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

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## IN THIS ISSUE

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Cover

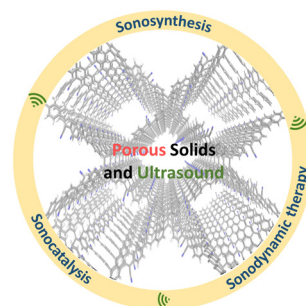
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## HIGHLIGHT

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### Emerging porous solids and sonochemistry

Seyoung Koo\* and Dong Won Kang\*

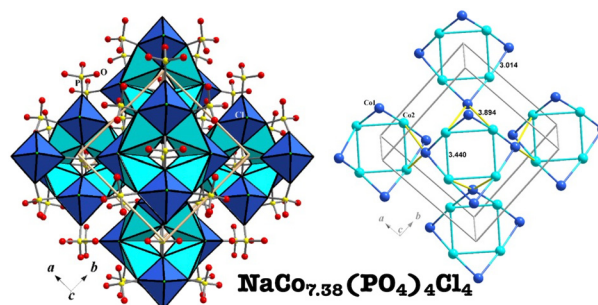


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### NaCo<sub>7.38</sub>(PO<sub>4</sub>)<sub>4</sub>Cl<sub>4</sub> in a series of homeotype compounds with stable cationic substructures derived from the sulphohalite archetype

Olga Yakubovich,\* Galina Kiriukhina, Sergei Simonov, Anatoliy Volkov and Olga Dimitrova



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# CrystEngComm

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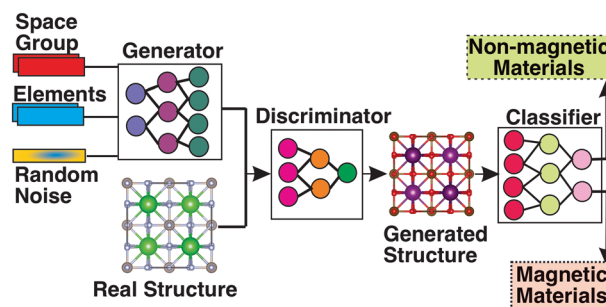
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## Data-driven deep generative design of stable spintronic materials

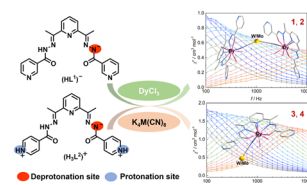
Edirisuriya M. Dilanga Siriwardane, Yong Zhao and Jianjun Hu\*



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## Dinuclear and trinuclear cyano-bridged $\{Dy^{III}M^{IV}\}$ ( $M = W, Mo$ ) single-ion magnets supported by pentadentate Schiff-base ligands

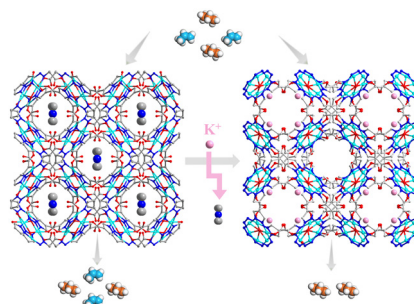
Pan-Dong Mao, Hui-Ying Sun, Fei-Fei Yan, Shi-Hui Zhang, Xin-Feng Li, Ren-He Zhou, Yi-Quan Zhang, Yin-Shan Meng\* and Tao Liu\*



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## Cation exchange in an anionic metal-organic framework enhancing propylene/propane separation

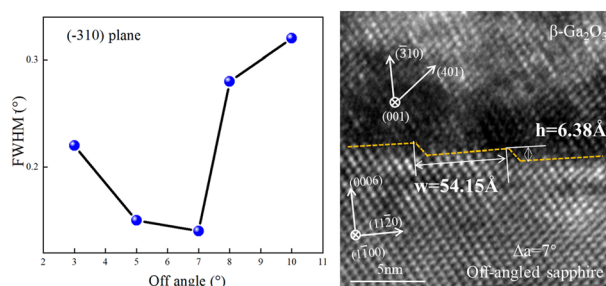
Xue Zhang, Hui-Juan Tang, Min Zeng, Rong Yang, Yu Wang\* and Kai-Jie Chen\*



