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ISSN 1477-9226 CODEN DTARAF 52(31) 10623–10990 (2023)



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See Davide Barreca,  
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pp. 10677–10688.

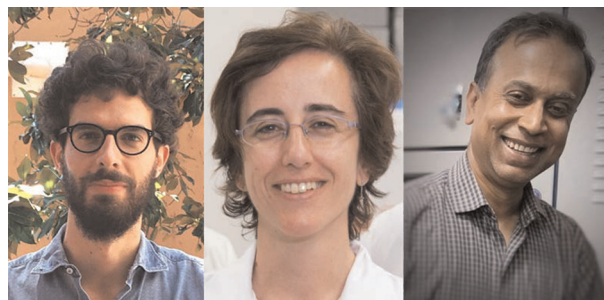
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## EDITORIAL

10637

### Aggregation induced luminescence of metal complexes: advances and applications

Andrea Fermi,\* Paola Ceroni and  
Inamur Rahaman Laskar

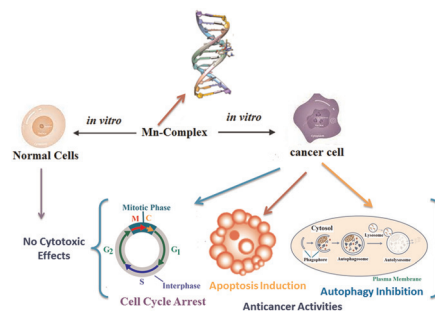


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### Interactions of Mn complexes with DNA: the relevance of therapeutic applications towards cancer treatment

Oishi Mallick Ganguly\* and Shuvojit Moulik\*



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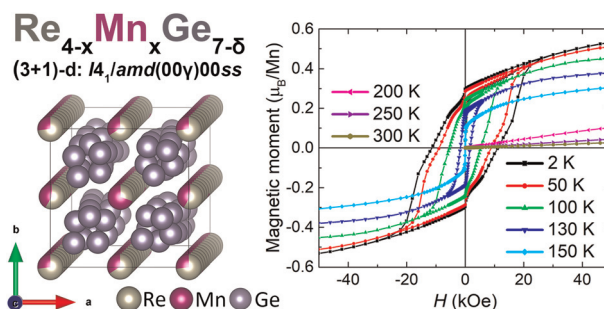


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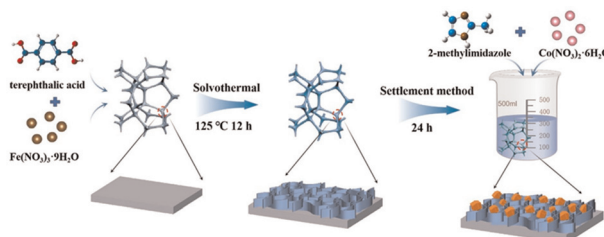
Roman A. Khalaniya,\* Valeriy Yu. Verchenko, Alexey V. Bogach, Maxim Likhanov and Andrei V. Shevelkov



10662

### Constructing MIL-53(Fe)@ZIF-67(Co) binary metal-organic framework hierarchical heterostructure electrodes for efficient oxygen evolution

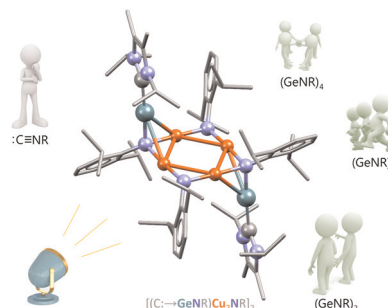
Dan Wen, Yan Ma, Guomei Mu, Qiuping Huang, Xuefeng Luo, Dunmin Lin, Chenggang Xu, Fengyu Xie,\* Guangzhao Wang\* and Wenhan Guo\*



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### Interaction of germanium analogue of organic isonitrile with Cu(I) imide in side-on mode

