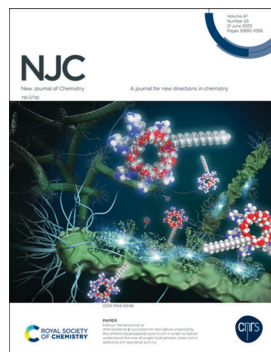


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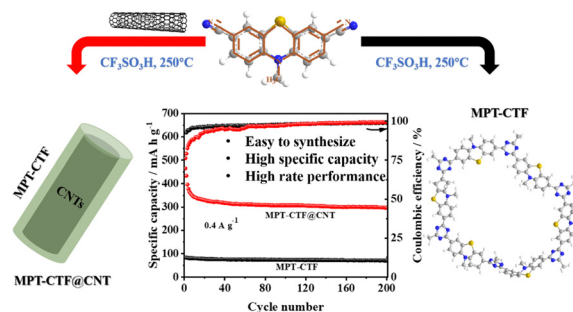
See Hatsuo Yamamura *et al.*, pp. 10921–10929.  
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10911

### High performance cathode materials for lithium-ion batteries based on a phenothiazine-based covalent triazine framework

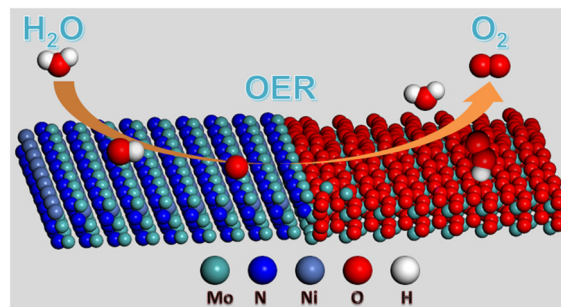
Shaoyu Lv, Qimin He, Ying Zhang, Jingying Guo, Xiangling Peng, Ya Du and Haishen Yang\*



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### $\text{MoO}_2/\text{Ni}_{0.2}\text{Mo}_{0.8}\text{N}$ nanorods on nickel foam as a high performance electrocatalyst for efficient water oxidation

Yu-wen Hu, Hao Yang\* and Jian Chen\*



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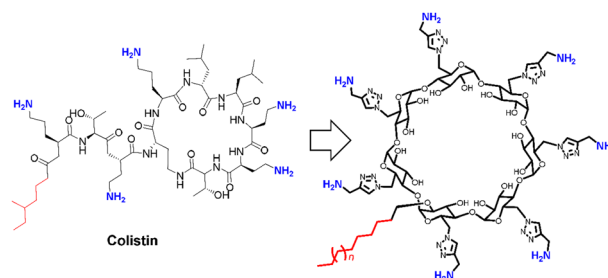


## PAPERS

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# Anti-bacterial $\beta$ -cyclodextrin derivatives inspired by the antimicrobial peptide polymyxin in order to better understand the role of single hydrophobic chain tail in selective anti-bacterial activity

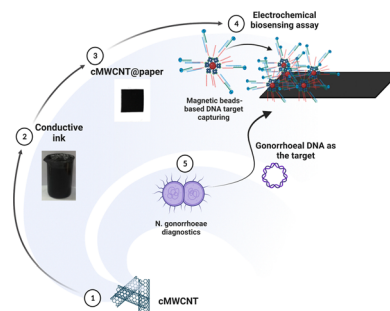
Hatsuo Yamamura,\* Masashi Owaki, Kana Isshiki, Yukari Ishihara, Hisato Kato, Takashi Katsu, Kazufumi Masuda, Kayo Osawa and Atsushi Miyagawa



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# Carbon nanotubes modified conductive ink for application to paper-based electrochemical biosensors for pathogenic DNA detection

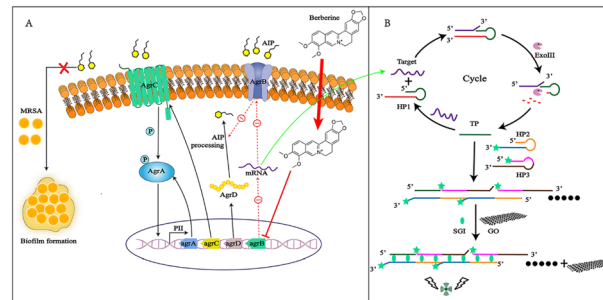
Niharika Gupta, D. Kumar, Asmita Das, Seema Sood and Banshi D. Malhotra\*



