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ISSN 1144-0546 CODEN NJCHES 47(32) 14989-15392 (2023)



Cover

See Xinrui Miao, Xiaohong Cheng et al., pp. 15014-15020. Image reproduced by permission of Xinrui Miao from New J. Chem., 2023, 47, 15014.

EDITORIAL

15003

50th anniversary of ICCST: celebrating ICCST at its 15th edition

Jamal Rafique,* Eder J Lenardão* and Antonio L. Braga*

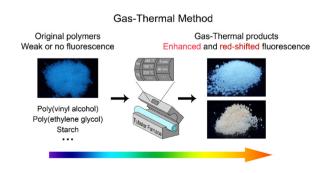


COMMUNICATIONS

15005

A gas-thermal method as a universal and convenient strategy for preparing non-traditional luminescent polymers with enhanced and red-shifted fluorescence

Yaxin Zhao, Wendi Xie, Junwen Deng, Deyu Liu, Haiqi Liu, Tianqi Li and Huiliang Wang*



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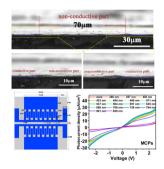


COMMUNICATIONS

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An efficient low-cost and facile ITO interdigital micro-photodetector based on mixed cationic perovskites for screening new optoelectronic materials

Mengqing Li, Wenhuan Cao, Xiangfei Min, Wenhui Li, Xueze Wang, Huidan Gao, Huawei Zhou,* Jie Yin and Xianxi Zhang*

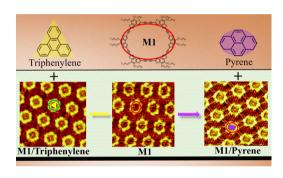


PAPERS

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Shape-responsive adsorption of an oval macrocycle co-deposited with guest molecules

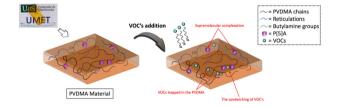
Yi Wang, Qingqing Han, Songyao Zhang, Deling Zhang, Xinrui Miao,* Xiaohong Cheng* and Wenli Deng



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Pillar[5] arenes-based high- T_g thermosets for the capture of volatile organic compounds

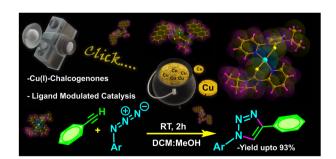
Solenne Ritaine, Valentin Ternel, Patrice Woisel, Jerome P. Claverie* and Jonathan Potier*



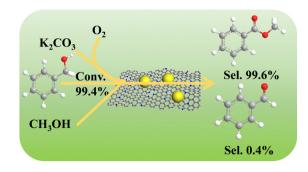
15027

Highly active higher coordinated copper(ı)-N-heterocyclic chalcogenone catalysed click chemistry

Suman Mandal, Dinesh Harijan, Gopendra Muduli, Kalaivanan Subramaniyam, Aravind Kumar Rengan* and Ganesan Prabusankar*



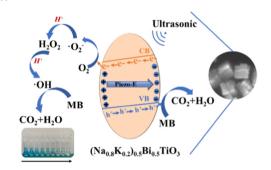
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Atomically dispersed cobalt-nitrogen-carbon catalysts for efficient oxidative esterification of aromatic alcohols

Fengwei Zhang,* Peihao Liu, Jingjing Li, Hefang Guo, Han Zhang, Zehui Zhang* and Zhengping Dong*

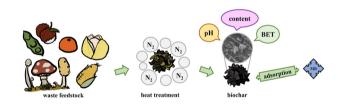
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Solvothermal synthesis of (Na_{0.8}K_{0.2})_{0.5}Bi_{0.5}TiO₃ piezoelectric catalyst with morphotropic-phaseboundary structure for efficient dye degradation

Ning Xie, Li Jiang, Yuanwen Hou, Hongguan Fu,* Juan Zhang, Hejun Gao* and Yunwen Liao*

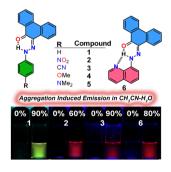
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Type-effects of multiple waste-sourced biochar feedstocks on methylene blue adsorption

Zhaolian Han, Qiushi Jiang, Yifeng Pei, Chunli Zhao, Jinying Li, Hao Dong and Zhiqiang Cheng*

15066



The effect of substituents on the aggregation-induced emission of 9,10-phenanthraquinone-hydrazones

Naveen Kumar M, Deikrisha Lyngdoh Lyngkhoi, Sudhakar Gaikwad, Debabrata Samanta, Snehadrinarayan Khatua* and Susnata Pramanik*