Shuai-Cong Huo, Yao Li, Peng-Fei Ji, De-Xiang Zhang, Ying Yang\* and Herbert W. Roesky\*

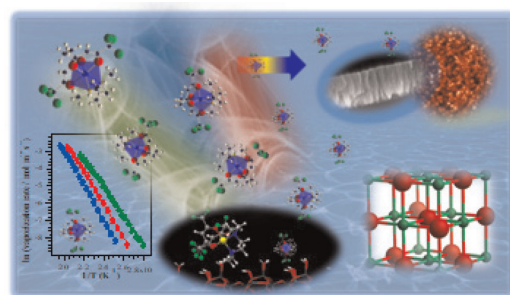


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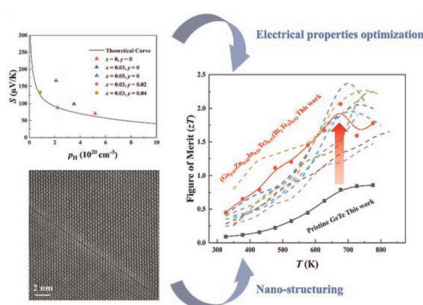
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M. Benedet, D. Barreca,\* E. Fois, R. Seraglia, G. Tabacchi,\* M. Roverso, G. Pagot, C. Invernizzi, A. Gasparotto, A. A. Heidecker, A. Pöthig, E. Callone, S. Dirè, S. Bogialli, V. Di Noto and C. Maccato



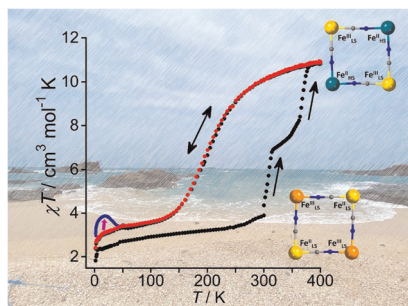
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### Optimized electronic properties and nano-structural features for securing high thermoelectric performance in doped GeTe

Zan Yang, Yu-Chih Tseng, Suneesh Meledath Valiyaveetil, Hui Yuan, Evan Smith, Kuei-Hsien Chen, Yuyang Huang, Tianze Zou, Jan Kycia and Yuriy Mozharivskyj\*

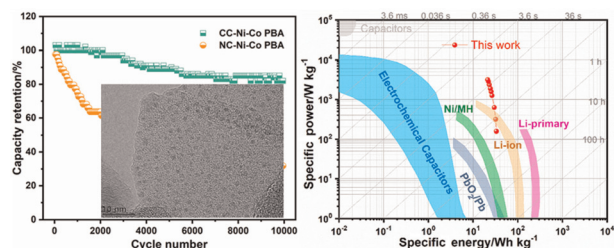
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### Near room temperature stepwise spin state switching and photomagnetic effect in a mixed-valence molecular square

Sujit Kamilya, Sakshi Mehta, Rodrigue Lescouëzec, Yanling Li, Jiri Pechousek, Mohini Semwal and Abhishake Mondal\*

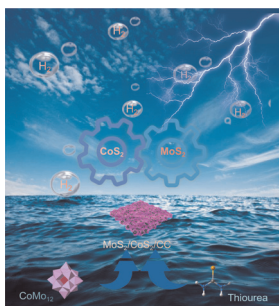
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### Nickel hexacyanocobaltate quantum dots embedded in N-doped carbon for aqueous alkaline batteries with ultrahigh durability

Yanhong Li,\* Zhiting Song, Qifeng Zhang, Kai Shu, Hongming Hu, Yi Lu, Xiao Tang, Xianju Zhou, Xijun Wei and Yunhuai Zhang\*

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### *In situ* coupling of a Co–Mo bimetallic sulfide derived from $[\text{CoMo}_{12}\text{O}_{40}]^{6-}$ clusters showing highly efficient electrocatalytic hydrogen evolution