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# A fluorometric graphene oxide-based assay for determination of *agrB* gene transcription in methicillin-resistant *Staphylococcus aureus* by coupling exonuclease III-assisted target recycling and hybridization chain reaction

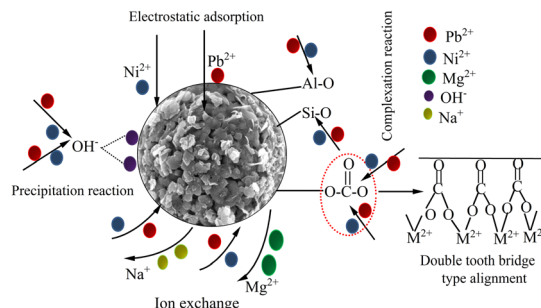
Shiwu Liu, Longzhi Tian, Qizhi He, Xiaoqi Wang, Jue Hu, Ling Li, Fangguo Lu and Yi Ning\*



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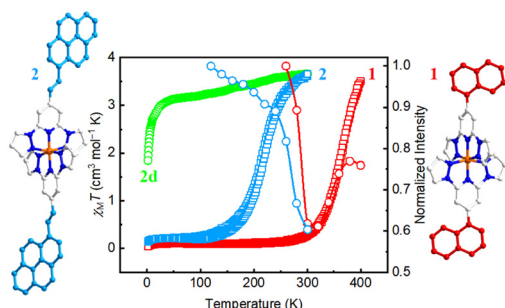
# Study of the removal of Pb(II) and Ni(II) from aqueous solution by new nano-Mg(OH)<sub>2</sub>/fly ash adsorbent materials

Chunxue Zhao, Caili Wang,\* Zhixue Wang, Bin Wang, Guoxin Yao, Ying Qiu and Runquan Yang



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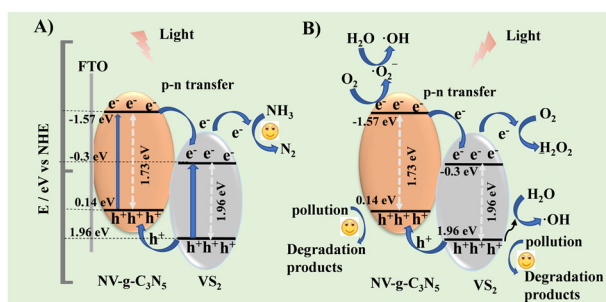
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### Construction of spin crossover-fluorescence bifunctional iron(II) complexes with modified bis(pyrazole)pyridine ligands

Guo-Hui Zhao, Shi-Hui Zhang, Cheng Yi, Tao Liu and Yin-Shan Meng\*

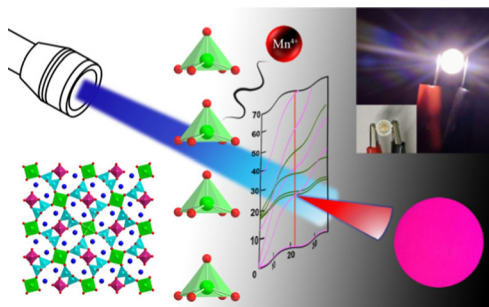
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### Solar light-driven photoelectrocatalytic and photocatalytic applications based on flower-like NV-g-C<sub>3</sub>N<sub>5</sub>@VS<sub>2</sub> heterojunctions

Bicheng Hu, Yuhui Zhang, Jincheng Zhang, Jiazan Liu, Meng Lei, Chenxi Zhao, Qiujun Lu, Haiyan Wang,\* Fuyou Du\* and Shiyang Zhang\*

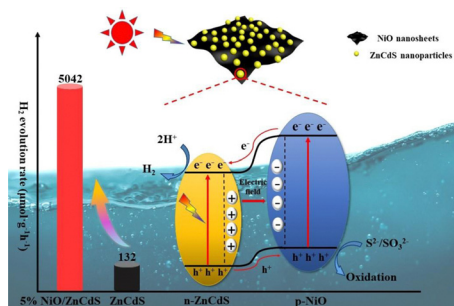
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### A distorted octahedron-dependent red-emitting Li<sub>2</sub>K<sub>4</sub>TiOGe<sub>4</sub>O<sub>12</sub>:Mn<sup>4+</sup> phosphor for white LEDs

Haiyan Wu, Guang Zhu,\* Jian Zhang, Hui Xie, Tao Tan, Yan Gao,\* Lihong Jiang,\* Chengyu Li and Hongjie Zhang

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### Construction of a unique 2D/0D NiO/ZnCdS p-n hetero junction photocatalyst with highly improved photocatalytic H<sub>2</sub> generation capacity

