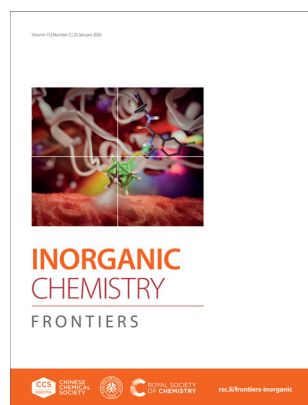


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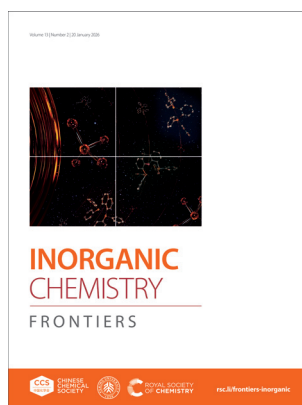
ISSN 2052-1553 CODEN ICFNAW 13(2) 351-776 (2026)



#### Cover

See Michael Gütschow, Drahomír Hnyk, Michael Mareš, Jindřich Fanfrlík *et al.*, pp. 364–376.

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#### Inside cover

See María Rodríguez-Castillo, José M. López-de-Luzuriaga *et al.*, pp. 377–388.

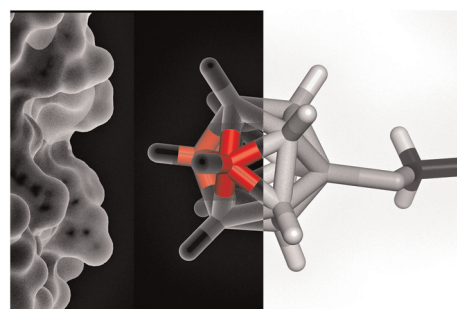
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### RESEARCH ARTICLES

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#### Fat or flat? The impact of dipole moment vectors on non-covalent interactions between aromatic tags and macromolecules

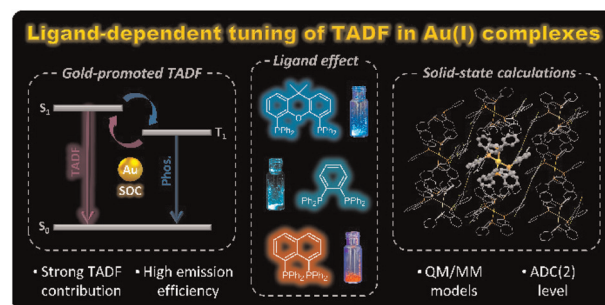
Josef Holub, Adéla Jílková, Carina Lemke, Lorenzo Cianni, Petra Spiwoková, Martin Horn, Christian Breuer, Adrian Leontovyč, Jiří Brynda, Helena Mertlíková-Kaiserová, Marta Chanová, Fernanda dos Reis Rocho, Carlos A. Montanari, Nelly El-Sakkary, Conor R. Caffrey, Michael Gütschow,\* Drahomír Hnyk,\* Michael Mareš\* and Jindřich Fanfrlík\*



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#### The role of the electron density of the acceptor in efficient diphenylphosphino-gold(I) TADF emitters

Oliver Baltar, Inés Soldevilla, Rinat T. Nasibullin, Rashid R. Valiev, M. Elena Olmos, Miguel Monge, Dage Sundholm, María Rodríguez-Castillo\* and José M. López-de-Luzuriaga\*



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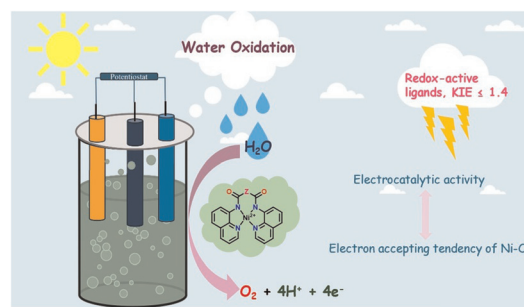
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## RESEARCH ARTICLES

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## Water oxidation by Ni(II) amido-quinoline complexes

