

# Journal of Materials Chemistry A

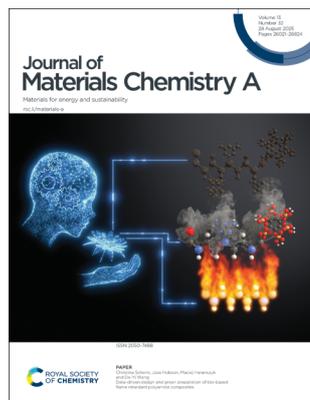
Materials for energy and sustainability

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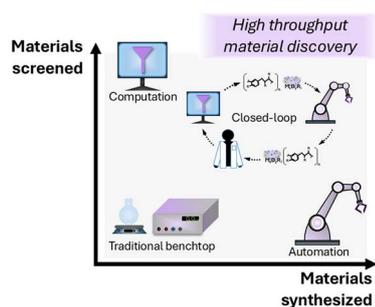
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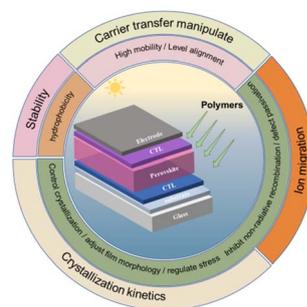
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Zhiwei Chen, Zhichao Lin,\* Yibing Wu and Xinhua Ouyang\*



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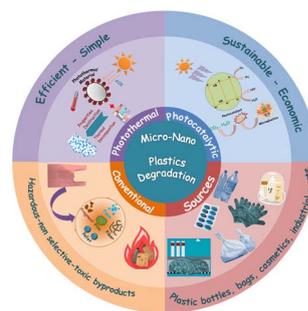
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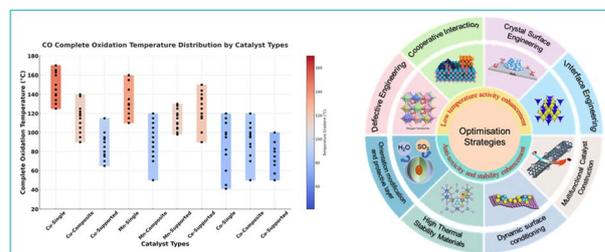
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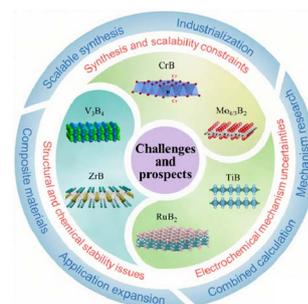
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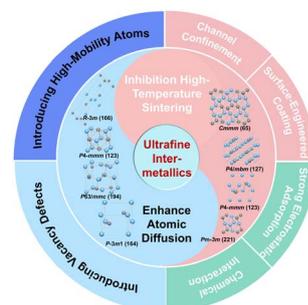


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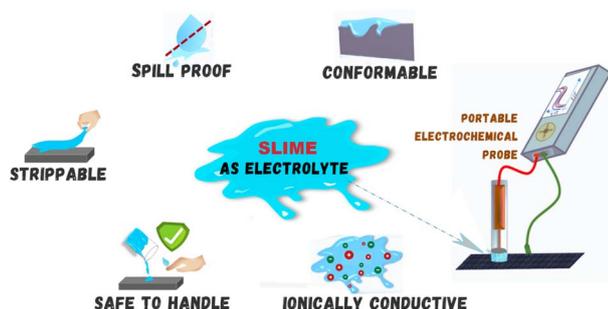
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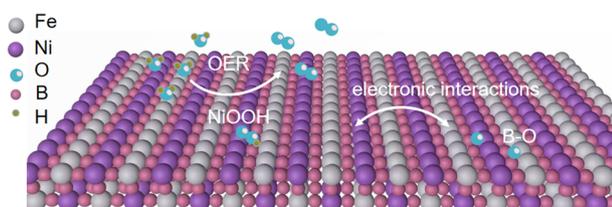


