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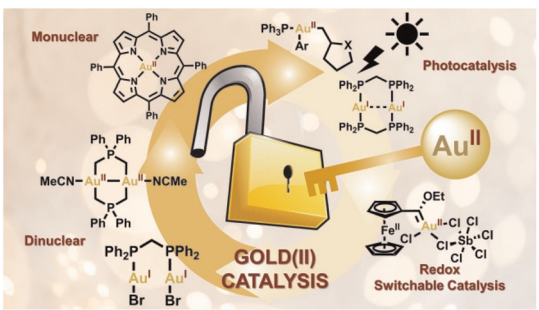
Unlocking the catalytic potential of gold(II) complexes: a comprehensive reassessment

Juan Carlos Pérez-Sánchez, Raquel P. Herrera* and M. Concepción Gimeno*



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Fluorescence sensing and device fabrication with luminescent metal–organic frameworks

Ding-Gui Cai, Teng-Fei Zheng,* Sui-Jun Liu* and He-Rui Wen

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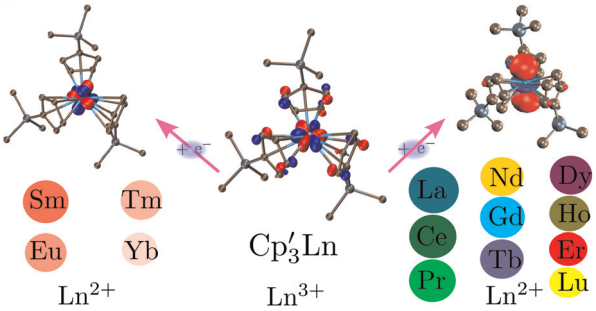
A DFT perspective on organometallic lanthanide chemistry

Ahmadreza Rajabi, Robin Grotjahn, Dmitrij Rappoport and Filipp Furche*



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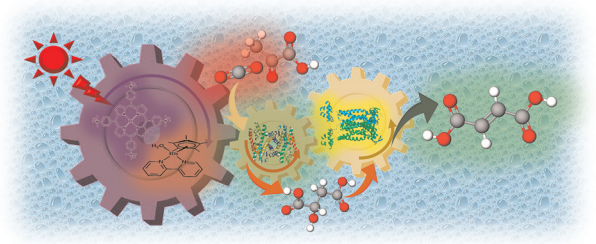
An effective visible-light driven fumarate production from gaseous CO_2 and pyruvate by the cationic zinc porphyrin-based photocatalytic system with dual biocatalysts

Mika Takeuchi and Yutaka Amao*



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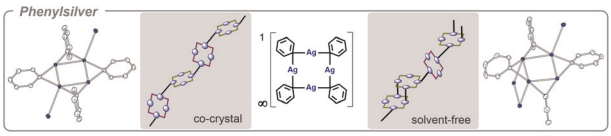
Phenylsilver – an unexpected one-dimensional coordination polymer of silver(I) tetrads

Tabea Lenz and Marian Hebenbrock*



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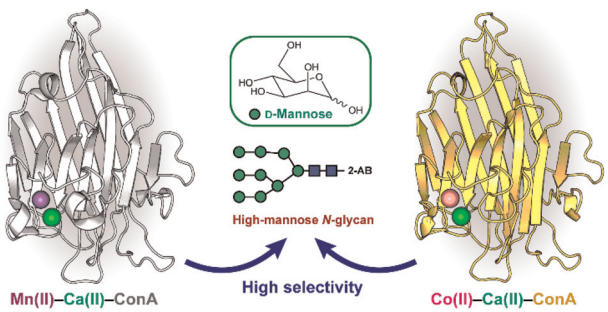
Selective interactions of Co^{2+}–Ca^{2+}–concanavalin A with high mannose *N*-glycans

Yunha Hwang, Jae-hee Jeong, Dong-Heon Lee and Seung Jae Lee*



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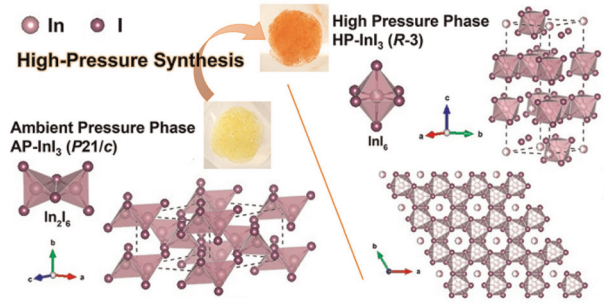

