

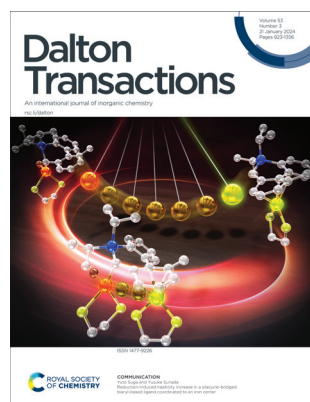
# Dalton Transactions

An international journal of inorganic chemistry incorporating Acta Chemica Scandinavica  
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Yusuke Sunada, pp. 862–865.

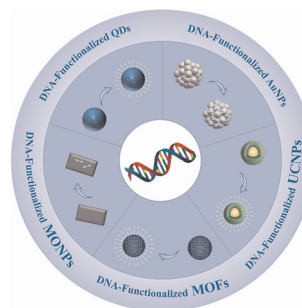
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## PERSPECTIVE

839

### DNA-functionalized metal or metal-containing nanoparticles for biological applications

Bei Liu, Huijuan Duan, Zechao Liu, Yuechen Liu and  
Hongqian Chu\*

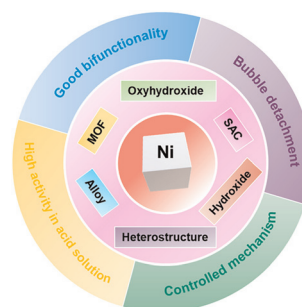


## FRONTIER

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### Recent progress of Ni-based nanomaterials for the electrocatalytic oxygen evolution reaction at large current density

Cheng Wang, Zhenghao Fei, Yanqing Wang,  
Fangfang Ren\* and Yukou Du\*



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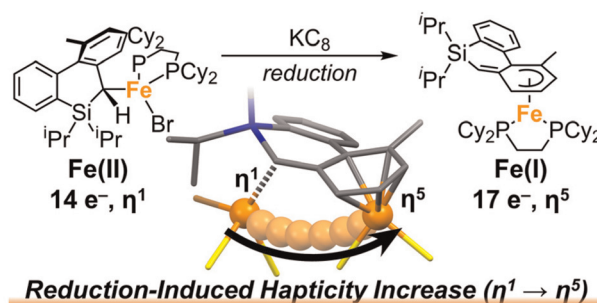


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### Reduction-induced hapticity increase in a silacycle-bridged biaryl-based ligand coordinated to an iron center

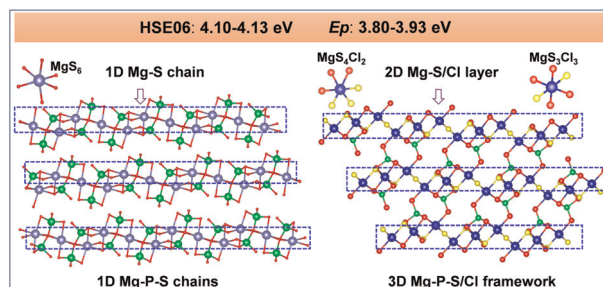
Yuto Suga and Yusuke Sunada\*



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### Na<sub>6</sub>Mg<sub>3</sub>P<sub>4</sub>S<sub>16</sub> and RbMg<sub>2</sub>PS<sub>4</sub>Cl<sub>2</sub>: two Mg-based thiophosphates with ultrawide bandgaps resulting from [MgS<sub>6</sub>] and [MgS<sub>x</sub>Cl<sub>6-x</sub>] octahedra

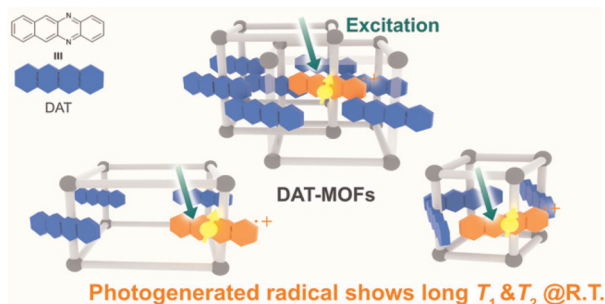
Yi Huang, Dongdong Chu, Xueling Hou, Guangmao Li\* and Yong Zhang\*



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### Radical qubits photo-generated in acene-based metal-organic frameworks

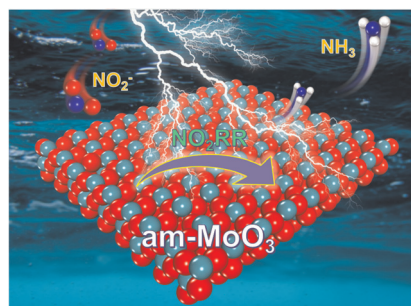
Kana Orihashi, Akio Yamauchi, Miku Inoue, Bhavesh Parmar, Saiya Fujiwara, Nobuo Kimizuka, Mizue Asada, Toshikazu Nakamura and Nobuhiro Yanai\*



