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IN THIS ISSUE

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Cover
See Briana R. Schrage *et al.*,
pp. 586–593.

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Inside cover
See Lígia C. Gomes-da-Silva, Andreia Valente *et al.*,
pp. 594–610.

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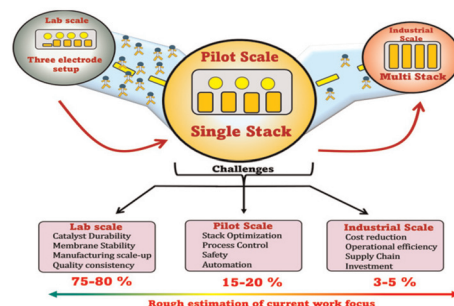
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Cell membrane generated with AI.

PERSPECTIVES

540

Recent advances in non-precious metal catalysts for anion exchange membrane water electrolysis

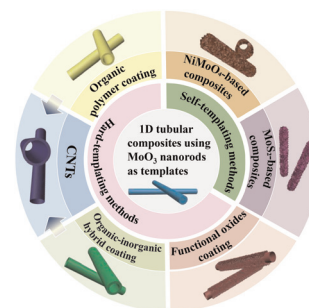
Suprobhat Singha Roy, Sreenivasan Nagappan, Prasita Mazumder, Fajar Dhanish C P, Vishesh Vishesh and Subrata Kundu*



563

Recent advances in one-dimensional tubular composites with MoO₃-based micro/nanorods as templates

Xiaohong Xu, Min Zhang,* Jingli Xu and Xue-Bo Yin*



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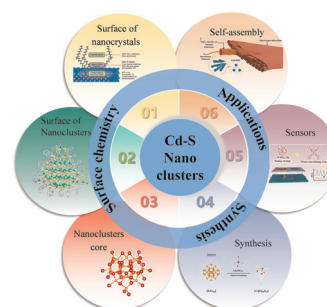
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571

Ligand evolution in cadmium sulfide nanoclusters: tailoring surface coordination for atomic precision

Yan-Xiang Ling, Ju-Suo Zhong, Xin-Yu Tong, Zhan-Guo Jiang* and Cai-Hong Zhan*

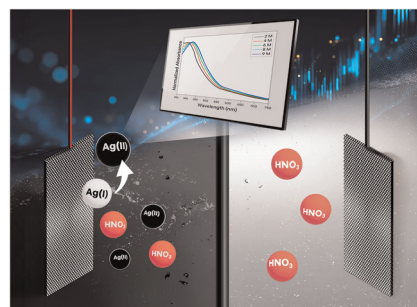


PAPERS

586

Optimization and quantification of silver(II) for mediated electrochemical oxidation applications

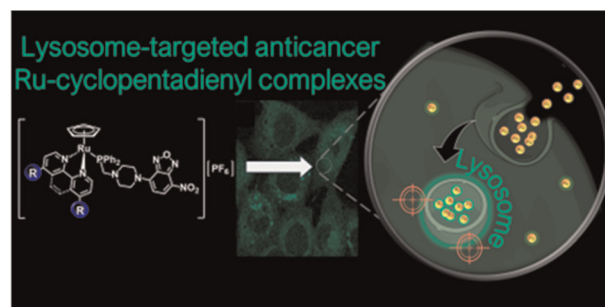
Briana R. Schrage,* Joshua E. Leach, Ethan Villarreal, Jisue Braatz and Kristian G. Myhre



594

Lysosome-targeted Ru(II)-cyclopentadienyl organometallic anticancer complexes

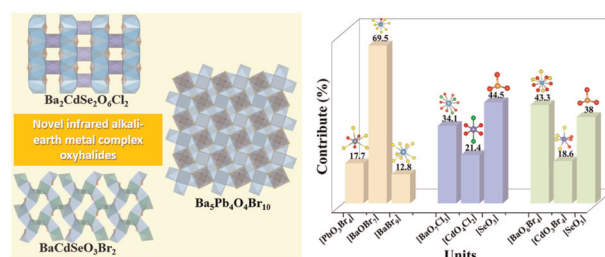
Ricardo G. Teixeira, Livia Stenico, Xavier Fontrodona, Isabel Romero, Radostaw Starosta, Maria João Moreno, Ana Isabel Tomaz, Lígia C. Gomes-da-Silva* and Andreia Valente*



