

# CrystEngComm

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

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### Cover

See Shouvik Chattopadhyay *et al.*, pp. 5104–5125.

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## HIGHLIGHTS

5040

### Wet chemistry nanoarchitectonics for nanocrystal-based films

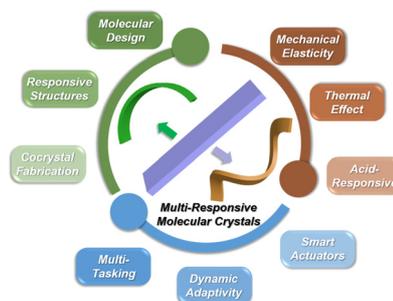
Gauthier Rydzek\* and Katsuhiko Ariga\*



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### Versatile responses beyond photomechanical behavior based on dynamic molecular crystals

Fei Tong,\* Ya-Bing Sun, Lin Chen and Hui-Yao Lin



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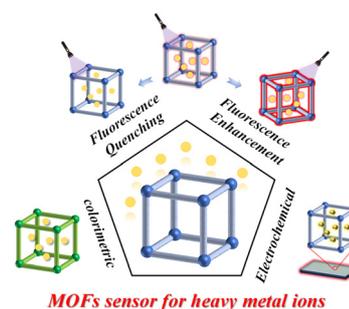


## HIGHLIGHTS

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**Metal–organic framework-based sensors for the detection of heavy metal ions in water**

Guo-Zhu Liu, Zheng-Dong Liang, Zhu-Jun Long, Jie-Wei Liu, Huan-Ying Li\* and Zong-Wen Mo\*

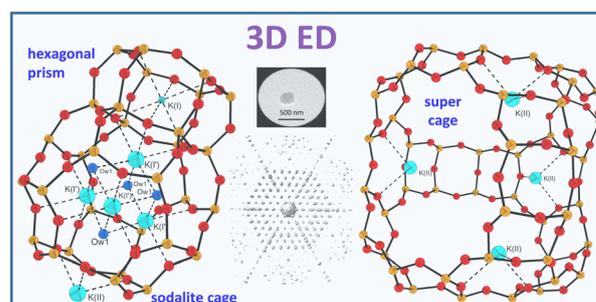


## COMMUNICATIONS

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**3D ED for the localization of cations in potassium exchanged and partially dehydrated nano Y zeolite**

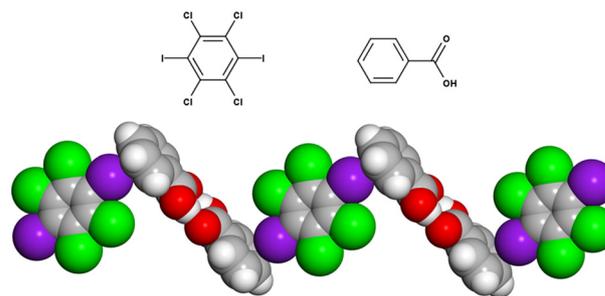
Yacine Malik Chaib Draa, Taylan Örs, Irena Deroche, Catherine Dejoie and Jean-Louis Paillaud\*



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**Hierarchy and cooperativity between  $\pi$ -type halogen bonds and aromatic carboxylic acid dimers in co-crystal formation**

Emmett H. Feld, Eric Bosch, Daniel K. Unruh, Herman R. Krueger Jr. and Ryan H. Groeneman\*

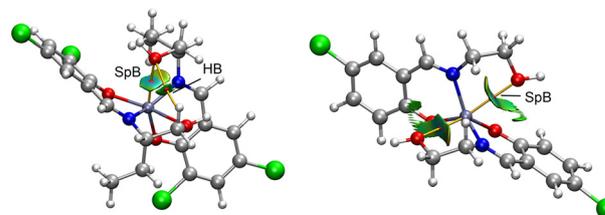


## PAPERS

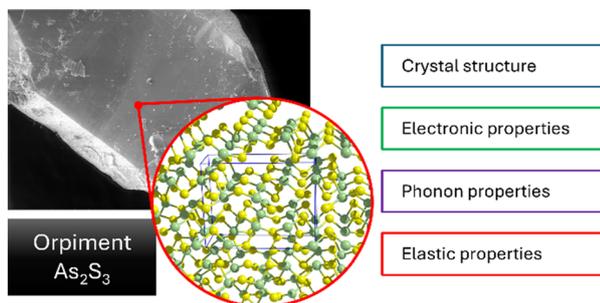
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**Synthesis, structural characterization, and DFT analysis of zinc(II) Schiff base complexes featuring noncovalent spodium bonds**

Md Gishan, Puspendu Midya, Sergi Burguera, Antonio Frontera\* and Shouvik Chattopadhyay\*



