### CrystEngComm

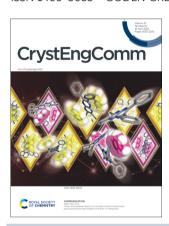
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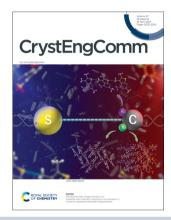
#### IN THIS ISSUE

ISSN 1466-8033 CODEN CRECF4 27(14) 2035-2242 (2025)



#### Cover See Akiko Hori et al... pp. 2065-2070. Image reproduced by permission of Akiko Hori from CrystEngComm,

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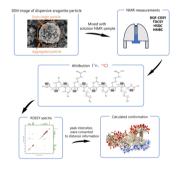
Inside cover See Deepak Chopra et al., pp. 2071-2086. Image reproduced by permission of Deepak Chopra from CrystEngComm, 2025, 27, 2071. Cover artwork designed by Amen Anees

#### **HIGHLIGHT**

#### 2043

Conformational analysis of biomineral proteins interacting with inorganic minerals using dispersive mineral particles for solution NMR

Kei Futagawa, Yugo Kato and Michio Suzuki\*



#### COMMUNICATION

#### 2064

Yellow and red polymorphic co-crystals of phenylsubstituted pyrazinacene and naphthalene via  $\pi$ -hole··· $\pi$  interactions

Kazushi Nakada, Gary J. Richards and Akiko Hori\*





# YOUNTA PNAL

# **RSC Applied Interfaces**

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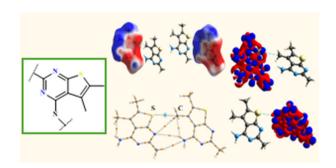
Fundamental questions Elemental answers

Registered charity number: 207890

#### 2070

Exploring intermolecular interactions and energetics in crystalline substituted thieno[2,3-d] pyrimidines

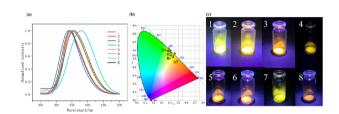
Pran Kishore Deb.\* Anila M. Menon, Fathima Nida PSR. Ipsha Shruti, Sara Nidal, Katharigatta N. Venugopala and Deepak Chopra\*



#### 2086

Synthesis, characterization, and green to orange luminescence properties of copper(1) complexes with 3-bdppmapy ligand-containing phenanthroline and its derivatives

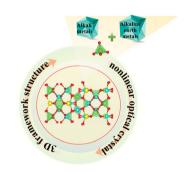
Wen-Long Mou, Si-Jie Fan, Ying-Long Wang, Guo Wang, Fu-Zhen Hu, Gui-Xiong Guo, Hong-Liang Han, Xiu-Lan Xin, Jian-Ming Liu, Yu-Ping Yang, Zhong-Feng Li\* and Qiong-Hua Jin\*



#### 2101

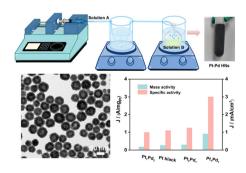
Exploring quaternary vanadates containing alkali metals, alkaline earth metals, and [VO<sub>4</sub>] in the quest for nonlinear optical materials

Xiaoming Wang, Qiuyuan Feng, Ketian Hou, Wei Wei, Juanjuan Lu, Lai Wei\* and Feng Zhang\*



Microinjection-assisted synthesis of Pt-Pd hollow nanoparticles for enhanced methanol oxidation reactions

Dan Zhao, Pan Zeng, Xinyu Wang, Fuquan Wang, Huiting Wu, Yujia Zhai, Dandan Men,\* Yiqiang Sun, Wenshan Qu\* and Haijian Li\*

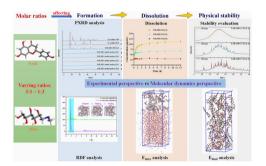


# 2115 1. Solubility

#### Reactive crystallization of Li<sub>2</sub>CO<sub>3</sub> in LiOH/KOH solutions: solubility, nucleation and carbonization

Zhuofan Chen, Yuhao Chen, Youfa Jiang, Chenglin Liu\* and Jianguo Yu

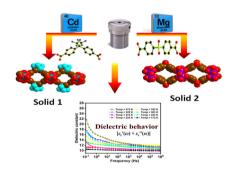
2124



Effect of molar ratios on formation, dissolution and physical stability of co-amorphous naringeninmeglumine by integrating theoretical-modelingexperimental techniques