The pressure-stabilized polymorph of indium triiodide

Danrui Ni, Haozhe Wang, Xianghan Xu, Weiwei Xie and Robert J. Cava*

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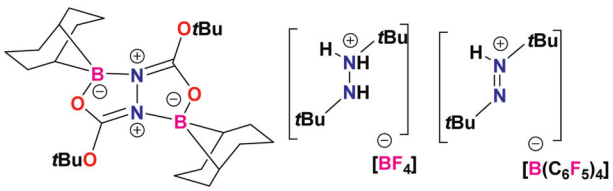

The impact of Lewis acid variation on reactions with di-*tert*-butyl diazo diesters

Vaibhav Bedi, Dipendu Mandal, Zahid Hussain, Shi-Ming Chen, Yile Wu,* Zheng-Wang Qu,* Stefan Grimme and Douglas W. Stephan*

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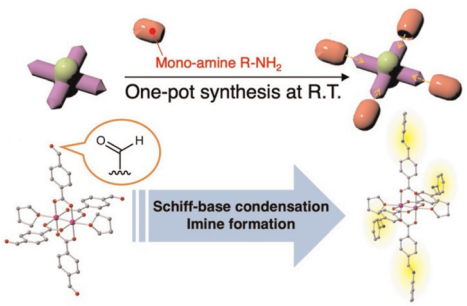

Post-synthetic molecular modifications based on Schiff base condensation reactions for designing functional paddlewheel diruthenium(II,II) complexes

Chisa Itoh, Haruka Yoshino, Taku Kitayama, Wataru Kosaka and Hitoshi Miyasaka*

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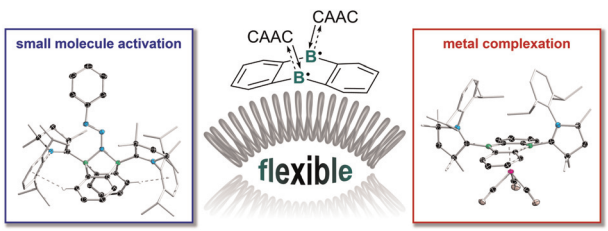

CAAC-stabilised 9,10-diboraanthracene: an electronically and structurally flexible platform for small-molecule activation and metal complexation

Maximilian Dietz, Merle Arrowsmith and Holger Braunschweig*

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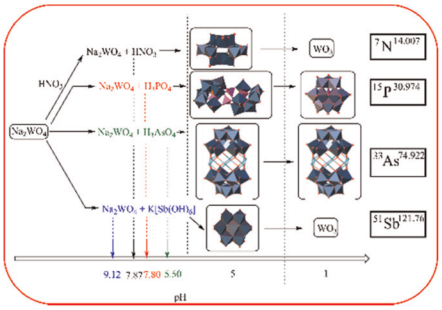
Heteroelements in polyoxometalates: a study on the influence of different group 15 elements on polyoxometalate formation

Jan-Christian Raabe, Froze Jameel, Matthias Stein, Jakob Albert and Maximilian J. Poller*



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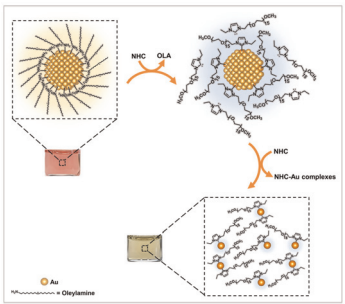
Molar excess of coordinating N-heterocyclic carbene ligands triggers kinetic digestion of gold nanocrystals

Neda Arabzadeh Nosratabad, Zhicheng Jin, Hesam Arabzadeh, Banghao Chen, Cheng Huang and Hedi Mattoussi*



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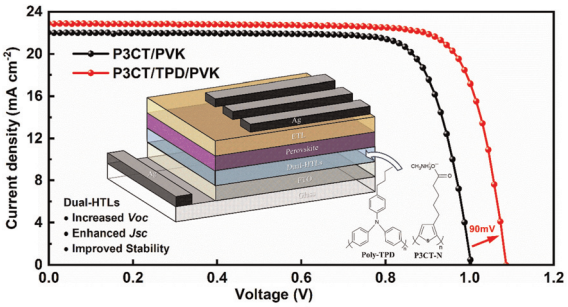
Improving the performance of perovskite solar cells using a dual-hole transport layer

Chenghao Song, Huiwei Du,* Menglei Xu,* Jie Yang, Xinyu Zhang, Jungan Wang, Yuanfang Zhang, Chengjun Gu, Rui Li, Tao Hong, Jingji Zhang, Jiangying Wang and Yongchun Ye



