

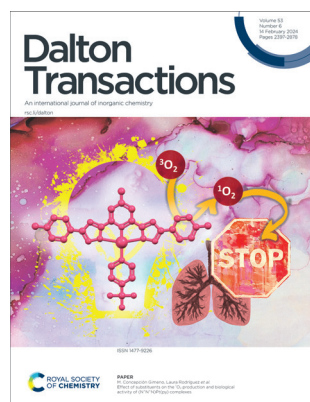
# Dalton Transactions

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### Cover

See M. Concepción Gimeno,  
Laura Rodríguez *et al.*,  
pp. 2475–2486.

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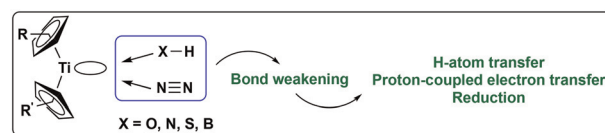
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Ugochinyere N. Oloyede and Robert A. Flowers, II\*

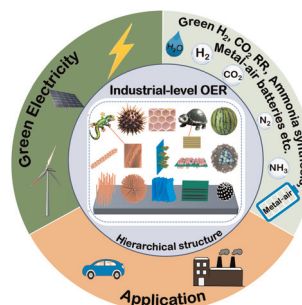


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Haiyu Yao, Peijie Wang, Min Zhu and Xue-Rong Shi\*



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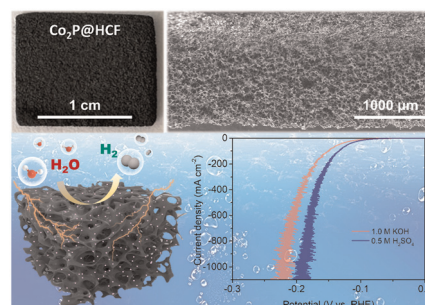


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### A hierarchical carbon foam-hosted $\text{Co}_2\text{P}$ nanoparticles monolithic electrode for ampere-level and super-durable electrocatalytic hydrogen production

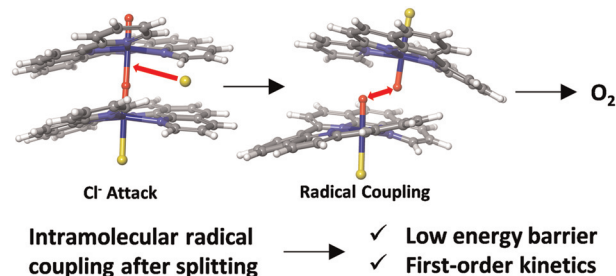
Yaoyao Zhao, Zhengguo Zhang,\* Fang Wang and Shixiong Min\*



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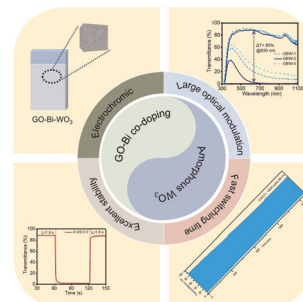
Ge Li and Mårten S. G. Ahlquist\*



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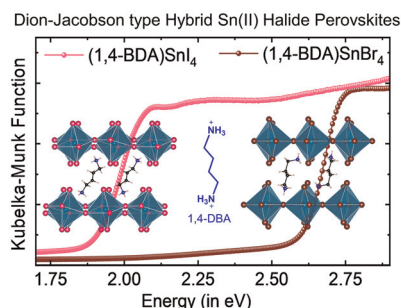
Jin You Zheng, Qimeng Sun, Huijing Yang, Shuang Yu, Mengsi Li, Xiaomei Yu,\* Chengduo Wang, Tiantian Liu and Songjie Li\*



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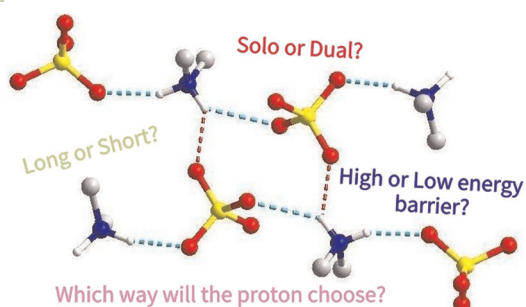
### $[\text{NH}_3(\text{CH}_2)_4\text{NH}_3]\text{SnX}_4$ ( $\text{X} = \text{Br}, \text{I}$ ): Dion–Jacobson type 2-D perovskites with short interlayer spacing