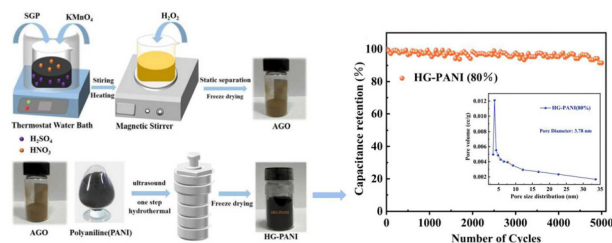
Gang He, Yimin Liu, Runchen Gao, Yufeng Gan, Wei Zhao, Duoqiang Liang, Toyohisa Fujita and Deqian Zeng\*



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## Honeycomb graphene–polyaniline nanocomposites as novel electrode materials for high-performance supercapacitors

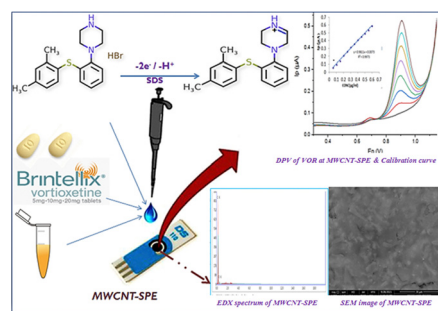
Haiyang Fu, Bo Gao,\* Jiahao Li, Zhuang Liu, Qihao Yin, Zhongbao Feng and Ali Reza Kamali\*



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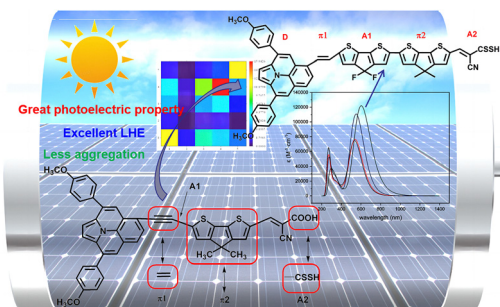
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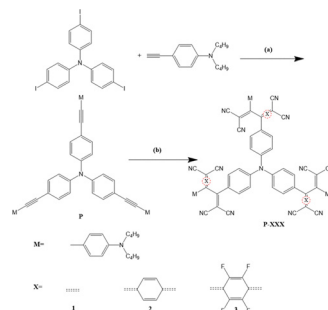
Jing Huang,\* Lei Yang, Zhangxu Chen, Yikun Zhou and Shasha Zeng



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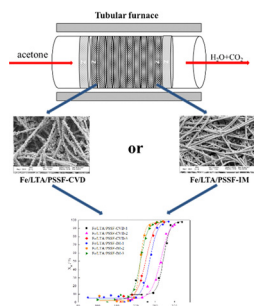
## Click reactions to prepare symmetrical and asymmetrical and broad-band near-infrared absorbing dyes

Yang Zhao, Yang Yu, Wenqi Song, Ruijuan Yao, Jianjing Gao, Huimin Zhang, Yun Zhao, Yuzhen Zhao\* and Dong Wang\*





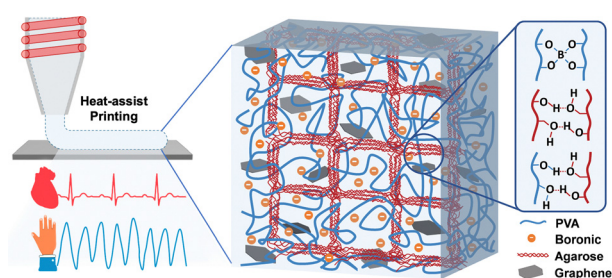
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### Preparation of a microfibrous Fe/LTA zeolite membrane catalyst for acetone oxidation: effect of the preparation method

Chengzhi Hu, Changyan Zhou, Huiping Zhang and Ying Yan\*

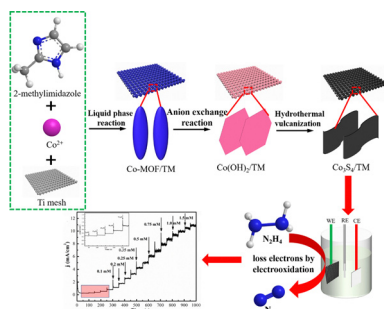
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### Facile fabrication of a printable conductive self-healing hydrogel for human motion and electrocardiogram monitoring