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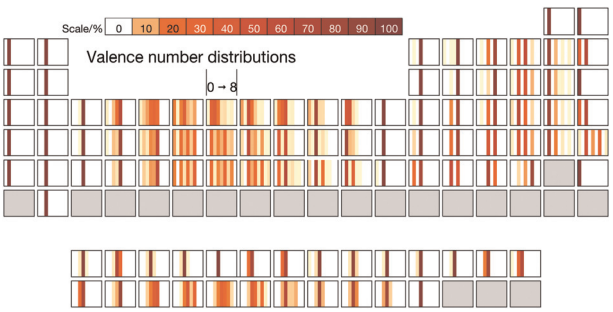
Chemdex: quantification and distributions of valence numbers, oxidation numbers, coordination numbers, electron numbers, and covalent bond classes for the elements

Mark J. Winter



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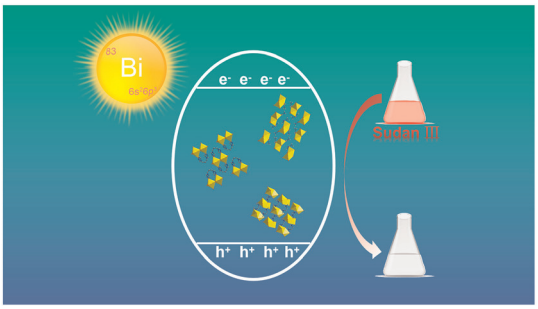

Seeking environmentally friendly halide perovskite photocatalysts: synthesis, structure and photocatalytic performance exploration

Cheng-An Hu, Jian-Peng Qin and Chun-Yang Pan*

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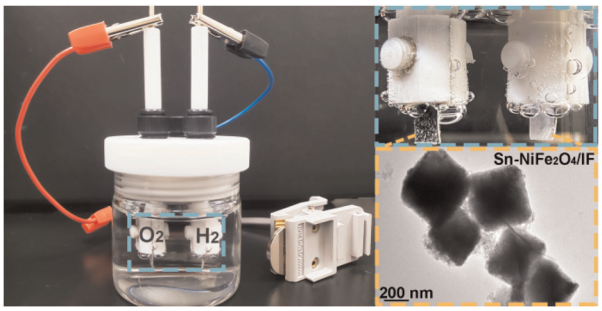

Tin-doped $NiFe_2O_4$ nanoblocks grown on an iron foil for efficient and stable water splitting at large current densities

Juan Jian, Meiting Wang, Zhuo Wang, Jingwen Meng, Yuqin Yang and Limin Chang*

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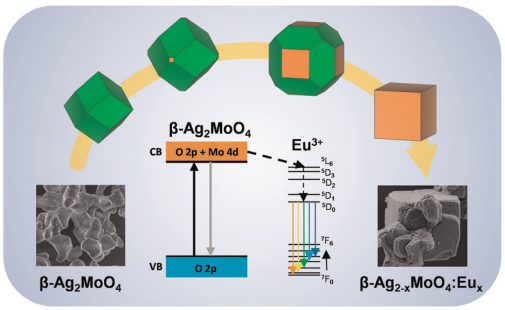

Tracking of structural defects induced by Eu-doping in β-Ag_2MoO_4: their influences on electrical properties

Carlos Macchi, Guilherme Magalhaes Petinardi, Leonardo Almeida Freire, Miriam Susana Castro, Celso Manuel Aldao, Thaís Marcial Luiz, Francisco Moura, Alexandre Zirpoli Simões, Henrique Moreno, Elson Longo, Alberto Somoza, Marcelo Assis* and Miguel Adolfo Ponce

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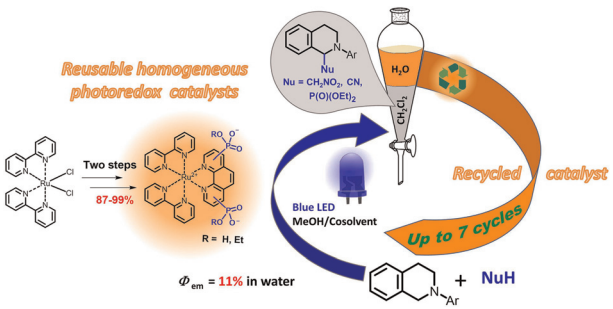

Ruthenium(II) complexes with phosphonate-substituted phenanthroline ligands as reusable photoredox catalysts