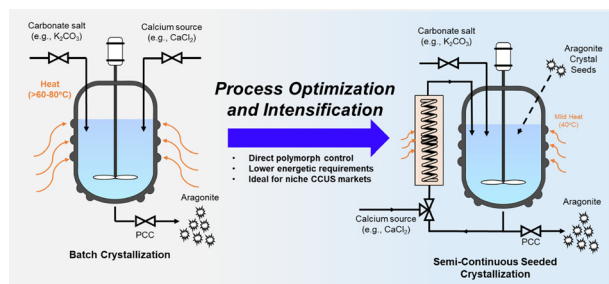
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## $(\bar{3}10)$ -Oriented $\beta$ -Ga<sub>2</sub>O<sub>3</sub> grown on (0001) sapphire by halide vapor phase epitaxy: growth and structural characterizations

Wanli Xu, Yuewen Li, Bin Li, Xiangqian Xiu,\* Hong Zhao,\* Zili Xie, Tao Tao, Peng Chen, Bin Liu, Rong Zhang\* and Youdou Zheng



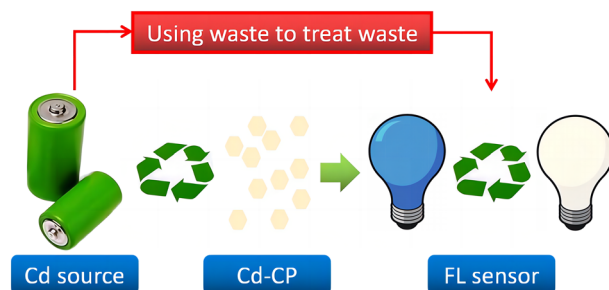
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### Directed synthesis of aragonite through semi-continuous seeded crystallization methods for $CO_2$ utilization

Jonah M. Williams, Diandian Zhao, Ning Zhang, Aysha Chin, Shiho Kawashima and Aaron J. Moment\*

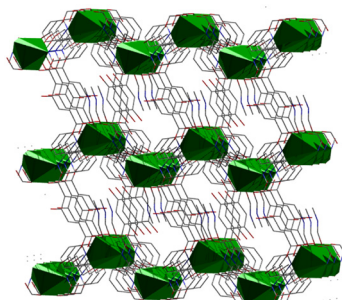
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### Fabrication of 5-R-isophthalic acid-modulated cadmium-organic coordination polymers and selectivity for the efficient detection of multiple analytes

Wen-Ze Li, Yu-Shu Sheng, Xiao-Sa Zhang, Yu Liu, Jing Li and Jian Luan\*

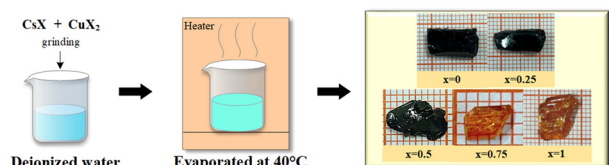
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### Synthesis and characterisation of new coordination polymers by combining 2-pyridyl oximes or alcohols with functionalised terephthalic acid analogues

Foteini Dimakopoulou, Constantinos G. Efthymiou, Andreas Kourtellaris, Ciaran O'Malley, Lamis Alaa Eldin Refat, Anastasios Tasiopoulos, Patrick McArdle and Constantina Papatriantafyllopoulou\*

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### Growth of large $Cs_2Cu(Cl, Br)_4$ single crystals

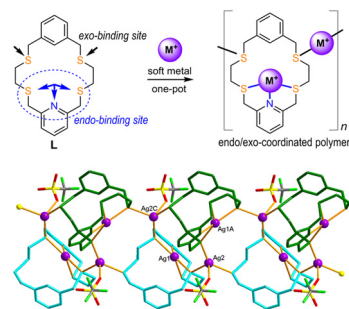
Jing Huang, Minghao Li, Zhanhui Liu, Jingyan Hua, Hui Zeng, Yunyun Chen and Jing Su\*



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## Assembling silver(I) coordination polymers of an NS<sub>4</sub>-macrocyclic *via* an endo/exocyclic coordination mode

Seulgi Kim,\* Shim Sung Lee, Joon Rae Kim and Eunji Lee\*



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## Interface segregation of iron sintering aid in gadolinium-doped ceria

Marina Machado, Andre L. da Silva, Leticia P. R. Moraes, Lays N. Rodrigues, Lorena B. Caliman, Douglas Gouvêa and Fabio C. Fonseca\*