Ruizhe Xing, Renliang Huang,\* Rongxin Su and Wei Qi\*

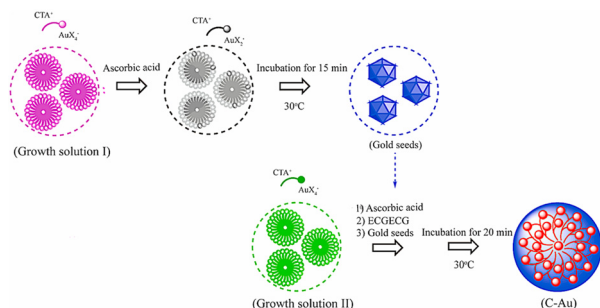
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### Metal-organic framework derived $\text{Co}_3\text{S}_4$ nanosheets grown on Ti mesh: an efficient electrocatalyst for electrochemical sensing of hydrazine

Jiankang Wang, Rui Li, Rong Li, Taiping Xie, Songli Liu and Yajing Wang\*

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### Synthesis of coral-like gold nanocrystals with the glutamic acid-cysteine-glycine-glutamic acid-cysteine-glycine hexapeptide for the electrochemical detection of $\alpha$ -amanitin in urine

Ruiyi Li, Qiyue Zhu, Xiulan Sun, Pengwu Xu and Zaijun Li\*

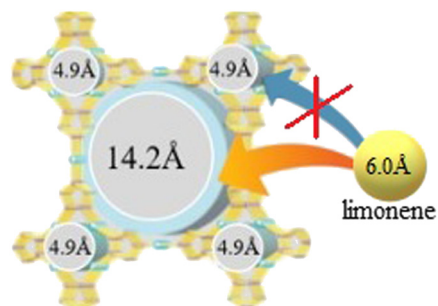


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### Chiral recognition during adsorption on MOF $[\{Cu_{12}(trz)_8\} \cdot 4 Cl \cdot 8 H_2O]_n$ , obtained from achiral building blocks without an external source of chirality

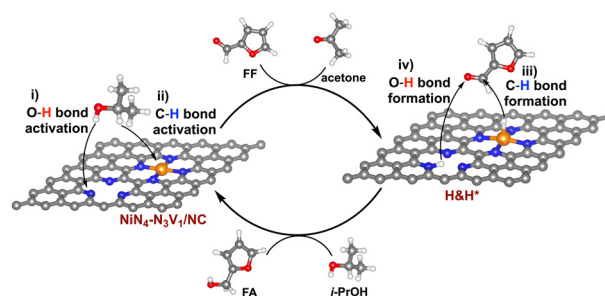
Yuliya F. Sharafutdinova, Ksenia S. Balandina, Irina N. Pavlova, Marat R. Agliullin and Vladimir Yu. Guskov\*



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### Mechanistic insights into the catalytic transfer hydrogenation of furfural to furfuryl alcohol over a N-doped carbon-supported Ni single atom catalyst from first principles

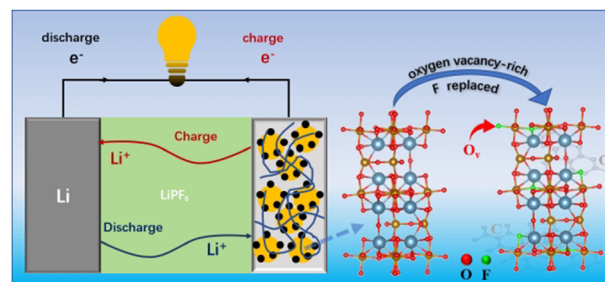
Fan Yang and Wenzhen Lai\*



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### *In situ* construction of oxygen vacancy-rich and fluorine-doped carbon-coated $Ca_2Fe_2O_5$ for improved lithium storage performance

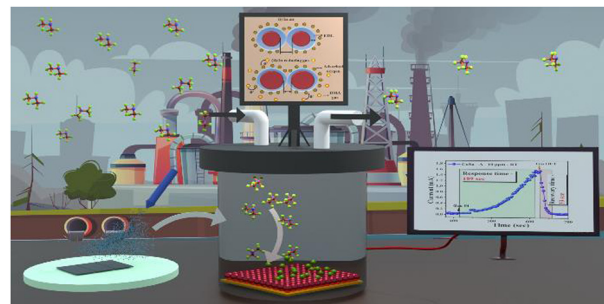
Piao Zhu, Gang Yang, Xiujuan Sun,\* Qiuhan Cao, Yongjie Zhao, Rui Ding, Enhui Liu\* and Ping Gao



