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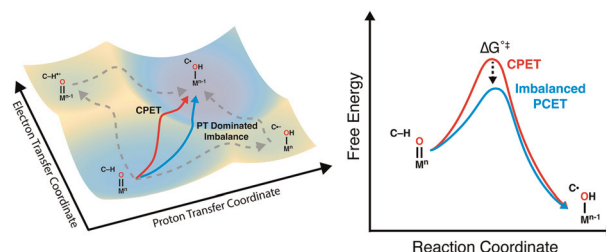
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Yusuke Takezawa from  
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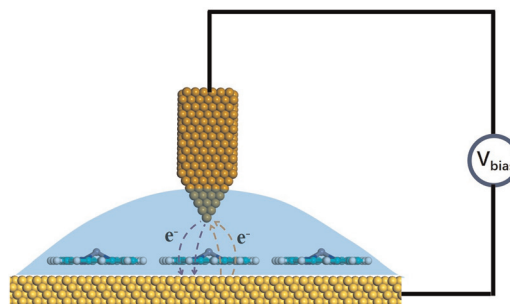
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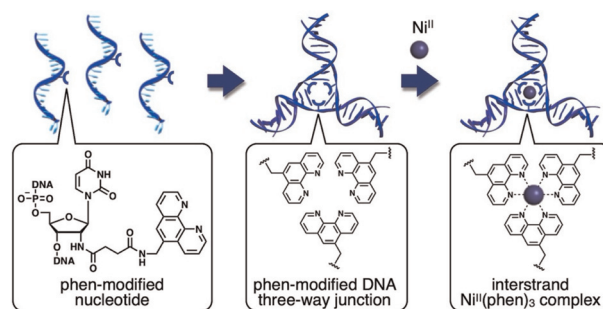


## COMMUNICATIONS

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## Phenanthroline-modified DNA three-way junction structures stabilized by interstrand 3 : 1 metal complexation

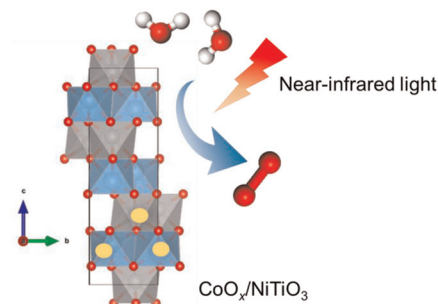
Yusuke Takezawa,\* Daisuke Kanemaru, Naofumi Kudo and Mitsuhiro Shionoya\*



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Driving a  $\text{NiTiO}_3$  photocatalyst for the oxygen evolution reaction with near-infrared light

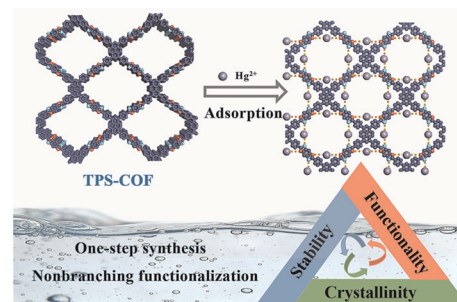
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One-step synthesis of a benzothiadiazole-based nonbranching functionalized covalent organic framework and its application in efficient removal of  $\text{Hg}^{2+}$ 

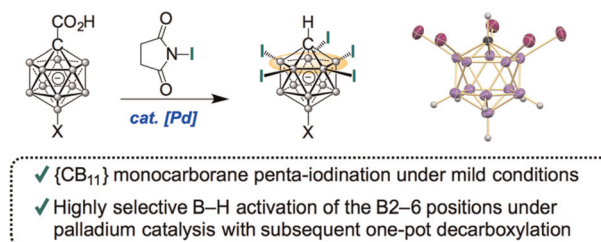
Guizhen Li, Yuanzhe Cao, Bo Zhang, Qiang Zhang, Yingyuan Hu\* and Xin Zhao\*



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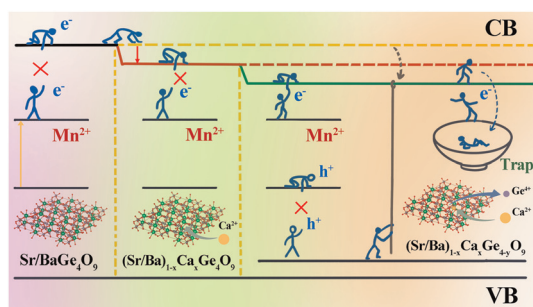
Regioselective B2–6 penta-iodination of the  $[\text{CB}_{11}\text{H}_{12}]^-$  monocarborane cluster by palladium catalysis

