Journal of Materials Chemistry C

Materials for optical, magnetic and electronic devices

rsc.li/materials-c

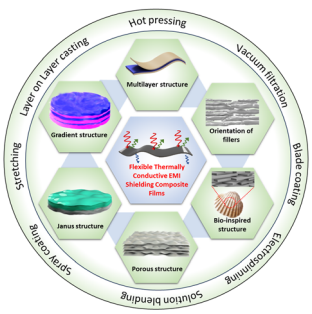
The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 2050–7526 CODEN JMCCCX 13(18) 8875–9394 (2025)

Cover
See Kang Yan, Tao Tan, Dawei Wu *et al.*, pp. 8958–8968. Image reproduced by permission of Kang Yan from *J. Mater. Chem. C*, 2025, **13**, 8958.

REVIEWS



ROYAL SOCIETY OF CHEMISTRY

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

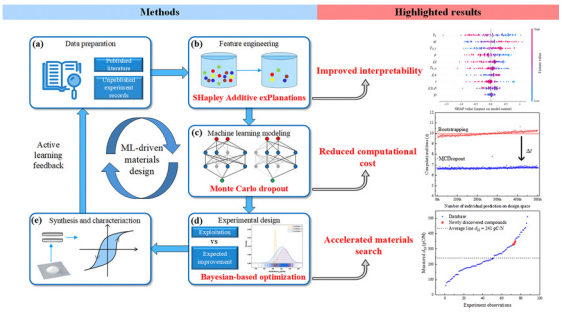
Registered charity number: 207890

PAPERS

8958

Interpretable and uncertainty-informed machine learning to accelerate the design and discovery of lead-free piezoceramics with large piezoelectric constant

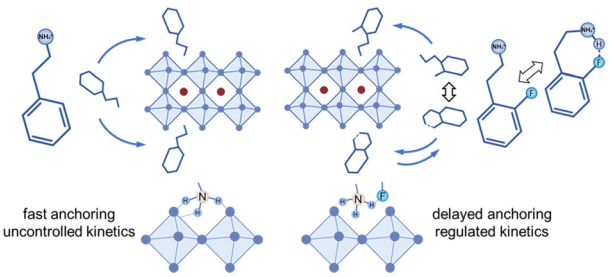
Heng Hu, Bin Wang, Didi Zhang, Kang Yan,* Tao Tan* and Dawei Wu*



8969

Intramolecular hydrogen bonds assist in controlling the quantum well distribution in quasi-2D perovskites for efficient pure-blue perovskite light-emitting diodes

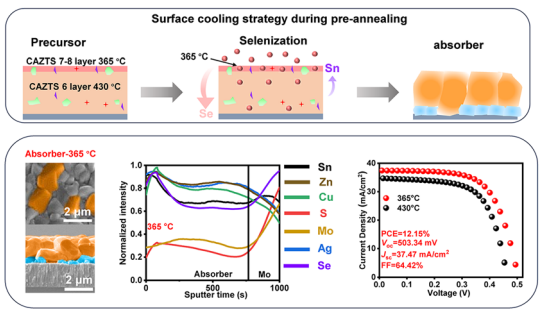
Zixun Tang, Yuhang Guo, Zexu Li, Yingying Fu, Jiang Wu and Zhiyuan Xie*



8978

Surface cooling for optimized elemental distribution and improved kesterite solar cells

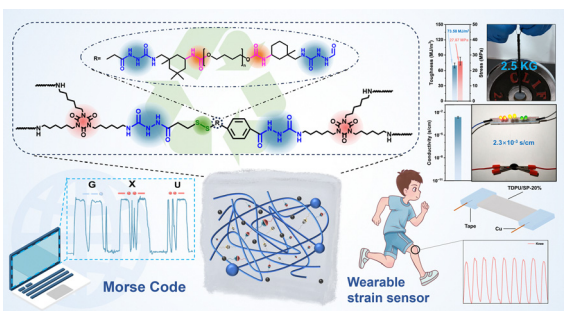
Shanheng Zhao, Lijie Zhao, Shunxiang Yu, Mengyang Wang, Mingtao Han, Lingling Wang, Qianqian Wang, Junjie Fu, Chaoliang Zhao,* Sixin Wu* and Zhi Zheng*



8990

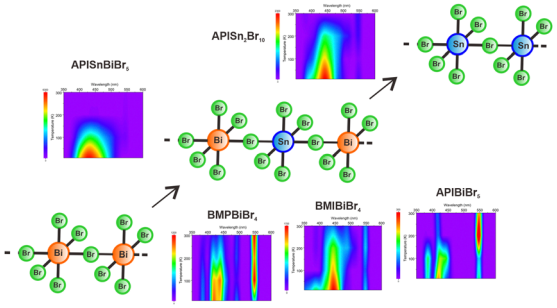
High-strength, self-healing conductive polyurethane with covalent crosslinking and reversible dynamic bonds for multifunctional strain sensors