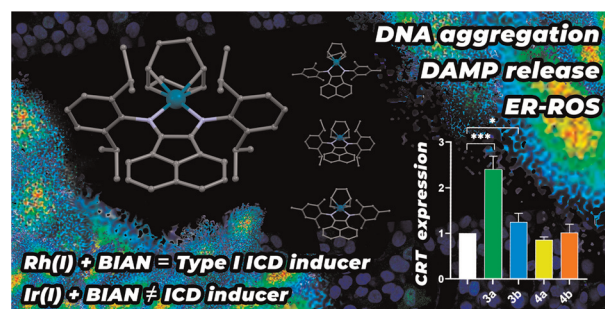
Monika, Vasanthapandiyan Mari, Pankaj Kumar, Naiwrit Karmodak and Basab Bijayi Dhar\*



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## Immunogenic cell death-inducing Rh(I) and Ir(I) complexes with bis(imino)acenaphthene-derived ligands: insights into the role of the metal center and the ligands

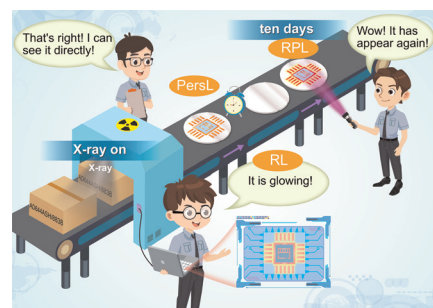
Chengnan Wu, Nikolai F. Romashev, Veronika I. Komlyagina, Tamara Petrović, Ivan V. Bakaev, Pavel A. Abramov, Yuan Wang, Alexey A. Ryadun, Iakov S. Fomenko, Taotao Zou,\* Artem L. Gushchin\* and Maria V. Babak\*



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## Smart tri-mode imaging material for on-demand visual encryption and dynamic displays

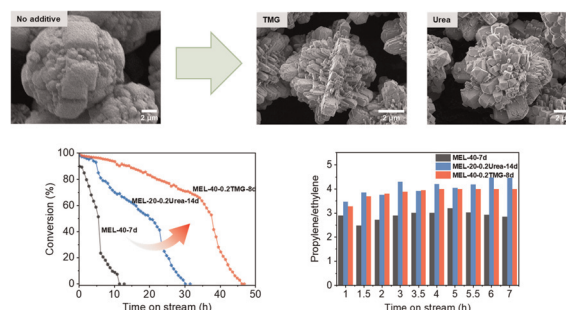
Xue Yang, Yucheng Li, Yibo Hu, Meng Gu, Yanshuo Han, Guibin Zhai, Jingkun Chen, Naixin Li, Sihan Yang, Kuan Ren, Jingtai Zhao, Jianguo Chen, Yan Zhao, Xuyong Yang\* and Qianli Li\*



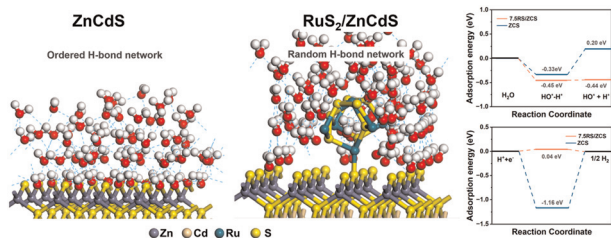
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## Dual function of additives in controlling Al siting and nanocrystal assembly of MEL zeolites for enhanced methanol-to-olefins performance

Junwei Wu, Qiudi Yue,\* Diógenes Honorato-Piva, Chunzheng Wang and Svetlana Mintova\*



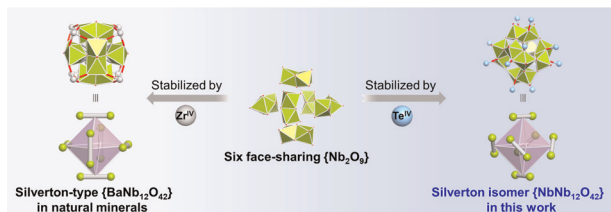
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### Enhancing the efficiency of the photocatalytic hydrogen evolution half-reaction via disruption of the rigid H-bond network at the RuS<sub>2</sub>/ZnCdS interface

Jiaxin Liu, Yani Dong, Li Chen, Guangmin Ren,\*  
Tuo Guo\* and Qingjie Guo\*

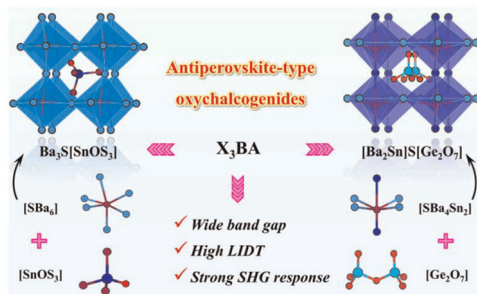
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Ni Zhen, Run-Han Li, Binghui Xue, Jingjing Liu, Shan Xu, Chao Zhang, Peng Lei, Jing Dong, Yingnan Chi,\*  
Panchao Yin,\* Ya-Qian Lan\* and Changwen Hu