Gleb V. Morozkov, Anton S. Abel,* Konstantin A. Lyssenko,* Vitaly A. Roznyatovsky, Alexei D. Averin, Irina P. Beletskaya and Alla Bessmertnykh-Lemeune*

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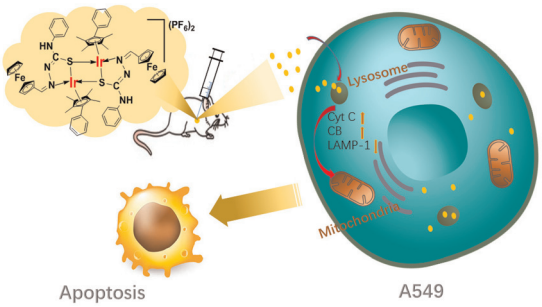
The anticancer application of half-sandwich iridium(III) ferrocene-thiosemicarbazide Schiff base complexes

Xicheng Liu,* Ao Lv, Pei Zhang, Jiaying Chang, Ruixiao Dong, Mengxian Liu, Jiayi Liu, Xiaoqing Huang, Xiang-Ai Yuan and Zhe Liu*



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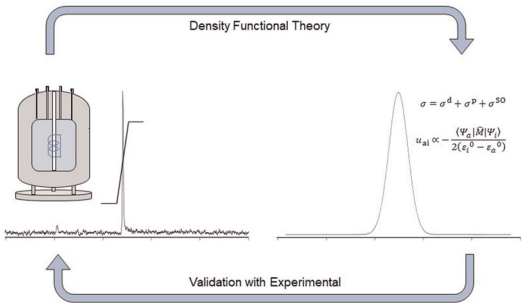
Computation of ^{31}P NMR chemical shifts in Keggin–based lacunary polyoxotungstates

Jake A. Thompson and Laia Vilà-Nadal*



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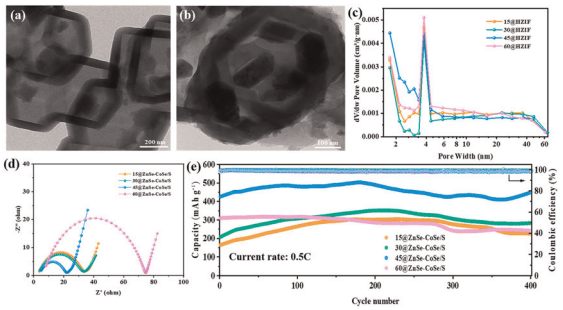
Synergistic design of a semi-hollow core–shell structure and a metal–organic framework-derived Co/Zn selenide coated with MXene for high-performance lithium–sulfur batteries

Lei Wang,* Zhao Liu, Ying Ma, Zhao Li, Meixia Xiao, Bingtian Tu and Haiyang Song*



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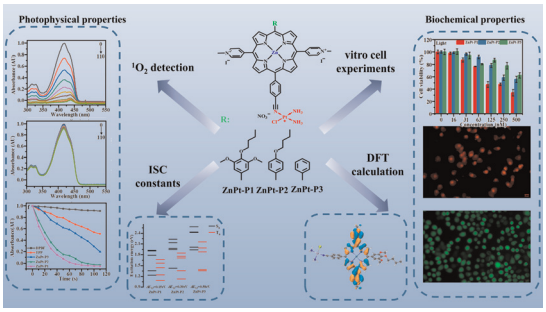
Synthesis of three cisplatin-conjugated asymmetric porphyrin photosensitizers for photodynamic therapy

Wen-Yuan Zhang, Gui-Chen Li, Yan Fan, Xue-Qin Sun, Bo Wang, Chun-Yan Zhang, Xiao-Xia Feng,* Wei-Bing Xu* and Jia-Cheng Liu*



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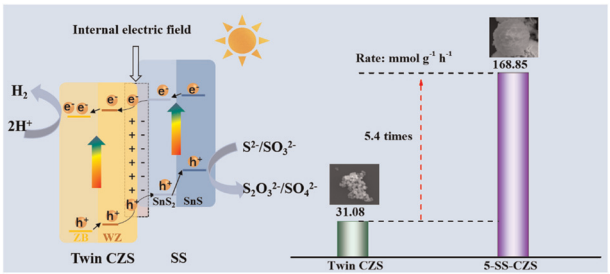

Green synthesis of 3D core–shell SnS_2/SnS-$Cd_{0.5}$-$Zn_{0.5}S$ multi-heterojunction for efficient photocatalytic H_2 evolution

