

IN THIS ISSUE

ISSN 1144–0546 CODEN NJCHES 49(23) 9537–10002 (2025)



Cover

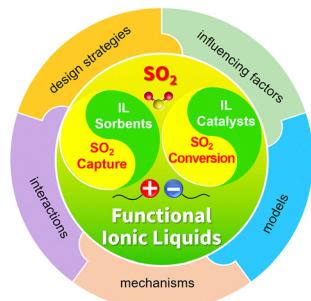
See Ceylan Mutlu Balci et al., pp. 9583–9599.
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PERSPECTIVE

9552

Functional ionic liquids for SO₂ capture and conversion

Ruina Zhang, Lina Tang,* Chunliang Ge,* Xiongfei Nie, Limin Xu, Quanli Ke, Zekai Zhang, Ying Zhou, Xiaopo Niu, Huayan Liu, Hanfeng Lu and Guokai Cui*



COMMUNICATIONS

9572

Optimized two-step sulfuric acid leaching for sustainable recovery of valuable metals from hazardous sodium carbonate roasting-leaching residues of spent hydrodesulfurization catalysts

Bingzhi Yi, Xiangjun Hu, Xuan Chen, Shilong Lin, Sanchuan Yu* and Doufeng Wu*



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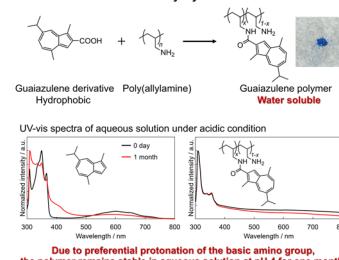
COMMUNICATIONS

9578

Hydrophilization of guaiazulene-based blue pigment: improving its stability in acidic conditions by substitution with polyallylamine

Yo Kinoshita, Kiyotaka Maruoka, Yuta Takahashi, Yoko Teruchi, Minoru Takeuchi, Kazuhiko Igarashi, Hitoshi Kasai and Kouki Oka*

Hydrophilization of Guaiazulene-based Blue Pigment:
Improving Its Stability in Acidic Condition by Substitution
with Polyallylamine

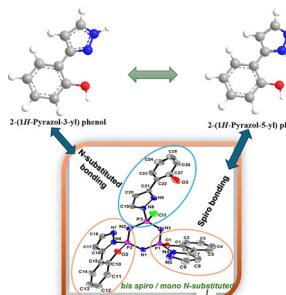


PAPERS

9583

Cyclic phosphazene derivatives combined with two different forms of the phenol-pyrazole group: synthesis, spectroscopic and crystallographic characterization and stereochemical properties

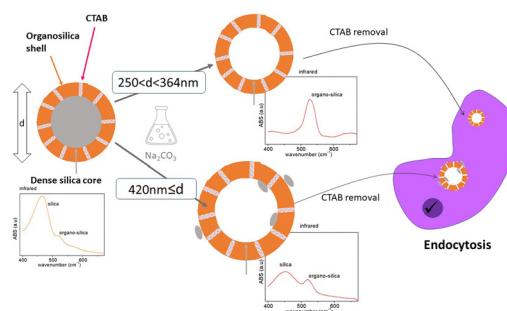
Ceylan Mutlu Balci,* Duygu Palabıyık and Serap Beşli



9600

Elaboration of hollow mesoporous organosilica nanospheres of various sizes

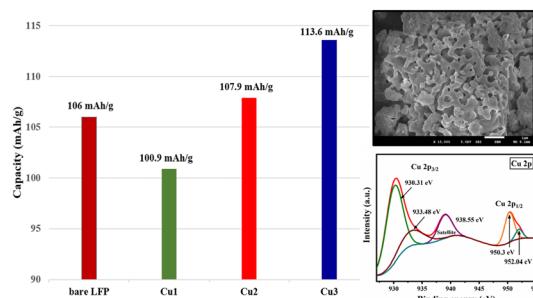
Manisa Kongkaew, Imane El Moujarrad, Rozenn Le Parc, Paul Mohammadi, Magali Gary-Bobo, Carole Carcel, Guillaume Toquer, Philippe Trens, David Maurin, Erwan Olivier, Philippe Dieudonné, Makoto Ogawa, Jean-Louis Bantignies and Michel Wong Chi Man*



