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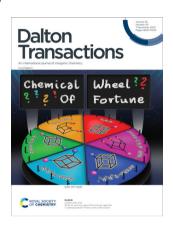
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See Amy E. Hixon et al., pp. 16601-16606.

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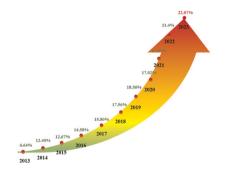
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PERSPECTIVE

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Advances in the research of carbon electrodes for perovskite solar cells

Yaoqiang Gan, Jian Sun, Pingchun Guo, Hedong Jiang, Jiake Li, Hua Zhu, Xueyun Fan, Liqun Huang and Yanxiang Wang*

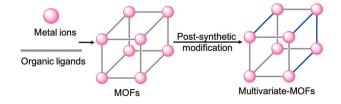


FRONTIER

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Multivariate metal-organic frameworks generated through post-synthetic modification: impact and future directions

Kyle T. Smith and Kyriakos C. Stylianou*



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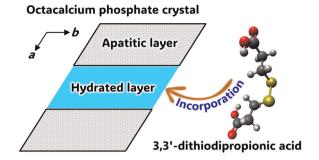


COMMUNICATIONS

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Formation of octacalcium phosphate with incorporated dicarboxylate ions containing disulfide bonds

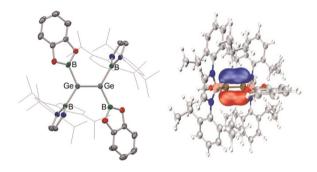
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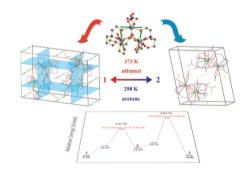
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Reversible single-crystal to single-crystal transformation between triangular single-molecule toroics

Lixi Feng, Yue Yang, Yu-Xia Wang,* Yizhen Zhao, Zhong-Yi Liu, Junzhuang Cong, Yi-Quan Zhang and Peng Cheng*

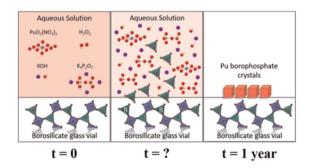


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The crystal chemistry of plutonium(IV) borophosphate

Ginger E. Sigmon, Nicole A. DiBlasi and Amy E. Hixon*



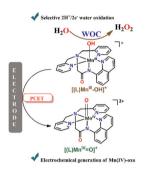
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What do we know about bifunctional cage-like T_8 silsesquioxanes? Theory *versus* lab routine

Kamila Fuchs, Edyta Nizioł, Jolanta Ejfler, Wiktor Zierkiewicz, Anna Władyczyn and Łukasz John*

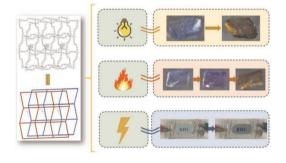
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Electrochemical generation of high-valent oxo-manganese complexes featuring an anionic N5 ligand and their role in O-O bond formation

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A series of isopolymolybdate—viologen hybrids with photo-, thermo- and electro-chromic properties

Shuang Yu, Tao Liu, Jun Ying,* Aixiang Tian, Mengle Yang and Xiuli Wang*

Ni Co²⁺ Mn Co³⁺ Zn S O Interface Built-in electric field Current density (A g⁺)

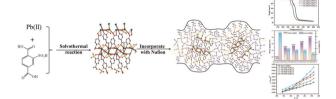
A heterostructure of NiMn-LDH nanosheets assembled on ZIF-L-derived ZnCoS hollow nanosheets with a built-in electric field enables boosted electrochemical energy storage

Tong Li, Xuanying Hu, Cui Yang,* Lei Han and Kai Tao*

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A simple MOF constructed using Pb(II) with strong polarizing force: a filler of Nafion membrane to increase proton conductivity

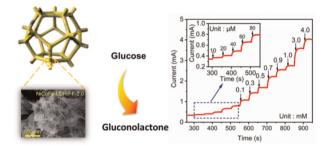
Jiawei Liu, Li Ding, Huigi Zou, Zhipeng Huan, Houting Liu,* Jing Lu,* Suna Wang and Yunwu Li



