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ISSN 1144-0546 CODEN NJCHES 47(30) 14099-14570 (2023)



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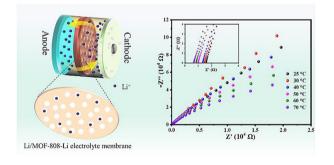
See Siwaporn Meejoo Smith et al., pp. 14134-14141. Image reproduced by permission of Siwaporn Meejoo Smith from New J. Chem., 2023, 47, 14134.

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Metal organic framework MOF-808-based solid-state electrolytes for lithium-ion batteries

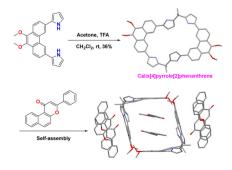
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Fei Zeng,\* Lin-Li Tang and Man-Hua Ding



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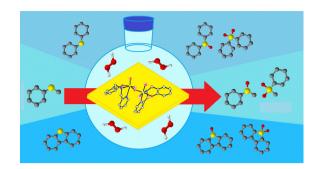
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Catalytic activity of a new dioxidomolybdenum(vi) complex with a bipodal N2O-donor ligand in sulfur compound oxidation

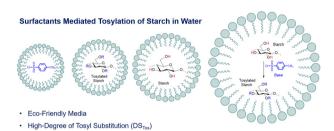
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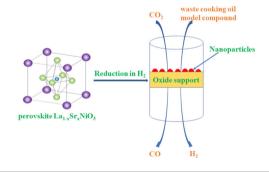


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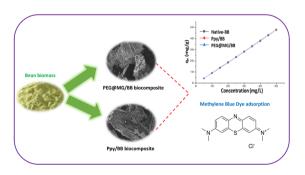
Songyuan Hao, Wenbo Luo, Yaming Kang, Sen Fu and Hong Yuan\*



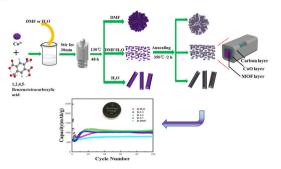
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Komal Saeed, Urooj Kamran,\* Amina Khan, Hasan Jamal and Hag Nawaz Bhatti\*



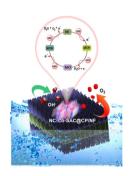
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# Construction of hierarchical multilayered nanomaterials derived from Co-MOFs supported by pyromellitic acid for advanced lithium storage performance

Guohua Chen, Liying Wang,\* Yunfei Liu, Xin Miao, Zhenzhu Cao and Yongfeng Zhang

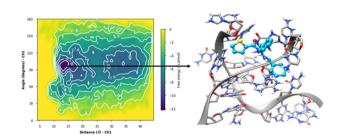
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### N-Coordinated cobalt single atom-integrated electrospun nanofibers for an efficient oxygen evolution reaction

Reda M. El-Shishtawy, Mahmoud A. Hussein, Salih S. Al-Juaid, Muhammad Waseem Fazal, Waleed A. El-Said\* and Naeem Akhtar\*

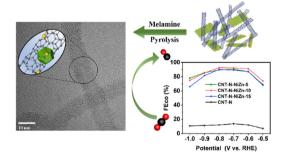
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R. Durga Priyadharshini, P. N. Sathishkumar, M. Bensingh, N. Bhuvanesh, K. N. Vennila, R. Karvembu and Kuppanagounder P. Elango\*

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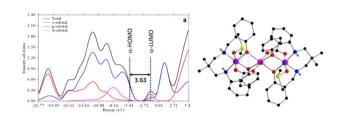
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Shuyu Jia, Ping Zhang,\* Hao Chen, Ruishi Xie, Yingke Fu, Lin Chen, Yaping Zhang and Ying Xiong\*

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Sudip Bhunia, Pubali Das, Snehasis Banerjee, Rosa M. Gomila, Michael G. B. Drew, Antonio Frontera, Partha Pratim Ray and Shouvik Chattopadhyay\*



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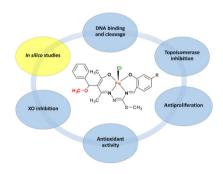
### Recyclable poly-m-phenylenediamine selectively recovers gold from acidic solutions

Min Wang, Zhiwei Huang, Zhongmin Feng and Zhuqing Wang\*

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### In vitro biological and in silico screening of novel iron(III) complexes for DNA-targeted antitumor drug component

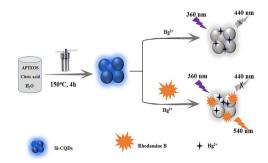
Serap Nigdelioglu Dolanbay, Zehra Kübra Yilmaz, Büşra Kaya,\* Belma Aslim and Bahri Ülküseven\*