Nagale S. Vishwajith, Mridul Krishna Sharma, Isha Jain and Pratap Vishnoi\*



## COMMUNICATIONS

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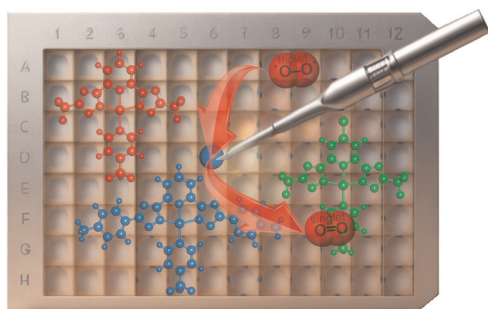


### High anhydrous proton conductivity and a smart proton transportation approach of a sulfate coordination polymer

Xing Zhao, Jiasheng Wang, Bo Li,\* Man Zhang\* and Jingping Zhang\*

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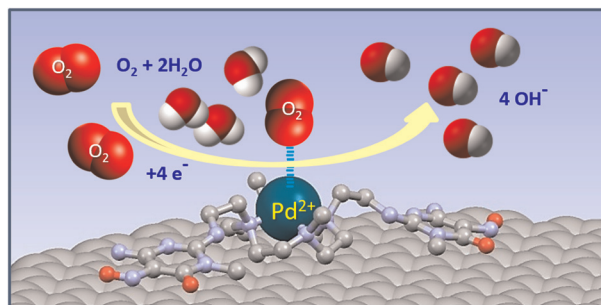
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Guillermo Romo-Islas, María Gil-Moles, Arnav Saxena, Antonio Frontera, M. Concepción Gimeno\* and Laura Rodríguez\*

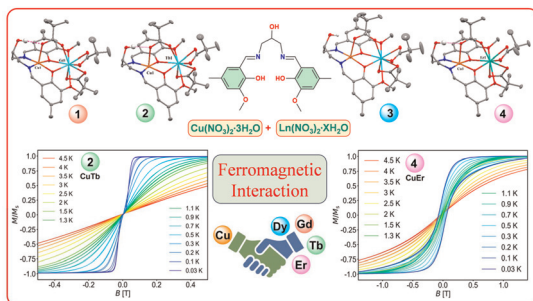
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### Insight into ferromagnetic interactions in $\text{Cu}^{\text{II}}\text{--Ln}^{\text{III}}$ dimers with a compartmental ligand

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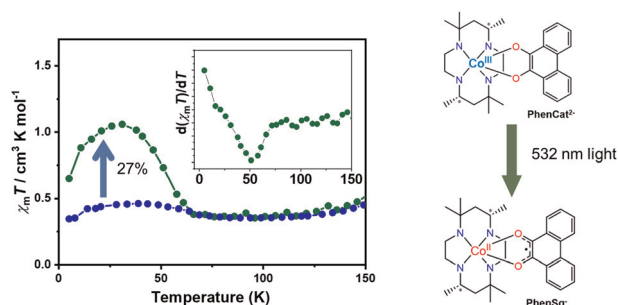


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### Photo-induced valence tautomerism and polarization switching in mononuclear cobalt complexes with an enantiopure chiral ligand

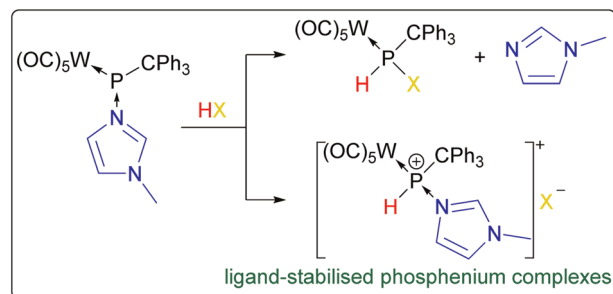
Wen-Huang Xu, Yu-Bo Huang, Wen-Wei Zheng, Sheng-Qun Su, Shinji Kanegawa, Shu-Qi Wu\* and Osamu Sato\*



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### Access to ligand-stabilized PH-containing phosphonium complexes

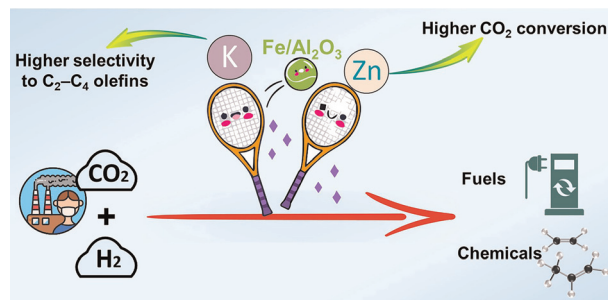
David Biskup, Gregor Schnakenburg, Arturo Espinosa Ferao\* and Rainer Streubel\*



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### Synergistic effect of K and Zn on Fe-based catalysts for efficient CO<sub>2</sub> hydrogenation