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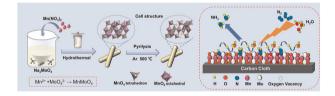
Yi Dong, Yuchi Zhang and Yan Xu*



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A simple hydrothermal synthesis of an oxygen vacancy-rich MnMoO₄ rod-like material and its highly efficient electrocatalytic nitrogen reduction

Huhu Yin, Xiujing Xing, Wei Zhang, Jin Li, Wei Xiong* and Hao Li*



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Ritu Yadav, Bindusagar Das, Ashi Singh, Anmol, Ankita Sharma, Chinmoy Majumder and Subrata Kundu*

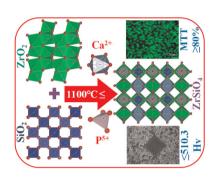


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Electronically flexible PYA ligands for efficient palladium-catalyzed α -arylation of ketones

Esaïe Reusser and Martin Albrecht*

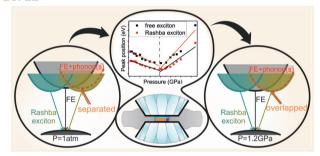
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Enhancing the zircon yield through the addition of calcium phosphates into ZrO₂-SiO₂ binary systems: synthesis and structural, morphological, mechanical and *in vitro* analysis

Ezhilan Manivannan, Poornima Govindharaj, Somlee Gupta, Arunkumar Dhayalan and S. Kannan*

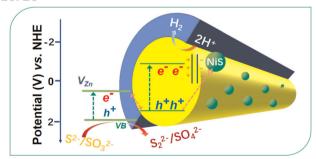
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Pressure influence on excitonic luminescence of CsPbBr₃ perovskite

Lev-Ivan Bulyk,* Taras Demkiv, Oleh Antonyak, Yaroslav M. Chornodolskyy, Roman Gamernyk, Andrzej Suchocki* and Anatolii Voloshinovskii

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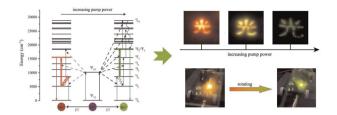
Improving photocatalytic hydrogen production by switching charge kinetics from type-I to Z-scheme *via* defective engineering

Shuang Wang, Mengjie Yao, Yuye Cheng, Kai Ding, Minghao Dou, Hongyu Shao, Shuaitong Xue, Shenjie Li* and Yanyan Chen*

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Zixun Zhou, Bin Zhu, Kuanxin Chen and Tao Pang*



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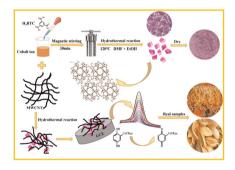
Synthesis of a diruthenium μ - η^4 - α -diimine complex via dehydrogenative coupling of cyclic amines and its role in dehydrogenative oxidation of pyrrolidine

Toshiro Takao,* Ryuichi Shimogawa, Ryosuke Fujita and Shu Egawa

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Co-MOF@MWCNTs/GCE for the sensitive detection of TBHQ in food samples

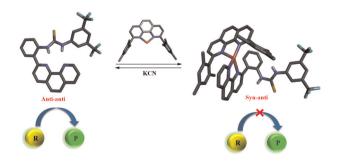
Junhui Feng, Chenxin Li, Wan-nai-yi Liu, Xiaoqin Min and Xiaoyun Lin*



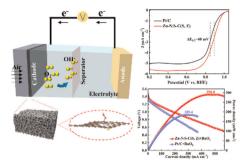
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Interplay between anti-anti and syn-anti conformations of thiourea modulating ON-OFF catalysis

Renitta Benny and Soumen De*



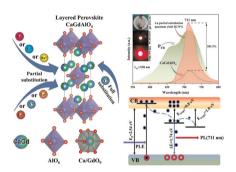
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Zn/N/S Co-doped hierarchical porous carbon as a high-efficiency oxygen reduction catalyst in Zn-air batteries

Mincong Liu, Jing Zhang, Guohua Ye, Yan Peng and Shiyou Guan*

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Defect-induced deep red luminescence of $CaGdAlO_4$ -type layered perovskites: multi-cationic sites partial/full substitution and application in pc-LED and plant lighting