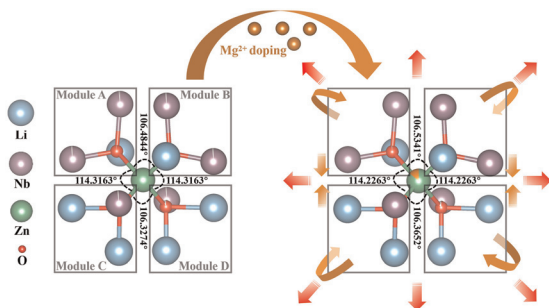
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### Ba<sub>3</sub>S[SnOS<sub>3</sub>] and [Ba<sub>2</sub>Sn]S[Ge<sub>2</sub>O<sub>7</sub>]: two antiperovskite oxychalcogenides with good IR nonlinear optical performances

Jiaxue Wang, Yixin Song, Hongping Wu,\* Hongwei Yu,\*  
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### Simultaneous emission and thermal stability enhancement of long-wavelength NIR luminescence of Cr<sup>3+</sup> ions in spinel phosphors via pivot-polyhedron linkage engineering

Taizhong Xiao, Wen Song, Chongbing Mou, Jinke Wang, Liang Xu, Yongjin Li,\* Rui Hu,\* Zhaoyi Yin, Zhengwen Yang, Jianbei Qiu and Zhiguo Song\*

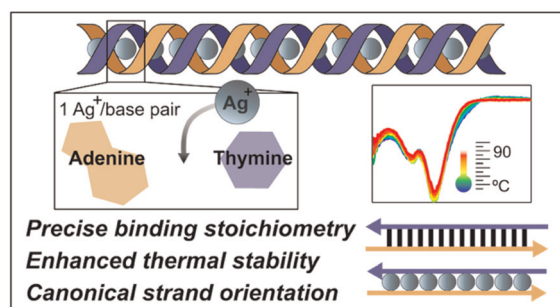


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**Assembly and solution phase properties of Ag<sup>+</sup>-mediated adenine–thymine DNA duplexes**

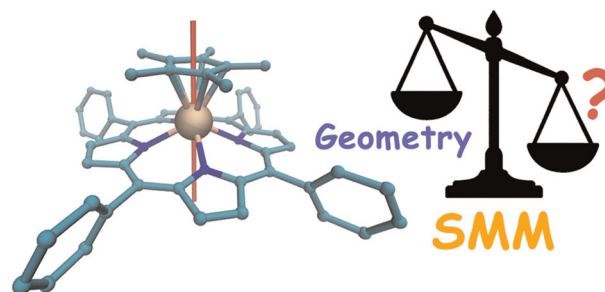
Eshana Bethur, Ziqian Zhao, Rweetuparna Guha, Hongbo Zeng and Stacy M. Copp\*



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**Air-stable tetraphenylporphyrinate–Cp\* sandwiches of Ln(III): how decisive is geometry in controlling magnetic anisotropy?**

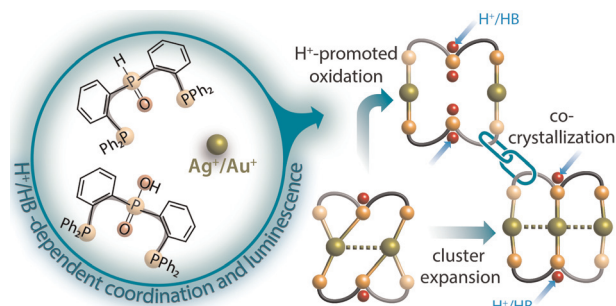
Dmitry M. Lyubov, Ilya D. Ermolin, Tatyana V. Mahrova, Anna V. Vologzhanina, Yulia V. Nelyubina, Max Kallio, Veacheslav Vieru, Alexander G. Martynov, Gayane A. Kirakosyan, Yulia G. Gorbunova, Gautier Félix, Yannick Guari, Saad Sene, Joulia Larionova\* and Alexander A. Trifonov\*



