Bett, Jochen Hohl-Ebinger, Florian Schindler, Martin Hermle, Martin C. Schubert, Patricia S. C. Schulze, Juliane Borchert and Stefan W. Glunz

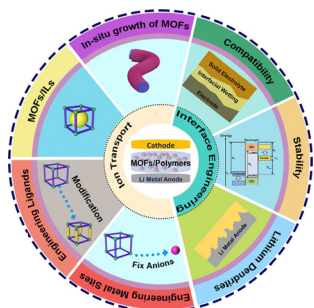
1819



Potential-induced degradation: a challenge in the commercialization of perovskite solar cells

Hasan Raza, Tahir Imran, You Gao, Muhammad Azeem, Muhammad Younis, Jianan Wang, Sanwan Liu, Zhichun Yang,* Zonghao Liu* and Wei Chen*

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Recent progress on metal-organic framework/polymer composite electrolytes for solid-state lithium metal batteries: ion transport regulation and interface engineering

Bei Li, Changhong Wang,* Ruizhi Yu,* Jingquan Han, Shaohua Jiang, Chunmei Zhang and Shuijian He*

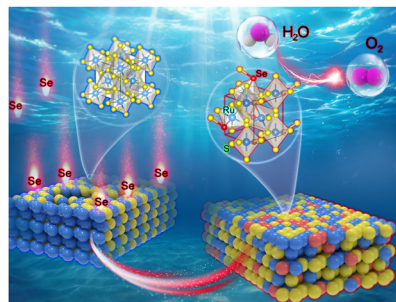


COMMUNICATIONS

1885

Heteroanion induced structural asymmetry centered on Ru sites switches the rate-determining step of acid water oxidation

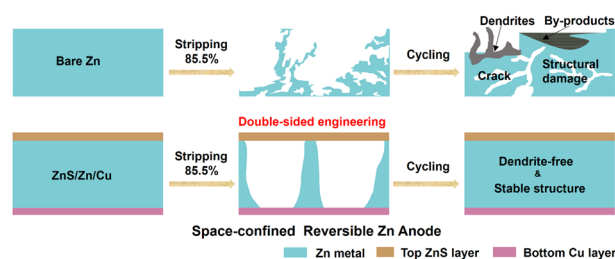
Ding Chen, Hongyu Zhao, Ruohan Yu, Kesong Yu, Jiawei Zhu, Jixiang Jiao, Xueqin Mu, Jun Yu, Jinsong Wu and Shichun Mu*



1894

Double-sided engineering for space-confined reversible Zn anodes

Yong Gao, Nute Yang, Fan Bu, Qinghe Cao, Jie Pu, Yuxuan Wang, Ting Meng, Jipeng Chen, Wenbo Zhao and Cao Guan*

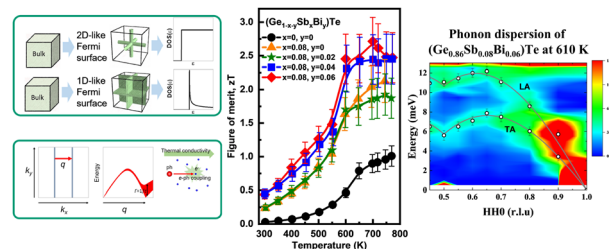


PAPERS

1904

Ultrahigh zT from strong electron–phonon interactions and a low-dimensional Fermi surface

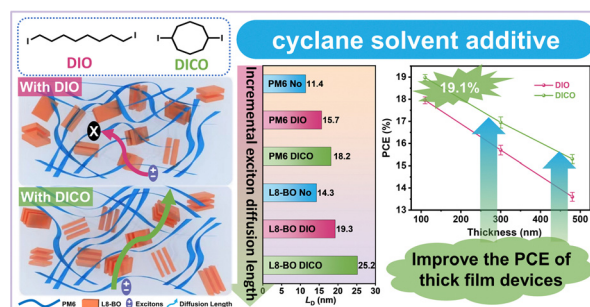
V. K. Ranganayakulu, Te-Hsien Wang, Cheng-Lung Chen,* Angus Huang, Ma-Hsuan Ma, Chun-Min Wu, Wei-Han Tsai, Tsu-Lien Hung, Min-Nan Ou, Horng-Tay Jeng,* Chih-Hao Lee, Kuei-Hsien Chen, Wen-Hsien Li, Madison K. Brod, G. Jeffrey Snyder and Yang-Yuan Chen*



1916

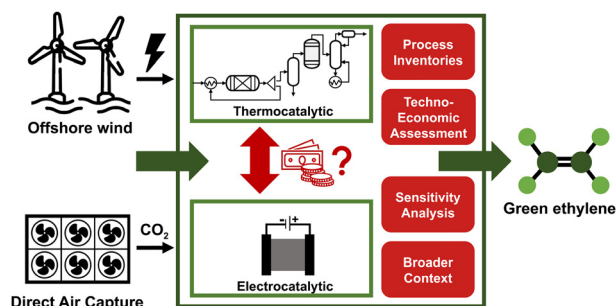
1,5-Diiodocyclooctane: a cyclane solvent additive that can extend the exciton diffusion length in thick film organic solar cells

