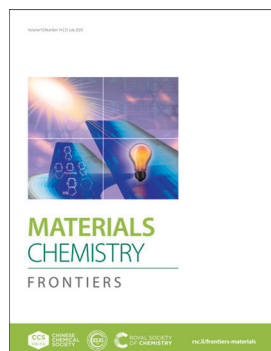


IN THIS ISSUE

ISSN 2052-1537 CODEN MCFAC5 9(14) 2113-2278 (2025)



Cover

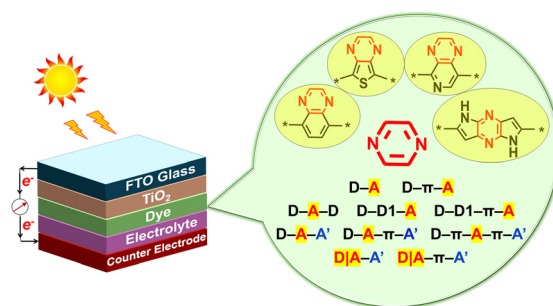
See Ravulakollu Srinivasa Rao, Igor F. Perepichka, Janah Shaya *et al.*, pp. 2120–2160. Image reproduced by permission of Janah Shaya from *Mater. Chem. Front.*, 2025, 9, 2120 and Jinan Chaya. The authors acknowledge the artistic work of Mrs Jinan Chaya in the preparation of the cover image.

REVIEWS

2120

Pyrazine-based sensitizers for dye-sensitized solar cells

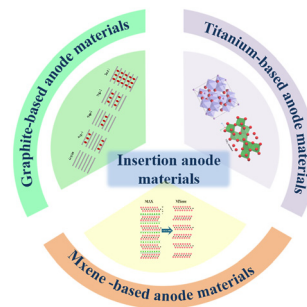
Ravulakollu Srinivasa Rao,* Jonnadula Venkata Suman Krishna, Upendar Reddy Gandra, Igor F. Perepichka* and Janah Shaya*



2161

Recent developments in insertion anode materials for Li-ion batteries

Junjin Zhang, Qitao Shi,* Chen Lu, Xiangqi Liu, Jiaqi Wang, Cheng Zhang, Zhipeng Wang, Mansoor Majid, Luwen Li, Alicja Bachmatiuk, Yanbin Shen,* Ruizhi Yang* and Mark H. Rummeli*



**GOLD
OPEN
ACCESS**

EES Batteries

**Exceptional research on
batteries and energy storage**

Part of the EES family

**Join
in** | Publish with us
rsc.li/EESBatteries

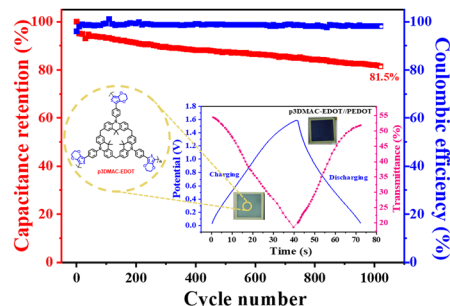


RESEARCH ARTICLES

2178

Novel twisted-structure polymer electrode material with intrinsic pores for high-performance electrochromic supercapacitor

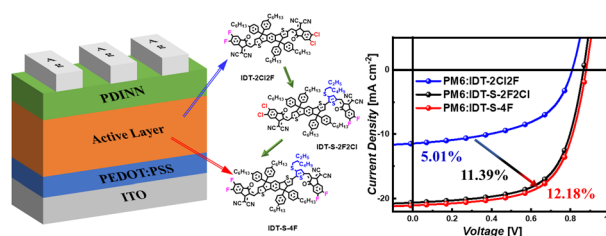
Yuchen Chang, Qidi Huang, Lei Yang, Mi Ouyang, Yujie Dong,* Weijun Li and Cheng Zhang*



2190

A π -bridge strategy for asymmetric small molecule acceptors in organic photovoltaics

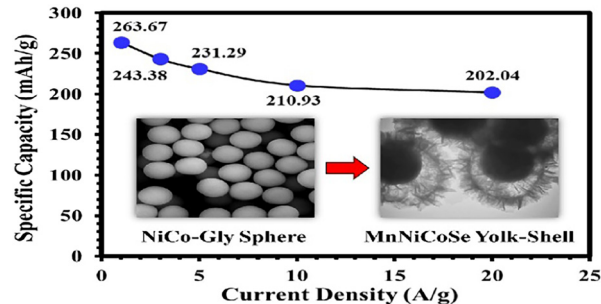
Kun Wang,* Cheng Zhang, Jingshun Gao, Weijie Qin, Jianan Hu, Yan Gao, Longxin Li, Lei Meng and Yongfang Li