Chuhao Lin, Yujie Jin, Jizeng Sun, Zehua Ye, Tao Chen, Jiyong Liu and Simon Duttwyler\*



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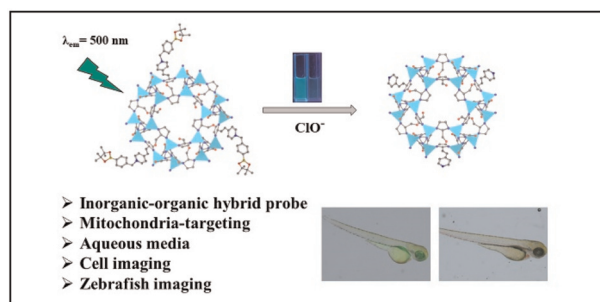
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Probing into the conduction band and type of carriers/traps on red/orange persistent phosphors in vacancy & solid-solution induced  $(\text{Sr/Ba})_{1-x}\text{Ca}_x\text{Ge}_{4-y}\text{O}_9:\text{Mn}^{2+}$

Feng Peng and Wang Yuhua\*

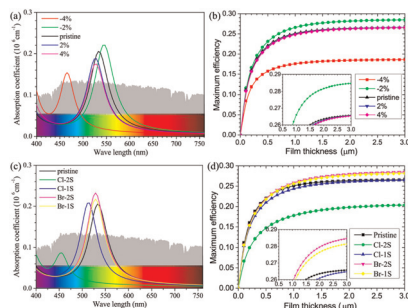
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A zeolitic imidazolate framework-90-based probe for fluorescent detection of mitochondrial hypochlorite in living cells and zebrafish

Ling Zhang, Xi Chen, Wei-Na Wu,\* Xiao-Lei Zhao, Yun-Chang Fan, Yuan Wang,\* Zhi-Hong Xu,\* Ayman Nafady, Abdullah M. Al-Enizi and Shengqian Ma\*

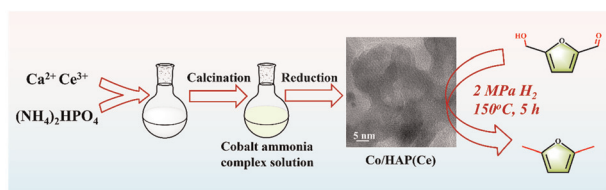
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Enhanced optical absorption in two-dimensional Ruddlesden-Popper  $(\text{C}_6\text{H}_5\text{CH}_2\text{NH}_3)_2\text{PbI}_4$  perovskites via biaxial strain and surface doping

Wen-Hui Zhao, Zheng Liang, Yao-Zhong Liu, Zi-Qiang Deng, Yu-Lou Ouyang, Rui Tan, Yong-Sheng Yao, Xiao-Lin Wei and Zhen-Kun Tang\*

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Highly dispersed Co anchored on Ce-doped hydroxyapatite as a dual-functional catalyst for selective hydrogenolysis of 5-hydroxymethylfurfural

Zhuoyou Gao, Mengying Wang, Ningzhao Shang, Wei Gao, Xiang Cheng, Shutao Gao, Yongjun Gao\* and Chun Wang\*

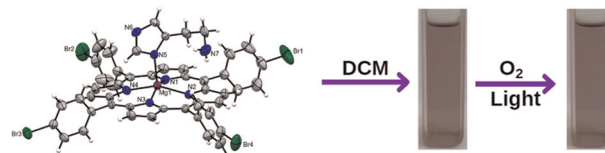


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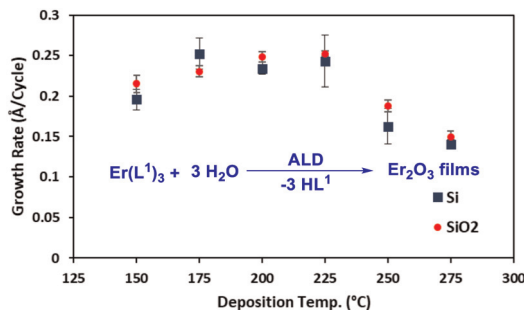
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### Thermal atomic layer deposition of $\text{Er}_2\text{O}_3$ films from a volatile, thermally stable enaminolate precursor