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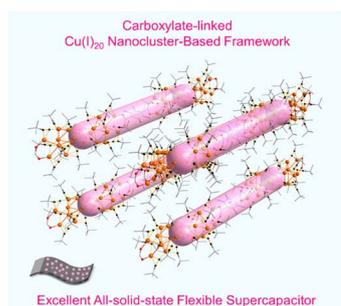
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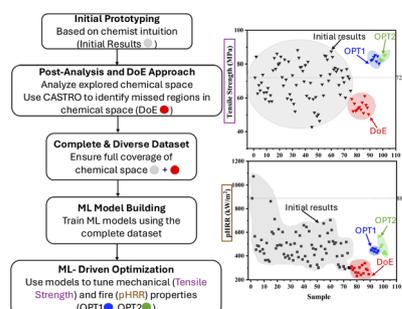
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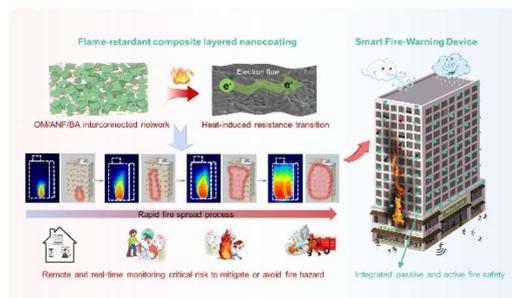
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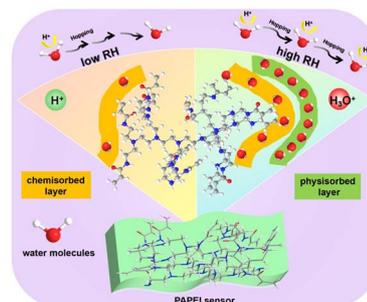
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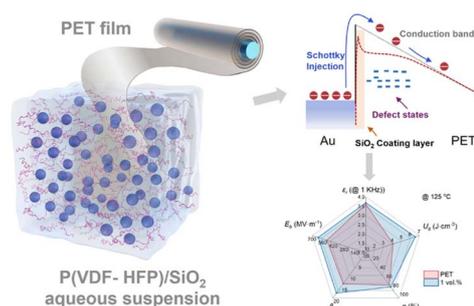
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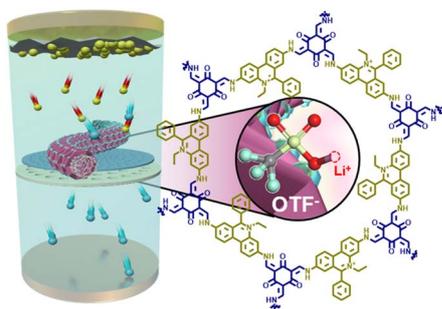
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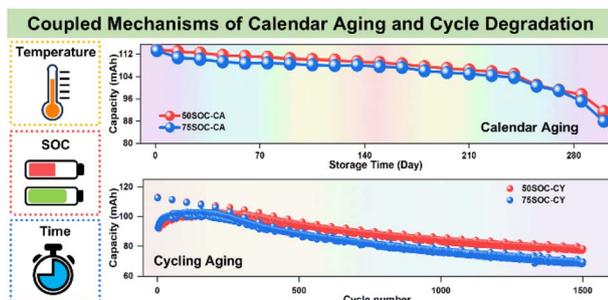
