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See Sergey V. Kolotilov *et al.*, pp. 13057–13070.

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Inside cover
See Ajay Venugopal *et al.*, pp. 13005–13019.

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EDITORIAL

PERSPECTIVE

EES Batteries

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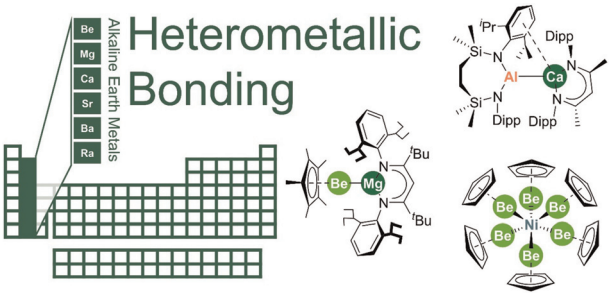
FRONTIER

13020

Alkaline earth metals: heterometallic bonding

Liam P. Griffin* and Josef T. Boronski*



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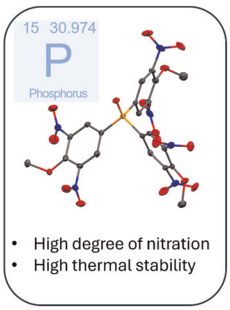
13030

Nitrated triarylphosphine oxides: accessible triarylphosphoryl molecules with up to six nitro groups

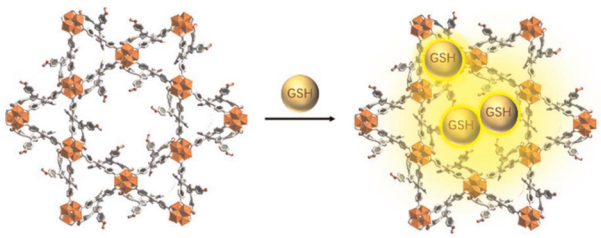
Rafael Pérez, Houari Dahmani and Guillaume Bélanger-Chabot*



13035

A hexatopic-carboxylate-based csq type luminescent zirconium-organic framework for the detection of glutathione

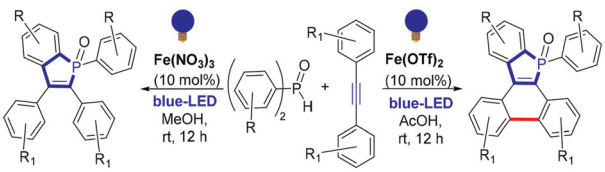
Jin-Peng Chu, Zhen-Sha Ma, Jun Xia, Kang Zhou,* Zhi-Qiang Zhang* and Xiao-Yuan Liu*



13040

Using blue-light driven iron-catalysis to afford molecular diversity in phosphindole oxide derivatives

Yumeng Yuan, Lingfeng Zhao, Marie Cordier, Thierry Roisnel, Anne Pensel, Muriel Hissler, Pierre-Antoine Bouit* and Christophe Darcel*



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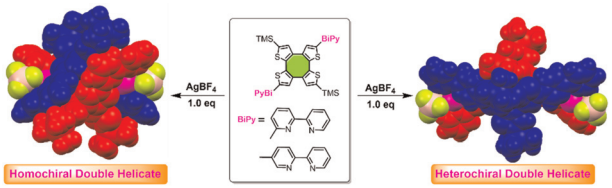
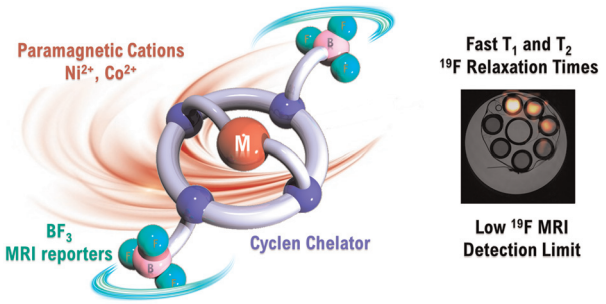
13048



Ag-induced homochiral *versus* heterochiral double helicates based on cyclooctatetrathiophene-bipyridine

Chenglong Wang, Jie Yang, Guanfeng Miao, Zhiying Ma, Guangxia Wang* and Hua Wang*

13053



Trifluoroborate-appended cyclen complexes of paramagnetic transition metals (Ni^{2+}, Co^{2+}) as fast-relaxing ^{19}F MRI probes

Charline Sire, Francesca Garello, Noémie Lalaoui, Nathalie Saffon-Merceron, Nicolas Le Poul, Raphaël Tripier, Lorenzo Tei* and Thibault Troadec*

