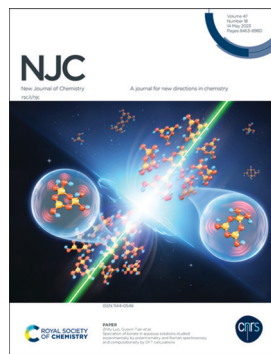


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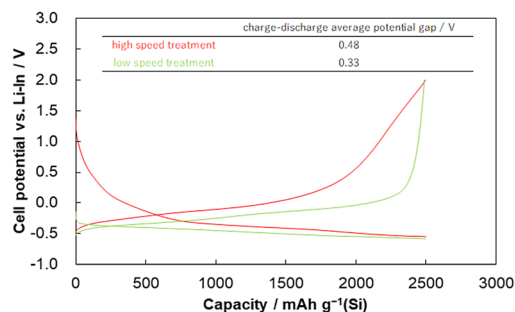
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### Influence of compositing conditions for Si-composite negative electrodes in sulfide-type all-solid-state lithium-ion batteries

Hiroshi Nagata,\* Junji Akimoto and Kunimitsu Kataoka

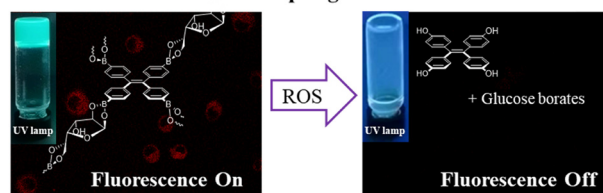


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### Macroscopic and fluorescence detection of reactive oxygen species by using a glucose-linked tetraphenylethylene polymer gel

MiaoMiao Yu, Ningge Xu, Xu-Min Cai, Heng Liu, Shuaiyuan Han,\* Fabiao Yu\* and Weiwei Fang\*

#### ROS Detection via Gel Collapsing with Fluorescence Off



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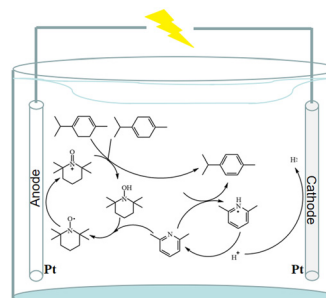


## COMMUNICATIONS

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**Synthesis of *p*-cymene by the electrocatalytic oxidation of  $\alpha$ -terpinene and  $\gamma$ -terpinene**

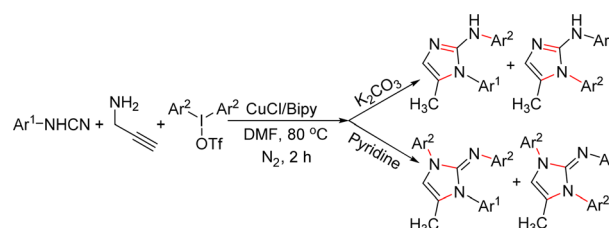
Chenyun Luo, Chuanyong Niu, Jun Zhou\* and Xiangzhou Li



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**Base-controlled copper-catalyzed multi-component cascade reactions of cyanamides, diaryliodonium triflates and propargylamine for rapid assembly of polysubstituted 2-aminoimidazoles and 2-iminoimidazoles**

Run Yang, Yiming Zhao, Shihan Wang, Canming Wu, Jihui Li\* and Shuying Xu

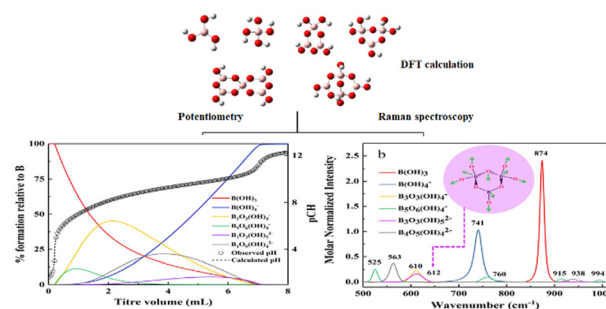


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**Speciation of borate in aqueous solutions studied experimentally by potentiometry and Raman spectroscopy and computationally by DFT calculations**

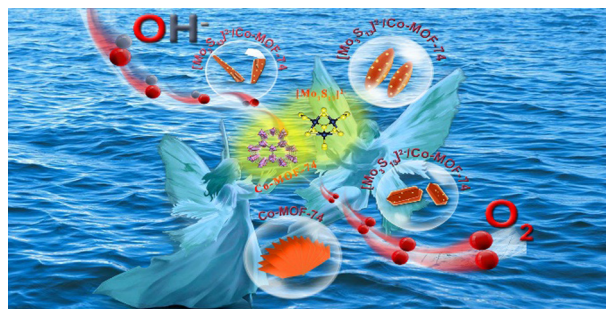
Huanhuan Liu, Qian Liu, Youshi Lan, Di Wang, Lifeng Zhang, Xian Tang, Suliang Yang, Zhifu Luo\* and Guoxin Tian\*



