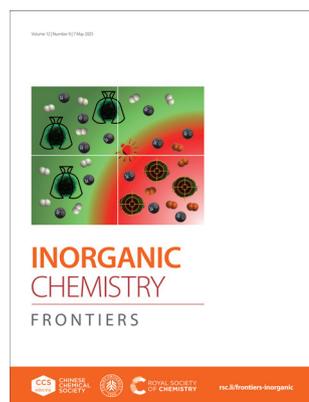


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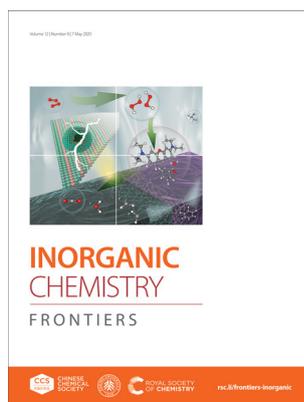
ISSN 2052-1553 CODEN ICFNAW 12(9) 3337–3546 (2025)



#### Cover

See José Ruiz, Vicente Marchán *et al.*, pp. 3367–3383.

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#### Inside cover

See Jie Wang, Liangyu Gong *et al.*, pp. 3384–3392.

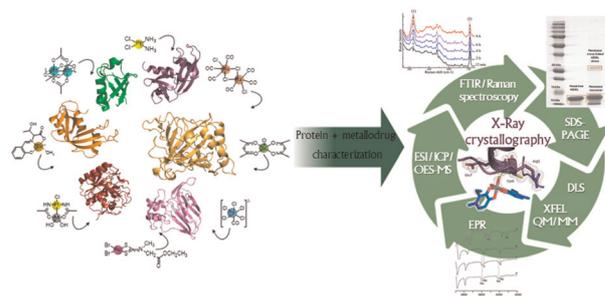
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### REVIEW

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#### Investigation of metallodrug/protein interaction by X-ray crystallography and complementary biophysical techniques

Giarita Ferraro and Antonello Merlino\*

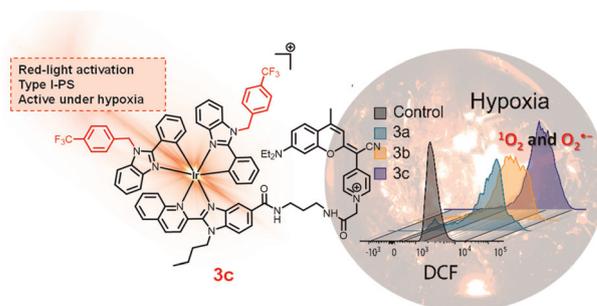


### RESEARCH ARTICLES

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#### Achieving red-light anticancer photodynamic therapy under hypoxia using Ir(III)–COUPY conjugates

Enrique Ortega-Forte, Anna Rovira, Pezhman Ashoo, Eduardo Izquierdo-García, Cormac Hally, Diego Abad-Montero, Mireia Jordà-Redondo, Gloria Vigueras, Alba Deyà, José Luis Hernández, Jorge Galino, Manel Bosch, Marta E. Alberto, Antonio Francés-Monerris, Santi Nonell, José Ruiz\* and Vicente Marchán\*



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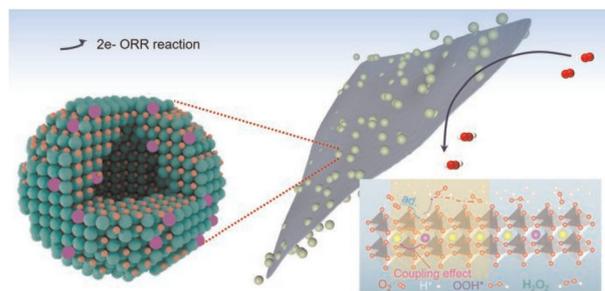
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## RESEARCH ARTICLES

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### Homogeneous bismuth dopants regulate cerium oxide structure to boost hydrogen peroxide electrosynthesis *via* two-electron oxygen reduction

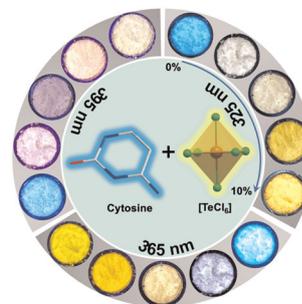
Qiyang Yang, Changhui Sun, Lanju Sun, Hangning Liu, Linghao Su, Chuanli Ma, Jie Wang,\* Liangyu Gong\* and Zhenhua Yan



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### Excitation-dependent multicolor luminescence with tunable afterglow from Te<sup>4+</sup>-doped (CytH)<sub>2</sub>SnCl<sub>6</sub> for dynamic anticounterfeiting