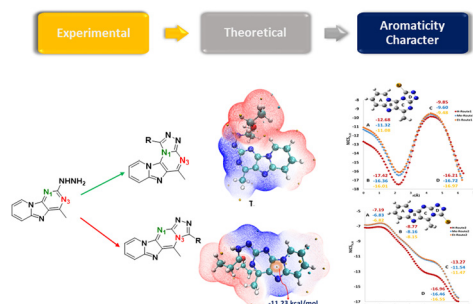
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### Inverse and distorted $Co_2SnO_4$ cubic spinel thin films for dimethylamine detection at room temperature

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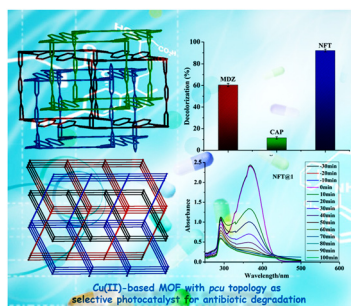
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**The origin of experimental regioselectivity in ring-closing reaction of pyrido[1,2-e]purine systems and comparison of the aromaticity character of probable products: a mechanistic study based on DFT insights**

Parvin Moghimi, Shadi Bolourian, Ali Shiri, Hossein Eshghi, Fereshteh Hosseini and Hossein Sabet-Sarvestani\*

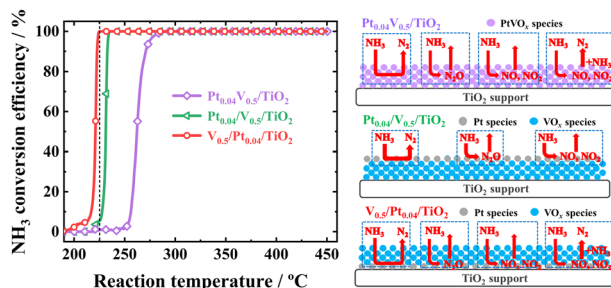
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**A 3D paddle-wheel type Cu(II)-based MOF with pcu topology as an efficient photocatalyst for antibiotics photodegradation**

Mei-Hua Yan, Jun Wang,\* Xiao-Yong Su, Hiroshi Sakiyama, Na Qi,\* Mohd Afzal, Abdullah Alarifi, Devyani Srivastava and Abhinav Kumar\*

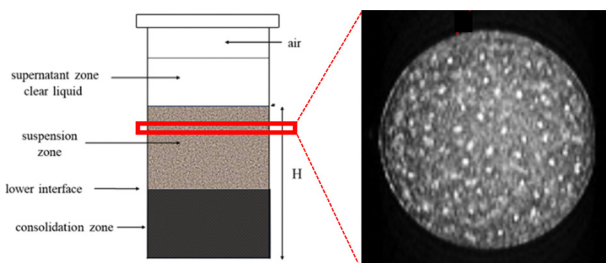
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**Influence of deposition order of dual active components on the NH<sub>3</sub>-SCO performance of the bimetallic Pt-V system supported on TiO<sub>2</sub>**

Yu Gao, Zhitao Han,\* Shijian Lu and Xinxiang Pan

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**Formation and evolution of channels and voids in gravity sedimentation of kaolin suspensions studied by MRI**

Victor V. Rodin\* and William M. Holmes



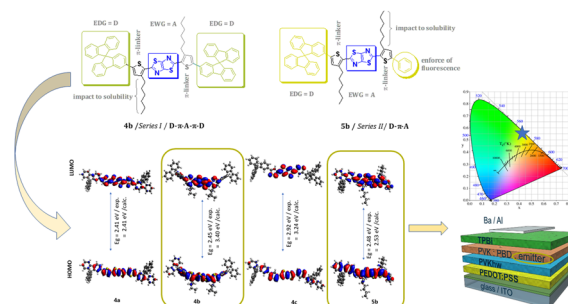


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# Thiazolo[5,4-*d*]thiazoles with a spirobifluorene moiety as novel D- $\pi$ -A type organic hosts: design, synthesis, structure-property relationship and applications in electroluminescent devices

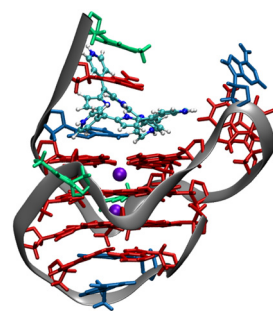
Anita Eckstein-Andicsová,\* Zita Tokárová,\* Erika Kozma, Róbert Balogh, Anna Vykydalová, Wojciech Mróz and Kamil Tokár



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# Binding symmetric porphyrins to the c-MYC promoter Pu24I G-quadruplex: toward more specific ligand recognition by flanking bases