Bowen Wang, Changshuai Gong, Xuyan Xue, Meiting Li, Qi Zhu, Xuejiao Wang* and Ji-Guang Li*

16791 Ln(CH₂COO)₃ Ln(CH₂COO)₃ Mn(CH₂COO)₃ Ln(CH₂COO)₃ Ln(CH₂COO)₃ Ln(CH₂COO)₃ Ln(CH₂COO)₃ Mn(CH₂COO)₃ Ln(CH₂COO)₃ Ln(CH₂COO)₃

Ln^{III}/Mn^{II}—Ln^{III} complexes derived from a salicylic azo dye ligand: synthesis, structures, magnetic and fluorescence properties

Xiaoman Kuang, Youhong Li, Meng Yang,* Wen Dong* and Jidong Leng*

DNA Destabilization DNA Cleavage | Court | C

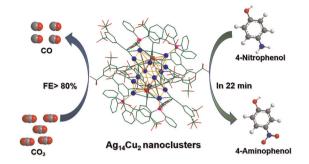
Novel Cu(II) complexes as DNA-destabilizing agents and their DNA nuclease activity

Hee Chang Kwon, Da Hyun Lee, Minyoung Yoon, Saira Nayab, Hyosun Lee* and Ji Hoon Han*

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Synthesis, structure anatomy, and catalytic properties of Ag₁₄Cu₂ nanoclusters co-protected by alkynyl and phosphine ligands

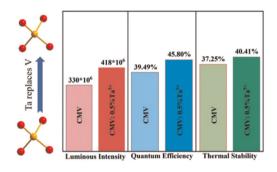
Quanli Shen, Xuzi Cong, Leyi Chen, Lei Wang, Yonggang Liu, Likai Wang* and Zhenghua Tang*



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Highly efficient rare-earth free vanadate phosphors for WLEDs

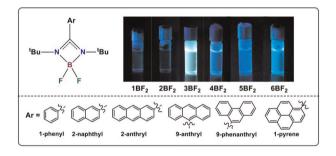
Zhaojiang Liu, Yujuan Dong,* Man Fu and Chuang Wang*



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Blue emissive amidinate-based tetra-coordinated boron compounds

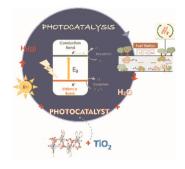
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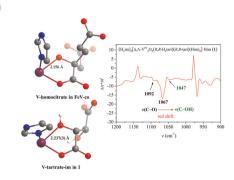
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Novel organically linked Zn^{II} hydrogenselenite coordination polymers: synthesis, characterization, and efficient TiO₂ photosensitization for enhanced photocatalytic hydrogen production

Andressa Lunardi, Tanize Bortolotto, Camila Nunes Cechin, Natália de Freitas Daudt, Melina de Azevedo Mello, Sailer S. dos Santos, Roberta Cargnelutti, Ernesto Schulz Lang and Bárbara Tirloni*



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Protonated and deprotonated vanadyl imidazole tartrates for the mimics of the vanadium coordination in the FeV-cofactor of V-nitrogenase

Shuang-Shuang Zhu, Zhen-Lang Xie, Lan Deng, Si-Yuan Wang, Lu-Bin Ni and Zhao-Hui Zhou*

16858

$$\{ \text{CpFe-CN-Ru-NC-FeCp} \}^{3+}$$

$$n = 0 \quad \bigcirc \bullet \otimes$$

$$\{ \text{Me}_n \text{CpFe}^{\parallel}\text{-CN-Ru}^{\parallel}\text{-NC-Fe}^{\parallel}\text{CpMe}_n \}^{2+}$$

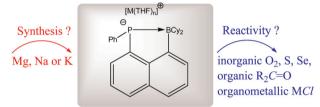
$$n = 5 \quad \bigcirc \bullet \otimes$$

$$\{ \text{Me}_5 \text{CpFe-CN-Ru} \}^{3+}\text{-NC-Fe}\text{CpMe}_5$$

Different delocalized ranges in mixed valence cyanido-metal-bridged Fe-Ru-Fe complexes controlled by terminal ligand substitution modification

