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# CrystEngComm

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

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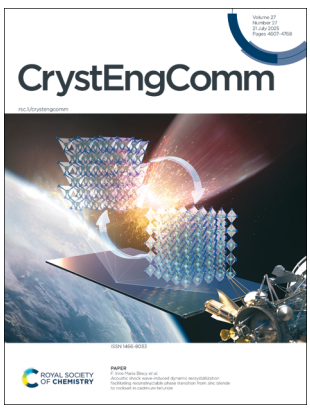


**Cover**
See F. Irine Maria Bincy *et al.*, pp. 4649–4667.
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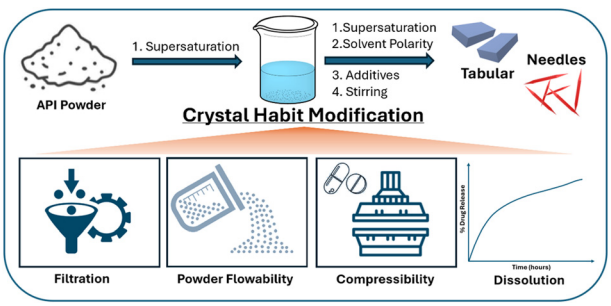
**The impact of crystal habit on the pharmaceutical properties of active pharmaceutical ingredients**

Niranj H. Ram, Madhukiran R. Dhondale, Maan Singh, Brahmeshwar Mishra, Ashish Kumar Agrawal, Anne Marie Healy and Dinesh Kumar*

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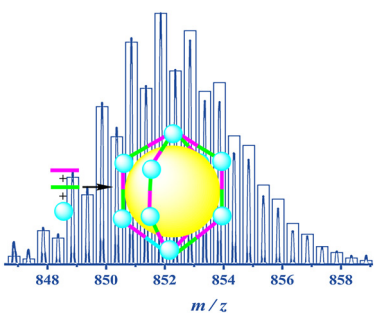
**Subcomponent self-assembly approach in molecular cages and its implication on solution behavior**

A-Mei Yang, Xiao-Huan Qin, Hai-Ye Li,* Di Yao and Fu-Ping Huang*



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## HIGHLIGHTS

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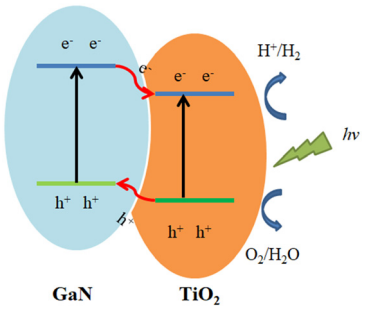
**Preparation and photoelectrochemical properties of GaN-based $TiO_2$ nanorod heterojunctions**

Feifei Wang, Ziwei Yu, Dezhong Cao,* Sen Wang, Kunxiao Sun, Baoke Ma, Li Ma, Yuxuan Diwu, Tiantian Luo, Ningning Feng, Xumei Zhao, Mengqi Tian, Shenwei Bai, Dingze Lu, Lianbi Li, Xiaohua Ma and Yue Hao

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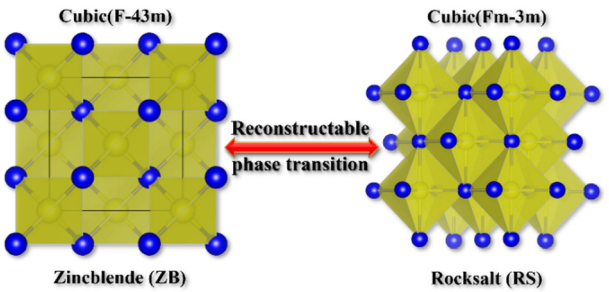
**Acoustic shock wave-induced dynamic recrystallization facilitating reconstructable phase transition from zinc blende to rocksalt in cadmium telluride**

F. Irine Maria Bincy, S. Oviya, Raju Suresh Kumar, P. Kannappan, Ikhyun Kim* and S. A. Martin Britto Dhas*

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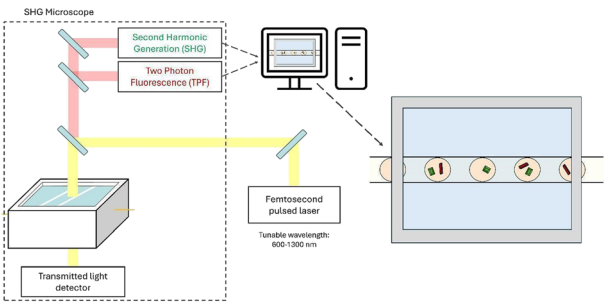
**The benefit of coupling droplet microfluidics and multiphoton optical microscopy to study the crystallization of polymorphic substances: a case study with *ortho*-aminobenzoic acid**