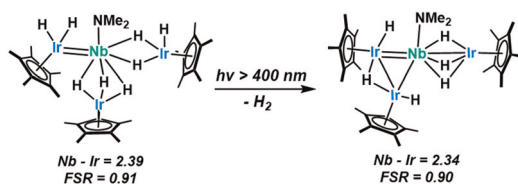
611

Tuning birefringence in alkaline-earth metal oxyhalides through diverse mixed-cation coordination architectures

Shenghong Zeng, Mayinuer Maimaiti, Jinche Wu, Tingwen Han, Hui Chai,* Fangfang Zhang* and Min Zhang*

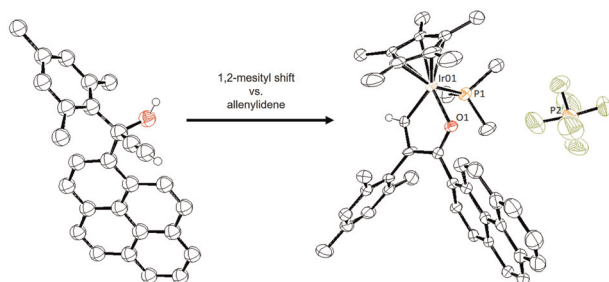


620

Niobium Heterobimetallic Multiple Bonding*Inert to substitution**Reactive***Photolytic H₂ Elimination Opens Reactivity****Visible-light driven H₂ reductive elimination unlocks reactivity in polyhydrido niobium iridium clusters**

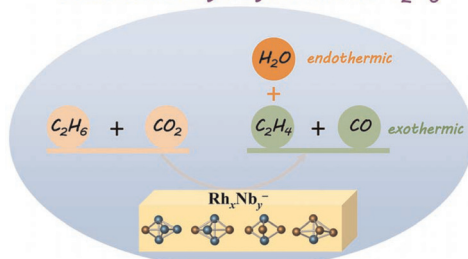
Zachary Dubrawski, Samy Aïssiou, Erwann Jeanneau, Chloé Thieuleux and Clément Camp*

630

**Unprecedented 1,2-mesityl shift for the synthesis of iridafurans**

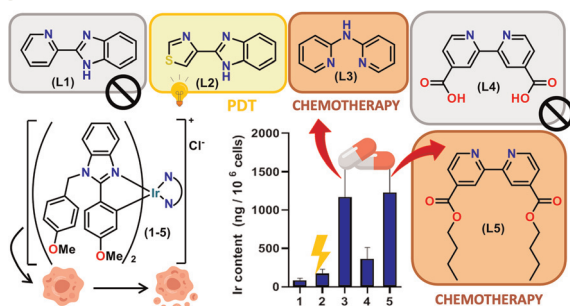
Maria Talavera,* Antonio Gómez, Nicolás Otero, Ángeles Peña-Gallego and Sandra Bolaño*

635

Oxidative Dehydrogenation of C₂H₆**Oxidative dehydrogenation of C₂H₆ and CO₂ mediated by Rh_xNb_y⁻ (x + y = 5) clusters**

Hai Zhu, Xin-Yue Sun and Xiao-Na Li*

643

**Structure–activity insights into benzimidazole-based Ir(III) cyclometallated complexes for cancer therapy**

Eva Morales-Pioz, Mónica Martínez, Andrea Benedi, María Tejera-Ruiz, Isabel Marzo, M. Concepción Gimeno, Ezequiel M. Vázquez-López, Soledad García-Fontán* and Vanesa Fernández-Moreira*



653

Chemically bonded Bi@C in porous carbon bundles for ultrafast and stable sodium storage