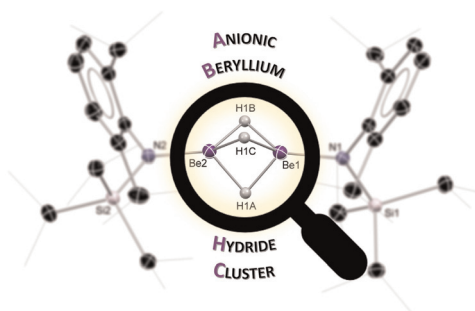
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### Electrochemical reduction of nitrite to ammonia on amorphous MoO<sub>3</sub> nanosheets

Tingting Wu,\* Fengyu Zhang, Jingxuan Wang, Xiaoxu Liu, Ye Tian and Ke Chu\*



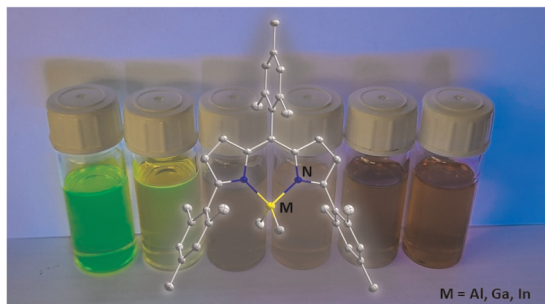
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### An anionic beryllium hydride dimer with an exceedingly short Be...Be distance

Terrance J. Hadlington

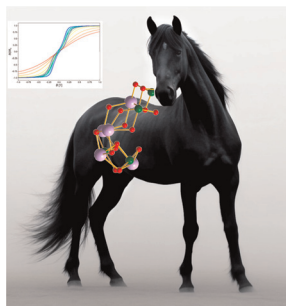
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### Easy access to strongly fluorescent higher homologues of BODIPY

Lukas Erlemeier, Marius J. Müller, Gina Stuhmann, Tobias Dunaj, Gunnar Werncke,\* Sangam Chatterjee and Carsten von Hänisch\*

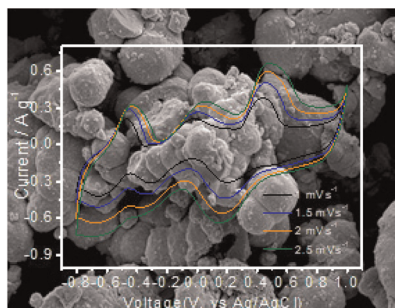
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### A nested spin structure and single molecule magnet behaviour in an $\text{Fe}_8\text{Dy}_{12}$ heterometallic cyclic coordination cluster

Yan Peng,\* Jonas Braun, Michael Schulze, Hagen Kaemmerer, Yannik F. Schneider, Christopher E. Anson, Wolfgang Wernsdorfer and Annie K. Powell\*

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Sunny Nandi,\* Hirdoyjit Phukon, Dipul Kalita and Shyamal K. Das



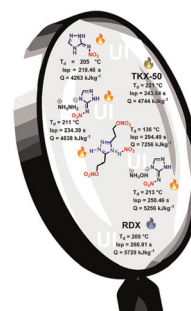


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### Nitroiminotriazole (NIT) based potential solid propellants: synthesis, characterization, and applications

Sohan Lal, Richard J. Staples and Jean'ne M. Shreeve\*

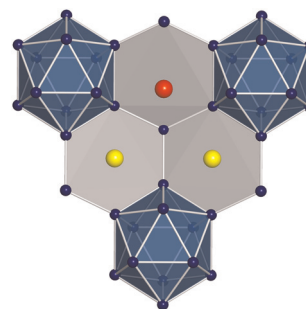


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### Ordering by cation replacement in the system $\text{Na}_{2-x}\text{Li}_x\text{Ga}_7$

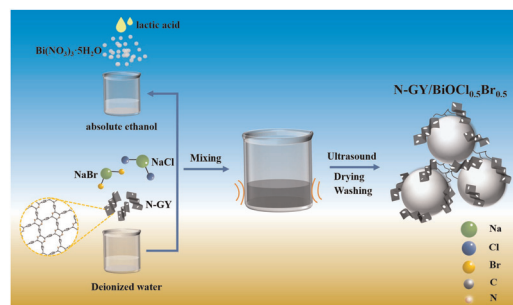
Chia-Chi Yu, Yurii Prots, Alim Ormeci, Mitja Krnel, Marcus Schmidt, Lev Akselrud, Frank R. Wagner, Yuri Grin and Michael Baitinger\*



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### *In situ* sonochemical synthesis of flower-like N-graphyne/BiOCl<sub>0.5</sub>Br<sub>0.5</sub> microspheres for efficient removal of levofloxacin