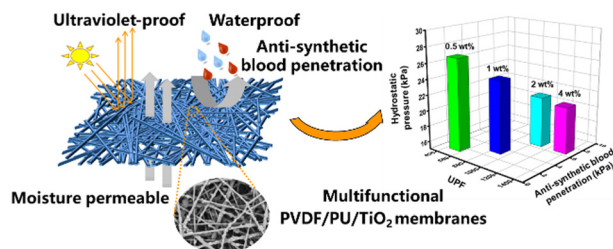
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# Multifunctional poly(vinylidene fluoride)/polyurethane/titanium dioxide nanofibrous membranes with enhanced ultraviolet-proof, resistant to blood penetration, and waterproof performance

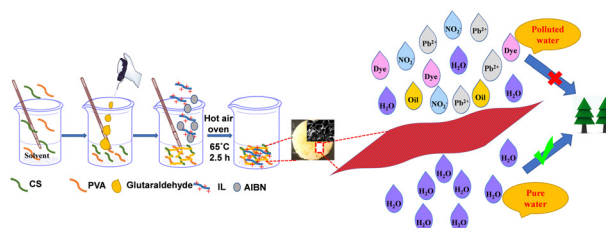
Kefei Yu, Yongbo Yao, Kuihua Zhang, Junlu Sheng,\* Haiyan Liao, Yunyun Zhai, Xueqin Wang,\* Zhe Li and Zhiyong Yan



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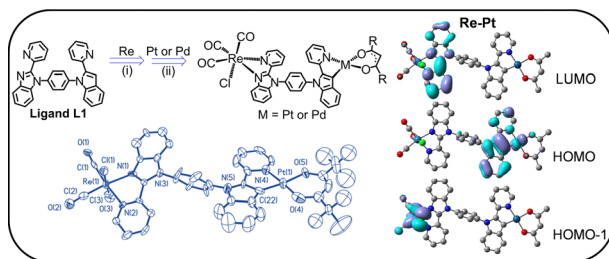
# Chitosan-poly(vinyl alcohol)-ionic liquid-grafted hydrogel for treating wastewater

Anoop Singh, Narinder Singh,\* Navneet Kaur\* and Doo Ok Jang\*



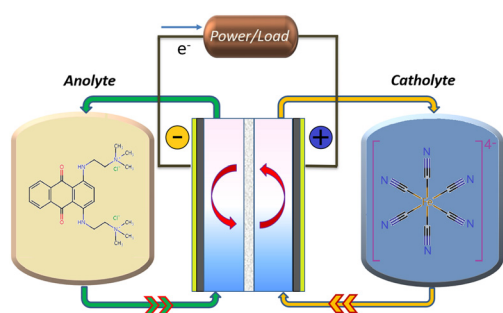
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**Bimetallic Re(i)/Pt(II)/Pd(II) complexes: study of synthesis and properties**

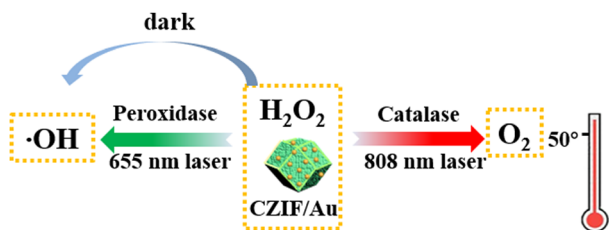
Nan Wang,\* Qing-Dong Zhou and Zhiyu Jia\*

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**A quaternized anthraquinone derivative for pH-neutral aqueous organic redox flow batteries**

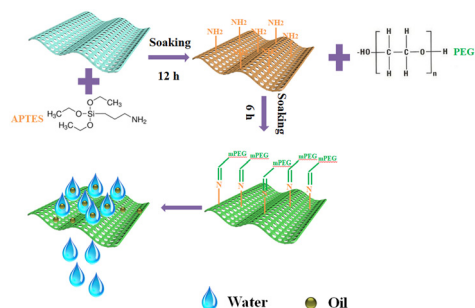
Lei Xu, Qianwei Wang, Dengfeng Guo, Juan Xu\* and Jianyu Cao\*

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**Skillfully manipulating electron transitions of Au nanoparticles for the modulation of nanozyme functions**

Ying Li,\* Yujie Chen, Kaiyuan Wang, Yufeng Zhou, Wei Wei, Yuanjian Zhang and Songqin Liu

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**Underwater superoleophobic PVDF membrane with robust stability for highly efficient oil-in-water emulsion separation**