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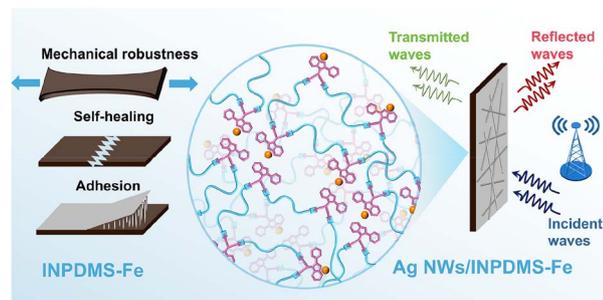
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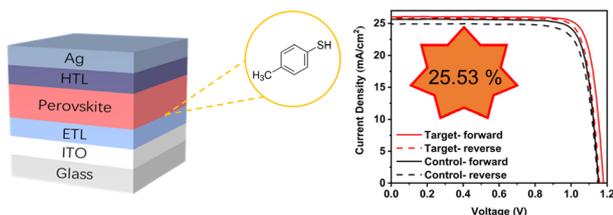
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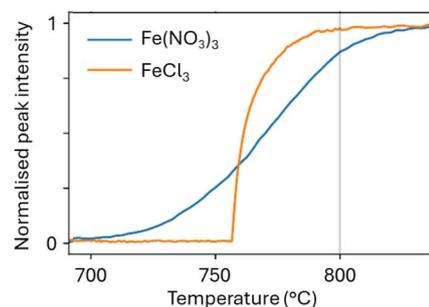
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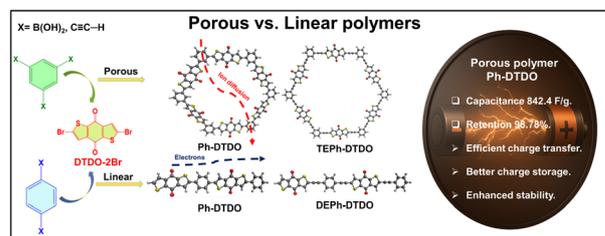
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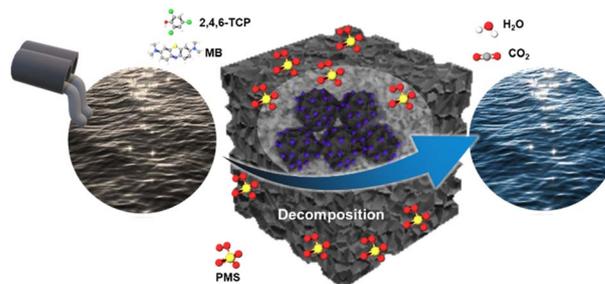
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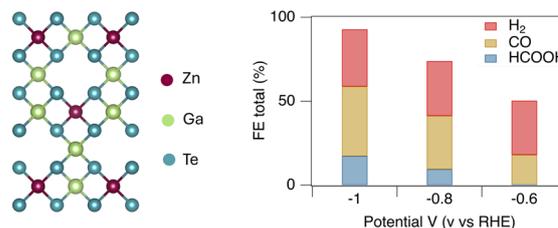


