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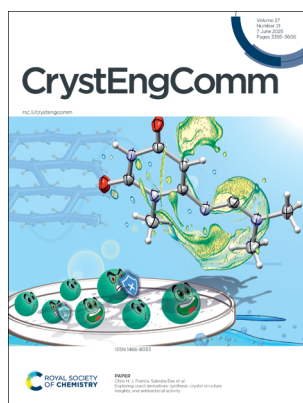
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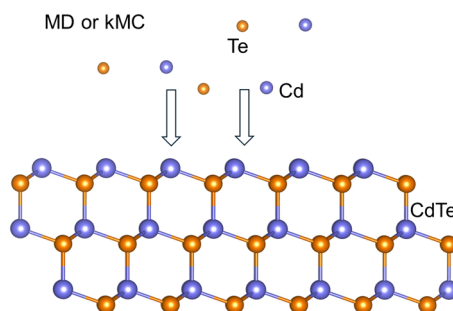
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HIGHLIGHTS

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Elucidating thin film growth mechanisms for high-performance II–VI photovoltaic semiconductors: simulation-driven insights and challenges

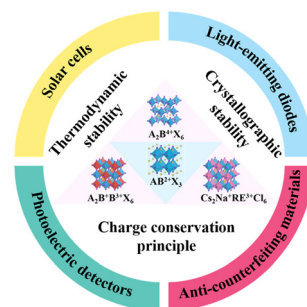
Chengchi Cao and Qi An*



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Lead-free metal halide double perovskites – from crystal design to optoelectronic applications

Shuai Zhang, Guanfeng Liu, Bing Teng* and Shaohua Ji*



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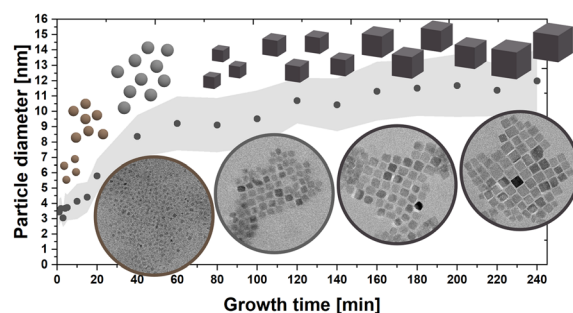


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Concentration- and temperature-dependent variation of Co_3O_4 nanoparticle size and morphology: insights into the growth behaviour and scalability

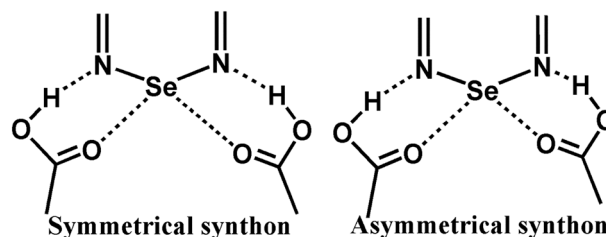
Johannes Kießling* and Anna S. Schenk*



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Strong supramolecular synthons assembled by hydrogen bonds and chalcogen bonds

Yu Zhang, Xiaotian Sun and Weizhou Wang*

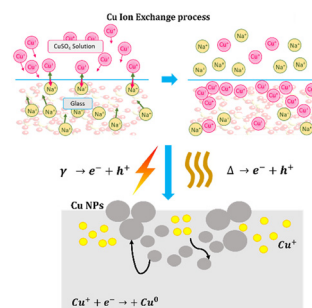


PAPERS

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Embedding crystalline Cu and Cu_2O nanoparticles in silicate glasses through an ion-exchange process followed by gamma irradiation and annealing: an optical absorption spectroscopy assessment

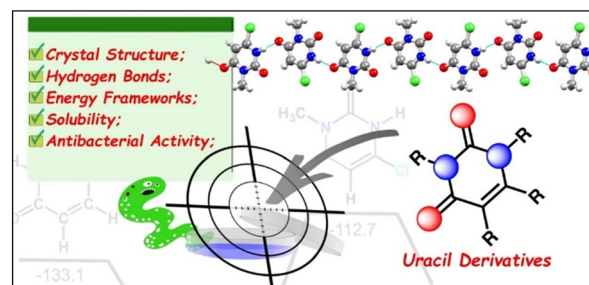
Safa Toumi, Khaled Farah* and Alaa Adawy*



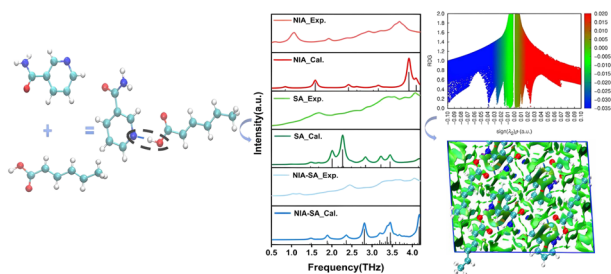
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Exploring uracil derivatives: synthesis, crystal structure insights, and antibacterial activity

Susital Mal, Chris H. J. Franco,* Binay Kumar, Alexander M. Kirillov and Subrata Das*



