

CrystEngComm

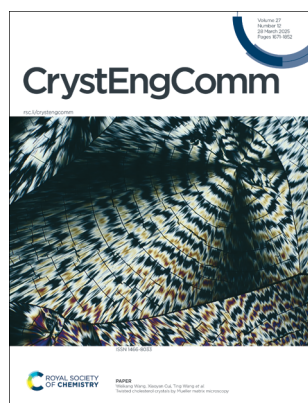
A journal at the forefront of the design and understanding of solid-state and crystalline materials

rsc.li/crystengcomm

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 1466-8033 CODEN CRECF4 27(12) 1671-1852 (2025)



Cover

See Weikang Wang, Xiaoyan Cui, Ting Wang *et al.*, pp. 1687–1693.

Image reproduced by permission of Xiaoyan Cui from *CrystEngComm*, 2025, 27, 1687.



Inside cover

See Björn H. Greijer and Vadim G. Kessler, pp. 1679–1686.

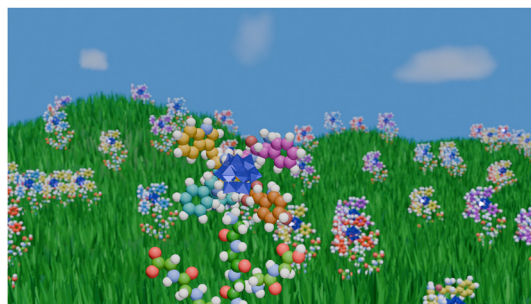
Image reproduced by permission of Björn H. Greijer from *CrystEngComm*, 2025, 27, 1679.

HIGHLIGHT

1679

Unveiling POM-peptide complexes: molecular insights into metal oxide nanoparticle-protein interactions

Björn H. Greijer and Vadim G. Kessler*

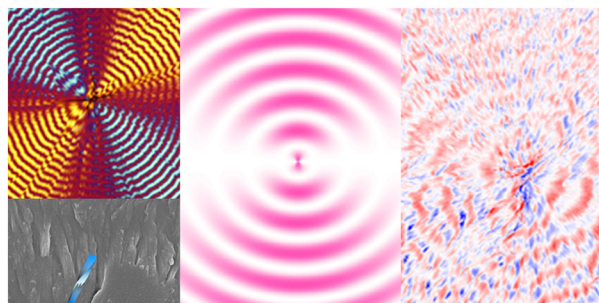


PAPER

1687

Twisted cholesterol crystals by Mueller matrix microscopy

Yue Tian, Mengyuan Hao, Yong Tang, Chen Li, Demei Kong, Junru Zhu, Weikang Wang,* Xiaoyan Cui* and Ting Wang*





Advance your career in science

with professional recognition that showcases your **experience, expertise and dedication**

Stand out from the crowd

Prove your commitment to attaining excellence in your field

Gain the recognition you deserve

Achieve a professional qualification that inspires confidence and trust

Unlock your career potential

Apply for our professional registers (RSci, RSciTech) or chartered status (CChem, CSci, CEnv)

Apply now

rsc.li/professional-development

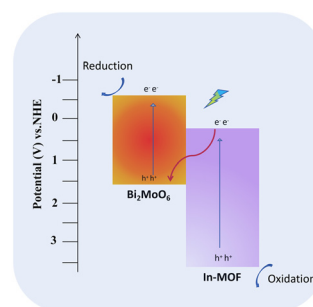


COMMUNICATIONS

1694

Synergistic advantages of In-MOF/Bi₂MoO₆ composites in photocatalytic CO₂ reduction: enhanced light absorption, charge separation and reactivity

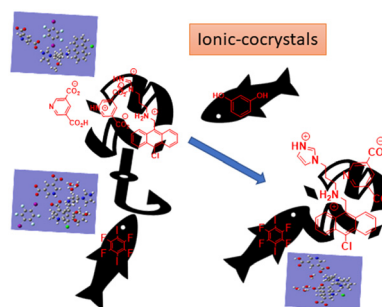
Xiao Zhang, Xiong He, Meng-Yao Ye, Bei-Bei Yuan, Song-Fang Zhao and Kui Li*