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**Acid–base interactions in luminescent silver(I) and gold(I) complexes with phosphine–phosphinate/phosphinite ligands**

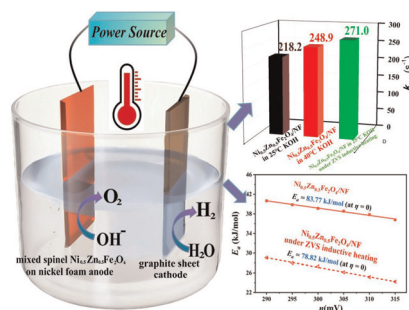
Mariia Beliaeva, Andrey Belyaev, Henna Korhonen, Ondrej Mrózek, Janne Jänis, Andreas Steffen\* and Igor O. Koshevoy\*



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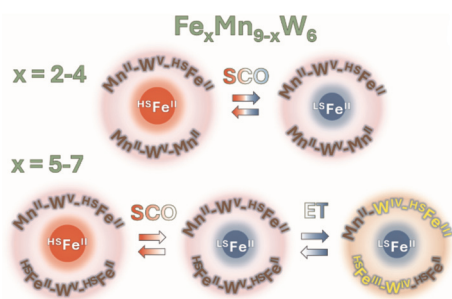
**Mixed spinel Ni<sub>0.5</sub>Zn<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub> on nickel foam for electrocatalytic oxygen evolution reaction: revealing the influence of temperature and promoting performance with zero voltage switching inductive heating**

Yujie Guo, Feng Duan, Gaili Ke, Yiming Zhang, Tao Han, Hanmei Jiang, Wenrong Wang, Yong Zhou and Huichao He\*



## RESEARCH ARTICLES

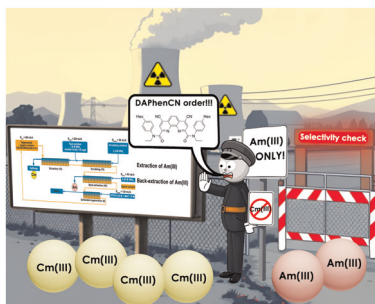
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### The effect of the large cation matrix and delocalization of electronic density on the switchable behaviour of heterotrimetallic cyanido-bridged $\text{Fe}_x\text{Mn}_{9-x}\text{W}_6$ clusters

Jedrzej Kobylarczyk,\* Marcin Koziel, Katarzyna Dziedzic-Kocurek, Jan M. Michalik, Dawid Pinkowicz, Magdalena Fitta, Barbara Sieklucka and Robert Podgajny\*

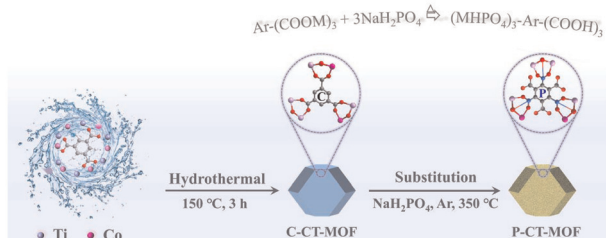
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### A highly efficient extraction system for $\text{Am}(\text{III})$ – $\text{Cm}(\text{III})$ pair separation in spent nuclear fuel reprocessing

V. G. Petrov,\* P. I. Matveev, V. G. Nenajdenko, Yu. A. Ustynyuk, I. P. Gloriov, M. V. Evsyunina, P. S. Lempert, N. A. Avagyan, V. S. Petrov, A. D. Krot, P. Kalle, V. N. Khrustalev, N. D. Goletskiy, A. A. Naumov and S. N. Kalmykov

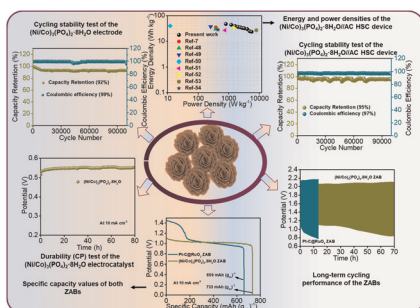
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### The transformation of a bimetal carboxylate-MOF into a phosphonate-based MOF as a multifunctional photocatalyst

Aihui Cao,\* Kang Li, Xiao Xu, Longtian Kang and Min Zhang\*

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### Efficient and durable multifunctional nickel-doped cobalt phosphate hydrate electrocatalysts for hybrid supercapacitors and zinc–air batteries