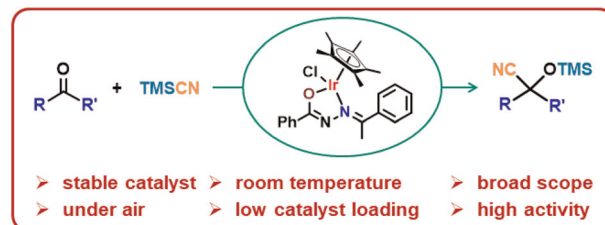
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### Half-sandwich iridium complexes with hydrazone ligands: preparation, structure, and catalytic synthesis of cyanosilyl ethers under air

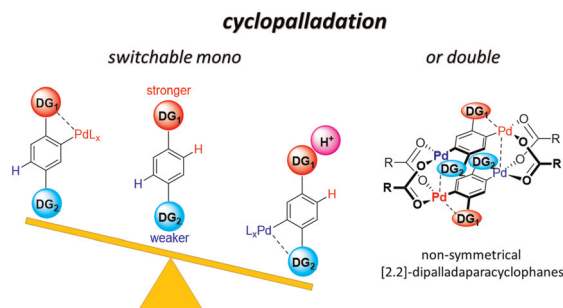
Song Gao, Zhen-Jiang Liu, Yu-Zhou Luo\* and Zi-Jian Yao\*



11113

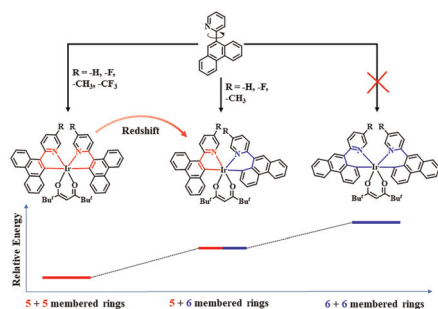
### Switchable cyclopalladation of substrates containing two directing groups: on the way to non-symmetrical [2.2]-dipalladaparacyclophanes

Tereza Korábková, Jan Bartáček, Lukáš Marek, Jiří Hanusek, Aleš Růžička and Jiří Váňa\*





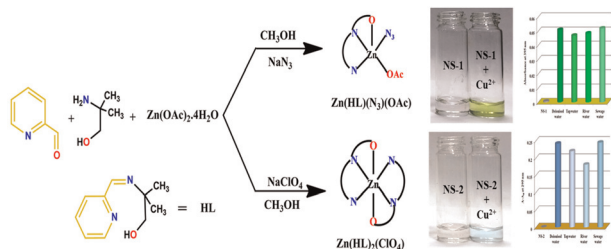
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### Unprecedented hetero-coordinated Ir(C<sup>N</sup>)<sub>2</sub>tmd complexes containing both five- and six-membered Ir-(C<sup>N</sup>) rings based on phenanthrylpyridine ligands: syntheses, crystal structures and photophysical properties

Sen Liu, Mengyun Wang, Tianjiao Hou\* and Xuan Shen

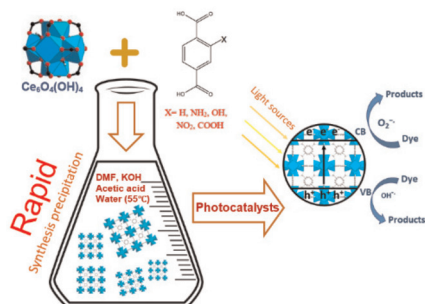
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### Anion-directed structural tuning of two azomethine-derived Zn<sup>2+</sup> complexes with optoelectronic recognition of Cu<sup>2+</sup> in aqueous medium with anti-cancer activities: from micromolar to femtomolar sensitivity with DFT revelation

Nithun Ranjan Pandit, Sourav Bej, Riyanka Das, Nirajan Ghosal, Ananya Mondal, Ranjana Pal, Meenakshi Ghosh, Priyabrata Banerjee\* and Biplab Biswas\*

