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See Toshiharu Ishizaki, Tomoji Ozeki *et al.*, pp. 3581–3585.

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Inside cover

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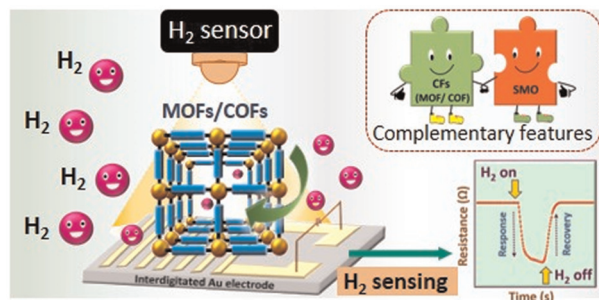
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PERSPECTIVES

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Advancements in porous framework materials for chemiresistive hydrogen sensing: exploring MOFs and COFs

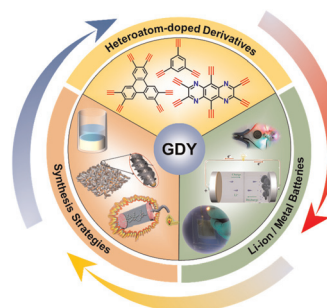
Nany Thokala, Marilyn Esclance DMello, Krishnaveni Valle, Kiran Vankayala and Suresh Babu Kalidindi*



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Graphdiyne and its heteroatom-doped derivatives for Li-ion/metal batteries

Hong Shang,* Jia Peng, Yougui Zhou, Lihua Guo, Huipeng Li and Weiliang Wang



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Earth-abundant transition metal complexes in light-emitting electrochemical cells: successes, challenges and perspectives

Ginevra Giobbio,* Rubén D. Costa* and Sylvain Gaillard*

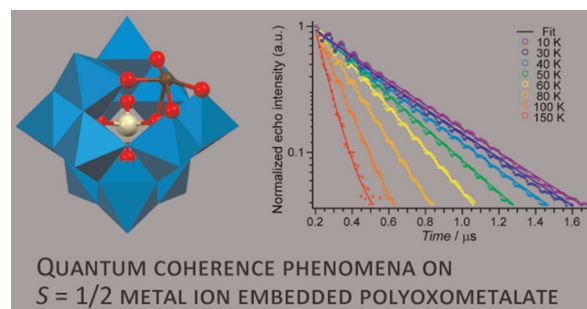


COMMUNICATIONS

3581

Spin coherence phenomena of an $S = 1/2$ copper(II) system in a polyoxometalate with a less-abundant nuclear spin

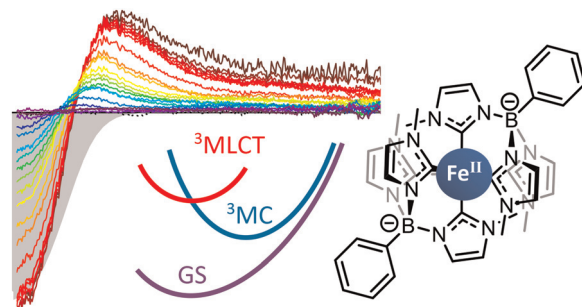
Toshiharu Ishizaki,* Mizue Asada, Toshikazu Nakamura and Tomoji Ozeki*



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Shining light on the ferrous analogue: excited state dynamics of an Fe(II) hexa-carbene scorpionate complex

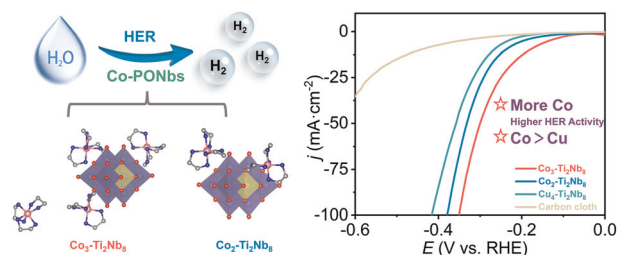
Catherine E. Johnson, Mawuli Deegbey, Aleksandra Ilic, Nidhi Kaul, Om Prakash, Kenneth Wärnmark,* Elena Jakubikova* and Reiner Lomoth*