Fengbo Sun, Xufan Zheng, Tianyu Hu, Jingnan Wu, Ming Wan, Yuanyuan Xiao, Tingting Cong, Yuda Li, Biao Xiao, Juan Shan, Ergang Wang, Xunchang Wang* and Renqiang Yang*



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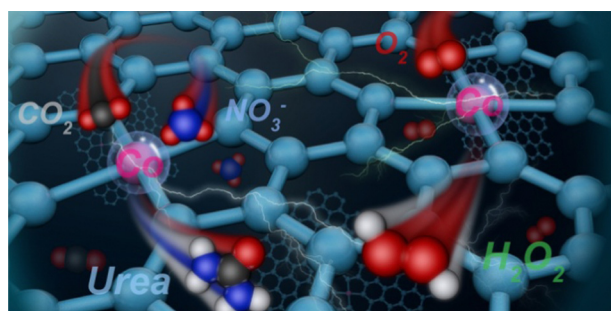
1931



Green ethylene production in the UK by 2035: a techno-economic assessment

Andreas H. Nyhus, Maria Yliruka,* Nilay Shah and Benoît Chachuat*

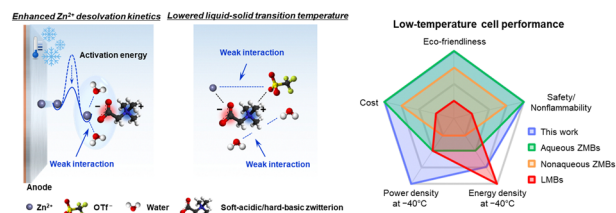
1950



An oxygen-coordinated cobalt single-atom electrocatalyst boosting urea and urea peroxide production

Shengbo Zhang, Meng Jin, Hui Xu, Xinyuan Zhang, Tongfei Shi,* Yixing Ye, Yue Lin, Lirong Zheng, Guozhong Wang, Yunxia Zhang, Huajie Yin, Haimin Zhang* and Huijun Zhao

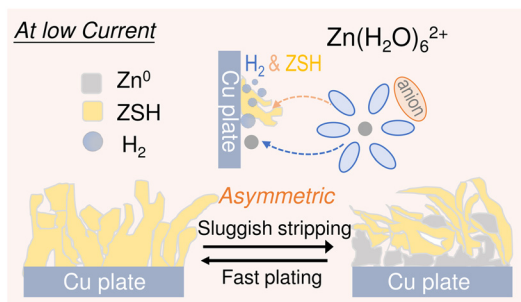
1961



Restructuring of aqueous electrolytes using a soft-acidic/hard-basic zwitterion for low-temperature anode-free Zn batteries

Hong-I Kim, Kyung Min Lee, Won-Yeong Kim, Seong Hyeon Kweon, Xiao Wang, Shuanghao Zheng, Seung-Hyeok Kim, Jee Ho Ha, Seok Ju Kang, Zhong-Shuai Wu,* Sang Kyu Kwak* and Sang-Young Lee*

1975



Correlating hydrogen evolution and zinc deposition/dissolution kinetics to the cyclability of metallic zinc electrodes

Huijun Yang,* Yang Yang, Wuhai Yang, Gang Wu and Ruijie Zhu*

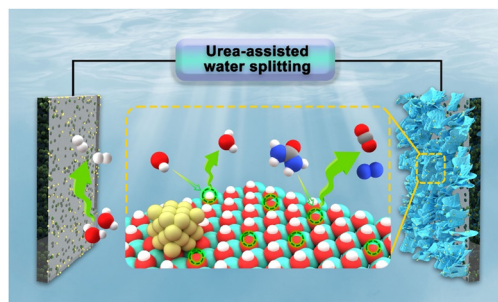


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1984

Modulating the electronic structure of Ni(OH)₂ by coupling with low-content Pt for boosting the urea oxidation reaction enables significantly promoted energy-saving hydrogen production

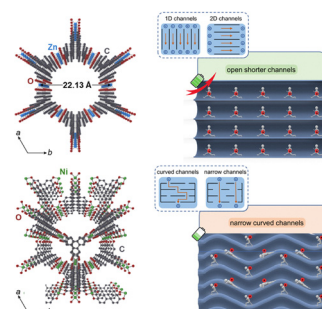
Mengxiao Zhong, Meijiao Xu, Siyu Ren, Weimo Li, Ce Wang, Mingbin Gao* and Xiaofeng Lu*



1997

Ballistic electrolyte ion transport with undisturbed pathways for ultrahigh-rate electrochemical energy storage devices

