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Cover
See Koichiro Takao,
pp. 9866–9881.

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Inside cover
See Kei Oota and
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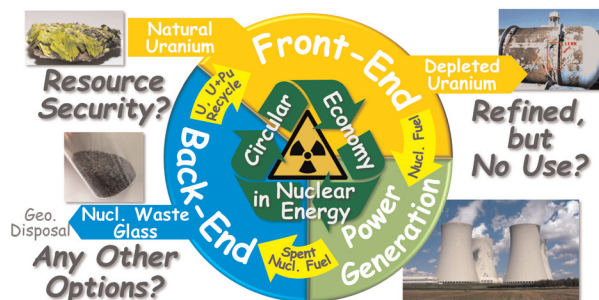
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PERSPECTIVE

9866

How does chemistry contribute to circular economy in nuclear energy systems to make them more sustainable and ecological?

Koichiro Takao

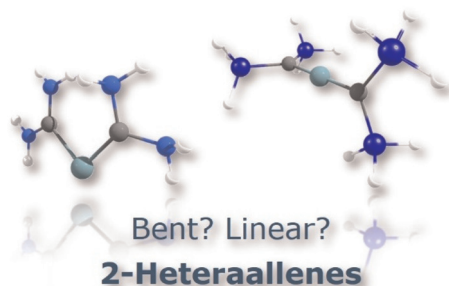


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9882

2-Heteraallenes

Koh Sugamata* and Takahiro Sasamori



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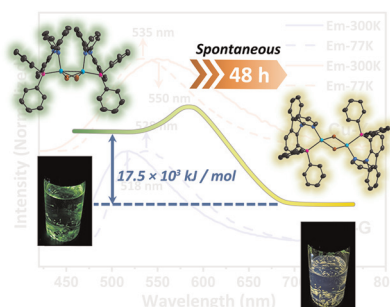


COMMUNICATIONS

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Rotational isomerization: spontaneous structural transformation of a thermally activated delayed fluorescence binuclear copper(i) complex

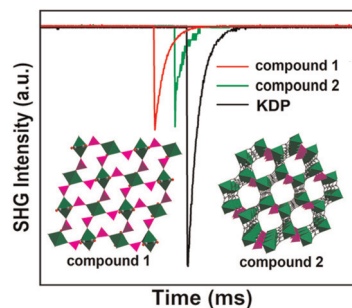
Xiao-Wen Zhang, Chun-Hua Huang, Mingxue Yang, Xu-Lin Chen* and Can-Zhong Lu*



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Solvent-free synthesis of magnesium phosphite-oxalates that show second-harmonic generation responses

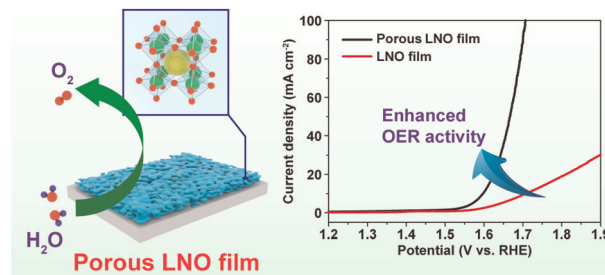
Lisiteng Luo, Xuemei Wen, Juan Cheng, Jing Li,* Hongmei Zeng, Guohong Zou and Zhien Lin*



9903

Synthesis of porous LaNiO₃ thin films by chemical solution deposition for enhanced oxygen evolution reaction

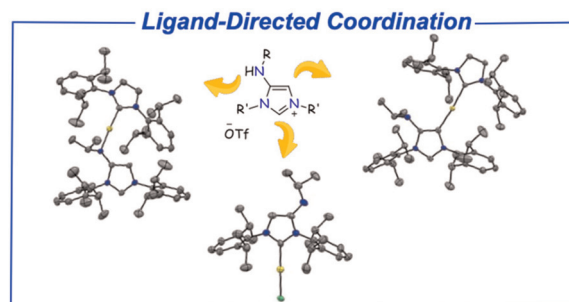
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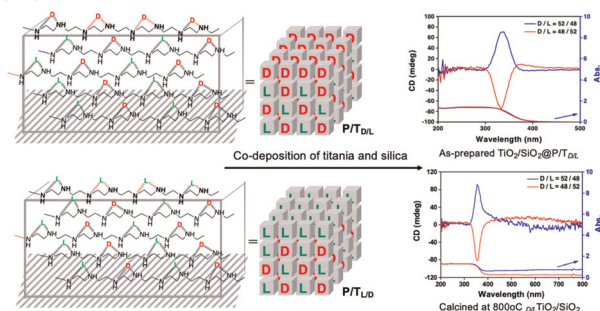
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Gold complexes with remote-substituted amino N-heterocyclic carbenes