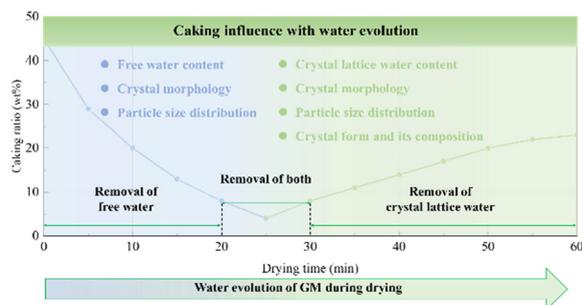
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### Cross-correlated experimental and theoretical characterisation of orpiment $\text{As}_2\text{S}_3$ , a potential material for new advanced technological applications

Gianfranco Ulian, Francesca Ranellucci and Giovanni Valdrè\*

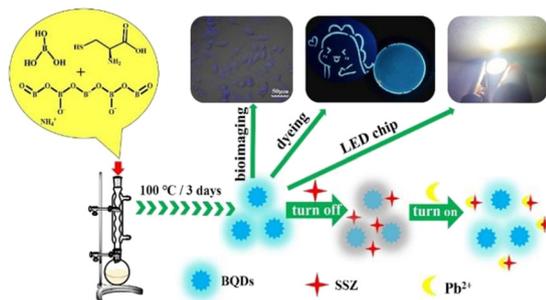
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### Revealing the relationship between the anti-caking function of wet hydrate crystals and water migration: a case study of glucose monohydrate

Mengdi Zhang, Mingxuan Li, Hongwei Zhao, Zhilong Liu, Dandan Han,\* Mingyang Chen\* and Junbo Gong

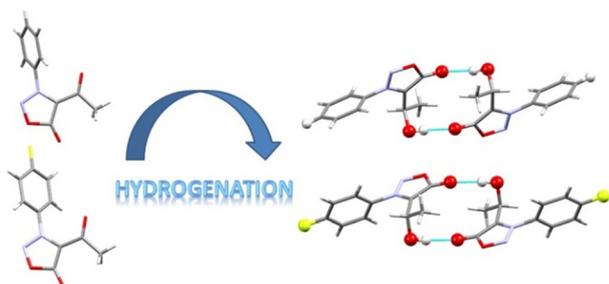
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### A simple low-temperature synthesis of fluorescent boron quantum dots for versatile applications

Shutao Li, Pengyi Ma, Jinping Song,\* Xiaoting Guo, Jianhua Xue and Qi Ma\*

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### H/F replacement in secondary alcohols of sydnones as examples of isostructural $\text{OH}\cdots\text{O}=\text{C}$ hydrogen bonded dimer structures

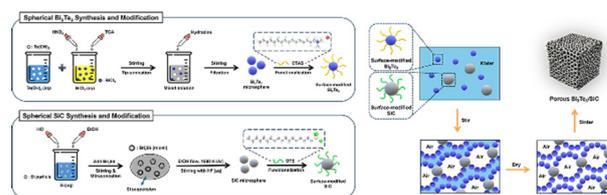
Florea Dumitrascu, Marcel Mirel Popa,\* Sergiu Shova, Isabela C. Man, Constantin Draghici and Mino R. Caira



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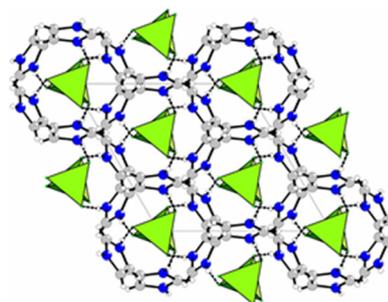
Oju Kwon, Minsu Kim, Jaeyeon Kim, Jaekyung Lee, Subin Lee, Jaeho Lee and Jooheon Kim\*



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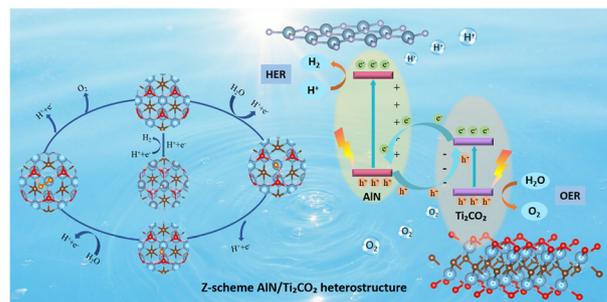
Dmitri O. Charkin, Semen A. Ivanov, Vadim E. Kireev, Alevtina N. Gosteva, Alena A. Kompanchenko, Alexander M. Banaru, Sergey Yu. Stefanovich, Ivan G. Tananaev and Sergey M. Aksenov\*



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### AlN/Ti<sub>2</sub>CO<sub>2</sub> van der Waals heterostructure: a direct Z-scheme photocatalyst for efficient photocatalytic water splitting

Yanfei Li, Zhi Xiao, Wen Qiao,\* Ru Bai, Tiejun Zhou and Shiming Yan\*



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### Structurally controllable Cd(II)-based luminescent metal-organic frameworks for efficient detection of antibiotics in water

Ning Xu, Yulong Zhou, Yexin Shen, Rui Li, Qinghua Zhang and Xiandong Zhu\*