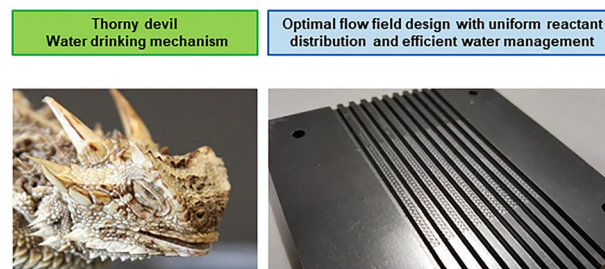
Situo Cheng, Zhen Cao, Yupeng Liu, Junli Zhang, Luigi Cavallo, Erqing Xie and Jiecai Fu*



2007

A nature-inspired solution for water management in flow fields for electrochemical devices

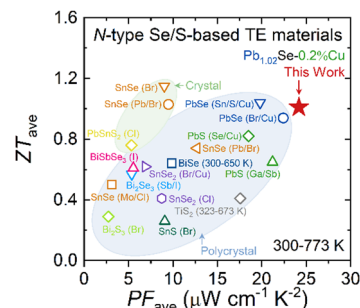
Panagiotis Trogadas, Jason I. S. Cho,* Lara Rasha, Xuekun Lu, Nikolay Kardjilov, Henning Markötter, Ingo Manke, Paul R. Shearing, Dan J. L. Brett and Marc-Olivier Coppens*



2018

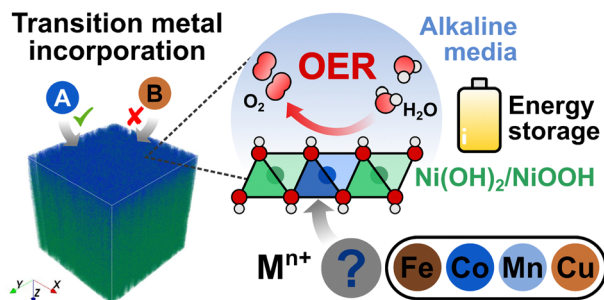
Enhanced average power factor and ZT value in PbSe thermoelectric material with dual interstitial doping

Liqing Xu, Xiaoying Wang, Yang Wang, Zhibin Gao, Xiangdong Ding and Yu Xiao*



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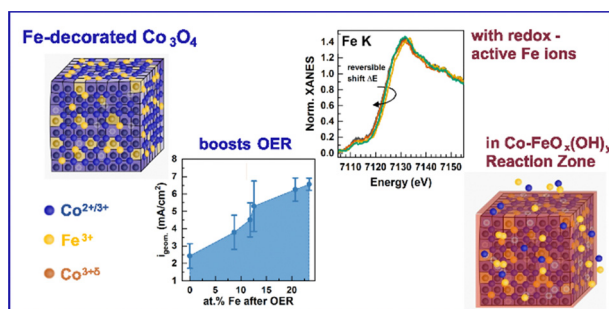
2028



Transition metal incorporation: electrochemical, structure, and chemical composition effects on nickel oxyhydroxide oxygen-evolution electrocatalysts

Raul A. Marquez, Emma Kalokowski, Michael Espinosa, Jay T. Bender, Yoon Jun Son, Kenta Kawashima, Chikaodili E. Chukwuneke, Lettie A. Smith, Hugo Celio, Andrei Dolocan, Xun Zhan, Nathaniel Miller, Delia J. Milliron, Joaquin Resasco and C. Buddie Mullins*

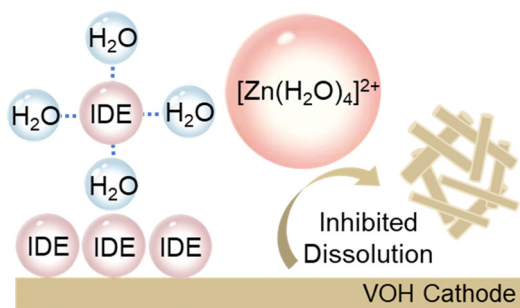
2046



Role of Fe decoration on the oxygen evolving state of Co₃O₄ nanocatalysts

Felix T. Haase, Eduardo Ortega, Sascha Saddeler, Franz-Philipp Schmidt, Daniel Cruz, Fabian Scholten, Martina Rüscher, Andrea Martini, Hyo Sang Jeon, Antonia Herzog, Uta Hejral, Earl M. Davis, Janis Timoshenko, Axel Knop-Gericke, Thomas Lunkenbein, Stephan Schulz, Arno Bergmann* and Beatriz Roldan Cuenya*

2059



Mitigating cathodic dissolution through interfacial water masking to enhance the longevity of aqueous zinc-ion batteries

Wei Zhong, Zeyu Shen, Jiale Mao, Shichao Zhang, Hao Cheng,* Yoonseob Kim and Yingying Lu*