Sofie M. P. Vanden Broeck, Nikolaos V. Tzouras, Marina Saab, Kristof Van Hecke, Busra Dereli, Ida Ritacco, Luigi Cavallo, Georgios C. Vougioukalakis, Pierre Braunstein, Steven P. Nolan,* Andreas A. Danopoulos* and Catherine S. J. Cazin*



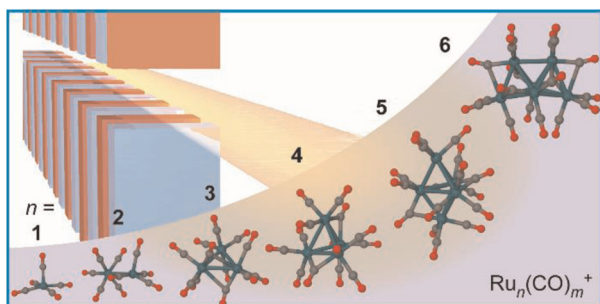
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Fascinating chiral information transfer to titania/silica from near to racemic compound self-organized from polyethyleneimine and tartaric acid

Kei Oota and Ren-Hua Jin*

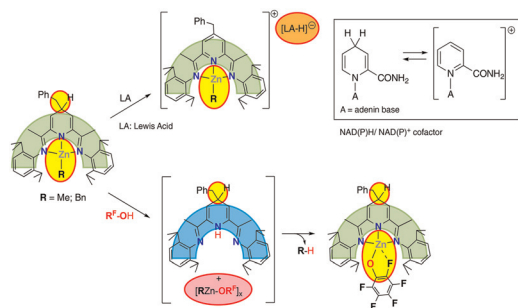
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IR spectra and structures of saturated ruthenium cluster carbonyl cations $\text{Ru}_n(\text{CO})_m^+$ ($n = 1-6$)

David Yubero Valdivielso, Christian Kerpel, Wieland Schöllkopf, Gerard Meijer and André Fielicke*

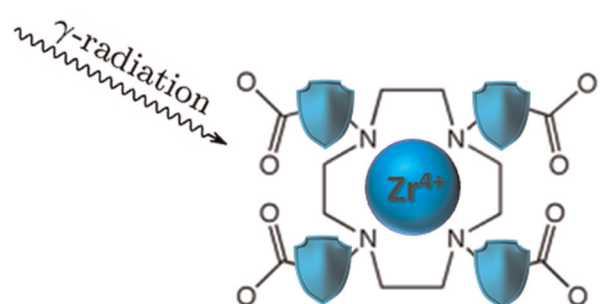
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Ligand and metal-centred reactivity in 2,6-bis(imino)-1,4-dihydropyridine Zn(II) alkyls: the dual behaviour of an intriguing type of complex

J. M. Delgado-Collado, M. Gallardo-Villagrán, E. Álvarez, J. Cámpora* and A. Rodríguez-Delgado*

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Effect of metal complexation on the radiolytic stability of DOTA

Ilyes Mahti, Dominique Guillaumont,* Claude Berthon, Georges Saint-Louis, Xavier Hérès and Laurence Berthon*

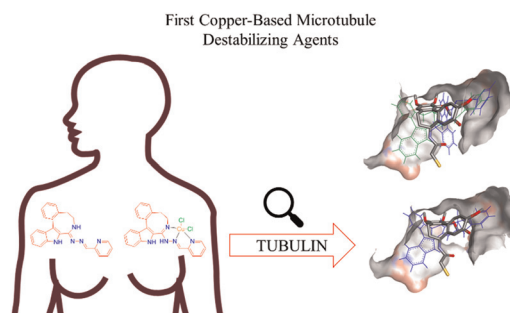


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Indolo[2,3-*e*]benzazocines and indolo[2,3-*f*]benzazonines and their copper(II) complexes as microtubule destabilizing agents