9609

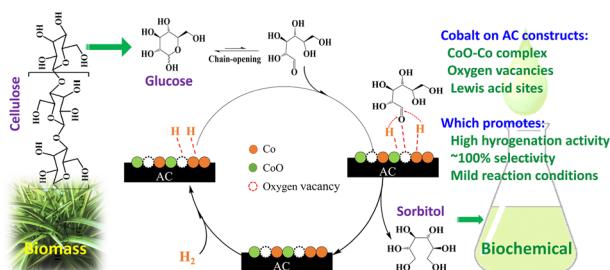
Impact of Cu doping on the electrochemical properties of LiFePO₄ synthesized via the solution combustion method

Chetana U. Mulik, Rohan S. Kamat, Mahesh Y. Chougale, Deepak P. Dubal, Ramchandra S. Kalubarme and Lata D. Jadhav*



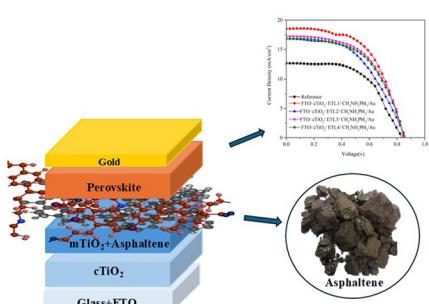
PAPERS

9617

**Hydrogenation of glucose to sorbitol catalyzed by Co supported on coconut-shell active carbon**

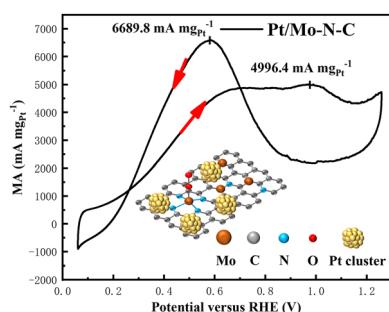
Yanqiu Liu, Mengtian Wang, Jingbo Mao,* Hui Lv and Jinxia Zhou*

9629

**Novel asphaltene-TiO₂ electron transport layers for high-performance perovskite solar cells: synthesis and characterization**

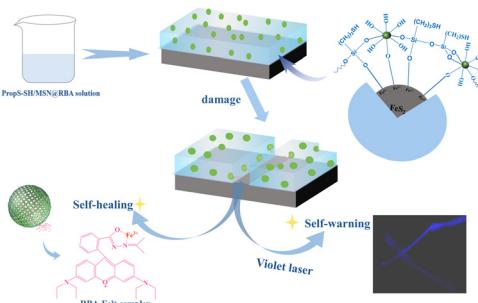
Roghaye Izan, Mahmood Borhani Zarandi,* Mohammad Ali Haddad and Hojjat Amrollahi Bioki

9638

**Pt cluster catalysts on N-doped carbon for an efficient formic acid oxidation reaction**

Zongqin Ding, Xingbo Ge,* Sen Ren, Xin Chen,* Xuanxuan Bi* and Rongyue Wang*

9652

**Acid-responsive MSN@RBA enhanced coating wound healing through alerting and releasing repairing agents**

Zhiting Yang, Jiahua Tang, Yan Zhang,* Xianzhi Hu,* Futing Zi, Yue Lin and Jin Wu

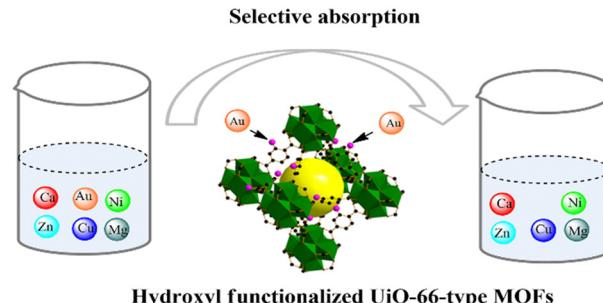


PAPERS

9663

Rapid and selective adsorption of gold ions with hydroxyl-functionalized UiO-66-type metal–organic frameworks