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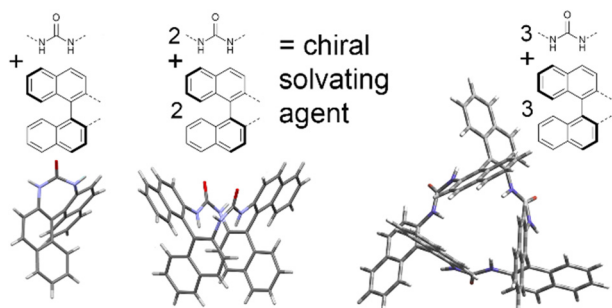
**Morphology control in the synthesis of  $[\text{Mo}_3\text{S}_{13}]^{2-}$  / Co-MOF-74 composite catalysts and their application in the oxygen evolution reaction**

Jianxia Gu,\* Jingting He, Haiyan Zheng and Chunyi Sun\*



## PAPERS

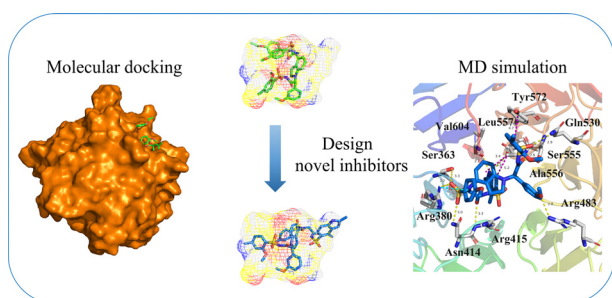
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### Binaphthalene-based cyclic homochiral ureas and their structure-related properties

Roman Holakovský, David Just, Václav Eigner, Martin Jakubec and Petra Cuřínová\*

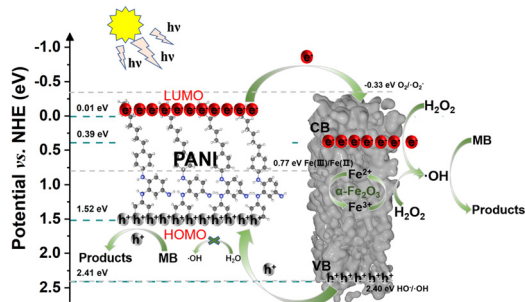
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### Structural investigation of Keap1–Nrf2 protein–protein interaction (PPI) inhibitors for treating myocarditis through molecular simulations

Yan Tuo, Yuelu Tang, Yongxin Yu, Haoran Liang, Bin Huang, Shan Geng\* and Yuanqiang Wang\*

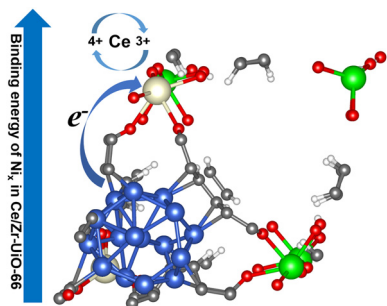
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### Synthesis of rod-like PANI/α-Fe<sub>2</sub>O<sub>3</sub> composite catalysts with excellent photo-Fenton catalytic performance

Shiwei Liu, Xuezhuang Wang, Su Yan, Jing Zeng, Jinshuo Bai, Jianxin Li and Xiaoping Liang\*

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### A density functional theory study of Ni<sub>x</sub> ( $x = 4-16$ ) cluster impregnation effects in multi-metal (Ce, Ti) UiO-66 metal–organic frameworks

Phanikumar Pentyala, Prakash Biswas and Prateek K. Jha\*

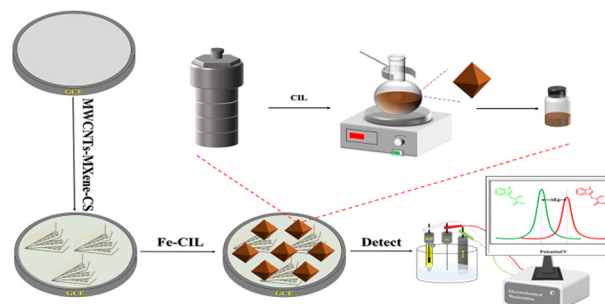


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### An electrochemical sensor based on metal–organic framework–chiral ionic liquid composites for the enantiorecognition of tryptophan enantiomers