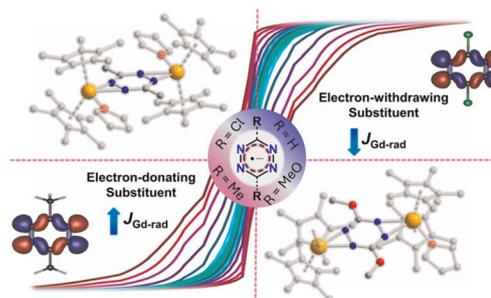
Mengjia Zhang, Xianli Li,\* Yuerong Xie, Chenghao Ye, Jiaojiao Qian\* and Binbin Luo



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### Exploring the substitution effect on the magnetic coupling of tetrazinyl-bridged Ln<sub>2</sub> single-molecule magnets

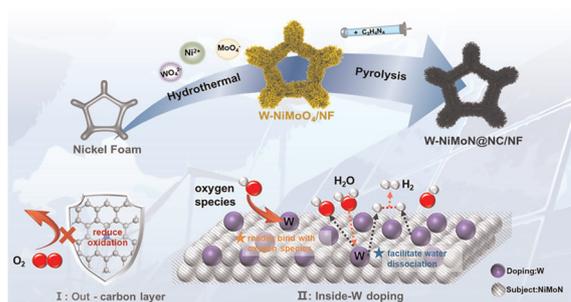
Niki Mavragani, Alexandros A. Kitos, Rezeda Gayfullina, Akseli Mansikkamäki,\* Jani O. Moilanen\* and Muralee Murugesu\*



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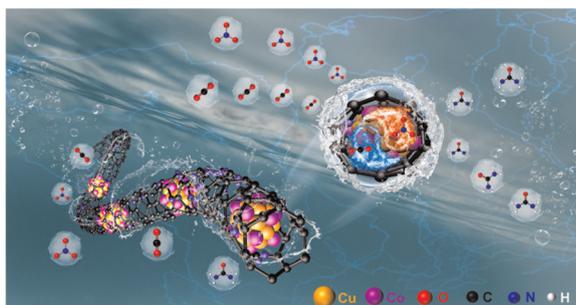
### Carbon-coated W-doped NiMoN catalysts with enhanced antioxidant properties for robust water electrolysis under fluctuating electricity

Rufei Zhang, Hui Teng, Jinyuan Miao, Jianing Kang, Lili Zhou, Linting Cheng, Zhiqun Bai, Jianwen Zhang, Jia Liu, Yang Tang\* and Pingyu Wan



## RESEARCH ARTICLES

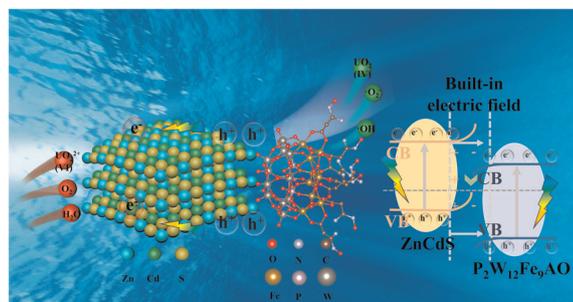
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### Optimizing the electronic structure of copper and cobalt dual sites for efficient electrocatalysis of urea

Jiafang Liu, Shengbo Zhang,\* Zhixian Mao, Wenyi Li, Meng Jin, Huajie Yin, Yunxia Zhang, Guozhong Wang and Haimin Zhang\*

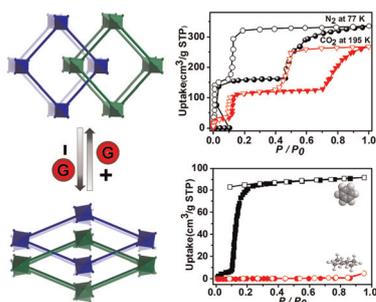
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### A Z-scheme heterojunction ZnCdS/P<sub>2</sub>W<sub>12</sub>Fe<sub>9</sub>AO nanocomposite based on an adsorption–photoreduction synergistic strategy for uranium reduction

Yu Liu, Donghui Cui, Xue Yang and Fengyan Li\*

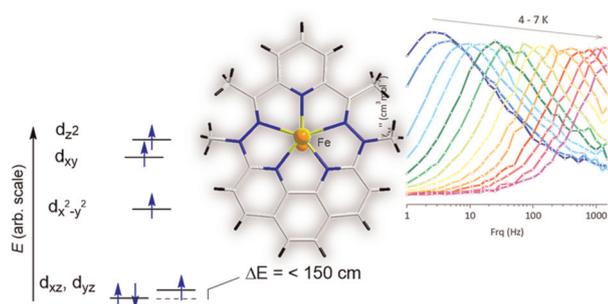
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### Guest-induced gate-opening in a flexible MOF adsorbent that exhibits benzene/cyclohexane selectivity

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### Engineering first-order spin–orbit coupling in a pentagonal bipyramidal Fe(II) complex and subsequent SMM behavior