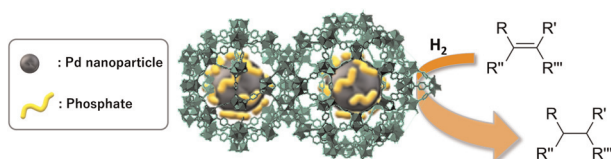
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### Rapid synthesis of cerium-UiO-66 MOF nanoparticles for photocatalytic dye degradation

Ehsan Ezzatpour Ghadim, Marc Walker and Richard I. Walton\*

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### Co-generation of palladium nanoparticles and phosphate supported on metal-organic frameworks as hydrogenation catalysts

Yohei Takashima,\* Seiko Tetsusashi, Mai Takano, Shintaro Tanaka, Yui Murakami, Takaaki Tsuruoka and Kensuke Akamatsu\*

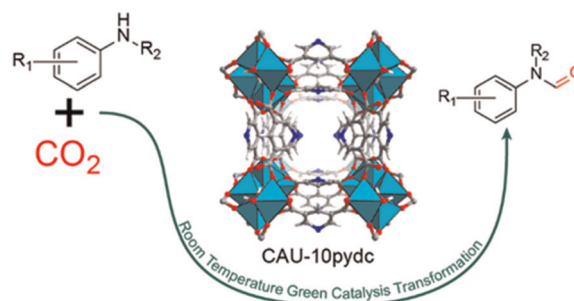


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### Highly efficient conversion of CO<sub>2</sub> into *N*-formamides catalyzed by a noble-metal-free aluminum-based MOF under mild conditions

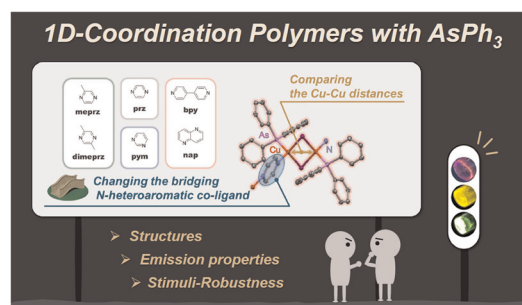
Zhi-Qiang Wang, Cheng-Hua Deng, Xiao Liu\* and Wen-Min Wang\*



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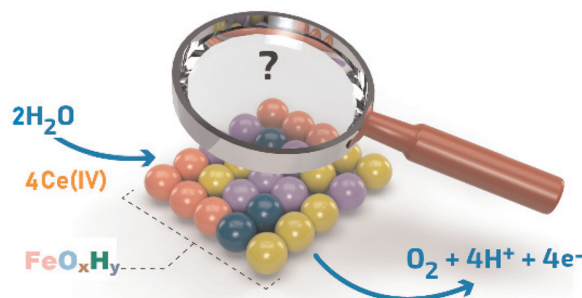
Kazuma Kikuchi, Hiroaki Imoto\* and Kensuke Naka\*



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### Oxygen-evolution reaction in the presence of cerium(IV) ammonium nitrate and iron (hydr)oxide: old system, new findings

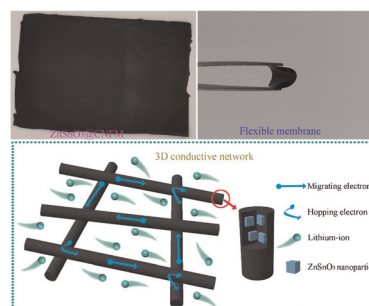
Nader Akbari, Subhajit Nandy, Pavlo Aleshkevych, Keun Hwa Chae and Mohammad Mahdi Najafpour\*



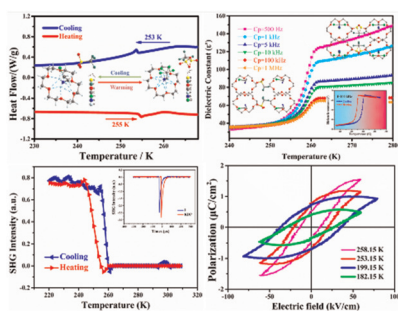
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### Enhanced electrochemical performances based on ZnSnO<sub>3</sub> microcubes functionalized in-doped carbon nanofibers as free-standing anode materials

