

# CrystEngComm

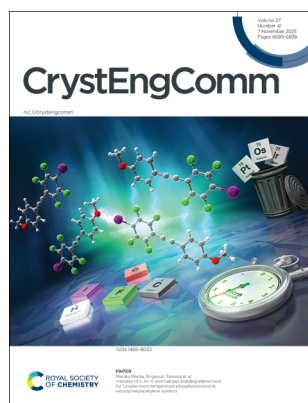
A journal at the forefront of the design and understanding of solid-state and crystalline materials

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### Cover

See Masato Morita,  
Shigeyuki Yamada *et al.*,  
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2025, 27, 6735.

## EDITORIAL

6696

### MOFs in Asia

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

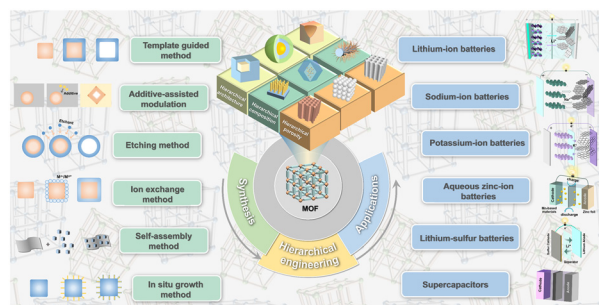


## HIGHLIGHTS

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### 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



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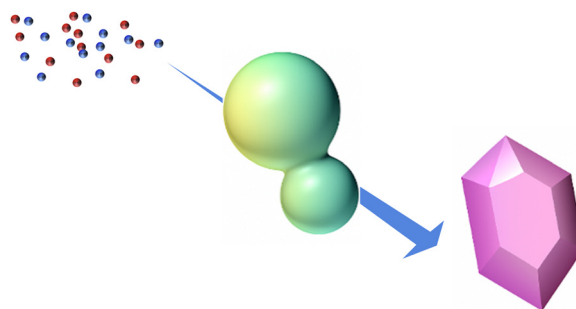


## HIGHLIGHTS

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

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

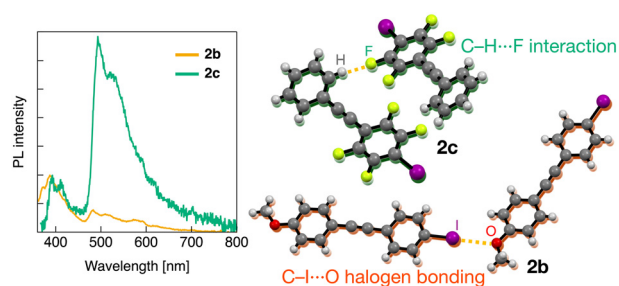


## PAPERS

6735

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

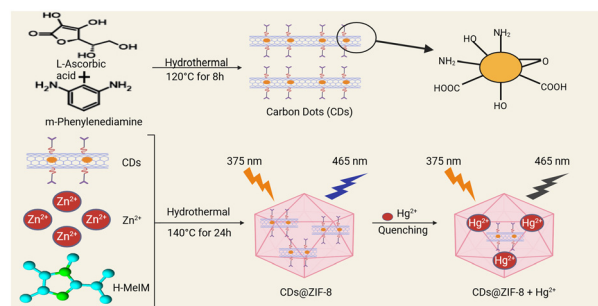
Masato Morita,\* Motohiro Yasui, Tsutomu Konno and Shigeyuki Yamada\*



6742

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

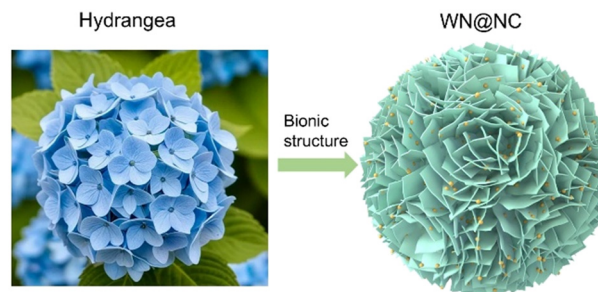
Imtiyaz Ahmad Lone and Jigneshkumar V. Rohit\*