Qingfang Zhen, Haijun Pang,\* Sumin Hu, Zhongxin Jin, Qiong Wu, Huiyuan Ma,\* Xinming Wang, Guixin Yang and Zhipeng Yu\*



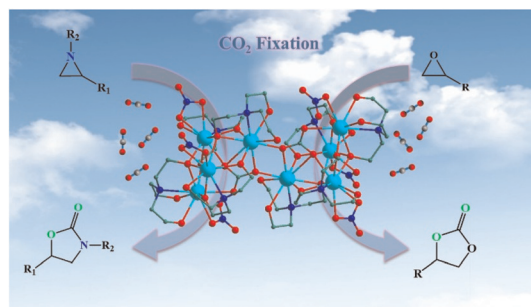


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## Two novel $\text{Ln}_8$ clusters bridged by $\text{CO}_3^{2-}$ effectively convert $\text{CO}_2$ into oxazolidinones and cyclic carbonates

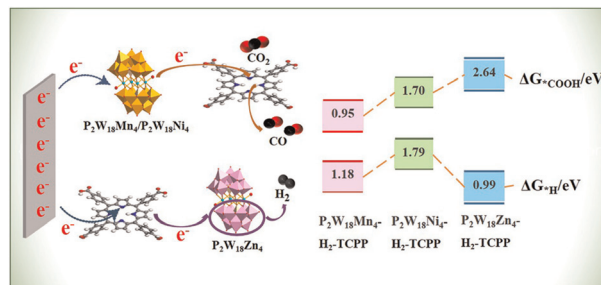
Na Qiao, Xiao-Yan Xin, Wen-Min Wang,\* Zhi-Lei Wu\* and Jian-Zhong Cui



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## Exploring the role of sandwich-type polyoxometalates in $\{\text{K}_{10}(\text{PW}_9\text{O}_{34})_2\text{M}_4(\text{H}_2\text{O})_2\}$ @PCN-222 ( $\text{M} = \text{Mn}, \text{Ni}, \text{Zn}$ ) for electroreduction of $\text{CO}_2$ to CO

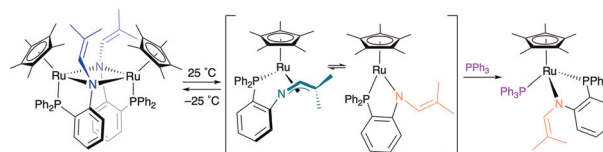
Meng-Ting Peng, Chuang Chen, Yan Zhang, Jia-Yu Xu, Yun-Lei Teng\* and Bao-Xia Dong\*



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## Operationally unsaturated ruthenium complex stabilized by a phosphine 1-azaallyl ligand

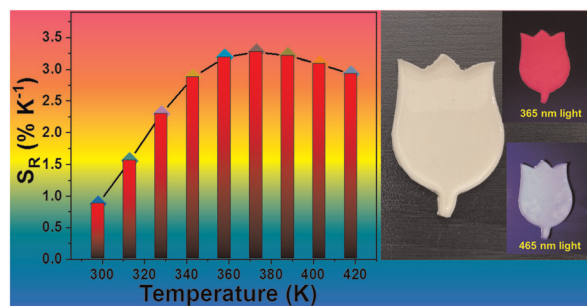
Meagan B. Kindervater, Viktor N. Staroverov, Kyle M. K. Jackman, Amanda A. Fogh, Leslie S. G. Kelley, Lisabeth Lim, Sofia A. Sirohey, Paul D. Boyle and Johanna M. Blacquiere\*



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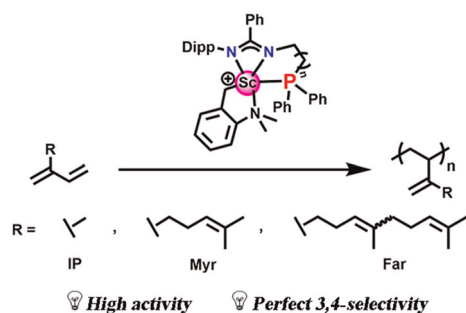
## Deep-red-emitting phosphors of $\text{Mn}^{4+}$ -activated tantalite for high-sensitivity lifetime thermometry and security films

