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See Pannee Leeladee et al., pp. 11407-11418.

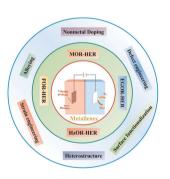
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PERSPECTIVE

11378

Engineering metallenes for boosting electrocatalytic biomass-oxidation-assisted hydrogen evolution reaction

Lida Yang, Kun Wang, Lie Jin, Hui Xu* and Haigun Chen*

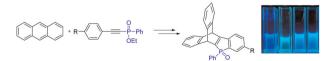


COMMUNICATIONS

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Synthesis and properties of photoluminescent phosphorus-doped triptycenes

Zengye Gao, Yue Wang, Yang Zhou, Bingxin Yuan* and Zheng Duan*



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COMMUNICATIONS

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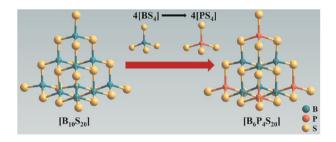
Vanadium-catalysed regioselective hydroboration of epoxides for synthesis of secondary alcohols

Guoqi Zhang,* Haisu Zeng, Quan Tang, Selin Ates, Shengping Zheng and Michelle C. Neary

11401

 $MB_3P_2S_{10}$ (M = Rb, Cs): two new alkali metal thioboratephosphates with [B₆P₄S₂₀] T3-supertetrahedra

Jiazheng Zhou, Xin Su, Ling Luo, Junjie Li* and Feng Yu*



PAPERS

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Molecularly dispersed nickel complexes on N-doped graphene for electrochemical CO₂ reduction

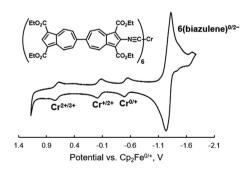
Methasit Juthathan, Teera Chantarojsiri, Kittipong Chainok, Teera Butburee, Patchanita Thamyongkit, Thawatchai Tuntulani and Pannee Leeladee*



11419

Homoleptic complexes of isocyano- and diisocyanobiazulenes with a 12-electron, ligand-based redox capacity

Patrick T. Connelly, Jason C. Applegate, David A. Maldonado, Monisola K. Okeowo, Wade C. Henke, Allen G. Oliver, Cindy L. Berrie* and Mikhail V. Barybin*



Angiogenesis

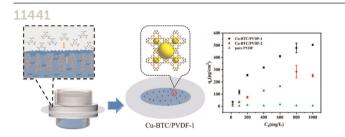
Apoptosis Copper complex SKOV3 cells senografted nude mice model Immunohisto chemistry

Tumor

HE staining

A novel chiral oxazoline copper(II)-based complex inhibits ovarian cancer growth *in vitro* and *in vivo* by regulating VEGF/VEGFR2 downstream signaling pathways and apoptosis factors

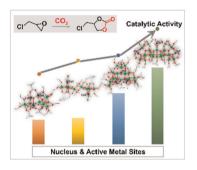
Rong Fan, Jing-chen Wei, Bing-Bing Xu, Nan Jin, Xiao-Yi Gong and Xiu-Ying Qin*



Interface synthesis of Cu-BTC/PVDF hybrid membranes and their selective adsorption activity toward Congo red

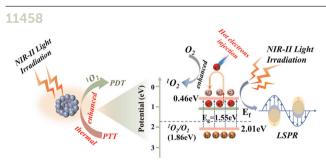
Defeng Hu, Zhongqiao Sun, Yide Han, Hao Meng and Xia Zhang*

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Ligand-dependent structural diversity and optimizable CO₂ chemical fixation activities of Cu-doped polyoxo-titanium clusters

Xin Lin, Ying-Hua Yu, Guang-Hui Chen, Qiao-Hong Li,* Lei Zhang* and Jian Zhang*



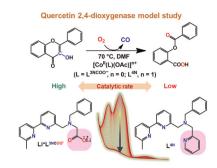
NIR-II responsive PEGylated MoO₂ nanocrystals with LSPR for efficient photothermal and photodynamic performance enhancement

Xuejiao Li,* Bo Li, Wenbo Zhang, Zimo Chen, Jinping Liu, Yu Shi, Huanyan Xu, Lianwei Shan, Xin Liu and Limin Dong