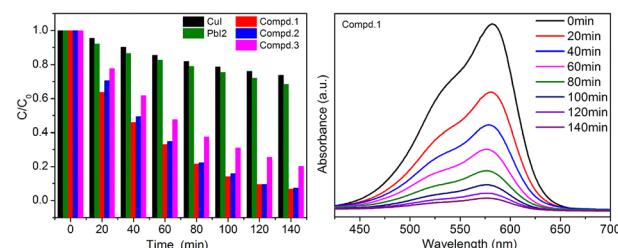
Wenhui Yao, Yongkui Chen* and Xiaowei Guo



9669

Heterometallic lead–iodocuprate hybrids with transition-metal complexes: syntheses, structures, photoelectricity and photocatalysis

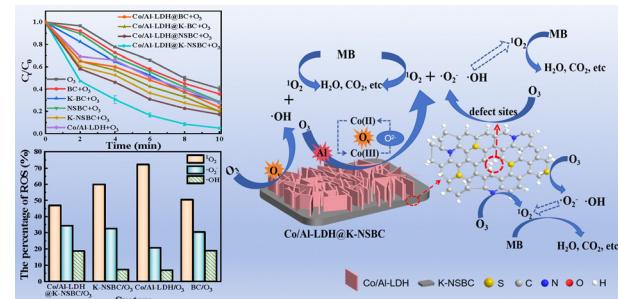
Taohong Ren, Hongjin Zhu, Xiao Yang and Dingxian Jia*



9678

Degradation of methylene blue by ozone oxidation activated by N and S co-doped biochar supported Co-Al layered double hydroxides

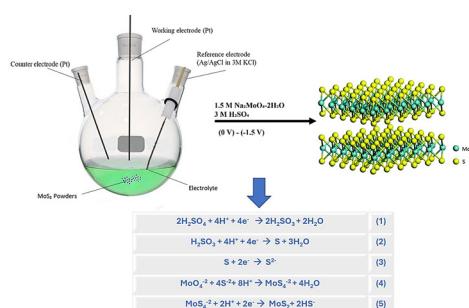
Danli Tang, Dengjie Zhong,* Yongxian Zhou, Yunlan Xu, Tanxia Xiang, Wantao Li, Yuanfang Yang, Chunmiao Fan and Jisai Chen



9697

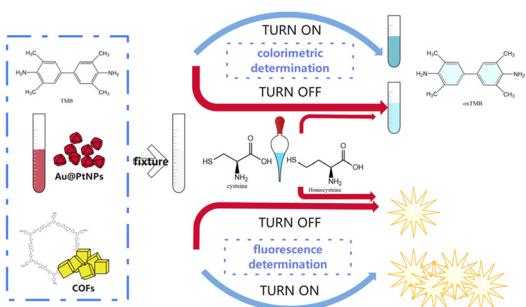
One-step room-temperature electrochemical production of 2H-molybdenum disulfide (2H-MoS₂) powders as anode materials for lithium-ion batteries

Aysu S. Sahin, Ayse V. Hacinecipooglu, Mohammed Al-Bujasim, Metin Gencen* and Yucel Sahin



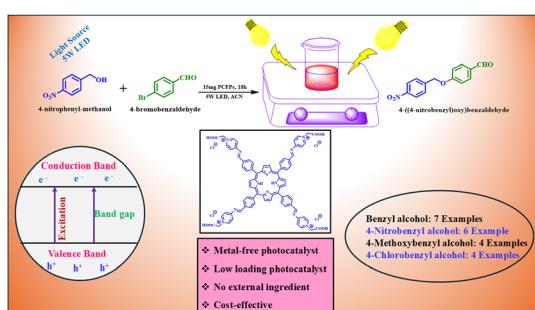
PAPERS

9712

**A fluorescence and colorimetric dual-mode sensing system for Cys/Hcy detection**

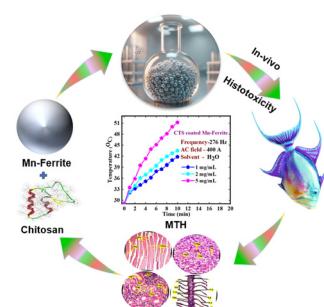
Yuying Jia, Xiangyu Cai, Xuepeng Wang, Hongyan Shan and Yanfu Huan*