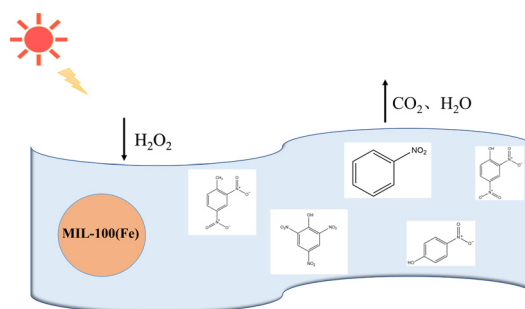
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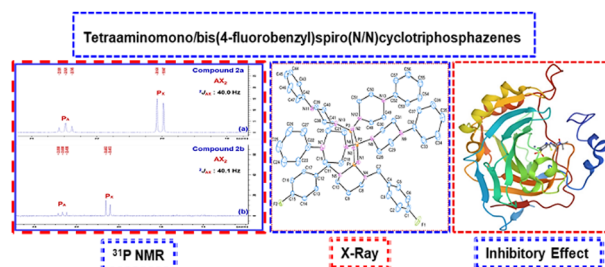
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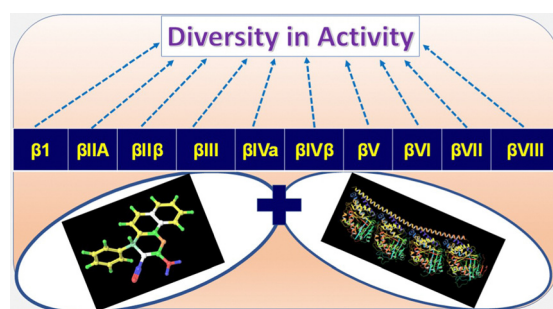
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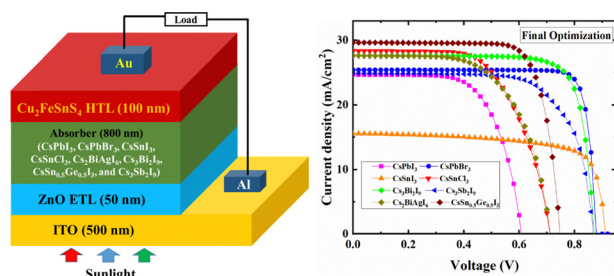
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Mayank,\* Ashutosh Singh, Kumar Udit Saumya, Mayank Joshi, Navneet Kaur,\* Neha Garg\* and Narinder Singh\*





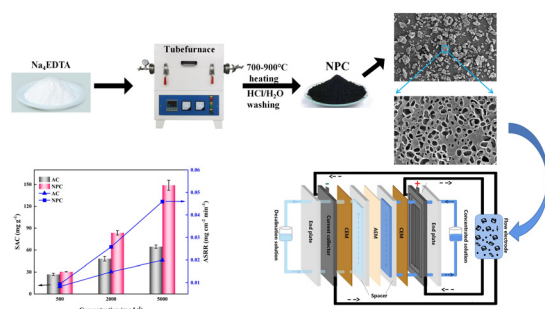
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### A comprehensive study of the optimization and comparison of cesium halide perovskite solar cells using ZnO and Cu<sub>2</sub>FeSnS<sub>4</sub> as charge transport layers

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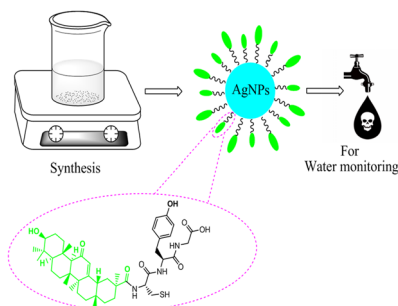
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### Enhanced desalination performance in flow electrode capacitive deionization with nitrogen doped porous carbon

Bo Xie, Qilin Liu, Chungqiong Hu, Hongmei Li, Guangqun Tan\* and Dan Xiao\*

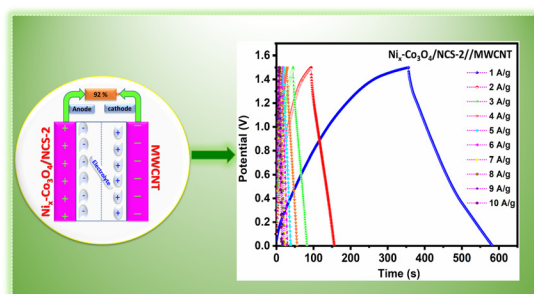
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### Synthesis of conjugated silver nanoparticles of 18β-glycyrrhetic acid peptide conjugate (GAP) as a colorimetric probe for barium ions

Sadiq Noor Khan, Imdad Ali, Farid Ahmed, Muhammad Raza Shah\* and Farzana Shaheen\*