Xiaoqiang Li, Guangguang Guan, Chuanjin Yu, Bingjie Cheng, Xin Chen, Kaiyin Zhang and Jun Xiang\*



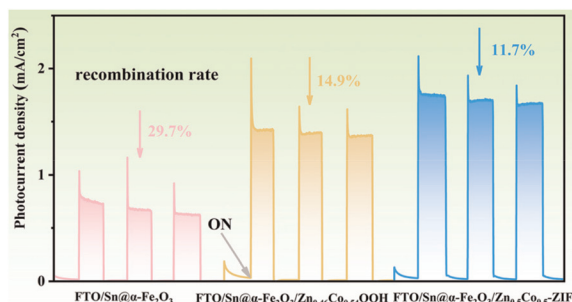
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## 2-Chloroethylamine-trifluoromethanesulfonate combined with 18-crown-6: a ferroelectric with excellent dielectric switching properties

Ning Song, Ting-Ting Ying, Yu-Hui Tan,\* Yun-Zhi Tang,\* Juan Liao, Li-Juan Wang, Fang-Xin Wang and Ming-Yang Wan

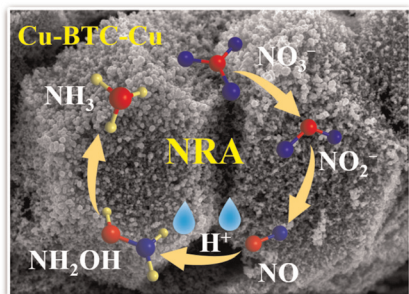
11203



## Regulating a Zn/Co bimetallic catalyst in a metal–organic framework and oxyhydroxide for improved photoelectrochemical water oxidation

Xiu-Shuang Xing, Xuyang Zeng, Zhongyuan Zhou,\* Xin Song, Xiaohua Jing, Minghao Yuan, Cuiying Xu, Xiaofei Ren and Jimin Du\*

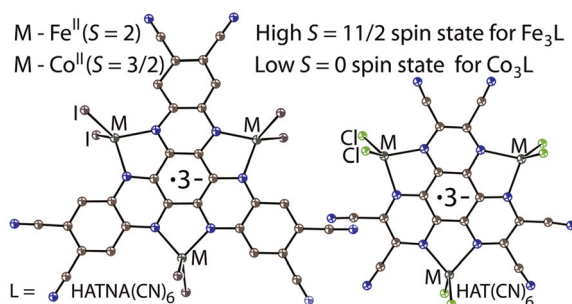
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## Metal–organic framework-derived Cu nanoparticle binder-free monolithic electrodes with multiple support structures for electrocatalytic nitrate reduction to ammonia

Yingying Wang, Yue Cao, Yan Hai, Xinyan Wang, Senda Su, Wenming Ding, Zhenyu Liu, Xiaoman Li and Min Luo\*

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## Magnetic behavior and ground spin states for coordination $\{L \cdot [M^{II}(\text{Hal})_2]_3\}^{3-}$ assemblies (Hal = Cl or I) of radical trianion hexacyanohexaazatriphenylenes (L) with three coordinated high-spin $\text{Fe}^{II}$ ( $S = 2$ ) or $\text{Co}^{II}$ ( $S = 3/2$ ) centers

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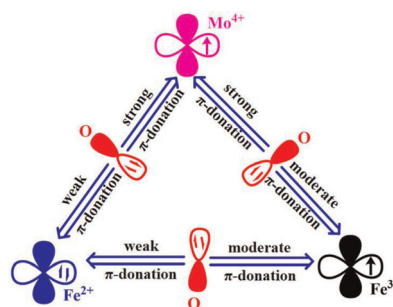


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### Efficient oxygen evolution reaction from iron-molybdenum nitride/molybdenum oxide heterostructured composites

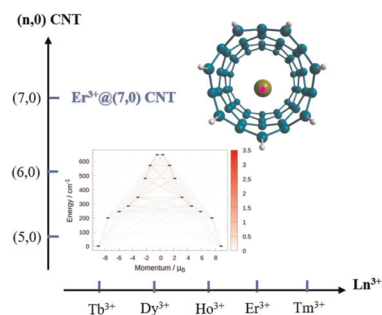
Aijian Wang,\* Yuqin Dou, Xin Yang, Qi Wang, M. Shire Sudi, Long Zhao, Danhong Shang, Weihua Zhu and Jinshen Ren