9721

**Pyridinium-based carboxyl-functionalized porphyrin: an easy gateway to afford substituted benzyl aryl ethers**

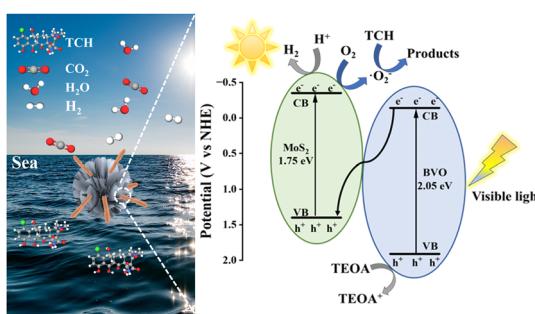
Vijay Shivaji Patil and Pundlik Rambhau Bhagat*

9734

**Polyol-assisted chitosan-coated MnFe₂O₄ nanoparticles: assessing magneto-hyperthermia efficacy and toxicological effects on *Garra mcclellandi* fish**

Amol B. Pandhare, Swapnajit V. Mulik, Omkar S. Nille, Dhanaji B. Malavekar, Jin H. Kim, Nagesh B. Birajdar, Sandeep B. Somvanshi, Satish S. Phalake, Vishwajeet. M. Khot, Rajendra P. Patil* and Sagar D. Delekar*

9747

**BiVO₄/MoS₂ n-n heterojunction for enhanced solar-driven seawater antibiotic degradation and photocatalytic hydrogen evolution**

Bingyan Ni, Ying Liu, Linlin Zhang,* Jianjun Liao, Xiaodong Zhang and Cheng Li

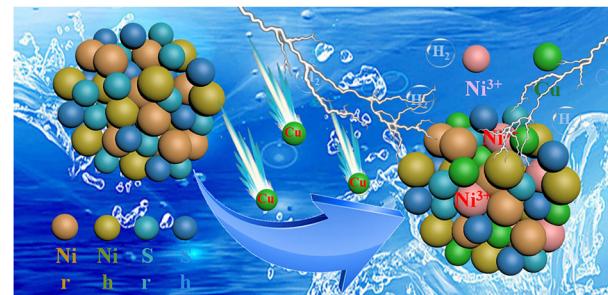


PAPERS

9758

Cu₂S/Ni_xS_y multi-interfaces induced Ni(II) for optimizing alkaline hydrogen evolution reaction

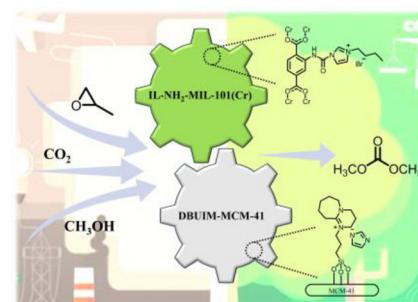
Fei Yuan,* Xiaoteng Wang, Gang Liu and Yang Liu



9765

One-pot synthesis of dimethyl carbonate catalyzed by two-component supported ionic liquid catalysts

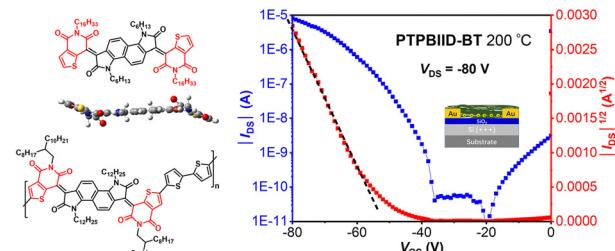
Han Xue, Hailong Xu, Miaomiao Chen, Huili Zhao, Xinkui Wang, Min Ji* and Min Wang*



9773

A thieno[3,2-c]pyridine-4,6-dione derived bisisoindigo for organic field-effect transistors

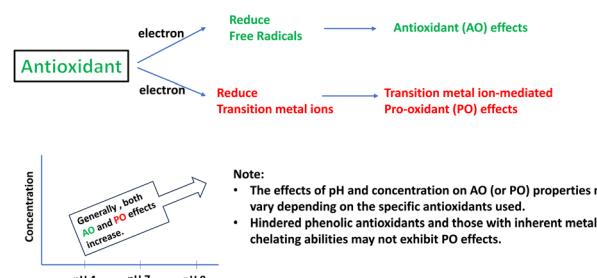
Chang Li, Fangliang Dong, Rui Ge and Ming Wang*