Haitao Zhao,* Baohua Zhao, Heyuan Liu and Xiyou Li*

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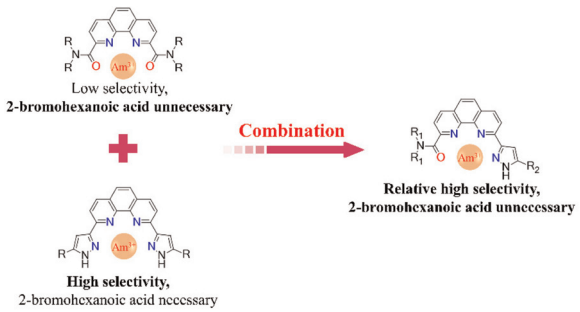

New asymmetric tetradentate phenanthroline chelators with pyrazole and amide groups for complexation and solvent extraction of Ln(III)/Am(III)

Haolong Wang, Pengyuan Gao, Tengfei Cui, Dongqi Wang, Jinping Liu, Hui He, Zongyuan Chen, Qiang Jin and Zhijun Guo*

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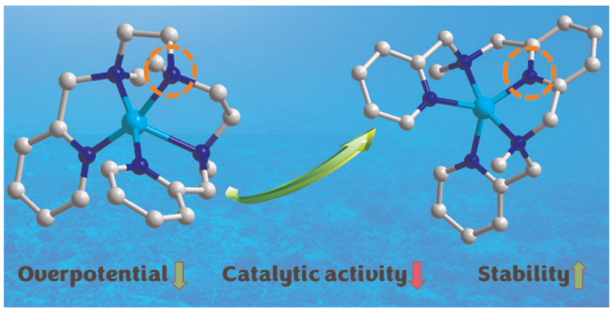

Impact of the hybridization form of the coordinated nitrogen atom on the electrocatalytic water oxidation performance of copper complexes with pentadentate amine-pyridine ligands

Kaishan Yu, Tao Wang, Yue Sun, Mei Kang, Xinxin Wang, Dingwei Zhu, Siyi Xue, Junyu Shen,* Qijian Zhang* and Jinxuan Liu*

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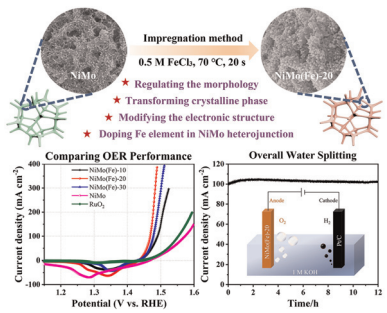

Fe-induced crystalline–amorphous interface engineering of a NiMo-based heterostructure for enhanced water oxidation

Junming Zhang,* Yingjian Fang, Yao Chen, Yang Gao, Xiaojie Zhang, Tao Tang, Baoqiang Tian, He Xiao, Man Zhao, Ergui Luo,* Tianjun Hu, Jianfeng Jia* and Haishun Wu

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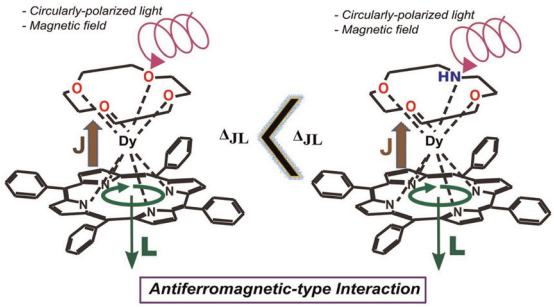
Tuning of the antiferromagnetic-type interaction in photo-excited single-decker porphyrin–lanthanide complexes with different crown capping ligands

Langit Cahya Adi, Anas Santria* and Naoto Ishikawa*



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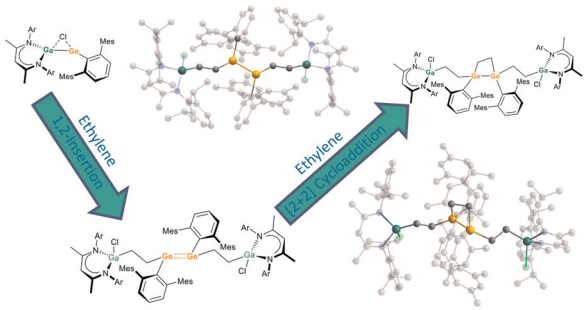
Multiple ethylene activation by heteroleptic L(Cl)Ga-substituted germylenes

Anna Bücker, Christoph Wölper, Hannah Siera, Gebhard Haberhauer and Stephan Schulz*



