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IN THIS ISSUE

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Cover See Jicheng Zhou, Wentao Xu *et al.*, pp. 3808–3820.

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INORGANIC CHEMISTRY frontiers



Inside cover See Shi-Qiang Wang, Michael J. Zaworotko *et al.*, pp. 3821–3827.

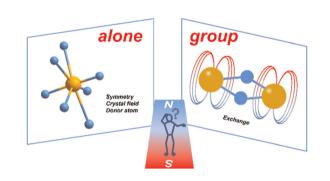
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Ming Liu, Xiao-Han Peng, Fu-Sheng Guo* and Ming-Liang Tong*



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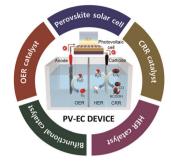
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REVIEWS

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Halide perovskite photovoltaic-electrocatalysis for solar fuel generation

Jin Wook Yang, You Jin Ahn, Deok Ki Cho, Jin Young Kim* and Ho Won Jang*

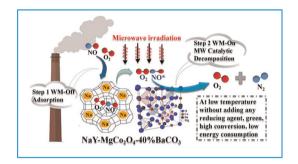


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Highly effective and energy-saving removal of NO through an adsorption-microwave catalytic decomposition method under complex flue gas at low temperature

Chunmu Yu, Yuhan Yi, Jicheng Zhou* and Wentao Xu*



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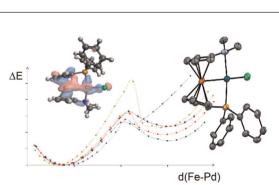
The impact of solution vs. slurry vs. mechanochemical syntheses upon the sorption performance of a 2D switching coordination network

Shi-Qiang Wang,* Shaza Darwish and Michael J. Zaworotko*

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Tailoring the Fe \rightarrow Pd interaction in cationic Pd(II) complexes *via* structural variation of the ligand scaffold of sterically demanding dppf-analogs and their P,N-counterparts

Subhayan Dey, Fabian Roesler, Clemens Bruhn, Zsolt Kelemen* and Rudolf Pietschnig*





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-10

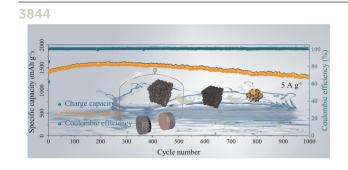
-20

-30

-40

-50 -60 -0.6

Current density(mA cm⁻²)



2.54 wt.% Ru@TiO

TiO₂

-04 -03 -02 -01

Potential(V vs. RHE)

0.0

0 1

- 20 wt.% Pt/C

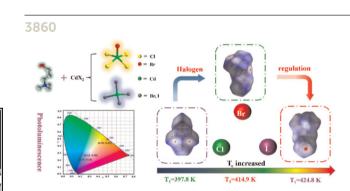
-0.5

Highly efficient sulfur cathode built from biomass of hierarchical porous carbon for aqueous Cu–S batteries

Xue Han, Jiaxi Xu, Haoxiang Yu,* Junwei Zhang, Yiwen Liu, Junyi Wang, Zhouxiang Wu, Zhongjie Shu,* Lei Yan, Liyuan Zhang and Jie Shu*

Unique sandwich structure of Ru@TiO₂: salicylic acid micro-etching from $K_2Ti_2O_5$ and high-performance electrocatalytic hydrogen evolution

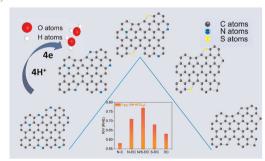
Yuge Cao, Song Liang, Ya Yan, Wujie Dong, Chenlong Dong, Wangshu Zheng, Shuying Nong* and Fuqiang Huang*



Halogenation triggering rules in hybrid materials for fluorescence and dielectric phase transitions

Jun-Qin Wang, Gele Teri, Hao-Fei Ni, Qing-Feng Luo, Xiao-Ping Wang, Da-Wei Fu,* Yi Zhang* and Qiang Guo*

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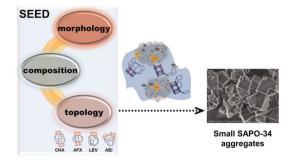
Gradual introduction of multiple active sites in quest of high activity metal-free oxygen reduction catalysts and exploring the synergistic effect

Qi Guo, Shuai Ma, Qi-Long Wu, Zhi-Zhuang Liu, Zhao-Quan Yao,* Shuai Li, Jiong-Peng Zhao* and Fu-Chen Liu*

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Insights on the seed selection criteria of SAPO-34 synthesis: structural units and their chemical microenvironment