9779

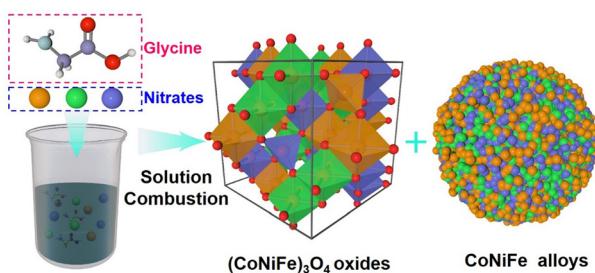
Evaluation of pH and concentration effects on the antioxidant and pro-oxidant activities of lysine- and lysine methyl ester-based antioxidant tetramers, each containing four units of either syringaldehyde or vanillin

Collins Antwi-Boasiako, Blessed Agbemade, Jacqueline H. Ko, Yusif I. Gyasi, Nanzhu Li, Rebecca L. Uzarski and Choon Young Lee*



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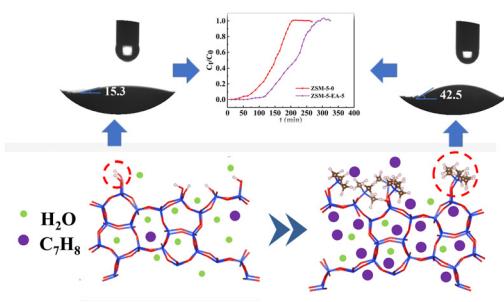
9798



Dynamic activation of lattice oxygen in medium-entropy CoNiFe-based spinel oxides decorated with *in situ* formed alloy for efficient oxygen evolution reaction

Xin Chen, Weiji Dai,* Shuzhan Bai, Fan Zhang, Jing Guo, Cuijiao Zhao, Yudong Zhang, Can Cui and Saifang Huang*

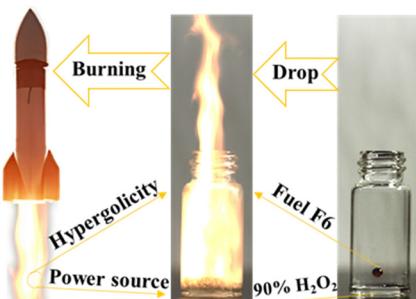
9806



Preparation of green hydrophobic ZSM-5 zeolite and its toluene adsorption performance under high humidity conditions

Qianjiao Yin, Ke Yin, Sijia Weng, Fanghe Ye, Haomin Huang, Leneng Yang and Mingli Fu*

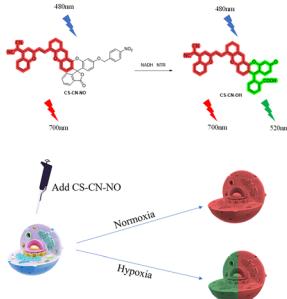
9816



Ferrocene-functionalized room-temperature ionic liquids as green bipropellant hypergolic fuels

Haichao Fang, Mingren Fan, Siwei Song, Yi Wang* and Qinghua Zhang*

9822



A novel internal standard ratio fluorescent probe for nitroreductase detection in cells

Han Zeng, Haijie Wang, Mingchao Huang, Yuanyuan Wu, Yaping Wang, Yiyi Li and Shicong Hou*

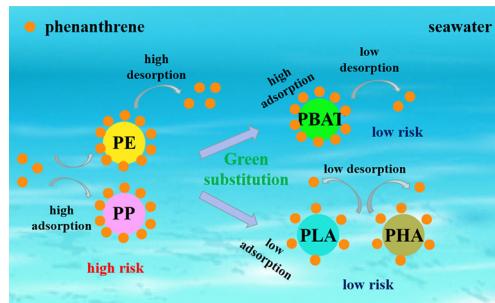


PAPERS

9829

Degradable plastics could help to protect the marine environment: proof based on pollutant surface behaviors

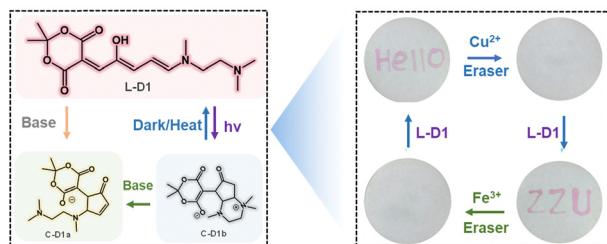
Xiaotao Liu, Xuetong Hua, Jian Lu,* Jun Wu and Yuexia Feng