Qi Zhong, Qing Sun, Bin Xiang, Peng Mu and Jian Li\*

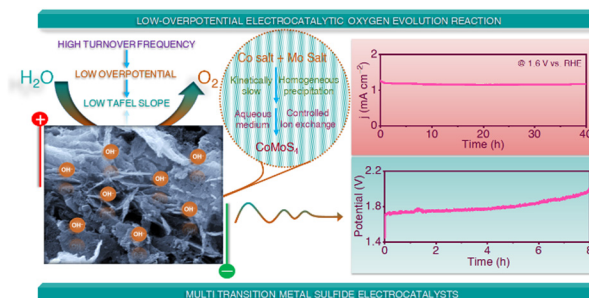


## PAPERS

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# Hierarchical CoMoS<sub>4</sub> flakes with rich physico-electrochemical physiognomies for electrocatalytic oxygen evolution reaction

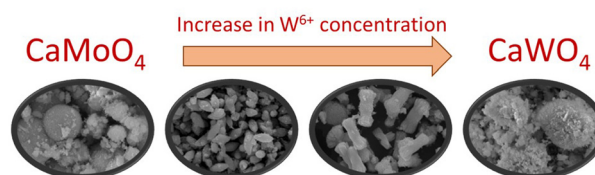
Yogesh Kumar Sonia, Siddhant Srivastav and Sumanta Kumar Meher\*



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# Synthesis, characterization, and photocatalytic CO<sub>2</sub> reduction evaluation of the CaW<sub>x</sub>Mo<sub>1-x</sub>O<sub>4</sub> (x = 0–1) solid solution

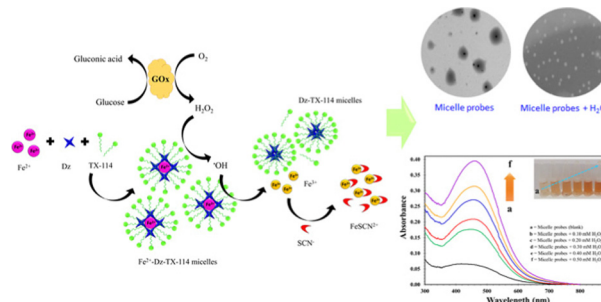
Luis F. Garay-Rodriguez, Luz I. Ibarra-Rodriguez, Leticia M. Torres-Martinez\* and I. Juárez-Ramírez



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# Colorimetric hydrogen peroxide and glucose sensors based on the destruction of micelle-protected iron(II) complex probes

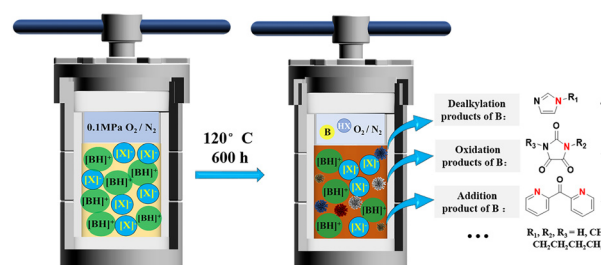
Tawatchai Kangkamano,\* Warakorn Witsapan, Apon Numnuam, Jas Raj Subba and Titilope John Jayeoye



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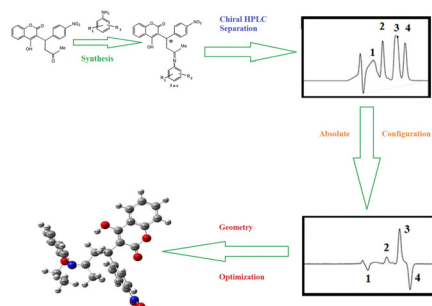
# Degradation processes of protic ionic liquids for NH<sub>3</sub> separation

Huifang Duan, Fan Liu, Shahid Hussain, Haifeng Dong,\* Xiangping Zhang and Zhiyu Cheng



## PAPERS

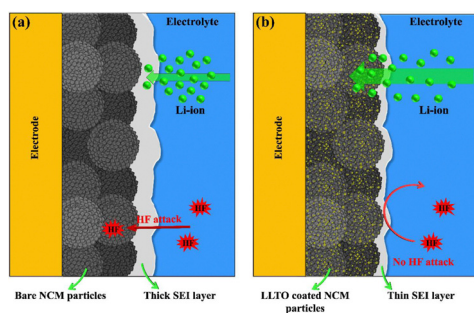
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### Synthesis and characterization of novel imino derivatives of acenocoumarol: chiral separation, absolute configuration and determination of biological activity