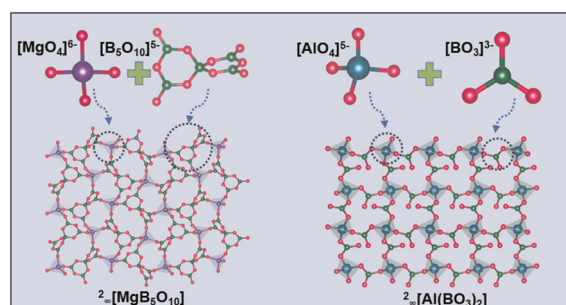
Shuyan Li, Mingxuan Sun,\* Xiangzhi Huang, Haohao Chen, Junjie Zhao and Ziyang Li



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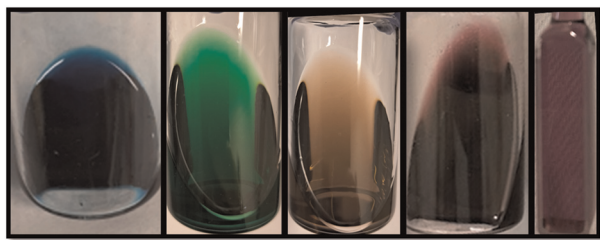
### $\text{Rb}_3\text{MgB}_5\text{O}_{10}$ and $\text{LiBaAl}(\text{BO}_3)_2$ : covalent tetrahedra $\text{MO}_4$ -containing borates with deep-ultraviolet cutoff edges

Hongkang Su, Jiahao Jiao, Shibin Wang, Donghai An and Min Zhang\*



## PAPERS

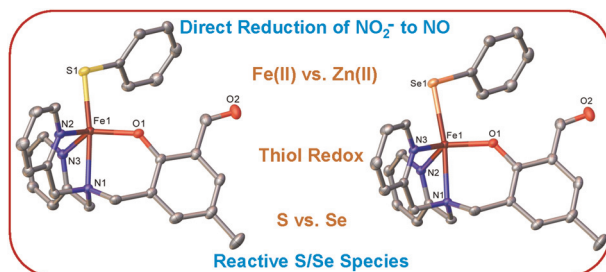
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### Tuning the visible colour of octahedral manganese(III) phthalocyanines *via* axial ligand exchange

Declan McKearney, Kyle MacDonald, Min Suk Kim, Vance E. Williams and Daniel B. Leznoff\*

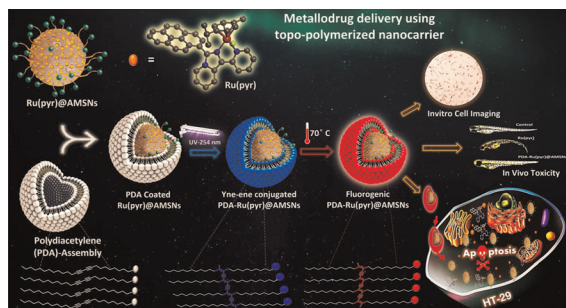
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### Reduction of nitrite to nitric oxide and generation of reactive chalcogen species by mononuclear Fe(II) and Zn(II) complexes of thiolate and selenolate

Sayan Atta, Amit Mandal, Rahul Saha and Amit Majumdar\*

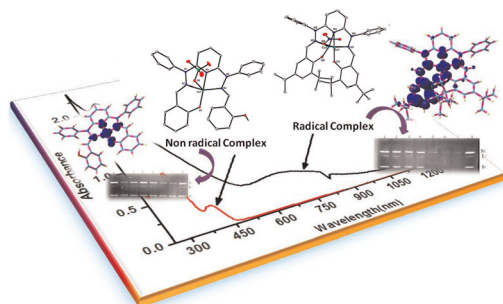
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### Design of an anticancer organoruthenium complex as the guest and polydiacetylene-coated fluorogenic nanocarrier as the host: engineering nanocarrier using ene-yne conjugation for sustained guest release, enhanced anticancer activity and reduced *in vivo* toxicity

C. Sumithaa, P. Gajda-Morszewski, W. Ishaniya, T. Khamrang, M. Velusamy, N. Bhuvanesh, M. Brindell, O. Mazuryk\* and M. Ganeshpandian\*

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### Crystal structure of a phenoxyl radical complex relevant to the metal site of the galactose oxidase enzyme: A facile one-pot synthesis, evidence for hydrogen atom transfer and DNA cleavage *via* self-activation

Ovender Singh, Anshu Singh, Ankur Maji, Rahul Chauhan, Puneet Gupta and Kaushik Ghosh\*

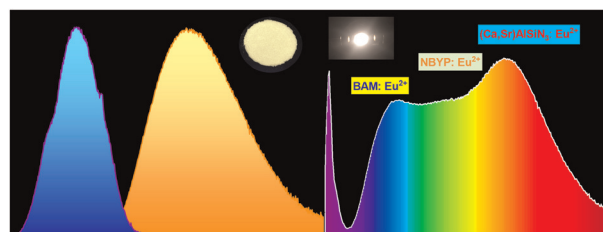


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# A promising yellow-emitting langbeinite-type phosphor $\text{NaBaY}_2(\text{PO}_4)_3:\text{Eu}^{2+}$ for WLEDs