Kateryna Bretosh, Virginie Béreau, Flarent Heully-Alary, Nicolas Suaud,\* Carine Duhayon, Elen Duverger-Nédellec, Nathalie Guihéry\* and Jean-Pascal Sutter\*

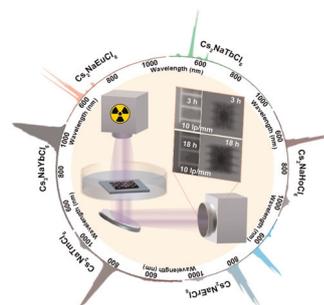


## RESEARCH ARTICLES

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## Rare earth double perovskites for underwater X-ray imaging applications

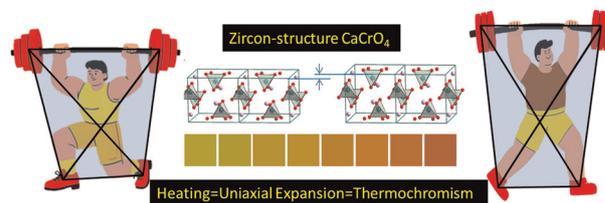
Ying Wang, Chao Wang, Luxuan Men, Jinlong Zhu, Qingsong Hu,\* Jiawen Xiao\* and Omar F. Mohammed\*



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Uniaxial thermal expansion-induced successively reversible thermochromism in zircon-type  $\text{CaCrO}_4$ 

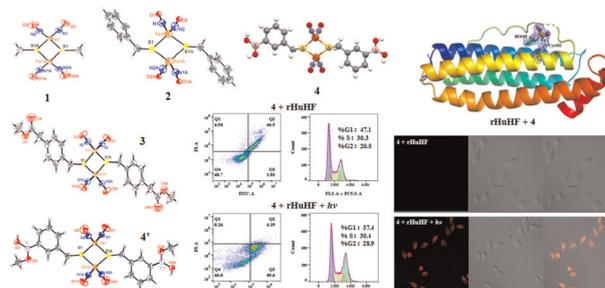
Yanan Sun, Fahua Guo, Xuefeng Chu, Haiyang Zhao, Xiaotian Yang and Long Yuan\*



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Photoinduced NO release of  $[\text{Fe}_2(\mu\text{-SL})_2(\text{NO})_4]$  complexes and their protein adducts: insights from structure, cytotoxicity, and photodynamic studies

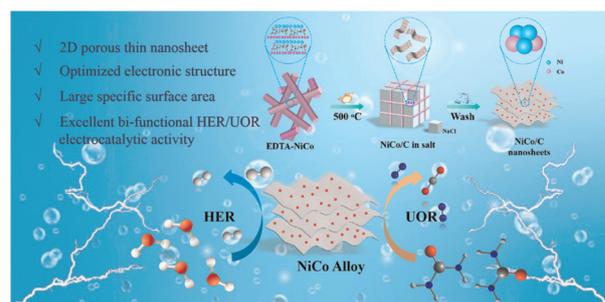
Wenjun Gong, Yating Pang, Chenyu Wang, Wenming Wang and Hongfei Wang\*



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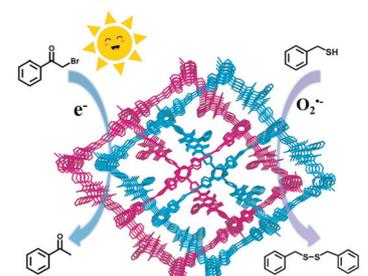
## Porous NiCo alloy thin sheets with synergistic Co/Ni sites for high-efficiency urea-assisted electrocatalytic hydrogen production

Chengxu Jin, Aiping Wu, Yuying Fan, Xianyun Yue, Dongxu Wang\* and Chungui Tian\*



## RESEARCH ARTICLES

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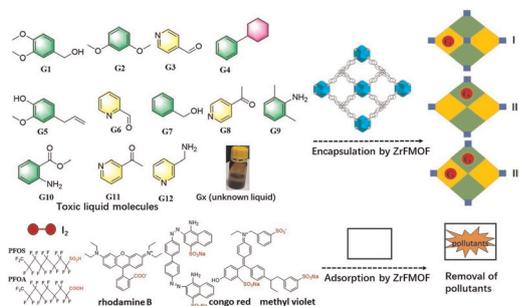


BODIPY-based MOFs for photoredox organic transformations

### Isomorphous BODIPY-based metal–organic frameworks for high-efficiency photoredox organic transformations

Chen-Yang Nie, Li-Jun Xue, Shao-Dan Wang, Meng-Yuan Li, Qian Kang and Li-Li Wen\*

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### Encapsulation of toxic liquid molecules and adsorption of water pollutants by a versatile pre-organized single crystalline coating material

Wei-Ping Huang, Jin-Chang Liu, Feng Wang, Wei Xu, Zi-Meng Tao, David A. Middleton, Cheng-Dong Liu,\* Shu-Qin Qin,\* Wen-Cai Ye\* and Ren-Wang Jiang\*