Hugo Cercel, Clément Brandel,* Romain Rac, Clément Pinètre, Charline J. J. Gerard, Stéphane Veesler, Nadine Candoni, Romain Grossier and Valérie Dupray

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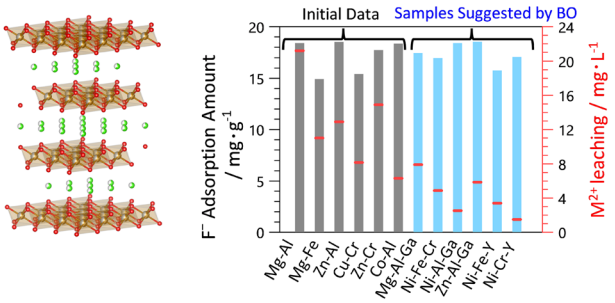
**Data-driven exploration of layered double hydroxide crystals exhibiting high fluoride ion adsorption properties and chemical stability**

Fumitaka Hayashi,* Ryuki Harada, Hiroaki Sugitani, Hiromasa Kaneko, Tien Quang Nguyen, Mongkol Tipplook, Tetsuya Yamada, Michihisa Koyama and Katsuya Teshima*



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## PAPERS

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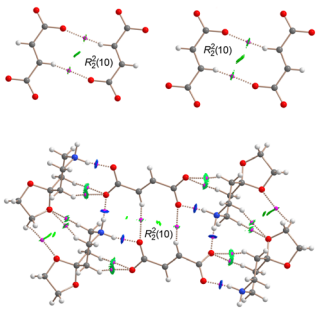

**Structural and computational analysis of H-bond mediated anion···anion interactions in new salts of fumaric and maleic acids**

Mahdi Jemai, Miquel Barceló-Oliver, Houda Marouani, Thierry Roisnel, Antonio Frontera* and Rafel Prohens*

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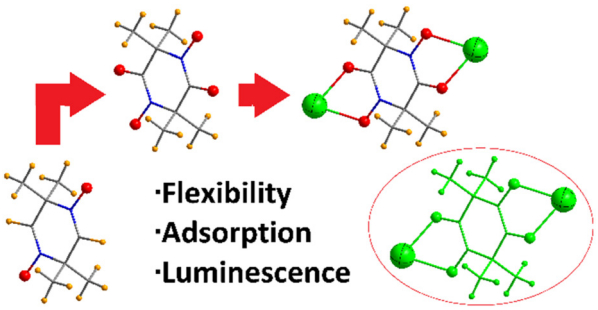


**Solvatomorphism, $CO_2$ adsorption and luminescence properties of non-aromatic bis-hydroxamate-based metal–organic frameworks**

Daniil A. Ushakov, Alexey A. Ryadun, Konstantin A. Kovalenko, Igor A. Kirilyuk, Pavel A. Demakov* and Vladimir P. Fedin

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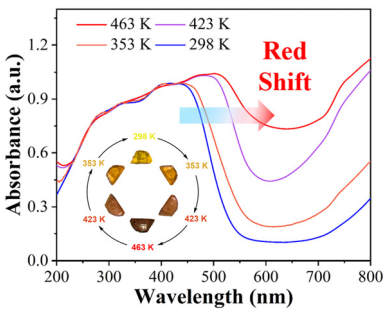


**A stable and sensitive organic–inorganic hybrid reversible thermochromic material: [1-(2-fluoroethyl)piperazine]$_2$[CuCl$_4$]**

Kang Zuo, Ruisi Yu, Wei Bao, Shuai Shao, Qing-Ling Cao, Hao Du, Linna Tian, Jia-Jia Zhao* and Li-Zhuang Chen*