Yongbin Hua and Jae Su Yu\*



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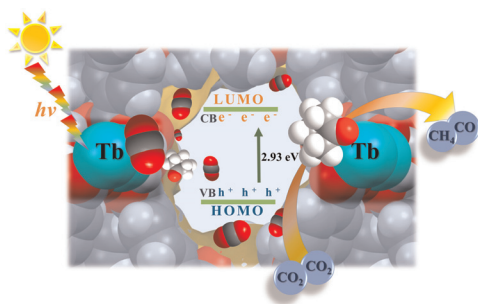
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### Phosphine-functionalized amidinate ligated rare-earth metal complexes for highly 3,4-selective living polymerization of 1,3-conjugated dienes

Fen You, Jixing Wang, Hui Liu, Xiaohui Kang\* and Xiaochao Shi\*

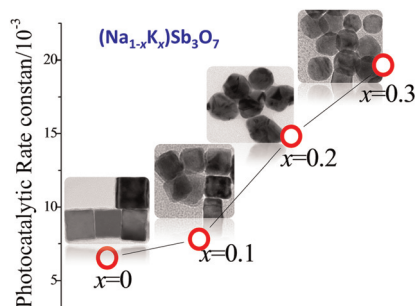
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### A solvent-responsive terbium-organic framework for photocatalytic CO<sub>2</sub> reduction

Xin Lu, Zhilong Yao, Xiaomin Yuan, Yao Wei, Zhihao Zhu,\* Hegen Zheng\* and Chuanlei Zhang\*

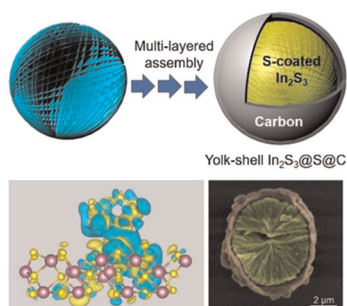
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### Significant effects of mixed cations on the morphology and photochemical activities of alkali-metal-antimony (Na,K)Sb<sub>3</sub>O<sub>7</sub>

Donglei Wei, Xifeng Yang, Yushen Liu, Joo Hyun Kim, Sung Heum Park, Hyo Jin Seo and Bo Ram Lee\*

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### Rational engineering yolk-shell In<sub>2</sub>S<sub>3</sub>@void@carbon hybrid as polysulfide-absorbable sulfur host for high-performance lithium-sulfur batteries

Yingyi Ding, Zihan Shen, Tianli Han, Jing Xu, Huigang Zhang, Chaoquan Hu\* and Jinyun Liu\*

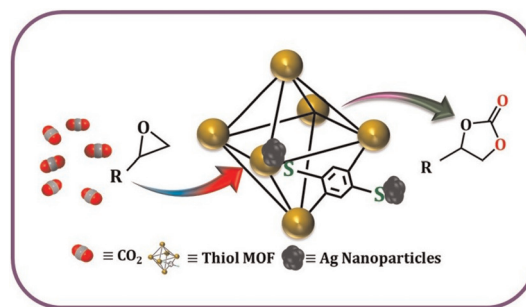


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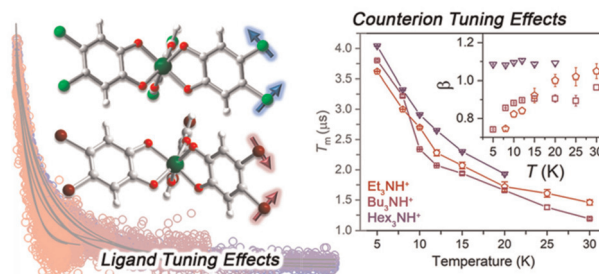
Rajesh Patra and Debajit Sarma\*