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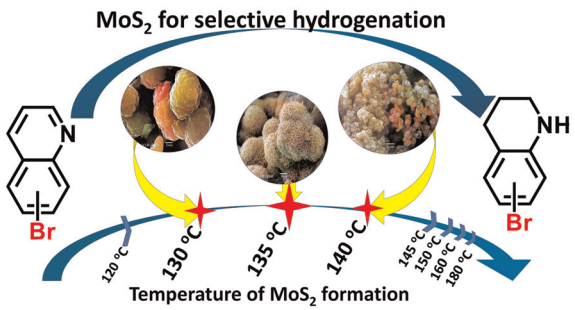
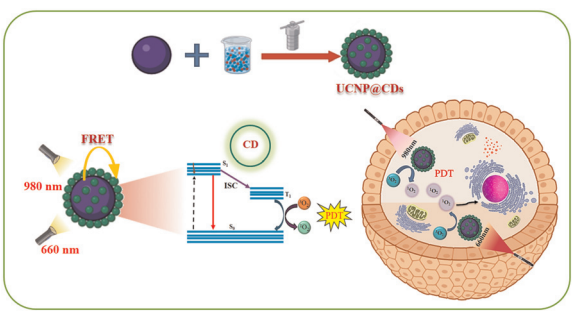


Influence of formation temperature on the morphology of MoS_2 and its catalytic properties in the hydrogenation of isomeric bromoquinolines to bromo-1,2,3,4-tetrahydroquinolines

Anastasia V. Terebilenko, Maryna V. Olenchuk, Denys O. Mazur, Andrii S. Nikolenko, Vadym I. Popenko, Galyna I. Dovbeshko, Oleksii Bezkrovnyi, Tomash Sabov, Boris M. Romanyuk, Volodymir N. Poroshin, Serhiy V. Ryabukhin, Dmytro M. Volochnyuk and Sergey V. Kolotilov*

13071



Amplification of luminescence intensity by ytterbium(III) dopant in upconversion nanoparticles integrated with carbon dots for NIR-responsive targeted photodynamic therapy

Bijay Saha, Antara Ghosh, Archana Singh and Sumanta Kumar Sahu*

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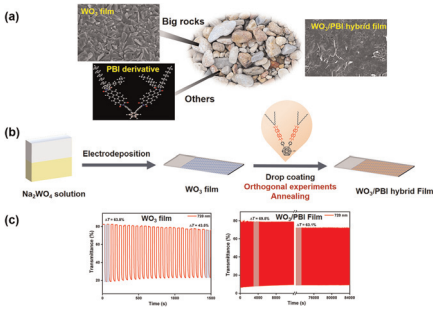
Synergistic WO_3-PBI hybrid electrochromic materials with an enhanced diffusion coefficient and cycling reversibility inspired by the "Big Rocks" theory

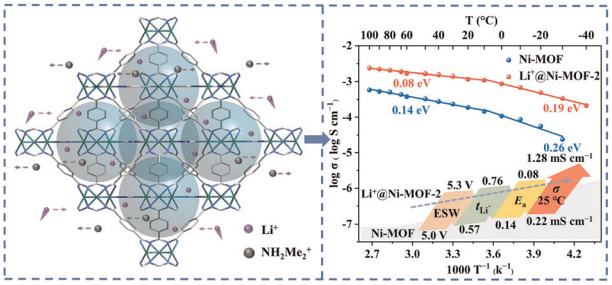
Chunxia Hua, Huanyu Tan, Shujin Ma, Jiaxue Hou, Ming Gong, Jia Chu, Xiaoqin Wang and Shanxin Xiong*



13093

Significant electrochemical performance improvement of an anion MOF-based solid-state electrolyte across a wide temperature range *via* an ion exchange strategy

Changqi Gu, Wenyu Ding, Sheng Jin, Xinyu Tang, Xin Zhang, Li Fan, Zhiliang Liu and Xiaomin Kang*



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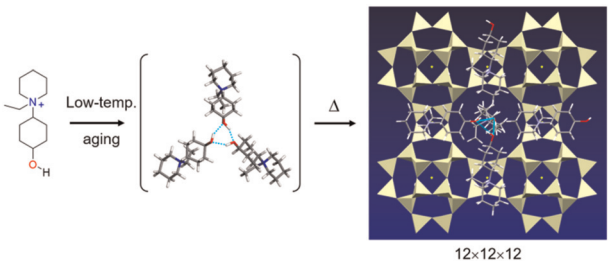
Synthesis of a high-silica intersecting-large-pore zeolite using hydrogen-bond-assisted structure-directing agents