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### Nickel-doped Co<sub>3</sub>O<sub>4</sub> spinel nanospheres embedded in nitrogen-doped carbon composites derived from bimetallic NiCo metal-organic framework as a high-performance asymmetric supercapacitor

S. Silambarasan, Mani Sivakumar, K. Ram Kumar, Zhongqing Jiang and T. Maiyalagan\*

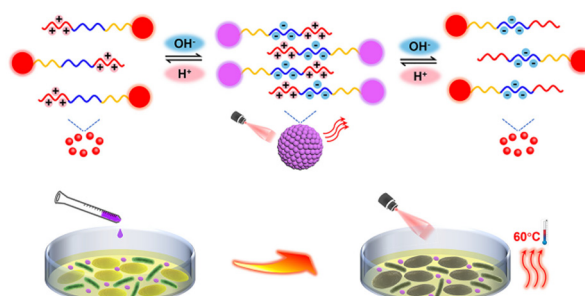


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**pH-Induced reversible self-assembly of gold nanoparticles functionalized with self-complementary zwitterionic peptides for near-infrared photothermal antibacterial treatment**

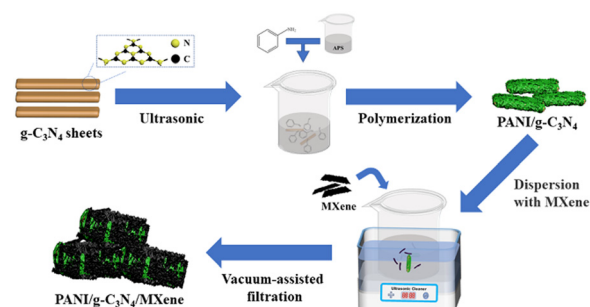
Huimin Qin, Zhuo-Ran Yang, Niannian Lv, Teng Ma, Kehan Du, Jingyi Xiong, Hao Jiang\* and Jintao Zhu



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**Facile fabrication of PANI/g-C<sub>3</sub>N<sub>4</sub>/MXene composites as electrode materials for supercapacitors**

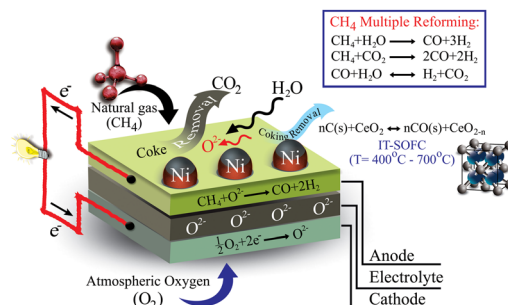
Hangming Xie, Zhibiao Guo, Mingkun Wang, Shiyu Ma, Zhe Kong and Zhiwei He\*



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**The electrochemical study of Ni<sub>x</sub>Ce<sub>1-x</sub>O<sub>2-δ</sub> electrodes using natural gas as a fuel**

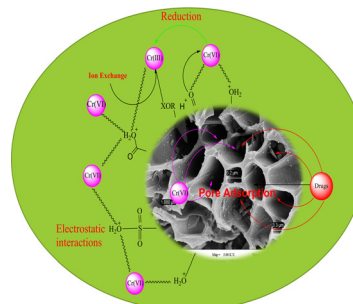
Munazza Mohsin,\* Shumail Farhan, Naveed Ahmad, Asif Hassan Raza, Zohra Nazir Kayani, Syed Hassan Mujtaba Jafri and Rizwan Raza



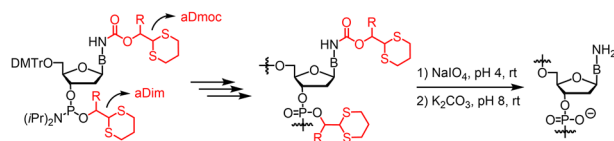
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**Remediation of hexavalent chromium and pharmaceuticals from aquatic environments by employing an oxygen-doped porous carbon adsorbent and its antifungal activity**

Sajad Ur Rehman Beig,\* Umar Ali Dar, Sajad Ahmad Sheergugri and Shakeel A. Shah



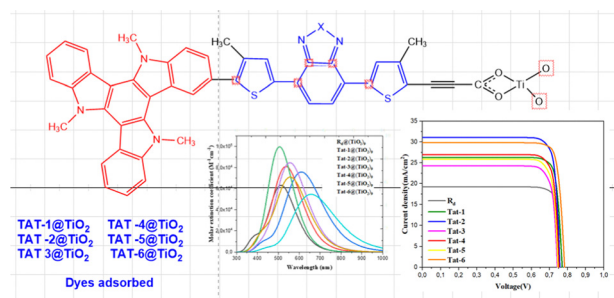
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### Oligonucleotide synthesis under mild deprotection conditions