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Flavonol dioxygenation catalysed by cobalt(II) complexes supported with 3N(COO) and 4N donor ligands: a comparative study to assess the carboxylate effects on quercetin 2,4-dioxygenaselike reactivity

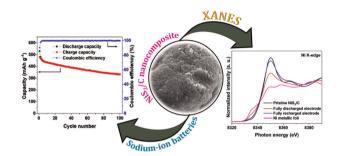
Nirmalya Podder, Anannya Saha, Suman K. Barman and Sukanta Mandal*



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A NiS₂/C composite as an innovative anode material for sodium-ion batteries: ex situ XANES and EXAFS studies to investigate the sodium storage mechanism

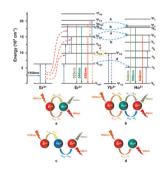
Shoyebmohamad F. Shaikh, Sikandar Aftab, Bidhan Pandit,* Abdullah M. Al-Enizi, Mohd Ubaidullah, Satish Ekar, Sajjad Hussain, Yogesh B. Khollam, Pravin S. More and Rajaram S. Mane*



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Co-doping of Ho-Yb ion pairs modulating the up-conversion luminescence properties of fluoride phosphors under 1550 nm excitation

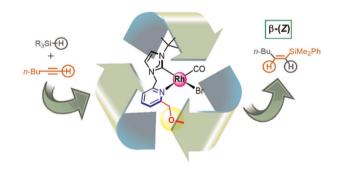
Bohan Lei, Liping Lu,* Haiying Sun, Xiyan Zhang, Zhaohui Bai and Xiaoyun Mi



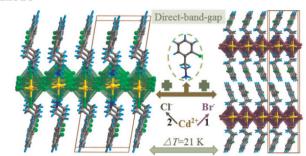
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 β -(Z)-Selective alkyne hydrosilylation by a N,Ofunctionalized NHC-based rhodium(ı) catalyst

Miguel González-Lainez, M. Victoria Jiménez,* Vincenzo Passarelli and Jesús J. Pérez-Torrente*

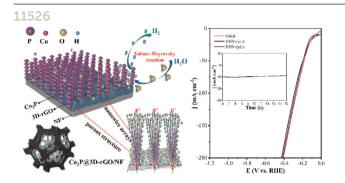


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Halogen-regulating induced reversible hightemperature dielectric and thermal transitions in novel layered organic-inorganic hybrid semiconducting crystals

Ding-Chong Han, Yu-Hui Tan,* Yun-Zhi Tang,* Jia-Hui Wen, Hui-Juan Shi, Xiao-Wei Fan,* Qiao-Lin Li and Meng-Na Wang

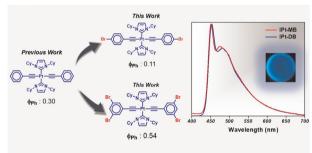


Co₂P nanowire arrays anchored on a 3D porous reduced graphene oxide matrix embedded in nickel foam for a high-efficiency hydrogen evolution reaction

Yuanqiang Wang,* Ting Wang, Mengru Yang, Yichuan Rui, Zhili Xue, Haozhen Zhu, Chengjie Wang, Jing Li and Binling Chen

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Effect of bromine substitution on blue phosphorescent trans-(N-heterocyclic carbene) Pt(II) acetylide complexes

Amran A. T. Khan, Habtom B. Gobeze, Tanjila Islam, Hadi D. Arman and Kirk S. Schanze*

N₂O₂ or N₂O ligation? ononuclear or dinuclear OAc still bound to Ni? H lost once or twice?