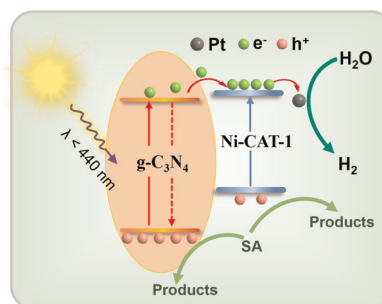
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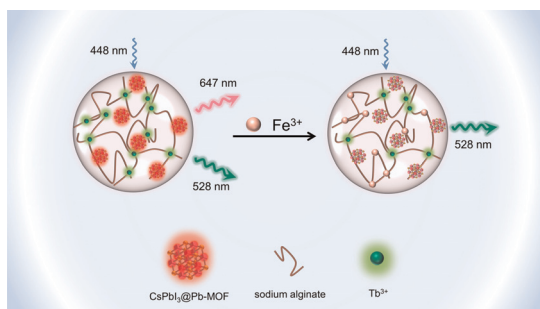
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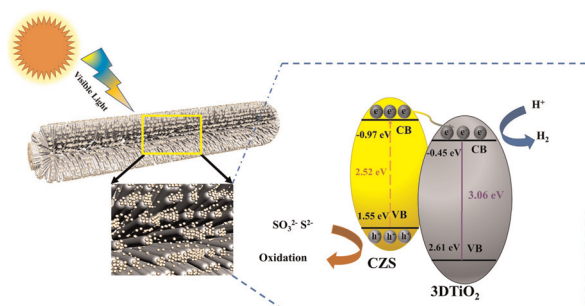
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### Terbium alginate encapsulated CsPbI<sub>3</sub>@Pb-MOF: a ratiometric fluorescent bead for detection and adsorption of Fe<sup>3+</sup>

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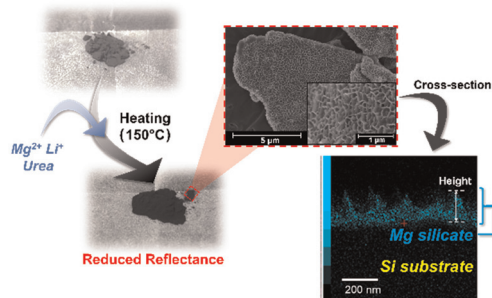
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### A rationally designed 3DTiO<sub>2</sub>@CdZnS heterojunction photocatalyst for effectively enhanced visible-light-driven hydrogen evolution

Zhuoyang Li, Hao Ji, Ziwen Feng, Zelin Li, Hang Gao, Yipeng Tan, Lingmin Yao,\* Qinglin Deng,\* Yu Sun and Mengmeng Shao

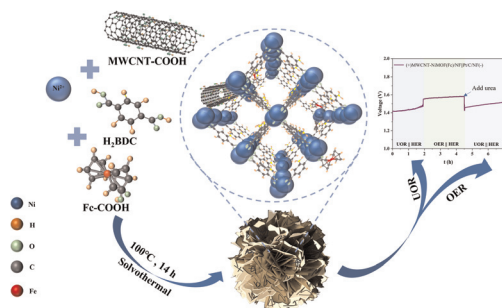
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### Formation of moth-eye-like structures on silicon through *in situ* crystallization of layered Mg silicate

Yuki Nakauchi, Hikari Minamisawa and Tomohiko Okada\*

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### A NiMOF integrated with conductive materials for efficient bifunctional electrocatalysis of urea oxidation and oxygen evolution reactions

Xiaopei Xie, Liqiang Xu, Qingsheng Zeng, Zhaona Zhang, Zhiqi Xu, Chuanxia Yin and Xinxing Wang\*

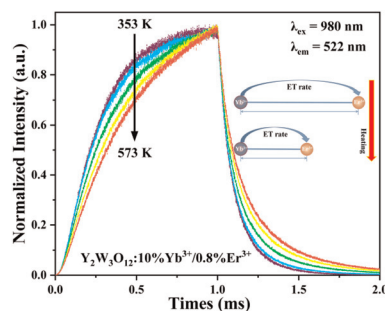


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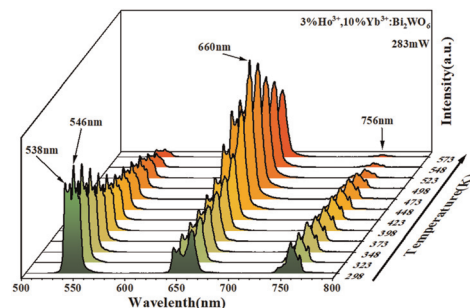
Yuhong Zhang,\* Wentong Cai, Jian Liu, Ziyi Zhang, Bo Sun and Hang Liu\*



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### Upconversion luminescence and temperature sensing properties of $\text{Ho}^{3+}, \text{Yb}^{3+}$ -codoped $\text{Bi}_2\text{WO}_6$