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### Impact of ligand chlorination and counterion tuning on high-field spin relaxation in a series of V(IV) complexes

Roxanna Martinez,\* Cassidy E. Jackson, Ökten Üngör, Johan van Tol and Joseph M. Zadrozny\*

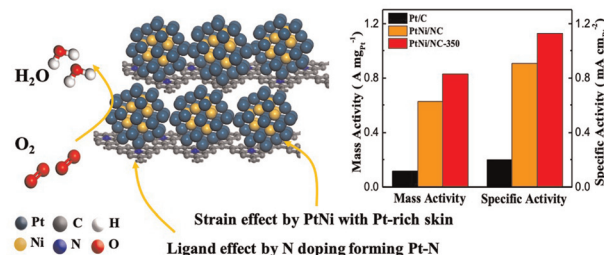


10817

### PtNi alloy nanoparticles grown *in situ* on nitrogen doped carbon for the efficient oxygen reduction reaction

Weiqi Ye, Zhenyu Wu, Shengqi Zhang, Yi Sun,\* Xiaoyan Zhang,\* Wei Zhou,\* Weimin Cao, Tao Wang, Danhong Cheng and Haijiao Xie

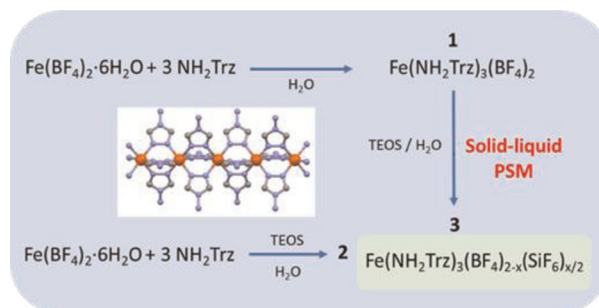
#### ORR: PtNi/NC catalyst



10828

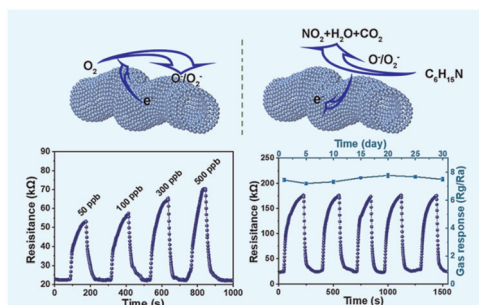
### Spin crossover in mixed-anion Fe(NH<sub>2</sub>trz)<sub>3</sub>(BF<sub>4</sub>)(SiF<sub>6</sub>)<sub>0.5</sub> crystalline rod-shaped particles: the strength of the solid–liquid post synthetic modification

Xinyu Yang, Alejandro Enriquez-Cabrera, Dorian Toha, Yannick Coppel, Lionel Salmon\* and Azzedine Bousseksou\*



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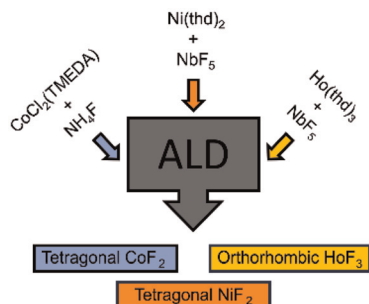
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### Biotemplate synthesis of a $\text{Co}_3\text{O}_4$ microtube sensor for fast triethylamine detection

Tingting Xu, Heru Wang, Jing Zhao,\* Fangbo Zhao, Wenbo Cong, Guiling Wang and Junqing Li\*

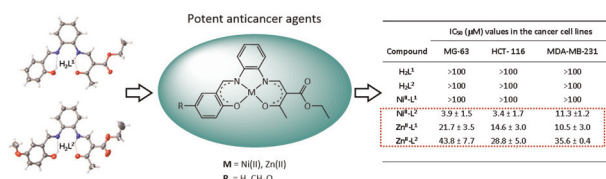
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### Atomic layer deposition of $\text{CoF}_2$ , $\text{NiF}_2$ and $\text{HoF}_3$ thin films