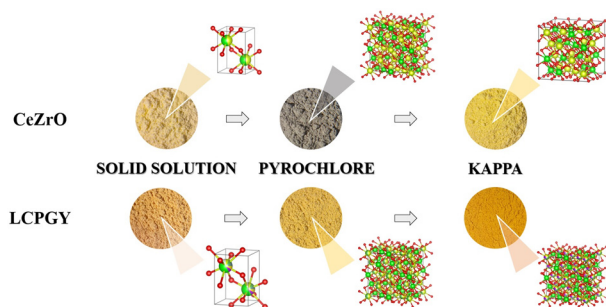
6753

**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\*



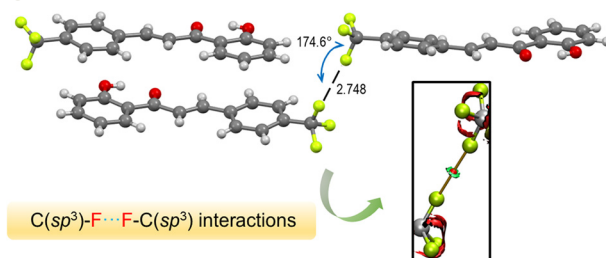
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### From solid solution towards pyrochlore and kappa phases: introducing configurational entropy in ordered ceria–zirconia systems

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

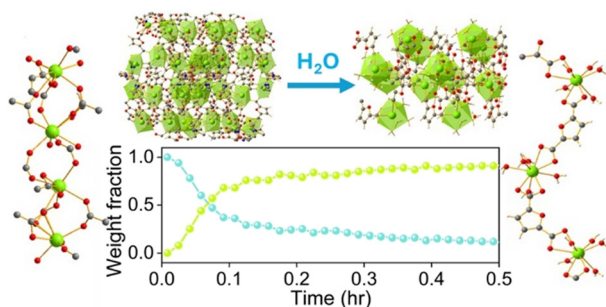
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### Deciphering weak hydrogen bonds, halogen bonds, and $\pi$ -stacking interactions in two fluorinated 2'-hydroxychalcones: insights from experimental and theoretical analysis

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

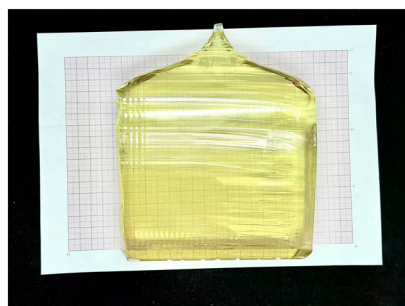
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### Solvent induced structural transformation of a cerium(III) 2,5-furandicarboxylate metal–organic framework

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

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### Growth and characterization of 6 inch $\text{Ca}_3\text{Ta}(\text{Ga}_{0.25}\text{Al}_{0.75})_3\text{Si}_2\text{O}_{14}$ for high-temperature piezoelectric applications

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

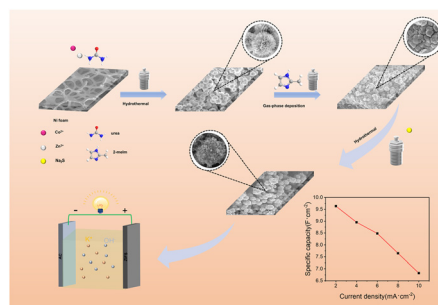


## PAPERS

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### 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

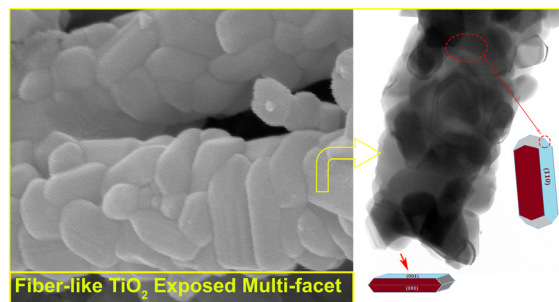
Ping Yang,\* Siying Wu, Ziqing Wang, Yuxi Qian and Yao Jiang



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### 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

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### 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\*