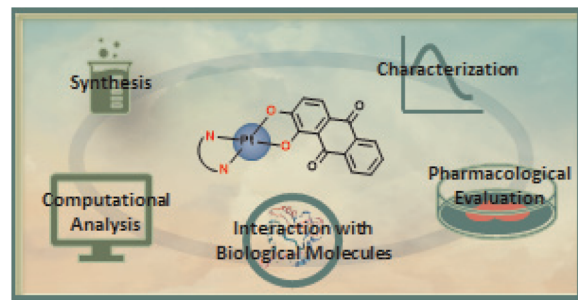
Mengliang Jiang, Linxiang Wang,\* Munire Maimaiti, Xin Feng and Yan Zhang



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### Cytotoxic $\text{Pt(II)}$ complexes containing alizarin: a selective carrier for DNA metalation

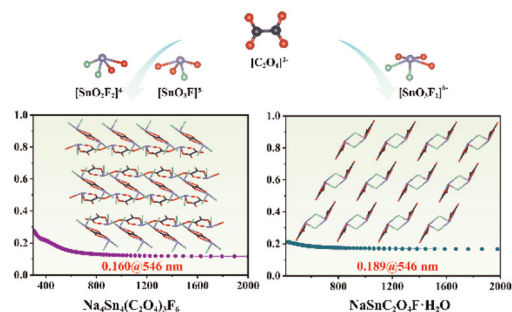
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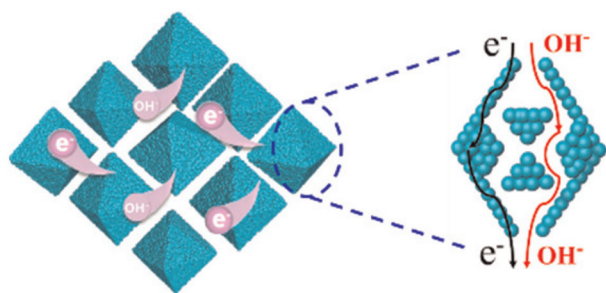
### $\text{Na}_4\text{Sn}_4(\text{C}_2\text{O}_4)_3\text{F}_6$ and $\text{NaSnC}_2\text{O}_4\text{F}\cdot\text{H}_2\text{O}$ : two tin(II) fluoride oxalates display large birefringence

Liyang Ren, Zeqiao Yin, Shiyi Wang, Zhengyan Lin, Liling Cao,\* Xuehua Dong, Ling Huang, Yuqiao Zhou, Daojiang Gao and Guohong Zou\*



## PAPERS

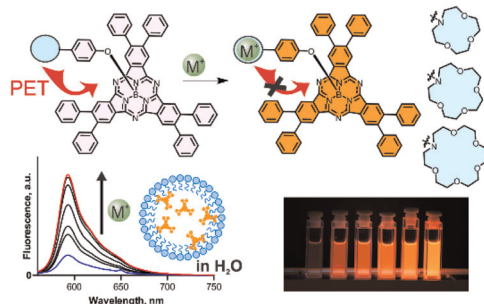
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### Prussian blue analogue-derived $\text{Co}_3\text{O}_4/\text{Fe}_2\text{O}_3$ with a partially hollow and octahedral structure for high-performance supercapacitors

Hui Ju, Jixiang Yang, Xiaoyang Guo, Hongli Lang, Sheng Wang, Chenjin Pu, Ling Zhao, Lirong Yang\* and Wenjing Han\*

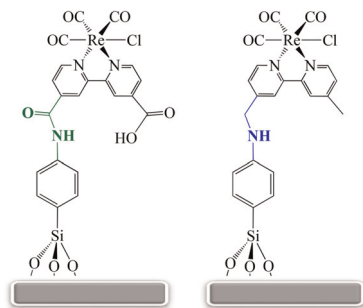
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### Subphthalocyanines as fluorescence sensors for metal cations

Mary Angelia Alfred, Kamil Lang, Kaplan Kirakci, Pavel Stuzhin, Petr Zimcik, Jan Labuta\* and Veronika Novakova\*

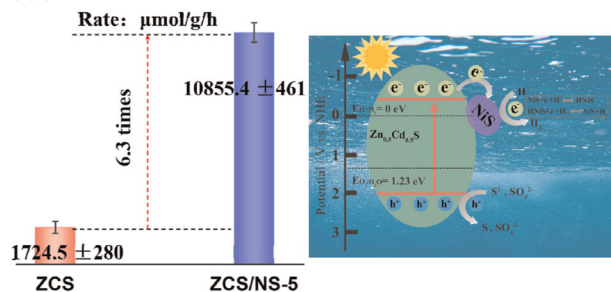
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### Solar $\text{CO}_2$ reduction using a molecular $\text{Re}(\text{I})$ catalyst grafted on $\text{SiO}_2$ via amide and alkyl amine linkages