Elisa Atosuo,\* Miia Mäntymäki, Leevi Pesonen, Kenichiro Mizohata, Timo Hatanpää, Markku Leskelä and Mikko Ritala\*

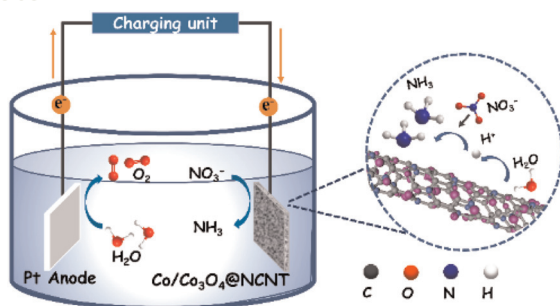
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David Villaman,\* Andrés Vega, Lucía Santa María de la Parra, Ignacio E. León, Pedro Levín and Patricia M. Toro\*

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### Heterostructured $\text{Co}/\text{Co}_3\text{O}_4$ anchored on N-doped carbon nanotubes as a highly efficient electrocatalyst for nitrate reduction to ammonia

Xianxian He, Hongfei Liu, Jiangzhou Qin, Zhaodong Niu, Jincheng Mu and Baojun Liu\*



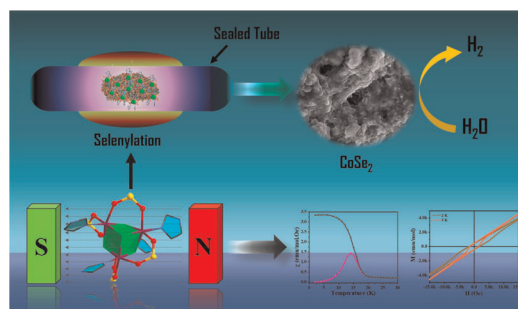


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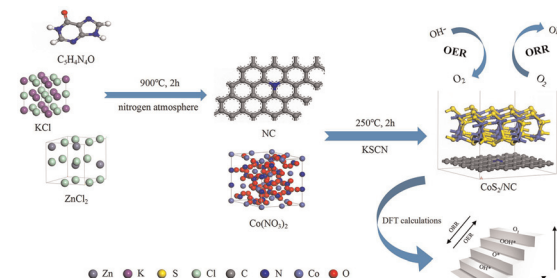
Malaya K. Sahoo and J. N. Behera\*



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### Low-temperature molten salt synthesis and catalytic mechanism of $\text{CoS}_2/\text{NC}$ as an advanced bifunctional electrocatalyst

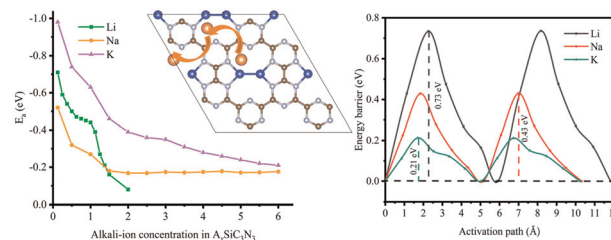
Yuankun Tu, Chuanhua Li,\* Yubao Shi, Yu Jiang, Wei Xiao, Shenghua Zhu, Peng Lv and Xuemin Yan\*



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### $\text{SiC}_3\text{N}_3$ monolayer as a universal anode for alkali metal-ion batteries

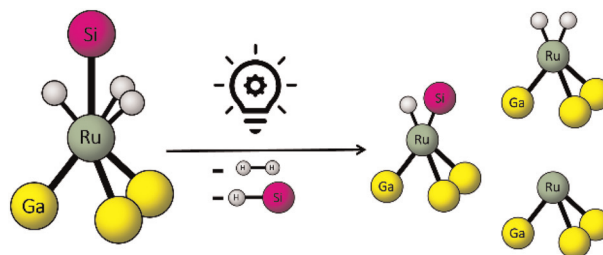
Xiaoying Xia, Jianze Wu, Xu Cai, Bao Liu, Zhaoxin Wang, Yongfan Zhang and Shuping Huang\*