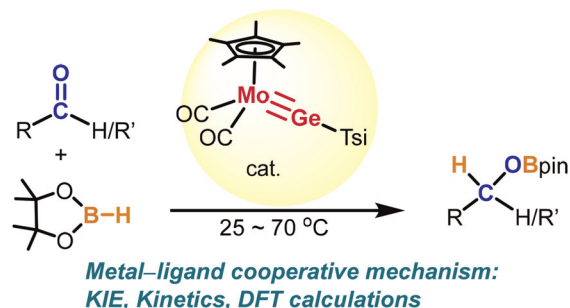
Hui Qi,* Bin Gao, Siqin Zheng, Jianghui Song, Hongwei Yuan, Weipeng Luo, Ze Zhang, Haoyu Liu, Xiaojing Yuan* and Wenfeng Wu



663

Hydroboration of carbonyl compounds catalysed by a molybdenum germylyne complex: metal–ligand cooperative mechanism

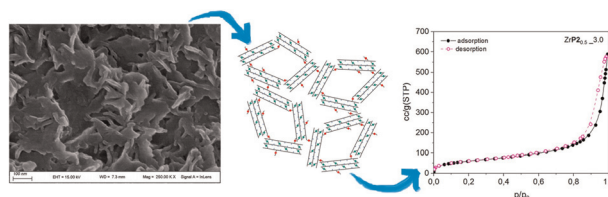
Christof Fontanilla, Yuto Shimizu, Koichi Nagata, Sakura Iwatsuki, Aoi Tanamura, Seiji Mori,* Tara Prasad Dhungana and Hisako Hashimoto*



671

Adsorption properties of α -type layered and pillared zirconium phosphite phosphonates with high specific surface areas and porosities

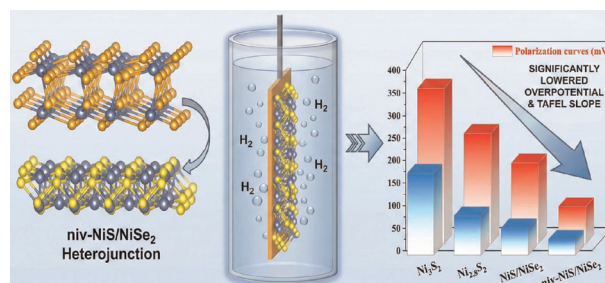
Monica Pica,* Elena De Paolis, Emmanuele Cillo, Giorgio Gatti, Geo Paul, Elisa Calà, Fabrizio Olivito, Anna Santaniello and Giovanni Golemme



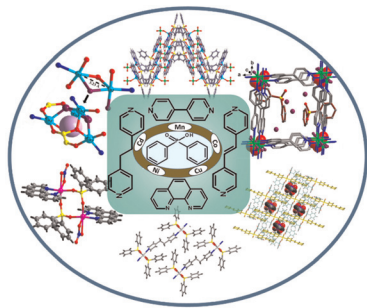
684

Formation of $\text{Ni}_{2.8}\text{S}_2$ -based heterojunctions with dual non-interfacial metal vacancies for enhanced hydrogen evolution performance

Zongpeng Wang, Longfei Ding, Xiang Li, Yuanmo Lin, Ting Jiang, Zhiping Lin* and Shougang Chen*



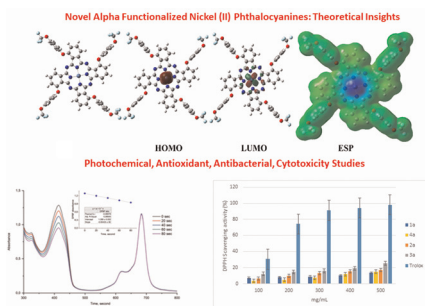
694



From discrete to polymeric assemblies: exploring supramolecular structural diversity in transition metal phosphinates with N-donor ligands