Thomas Fenton, Esraa Ahmad and Gonghu Li\*

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### One-pot hydrothermal synthesis of noble-metal-free $\text{NiS}$ on $\text{Zn}_{0.5}\text{Cd}_{0.5}\text{S}$ nanosheet photocatalysts for high $\text{H}_2$ evolution from water under visible light

Linfen Yang, Yong Peng\* and Yuhua Wang\*



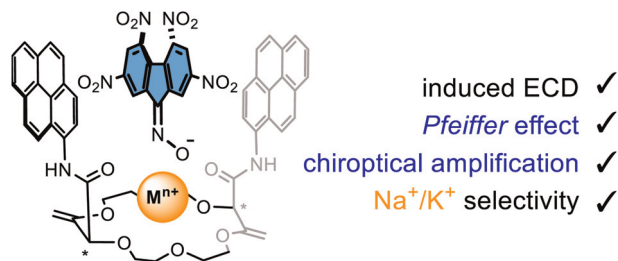


## PAPERS

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**Pfeiffer effect on configurationally labile dyes within ternary complexes with metal ions and enantiopure macrocycles**

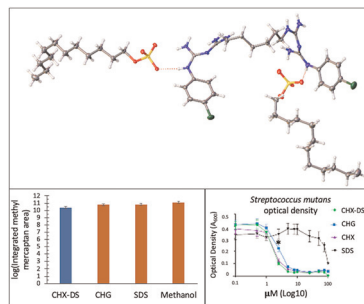
Dávid Pál and Jérôme Lacour\*



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**Novel anionic surfactant-modified chlorhexidine and its potent antimicrobial properties**

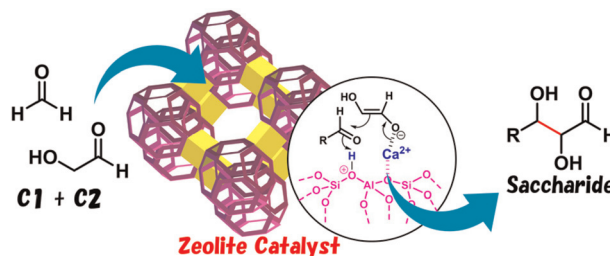
Zilma Pereira Muneeswaran, Baran Teoman, Yu Wang, Haroon Chaudhry, Tatiana V. Brinzari, Gaurav Verma, Lomaani Ranasinghe, Kylie Ryan Kaler, Xiaoyi Huang, Xing He, Belvin Thomas, Shiyu Xu, Chi-Yuan Cheng, Jeffrey M. Boyd, Dailin Chen, Zhigang Hao, Shengqian Ma, Tewodros Asefa, Long Pan\* and Viktor Dubovoy\*



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**Saccharide formation by sustainable formose reaction using heterogeneous zeolite catalysts**

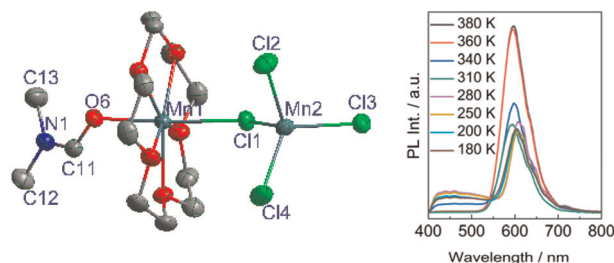
Minoru Waki,\* Soichi Shirai and Yoko Hase



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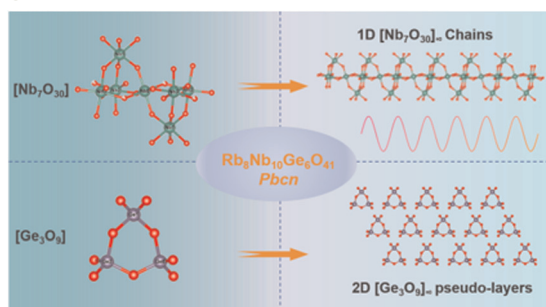
**Supramolecular crystals of Mn(15-crown-5)(MnCl<sub>4</sub>) (DMF) with dielectric phase transition, high quantum yield and phase transition-induced luminescence enhancement behavior**