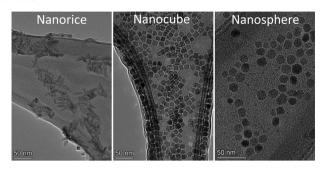
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# Selective detection of mercury ions via single and dual signals by silicon-doped carbon quantum dots

Sen Liao,\* Lilei Zhang, Shiyu Li, Siyao Yue and Guoping Wang\*



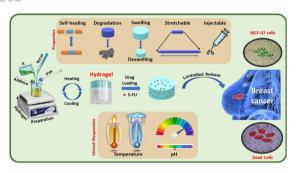
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### Synthesis of bimetallic aluminum-iron oxide nanorice, nanocubes and nanospheres

Abdul Hogue, Artur Huseinov, Chaminda P. Nawarathne and Noe T. Alvarez\*

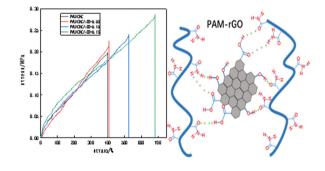
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## A dual responsive ionic liquid-based polymeric hydrogel: a promising drug delivery vehicle for the treatment of breast cancer

Raviraj Pansuriya, Tapas Patel, Sanjay Mehra, Arvind Kumar, Omar A. El Seoud, Sugam Kumar, Vinod K Aswal, Suresh Kumar Kailasa and Naved I. Malek\*

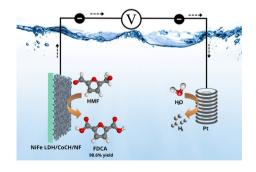
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## Preparation and properties of polyacrylamide/ cellulose nanocrystal/reduced graphene oxide interpenetrating network composite hydrogels

Lingling Meng,\* Weihao Li, Shijie Ding, En Liu and Da Liu

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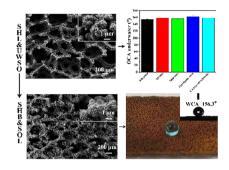
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Lintang Dhanasmoro and Oi Lun Li\*

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"Two birds with one stone" strategy for oil/water separation based on Ni foams assembled using metal-organic frameworks

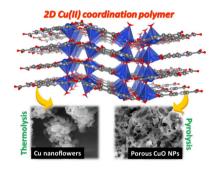
Xin-Xin Chen, Yu-Ping Zhang,\* Hong-Li Du, Li Wan, Cheng-Gang Zuo and Ling-Bo Qu



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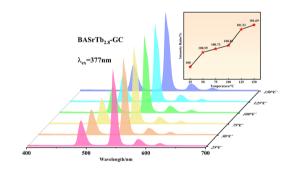
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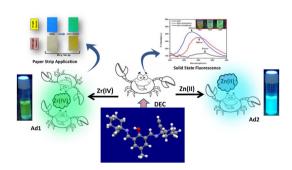
Wuyunga Bao, Xinmin Yu, Tong Wang, Qianwen Wang, Xiangyu Zou,\* Hongbo Zhang\* and Chunhui Su\*



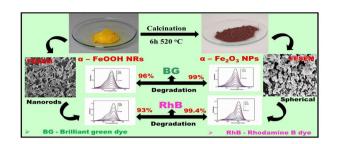
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Solvent dependent ESIPT-based probe for optical recognition of Zr(IV) and Zn(II)

Tandrim Shyam, Subhasis Ghosh, Sangita Maji, Prosenjit Mandal and Debasis Das\*



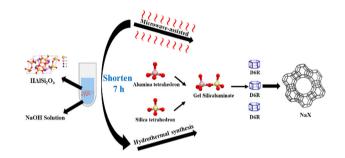
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Hydrothermal synthesis of  $\alpha$ -FeOOH (1D) nanorods and their transition to  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> (0D): an efficient photocatalyst in neutralizing hazardous organic dyes

Aruna M. Sudapalli and Navinchandra G. Shimpi\*

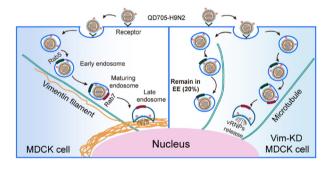
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Insight into the kinetic behavior of microwaveassisted synthesis of NaX zeolite from lithium slag

Shaozu Huang, Yu Wang, Lin Zhang, Shenjie Zhu, Zhengfei Ma, Qun Cui\* and Haiyan Wang\*