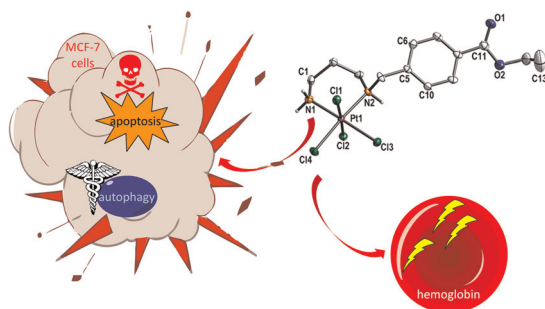
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Organic–inorganic hybrid Co-containing polyoxoniobates as hydrogen evolution catalysts in alkaline media

Chun-Xia Chen, Shui-Lin Duan, Xiao-Yue Zhang, Rong-Zhi Sun, Ping-Wei Cai, Cai Sun* and Shou-Tian Zheng*



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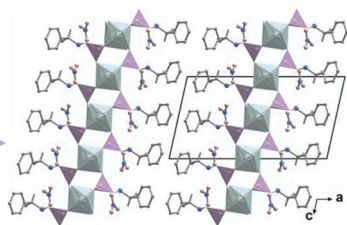


Platinum(II/IV) complexes with *N*-substituted carboxylate ethylenediamine/propylenediamine ligands: preparation, characterization and *in vitro* activity

Stefan Richter, Peter Lönnecke, Dijana Bovan, Nicoleta Andrian, Bianca Stoean, Maria Lehene, Radu Silaghi-Dumitrescu, Luiza Gaina, Sanja Mijatović, Danijela Maksimović-Ivanić, Goran N. Kaluđerović and Evamarie Hey-Hawkins*

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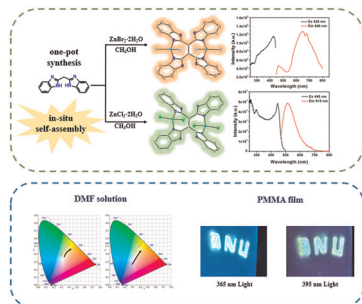
Chiral Indium Phosphonate Microflowers



Homochiral layered indium phosphonates: solvent modulation of morphology and chiral discrimination adsorption

Qian Teng, Song-Song Bao, Ran Gao and Li-Min Zheng*

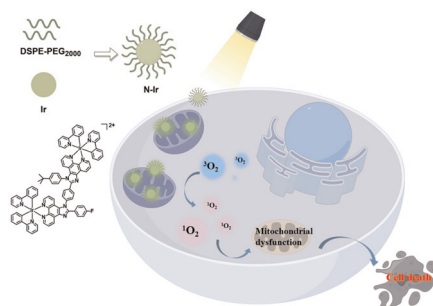
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Facile preparation, mechanochromic luminescence and excitation wavelength-dependent emission of tetra(1*H*-benzo[*d*]imidazol-2-yl)ethene Zn(II) complexes and their applications

Su-Jia Liu, Yong-Sheng Shi, Rui-Ying Wang, Tong Xiao, Zhong-Gang Xia, Rui Wang and Xiang-Jun Zheng*

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Mitochondria-localized dinuclear iridium(III) complexes for two-photon photodynamic therapy

Zanru Tan, Jiang Feng, Jiangping Liu,* Taihong Liu,* Huihui Wu* and Hui Chao*

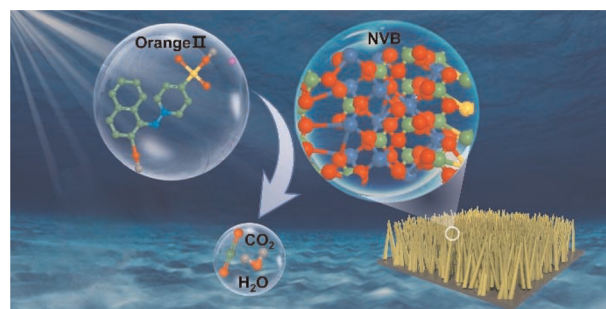


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Synthesis of a three-phase heterojunction $\text{NdVO}_4/\text{V}_2\text{O}_5/\text{BiVO}_4$ by cation exchange method for the degradation of anionic azo dye orange II