Obula Reddy Ankinapalli, B. N. Vamsi Krishna, Young Jun Lee, Logeshwaran Natarajan, Ramakrishna Reddy Ayyaluri and Jae Su Yu\*

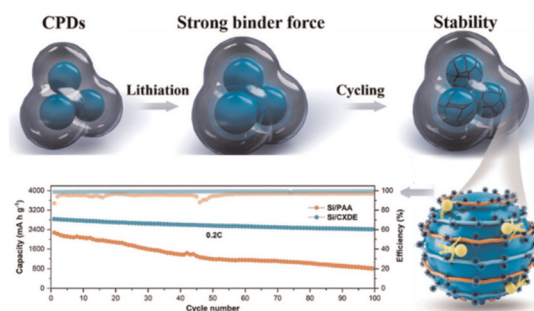


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### A carbonized polymer dot-functionalized 3D conductive network binder for high-performance silicon anodes

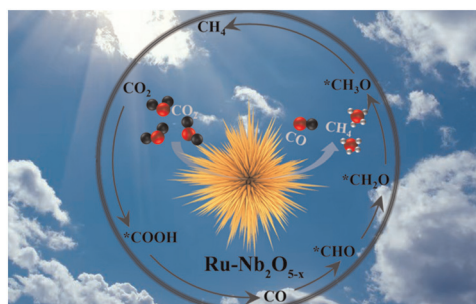
Yang Xiang, Jiangxiang Deng, Qiyu Chen, Haohang Xu, Zhi Xiao, Kang Pu, Aziz Ur Rehman and Shu-Juan Bao\*



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### Ru species decoration on hierarchical Nb<sub>2</sub>O<sub>5-x</sub> modulates product selectivity for CO<sub>2</sub> photoreduction

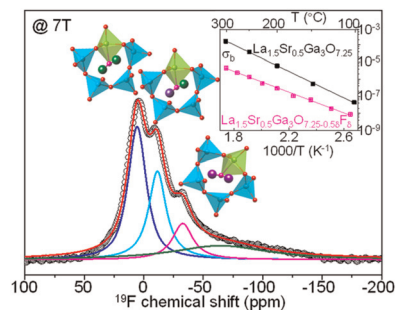
Yeqiang Zhai, Guimin Wang, Nan Wang, Yanqing Jiao,\* Dongxu Wang, Haijing Yan, Yuxian Jiang, Aiping Wu and Honggang Fu\*



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### Unveiling anionic migration mechanisms governed by mixed-anion chemistry in melilite oxyfluorides

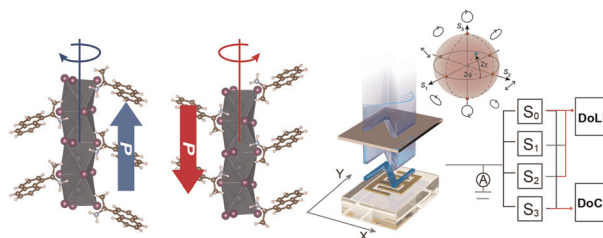
Lijia Zhou, Li Yang, Aydar Rakhmatullin, Shipeng Geng, Xiaoyan Yang,\* Mathieu Allix, Jiazheng Hao, Lunhua He, Mingxue Tang, Zewei Quan and Xiaojun Kuang\*



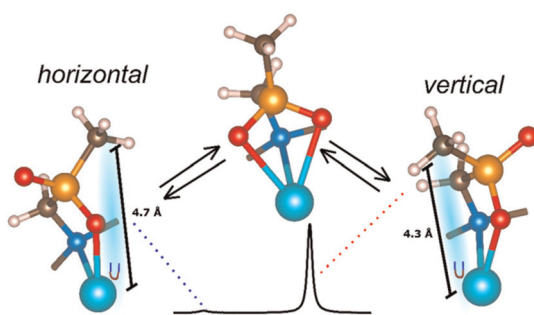
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### A monolithic chiral perovskite crystal enables self-powered, full-Stokes detection of ultra-weak light

Quanlin Chen,\* Yangbin Xu, Qingming Wu, Yanxing Feng, Zhiqiang Huang, Hai Jia, Shaoming Ying\* and Xiaohui Huang\*