Archana Kumari Pattnaik* and Gobinda Chandra Behera

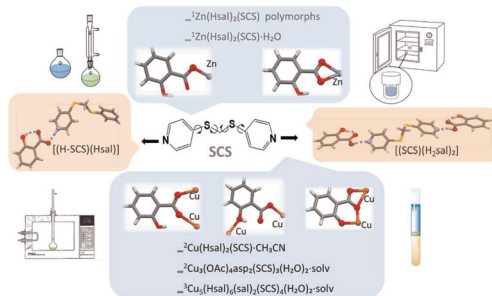
710



Novel alpha-functionalized nickel(II) phthalocyanines: photochemical, antioxidant, antibacterial, cytotoxicity studies and theoretical insights

Mustafa Akin, Ozan Cobanoglu, Neslihan Saki,* Bilge Karaca, Armağan Günsel, Burak Tüzün, Ahmet T. Bilgiçli, Gulnur Arabaci and M. Nilüfer Yarasir*

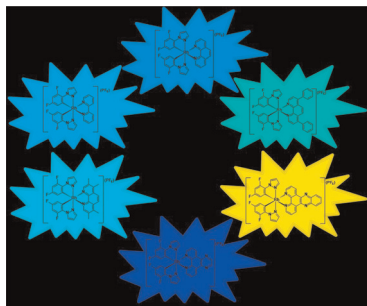
724



Structural diversity in Zn(II)/Cu(II) complexes with salicylic/acetylsalicylic acids and bis(4-pyridylthio) methane: coordination polymers, one organic cocrystal, and one organic salt

Olaya Gómez-Paz, Rosa Carballo,* Ana B. Lago,* Ezequiel M. Vázquez-López and Berta Covelo

735



Fluorine-substituted cyclometallated rhodium(III) complexes with α -diimine ancillary ligands: synthesis, structure, and photophysical and DNA-binding properties

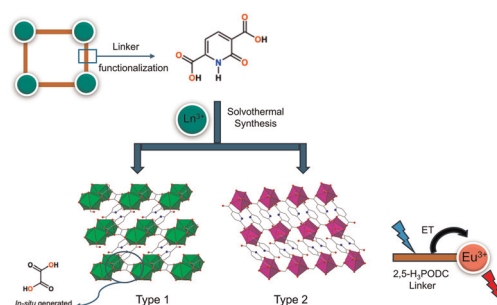
Patryk Wójcik, Camille Latouche,* Kinga Suwińska, Anna Kamecka,* Joanna Masternak and Mariusz Urbaniak



748

Combining coordination and chelation moieties to engineer a new linker for lanthanide coordination chemistry

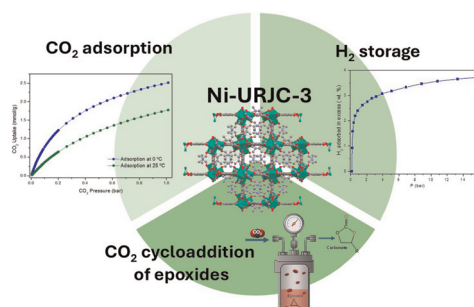
Ashanthi K. Katuwana Arachchige, Brett Lottes, Daniel K. Unruh, Samuel M. Greer, Benjamin W. Stein and Korey P. Carter*



761

Dual-function Ni-based MOF for hydrogen storage and CO₂ to carbonate cyclic catalysis

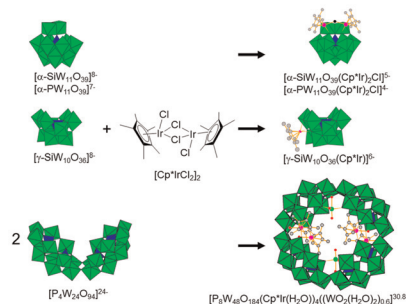
Elena García-Rojas, Helena Montes-Andrés, Jesús Tapiador, Carmen Martos,* Pablo Salcedo-Abraira, Duane Choquesillo-Lazarte, Gisela Orcajo and Pedro Leo*



775

Reaction of a Cp*Ir(III) cation with mono- and di-lacunary Keggin-type heteropolytungstates and a dimer of a hexa-lacunary Dawson-type phosphopolytungstate