Guo-Jun Yuan,\* Xue-Wei Pan, Li Chen, Chao Chen and Xiao-Ming Ren\*



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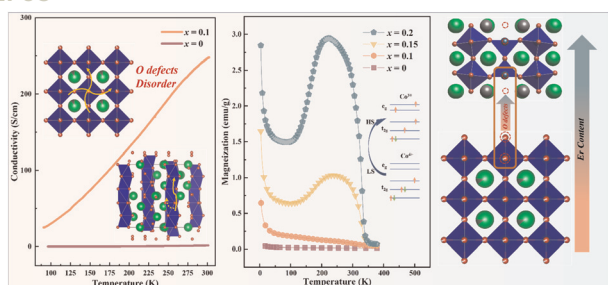
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### Rb<sub>8</sub>Nb<sub>10</sub>Ge<sub>6</sub>O<sub>41</sub>: a new niobium-germanate crystal featuring unique one-dimensional [Nb<sub>7</sub>O<sub>30</sub>]<sub>∞</sub> chains and wide mid-IR transparency

Jing Chai, Yuheng She, Jinmiao Jiao, Lili Li, Ning Ye, Zhanggui Hu, Yicheng Wu and Conggang Li\*

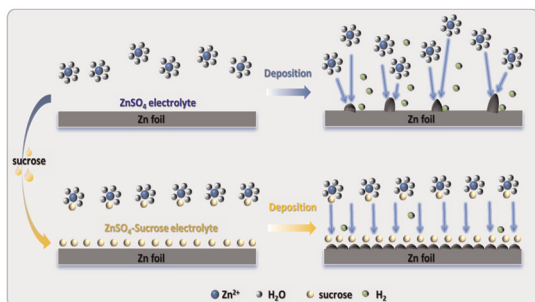
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### Introducing gradient Er ions and oxygen defects into SrCoO<sub>3</sub> for regulating structural, electrical and magnetic transport properties

Hongyuan Song, Xuesong Wang, Haorong Wu, Kun Dong, Kun Meng, Ju Rong, Xiaohua Yu, Liangwei Chen, Bin Liu, Zhenhua Ge and Lan Yu\*

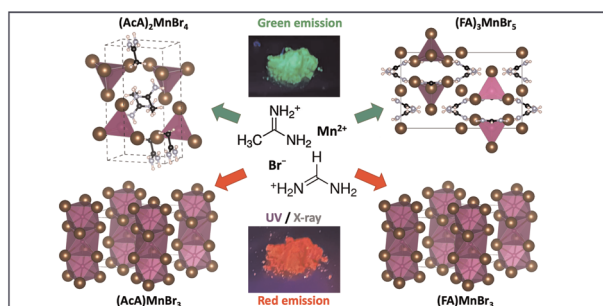
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### Highly stable and reversible Zn anodes enabled by an electrolyte additive of sucrose

Ming Song, Shan Li, Yi Zhu, Hongri Wan,\* Xuena Xu, Lu Li, Limei Sun, Lin Tian\* and Yan Xu\*

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Sergey A. Fateev, Vladislava Y. Kozhevnikova, Kirill M. Kuznetsov, Daria E. Belikova, Victor N. Khrustalev, Eugene A. Goodilin and Alexey B. Tarasov\*

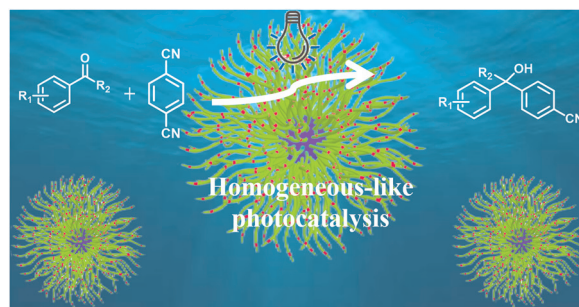


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### Homogeneous-like photocatalysis: covalent immobilization of an iridium(III) complex onto polystyrene brushes grafted on SiO<sub>2</sub> nanoparticles as a mass/charge transfer-enhanced platform

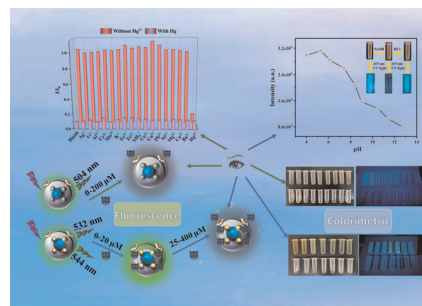
Shaoqi Chen, Yang Zhou and Xuebing Ma\*



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### A series of viologen complexes containing thiophene and Br<sup>-</sup> dual fluorescent chromophores for continuous visual sensing of pH and Hg<sup>2+</sup>

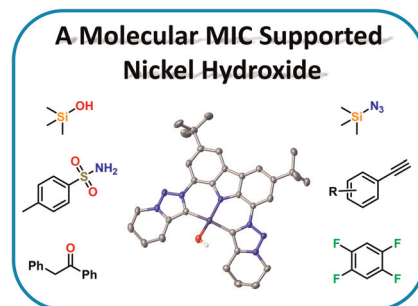
Kai Li, Jun Ying,\* Tao Liu, Aixiang Tian and Xiuli Wang\*