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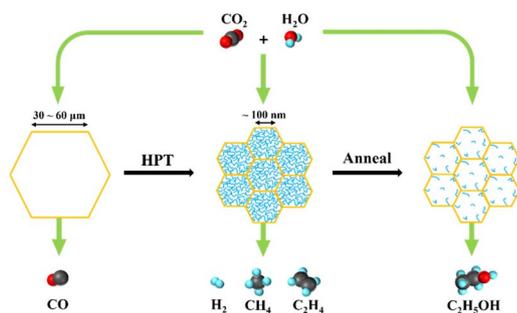
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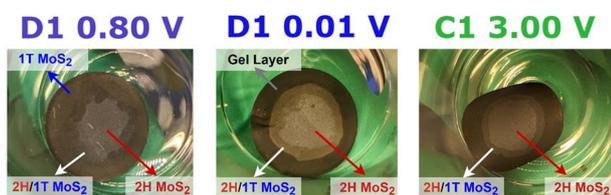
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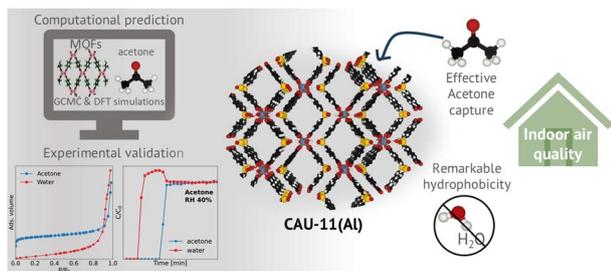
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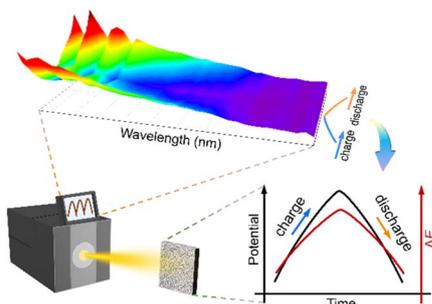
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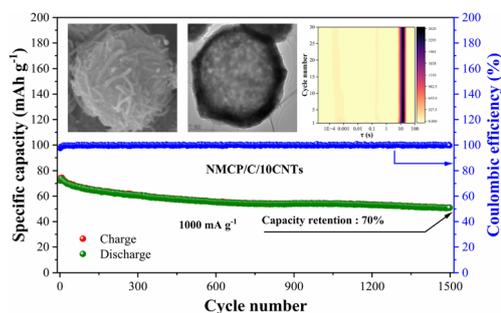
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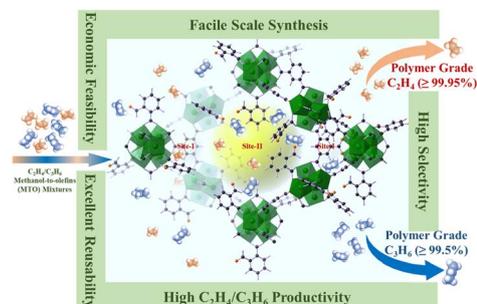
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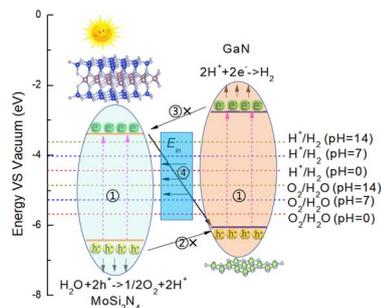
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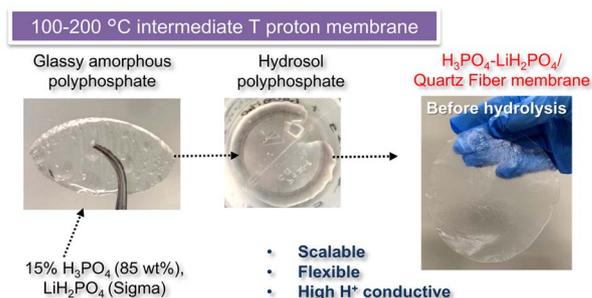
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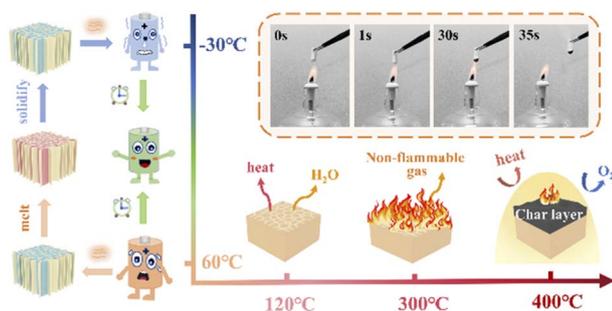
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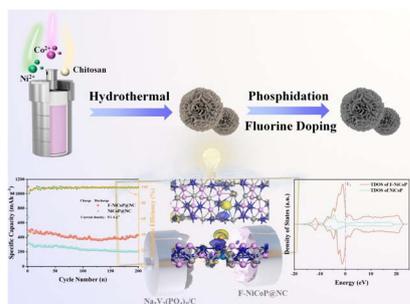
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Beibei Lei, Xiaoting Shen, Wei Chen, Ziyang Hong and Miao Wang\*