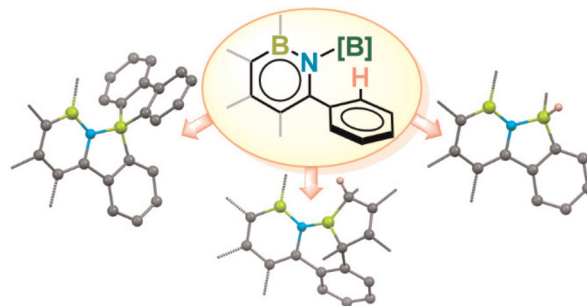
Qiang Zhang, Xin Ding, Bin Liu\* and Yuhua Wang\*



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# Synthesis, reduction and C–H activation chemistry of azaborinines with redox-active organoboryl substituents

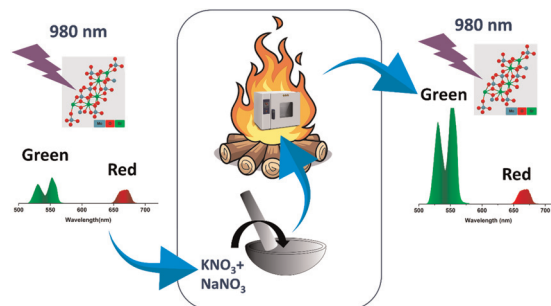
Anna Lamprecht, Merle Arrowsmith, Maximilian Dietz, Sonja Fuchs, Anna Rempel, Marcel Härterich and Holger Braunschweig\*



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# Strong green upconversion emission from submicron spindle-shaped $\text{SrMoO}_4:\text{Yb}^{3+},\text{Er}^{3+}$

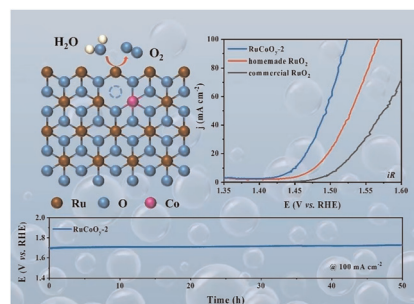
Thulitha M. Abeywickrama and Yuanbing Mao\*



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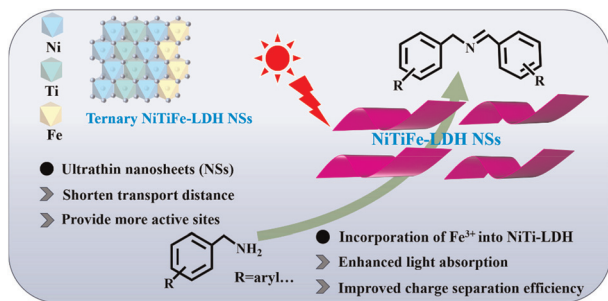
# Co-doped $\text{RuO}_2$ nanoparticles with enhanced catalytic activity and stability for the oxygen evolution reaction

Wei Zhang, Jiabing Luo, Han Tang, Shutao Wang, Wenle Li, Jun Zhang and Yan Zhou\*



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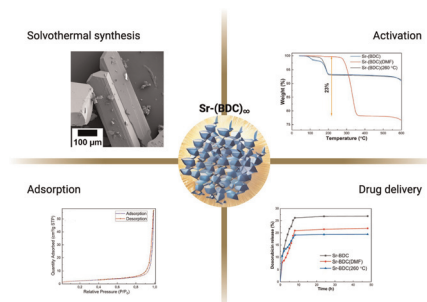
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### Facile fabrication of ternary NiTiFe-LDH ultrathin nanosheets for efficient conversion of amines into imines under visible light

Shaojin Li, Jiaqi Wang, Hurunqing Liu and Zhaohui Li\*

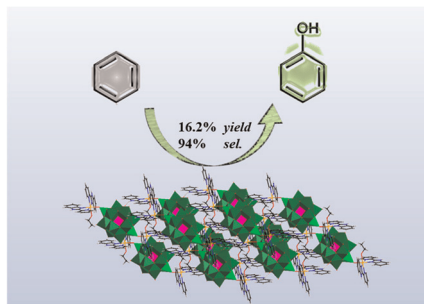
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### Synthesis and activation of pH-sensitive metal-organic framework Sr(BDC)<sub>∞</sub> for oral drug delivery

Andrey Vodyashkin,\* Antonina Sergorodceva, Parfait Kezimana, Mariya Morozova, Elena Nikolskaya, Mariia Mollaeva, Nikita Yabbarov, Maria Sokol, Margarita Chirkina, Leonid Butusov and Alexey Timofeev