Imran Ali,\* Aicha Kraimi, Nasser Belboukhari, Khaled Sekkoum\* and Mouslim Messali

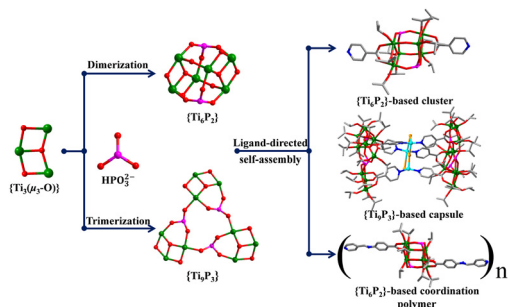
11303



### Li<sub>0.33</sub>La<sub>0.56</sub>TiO<sub>3</sub>, a novel coating to improve the electrochemical properties and safety of NCM523 cathode materials for Li-ion batteries

Ehsan Heidari, Mohammad Amin Razmjoo Kholari and Reza Soltani\*

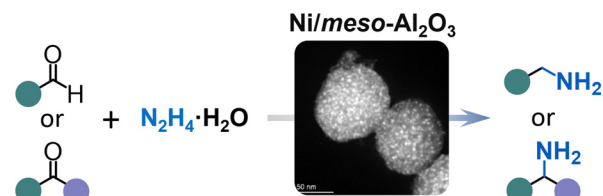
11312



### Ligand-directed structure evolution from a titanium-oxo cluster to coordination capsule and one-dimensional coordination polymer based on {Ti<sub>3</sub>O} units

Min Meng, Lingrong Liao, Qi Zheng\* and Weimin Xuan\*

11318



55 examples, up to 99% yields

- Non-noble metal catalysis
- Non-gaseous reagent
- Broad scope
- Easy operation
- Recyclable catalyst

### A general and selective Ni-catalysed reductive amination using hydrazine hydrate as facile hydrogen and nitrogen sources

Jiazheng Zhu, Chengjie Duan, Sen Ye, Qizhong Zhang, Kun Li, Guangke He, Xiang Liu\* and Zhiguo Zhang\*

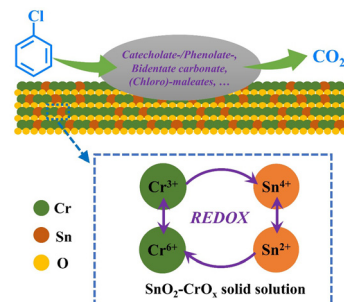


## PAPERS

11325

# The promotion effect of Sn on Cr/KIT-6 for the catalytic combustion of chlorobenzene

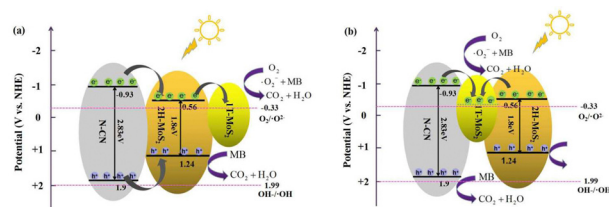
Shiqi Xu, Shantang Liu\* and Fei He\*



11334

# Heterojunctions of N-deficient g-C<sub>3</sub>N<sub>4</sub>/1T@2H-MoS<sub>2</sub> with interfacial C–S–Mo coordination for enhanced photocatalytic activity

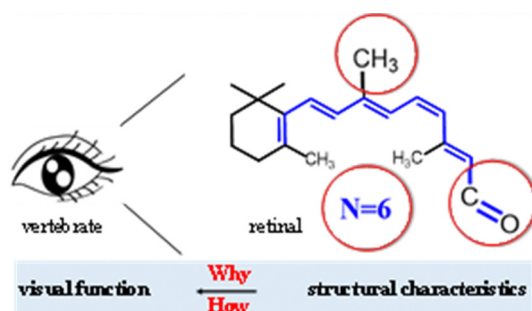
Changzhao Chen,\* Yuanzhi Li and Xing Wang



11345

# Relationship between the structural characteristics of retinal and its visual function—a theoretical study

Jin Feng, Baofeng Li, Xinlu Wang, Xinlong Mao, Tengfei Ma, Dapeng Zhang\* and Siwei Bi\*



## CORRECTIONS

11353

# Correction: Carbon nano-onions from waste oil for application in energy storage devices

SungHoon Jung, Yusik Myung, Gouri Sankar Das, Amit Bhatnagar, Jun-Woo Park, Kumud Malika Tripathi\* and TaeYoung Kim\*





## CORRECTIONS

11354

**Correction: 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