2200

From NiCo-glycerate to tri-metallic selenide: engineering yolk-shell MnNiCoSe spheres with nanosheet arrays for hybrid supercapacitors

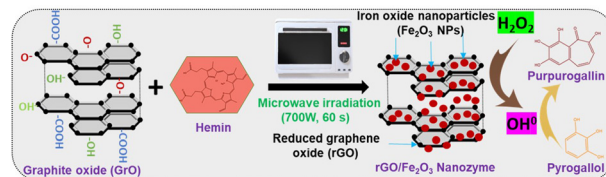
Majid Shirvani* and Davoud Nasr Esfahani*



2213

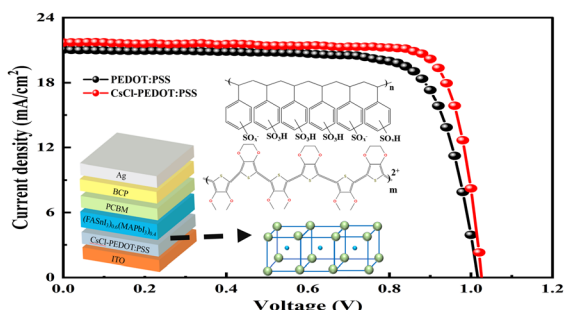
Microwave-assisted ultrafast synthesis of an iron-based biomolecule-templated nanozyme with augmented peroxidase-mimetic activity

Ankur Sood, Soonmo Choi, Suhyeon Han, Sumanta Sahoo* and Sung Soo Han*



RESEARCH ARTICLES

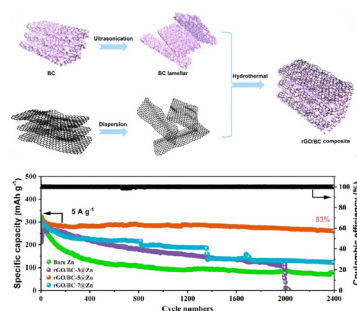
2224



Doping PEDOT:PSS with cesium chloride for enhancing the performance of perovskite solar cells

Wan Cheng, Cunyun Xu, Ying Li, Yanqing Yao, Yuanlin Yang, Xusheng Zhao, Ping Li* and Lijia Chen*

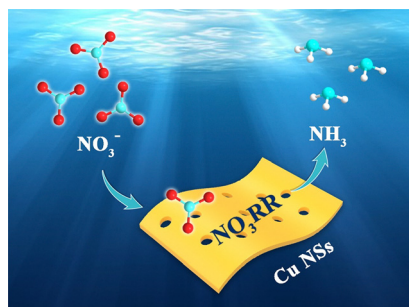
2232



Achieving dendrite-free anodes for aqueous zinc ion batteries using zinc anode coated with a rGO/biomass carbon composite for interfacial modification

Lin Zhu,* Hao Zhou, Dongbo Zhu, Wenjing Zheng, Jie Guan and Kan Zhang*

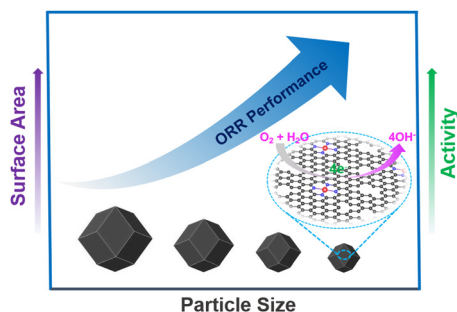
2243



Porous Cu nanosheets for efficient ammonia production via nitrate electroreduction

Eman-Shaiba Thani, Yi-Ting Yang, Qiu-Yu Du, Rou Yuan, Yong-Qi Zhang, Yu-Tong Yan, Xuan Ai,* Yu Chen and Shu-Ni Li*

2250



A rational synthetic approach to a highly active Fe–N–C catalyst for efficient electrochemical oxygen reduction

Sanjit Kumar Parida* and Hrudananda Jena



RESEARCH ARTICLES

2260

Highly conductive Cu-deposited basalt fiber fabric for high-performance electromagnetic interference shielding and Joule heating

Anand Parkash, Abudukeremu Kadier* and Peng-Cheng Ma*