9838

High-performance donor–acceptor stenhouse adduct sensors with multi-stimuli response for efficient metal ion detection

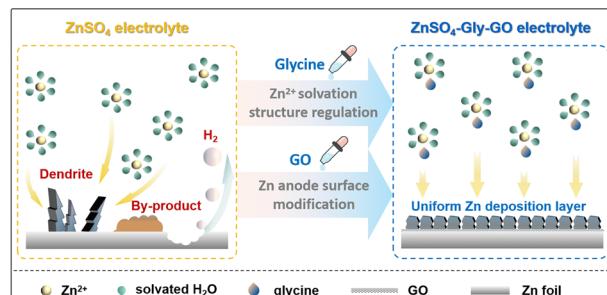
Weixia Zhu, Zhenya Wang, Youming Kou, Peixin Liu and Haoran Wu*



9847

A dual electrolyte additive strategy for achieving stable Zn anodes for zinc-ion batteries

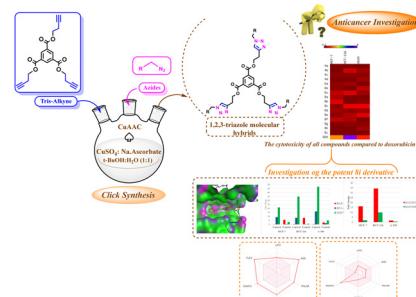
Hongri Wan, Zishu Wang, Zhaohe Guo, Xueyao Mo, Lu Li, Limei Sun, Jianfeng Liu, Yan Xu* and Xiaofang Hu*



9858

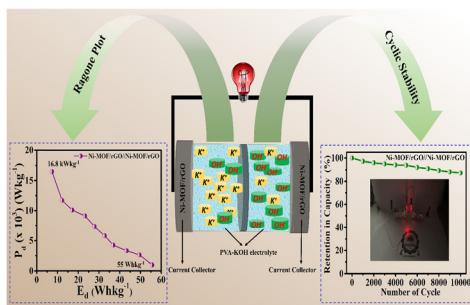
Discovery of potent anticancer tricarboxamide analogs linked to 1,2,3-triazole, promoting EGFR and VEGFR downregulation

Fawzia F. Albelwi,* Adeeb Al Sheikh, Mohamed R. Aouad, Hatim Ahmed Neyaz, Mohamed M. Khalifa,* Aeshah A. Awaji, Hany E. A. Ahmed and Nadjet Rezki



PAPERS

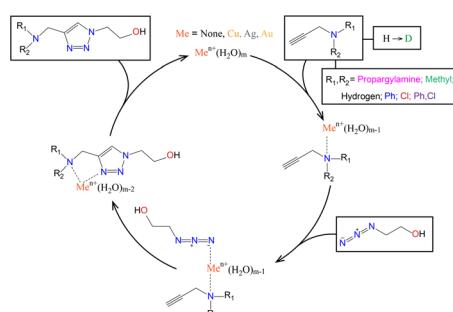
9874



Design and electrochemical performance of Ni-MOF/rGO heterostructures for high-capacity supercapacitors

Mayank K. Singh, Sheetal Gupta, Khushwant Singh, Suporna Bhowmik, Govind Kumar Maurya and Dhirendra K. Rai*

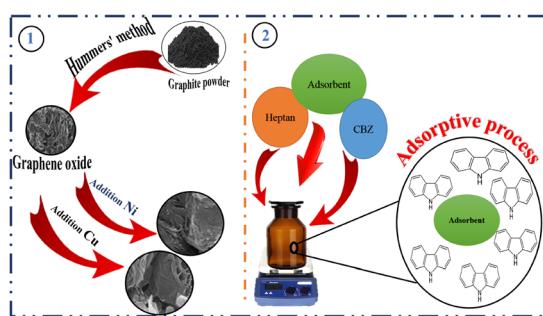
9884



Azide–alkyne cycloaddition catalyzed by Cu(i), Ag(ii), and Au(ii) complexes and the influence of the deuterium isotope: DFT-based computational insights