Komal Chillar, Adikari M. D. N. Eriyagama, Yipeng Yin, Shahien Shahsavari, Bhaskar Halami, Alexander Apostle and Shiyue Fang\*

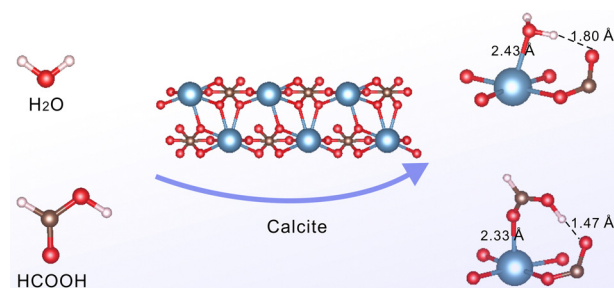
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### High photovoltaic performance (23.75) of triazatruxene-based dye-sensitized solar cells containing different $\pi$ bridges: computational investigation

Alioui Abdelaaziz, Si Mohamed Bouzzine,\* Mohamed Hamidi and Reda M. El-Shishtawy

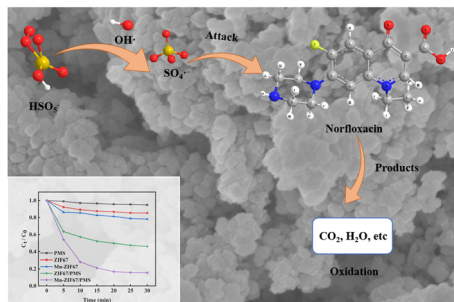
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### Activation of peroxymonosulfate for degradation of norfloxacin by Mn-doped zeolitic imidazolate framework-67 nanocrystals

Jiahao He, Junyou Wu, Yujie Zhang, Qin Yang and Yingchun Yang\*



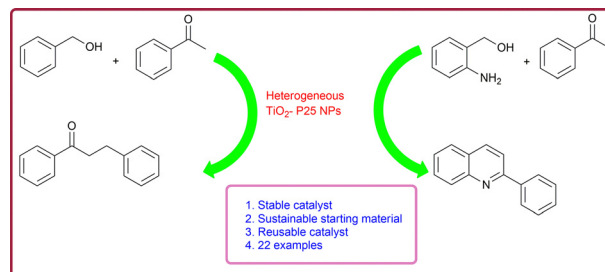


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### TiO<sub>2</sub> (P25) nanoparticle catalyzed C-alkylation and quinoline synthesis via the borrowing hydrogen method

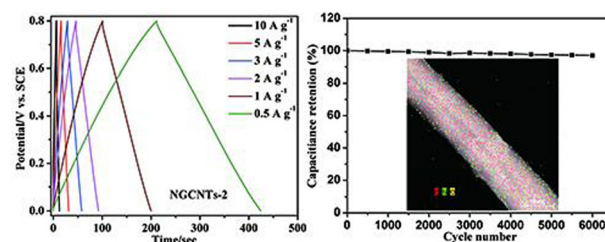
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### High rate-performance supercapacitors based on nitrogen-doped graphitized carbon nanotube networks *in situ* grown on 316L stainless steel as binder-free electrodes

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### Asymmetric hydrogenation using a covalently immobilized Ru-BINOL-AP@MSNs catalyst

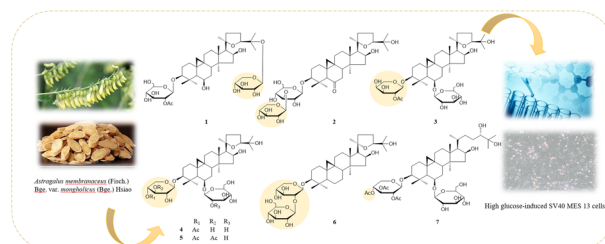
Pratikkumar Lakhani and Chetan K. Modi\*



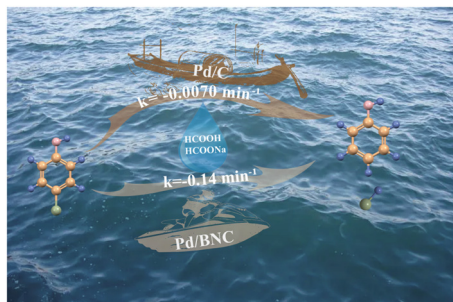
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### Seven new triterpenoid saponins from *Astragalus membranaceus* var. *mongholicus* and the inhibition of high-glucose induced SV40 MES 13 cells