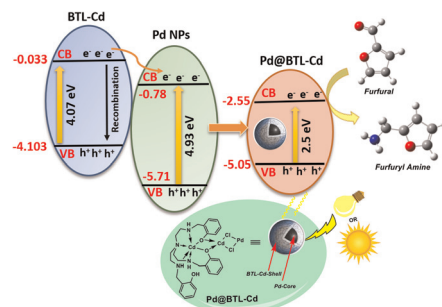
Liyang Li, Zixi Liao, Jianhong Yi* and Dong Fang*



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Pd@BTL–Cd core–shell nanoparticles as plasmonic photocatalysts for the reductive amination of furfural in water

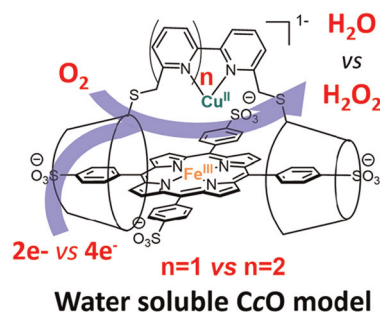
Jyoti Rohilla, Sahil Thakur, Sahil Sharma, Raghubir Singh* and Varinder Kaur*



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Insight into copper coordination in O_2 reduction by water-soluble cytochrome c oxidase models

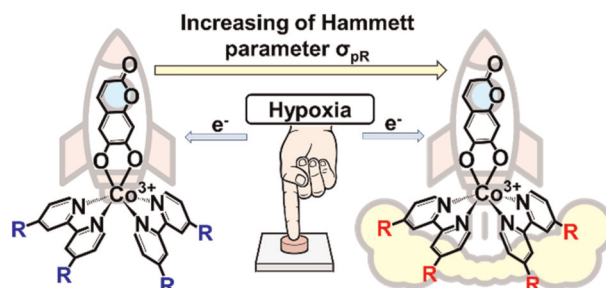
Mathilde Berthe, Corinne Boudon, Nolwenn Le Breton, Hiroaki Kitagishi, Koji Oohora, Takashi Hayashi, Jennifer A. Wytko* and Jean Weiss*



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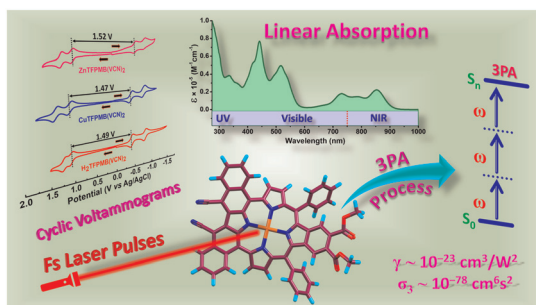
Hypoxia-activated dissociation of heteroleptic cobalt(III) complexes with functionalized 2,2'-bipyridines and a model anticancer drug esculetin

Ekaterina Khakina, Igor Nikovski, Kirill Spiridonov, Valentin Novikov, Evgenia Antoshkina, Dzhuliia Dzhailova, Marina Diatropova, Alina Martyanova, Alexey Rodionov and Yulia V. Nelyubina*



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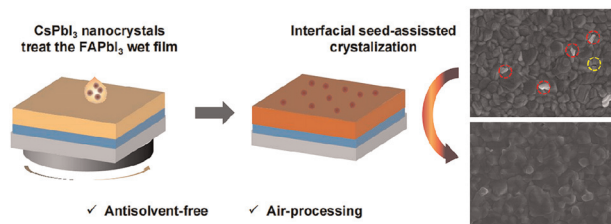
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Meso-β, β-β' trifused porphyrins: synthesis, spectral, electrochemical and DFT studies and their femtosecond third-order nonlinear optical properties

Amir Sohel Bulbul, Jhansi Mogilipuri, Venugopal Rao Soma* and Muniappan Sankar*

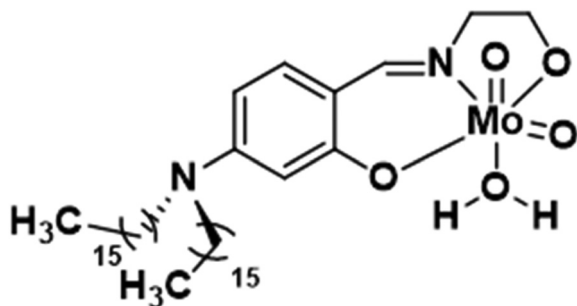
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Interfacial seed-assisted FAPbI₃ crystallization and phase stabilization enhance the performance of all-air-processed perovskite solar cells