Chen Zeng, Qing-Dou Xu, Xiao-Lin Liu, Sheng-Min Hu, Xin-Tao Wu and Tian-Lu Sheng*

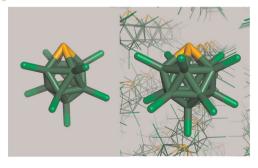
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B-substituted group 1 phosphides: synthesis and reactivity

Michal Aman, Libor Dostál, Aleš Růžička, Zdenka Růžičková and Roman Jambor*

16886



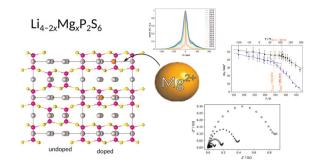
Chlorinated polyhedral selenaboranes revisited by joint experimental/computational efforts: the formation of closo-1-SeB₉Cl₉ and the crystal structure of closo-SeB₁₁Cl₁₁

Willi Keller,* Matthias Hofmann, Hubert Wadepohl, Markus Enders, Jindřich Fanfrlík and Drahomír Hnyk*

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Influence of Mg on the Li ion mobility in $Li_{4-2x}Mg_xP_2S_6$

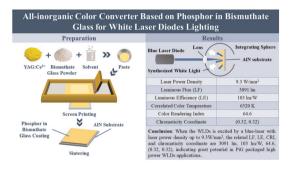
Sven Neuberger, Neeshma Mathew, Sheyi Clement Adediwura and Jörn Schmedt auf der Günne*



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All-inorganic color converter based on a phosphor in bismuthate glass for white laser diode lighting

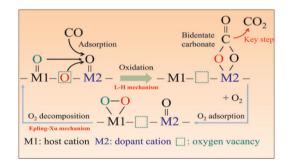
Hong Li,* Ruipeng Xu, Jie Yang and Dehua Xiong



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Revealing the intrinsic nature of Ni-, Mn-, and Y-doped CeO₂ catalysts with positive, additive, and negative effects on CO oxidation using operando DRIFTS-MS

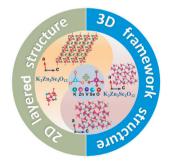
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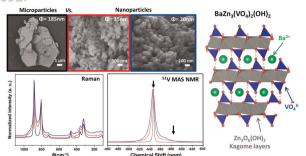
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Synthesis, structures and properties of two new selenite optical materials: K2Zn3Se4O12 and $K_4Zn_3V_4Se_2O_{19}$

Qiuyuan Feng, Zhixia Gao, Ketian Hou, Jialong Wang, Hong Du* and Qun Jing*



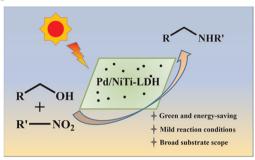
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Micro- and nanostructured layered-kagome zinc orthovanadate $BaZn_3(VO_4)_2(OH)_2$

Bachchar Hadrane, Philippe Deniard, Nicolas Gautier, Michael Paris, Christophe Payen* and Rémi Dessapt*

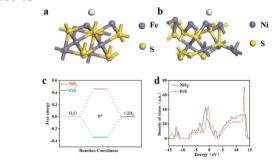
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Efficient one-pot syntheses of secondary amines from nitro aromatics and benzyl alcohols over Pd/NiTi-LDH under visible light

Jiaqi Wang, Jiaqi Jiang and Zhaohui Li*

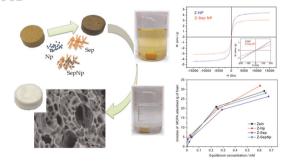
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Design of polymetallic sulfide NiS $_2$ @Co $_4$ S $_3$ @FeS as bifunctional catalyst for high efficiency seawater splitting

Mingshuai Chen, Guangping Wu, Xiaoqiang Du* and Xiaoshuang Zhang

16951



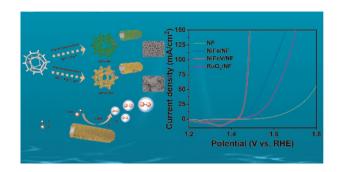
Magnetite-sepiolite nanoarchitectonics for improving zein-based bionanocomposite foams