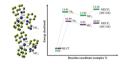
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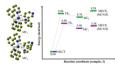
Regulation of internal reorganization energy to change the non-radiative channel in the Ir(III) complex: the role of N atoms

Lingkai Tang, Jiaxing Gao, Yafei Luo, Yan Cheng, Ling Liu, Dan Zheng, Li Liang, Jianping Hu and Ting Luo* Differences between N regulation methods



Two interesting MC states

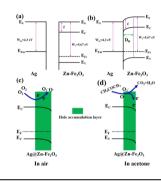




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The co-enhanced effect of Zn-doping and Ag-loading on the selectivity of a p-type Fe₂O₃ toward acetone

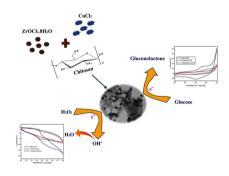
Qixuan Qin, Na Liu, Yan Zhang, Weiyi Bu, Zhijie Zhou, Changhua Hu and Xiaohong Chuai*



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A facile synthesis of CuZrO₂ nanoparticle functionalized chitosan for capable and stable non-enzymatic electrochemical detection of glucose and H₂O₂

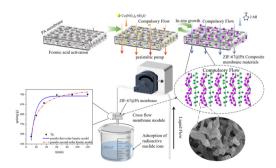
Ramesh Madhaiyan, Sankar Chinnusamy,* Umamatheswari Seeman* and Jayavel Ramasamy



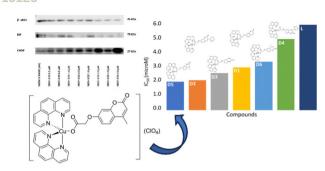
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ZIF-67@PA membranes based on deep permeation for rapid removal of a radionuclide: Th(IV)

Yaling Tang, Chunyan Chen,* Jian Zhou,* Qian Liu, Guoqing Xiao, Chunlin Chen, Yuheng Liu, Wanxin Chen and Shuyi Shang



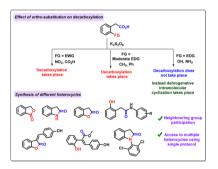
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Ternary copper(II) complexes of 1,10-phenanthroline and coumarin-based oxylacetates as pro-apoptotic UPR CHOP inducers

Sebastiano Masuri, Maria Grazia Cabiddu, Lukáš Moráň, Tereza Vesselá, Martin Bartosik, Josef Havel, Francesca Meloni, Enzo Cadoni, Petr Vaňhara and Tiziana Pivetta*

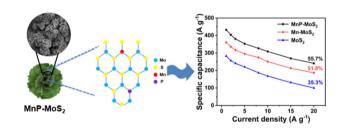
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Effect of ortho-substitution on persulfate-mediated decarboxylation and functionalization of arylacetic acids

Joydev K. Laha,* Upma Gulati and Saima

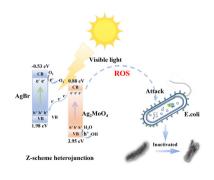
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Flower-like manganese and phosphorus co-doped MoS₂ with high 1T phase content as a supercapacitor electrode material

Yunan Li,* Xiaotian Wang, Jiayin Meng, Meng Song, Mingli Jiao, Qi Qin* and Liwei Mi*

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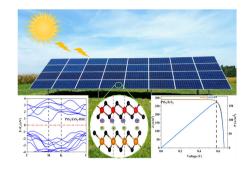
Construction of a AgBr-Ag₂MoO₄ heterojunction and its photocatalytic sterilization activity

Qin Rao, Xiao Xian, Huaxiang Lin,* Rusheng Yuan, Zizhong Zhang, Jinlin Long and Qun Lin*

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Solar energy harvesting by a PtS₂/ZrS₂ van der Waals heterostructure

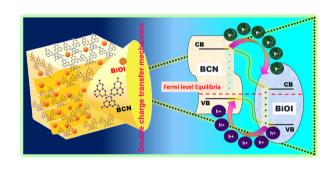
P. R. Parmar, S. J. Khengar, Disha Mehta, Yogesh Sonvane and P. B. Thakor*



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Double charge transfer mechanistic insights into the tailoring of BiOI nanoplates and boron-doped graphitic carbon nitride: a 2D/2D anchored p-n heterojunction nanocatalyst for improved photodegradation

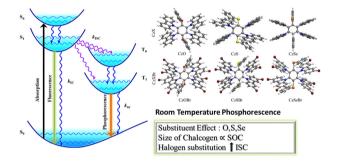
Pragnyashree Aparajita, Shubhalaxmi Choudhury, Ugrabadi Sahoo, Samarjit Pattnayak, Sandip Padhiari, Manamohan Tripathy and Garudadhwaj Hota*