Yuan Liu, Xingyuan Zhou, Yupei Wu, Hongwei Zhang and Kun Cao*

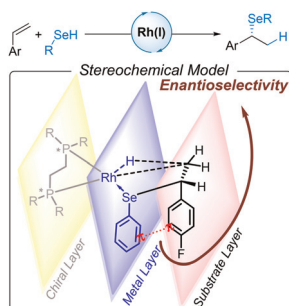
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A double-chain based metallomicellar catalyst for aerobic oxidative synthesis of benzimidazoles in water

Pragyansmruti Sunani, Prabakaran Thiruvengadam and Dillip Kumar Chand*

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A stereochemical model and origins of selectivity for the rhodium-catalyzed hydroselenation of styrene

Chunhui Shan,* Xi Luo, Xiaoling Luo and Rong Long*

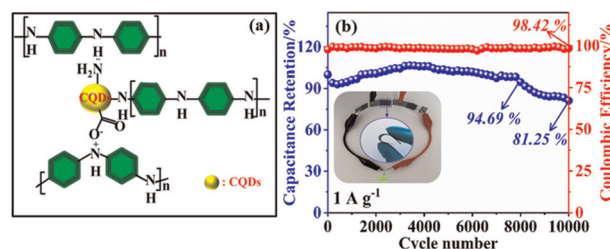


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Carbon quantum dot-anchored polyaniline on electrospun carbon nanofibers as freestanding electrodes for symmetric solid-state supercapacitors

Yunwei Zou, Yan Bu, Xuejiao Zhou,* Mingqi Hu and Mingyi Zhang*

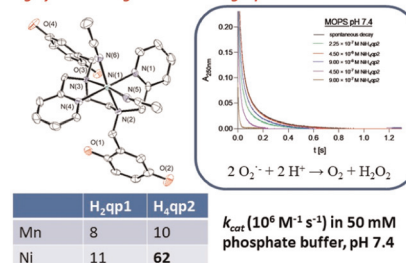


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Nickel(II) complexes with covalently attached quinols rely on ligand-derived redox couples to catalyze superoxide dismutation

Robert Boothe, Julian Oppelt, Alicja Franke, Jamonica L. Moore, Andrea Squarcina, Achim Zahl, Laura Senft, Ina Kellner, Akudo L. Awalah, Alisabeth Bradford, Segun V. Obisesan, Dean D. Schwartz, Ivana Ivanović-Burmazović* and Christian R. Goldsmith*

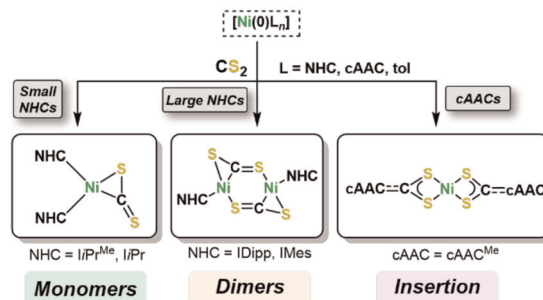
A nickel complex with a quinol-containing ligand outperforms highly active manganese-containing superoxide dismutase mimics



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On the reactivity of complexes $[\text{Ni}(\text{NHC})_2]$ with CS_2

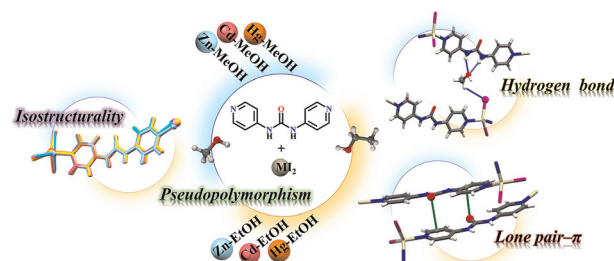
Martin Simon Luff, Celine Sophie Corsei and Udo Radius*