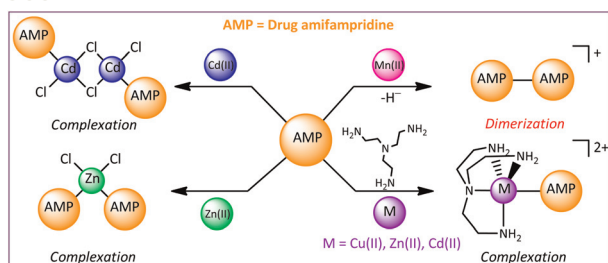
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### An iron-containing POM-based hybrid compound as a heterogeneous catalyst for one-step hydroxylation of benzene to phenol

Si-Man Li, Ji-Lei Wang, Jiu-Lin Zhou, Xin-Ying Xiang, Ya-Ting Yu, Qun Chen, Hua Mei\* and Yan Xu\*

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### Complexation of drug amifampridine with Cu(II), Zn(II) and Cd(II) ions, and its dimerization with the magic of Mn(II) salts. Potential anti-COVID-19 and anticancer activities

Farshid Hajibabaei, Samaneh Sanei Movafagh, Sadegh Salehzadeh\* and Robert William Gable



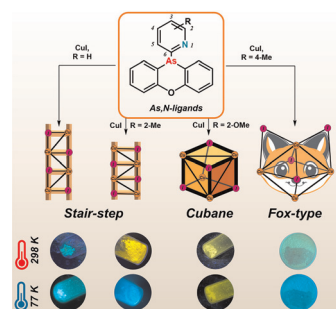


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### Design of luminescent complexes with different $\text{Cu}_4\text{I}_4$ cores based on pyridyl phenoxarsines

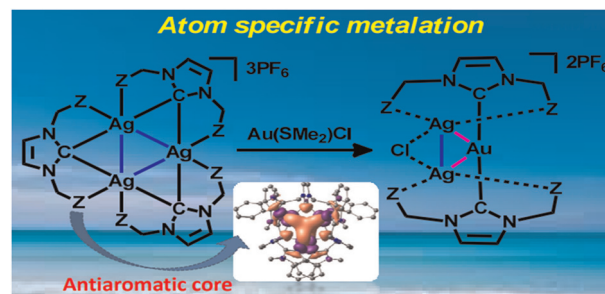
Milyausha F. Galimova,\* Ekaterina M. Zueva, Maria M. Petrova, Alexey B. Dobrynin, Ilya E. Kolesnikov, Elvira I. Musina, Rustem R. Musin, Andrey A. Karasik and Oleg G. Sinyashin



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### Unexpected structural preference with metallophilic Ag–Au contacts in silver(I)-N-heterocyclic carbene cluster; experimental and theoretical approach

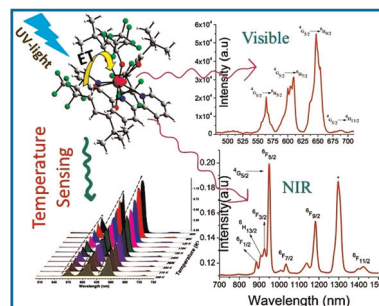
Priyanka Sahu, Narayan Ch. Jana, Sahadev Barik, Hemanta K. Kisan, Avtar Changotra, Anvarhusein A. Isab and Joydev Dinda\*



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### Heteroleptic samarium complexes with high quantum yields for temperature sensing applications

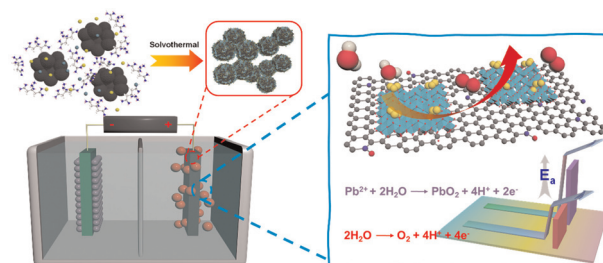
Asgar Ali,\* Zubair Ahmed, Khalid Iftikhar and Rahis uddin\*



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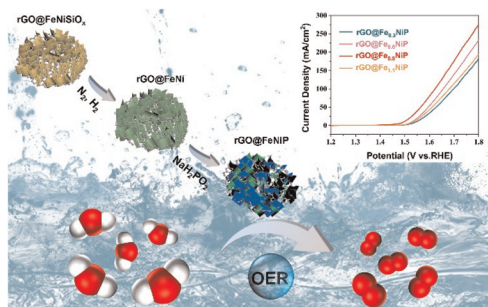
### Highly dispersed Ir/Fe nanoparticles anchored at nitrogen-doped activated pyrolytic carbon black as a high-performance OER catalyst for lead recovery

Guosai Jiang, Meiling Chen, Yanzhi Sun, Yufeng Wu and Junqing Pan\*



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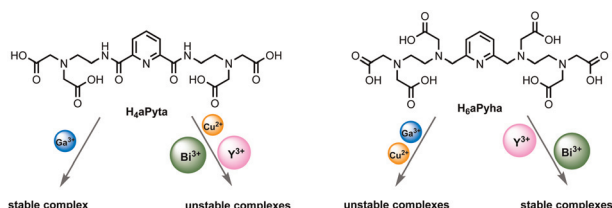
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### Construction of bimetallic phosphide nanostructures with *in situ* growth, reduction, and phosphidation of ultra-thin graphene layers as highly efficient catalysts towards the OER