15193

Theoretical insights into the room temperature phosphorescence properties in star-shaped carbazole-based molecules

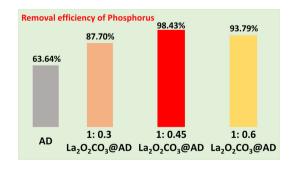
Naga Pranava Sree Kothoori, Pandiyan Sivasakthi and Pralok K. Samanta*



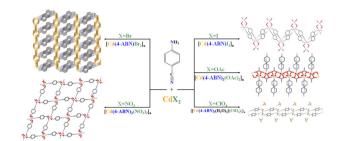
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Efficient removal of phosphate through adsorption by acidified diatomite loaded with La₂O₂CO₃

Rui Tian, Shu Yang, Ziyin Han, Ye Sun, Yexi Wang, Chen Wu, Qi Zhang, Jinyan Liu, Xulin Lu* and Zhiwei Zhang*



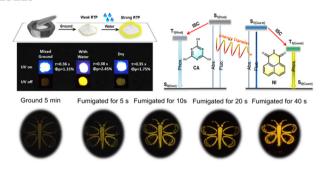
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Anion-induced structural diversity in cadmium coordination polymers of 4-aminobenzonitrile: a structural and DFT study

Behrouz Notash,* Ommolbanin Barzegar Tilenoie and S. Shahab Naghavi

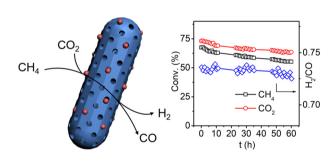
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Organic room temperature phosphorescence enhancement by grinding and adding water for humidity detection and anti-counterfeiting printing

Changli Zhang, Lingyun Lou, Yuzhan Li, Chengxiang Li, Dong Wang, Hui Cao, Wanli He and Zhou Yang*

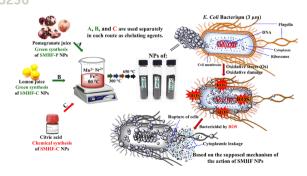
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Highly dispersed Ni nanoparticles supported by porous Al₂O₃ rods for catalytic dry reforming of methane

KeFa Sheng* and Kai Cui

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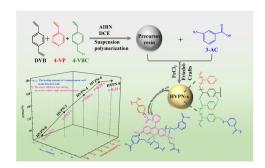
Green synthesis of M-type manganese-substituted strontium hexaferrite SrMn_xFe_{12-x}O₁₉ nanoparticles with intrinsic antibacterial activity against human pathogenic bacteria

Rebaz F. Hamarawf, Dyari I. Tofiq* and Khalid M. Omer*

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Adsorption of Rhodamine B from aqueous solutions using polarity-tunable hyper-cross-linked resins

Xiaofeng You, Lin Han and Qing Liu*



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Mechanistic insights of the copper(ı)-catalysed reaction between chlorohydrazones and terminal alkynes

Alessandro Ponti, Alessandra Silvani and Giorgio Molteni*

$$(D)H \longrightarrow N \longrightarrow Et_3N \longrightarrow CUCI \longrightarrow N \longrightarrow H(D) \longrightarrow H(D)$$

$$Ph \longrightarrow Ph$$

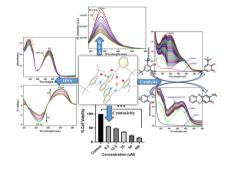
$$Ph \longrightarrow Ph$$

$$N \longrightarrow Ph$$

15267

Synthesis of a new benzoate bridged NNO tethered copper(II) complex: exploration of its bio, catalytic and anticancer activities

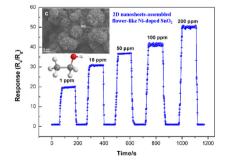
Subrata Mandal, Rahul Naskar, Rimi Mukherjee, Apurba Sau Mondal, Akash Das, Nabendu Murmu and Tapan K. Mondal*



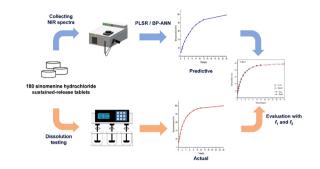
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Construction of flower-like hierarchical Ni-doped SnO₂ nanosheets and their gas sensing properties for ethanol

Wei Xiao, Zhao Jin, Wei Yang and Shantang Liu*



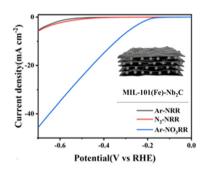
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Prediction of dissolution profiles of sinomenine hydrochloride sustained-release tablets part I: using near-infrared spectra as predictors