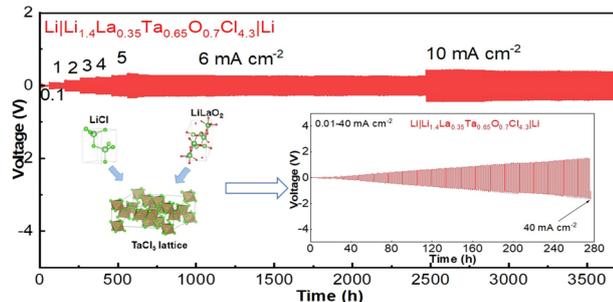
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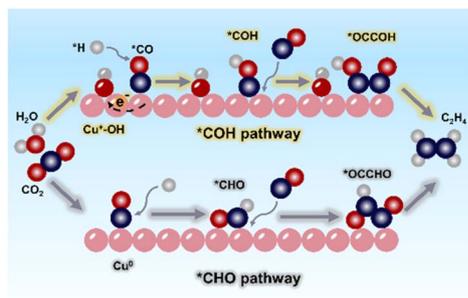
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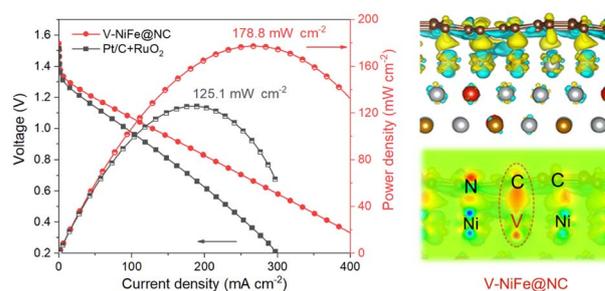
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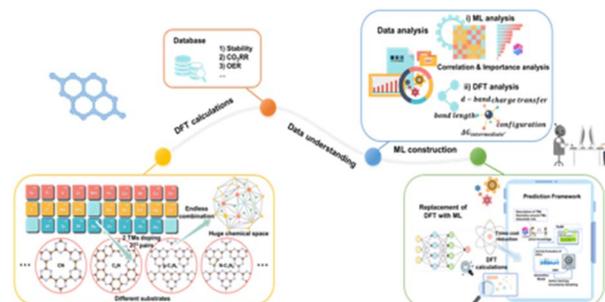
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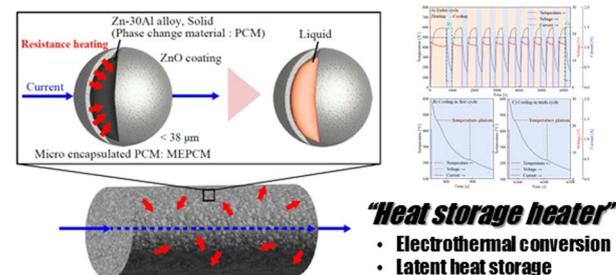
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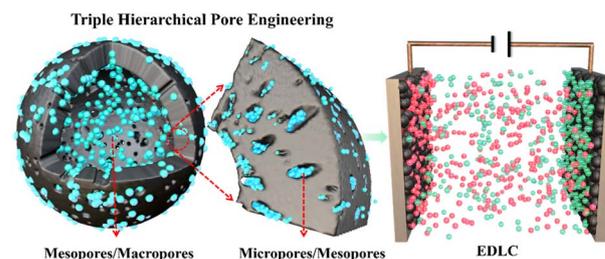
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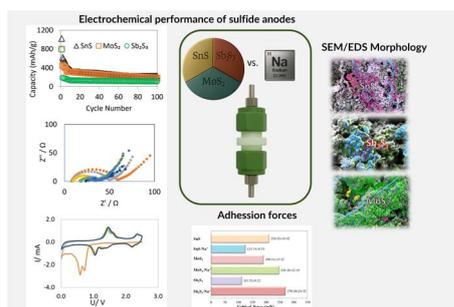
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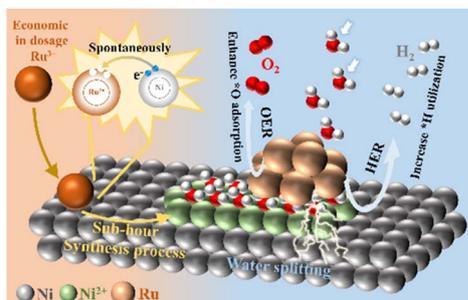
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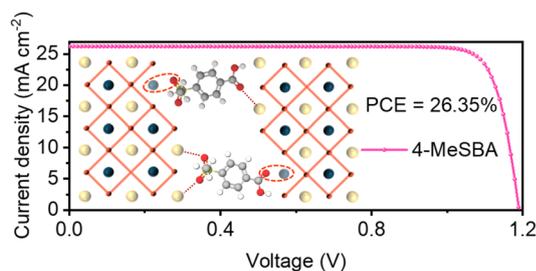