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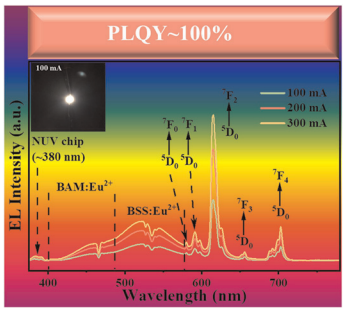
Development of thermally stable red-emitting lead-free double-perovskite phosphors with an internal PLQY approaching 100%

Hong Li, Li Li,* Lingsong Mei, Wei Zhao, Xianju Zhou, Yongbin Hua and Jae Su Yu*



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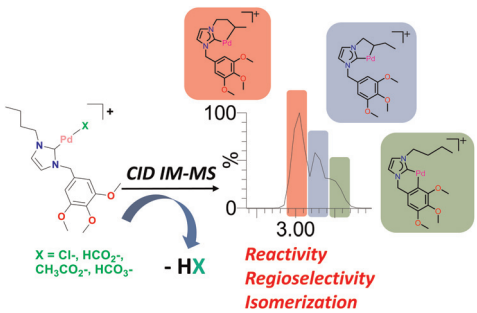
Ion mobility mass spectrometry uncovers regioselectivity in the carboxylate-assisted C–H activation of palladium N-heterocyclic carbene complexes

Laura Ibáñez-Ibáñez, Andres Mollar-Cuni, Edmond Apaloo-Messan, Akhilesh K. Sharma, Jose A. Mata,* Feliu Maseras* and Cristian Vicent*



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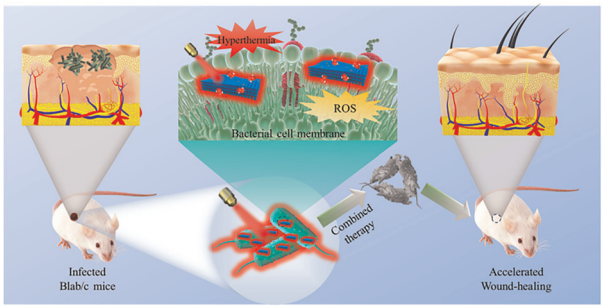

PdMo bimetallene nanozymes for photothermally enhanced antibacterial therapy and accelerated wound healing

Wei Zhou, Na Li, Minghui Wang, Peixian Wu, Qian Fu, Wenjie Wang, Zheng Liu, Shuiyuan He, MengYu Zhou, Dan Song, Jie Chen, Nanyun Lin, Yingying Wu, Lei Jiao,* Xiaofeng Tan* and Qinglai Yang*

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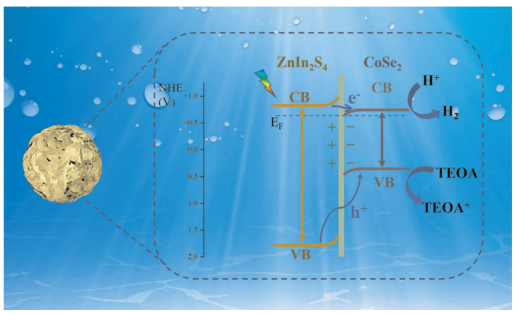

Construction of core–shell $CoSe_2/ZnIn_2S_4$ heterostructures for efficient visible-light-driven photocatalytic hydrogen evolution

Yuhan Xie, Boyu Dong, Xuemin Wang, Siyuan Wang, Jinxi Chen and Yongbing Lou*

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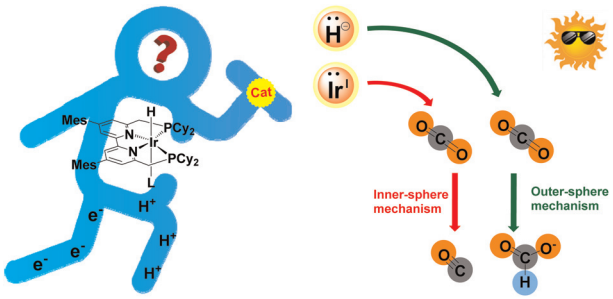

Mechanism of photocatalytic CO_2 reduction to HCO_2H by a robust multifunctional iridium complex