1701

Facts and reality of multi-component organic ionic-cocrystals of di-topic acid-base conjugates

Abhay Pratap Singh and Jubaraj B. Baruah*

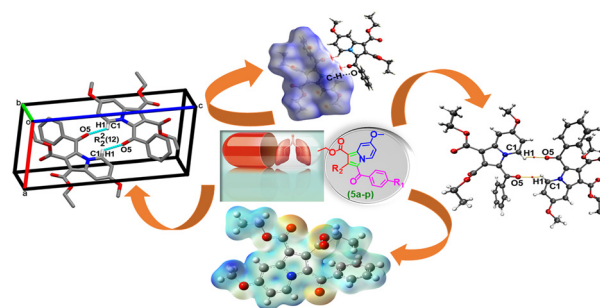


PAPERS

1707

Structural analysis, *in vitro* anti-tubercular activities, and *in silico* ADMET evaluation of ethyl 7-methoxy-3-(4-substituted benzoyl)indolizine-1-carboxylates

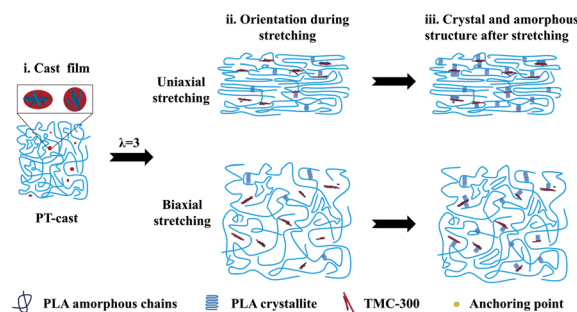
Rahul D. Nagdeve, Jyoti Swarup Thakur, Sandeep Chandrashekarappa, Pradip Kumar Mondal, Pran Kishore Deb, Maurizio Polentarutti, Keshab M. Bairagi, Gourav Rakshit, Osama I. Alwassil, Melendhran Pillay, Katharigatta N. Venugopala* and Susanta K. Nayak*



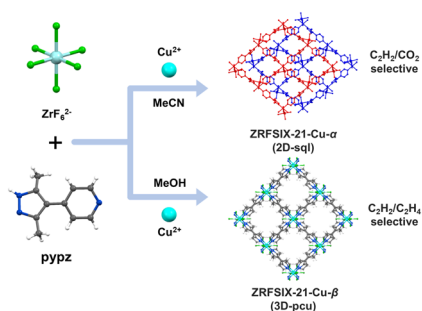
1722

Structural evolution and mechanism of PLA/TMC-300 films under uniaxial and biaxial stretching

Jia Tan, Lingna Cui,* Zhixian Qin, Yulin He, Shijuan Ding, Jingbo Li and Yuejun Liu*



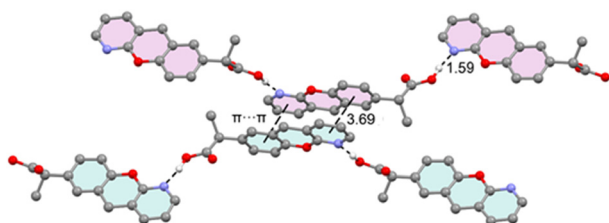
1736



Fine-tuning of gas uptake and selectivity in a hexafluorozirconate pillared coordination network that features two porous phases

Nathan C. Harvey-Reid, Hayley S. Scott, Komal M. Patil, Naveen Kumar, Colm Healy, Michael J. Zaworotko, Soumya Mukherjee* and Paul E. Kruger*

