

CrystEngComm

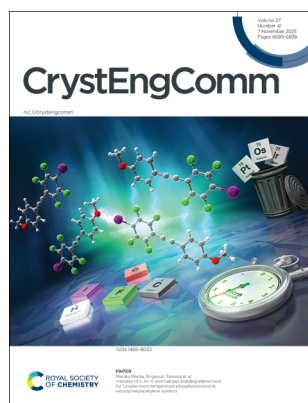
A journal at the forefront of the design and understanding of solid-state and crystalline materials

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(41) 6689-6838 (2025)



Cover

See Masato Morita,
Shigeyuki Yamada *et al.*,
pp. 6735-6741.
Image reproduced by
permission of Shigeyuki Yamada
from *CrystEngComm*,
2025, 27, 6735.

EDITORIAL

6696

MOFs in Asia

Hoi Ri Moon,* Sarah S. Park and Jihye Park

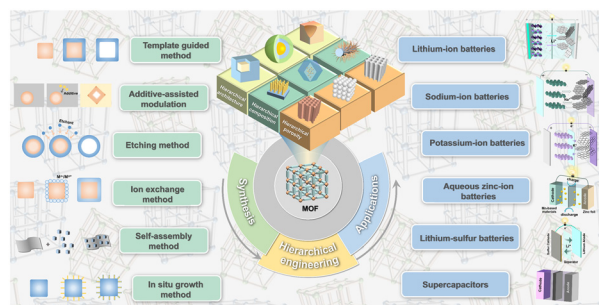


HIGHLIGHTS

6697

Hierarchical MOFs and derivatives toward advanced electrode materials for electrochemical energy storage

Zimeng Shao, Kai Shi, Jiahao Wei, Lina Zhou,*
Dandan Han* and Junbo Gong



RSC Advances

At the heart of open
access for the global
chemistry community

Editors-in-Chief

Russell Cox University of Bristol & Leibniz Universität, Germany

Karen Faulds University of Strathclyde, UK



Breadth We publish work in all areas of chemistry and reach a global readership



Affordability Low APCs, discounts and waivers make publishing open access achievable and sustainable



Quality Research to advance the chemical sciences undergoes rigorous peer review for a trusted, society-run journal



Community Led by active researchers, we publish quality work from scientists at every career stage, and all countries

Join | Submit now
in | rsc.li/rsc-advances

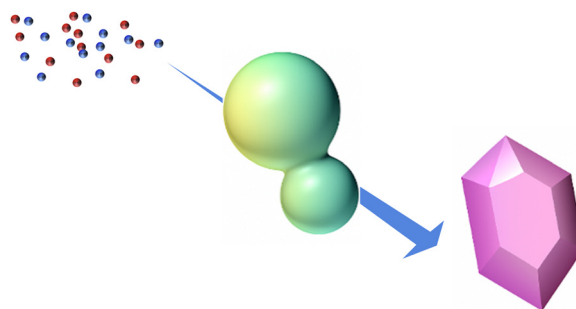


HIGHLIGHTS

6719

Liquid–liquid phase separation into reactant-rich precursors during mineral crystallization

David Carriere,* Jade Raimbault, Mark A. Levenstein and Corinne Chevallard

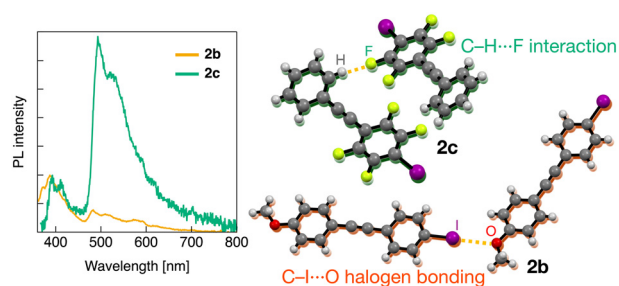


PAPERS

6735

Interplay of C–H...F and halogen bonding interactions for tunable room-temperature phosphorescence in iododiphenylacetylene systems

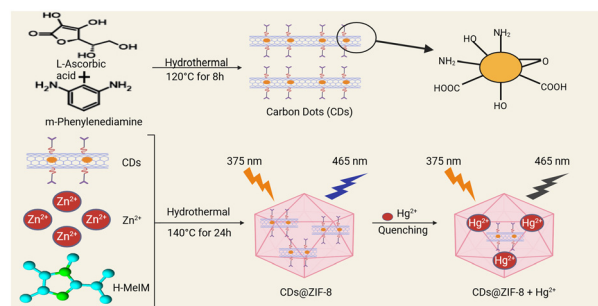
Masato Morita,* Motohiro Yasui, Tsutomu Konno and Shigeyuki Yamada*



6742

A fluorescent nanohybrid sensor based on carbon dots encapsulated in a metal organic framework for highly selective and sensitive detection of mercury

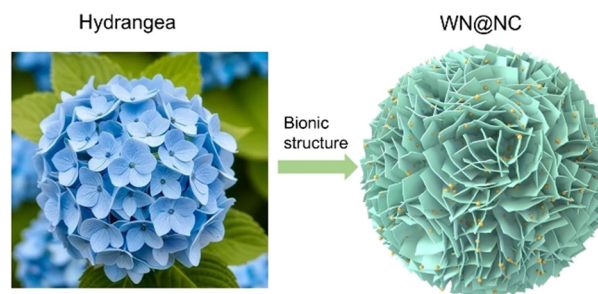
Imtiyaz Ahmad Lone and Jigneshkumar V. Rohit*