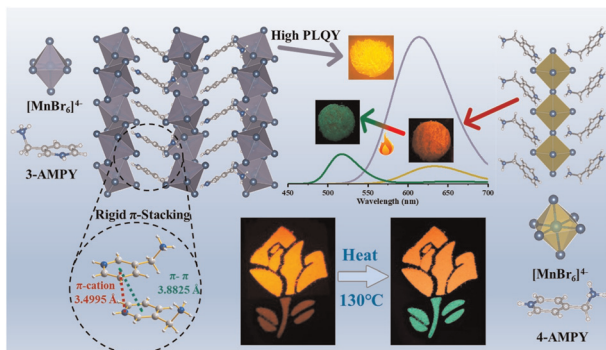
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### Phosphorus chirality assignment and solution dynamics of lanthanide(III) complexes of a monomethylphosphinate analogue of H<sub>4</sub>dota: a multinuclear NMR and DFT study

Adam Svitok, Carlos Platas-Iglesias, Jan Kotek and Petr Hermann\*

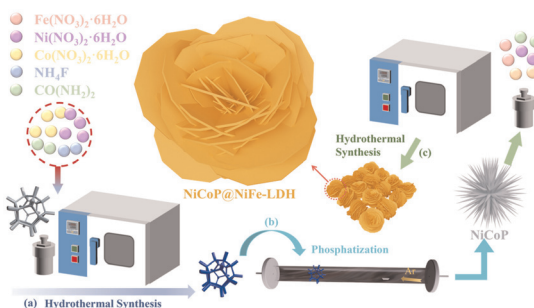
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### Polarity-enhanced cationic $\pi$ -conjugation in Mn(II)-based metal halide luminescent materials: boosting quantum yield and enabling anti-counterfeiting

Jia Liu, Long Yu, Xiaoyun Yi,\* Xin Li, Ziqing Liu, He Wang, Linwei Yang, Xin Yang\* and Suhua Wang\*

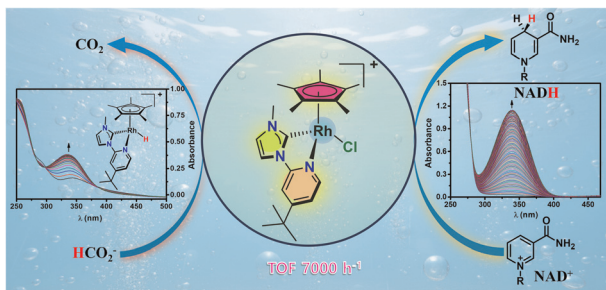
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### *In situ* reconstructed amorphous MOOH-enhanced NiCoP@NiFe-LDH bifunctional electrocatalyst for long durable seawater electrolysis

Huiya Zhou, Songlin Xu, Boyao Zhang, Xin Li, Zihan Lv, Depeng Zhao\* and Rong-Da Zhao\*

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### Aqueous-phase NADH regeneration using Rh(N-heterocyclic carbene) catalyst with enhanced hydride kinetics

Vinothkumar Ganesan, Dharmalingam Sivanesan and Sungho Yoon\*

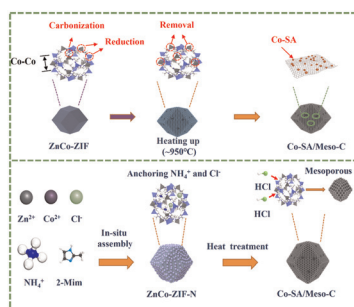


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### Mesoporous carbon-encapsulated Co single atoms synthesized via $\text{NH}_4\text{Cl}$ -templated ZnCo-ZIF pyrolysis for efficient ammonium perchlorate catalysis

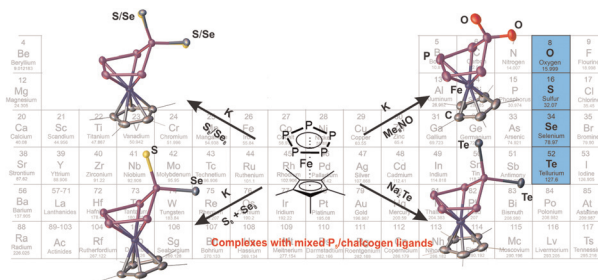
Yuming Zhou, Peng Zhou,\* Xiaolin Tang, Bo Yuan, Jun Liao, Chongtao Ding, Junyu Li, Weihang Cheng, Xingang Wang\* and Chi Huang\*



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### Anionic chalcogen functionalised pentaphosphaferrocene complexes