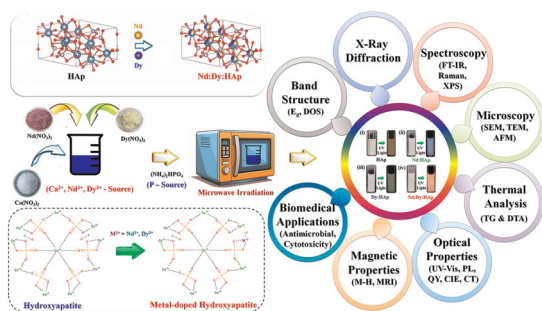
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Controlling pseudopolymorphism via robust and repetitive solvent-containing supramolecular interactions in urea-based isostructural coordination polymers

Ghazale Khorshidi and Behrouz Notash*



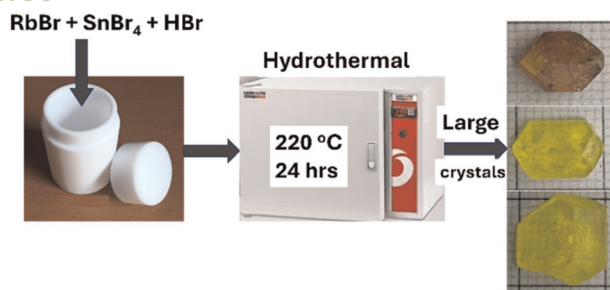
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Microwave-assisted synthesis of dual responsive luminomagnetic rare earth metal ions (Nd^{3+} , Dy^{3+}) co-doped nanohydroxyapatite for biomedical applications

Mohammad Irfan, Ashok Jeshurun and Bogala Mallikharjuna Reddy*

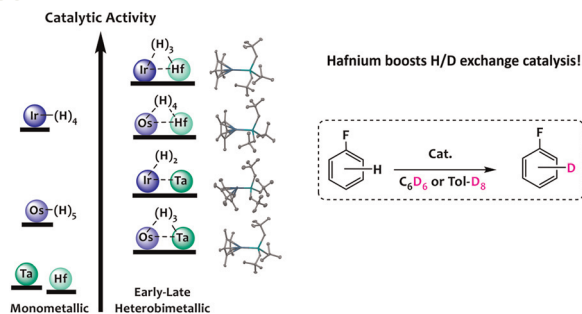
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Hydrothermal growth and characterization of large Rb_2SnBr_6 double perovskite crystals: a promising semiconductor material for photocatalysis and optoelectronics

Rahidul Hasan, Hafiz Zohaib Aslam, Rutva Joshi, Roger A. Lalancette and Georgiy Akopov*

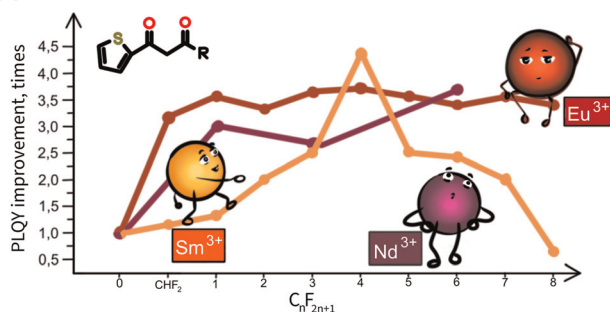
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Catalytic H/D exchange of (hetero)arenes with early-late polyhydride heterobimetallic complexes: impact of transition metal pairs

Abdelhak Lachgar, Till Neumann, Andrey V. Pichugov, Erwann Jeanneau, Laurent Veyre, Chloé Thieuleux and Clément Camp*

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Exploring the luminescent and thermometric potentials of samarium(III) diketonate complexes with extended fluoroalkyl chains

Daria A. Metlina,* Mikhail T. Metlin, Vladislav M. Korshunov, Victoria E. Gontcharenko, Roman I. Avetisov, Mikhail A. Kiskin, Yuriy A. Belousov and Ilya V. Taydakov*