(R = H, Me) Ni(OAc)₂• 4H₂C with or without NaOH

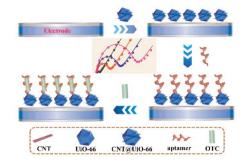
The curious cases of tetrahydrosalen-type ligands interacting with Ni(II): structures and ligand-based oxidation reactions

Vivian Xu, Bedraj Pandey, J. P. I. Dulmini Jayawardhena, Jeanette A. Krause and Hairong Guan*

11552

An electrochemical impedimetric platform formed by a CNT@UiO-66 nanocomposite for quantitative analysis of oxytetracycline

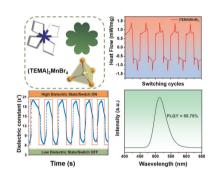
Rongrong Yuan,* Hongxu Chen,* Jiawei Liu, Ruyu Li and Hongming He*



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Zero-dimensional organic-inorganic hybrid manganese bromide with coexistence of dielectric-thermal double switches and efficient photoluminescence

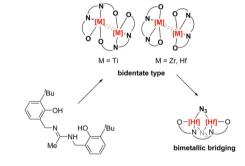
Ling-Kun Wu, Qing-Hua Zou, Hai-Quan Yao, Heng-Yun Ye and Jian-Rong Li*



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N-aryloxide-amidinate group 4 metal complexes

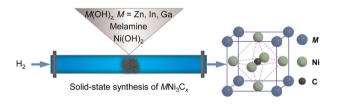
Hanhua Xu, Ze-Jie Lv, Junnian Wei* and Zhenfeng Xi



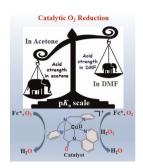
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A solid-state synthetic strategy toward nickel-based bimetallic interstitial compounds (MNi_3C_x , M = Zn, In, Ga)

Yali Lv, Mengxiang Ren, Ping Wang, Zupeng Chen, Xiaoling Mou,* Jiahui Fan, Jun Zhang,* Ronghe Lin, Jingwei Li* and Yunjie Ding*

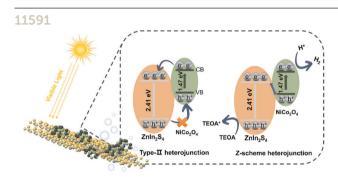


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Kinetic and mechanistic investigations of dioxygen reduction by a molecular Cu(II) catalyst bearing a pentadentate amidate ligand

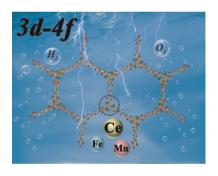
Srijan Narayan Chowdhury, Sachidulal Biswas, Saikat Das and Achintesh N. Biswas*



A direct Z-scheme $NiCo_2O_4/ZnIn_2S_4$ heterojunction for highly efficient visible-light-driven H_2 evolution

Dan Yan, Yan Li, Fangli Zhao, Tao Sun, Jun Fan, Qiushuo Yu* and Enzhou Liu*

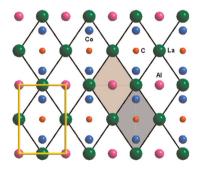




(FeMnCe)-co-doped MOF-74 with significantly improved performance for overall water splitting

Ning Chai, Yuxuan Kong, Tian Liu, Shuanglu Ying, Qiao Jiang and Fei-Yan Yi*





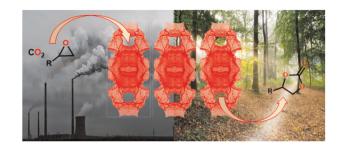
Extending interstitial tetrelides into carbides: synthesis and crystal and electronic structures- of RE_2Co_2AlC (RE = La, Pr, Nd)

Sergey N. Nesterenko, Anna I. Tursina* and Alexey N. Kuznetsov

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An amine decorated MOF for direct capture of CO₂ from ambient air

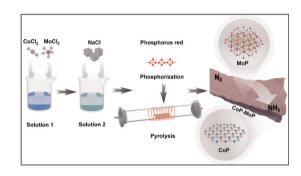
Mayank Gupta, Varad Daoo and Jayant K. Singh*



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NaCl template-assisted construction of a CoP-MoP heterostructured electrocatalyst for electrocatalytic nitrogen reduction

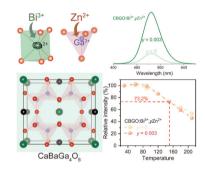
Yunni Liu, Yinghao Tao, Zhaobing Lu, Jing Teng, Weiju Hao, Jun Lin* and Guisheng Li*



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Exclusive confinement of Bi3+-activators in the triangular prism enabling efficient and thermally stable green emission in the tridymite-type phosphor CaBaGa₄O₈:Bi³⁺