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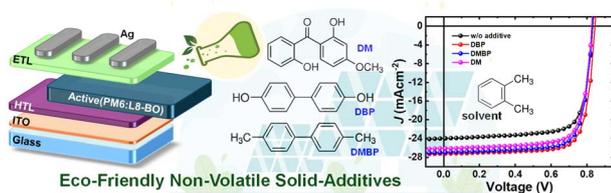
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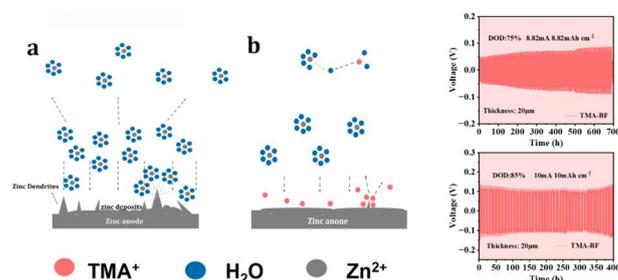
Do Hui Kim, Heunjeong Lee, Dongchan Lee, Jiwoo Yeop, Jin Young Kim and Shinuk Cho\*



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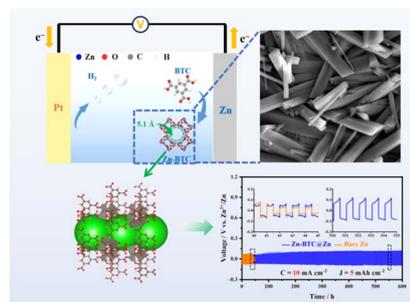
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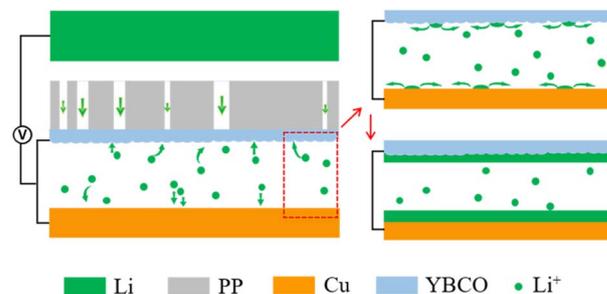
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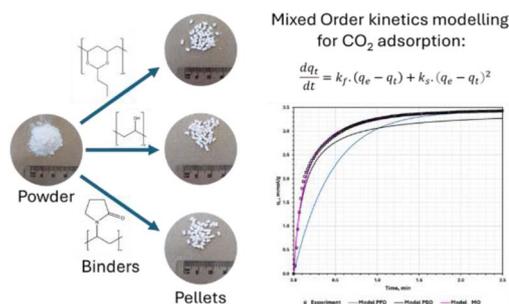
Juntao Si, Yida Wang, Jingchao Xiao, Yunyong Hu, Bicao Pan and Chunhua Chen\*



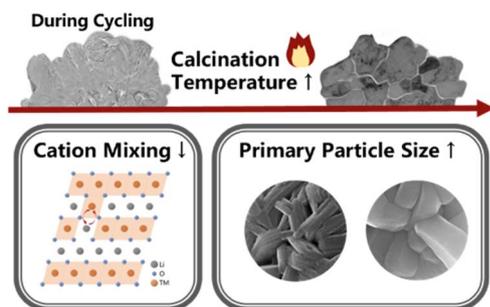
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### Kinetics of CO<sub>2</sub> adsorption on UTSA-16(Zn) metal-organic framework: thermal, compositional, and geometrical effects

Sanad Altarawneh and John Luke Woodliffe\*



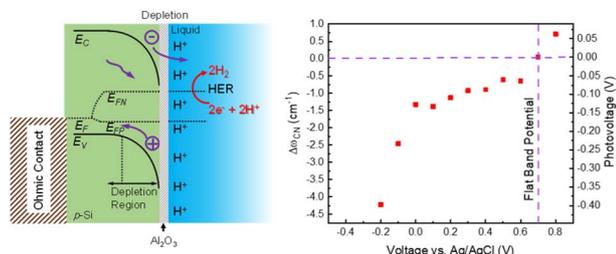
26627



### Origin of electrochemical cycling stability induced by calcination temperature for cobalt-free nickel-rich cathodes

Chenxi Song, Yaoyu Ren,<sup>\*</sup> Lin Gu, Qingyun Zhang, Yang Lu and Yang Shen<sup>\*</sup>

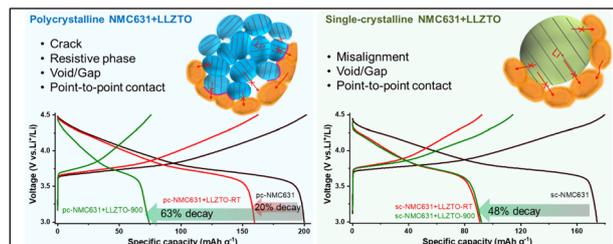
26637



### Monitoring photovoltages produced at semiconductor/liquid interfaces using *in situ* surface-enhanced Raman scattering (SERS) spectroscopy

Ruoxi Li, Yu Yun Wang, Sizhe Weng, Rifat Shahriar and Stephen B. Cronin<sup>\*</sup>

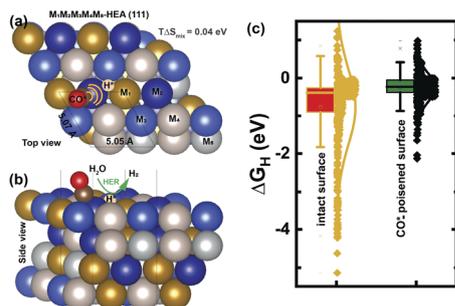
26647



### Thermal stability and electrochemical behavior of commercial polycrystalline and single-crystalline cathodes integrated with cubic $\text{Li}_{6.4}\text{La}_3\text{Zr}_{1.4}\text{Ta}_{0.6}\text{O}_{12}$ for all-solid-state lithium batteries

Ziting Ma, Grant LaBriola, Karlo Adrian Salazar, Chunting Chris Mi and Lingping Kong<sup>\*</sup>

26660



### Breaking the poisoning paradigm: a high-throughput DFT screening of high-entropy alloys with a focus on phonon-induced uncertainty