Dengxia Zhu, Huiting Bi,\* Chaolong Wang, Zheng Zhang and Junjiang Zhu\*

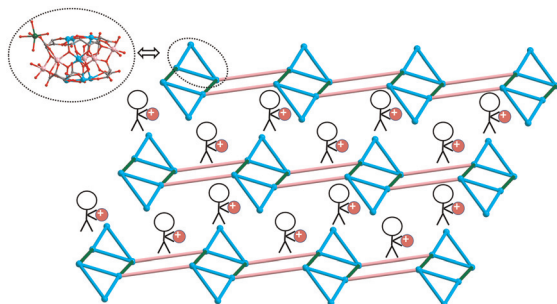
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### Synthesis of new acyclic chelators H<sub>4</sub>aPyta and H<sub>6</sub>aPyha and their complexes with Cu<sup>2+</sup>, Ga<sup>3+</sup>, Y<sup>3+</sup>, and Bi<sup>3+</sup>

Anastasia D. Zubenko,\* Anna A. Shchukina, Ekaterina Y. Chernikova, Bayirta V. Egorova, Irina S. Ikonnikova, Anna B. Priselskova, Anton A. Larenkov, Viktor B. Bubenshchikov, Artem A. Mitrofanov, Yury V. Fedorov and Olga A. Fedorova

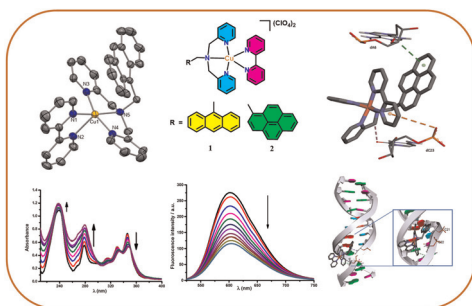
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### Mixed-valence compounds based on heterometallic-oxo-clusters containing Sb(III,v): crystal structures and proton conduction

Wei-Yang Wen, Wen Ma,\* Bing Hu,\* Hui-Ping Xiao, Tian-Yu Pan, Jia-Ting Liu, Hao-Wei Lin, Xin-Xiong Li and Xiao-Ying Huang\*

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### Chromophore appended DPA-based copper(II) complexes with a diimine motif towards DNA binding and fragmentation studies

Shobhit Mathur, Kalai Selvan Karumban, Arabinda Muley, Nikhil Tuti, Unnikrishnan Paruthiyethath Shaji, Indrajit Roy, Anushka Verma, Manoj Kumar Kumawat, Anindya Roy and Somnath Maji\*

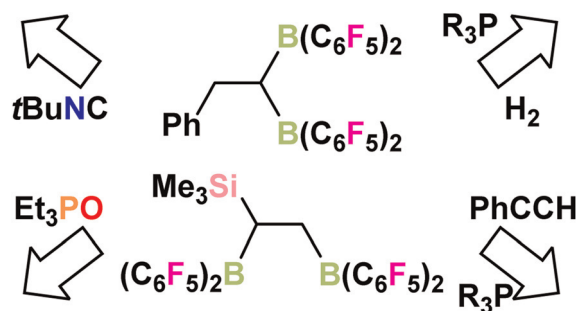


## PAPERS

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**Coordination chemistry and FLP reactivity of 1,1- and 1,2-bis-boranes**

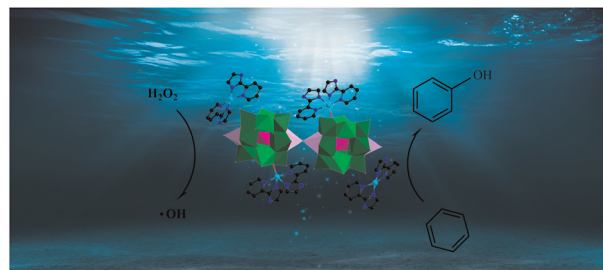
Amir Yeganeh-Salman, Jason Yeung, Linkun Miao and Douglas W. Stephan\*



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**Copper-containing POM-based hybrid  $P_2Mo_{22}V_4Cu_4$  nanocluster as heterogeneous catalyst for the light-driven hydroxylation of benzene to phenol**

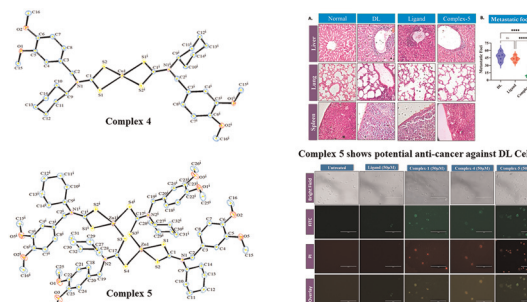
Qun Chen, Cheng-Yang Jiao, Hu Xu, Si-Man Li, Jian-Bo Yang, Hua Mei\* and Yan Xu\*