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### Photochemically generated reactive sites at ruthenium/gallium complexes: catalysis vs. cluster growth

Raphael Bühler, Maximilian Muhr, Johannes Stephan, Robert A. Wolf, Max Schütz, Christian Gemel and Roland A. Fischer\*

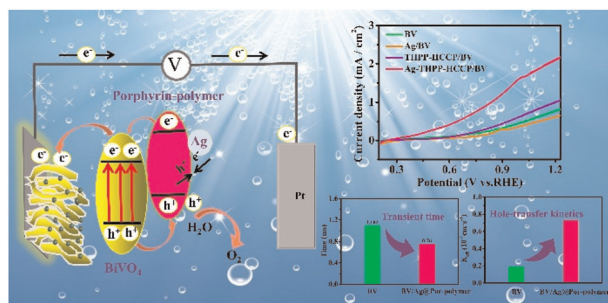


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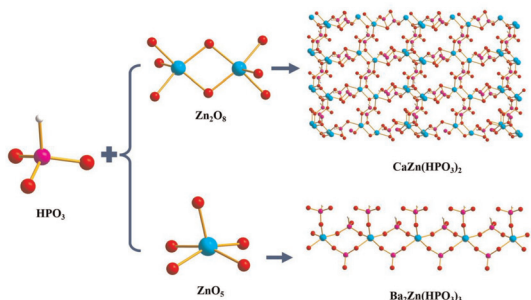
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### Photogenerated charge separation at BiVO<sub>4</sub> photoanodes enhanced by a Ag-modified porphyrin polymer skeleton

Huiqin Ye, Hui Xiao, Rongfang Zhang, Shengya Zhang, Ze Wang, Wei Luo, Ruixiu Xie, Yanjun Feng and Xiaoquan Lu\*

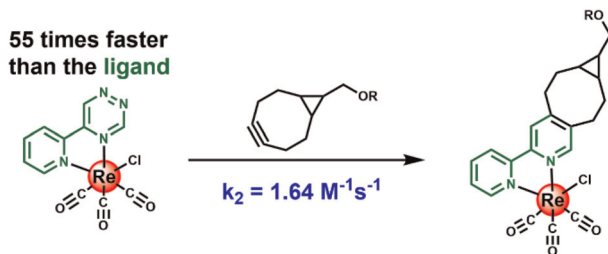
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Yu Zhang, Xia Liu, Qian-Yan Liu, Jian-Hua Wang, Ting Hu,\* Yan-Mei Lin and Jian-Han Zhang\*

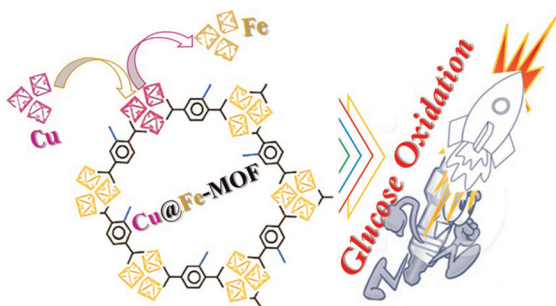
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### Catching up with tetrazines: coordination of Re(I) to 1,2,4-triazine facilitates an inverse electron demand Diels–Alder reaction with strained alkynes to a greater extent than in corresponding 1,2,4,5-tetrazines

Mark Sims, Sotiris Kyriakou, Aidan Matthews, Michael E. Deary and Valery N. Kozhevnikov\*

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### Accelerating glucose electrolysis on Cu-doped MIL-88B for an energy efficient anodic reaction in water splitting

Nabeen K. Shrestha,\* Supriya A. Patil, Amol S. Salunke, Akbar I. Inamdar and Hyunsik Im\*