Hai-dan Zou, Yan Liu, Zhen-Peng Zhang, Jia-Tong Wu, Jing Wang, Juan Pan, Wei Guan, Hai-xue Kuang\* and Bing-you Yang\*



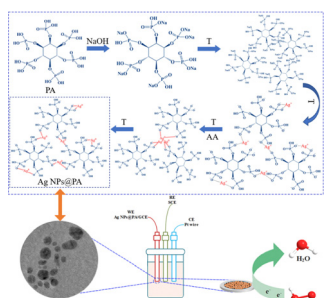
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### Tuning the metal valence state of Pd nanoparticles via codoping of B–N for chlorophenol hydrodechlorination

Jiaxin Zhang, Xianlang Chen, Jinhua Yu, Zheng Fang, Lele Yan, Zijian Wang, Zhengyu Pan, Rongrong Li\* and Li Zhang\*

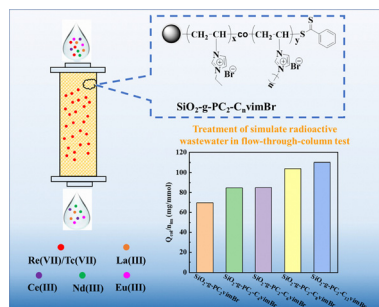
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### Green synthesis and characterization of Ag nanoparticles in a phytic acid/ascorbic acid/sodium hydroxide system and their application in the electrochemical detection of H<sub>2</sub>O<sub>2</sub>

Baolong Niu,\* Hong Wang, Yanwei Zhang, Bin Nie, Huifang Wang, Xiaojie Lian and Wenfeng Li\*

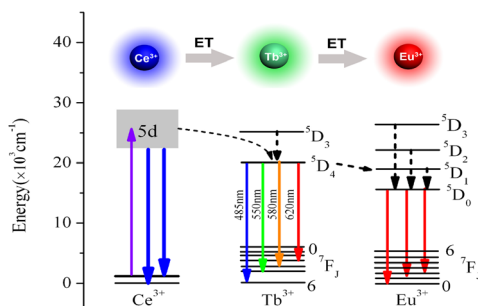
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### Radiation synthesis of binary poly(ionic liquid) functionalized silica-based materials for selective adsorption of ReO<sub>4</sub><sup>−</sup> as analogue of TcO<sub>4</sub><sup>−</sup> from simulated radioactive wastewater

Zhen Dong, Na Zhang, Manman Zhang, Miao Yang, Qiburi Bao and Long Zhao\*

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### To achieve tunable-color emission in a novel tri-doped phosphate sulfate phosphor: Tb<sup>3+</sup> as the energy transfer bridge

Xiaoqiao Kang, Wei Lü,\* Baichao An, Zhennan Zhu, Qiwen Pan and Fei Zhou

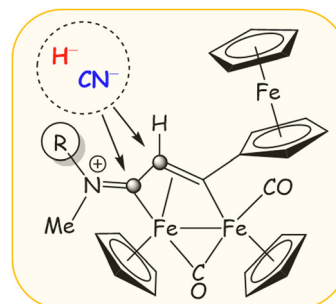


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## Iminium substituent directs cyanide and hydride additions to triiron vinyliminium complexes

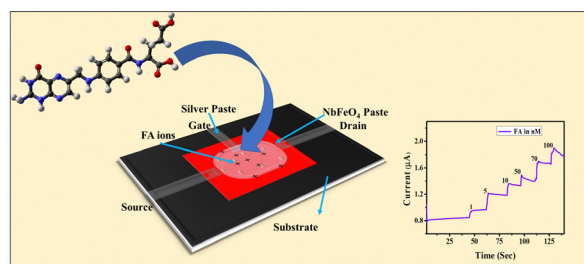
Silvia Schoch, Giulio Bresciani, Chiara Saviozzi, Tiziana Funaioli, Marco Bortoluzzi,\* Guido Pampaloni and Fabio Marchetti\*



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## Facile one-step synthesis of a niobium iron oxide based electrochemical transistor for rapid, label-free detection of folic acid in human blood serum samples

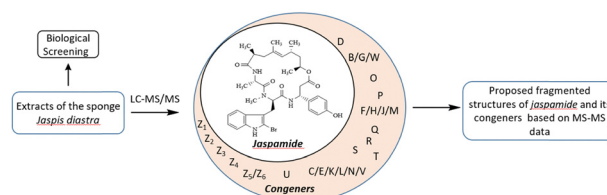
Anjali Sreekumar, Lignesh Durai and Sushmee Badhulika\*



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LC-MS/MS identification and cytotoxic assessment of jaspamide and its congeners from the sponge *Jaspis diastra*