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**Antiproliferative activity of Fe(II), Co(II), Ni(II), Cu(II), and Zn(II) complexes of dithiocarbamate: synthesis, structural characterization, and thermal studies**

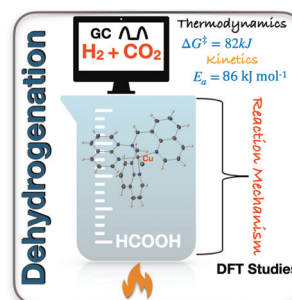
Anupam Singh, Kunal Shiv, Ranjeet Singh, M. K. Bharty, Partha Pratim Manna\* and Lal Bahadur Prasad\*

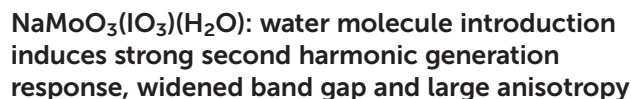


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**Formate dehydrogenase activity by a Cu(II)-based molecular catalyst and deciphering the mechanism using DFT studies**

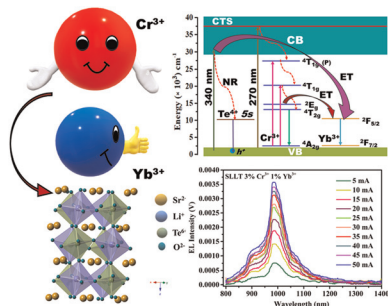
Aman Mishra, Diship Srivastava, Dev Raj, Niladri Patra and Sumanta Kumar Padhi\*





Yi Shui, Zhengli Liang, Zhenhua Li, Jiahao Wan,  
Lehui Liu, Xingxing Jiang,\* Zheshuai Lin and  
Hongming Liu\*

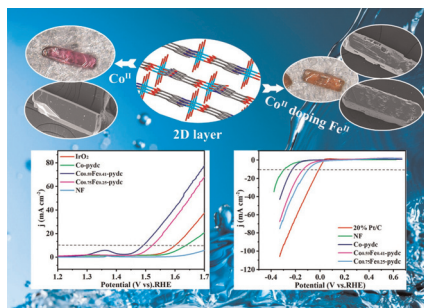
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# Enhancing the inherent NIR photoluminescence in SrLaLiTeO<sub>6</sub> through Cr<sup>3+</sup>–Yb<sup>3+</sup> co-substitution for high performance pc-LEDs

Sariqa C. Lal, I. N. Jawahar and Subodh Ganesanpotti\*

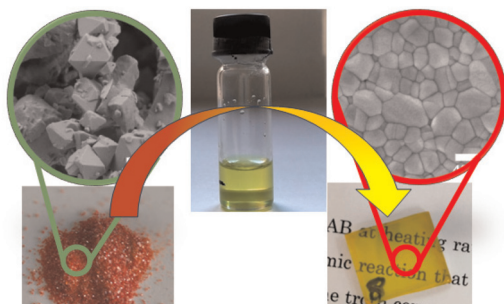
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# Surface defect-engineered Fe doping in layered Co-based complex as highly efficient bifunctional electrocatalysts for overall water splitting

Juan-Juan Hou,\* Huan Liu, Ting Wang,  
 Bao-Qiang Tian, Yang Yang and Xian-Ming Zhang\*

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**From particles to films: production of Cs<sub>2</sub>AgBiBr<sub>6</sub>-based perovskite solar cells and enhancement of cell performance *via* ionic liquid utilization at the TiO<sub>2</sub>/perovskite interface**

Arzu Öcebe and İsmail Cihan Kaya\*

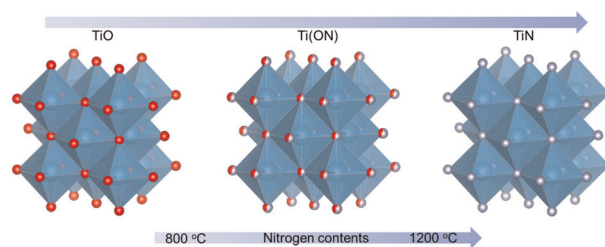


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### Synthesis of $\text{TiO}_x\text{N}_y$ oxynitrides with a tunable nitrogen content

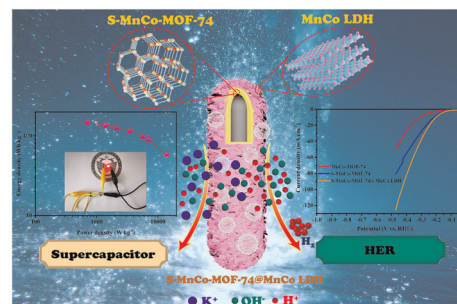
Wenqian Chen,\* Jinkun Li, Zihan Wang, Heng Wang, Yong Li and Liang Tang\*