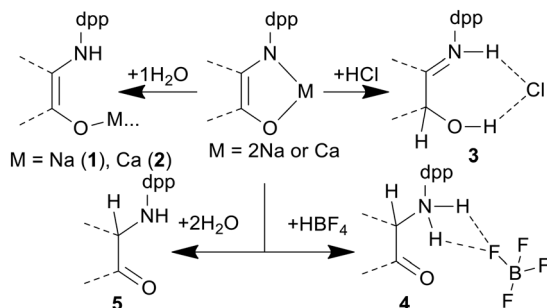
1742



Interplay of hydrogen bonding and π -stacking interactions in the solid-state architecture of pranoprofen: insights from X-ray crystallography and computational analyses

Rafel Prohens,* Rafael Barbas, Guadalupe Abrego and Antonio Frontera*

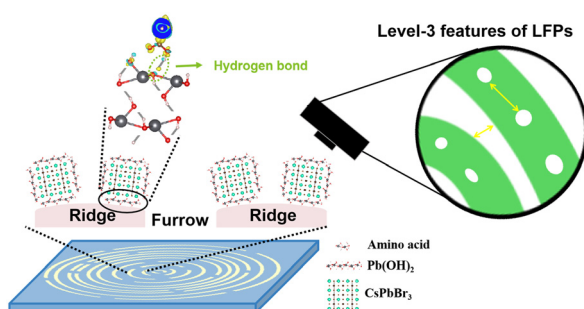
1749



Partial and complete hydrolysis of metal complexes based on monoiminoacenaphthene-1-ones

Anton N. Lukoyanov,* Yulia V. Zvereva, Anton V. Cherkasov, Grigory Yu. Zhigulin, Nikita P. Kharitonov and Sergey Yu. Ketkov

1763



Visualization of level-3 latent fingerprints by surfactant-free CsPbBr_3 MCs with Pb(OH)_2 as a passivation layer and an anchored bridge

Guoxin Zhuang, Yujing Li, Xiaodi Chu, Xianghui Lai, Zhiyu Liang,* Xiaohui Lin,* Yonglin Wen, Guosong Lin, Zhechong Zheng and Chonghui Li*

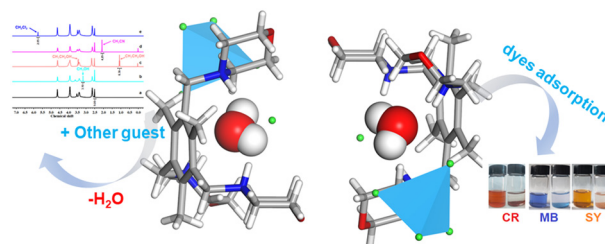


PAPERS

1773

Metallo-hydrogen bonded organic frameworks with nitrogen tridentate ligands: exploring inclusion and dye adsorption properties

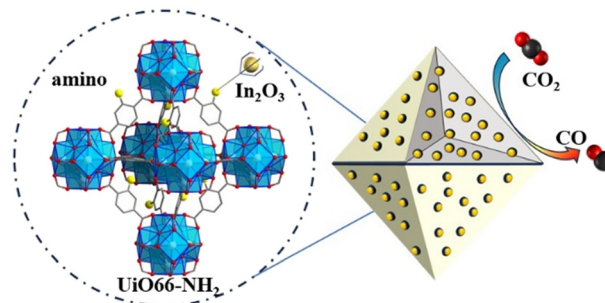
Haitao Li,* Guangshan Qin, Zhenwei Guo and Fang Guo*



1781

UiO66-NH₂@In₂O₃ heterostructures for improved photocatalytic CO₂ reduction

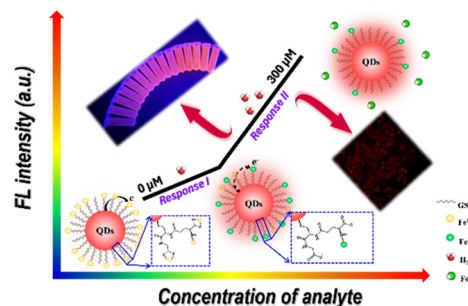
Bolin Ma, Guanghui Chen, Lingling Zhou, Chengyang Ni, Xinyu Sun, Lei Zhang, Xinguo Xi, Lanqin Tang* and Yong Zhou*