Saadiallakh Normatov, Pavel V. Nesterov, Maxim A. Demekhin, Alexander S. Novikov* and Ekaterina V. Skorb*

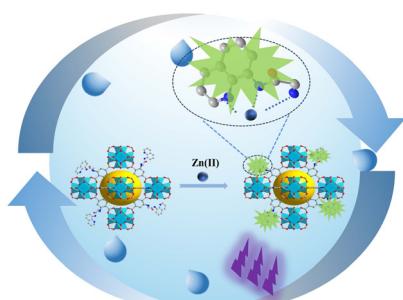
9890



Adsorptive denitrogenation of model fuels using copper and nickel adsorbents supported on reduced graphene oxide nanosheets

Fatemeh Moosavian, Ali Nakhaei Pour* and Mehdi A. Shadmehri

9903



A fluorescent sensor utilizing quinoline-functionalized UiO-66 for the detection and removal of zinc ions from aqueous solutions

Yiying Xiong, Ying Yang, Xue Li, Jing Feng, Yingming Mao and Yuanyuan Zhang*

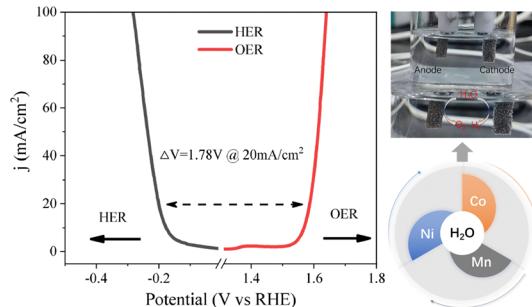


PAPERS

9918

Regulation of the activity interface in Ni–Co–Mn ternary aerogel catalysts for efficient water splitting

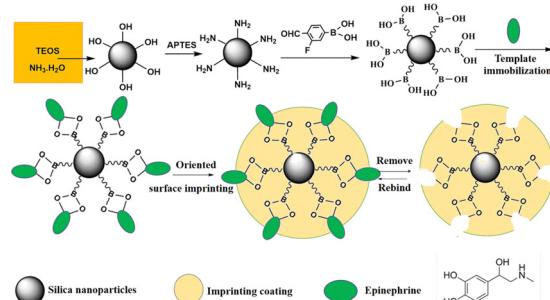
Lei Ma, Zhi Chen,* Yongkang An, Chengzhi Pang, Fei Liang, Shiwen Wang, Xusheng Wang, Shengbin Wang and Sizhe Wang*



9930

Preparation of an epinephrine-oriented imprinted coating on silica nanoparticles for rapid, facile and selective extraction and determination of epinephrine from animal-derived foods

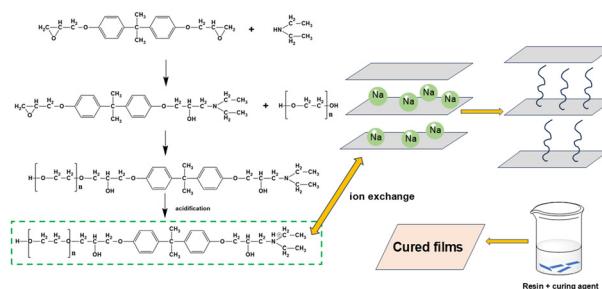
Shihui Li, Xiaojin Zong, Yuemeng Zhao, Dongsheng Deng and Daojin Li*



9942

Preparation of modified montmorillonite-stabilized epoxy resin emulsions and their cured properties