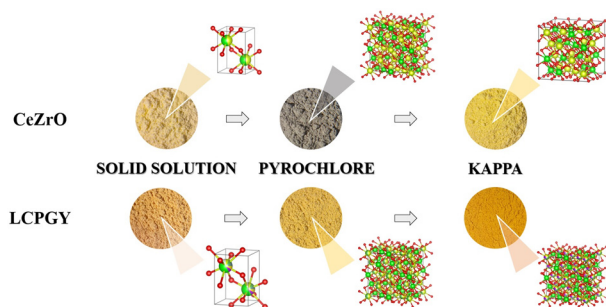
6753

3D bionic flower-like structure water-storage microcapsule evaporator for efficient solar interfacial evaporation

Wen Wang, Jixin Yao, Jintao Zhao, Xiuying Wang, Haili Zhang, Song Ye,* Feng Du* and Guang Li*



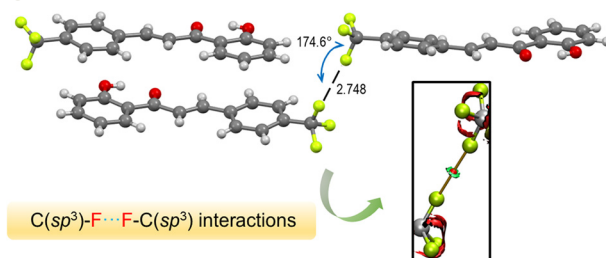
6762



From solid solution towards pyrochlore and kappa phases: introducing configurational entropy in ordered ceria–zirconia systems

Stjepan Šarić, Dalibor Tatar, Tina Skalar, Marjan Marinšek, Cora Bartus Pravda, Ákos Kukovecz, Imre Szent, Matjaž Finšgar, Igor Djerdj and Jelena Kojčinović*

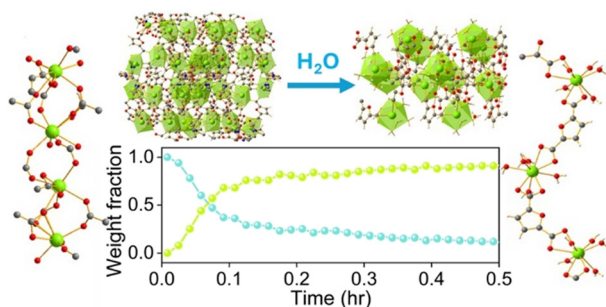
6781



Deciphering weak hydrogen bonds, halogen bonds, and π -stacking interactions in two fluorinated 2'-hydroxychalcones: insights from experimental and theoretical analysis

María Lucrecia Arias Cassará, Hiram Pérez,* Lilian E. Davies, Gustavo A. Echeverría, Oscar E. Piro and Diego M. Gil*

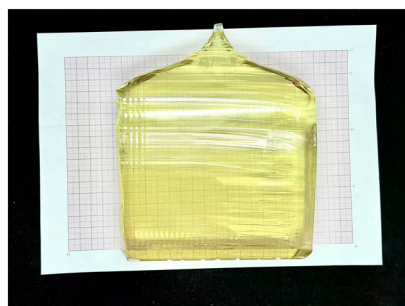
6797



Solvent induced structural transformation of a cerium(III) 2,5-furandicarboxylate metal–organic framework

Satarupa Das, Jeremiah P. Tidey, Jie Liu, Katie S. Pickering, James C. Coe, Marc Walker and Richard I. Walton*

6805



Growth and characterization of 6 inch $Ca_3Ta(Ga_{0.25}Al_{0.75})_3Si_2O_{14}$ for high-temperature piezoelectric applications

Kainan Xiong,* Xiaoniu Tu, Sheng Wang, Yanqing Zheng,* Jianjun Chen* and Erwei Shi

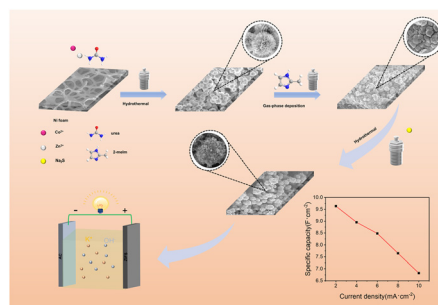


PAPERS

6811

Sulfidation of ZIF-derived templates for preparing $(\text{Zn}_{0.2}\text{Co}_{0.8})(\text{OH})_2/\text{Zn}_x\text{Co}_{1-x}\text{S}$ heterostructures toward high-performance supercapacitors

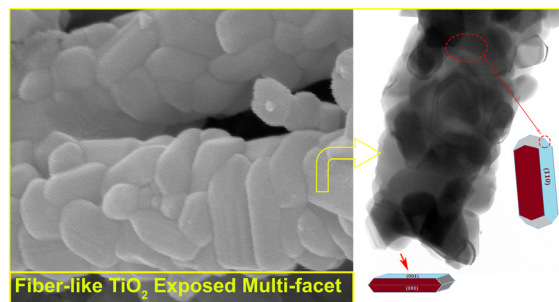
Ping Yang,* Siying Wu, Ziqing Wang, Yuxi Qian and Yao Jiang



6825

How to prepare exposed facet fiber-like hierarchical arrays: a facile scalable aqueous route to thermodynamically stable biphasic $\text{TiO}_2(\text{A})/\text{TiO}_2(\text{R})$ exposed multiple facets

Zahed Shami* and Bafrin Khanyaghma



CORRECTION

6836

Correction: Efficient solvent-free mechanochemical synthesis of CALF-20 for carbon dioxide capture

Natchaya Phongsuk, Chalarat Chaemchamrat, Taya Ko Saothayanun, Nopphon Weeranoppanant and Sareeya Bureekaew*