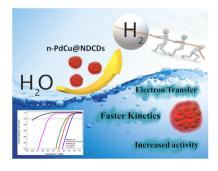
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Quantitative analysis of the effects of vimentin intermediate filaments on the early stages of influenza A virus infection

Ju-Mei Zhang, Zhi-Gang Wang, Lei Du, Dan-Dan Fu, Meng-Qian Zhang, Jing Li, Shu-Lin Liu and Dai-Wen Pang\*

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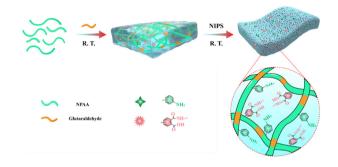
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Chandrasekaran Pitchai, Mahalakshmi Vedanarayanan and Sethuraman Mathur Gopalakrishnan\*

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Zhiming Mi, Lingjun Meng, Junman Wang, Lintao Liao, Yangyang Huang, Kaiyang Zhang, Jingling Xiao, Tongtong Xie, Yuhang Yan, Yiping Zhong and Zhixiao Liu\*



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### Efficient synthesis of ynones from carboxylic acids and terminal alkynes via Pd/Cu catalysis using 2-chloroimidazolium chloride as the activation reagent

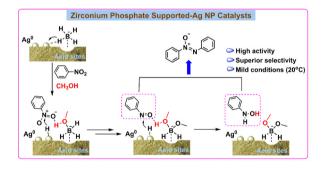
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## Zirconium phosphate supported-silver nanoparticles for selective hydrogenation of nitrobenzene into azoxybenzene compounds

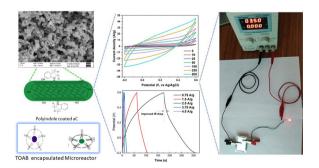
Yuxi Qin, Yongjun Jiang, Xinjia Wei, Yuan Ma, Huiying Liao, Qingpo Peng, Sheng Dai, Zhigiang Wang,\* Xiuge Zhao\* and Zhenshan Hou\*



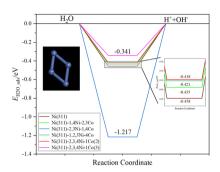
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Hydrotrope-assisted interconnected mesoporous polyindole-decorated carbon nanotubes: synthesis, characterisation, and fabrication of asymmetric supercapacitor

Shashikant Shivaji Vhatkar, Kumar Abhisek, Helen Treasa Mathew and Ramesh Oraon\*



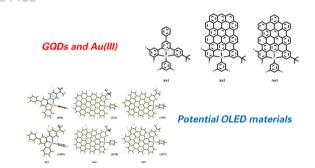
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A computational study of design and performance investigation of Ni-based electrocatalysts for efficient electrocatalytic hydrogen evolution reaction

Jingyi Zou and Xuefeng Ren\*

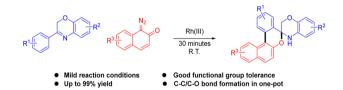
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### Computational investigation of graphene quantum dot and tridentate Au(III) complex composites

Lingkai Tang, Yafei Luo, Guangzhou Sun, Yu Jiang, Wenqin Luo, Xinru Yue, Zhigang Zhang, Chunran Zhang\* and Jianping Hu\*

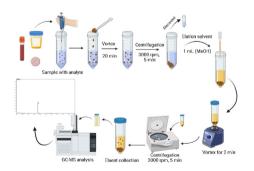
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Efficient synthesis of spirooxazine-pyrans via rhodium-catalyzed [3+3] cascade spiroannulation of benzoxazines with 1-diazonaphthalen-2(1H)-ones

Junwei Huang, Xuelin Yue, Yijie Gao, Yadong Feng and Xiuling Cui\*

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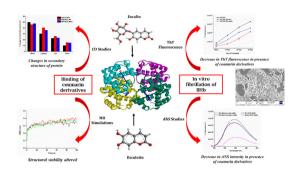
Molecularly imprinted polymer-based dispersive solid-phase extraction for the selective determination of carisoprodol in biological and pharmaceutical samples

Sakshi Manhas, Atul Bajaj, Bharti Jain, Deepak Kumar, Jaskaran Singh, Saurabh Shukla\* and Rajeev Jain\*

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In vitro interactions of esculin and esculetin with bovine hemoglobin alter its structure and inhibit aggregation: insights from spectroscopic and computational studies