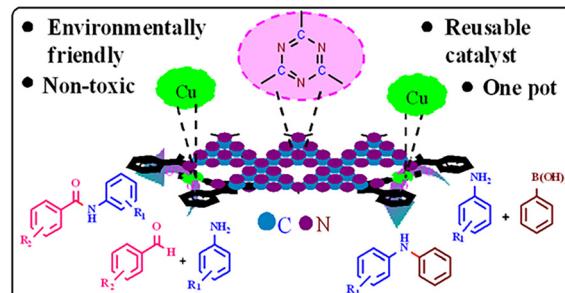
Shengyuan Liang and Yeyun Meng*



9954

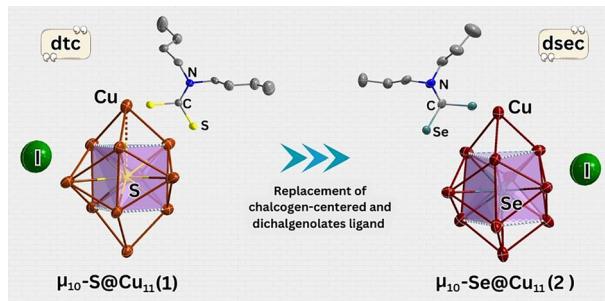
An adaptable and efficient approach for the formation of C–N bonds using copper Schiff-base graphitic carbon nitride as a reusable and heterogeneous catalyst

Priyanka Borah, Rona Moni Bora, Lenida Kyndiah, J. B. Yadav, R. S. Devan and Amarta Kumar Pal*



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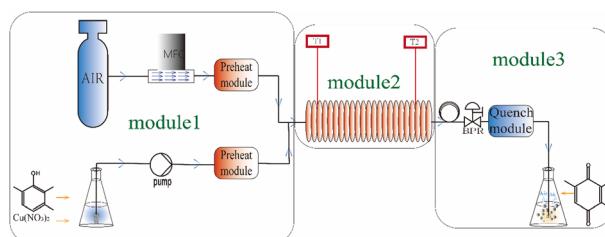
9965



Chalcogenide-centered Cu_{11} clusters heteroleptically passivated by dichalcogenolates and iodo ligands

Rhone P. Brocha Silalahi, Yu-Te Kuo, Tzu-Hao Chiu, Michael N. Pillay and C. W. Liu*

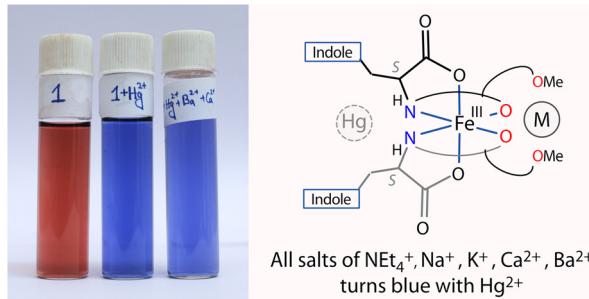
9973



A mild and efficient oxidation of 2,3,6-trimethylphenol to trimethyl-1,4-benzoquinone with high-velocity air as an oxidant in a continuous-flow microreactor

Zilong Xie, Siyi Yu, Yanping Liu, Jiankun Wu, Jianzhi Wang, Jie Liu, Xiao Lin and Faquan Yu*

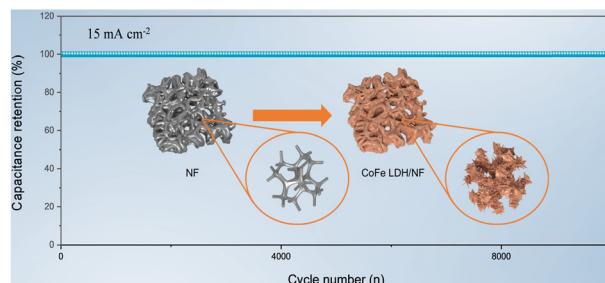
9980



Visual detection of Hg^{2+} without interference by alkali and alkaline earth metal ions using an iron(III) complex in a hetero-bimetallic environment

Somnath Paik and Manabendra Ray*

9990



Porous CoFe-LDH free-standing electrodes for high-performance asymmetric supercapacitors

Juan Chen, Yanhua Sun, Zi Li, Guojun Yuan* and Guangmei Han*



CORRECTIONS

9998**Correction: Synthesis of alumina-based cross-linked chitosan–HPMC biocomposite film: an efficient and user-friendly adsorbent for multipurpose water purification**

Bapun Barik, Pratap S. Nayak, L. Satish K. Achary, Aniket Kumar and Priyabrat Dash*

9999**Correction: Oxygen vacancy enhanced catalytic activity in a Pt nanoparticle decorated GO–Ce_xO_y catalyst for the efficient synthesis of pyran based derivatives**

Pratap S. Nayak, Banalata Maji, Bapun Barik, Shital Jyotsna Sahoo, Vishal Rout, Adyasha Das and Priyabrat Dash*