Ya-Qiong Zhang, Yu Zhang, Guoping Zeng, Rong-Zhen Liao and Man Li*

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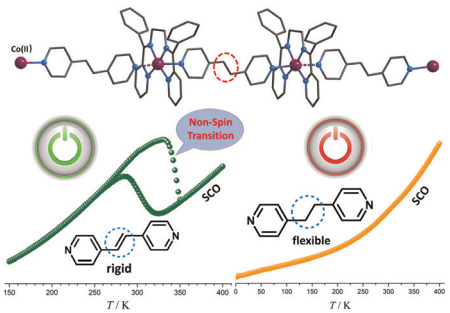

Exploring a prototype for cooperative structural phase transition in cobalt(II) spin crossover compounds

Yi-Fei Deng, Yi-Nuo Wang, Xin-Hua Zhao and Yuan-Zhu Zhang*

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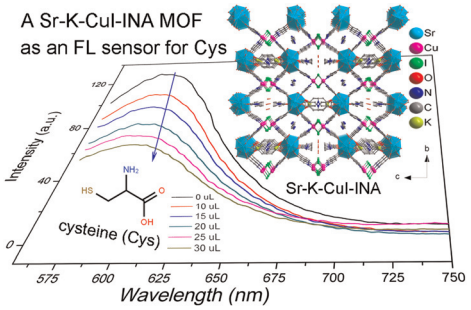
The $\{Cu_2I_2\}$ cluster bearing metal organic frameworks: crystal structures and fluorescence detecting performances towards cysteine and explosive molecules

Jiang Jiang,* Zi-Wei Li, Zhi-Zhuan Zhang, Bin Tan, Zhao-Feng Wu* and Xiao-Ying Huang



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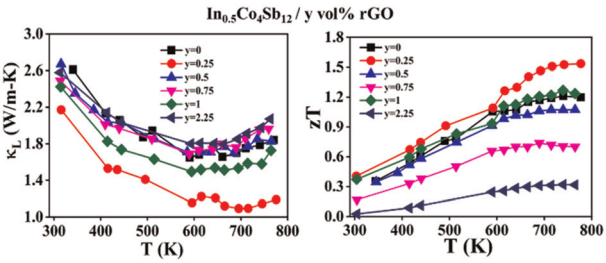
Enhanced thermoelectric properties of In-filled Co_4Sb_{12} by dispersion of reduced graphene oxide

Sanyukta Ghosh, Shubhanth Jain, Soumya Ranjan Mishra, Gerda Rogl, Peter Rogl, Ernst Bauer, B. S. Murty, A. Govindaraj and Ramesh Chandra Mallik*



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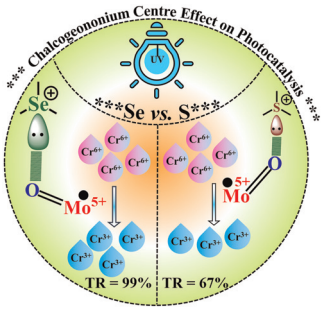
Aryl selenonium *vs.* aryl sulfonium counterions in polyoxometalate chemistry: the impact of Se^+ cationic centers on the photocatalytic reduction of dichromate

Mahender Singh, Aakash Yadav, Ranjit Singh and Chullikkattil P. Pradeep*



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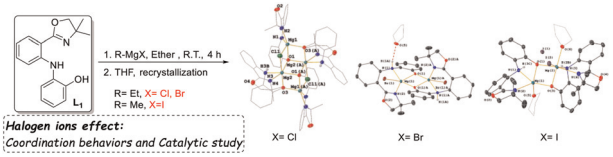
Grignard reagents as deprotonation agents for oxazoline-amido-phenolate ligands: structural and catalytic implications with the role of halogen ions

Ming-Tsz Chen,* Pei-Zheng Wu, Chi-Chung Liao, Kai-Wei Hung and Pin-Chi Shen



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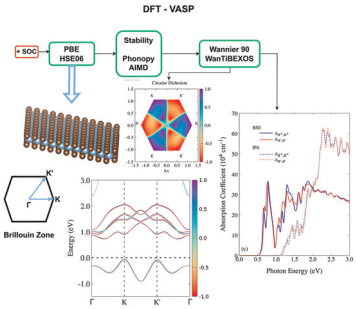

Promising TMDC-like optical and excitonic properties of the $TiBr_2$ 2H monolayer

André L. de O. Batista, João Marcos T. Palheta, Maurício J. Piotrowski,* Celso R. C. Rêgo, Diego Guedes-Sobrinho and Alexandre C. Dias*