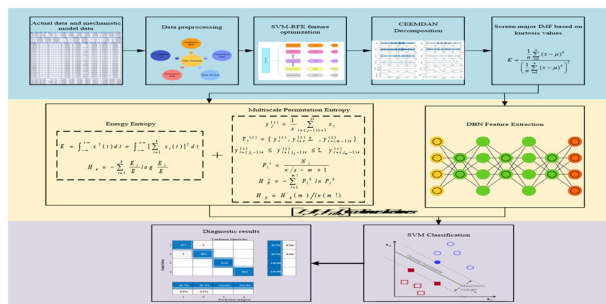
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Terahertz fingerprint spectrum and weak interaction analysis of nicotinamide-sorbic acid cocrystal

Di Zhu, Yali Liu, Lei Wang, Hanming Zhang, Qihong Qu, Xiaodong Sun* and Yizhu Zhang*

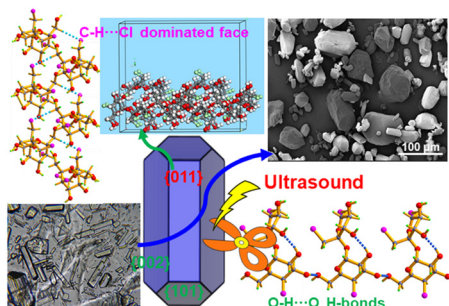
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Incipient fault diagnosis method for silicon single crystal growth assisted by deep learning

Yu-Yu Liu, Ding Liu,* Jun Chao Ren and Shi Hai Wu

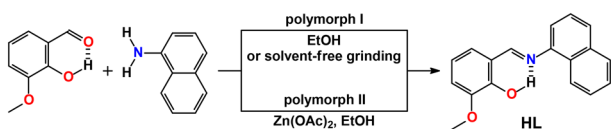
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Intermittent ultrasound-assisted anti-solvent crystallization for sucralose production with ultra-low aspect ratio and larger crystal size

Dongyu Zhou, Yongshang Li, Huimin Jie, Jiayan Lei, Zi'ang Chen, Xiaoping Chen, Can Cui, Huadong Luo, Jingjing Chen,* Haohong Li and Huidong Zheng*

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Polymorphism phenomenon of the naphthyl-containing *N*-salicylidenaniline derivative: syntheses, crystal structures, optical properties, and theoretical calculations

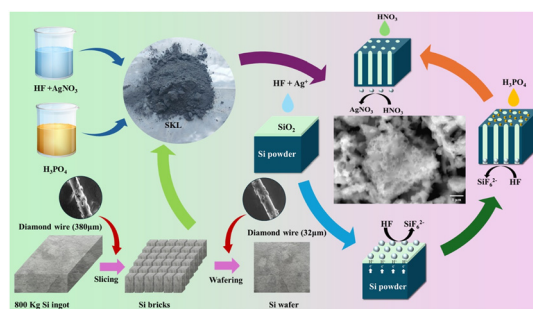
Elizaveta V. Panova,* Julia K. Voronina, Asmet N. Azizova, Ömer Faruk Tutar, Ghodrat Mahmoudi and Damir A. Safin*



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Investigation of phosphoric acid-catalyzed silver-assisted chemical etching for upgrading metallurgical grade silicon to solar grade silicon

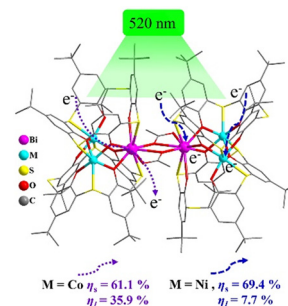
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Bismuth-based heterometallic clusters capped by thiacalixarene for visible-light photothermal conversion

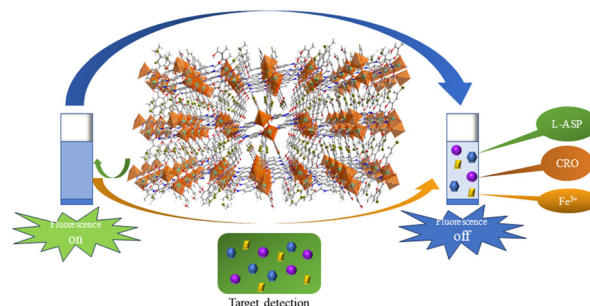
Tianxia Chen, Yuhan Zou, Dongao Mao and Yanfeng Bi*



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A Cd-based complex as a multifunctional fluorescent probe for the detection of Fe³⁺, ceftriaxone sodium (CRO) and L-aspartic acid (L-ASP)

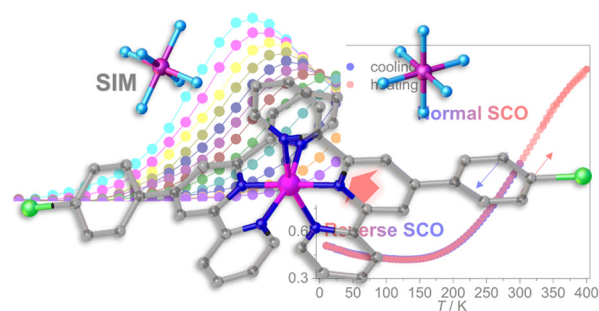
Jian-Fei Song, Jia-Li Chen, Gui-Quan Guo, Hong-Yan Zhu, Si-Ying Zhou, Xin-Rong Zheng and Xiu-Qing Zhang*