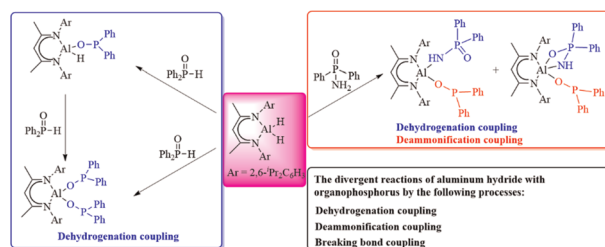


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The divergent reactivity of β -diketiminato aluminium hydrides with organophosphoryl compounds

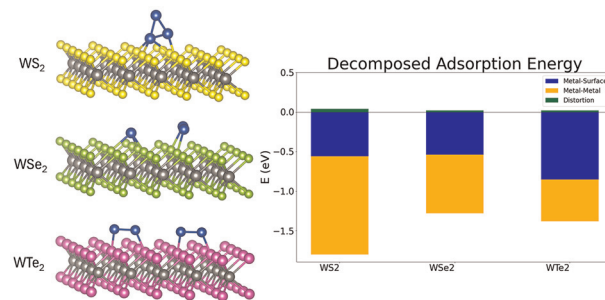
Yi Ding,* Yinghua Ma, Yongheng Tang, Yang Fu, Jiayi Wan, Zhiyuan Xu, Yifei He, Zhenhai Shi, Mohd Nazish,* Peng Wu* and Herbert W. Roesky*



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Structure and stability of copper nanoclusters on monolayer tungsten dichalcogenides

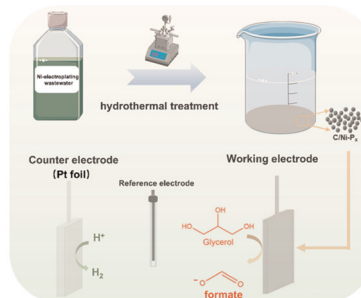
Michael Sweetman, Cara-Lena Nies and Michael Nolan*



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Chemical upcycling of Ni from electroplating wastewater into a well-defined catalyst for electrooxidation of glycerol to formate

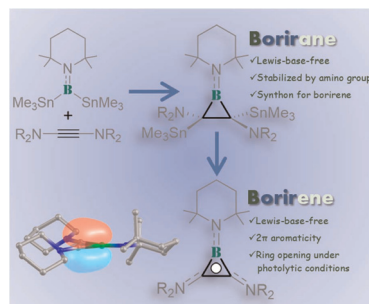
Ranran Zhai, Meiqi Zheng, Yifan Yan, Yue Ren, Zhenhua Li, Hua Zhou, Wenying Shi,* Xianggui Kong* and Mingfei Shao



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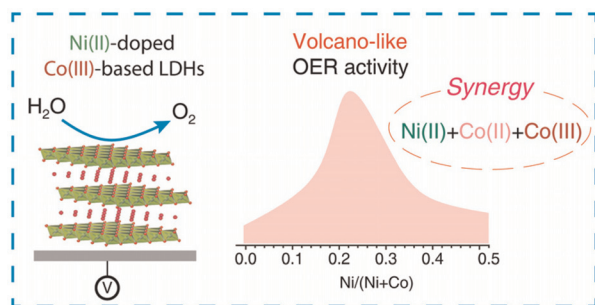
Synthesis of base-free boriranes and their conversion to borirenes using strong reductant

Simon Dotzauer, Sourav Kar, Theresa Swoboda, Christoph Weidemann, Andreas Häfner, Rian D. Dewhurst and Holger Braunschweig*



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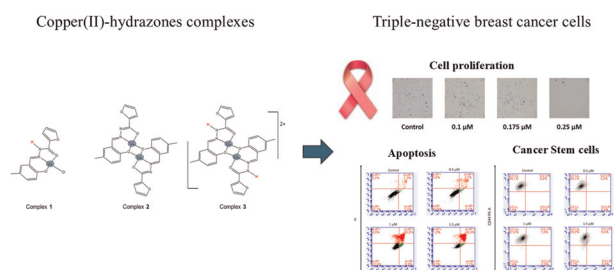
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Optimized Ni(II)-doping in Co(III)-based layered double hydroxides towards electrochemical oxygen evolution catalysis