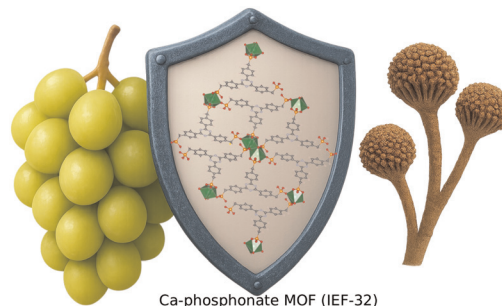
David Konieczny, Mehdi Elsayed Moussa, Eric Mädl, Stephan Reichl, Mikhail Butovskiy, M. Bodensteiner, Alexander. V. Virovets and Manfred Scheer\*



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### Ca-triazine phosphonate metal-organic framework as fungicide active packaging

Rubén Serrano-Nieto, Miriam Abán, Marta E. G. Mosquera, Tania Hidalgo, Claire Ayala, Inés Álvarez-Miguel and Patricia Horcajada\*

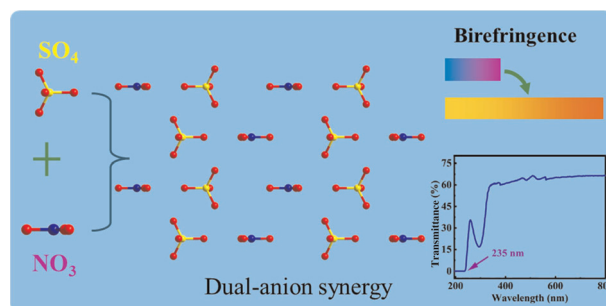


Ca-phosphonate MOF (IEF-32)

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### Dual-anion synergy drives remarkable birefringence in sulfate-nitrate crystals

LeHui Liu, FeiFei Yuan, YiSheng Huang, LiZhen Zhang\* and ZhouBin Lin\*



Dual-anion synergy



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### Amino-imidazolin-2-imine Cu(I) complexes: ligand screening and tuning of photophysical properties

Leo Wessel, Oliver Lange, Lars E. Burmeister, Lars Denker, Michael Karnahl,\* Stefanie Tschierlei,\* Matthias Tamm\* and René Frank\*

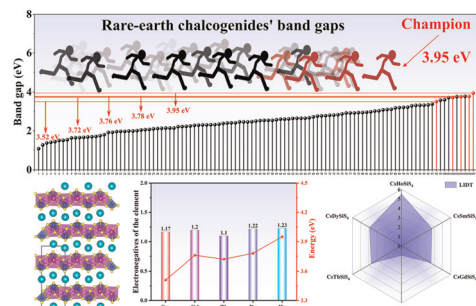
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### Anion-modulated photoswitching of a tetraurea-bridged azobenzene

Yue Wang, Yu Tao, Xu Lu, Chaochao Fan, Dan Zhang, Tian Wang, Shulei Feng, Wenyao Zhang\* and Chuandong Jia\*

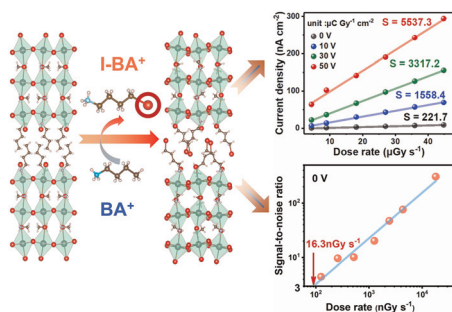
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### Reactive flux assisted metal oxide–boron–sulfur routine for syntheses of CsRESi<sub>4</sub> (RE = Sm, Gd–Ho): featuring nonlinear optical activity and wide band gaps

Zhen-Cheng Wu, Fang-Xu Tian, Rui Xiao, Mao-Yin Ran, Wenlong Liu, Wen-Tong Chen\* and Sheng-Ping Guo\*

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### Halogen-bond induced polar multilayer hybrid perovskites for efficient self-driven X-ray detection

Haotian Wen, Minmin Wang, Xin Dong, Zhijin Xu, Yaru Geng, Jie Qin, Junhua Luo, Min Zhang\* and Lina Li\*



## RESEARCH ARTICLES

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**Mitigation of A $\beta$  neurotoxicity in Alzheimer's disease using a non-toxic platinum complex derived from retinamide**

Chengyuan Qian, Yicun Shang, Linxiang Cai, Yunhua Zhang, Chengyan Chu, Zijian Guo and Xiaoyong Wang\*