Wenlong Li, Long Wang, Xi Wang, Guangpu Fang, Qiang Zhang, Ping Qiu and Pengfei Tu*

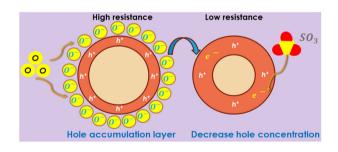
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MIL-101(Fe)@Nb₂C MXene for efficient electrocatalytic ammonia production: an experimental and theoretical study

Haiding Zhu, Sensen Xue, Fang Zhao, Qiangian Hua, Zhuangzhuang Liang, Xuefeng Ren, Liquo Gao, Tingli Ma and Anmin Liu*

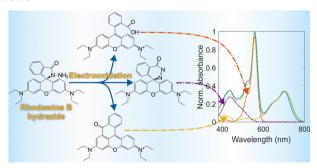
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Ni-doped Al₂O₃ sensor for effective SO₃ gas adsorption and sensing

V. Manikandan,* G. Ayyannan, Iulian Petrila, Rajaram S. Mane, Kamil Sobczak, J. Chandrasekaran, Robert D. Crapnell and Craig E. Banks

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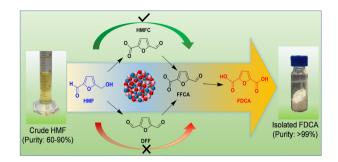
Electrooxidation of rhodamine B hydrazide

Nikita Belko,* Hanna Maltanava, Anatol Lugovski, Sviatlana Fatykhava, Polina Shabunya, Anastasiya Tabolich, Michael Samtsov and Sergey Poznyak

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Industry-oriented method for the aqueous phase oxidation of crude 5-hydroxymethyl furfural (HMF) to 2,5-furandicarboxylic acid (FDCA)

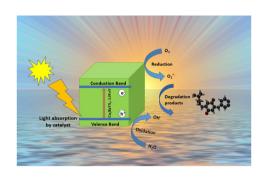
Priya Lokhande, Kalyani Sonone and Paresh L. Dhepe*



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Construction of chalcogenide Cu₂BaVS₄ nanograins from nanocubes via solvothermal synthesis for photoelectrochemical hydrogen/oxygen evaluation in alkaline media and dye degradation applications

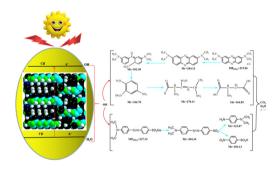
Sidra Aslam, Muhammad Awais, Nimra Usman and Muhammad Safdar*



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Efficient photocatalytic performance and the mechanism of copper(1) metal-organic framework nanosheets

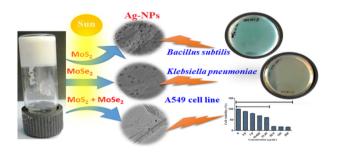
Shaolong Yang, Yuhuan Chen, Shixiong Li* and Huijun Chen*



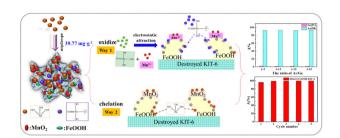
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MoS₂ and MoSe₂ 2D nanosheets-based supramolecular nanostructure scaffold-capped Ag-NPs: exploring their morphological, anti-bacterial, and anticancer properties

Gerald Lepcha, Rajib Sahu, Santanu Majumdar, Saikat Banerjee, Arpita Bhowmick, Samya Sen, Bholanath Panda, Debasis Dhak, Keka Sarkar and Biswajit Dey*



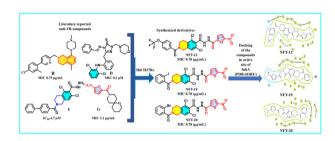
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Adsorbent nanoarchitectonics of mMnO₂/nFeOOH/ KIT-6 for As(III) adsorption from wastewater

Ying Xiong, Haolin Cong, Xingkun Qi, Yumei Zhao, Dandan Wang, Junshuo Cui, Weijun Shan and Haibiao Yu*

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Tetrahydroisoquinoline based 5-nitro-2-furoic acid derivatives: a promising new approach for anti-tubercular agents

Adinarayana Nandikolla, Yogesh Mahadu Khetmalis, Guruvelli Padma Vijaya Sangeetha, Ala Chandu, Swati, Muthyala Murali Krishna Kumar, Vivek Sharma, Sankaranarayanan Murugesan and Kondapalli Venkata Gowri Chandra Sekhar*