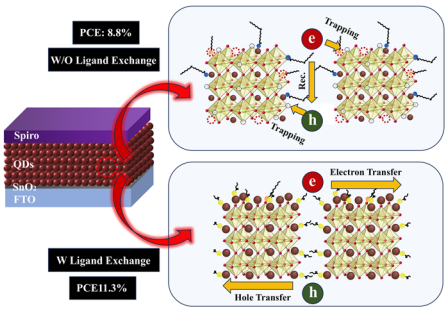
Zhecheng Hu, Changsheng Wang, Xiwei Xu, Ziqian Wang, Yuxuan Xie, Zequan Li* and Wei Gao

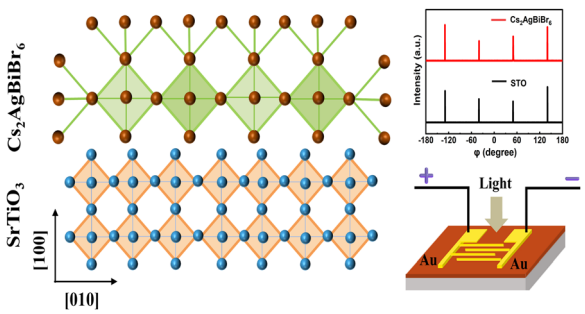


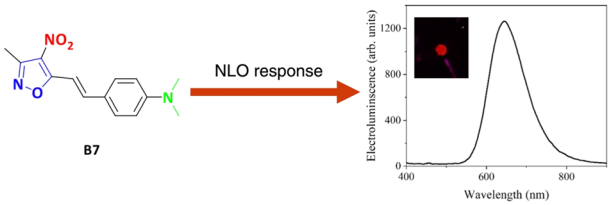
PAPERS

PAPERS



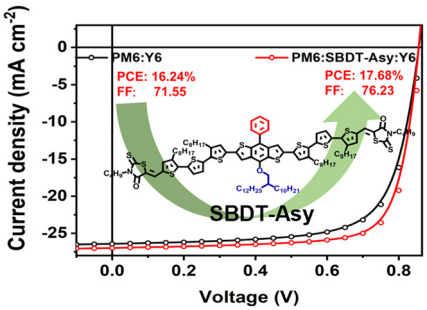


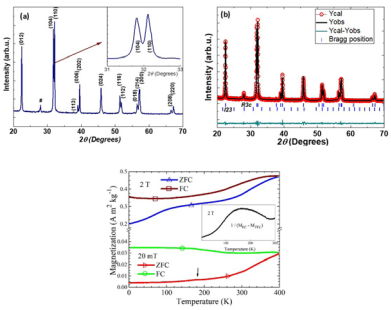


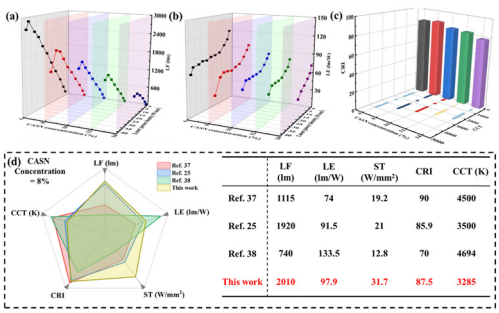


PAPERS

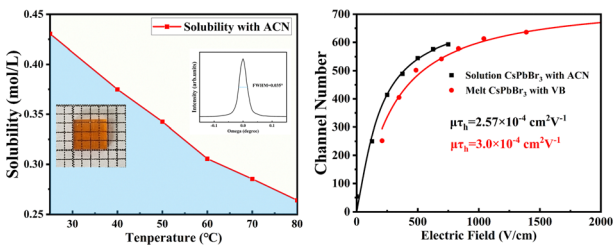
PAPERS





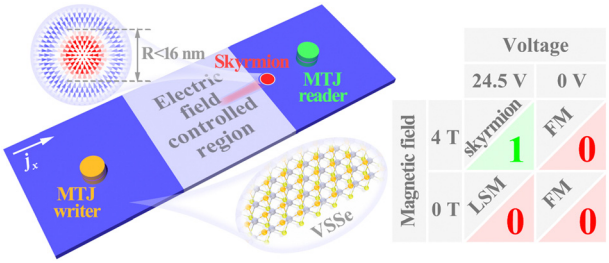


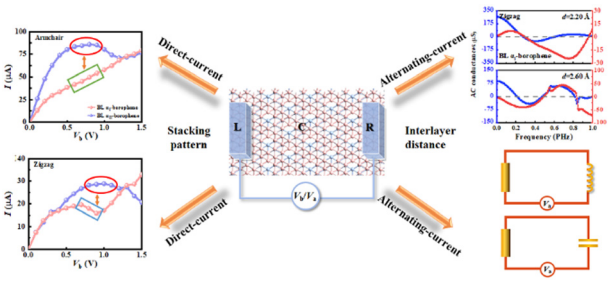