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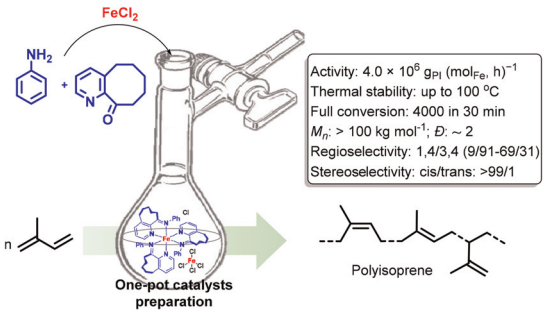

Enhancing isoprene polymerization with high activity and adjustable monomer enchainment using cyclooctyl-fused iminopyridine iron precatalysts

Nighat Yousuf, Yanping Ma,* Qaiser Mahmood,* Wenjuan Zhang,* Yizhou Wang, Hassan Saeed and Wen-Hua Sun*

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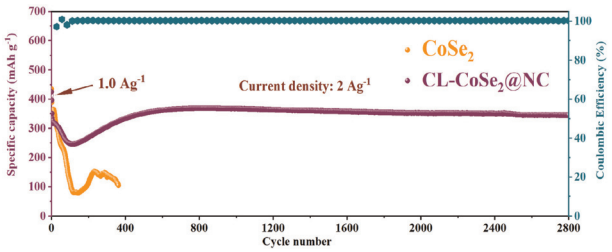

Coral-like $CoSe_2$@N-doped carbon with a high initial coulombic efficiency as advanced anode materials for Na-ion batteries

Zhiya Lin, Jiasheng Wu, Qianwen Ye, Yulong Chen, Hai Jia, Xiaohui Huang* and Shaoming Ying*

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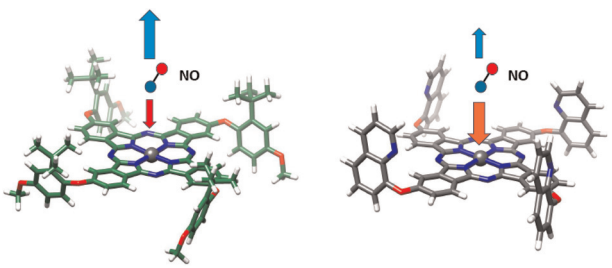

The control of nitric oxide dynamics and interaction with substituted zinc-phthalocyanines

Nassim Ben Brahim, Sarra Touaiti, Julien Sellés, Jean-Christophe Lambry and Michel Negrerie*

PAPERS

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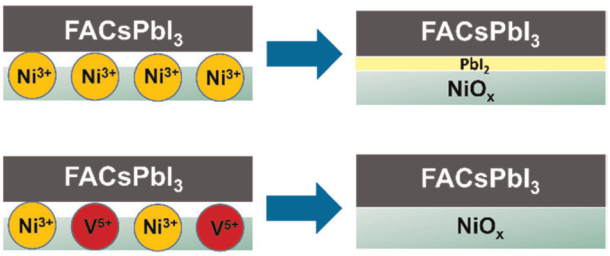
Critical role of dopant in NiO_x hole transport layer for mitigating redox reactivity at NiO_x/absorber interface in mixed cation perovskite solar cells

Vidya Sudhakaran Menon, Saraswathi Ganesan, Rohith Kumar Raman, Ananthan Alagumalai and Ananthanarayanan Krishnamoorthy*



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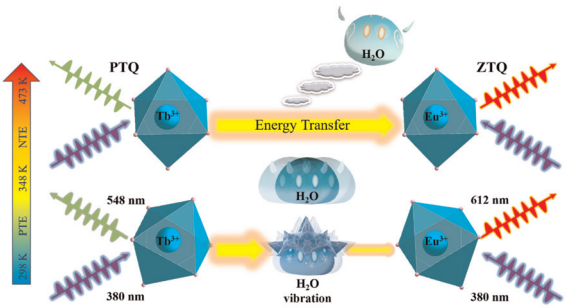
Simultaneously tuning the luminescent color and realizing an optical temperature sensor by negative thermal expansion in $Sc_2(WO_4)_3$:Tb/Eu phosphors

Biao Fu, Haokun Yan, Renfu Li, Ziqian Liao, Bao Qiu,* Guoliang Gong, Haiping Huang, Yijian Sun, He-Rui Wen and Jinsheng Liao*



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Syntheses, characterization, crystal structures and applications as sensitizers in solar cells of novel heteroleptic Cu(I) complexes containing nitrile-substituted 2,2′-bipyridyl ligands

Federico M. A. Tomás, Natalia L. Calvo, Nadia C. Vega, Faustino E. Morán Vieyra, Daniel R. Vega, David Comedi, Néstor E. Katz and Florencia Fagalde*