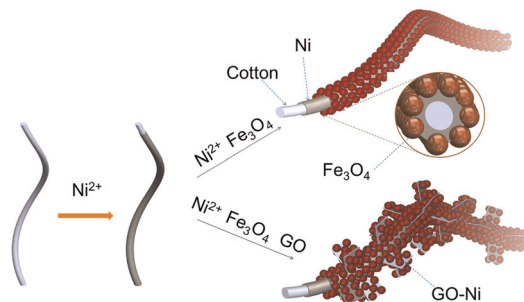
Christopher Wittmann, Orsolya Dömötör, Irina Kuznetcova, Gabriella Spengler, Jóhannes Reynisson, Lauren Holder, Gavin J. Miller, Eva A. Enyedy, Ruoli Bai, Ernest Hamel and Vladimir B. Arion*



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Fabrication of 3D macroporous Fe₃O₄–GO–Ni through a 'nano-reinforced concrete' method in the application of flexible supercapacitors

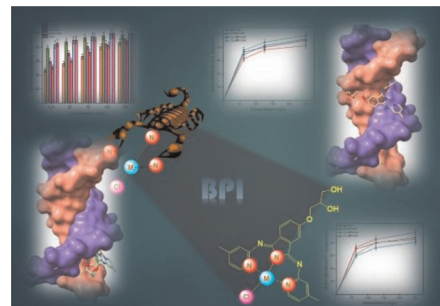
Ruitao Zhou and Kwok Ho Lam*



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Glycerol group substituted bis(2-pyridylimino) isoindoline (BPI) complexes: synthesis, characterization and investigation of their biological properties

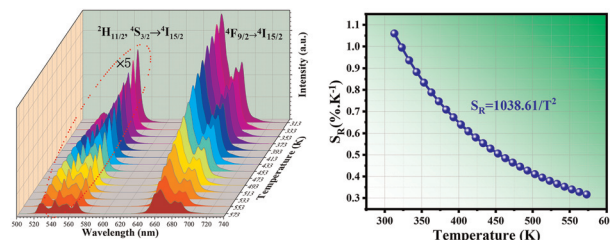
Asena Kaşıkçı, Ramazan Katırcı, Sadi Özdemir, M. Serkan Yalçın and Mukaddes Özçeşmeci*



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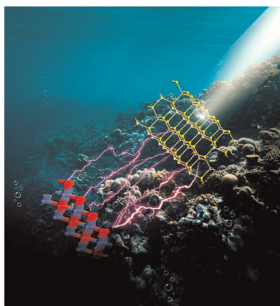
Non-contact thermometer behavior of (Y_{0.5}In_{0.5})₂O₃:Yb³⁺,Er³⁺ solid solution

Ye Jin,* Kun Li, Hongtao Chen, Fei Fang, Yuyan Li, Huayan Lin, Yanbin Xiong, Guoqing Feng, Xiao-jun Wang and Li Ma



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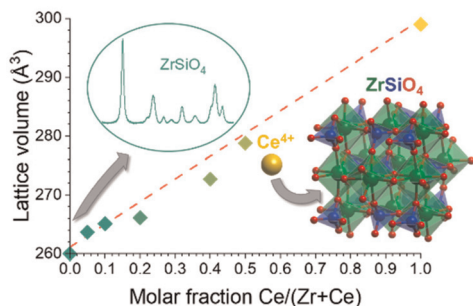
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MOF-derived CdS/CoO S-type heterojunctions for improving the efficiency of photocatalytic evolution

Huaizhi Yang, Yuqi Wan, Qingrong Cheng,* Hong Zhou, Zhiquan Pan and Yan Liu

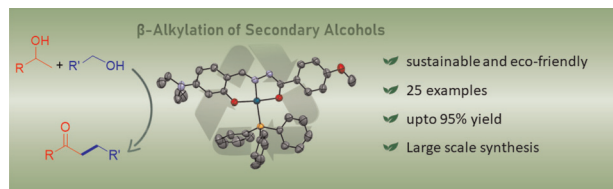
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How hydrothermal synthesis improves the synthesis of (Zr,Ce)SiO₄ solid solutions