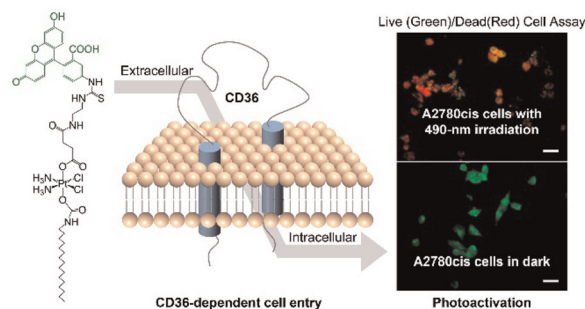


## PAPERS

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## Visible light-activatable platinum(IV) prodrugs harnessing CD36 for ovarian cancer therapy

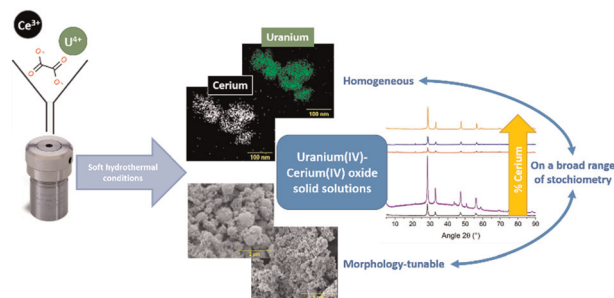
Amarasooriya M. D. S. Jayawardhana, Srijana Bhandari, Ariela W. Kaspi-Kaneti, Man Kshetri, Zihan Qiu, May Cheline, Hao Shen, Barry D. Dunietz and Yao-Rong Zheng\*



10951

Hydrothermal conversion of mixed uranium(IV)–cerium(III) oxalates into  $U_{1-x}Ce_xO_{2+\delta} \cdot nH_2O$  solid solutions

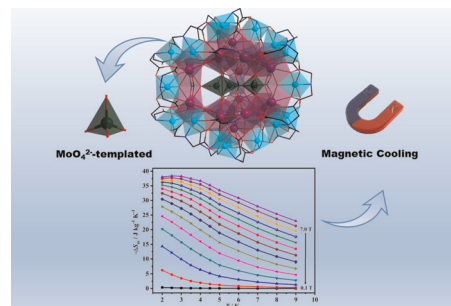
S. Benarib, N. Dacheux, X. F. Le Goff, J. Lautru, L. Di Mascio and N. Clavier\*



10969

 $MoO_4^{2-}$ -templated  $Ln_{20}Ni_{21}$  heterometallic clusters with large low-field magnetic entropy

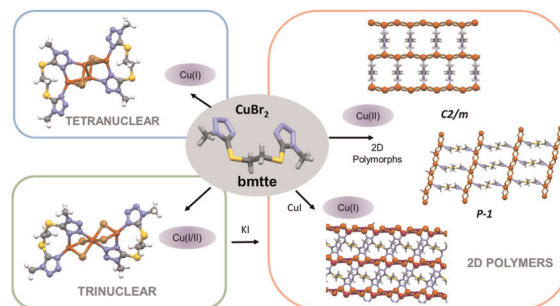
Ya-Ting Yu, Xu Bai, Qin Wang, Ji-Lei Wang, Xin-Ying Xiang, Jiu-Lin Zhou, Si-Man Li and Yan Xu\*



10975

## From Cu(I) and Cu(I)–Cu(II) mixed-valence clusters to 2D Cu(II) and Cu(I) coordination polymers supported by a flexible bis-tetrazole organosulfur ligand

Olaya Gómez-Paz, Rosa Carballo,\* Ana B. Lago,\* Inmaculada Prieto and Ezequiel M. Vázquez-López



## CORRECTION

10987

**Correction: Catalytic exploration of NHC–Ag(I)HMDS complexes for the hydroboration and hydrosilylation of carbonyl compounds**

Claudia P. Giarrusso, Daniel Van Zeil and Victoria L. Blair\*