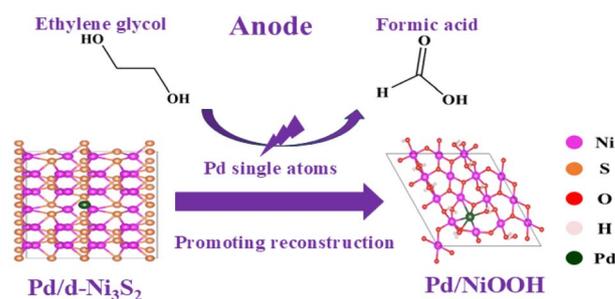
Mohsen Tamtaji, William A. Goddard III<sup>\*</sup> and GuanHua Chen<sup>\*</sup>



26669

### Anchoring Pd single atoms through S vacancies of defective nickel–sulfur for efficient electrocatalytic polyethylene terephthalate oxidation coupled with hydrogen evolution

Mingming Zhan, Lipeng Guo, Xin Liang, Zhefei Zhao,\* Xingyu Luo, Ruopeng Yu, Qilong Wu, Linlin Zhang, Runtao Jin, Yihan Zhu, Yi Jia\* and Huajun Zheng\*



26681

### Synergistic construction of defect-rich nanozymes via montmorillonite support loading and iron doping for enhanced peroxidase-like activity

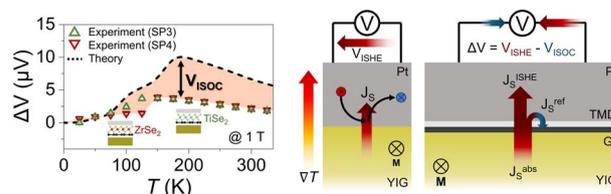
Wenjie Qu, Xiaorong Yang, Feng Feng, Yihe Zhang\* and Wangshu Tong\*



26690

### Negative spin-to-charge current induced by interfacial spin–orbit coupling in Pt/monolayer 1T-TiSe<sub>2</sub>/graphene/yttrium iron garnet quadruple heterostructures

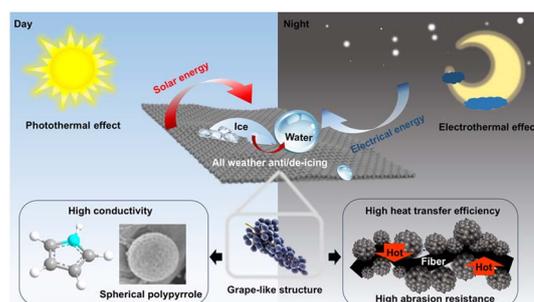
Jae Won Choi, Yun-Ho Kim, Jung-Min Cho, Katsuaki Sugawara, Jungtae Nam, Min-Sung Kang, Gangmin Park, Gil-Sung Kim, No-Won Park, Takashi Kikkawa, Won-Yong Lee, Young-Gui Yoon, Keun Soo Kim, Eiji Saitoh, Takafumi Sato\* and Sang-Kwon Lee\*



26700

### A robust grape-like superhydrophobic surface for efficient oil–water separation and anti/de-icing

Xiaoyan Xu, Chutong Xiao, Wenquan Liu, Wei Li,\* Lingling Feng, Xixuan Fang and Hui Qiao\*

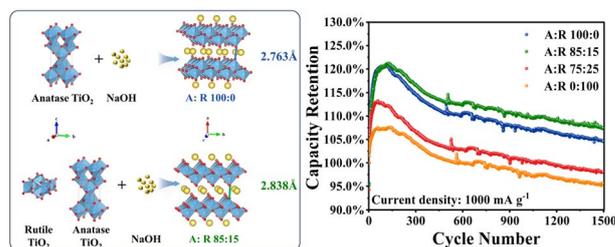




26756

### The balance of structural compatibility and distortion in titanium sources for the preparation of a high performance $\text{Na}_2\text{Ti}_6\text{O}_{13}$ anode

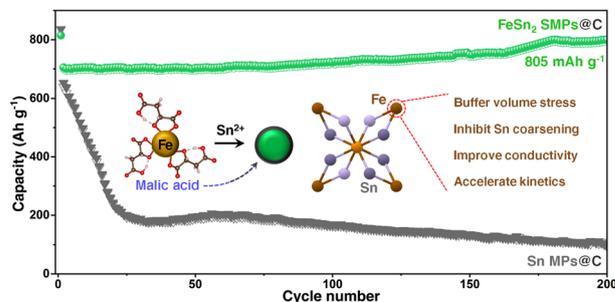
Qian Li, Changyan Hu, Yihua Liu, Ruoyang Wang, Feng Chen, Tingru Chen, Zhenguo Wu\* and Xiaodong Guo