	LF (lm)	LE (lm/W)	ST (W/mm²)	CRI	CCT (K)
Ref. 37	1115	74	19.2	90	4500
Ref. 25	1920	91.5	21	85.9	3500
Ref. 38	740	133.5	12.8	70	4694
This work	2010	97.9	31.7	87.5	3285

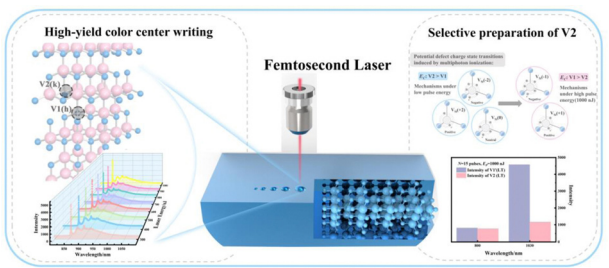


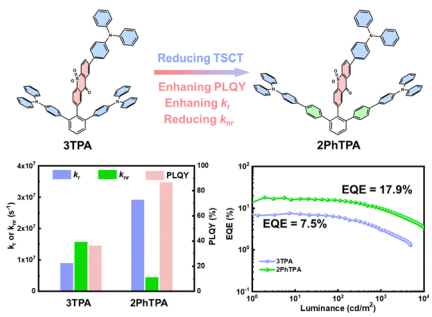
PAPERS

PAPERS



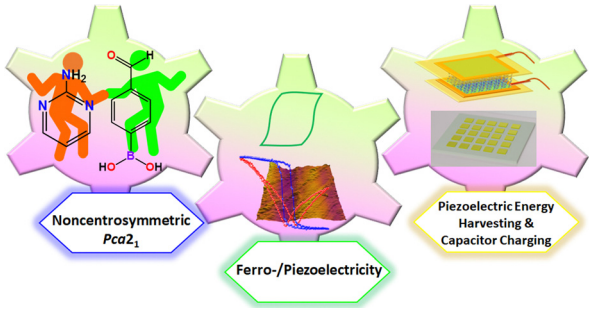


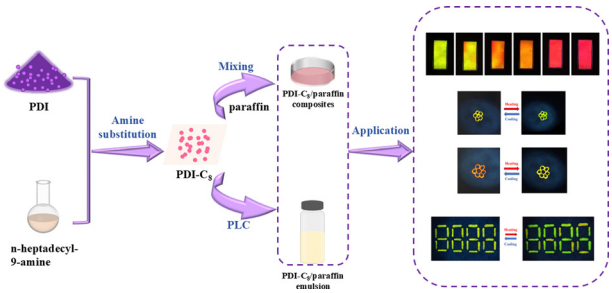


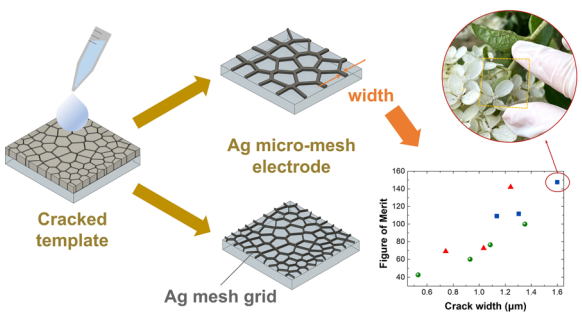


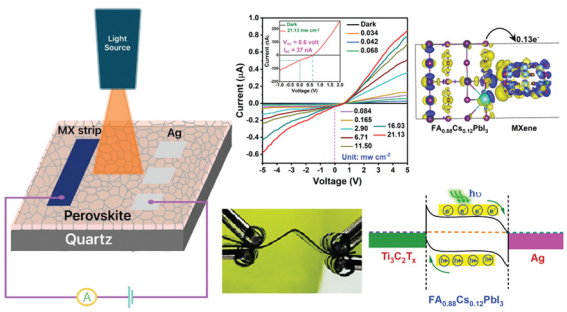
PAPERS

PAPERS









PAPERS

PAPERS