Jiawei Han, Wen Sun, Jiaxin Chen, Zhimin Yue, Weitao Fang, Xiaoqian Liu,\* Jue Wang\* and Gaorong Wu\*

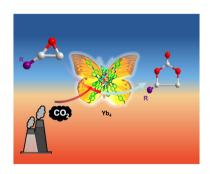
2136



Effect of coordinated and lattice neutral co-ligands on the dielectric properties of cadmium and magnesium based coordination polymers

Balendra,\* Mahboob Ali, Sanyukta and Sevi Murugavel

2148



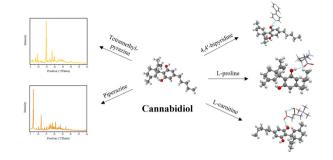
Two novel tetranuclear Yb(III)-based compounds for highly efficient conversion of CO<sub>2</sub> to cyclic carbonates

Yining Sun, Guoguo Liu, Gang Xiong and Guangwen Xu\*

#### 2154

#### Stability study and structural insights into cannabidiol cocrystals

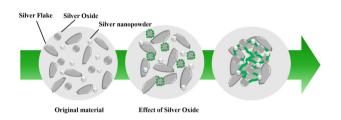
Adéla Koryťáková, Argyro Chatziadi, Jan Rohlíček, Eliška Zmeškalová, Josef Beránek and Miroslav Šoóš\*



#### 2166

#### Silver oxide-mediated synergistic enhancement of conductivity and adhesion in low-temperature cured silver pastes

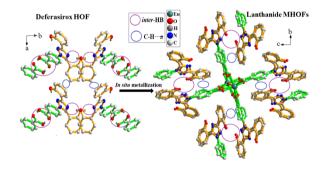
Yi-Chen Guo, Xiao-Gang Liao, Qi Wu, Yu-Xuan Hao, Zi-Hao Wang, Wen-Yan Zhang\* and Yao-Yu Wang



#### 2175

### Deferasirox HOF and its in situ metallization affording a new family of lanthanide coordination polymer-based MHOFs

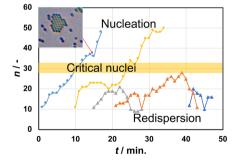
Yue-Mei Cao, Ying He, Xin-Yue Pei, Jia-Xing Liang, Jing Feng, Hong-Yan Wang and Qi-Bing Bo\*



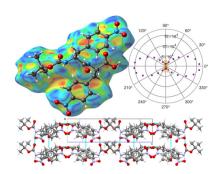
Thermodynamic analyses of critical nuclei and crystallization entropy using size distributions of small clusters of two-dimensional colloidal crystals

Yoshihisa Suzuki,\* Keigo Kishida, Hiroyasu Katsuno and Masahide Sato

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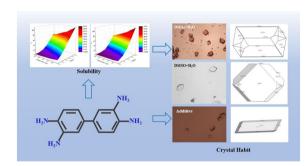
#### 2195



### Second harmonic generation and crystal structure of a self-assembled Boc-p-nitro-L-phenylalanyl-pnitro-L-phenylalanine dipeptide

Rosa M. F. Baptista,\* Alejandro P. Ayala, Etelvina de Matos Gomes, M. Cidália R. Castro, Ana V. Machado and Michael S. Belsley

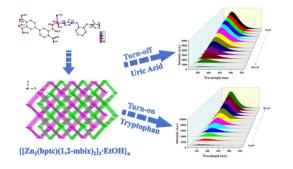
#### 2204



#### Mechanistic study on the crystal habit of 3,3'diaminobenzidine in the presence of solvents and additives

Jiawei Zhao, Na Wang,\* Lina Zhou, Ting Wang, Xin Huang, Ailian Wang, Longgui Zhang and Hongxun Hao\*

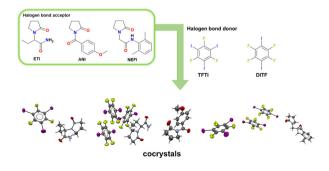
#### 2223



#### A stable two-fold interpenetrated 3D Zn(II) MOF for fluorescence sensing of uric acid and tryptophan

Fang-Hua Zhao,\* Yu-Shuo Li, Shu-Qi Li, Xiao-Hong Wu, Yuan-Chun He and Zhong-Lin Li\*

#### 2233



#### Halogen-bonded cocrystallization of racetam pharmaceuticals and perfluorinated iodobenzenes

Lixing Song,\* Lijie Wei, Chunling Liu, Yiwei Liu and Xiang Lian\*