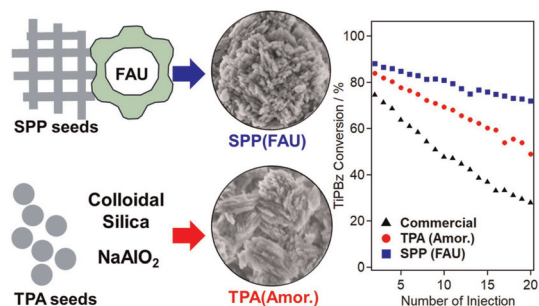
Sugiarto, Jun Shinogi, Sherif E. Ebied, Dachao Hong, Yoshihiro Kon and Masahiro Sadakane*



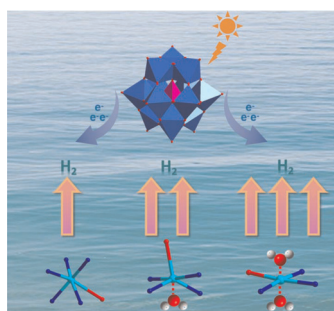
784

Nanosized Al-rich MFI zeolite synthesized by zeolite hydrothermal conversion in the presence of zeolite nanosheet seeds

Tareq W. M. Amen, Tsubasa Kitagawa and Nao Tsunogji*



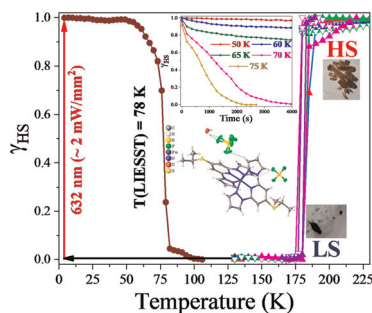
794



Polyoxometalate-based catalysts for visible-light-driven hydrolytic hydrogen production: coordinatively unsaturated Cu-based active sites enhance performance

Quan-Quan Wang, Rong-Xian Ren, Rui-Jie Gong, Shao-Da Zhao, Pin-Fang Yan and Yan Xu*

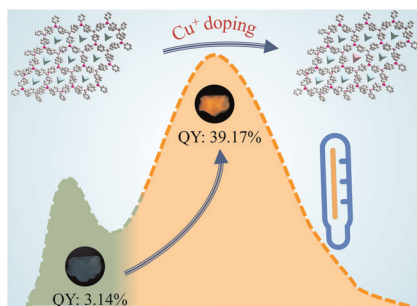
800



Optical signatures of hydration-controlled hysteretic spin-crossover in single crystals of an Fe(II) complex

Chinmoy Das, Malcolm A. Halcrow, Denisa Coltuneac, Laurentiu Stoleriu and Pradip Chakraborty*

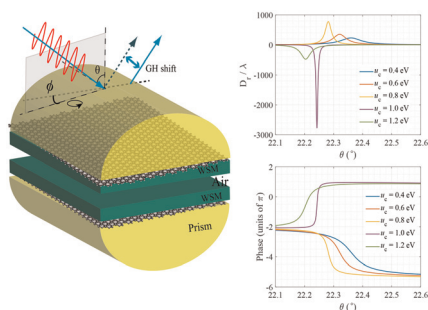
816



A Cu⁺-doped zinc organic halide with temperature-dependent dual-color emission as a thermochromic molecular thermometer

Yu-Fang Wu, Ya-Hui Li, Zhi-Meng Sui, Yu-Kun Wei, Rui-Han Wei, Xiao Chen, Xiao-Hua Yang, Zhi-Wei Chen,* Zhi-Hong Jing* and Cheng-Yang Yue*

825



Giant mid-infrared Goos–Hänchen shifts via resonant optical tunneling in graphene/Weyl-semimetal stacks

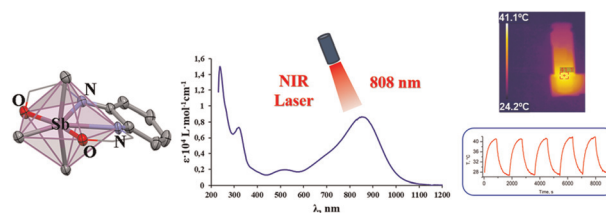
Ye Yang, Fenping Cui, Fenglin Xian and Gaige Zheng*