1789

Manipulating the surface structure of quantum dots based on dual response modes triggered by iron ions for the visualization of hydrogen sulfide with a wide detection range

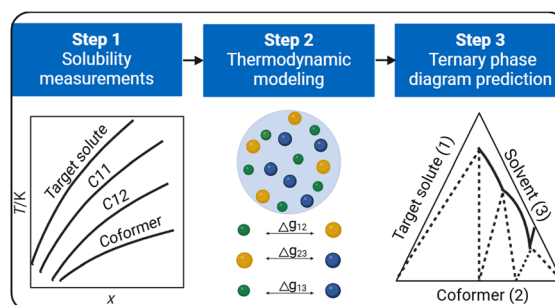
Cong Liu, Rongxiang Feng, Shidi Li, Fengyao Wu, Xiaofei Qi, Xiaohua Huang, Tianyu Bai* and Shanghua Xing



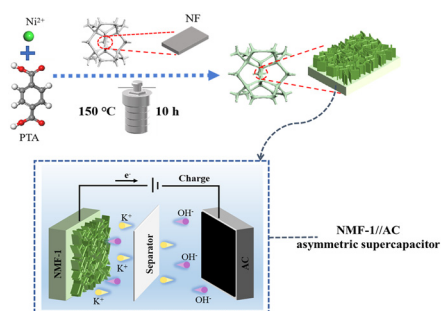
1796

Predicting the solid–liquid phase diagram of a ternary system with cocrystal formation

Sahar Nasrallah, Ahmad Alhadid* and Mirjana Minceva*



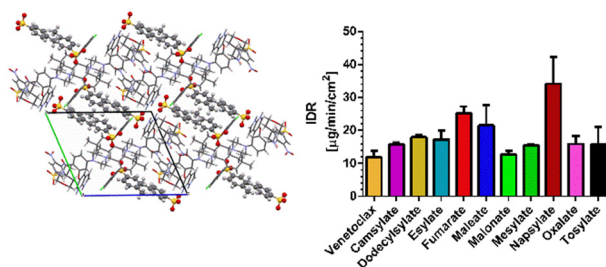
1806



One-step solvothermal *in situ* synthesis of NiMOF nanosheets for high-performance supercapacitor applications

Xiaojing Wang, Fenglian Lu, Zongjin Wu, Kuantao Zhang, Song Li, Rui Tu, Sha Luo, Hongyan Pan,* Keliang Wang* and Qian Lin*

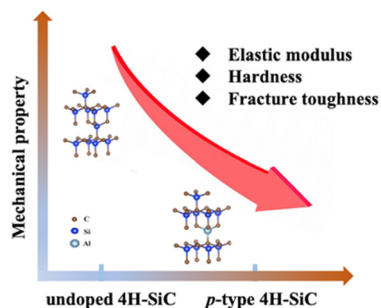
1816



Pharmaceutical salts of venetoclax with dicarboxylic and sulfonic acids: solid-state characterization and dissolution performance

Tereza Havlůjová, Erika Hriňová, Eliška Zmeškalová, Monika Kučeráková, Luděk Ridvan and Miroslav Šoóš*

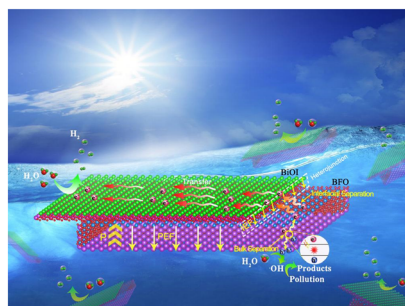
1830



The role of aluminum doping in shaping the mechanical properties of p-type 4H-SiC

Yanwei Yang, Zhouyu Tong, Xiaodong Pi,* Deren Yang and Yuanchao Huang*

1837



Synergistic effect of built-in and polarized electric fields in BiFeO₃/BiOI heterojunctions for efficient photocatalysis

Jiangwen Bai, Jiamin Li, Jinmeng Xiang and Chongfeng Guo*