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### Manganese–cobalt hydroxide nanosheets anchored on a hollow sulfur-doped bimetallic MOF for high-performance supercapacitors and the hydrogen evolution reaction in alkaline media

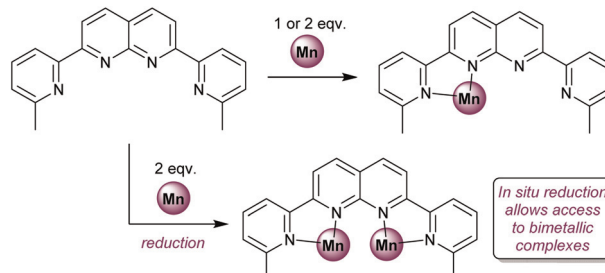
Li Zhang, Jingyu Sun, Fengbo Li,\* Zhen Cao, Jiaxin Lang and Shaobin Li\*



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### A one-pot reduction route to bimetallic manganese 1,8-naphthyridine complexes

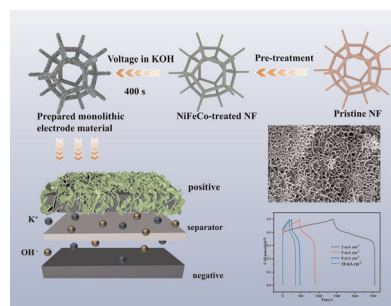
Michael A. Stevens, Li Feng Lim, Le Nhan Pham, Nicholas Cox,\* Michelle L. Coote\* and Annie L. Colebatch\*



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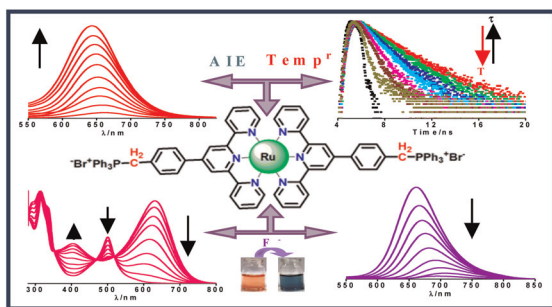
### Etching-induced ion exchange engineering of two-dimensional layered NiFeCo-based hydroxides for high energy charge storage

Chenhan Xiong, Wei Cao, Qiang Long, Jiaqi Chen, Yanqiu Yu, Xinming Lian, Jianhua Huang, Guoping Du and Nan Chen\*



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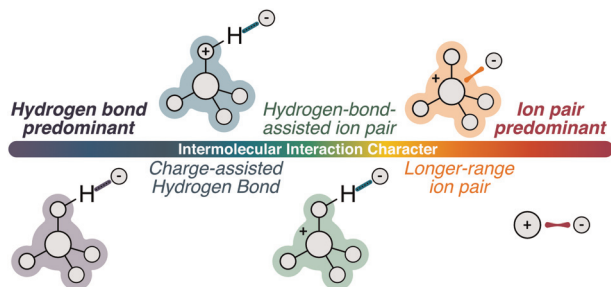
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**Design of molecular sensors and switches based on luminescent ruthenium-terpyridine complexes bearing active methylene and triphenylphosphonium motifs as anion recognition sites: experimental and DFT/TD-DFT investigation**

Sohini Bhattacharya, Poulami Pal and Sujoy Baitalik\*

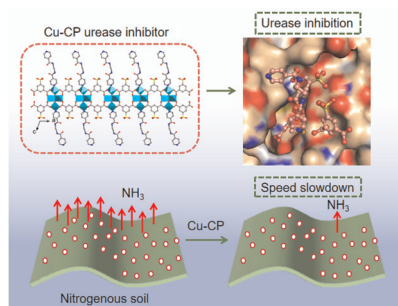
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**Revisiting ion-pair interactions in phase transfer catalysis: from ionic compounds to real catalyst systems**

Iñigo Iribarren, Eric Mates-Torres and Cristina Trujillo\*

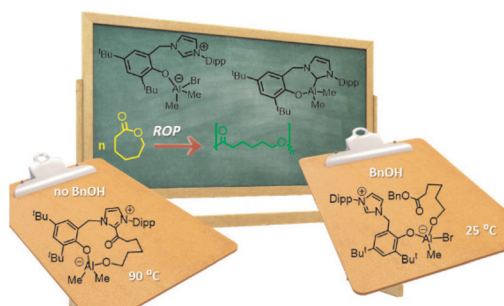
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**Fabrication of multinuclear copper cluster-based coordination polymers as urease inhibitors**

Wen-Long Duan, Kai-Tong Wang, Feng Yan\* and Jian Luan\*

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**Flexible NHC-aryloxido aluminum complex and its zwitterionic imidazolium aluminate precursor in ring-opening polymerization of  $\epsilon$ -caprolactone**

Santu Goswami, Pranay Mandal, Subham Sarkar, Mainak Mukherjee, Samanwita Pal, Dibyendu Mallick\* and Debabrata Mukherjee\*