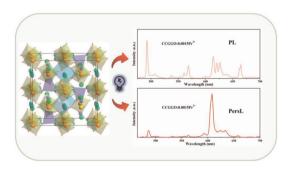
Jie Qin, Pengfei Jiang,* Rihong Cong and Tao Yang*



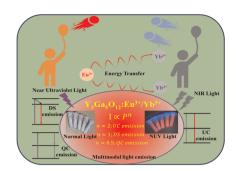
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Insights into blue-light activated red-emitting persistent luminescence from Pr³⁺-doped phosphors

Zikai Meng, Zhen Guo, Jiajia Cao, Zihui Li, Jihua Zhu, Zhenbin Wang,* Cunhua Ma, Mingjin Zhang* and Weisheng Liu*



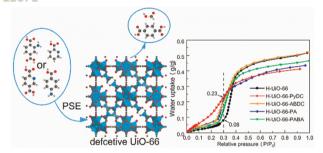
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Strategy to probe multimodal light emissions from Eu³⁺/Yb³⁺ activated garnet nanophosphors for LED devices and solar cell applications

Neeraj Kumar Mishra, Minarul I. Sarkar and Kaushal Kumar*

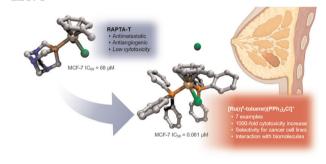
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Improvement of water adsorption performance of UiO-66 by post-synthetic modification

Guodong Fu, Ping Wu,* Shiping Zhang, Li Wang, Min Xu and Xiulan Huai

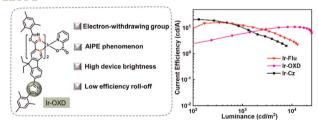
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Fine-tuning the cytotoxicity of ruthenium(II) arene compounds to enhance selectivity against breast cancers

Sarah A. P. Pereira, Jan Romano-deGea, Ana Isabel Barbosa, Sofia A. Costa Lima, Paul J. Dyson* and M. Lúcia M. F. S. Saraiva*

11691



Improved electroluminescence efficiency derived from functionalized decoration of 1,3,4-oxadiazole (OXD)-based Ir(III) complexes

Jia-Wei Liu, Xiong Tang, Chang Liu, Han-Chen Zhou, Shi Wang,* Hai-Peng Kang, Yong-Hua Li* and Wen-Yong Lai*

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Turn-on fluorescence of ruthenium pyrene complexes in response to bovine serum albumin

Saša Opačak, Margareta Pernar Kovač, Anamaria Brozovic, Ivo Piantanida* and Srećko I. Kirin*

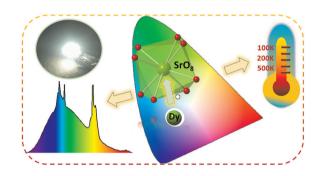


Open conformation - Turn-on fluorescence

11705

Augmenting cyan emission in vanadate garnets via Dy3+activation for light emitting devices and multi-mode optical thermometry

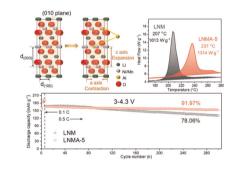
Amrithakrishnan Bindhu, Jawahar Isuhak Naseemabeevi and Subodh Ganesanpotti*



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Influence of Al doping on the structure and electrochemical performance of the Co-free LiNi_{0.8}Mn_{0.2}O₂ cathode material

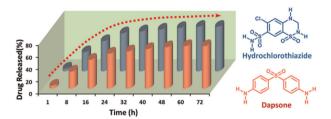
Rongzheng Tian, Shan Yin, Hongzhou Zhang,* Dawei Song, Yue Ma and Lianqi Zhang*



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Metal-organic framework based drug delivery systems as smart carriers for release of poorly soluble drugs hydrochlorothiazide and dapsone

Preety Yadav, Priya Bhardwaj, Mulaka Maruthi, Anindita Chakraborty* and Prakash Kanoo*



Sustained Release of Poorly Soluble BCS (Biopharmaceutics Classification System) Class IV Drugs