Journal of Materials Chemistry C

Materials for optical, magnetic and electronic devices

rsc.li/materials-c

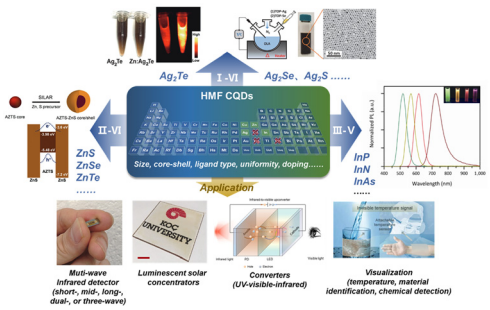
The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

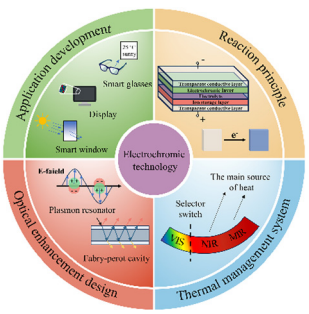
IN THIS ISSUE

ISSN 2050–7526 CODEN JMCCCX 12(39) 15797–16240 (2024)

Cover
See Jinhyeong Kwon, Hyeunseok Choi *et al.*, pp. 15895–15902. Image reproduced by permission of Jinhyeong Kwon from *J. Mater. Chem. C*, 2024, **12**, 15895. Artwork created by Bioartlab using Blender (www.blender.org).