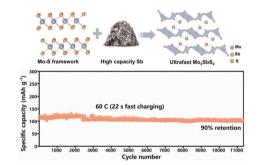
Xiaosi Zhang, Miao Yang,* Ye Wang, Caiyi Lou, Shutao Xu, Peng Tian* and Zhongmin Liu



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Anchoring atomic antimony in an intercalative Mo–S framework *via* soft covalent bonding for fast-charging and long-lived sodium ion batteries

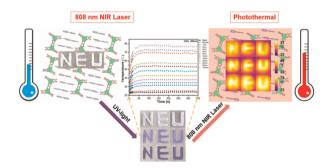
Baixin Peng, Zhuoran Lv, Yuqiang Fang, Tianxun Cai, Zhiyuan Shi, Ce Zhou, Yusha Gao and Fuqiang Huang*



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Photoinduced radicals modulated NIR photothermal conversion in a photochromic inorganic–organic complex

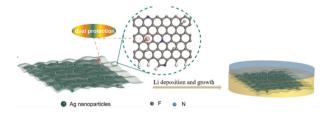
Zhe Wang, Tieqiang Wang, Junbiao Wu,* Zhuopeng Wang and Jiyang Li*

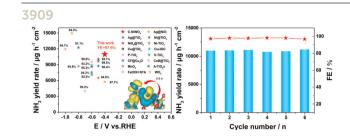


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A dual protection strategy for stable lithium metal anodes using Ag nanoseed decorated F-doped porous graphene current collectors

Yang Yan,* Jing Sun, Ying Zhang, Wen Liu, Yu-jie Wang, Hui-qin Yang, Cheng-jie Li and Juan Zhang*





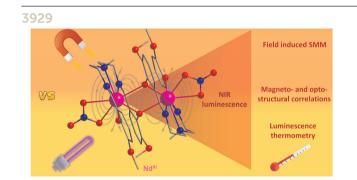
NiWO₄ nanoparticles with oxygen vacancies: high-efficiency electrosynthesis of ammonia with selective reduction of nitrite

Hang Qiu, Qiuyue Chen, Jing Zhang,* Xuguang An, Qian Liu, Lisi Xie, Weitang Yao, Xuping Sun* and Qingquan Kong*

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Metal-involved $C \cdots d_{z^2}$ -Pt^{II} tetrel bonding as a principal component of the stacking interaction between arenes and the platinum(II) square-plane

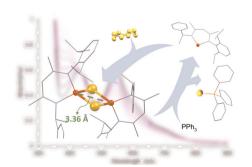
Eugene A. Katlenok,* Maxim L. Kuznetsov, Anton V. Cherkasov, Dmitry M. Kryukov, Nadezhda A. Bokach and Vadim Yu. Kukushkin*



The role of terminal ligands in the slow relaxation of magnetisation and luminescence thermometry of dinuclear Nd^{III} complexes

Airton G. Bispo-Jr, Diogo A. Gálico, Roberto M. Diaz-Rodriguez, Jeffrey S. Ovens, Fernando A. Sigoli* and Muralee Murugesu*

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Synthesis, kinetic studies, and atom transfer reactivity of [2Fe–2E] model compounds

Erwin A. Weerawardhana, Matthias Zeller and Wei-Tsung Lee*

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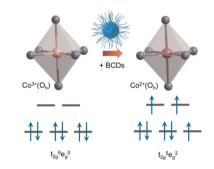
Engineering heterostructured Ti₄O₅/BaTiO₃ ferroelectric by surface reconstruction for enhanced photocatalytic CO₂ reduction

Ran Su, Zhitong Sun, Chao He, Suna Wei, Laniu Chen, Dawei Zhang, Zhipeng Wang,* Xingtao An* and Fatang Li*

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Regulating the spin density of Co^{III} using boron-doped carbon dots for enhanced electrocatalytic nitrate reduction

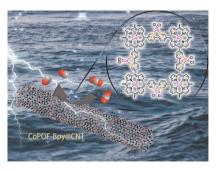
Jingjing Huang, Jingkun Yu, Xingmei Lu, Yingying Wei, Haoqiang Song, Ang Cao, Jinmeng Cai,* Shuang-Quan Zang and Siyu Lu*



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A supported polymeric organic framework composed of dual electrocatalytically active sites for high-performance carbon dioxide electroreduction

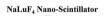
Shengsheng Huang, Qizhe He, Hongwei Li, Jinjie Qian,* Wei Xu and Ting-Ting Li*



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Enhanced radioluminescence of NaLuF₄:Eu³⁺ nanoscintillators by terbium sensitization for X-ray imaging

Tianshe Yang, Luo Guo, Hao Wang, Xueli Xu, Peilin Wu, Ning Zhang, Xiangmei Liu, Shujuan Liu* and Qiang Zhao*



The Eum

Energy (x 10[°] cm⁻¹)