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### Single-ion magnet behavior of $\text{Ln}^{3+}$ encapsulated in carbon nanotubes: an *ab initio* insight

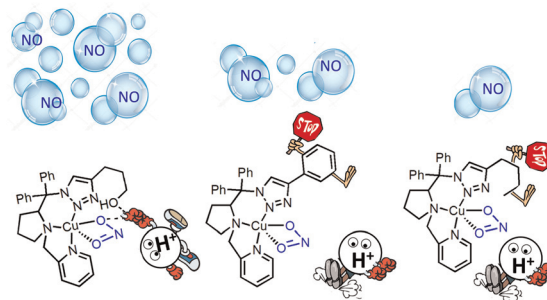
Dan Liu,\* Xuefeng Guo, Xiaoyong Zhang, Abdullah A. Al-Kahtani and Liviu F. Chibotaru\*



11254

### Biomimetic catalysis of nitrite reductase enzyme using copper complexes in chemical and electrochemical reduction of nitrite

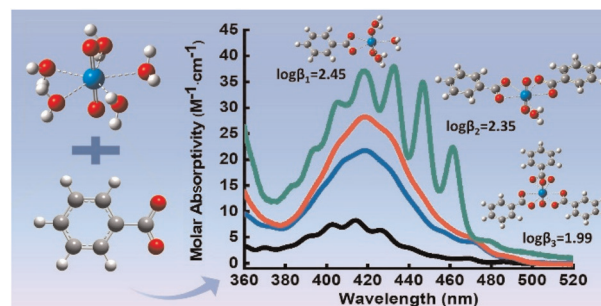
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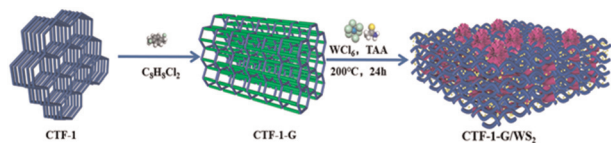
### Complexation of uranyl with benzoic acid in aqueous solution at variable temperatures: potentiometry, spectrophotometry and DFT calculations

Yuxiao Guo, Haiwang Liu, Hong Cao, Xue Dong, Zhipeng Wang, Jing Chen and Chao Xu\*



## PAPERS

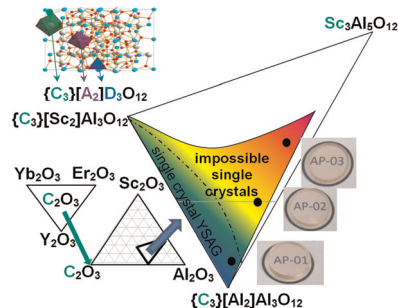
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**A novel molecularly expanded covalent triazine framework heterojunction with significantly enhanced molecular oxygen activation and photocatalysis performance under visible light**

Yuxuan Shao, Dan You, Yuqi Wan,\* Qingrong Cheng\* and Zhiquan Pan

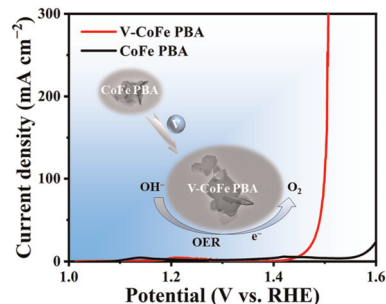
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**Fabrication and optical properties of garnet ceramics based on  $Y_{3-x}Sc_xAl_5O_{12}$  doped with ytterbium and erbium**

V. A. Tarala, S. V. Kuznetsov,\* O. M. Chapura, F. F. Malyavin, E. A. Brazhko and A. A. Kravtsov

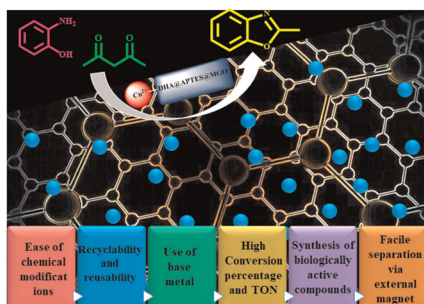
11297



**One-step fabrication of vanadium-doped CoFe PBA nanosheets for efficient oxygen evolution reaction**

Yin Huang, Yaoyao Pan, Xiaoyu Huang, Guangzheng Xu and Xiuhua Wang\*

11303



**A simple and straightforward strategy for expedient access to benzoxazoles using chemically engineered 2D magnetic graphene oxide nanosheets as an eco-compatible catalyst**