REVIEWS





ROYAL SOCIETY OF CHEMISTRY

GOLD OPEN ACCESS

EES Solar

Exceptional research on solar energy and photovoltaics

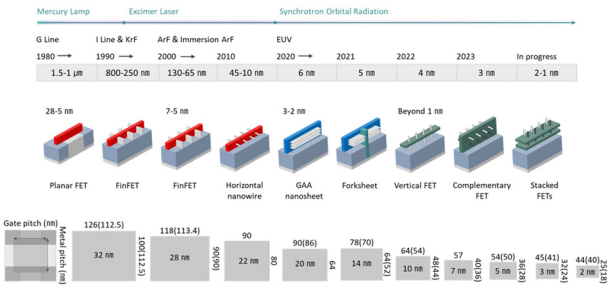
Part of the EES family

Join in | Publish with us

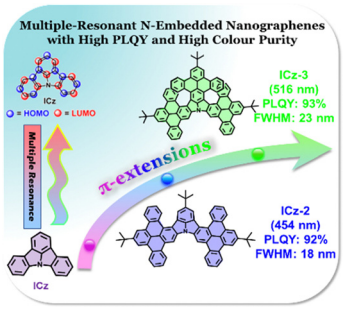
rsc.li/EESSolar

Registered charity number: 207890

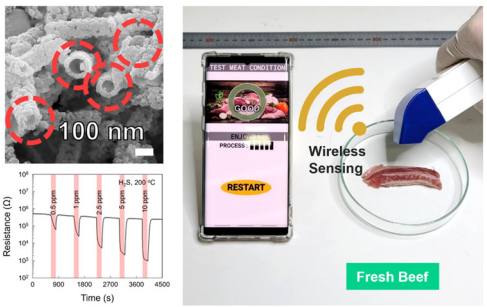
REVIEWS

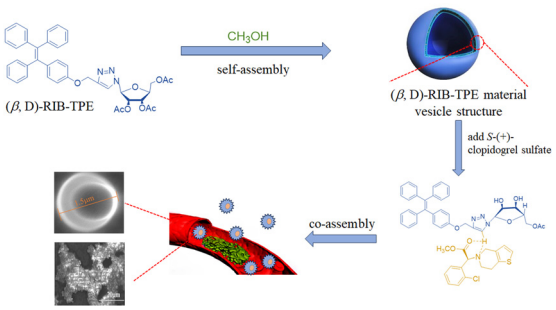


COMMUNICATION

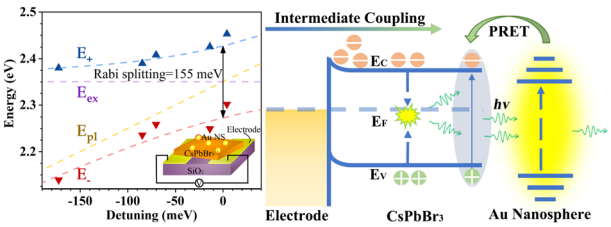


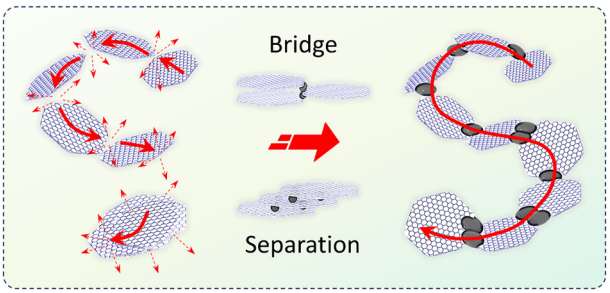
PAPERS

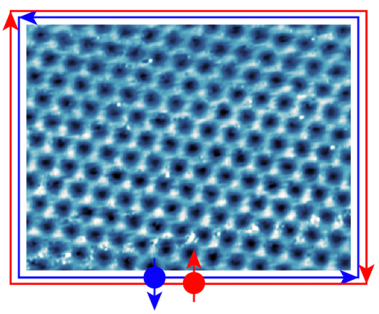


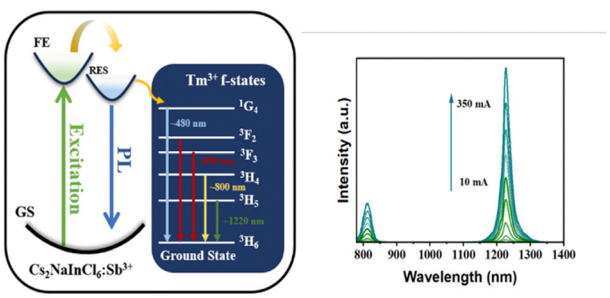


PAPERS



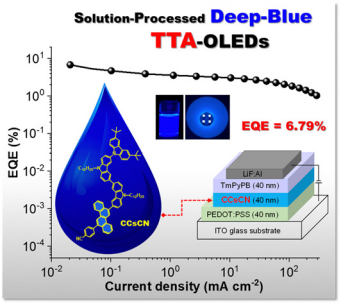


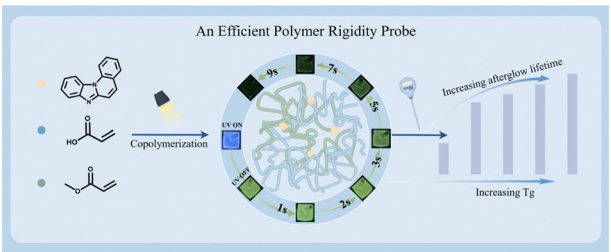


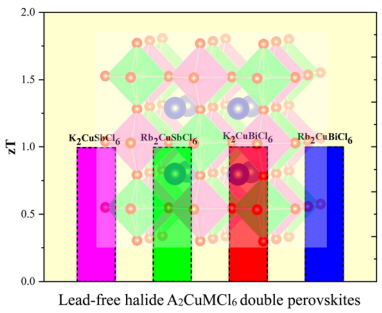


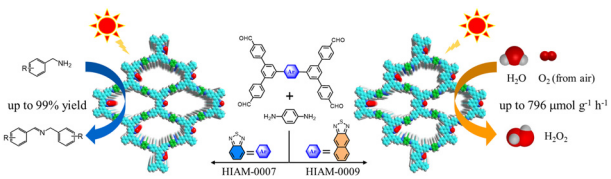
PAPERS

PAPERS



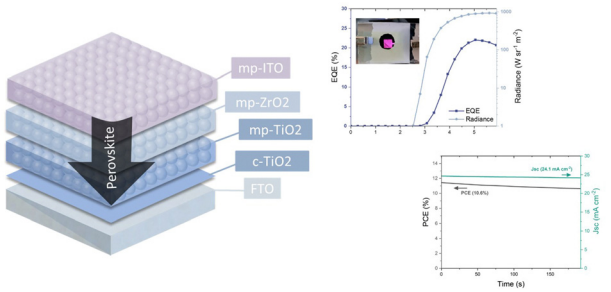






PAPERS

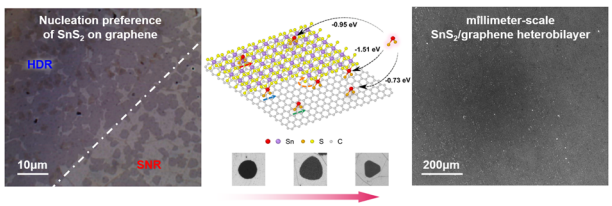
16067



Mesoscopic fully printable perovskite light-emitting diodes in the near infra-red region