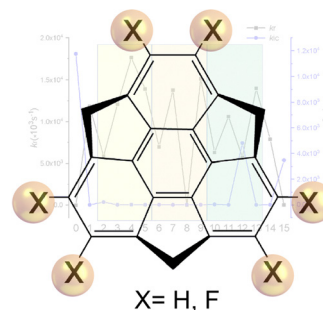
Avin Ramanjooloo, Mahmoud Kamel, Samson A. Adeyemi, Philemon Ubanako, Bertrand Baudot, Asho D. Thakoor, Yahya E. Choonara and Archana Bhaw-Luximon\*



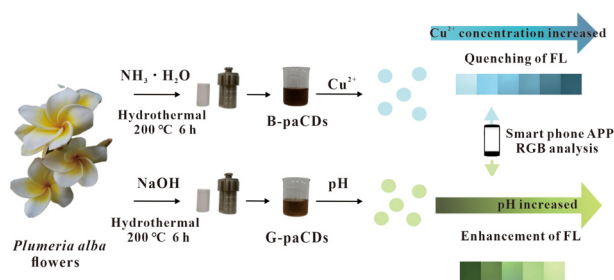
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## Theoretical study on the relationship between the molecular structures and optoelectronic properties of aromatic-fluorinated sumanene derivatives

Xi Chen, Xinpeng Liu, Xin Pu, Simeng Gao,\* Wei Wei and Fu-Quan Bai\*



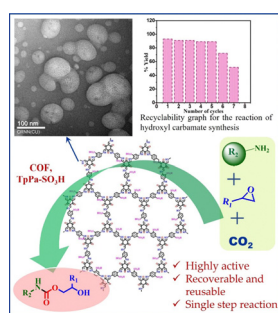
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### One-step green synthesis of carbon dots derived from *Plumeria alba* flowers for sensing and bioimaging

Ye He,\* Xiaojing Chen, Panlin Wang, Xiao Li, Bingbing Wang, Xiaomeng Wang, Zhuzheng Wu and Wenxiang Wang\*

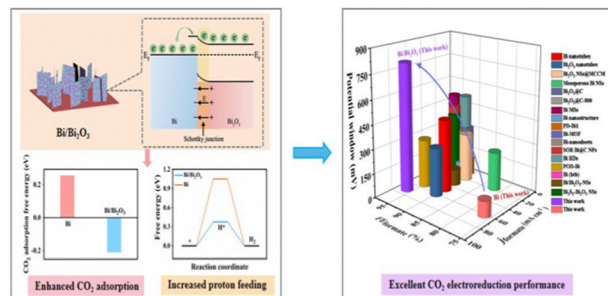
8885



### A SO<sub>3</sub>H-group anchored covalent organic framework for the synthesis of hydroxy carbamates in a single step utilizing CO<sub>2</sub>

Titu Mondal, Jhumur Seth, Somnath Sarkar and Sk Manirul Islam\*

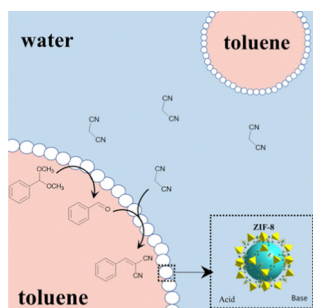
8894



### Simultaneous facilitation of CO<sub>2</sub> adsorption and proton feeding in Bi/Bi<sub>2</sub>O<sub>3</sub> heterostructure nanosheets for enhanced electroreduction of CO<sub>2</sub> to formate in a wide potential window

Wenwen Wang, Guangyu Ruan, Xin Wang, Chao Wu and Qinian Wang\*

8906



### Metal–organic frameworks as an efficient Pickering interfacial catalyst for the deacetalization-Knoevenagel tandem reaction

Yan-Sai Bao, Wei Liu, Zhen-Lin Dong, Zhi-Qiang Xing, Ming Yang, Yong-He Cui, Ling-Xu Meng, Liang-Cheng Li, Xiao-Meng Xu, Zheng-Bo Han and Yu-Yang Zhang\*

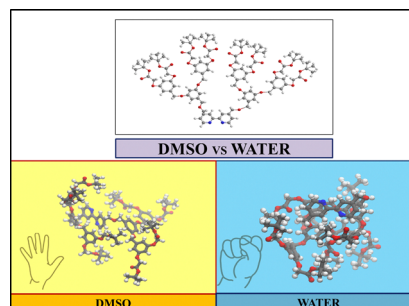


## PAPERS

8913

### Peripherally "tertiary butyl ester" functionalized bipyridine cored dendrons: from synthesis and characterization to molecular dynamic simulation study