Ana C. S. Alcântara, Yorexis González-Alfaro, Margarita Darder, Eduardo Ruiz-Hitzky and Pilar Aranda*

16963

One-step electrodeposition of V-doped NiFe nanosheets for low-overpotential alkaline oxygen evolution

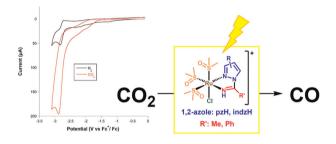
Qingxiang Kong, Junli Wang, Zhenwei Liu, Song Wu, Xiaoning Tong, Naixuan Zong, Bangfu Huang, Ruidong Xu* and Linjing Yang*



16974

1,2-Azolylamidino ruthenium(II) complexes with DMSO ligands: electro- and photocatalysts for CO2 reduction

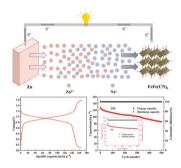
Murphy Jennings, Elena Cuéllar, Ariadna Rojo, Sergio Ferrero, Gabriel García-Herbosa, John Nganga, Alfredo M. Angeles-Boza, Jose M. Martín-Alvarez, Daniel Miguel and Fernando Villafañe*



16984

High specific capacity FeFe(CN)₆ as the cathode material in aqueous rechargeable zinc-sodium hybrid batteries

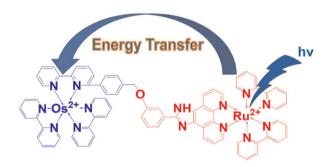
Chaogiao Yang, Shuang Ding, Ya Zhao, Jinxia Zhou, Lin Li and Jiaxin Fan*



16993

Energy transfer in metal-exchange binuclear complexes covalently linked by asymmetric ligands

Weijun Dai, Shiwen Yu, Wen Xu, Ci Kong, Zining Liu, Hongju Yin, Chixian He, Jian-Jun Liu* and Feixiang Cheng*

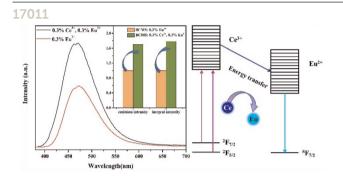


$[(cod)RhCl]_2 + Rh Cl_2$ $tBu ROH Cl_2$

bulky planar-chiral catalysts

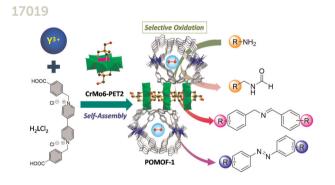
Rhodium complexes with planar-chiral cyclopentadienyl ligands: synthesis from tert-butylacetylene and catalytic performance in C–H activation of arylhydroxamates

Andrey V. Kolos, Yulia V. Nelyubina, Evgeniya S. Podyacheva and Dmitry S. Perekalin*



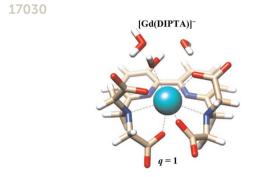
Ce³⁺–Eu²⁺ Co-doped BaCa₁₃Mg₂(SiO₄)₈ cyan phosphor—ultra-high energy transfer efficiency for white light emitting diodes

Xiaoxi Ma, Shuo Yang, Chuqi Wang, Nana Jia, Chengyu Cai and Chuang Wang*



A porous Anderson-type polyoxometalate-based metal—organic framework as a multifunctional platform for selective oxidative coupling with amines

Hong-Ru Tan, Xiang Zhou, Hanqi You, Qi Zheng, Sheng-Yin Zhao* and Weimin Xuan*



Bipyridil-based chelators for Gd(III) complexation: kinetic, structural and relaxation properties

Szilvia Bunda, Norbert Lihi,* Zsófia Szaniszló, David Esteban-Gómez, Carlos Platas-Iglesias,* Mónika Kéri, Gábor Papp and Ferenc Krisztián Kálmán*

CORRECTION

17041

Correction: Synthesis of novel solid scale inhibitors based on silver tungstate loaded KIT-6 for scale removal from produced water: static and modeling evaluation

Heba M. Salem,* Mahmoud F. Mubarak, Asmaa A. Abdelrahman and R. Hosny*