835

Antimony(v) complexes with tetradentate ONNO redox-active ligands: optical, electrochemical and photothermal properties

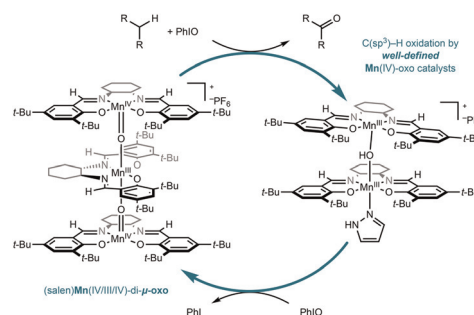
Svetlana V. Baryshnikova,* Polina O. Shisterova, Maxim V. Arsenyev, Irina N. Meshcheryakova, Dmitry S. Kolevatov, Ilya A. Yakushev, Tatyana N. Kocherova, Rinat R. Aysin and Alexandr V. Piskunov



845

Crystallographic evidence of a trinuclear (salen) manganese(IV/III/IV)-μ-oxo formed during catalytic C(sp³)-H oxidation reactions

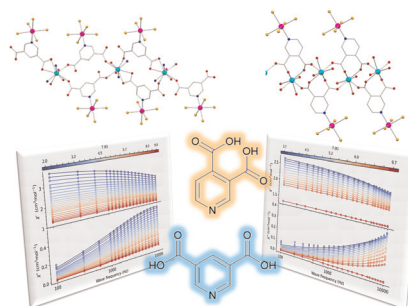
Bhaswati Paul, Kusalvin Dabare, Joshua D. Bocarsly and L. Reginald Mills*



854

Self-assembly of lanthanide-based single-ion magnets (SIMs) into 1D networks via Re(IV)-based metalloligands

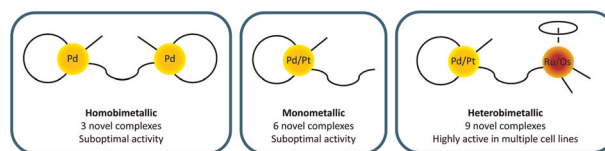
Carolina Ferrari-Argachá, Santiago Valiero, Carlos Rojas-Dotti, Aparicio Loaces, Raúl Chiozzone, Nicolás Moliner, Leopoldo Suescun, Joan Cano, Francesc Lloret, José Martínez-Lillo* and Ricardo González*



865

Mono- and bimetallic homo- and heterodinuclear Pd and Pt complexes bridged by diphosphines: synthesis, characterisation and cytotoxicity

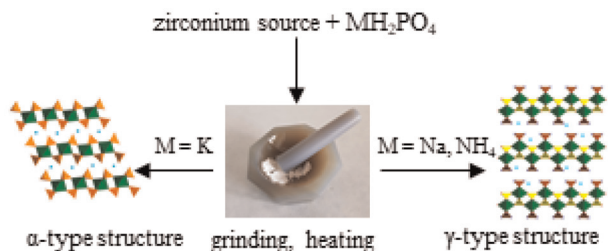
Basile Roufousse, Tomas Brice, Marco Papaldo, Lucy W. Macharia, Karabo Serala, Mihlali V. Mlaza, Thato T. Medupe, Sharon Prince,* Christoph Marschner, Thomas J. Cleij and Burgert Blom*



Synthesis and characterization of eighteen novel complexes
Slight structural variations in quest of structure-activity relationships
Three solid state X-ray crystal structures
Cytotoxic testing on eight cancer cell lines
Aqueation studies - speciation



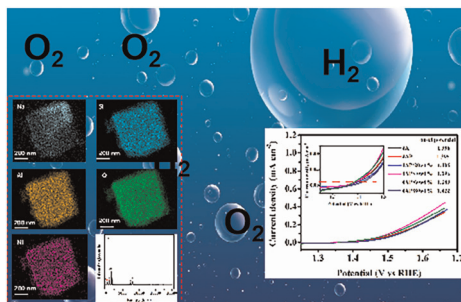
885



Minimal liquid-assisted method for synthesis of ammonium, sodium, and potassium intercalated zirconium hydrogen phosphate: the effect of the cation used on the formation of an α - or γ -structure