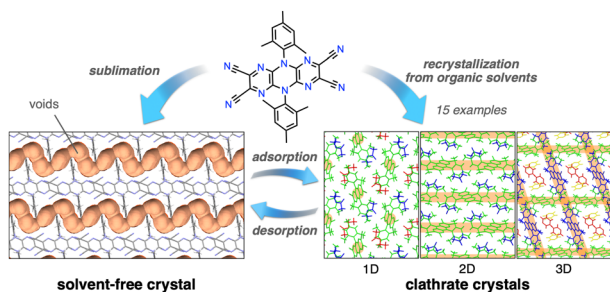
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A cobalt(II)-terpyridine complex showing field-induced slow magnetic relaxation behavior via reverse spin-crossover

Long Huang, Kun-Hua Zhang, Ao-Na Sun, Bingshan Zhao,* Le Shi, Jiong Yang and Dong Shao*



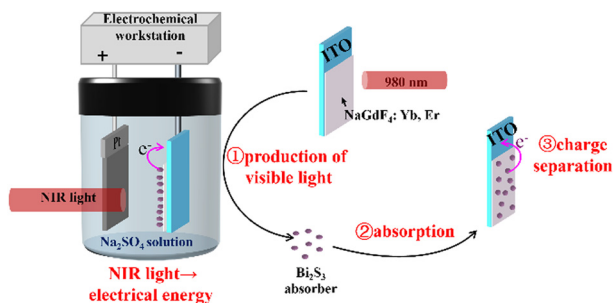
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Diverse tetracyanodihydrodipyrazinopyrazine clathrate crystals assembled from weak intermolecular interactions

Kosuke Watanabe, Haruki Sugiyama and Yasutomo Segawa*

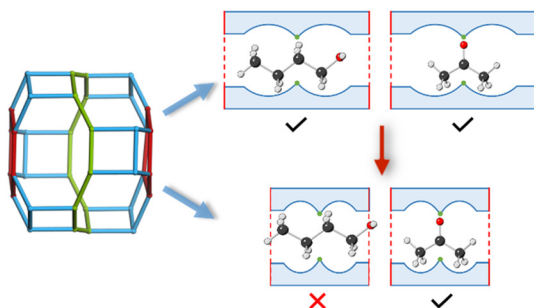
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Fabrication of rare-earth fluoride films via a sacrificial template method from layered rare-earth hydroxide (LRH) films: phase transition mechanism and near infrared light response

Junjie Huang, He Zhang, Taihui Chen, Lu He and Xiaoli Wu*

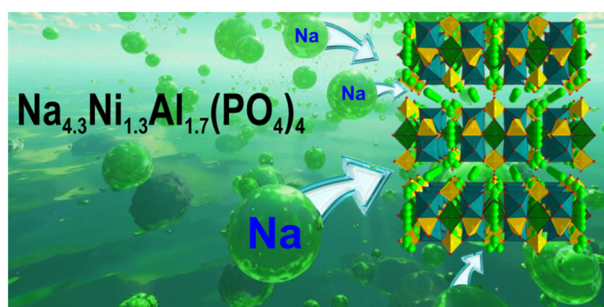
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Tunable ellipsoidal cage in ZIF-300 and ZIF-301 for size-selective acetone/butanol separation

YanJun Wu, Jiaojiao Song, Jiang Wang* and Qi Shi*

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$\text{Na}_{4.3}\text{Ni}_{1.3}\text{Al}_{1.7}(\text{PO}_4)_4$ structure transformation from stuffed $\alpha\text{-CrPO}_4$ type driven by the incorporation of Na: magnetism and ionic migration

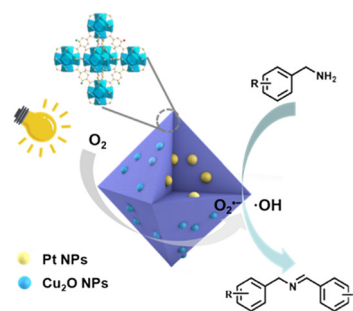
Olga Yakubovich,* Galina Kiriukhina, Elizaveta Manokhina, Anatoly Volkov, Olga Dimitrova, Larisa Shvanskaya and Alexander Vasiliev*



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Enhancement of visible-light-driven photocatalytic oxidative amine coupling through light-induced carrier spatial separation

Xiying Zhang, Yuanyuan Li,* Zhaozhen Zhang, Bin Zhang, Xiaomeng Hu, Shibo Lu and Jie Wu*



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Similar polymorphism of derivatives of salicylideneanilines with varying halo-substitution

Zaixiang Zhang, Xin Li, Junyu Liu, Manman Wang, Yang Yang* and Deyin Wang*