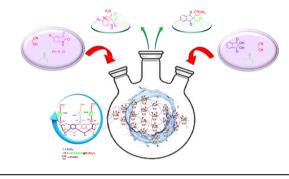
Sona Lyndem, Upasana Hazarika, Anindita Bhatta, Vivek Prakash, Anupam Nath Jha\* and Atanu Singha Roy\*



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3D mesoporous polycalix-functionalized dual Brønsted-Lewis acidic double-charged DABCO-based ionic liquid: a powerful and recyclable supramolecular polymeric catalyst for the synthesis of spiro-fused[4H-pyran]

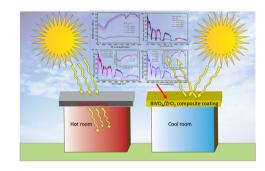
Zahra Karimi, Bahador Karami\* and Aref Mahmoudi Asl



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Development of an intense yellow-coloured BiVO<sub>4</sub>/ ZrO<sub>2</sub> composite coating for anticorrosion multifunctional cool roofing

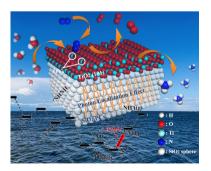
A. H. Riyas, C.V. Geethanjali, Liya Johnson, Liju Elias, A. M. A. Henaish, Aslam Hossain and S. M. A. Shibli\*



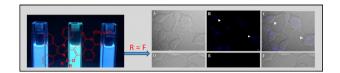
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Photon localization effect and surface oxygen vacancy enhanced photocatalytic nitrogen fixation performance for nanocrystalline titanium dioxide films

Sheng Chen, Ying-Min Xu, Ji-Nan He, Sheng-Li Chen\* and Ai-Jun Wang



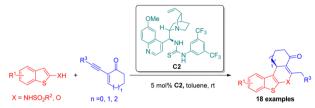
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## Synthesis, photophysical properties, bioimaging potential and in vitro toxicity studies of naphthalimide imidazole boron complexes

Ramu V. Ranga Naidu Chinta, Sushree Sulava, Basava Punna Rao Aradhyula, Harithalakshmi Jandhyam, Debasmita Pankaj Alone\* and Krishnan Venkatasubbaiah\*

#### 14515

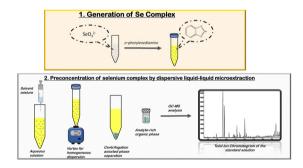


- Asymmetric [3 + 3] annulation to access novel polycyclic benzothiophenes
- Moderate to good yields (50 93%) Good enantioselectivities (up to 97%)

Organocatalytic stereoselective construction of polycyclic benzo[b]thiophenes from 2-aminobenzo[b]thiophenes and alkynyl-substituted enones

Cheng Niu, Yao Zheng and Da-Ming Du\*

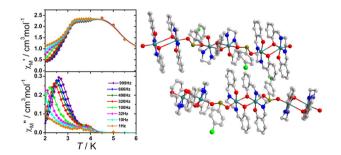
### 14520



Determination of selenium by gas chromatography-mass spectrometry after formation of its volatile derivative and preconcentration using vortex-assisted dispersive liquid-liquid microextraction

Serkan Topal, Miray Öner, Buse Tuğba Zaman, Cansu Demir, Fatma Turak, Ömer Tahir Günkara and Sezgin Bakırdere\*

#### 14528



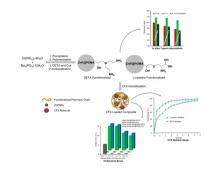
Single chain magnetic behaviour in a selenite-bridged out-of-plane Mn<sub>2</sub>O<sub>2</sub> dimer motif

Shao-Liang Zhang,\* Yu-Wen Liu, Cai-Ran Yue, Xin-Hua Zhao, Yan-Lan Wang\* and Shan-Shan Li\*

#### 14534

Synthesis and functionalization of zinc phosphate@polyglycidyl methacrylate composites for antimicrobial drug immobilization and controlled release: an in vitro study

Tonmoye Sarkar Shathi, Md. Abdur Rahman,\* Md. Ataur Rahman, Md. Nasiruddin, Md. Abdul Alim Al-Bari, Sagar Pande, Tadahiro Komeda, Anwar Ūl-Hamid, Hasan Ahmad and Md. Rabiul Karim\*



### 14551

Design, synthesis, crystal structure, photophysical behavior and aggregation-induced emission of a novel pyrene scaffold multifunctional Schiff base ligand: inhibition of digestive enzymes and docking studies

Naba Kr Mandal, Priyanka Arya, Neera Raghav, Shubhamoy Chowdhury and Jnan Prakash Naskar\*