Aditi Sharma, Shivani Sharma, Sriparna Dutta, Sneha Yadav, Ranjana Dixit, Bhavya Arora, Shilpa Mehta, Anju Srivastava and Rakesh K. Sharma\*

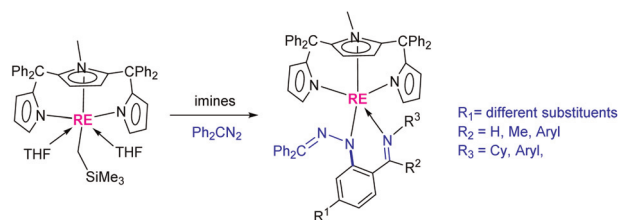


## PAPERS

11315

### Aryl C–H bond functionalization with diphenyldiazomethane induced by rare-earth metal alkyl complexes

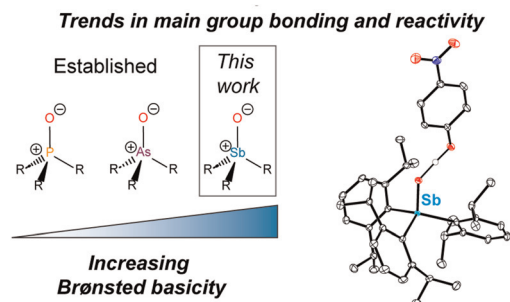
Dianjun Guo, Thayalan Rajeshkumar, Shan Zhu, Qingbing Yuan, Dongjing Hong, Shuangliu Zhou, Xiancui Zhu,\* Laurent Maron\* and Shaowu Wang\*



11325

### Variation in pnictogen–oxygen bonding unlocks greatly enhanced Brønsted basicity for the monomeric stibine oxide

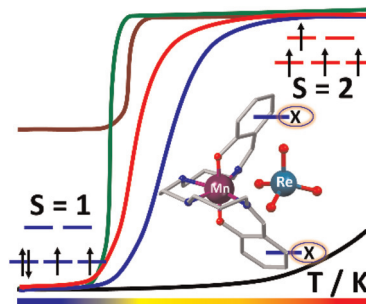
John S. Wenger, Addis Getahun and Timothy C. Johnstone\*



11335

### Spin-state switching: chemical modulation and the impact of intermolecular interactions in manganese(III) complexes

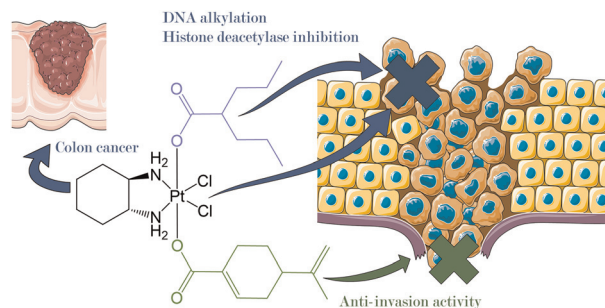
Sukanya Bagchi, Sujit Kamilya, Sakshi Mehta, Subhankar Mandal, Arka Bandyopadhyay, Awadhesh Narayan, Subrata Ghosh\* and Abhishake Mondal\*



11349

### Platinum(IV) combo prodrugs containing cyclohexane-1R,2R-diamine, valproic acid, and perillic acid as a multi-action chemotherapeutic platform for colon cancer

Elisabetta Gabano, Marzia Bruna Gariboldi, Emanuela Marras, Francesca Barbato and Mauro Ravera\*



## CORRECTION

11361

**Correction: Iridium-( $\kappa^2$ -NSi) catalyzed dehydrogenation of formic acid: effect of auxiliary ligands on the catalytic performance**

Alejandra Gomez-España, Jorge L. Lopez-Morales, Belinda Español-Sanchez, Pilar García-Orduña, Fernando J. Lahoz, Manuel Iglesias and Francisco J. Fernández-Alvarez\*