Klára Melánová,* Ludvík Beneš, Rokas Lemežis, Vytautas Klimavičius and Jan Smolík

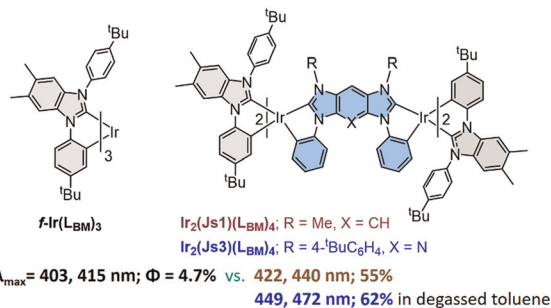
894



Boosting oxygen evolution reaction performance via hydrothermally synthesized 4A zeolite-supported Ni catalysts: structure–activity relationship investigation

Xiuzhen Xie,* Chenglu Hu, Cao Luo, QiuJie Shi, Yongyang Wang, Zhuohan Xie, Zihan Yao, Qizhi Le and Wen-yi Hu*

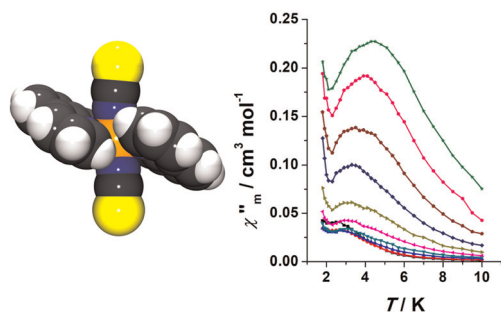
904



Janus-type diiridium complexes with functional carbene cyclometalates for high-energy phosphorescence

Guowei Ni, Yi Pan, Muyu Zhou, Yufeng Sang, Shek-Man Yiu,* Kai Chung Lau* and Yun Chi*

917



Probing the need for a very low axial zero-field splitting in Mn^{II} systems with slow relaxation of the magnetization

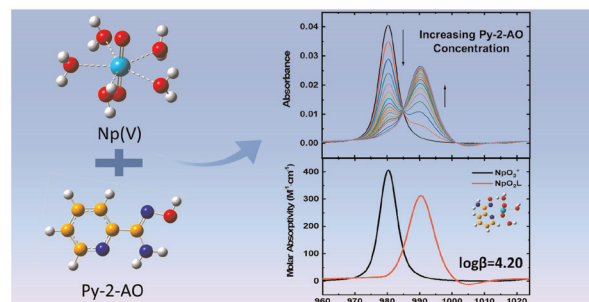
Evangelos Pilichos, Júlia Mayans and Albert Escuer*



926

Spectroscopic and DFT study on the complexation of Np(V) with amidoxime-derived ligands in aqueous solutions: speciation and structural optimization

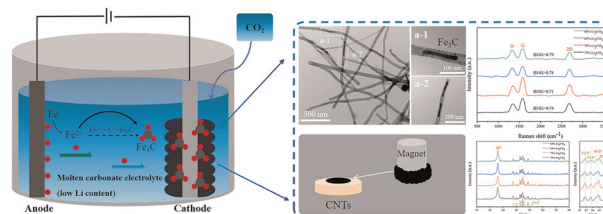
Yuxiao Guo, Zhijin Zhao, Huaixin Hao, Yishi Yu, Hong Cao, Jing Chen, Zhipeng Wang* and Chao Xu*



933

Electrochemical conversion of CO₂ into magnetic carbon nanotubes via low-lithium molten salt electrolysis