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### A mesoionic carbene stabilized nickel(II) hydroxide complex: a facile precursor for C–H activation chemistry

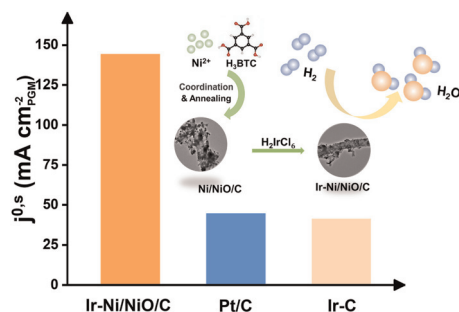
Anna Pavun, Raffael Niess, Lucas A. Scheibel, Michael Seidl and Stephan Hohloch\*



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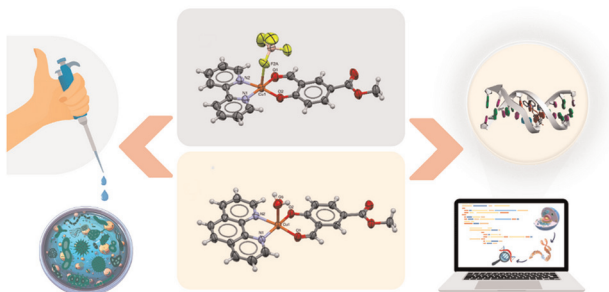
### A trinary support of Ni/NiO/C to immobilize Ir nanoclusters for alkaline hydrogen oxidation

Ziliang Kang, Yao Peng, Zi Wei, Yuanjun Liu,\* Xiaoyang Song, Zhenyuan Ji, Xiaoping Shen, Ning Yao, Xinhang Du and Guoxing Zhu\*



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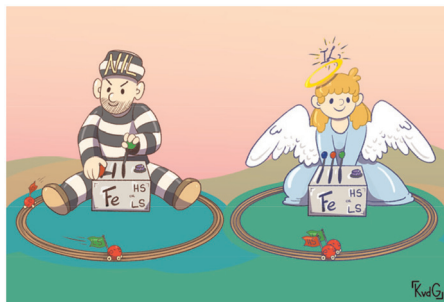
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**Cu(II) complexes with a salicylaldehyde derivative and  $\alpha$ -diimines as co-ligands: synthesis, characterization, biological activity. Experimental and theoretical approach**

Snežana Selaković, Marko V. Rodić, Irena Novaković, Ivana Z. Matić, Tatjana Stanojković, Andrea Pirković, Lada Živković, Biljana Spremo-Potparević, Miloš Milčić, Vesna Medaković, Filitsa Dimiza, George Psomas, Katarina Anđelković and Maja Šumar-Ristović\*

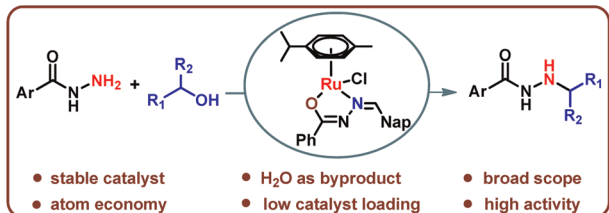
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**Changes in aromaticity of spin-crossover complexes: a signature for non-innocent ligands**

Ana V. Cunha,\* Francesca Milocco, Edwin Otten and Remco W. A. Havenith\*

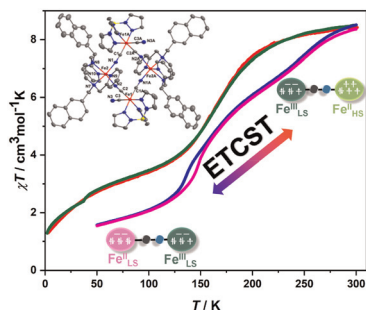
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**Half-sandwich ruthenium complexes with acylhydrazone ligands: synthesis and catalytic activity in the *N*-alkylation of hydrazides**

Heng Li, Ke Wang, Lin Yang, Yu-Zhou Luo\* and Zi-Jian Yao\*

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**Electron transfer coupled spin transition in cyano-bridged mixed-valence  $\{\text{Fe}_2^{\text{III}}\text{Fe}_2^{\text{II}}\}$  molecular squares**

Shuwen Jia, Mengjia Shang, Sai Jin, Xinrui Zhu, Yuanyuan Cai and Dongfeng Li\*



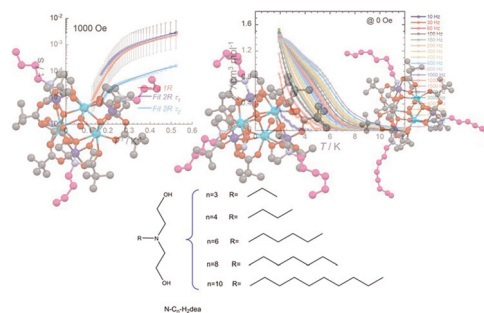


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### Alkyl chain length influence of the functionalized diethanolamine ligand on the slow relaxation of the magnetization in $\{\text{Co}^{\text{III}}\text{Dy}^{\text{III}}\}$ complexes