Thomas Barral, Paul Estevenon, Yann Chanteau, Thibault Kaczmarek, Andrew C. Strzelecki, Denis Menut, Eleonore Welcomme, Stephanie Szenknect, Philippe Moisy, Xiaofeng Guo and Nicolas Dacheux*

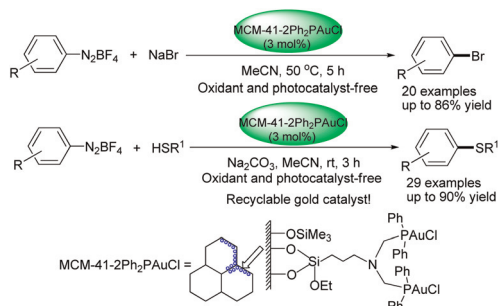
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Synthesis and structure of Pd(II) pincer complexes: catalytic application in β-alkylation of secondary alcohols involving sequential dehydrogenation of alcohols *via* the borrowing hydrogen approach

Sekar Pranesh Kavin and Rengan Ramesh*

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Heterogeneous gold-catalyzed Sandmeyer coupling of aryldiazonium salts with sodium bromide or thiols for constructing C–Br and C–S bonds

Jiajia Li, Jiajun Zeng, Wenyan Hao* and Mingzhong Cai*

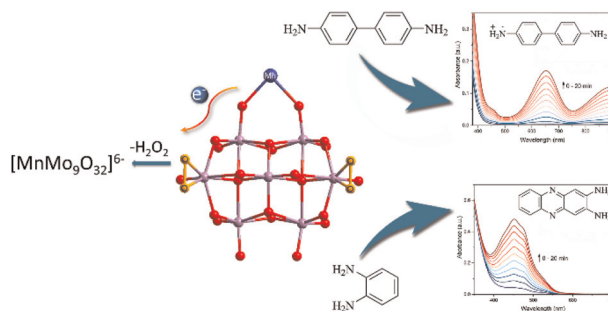


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A one-dimensional chain of manganese(II) bridged peroxomolybdate isolated from an aqueous Mn–polymolybdate–H₂O₂ system

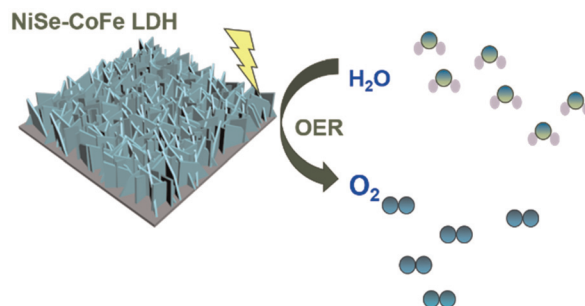
Jining Shang, Xiang Li, Yuanhang Ren, Hongxin Ding, Jiapeng Cao, Rui He, Bin Yue* and Heyong He*



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Heterostructural NiSe–CoFe LDH as a highly effective and stable electrocatalyst for the oxygen evolution reaction

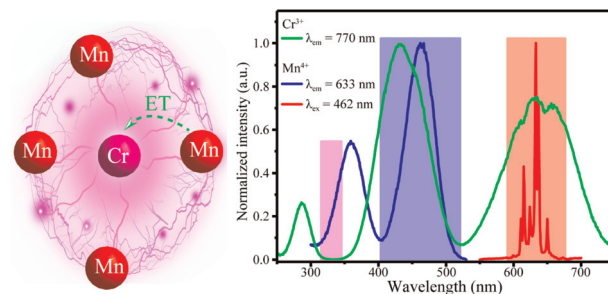
Zhengfang Hou, Fangyuan Fan, Zhe Wang, Yuqing Deng and Yeshuang Du*



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K₂LiScF₆:Cr³⁺/Mn⁴⁺ fluoride phosphor with enhanced broadband emission for NIR pc-LEDs

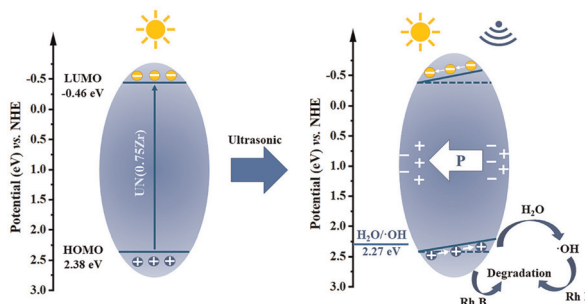
Yunfeng Wang, Jiajun Feng,* Pengyun Chen, Jiansheng Huo, Qihong Zhang, Shuanglai Liu, Mengyuan Tang, Junhao Li* and Jianbang Zhou*