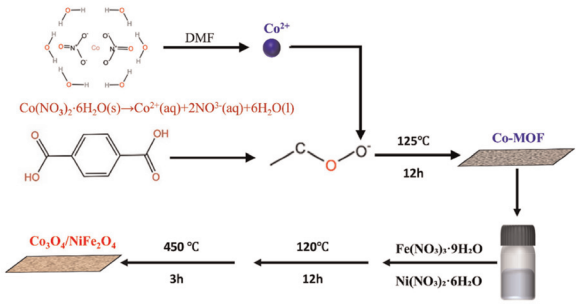
Hao Li, Zhenghan Zhang, Yanan Xu, Shiyue Zhang, Pengliang Gu, Qing Hu, Yu Zhang, Wenkai Wang, Zhan Shi, Xinyi Fu, Jian Li* and Hongbin Du*



13110

Self-supporting $Co_3O_4/NiFe_2O_4$ nanoflowers for efficient oxygen evolution reaction

Ying Wang, Yanghanqi Li, Jun Yu and Yukou Du*



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Preparation of selenium doped $CuCoO_2$ nanosheets as an efficient electrocatalyst for the oxygen evolution reaction

Qingyang Shen, Lihong Zhao, Jilin Bai,* Chao Jiang, Yue Mi, Wei Liao and Dehua Xiong*

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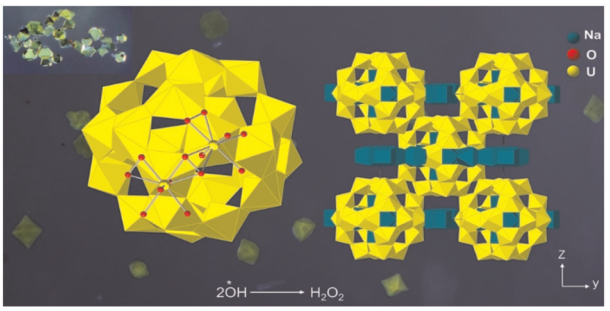

Formation of U(VI) peroxide nanoclusters from cascade reactions with a persulfate radical initiator

Vidumini S. Samarasiri, Harindu Rajapaksha, Sarah McGee, Sara E. Mason and Tori Z. Forbes*

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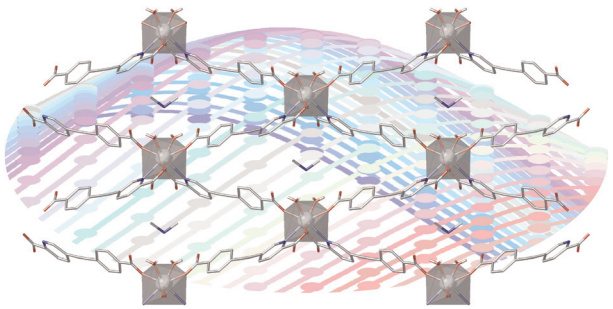

Synthesis, structure and slow magnetic relaxation of lanthanoid coordination polymers based on ethynyl-bridged picolinate ligands

Verónica Jornet-Mollá, Carlos J. Gómez-García,* Miquel J. Dolz-Lozano, Carlos Giménez-Saiz and Francisco M. Romero*

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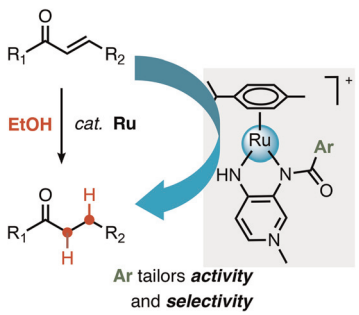

Ligand modification for the tuning of activity and selectivity in the chemoselective transfer hydrogenation of α,β-unsaturated carbonyls using EtOH as a hydrogen source

Alicia Beaufils, Nicole Elia, Sabela Reuge and Martin Albrecht*

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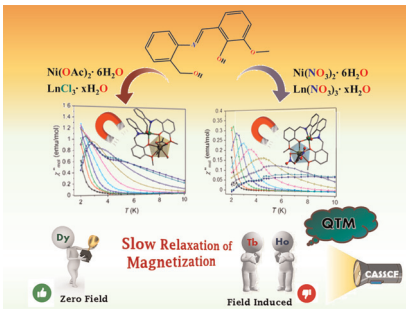