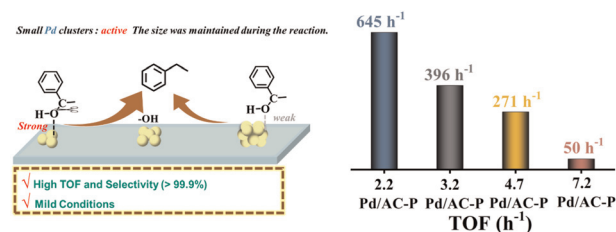
Yilan Chen, Jingrou Huang, Xiang Lin, Minyi Liu, Sheng Xu, Xiaozhu Wei, Xiawei Zhang and Yamin Liu*



945

Revealing the size effect of P-coated carbon-supported palladium nanoparticles in complete hydrodeoxygenation of bio-based aromatic alcohols

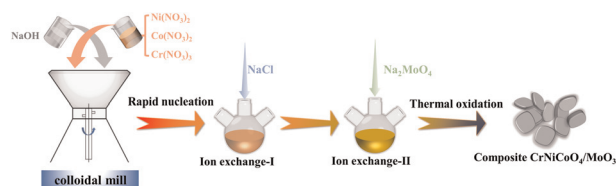
Wei Xuemei, Xu Haonan, Fang Zhengwei, Wang Kai, Cai Tao, Yu Guoqi, Shen Hualiang, Luo Yanjuan, Yan Mingming, Chen Jianhui* and Shen Runpu*



956

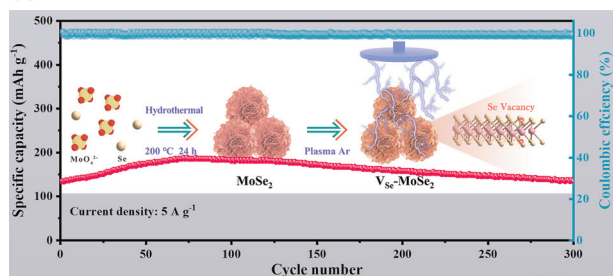
Constructing CrNiCoO₄/MoO₃ nanosheets via a multi-step strategy for efficient water splitting

Rong Zhu, Yefan Liu, Qianqiao Chen* and Qin Zhong



PAPERS

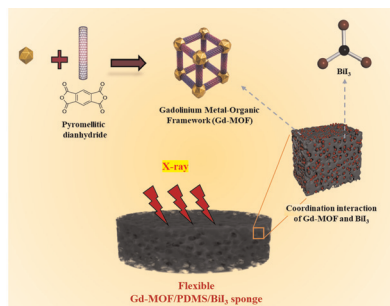
965



Selenium vacancy engineering in MoSe₂ nanoflowers: unlocking high-rate and durable potassium storage through plasma-mediated defect activation

Yi Feng, Zhi-Yuan Song, Yuan-Na Zhu, Cai-Li Lv, Lin-Lin Fan,* Yun-Dong Cao and Hong Liu*

976



Coordination interaction of Gd metal–organic frameworks and bismuth halides for efficient X-ray shielding

Nazmul Hossain, Shanmugam Mahalingam, Seok-Gyu Kang, Dae-Seong Kwon, Hyeon-Kwang Kim and Junghwan Kim*

CORRECTIONS

990

Correction: Tuning the electronic properties of Fe(II)–NHC sensitizers with thienyl π -extended ligands

Nour Shalhoub, Edoardo Marchini,* Federico Coppola, Roberto Argazzi, Stefano Caramori, Mariachiara Pastore,* Philippe Pierrat and Philippe C. Gros*

991

Correction: Copper(II)-mediated base pairing involving the artificial nucleobase 3H-imidazo[4,5-f]quinolin-5-ol

Nikolas Sandmann, Jim Bachmann, Marian Hebenbrock, Alexander Hepp, Nikos L. Doltsinis* and Jens Müller*



CORRECTIONS

992

Correction: Charge compensation endows $\text{K}_{0.16}\text{Na}_{0.05}(\text{NH}_4)_{0.71}\text{V}_4\text{O}_{10-x}\cdot 0.63\text{H}_2\text{O}$ cathode with tunable lattice strain for efficient Zn^{2+} storage

Xueke Zhu, Dong Fang,* Lang Zhang* and Jianhong Yi