26764

### A robust malic acid-assisted displacement reaction to form carbon-coated submicron $\text{FeSn}_2$ with superior lithium storage reversibility enabled by the solid solution effect

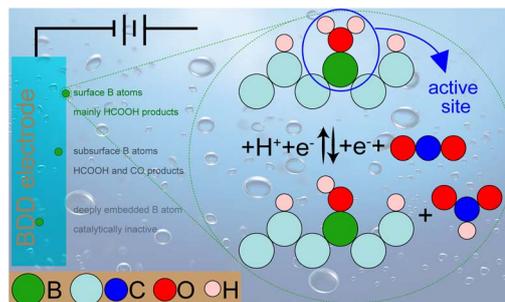
Guanghui Li, Chunhua Jiang, Shuaiwei Sun, Dongli Pei, Guangqiang Ma, Huile Jin, Shiqiang Zhao,\* Shun Wang\* and Xiaoxu Bo\*



26779

### Boron site-dependent electrocatalytic $\text{CO}_2$ reduction at the boron-doped diamond– $\text{H}_2\text{O}$ interface

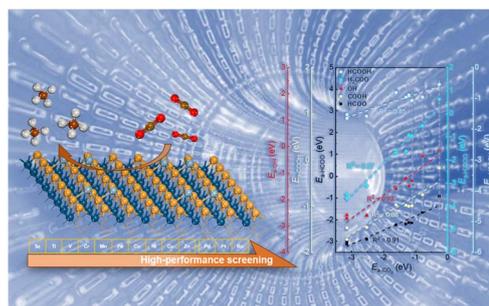
Kai Zhu, Shaohua Lu and Xiaojun Hu\*



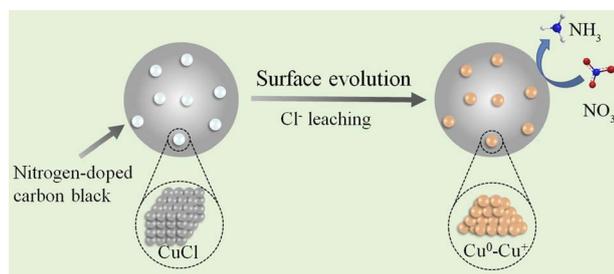
26788

### Rational design of $\text{MoS}_2$ -based dual-atom catalysts for $\text{CO}_2$ -to-methane conversion: thermodynamic and electronic insights into activity and selectivity

Yuxiang Jin, Zhengtong Ji, Xue Yao, Erhong Song\* and Yongfu Zhu\*



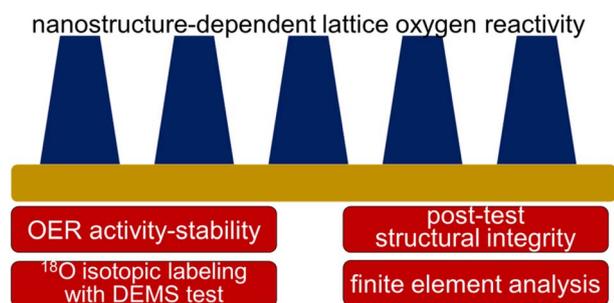
26797



### Anion leaching induced amorphous Cu/CuO<sub>x</sub> on N-doped carbon for efficient electrochemical nitrate reduction to ammonia

Maolin Zhang, Karthik Peramaiah, Moyu Yi and Hao Huang\*

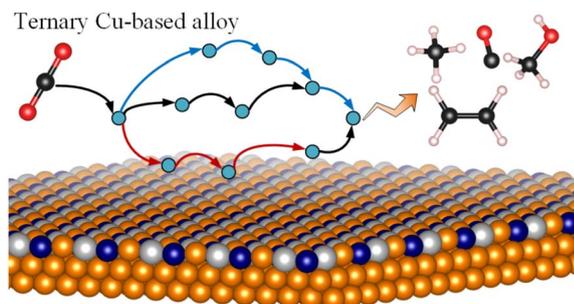
26804



### Nanostructure-dependent lattice oxygen reactivity and degradation of CoNi oxyhydroxide OER electrocatalysts: a mechanistic study

Liuyuan Ran, Kai Zhao, Xiaoyi Jiang and Ning Yan\*

26812



### A convenient method of ternary alloys design for CO<sub>2</sub>-to-C<sub>2</sub>H<sub>4</sub> electroreduction

Yiyang Xiao, Yingju Yang,\* Wei Liu and Jing Liu