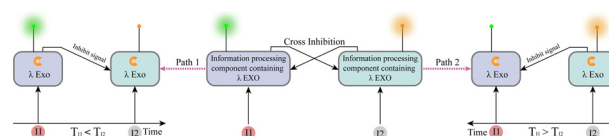
Liju Raju, Sousa Javan Nikkhah,\* Matthias Vandichel and Eswaran Rajkumar\*



8925

### Sequential logic circuit built on $\lambda$ exonuclease for cross inhibition

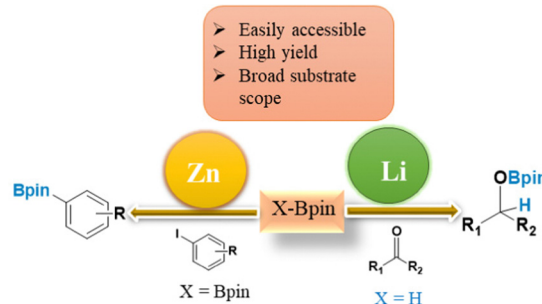
Zhi Guo, Xun Zhang and Shihua Zhou\*



8933

### Syntheses, characterizations and catalytic properties of three zinc complexes and one lithium compound chelated by $\beta$ -diketiminato ligands

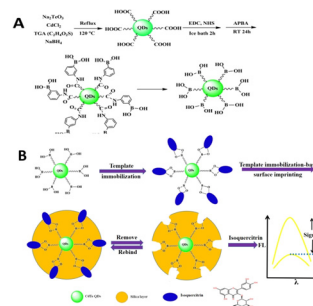
Yanhua Lu, Yafei Li, Yeye She, Chaohong Jia and Yahong Li\*



8942

### Fluorescent nanosensors for selective and sensitive determination of isoquercitrin based on boronate affinity-based imprinted quantum dots

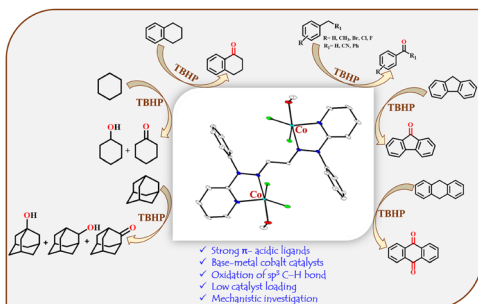
Guanfeng Li, Yipei Wang, Yihan Ding, Zixin Zhang, Na Tang, Xiping Tian and Daojin Li\*





## PAPERS

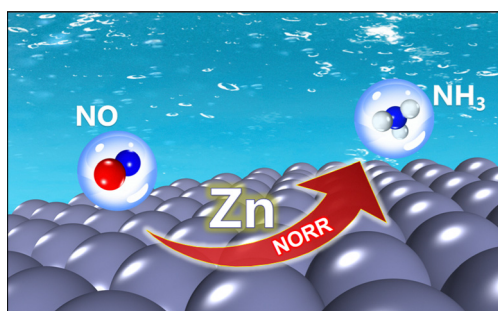
8951



### Design and synthesis of dinuclear cobalt(II) complexes derived from strong $\pi$ -acidic ligands: crystal structure and studies on the oxidation of $sp^3$ C-H bonds

Anshu Singh, Bishal Boro, Ankur Maji, Ovender Singh, Sain Singh, Udai P. Singh and Kaushik Ghosh\*

8960



### Electrochemical reduction of NO to $\text{NH}_3$ on Zn nanosheets

Wenhuan Qu,\* Xing Wang, Yunpeng Sun, Lingyan Dang, Xiaomiao Wang and Ke Chu\*

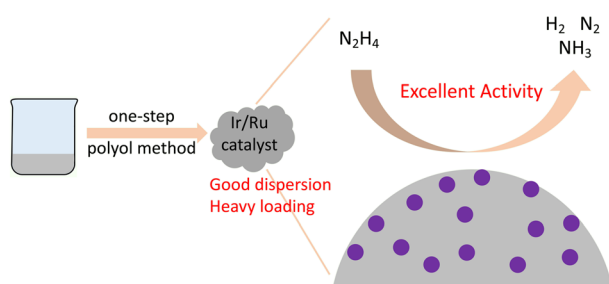
8965



### Carbon dots/silica nanoaggregates for highly efficient adsorption of alizarin red S and malachite green dyes

Xiao-Yu Li, Wei-Rong Wang, Rong-Chao Xue, Pei-Yao Chen, Yong Wang and Li-Ping Yu\*

8974



### A one-step polyol method for well-dispersed and heavily-loaded Ir and Ru catalysts in hydrazine decomposition

Yuhan Liu, Shuqiang Liang, Zhe Tan,\* Jun Cheng and Bo Huang\*