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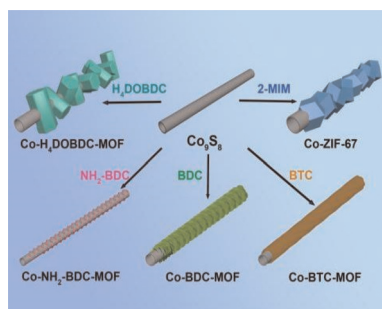
Bimetallic UiO-66-NH₂(Zr–Hf) synergistic photocatalytic and piezoelectric effects for the degradation of rhodamine B

Yinuo Wang, Nannan Zhang, Ruoheng Wang, Yingjie He, Hengqing Zhou, Xiao Li, Guoqi Gao, Huajun Sun and Xiaofang Liu*



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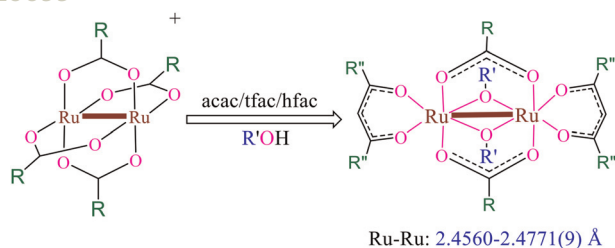
10089



A general strategy to *in situ* synthesize hollow metal sulfide/MOF heterostructures for high performance supercapacitors

Yingchao Wang, Guochang Li,* Jiachao Zhou, Kai Tao, Wenna Zhao, Linli Chen and Lei Han*

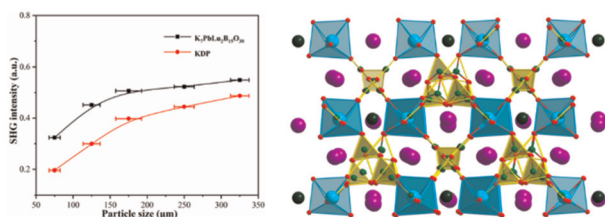
10099



A family of edge-sharing bi-octahedral diruthenium(III,III) compounds containing Ru–Ru single bonds

Li-Xiang Guo, Yao Gao, Pei Zhang, Jian-Hui Yang and Bin Liu*

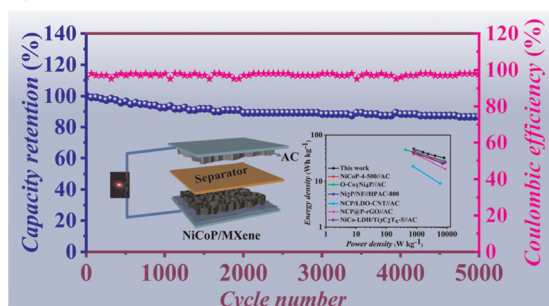
10109



Synthesis and characterization of a new rare earth borate nonlinear optical crystal $K_7PbLu_2B_{15}O_{30}$

Juhe Liu, Yuwei Chen, Mengran Sun, Wenhao Liu, Xianghe Meng* and Jiyong Yao*

10115



NiCoP/MXene nanocomposites *via* electrostatic self-assembly for high-performance supercapacitor electrodes

Shuling Liu,* Ying Li, Wei Zhang, Jie Wang, Wenxuan Xu and Chao Wang

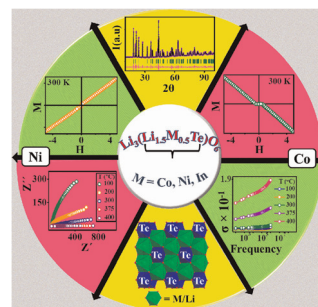


PAPERS

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Identification of high ionic conducting members ($M(\text{III}) = \text{Co}, \text{Ni}$) in the new lithium rich $\text{Li}_{4.50}\text{M}_{0.50}\text{TeO}_6$ ($M(\text{III}) = \text{Co}, \text{Ni}, \text{In}$) series