Maayan Sohmer-Tal and Lioz Etgar*

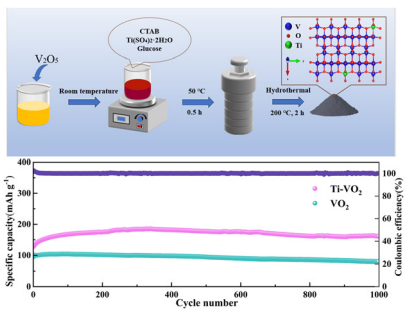
16076



Nucleation preference and lateral growth of monolayer tin disulfide on graphene

Gaoxiang Lin, Huimin Gao, Yimei Fang, Chenyi Huang, Junjie Huang, Jie Lu, Xinrui Cao, Yufeng Zhang,* Xueao Zhang, Shunqing Wu, Weiwei Cai* and Yinghui Zhou*

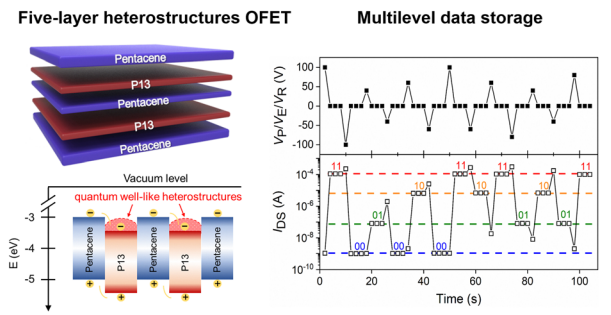
16084



Enhancing the stability of zinc-ion batteries with titanium-doped VO_2 cathode materials

Shuling Liu,* Wenhao Zhang, Jiale Guo, Zixiang Zhou, Yue Wang and Yulu Yang

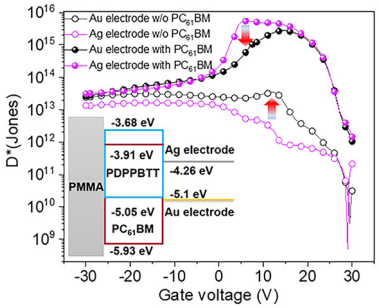
16092

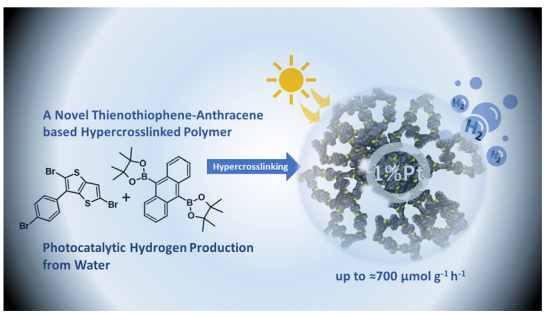


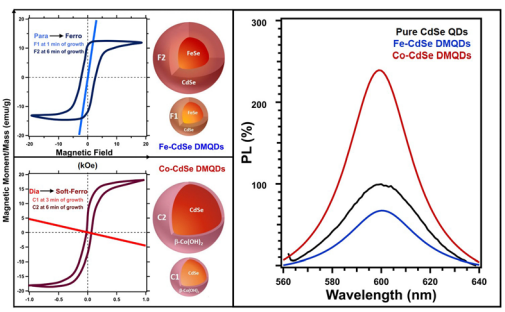
High-performance multilevel nonvolatile organic field-effect transistor memory based on multilayer organic semiconductor heterostructures

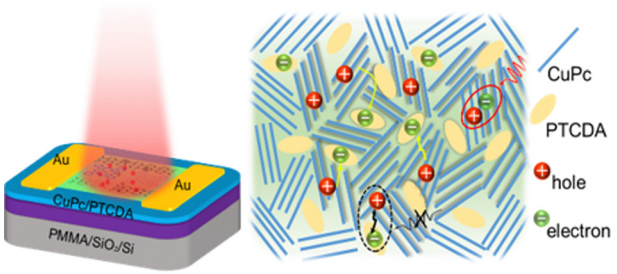
Yangzhou Qian, Jiayu Li, Wen Li,* Ziyi Song, Hao Yu, Ziyi Feng, Wei Shi,* Wei Huang and Mingdong Yi*