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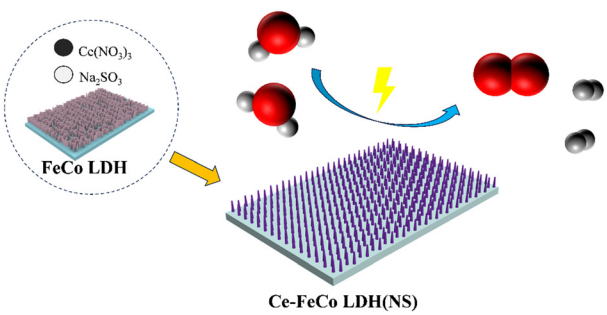


**Enhanced electrocatalytic OER activity of FeCo LDH by co-modification with Ce and reducing anions**

Feng Jiao, Jinzhao Huang,* Zehui Liu, Ke Zhang, Guixin Zhao, Yu Zhang and Xiaolong Deng*



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PAPERS

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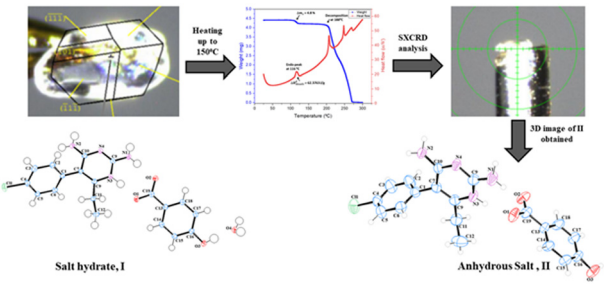
**A single crystal to single crystal solvatomorphic phase transition in cocrystals of pyrimethamine with 4-hydroxybenzoic acid. An experimental and theoretical study**

Aqsa Bilal, Arshad Mehmood, Sajida Noureen and Maqsood Ahmed*

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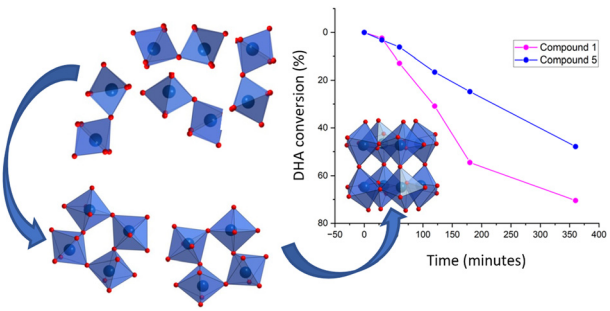
**Polynuclear tantalum(v) coordination complexes: from dinuclear {$Ta_2O$} to octanuclear {$Ta_8O_{12}$} oxo species connected through aryl monotopic carboxylate linkers**

Alejandro Vieyra Huerta, Mahmud Beji Ahmed, Nadine Essayem, Laurent Djakovitch, Adel Mesbah, Thierry Loiseau and Sylvain Duval*

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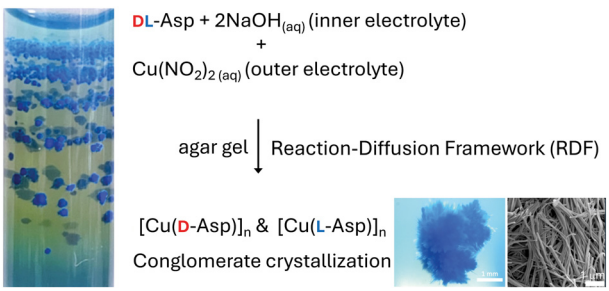
**Chiral resolution of copper aspartate under reaction–diffusion: synergy of experiment and simulation**

Poh Ying Fong, Sehrish Khan, Hatem M. Titi, Manal Ammar, Fiorenzo Vetrone, Mazen Al-Ghoul* and Louis A. Cuccia*

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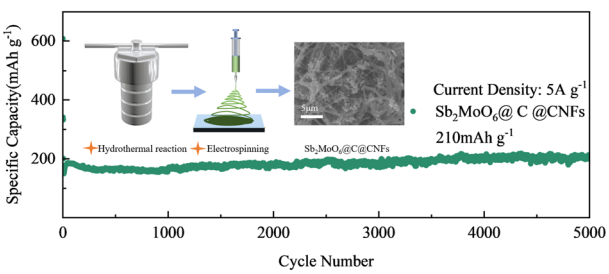
**Spider web-structured $Sb_2MoO_6$@C@CNF composites with conductive-stable dual carbon skeletons toward durable sodium-ion batteries**

Zihan Zhou, Yaping Zeng,* Zilong Li, Tao Li and Liu Wang*