Huiling Si, Yanhong Ma, Hang Zu and Jianbo Liang*

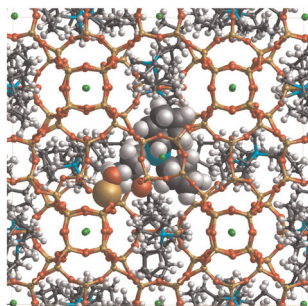
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Antiproliferative activity of a series of copper(II) complexes derived from a furan-containing *N*-acylhydrazone: monomers, dimers, charge status, and cell mechanistic studies on triple negative breast cancer cells

Olivia Espindola-Moreno, Fagner da Silva Moura, Lucía Santa Maria de la Parra, Carolina Stellet, Jilder D. P. Serna, Renata Diniz, Nicolás A. Rey* and Ignacio E. León*

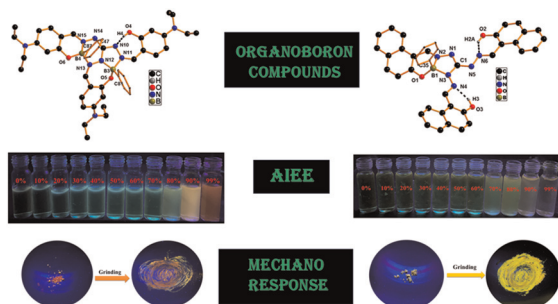
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An overloaded pure silica zeolite ISV synthesized using a phosphonium cation

Huajian Yu, Salvador R. G. Balestra,* Zihao Rei Gao and Miguel A. Camblor*

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Tetra-coordinated organoboron complexes with triaminoguanidine-salicylidene based ligands: aggregation induced enhanced emission and mechanoresponsive features

Balamurugan Tharmalingam, Rajendran Kishore Kumar, Ottoor Anitha, Werner Kaminsky, Jan Grzegorz Malecki and Balasubramanian Murugesapandian*

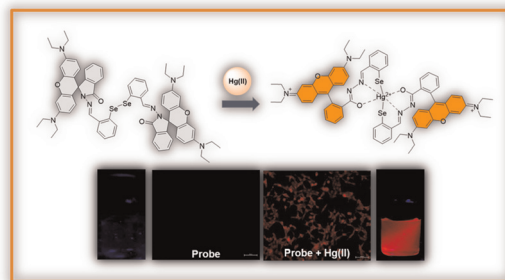


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Development of diselenide-based fluorogenic system for the selective and sensitive detection of the Hg(II) in aqueous media

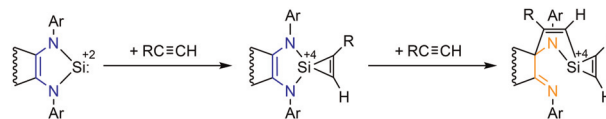
Gauri S. Malankar, Divyesh S. Shelar, Ray J. Butcher and Sudesh T. Manjare*



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Cooperative and non-cooperative additions involving a silicon atom and a redox-active ligand

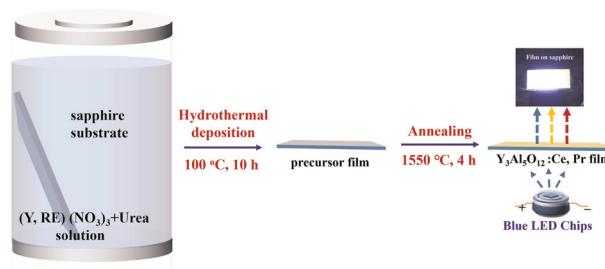
Vladimir A. Dodonov, Alina A. Kryuchenkova, Olga A. Kushnerova, Evgeny V. Baranov, Yanxia Zhao, Vladimir K. Osmanov and Igor L. Fedushkin*



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Yttrium aluminum garnet fluorescent conversion films for solid-state lighting: interface reaction synthesis strategy and modulation of warm white light

Haoxuan Zeng, Taihui Chen, Yongping Guo and Xiaoli Wu*



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Zn²⁺ triazamacrocyclic chelators with methylpyridine pendant arms for B-cell apoptosis: a structure–activity study

Axia Marlin, Fiona Le Pape, Thibault Troadec, Jocelyn Le Goff, Raphaël Tripier, Christian Berthou* and Véronique Patinec*