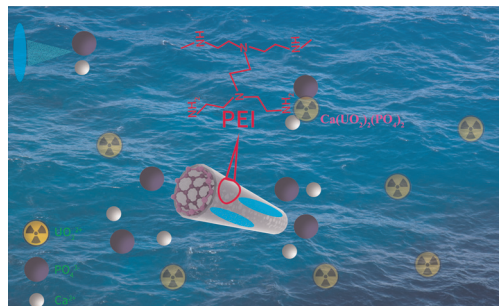
Dileep Kumar Yadav, Shrishti Uniyal and Sitharaman Uma*



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Efficient capture of uranium by a hydroxyapatite-modified polyethyleneimine@carbon nanotube composite from radioactive nuclear waste

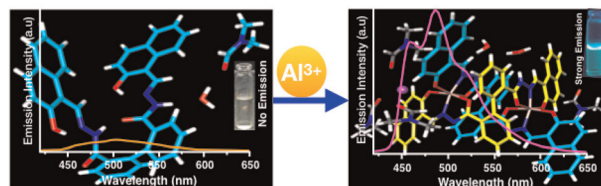
Debin Ji,* Yue Wang, Yao Liu, Shaoxian Hao, Jialiang Yang, Yongde Yan,* Congying Lu, Shuxia Guan, Qinghe Gao and Hongjun Wu



10145

Crystallographic elucidation of an aluminium-bound amido Schiff base chemosensor: a selective turn-on fluorescent chemosensor for Al^{3+} ions

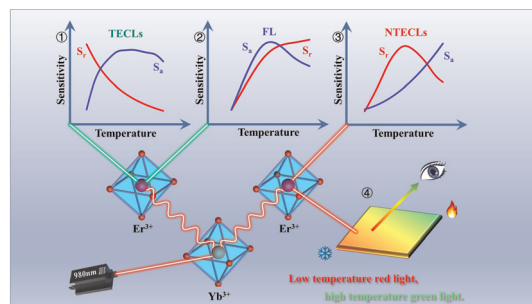
Anamika Hoque, Md Sanaul Islam, Samim Khan, Basudeb Datta, Ennio Zangrando,* Goutam Kumar Kole* and Md. Akhtarul Alam*



10155

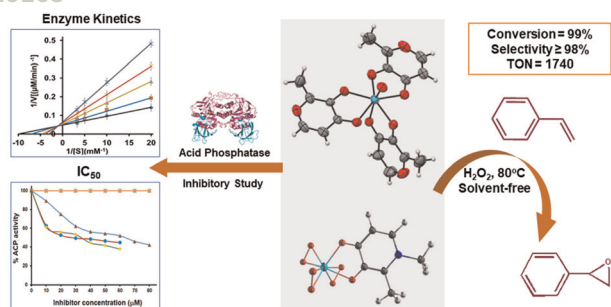
An up-conversion $\text{Ba}_3\text{In}(\text{PO}_4)_3:\text{Er}^{3+}/\text{Yb}^{3+}$ phosphor that enables multi-mode temperature measurements and wide-gamut 'temperature mapping'

Zonghao Lei, Ronghui Liu, Lijie Sun, Xiaoxiong Wang, Hu Chen, Yanfei Zou, Xiaowei Yang, Shikun Su, Bing Teng,* Hui Xu and Degao Zhong*



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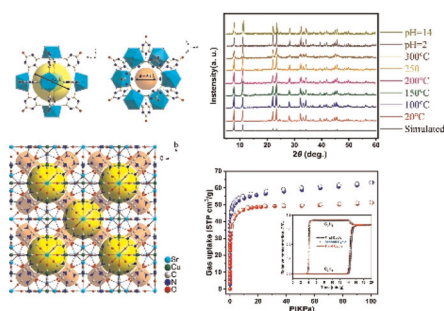
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Oxido- and mixed-ligand peroxido complexes of niobium(v) as potent phosphatase inhibitors and efficient catalysts for eco-friendly styrene epoxidation

Hiya Talukdar, Sandhya Rani Gogoi, Sazida Yasmin Sultana, Reshma Begum, Dikshita Dowerah, Bipul Sarma and Nashreen S. Islam*