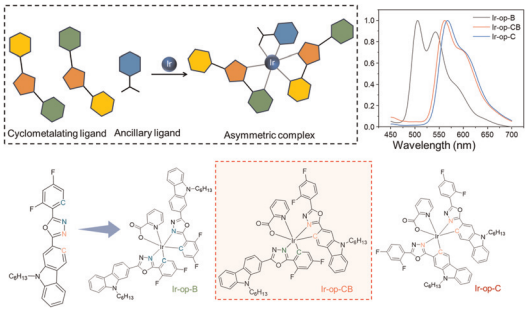

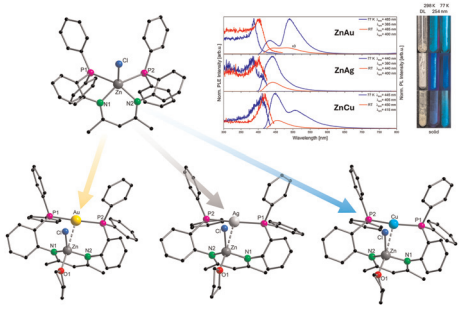

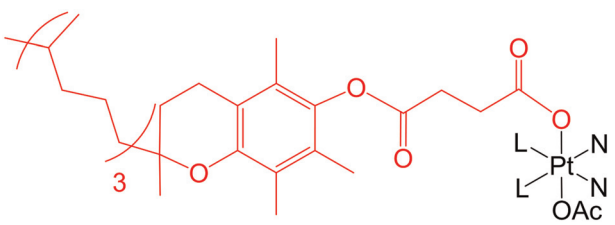

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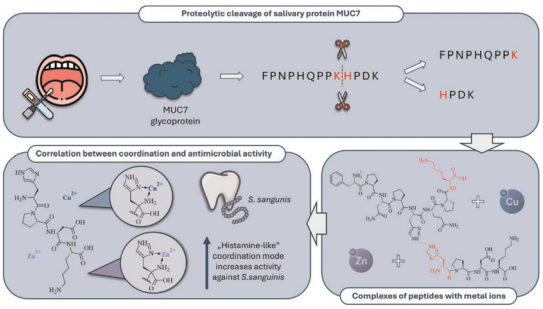

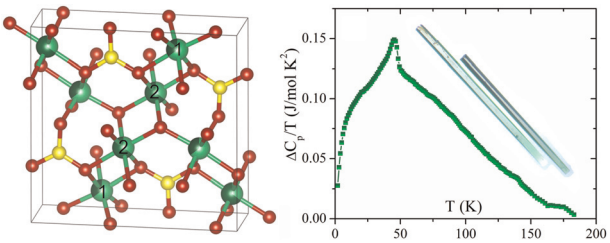

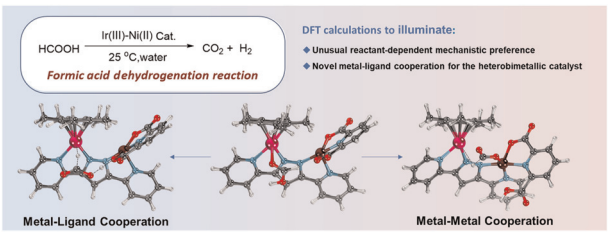

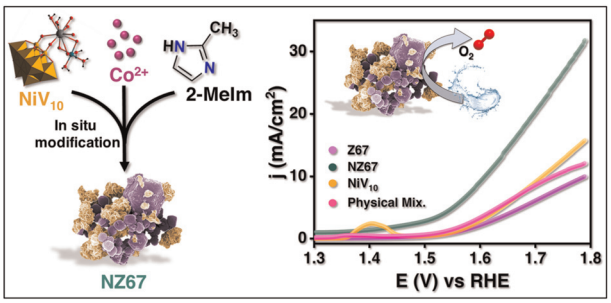

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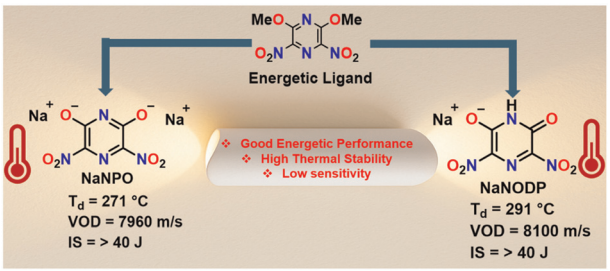
Crystal engineering of dinitropyrazine-based sodium E-MOFs: toward thermally robust and low-sensitivity energetic materials

Manojkumar Jujam, Abhishek Kumar Yadav and Srinivas Dharavath*



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Temperature-dependent flexible hybrid capacitors based on $Ni(OH)_2$@NiS electrode materials

Wei Jia, Qi He, Zhiqiang Guo* and Xiang Wu*