PAPERS



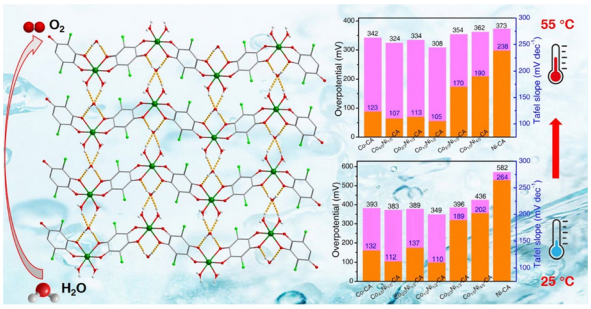






PAPERS

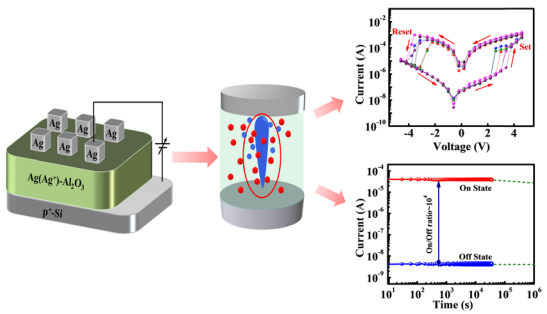
16138



CoNi-bimetallic coordination polymers as catalyst for boosting oxygen evolution reaction activity

Jia Du,* Xueguo Liu, Meng Guo, Bingke Li, Hongyong Ye and Lixuan Chen

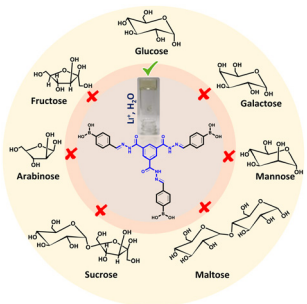
16145



Fabrication of a high performance memristor device by metallization of Ag^{+} inside a solution processed Li_5AlO_4 thin film

Subarna Pramanik, Rajarshi Chakraborty, Sobhan Hazra, Utkarsh Pandey and Bhola Nath Pal*

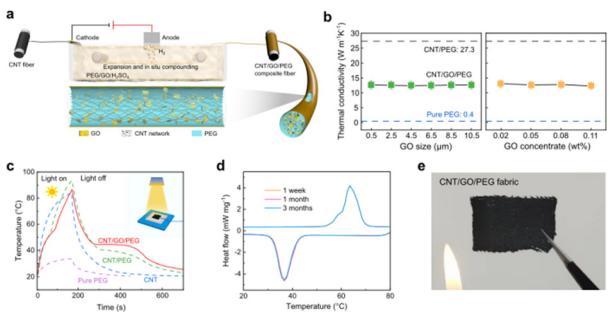
16156



D-(+)-Glucose triggered selective hydrometallogelation in a C_3-symmetric gelator

Moupia Mukherjee, Yeeshu Kumar, Abul Kalam and Mrigendra Dubey*

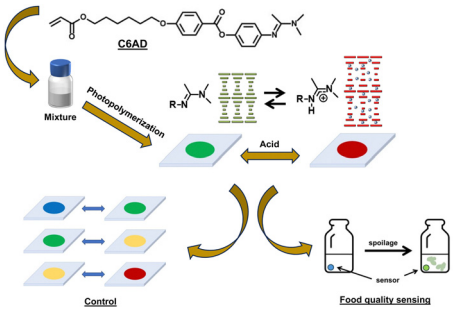
16163

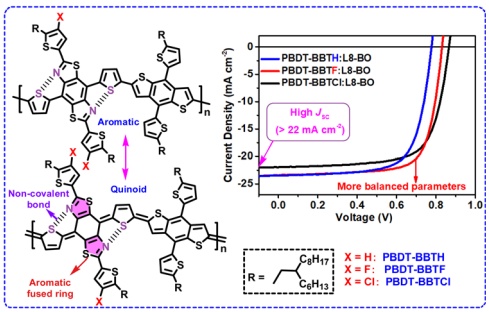


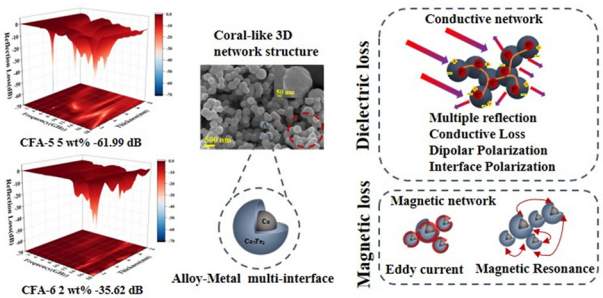
Carbon nanotube graphene multilevel network based phase change fibers and their energy storage properties

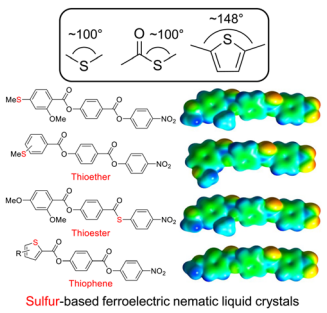
Xiaoyu Yang, Jingna Zhao,* Tanqian Liao, Wenya Li, Yongyi Zhang, Chengyong Xu, Xiaohua Zhang* and Qingwen Li

PAPERS









PAPERS