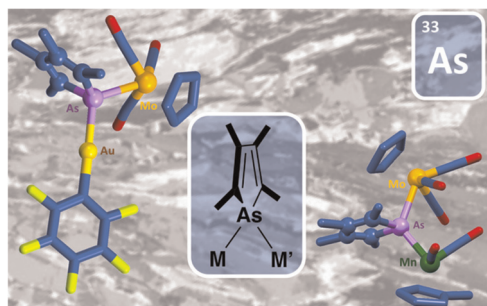
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Ultrastable 3D cage-like metal-organic frameworks constructed using polydentate cyanurate ligands and their gas adsorption properties

Wenhao Xing, Kaijin Kang, Jian Tang, Chunlan Tang, Wenlong Yin,* Bin Kang and Jianguo Deng

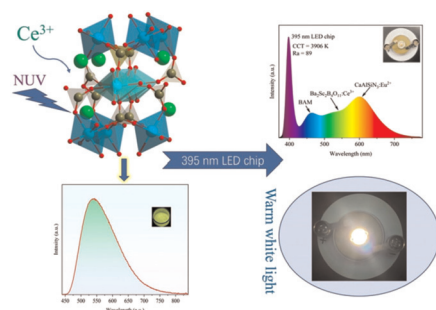
10190



Bridging arsolido complexes

Ryan M. Kirk and Anthony F. Hill*

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A broadband yellow-green emitting mixed orthoborate-pyroborate phosphor, Ba₂Sc₂B₄O₁₁:Ce³⁺, for white light emitting diodes

Feng Du, Longsheng Du, Wenqi Xia, Qianqian Zhao, Zhihua Leng and Zuobin Tang*



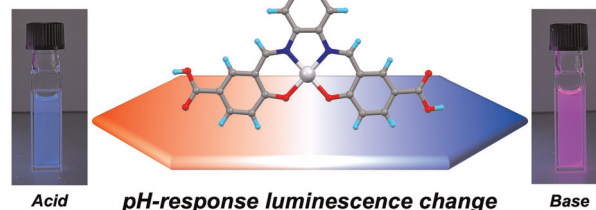
PAPERS

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pH-driven optical changes of platinum(II) complexes having carboxy-appended salophen ligands

Shun Fujii, Hajime Yagi, Tomohiro Kawaguchi, Mitsuru Ishikawa, Naoki Izumiyama and Manabu Nakaya*

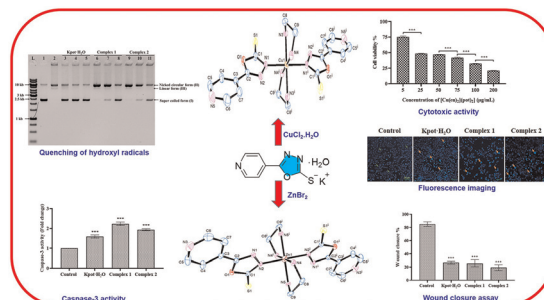
Carboxy-appended luminescent platinum(II) complex



10213

Isolation of potassium salt of oxadiazole-2-thione and *in vitro* anticancer activities of its Cu(II) and Zn(II) complexes against MDA-MB-231 human breast carcinoma cells

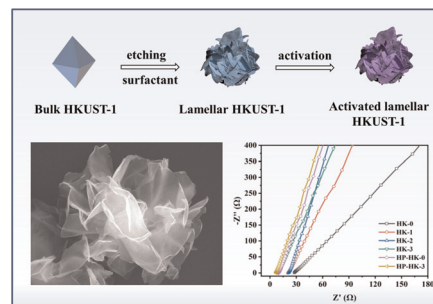
M. K. Gond, Nilesh Rai, Brijesh Chandra, Vibhav Gautam, Somenath Garai, R. J. Butcher and M. K. Bharty*



10222

Significantly enhanced lithium-ion conductivity of solid-state electrolytes *via* flower-like structured lamellar metal-organic frameworks with open metal sites

Xin Wang, Li Tian, Fencheng Tao, Meiying Liu, Sheng Jin and Zhiliang Liu*



10231

Dual-mode sensing of hydrogen peroxide on self-assembled Ag nanoparticles anchored on polydopamine wrapping 2D Cu-MOFs

Tonglei Zhang, Wanzhu Wang, Yuyao Zou, Lingnan Li, Danhua Ge* and Xiaojun Chen*