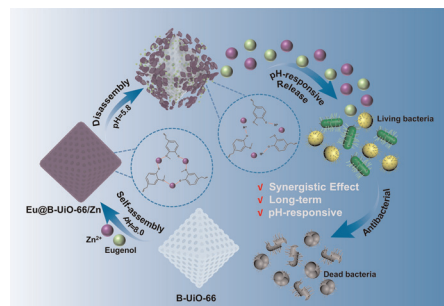
Chloë Bonnenfant, Nahir Vadra, Mathieu Rouzières, Rodolphe Clérac, Fabio D. Cukiernik\* and Pablo Alborés\*



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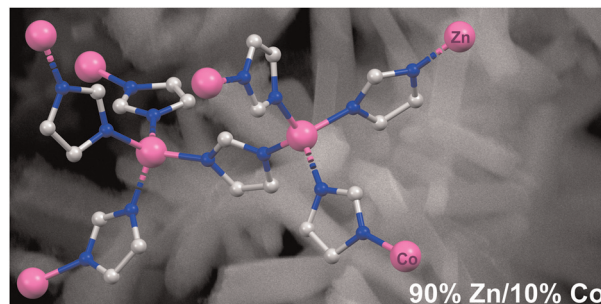
Jing Wang, Lin Li, Xingyu Hu, Lulu Zhou\* and Jing Hu\*



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### New heterometallic Co/Zn, Ag/Co, and Ag/Zn imidazolates: structural characterization and catalytic activity in the oxidation of organic compounds

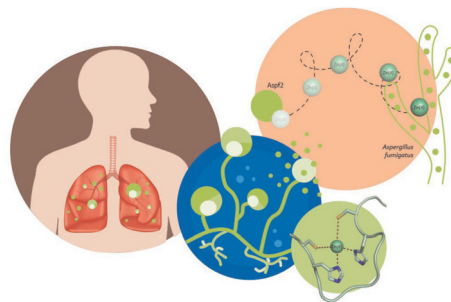
Mattia Lopresti, Łukasz Kurowski, Luca Palin, Marco Milanesio,\* Magdalena Siedzielnik, Karolina Gutmańska, Adriana Dobrenko, Tomasz Klimczuk, Ewelina Pawelczyk and Anna Dołęga\*



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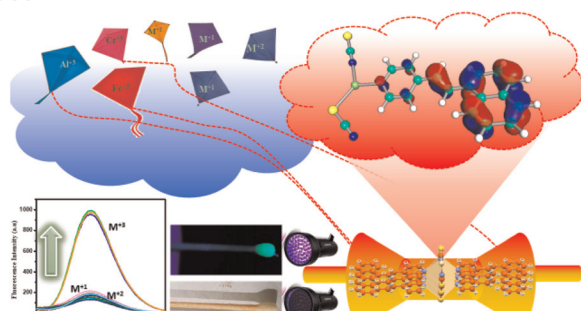
### *Aspergillus fumigatus* ZrFC Zn(II) transporter scavengers zincophore-bound Zn(II)

Kinga Garstka, Gabriela Potoczniak, Henryk Kozłowski and Magdalena Rowińska-Żyrek\*



## PAPERS

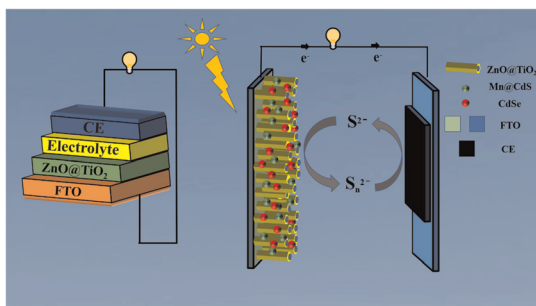
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### Exploitation of a 1D coordination polymer as a portable kit for an eye-catching fluorometric response towards sensing of trivalent cations

Sourav Datta, Sunanda Dey, Chittaranjan Sinha, Basudeb Dutta,\* Priyabrata Banerjee\* and Mohammad Hedayetullah Mir\*

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### Core-shell ZnO@TiO<sub>2</sub> hexagonal prism heterogeneous structures as photoanodes for boosting the efficiency of quantum dot sensitized solar cells

Quanhang Li, Tingting Zhang, Donghui Cui, Lin Xu and Fengyan Li\*

