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Cover

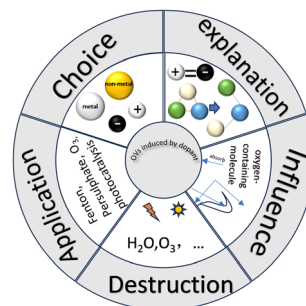
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PERSPECTIVE

21137

The roles of the oxygen vacancies caused by the ion doping method in catalytic materials and their applications in advanced oxidation processes

Jinxin Nie Cui Lai,* Tianjue Hu,* Huchuan Yan, Shiyu Liu, Ling Li, Xiuqin Huo, Xuerong Zhou, Mingming Zhang, Fuhang Xu, Dengsheng Ma, Haoyang Ye, Yixia Li, Neng Wang and Hanxi Li

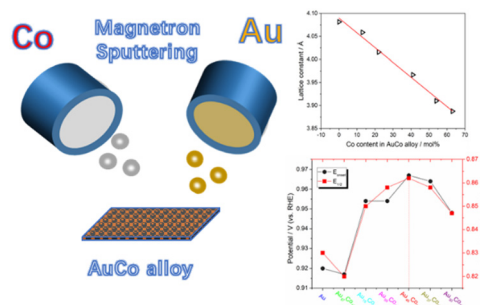


COMMUNICATIONS

21150

Overcoming the problem of insolubility to controllably synthesize AuCo alloy as a high performance electrocatalyst for the oxygen reduction reaction

Zhandong Ren, Zhiqiang Xie, Ruoxi Ming, Yiping Zhan, Yuefei Xin, Juanjuan Han, Lin Zhuang, Yi Liu and Yuchan Zhu*



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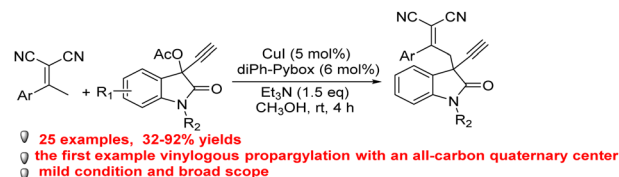


COMMUNICATIONS

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Vinyllogous propargylation of α,α -dicyanoalkenes: construction of an all-carbon quaternary center

Shuhui Lu, Yujie Zhao, Su Xie, Wei Li and Shi-Wu Li*

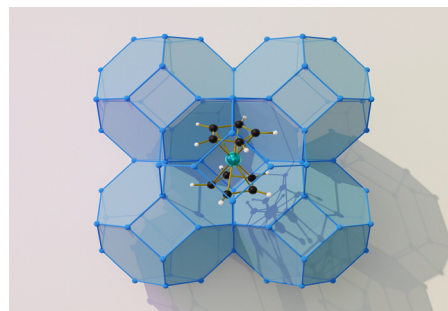


PAPERS

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Encapsulation of cobaltocenium ions in a zeolite-like metal–organic framework

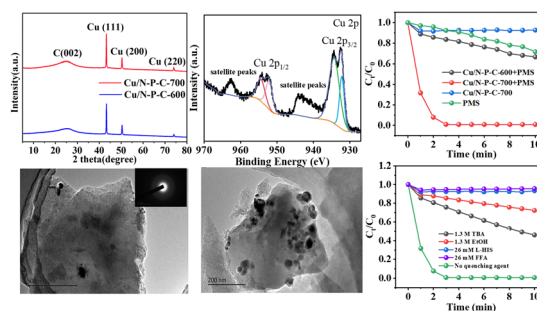
Muhammad Abbas, Anne M. Marti, Arslan Umer, Monu Joy, Ya-Ching Yang, Sue-Lein Wang and Kenneth J. Balkus Jr*



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Facile sol–gel fabrication of Cu/N–P-doped C nanocatalysts for peroxymonosulfate activation towards advanced oxidation of 4-nitrophenol

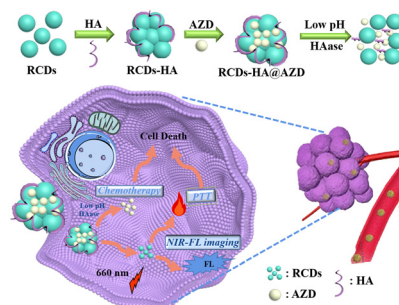
Yadan Wang, Cancan Zhang, Yanchao Shen, Han Wang, Yujie Ma and Pingyun Li*



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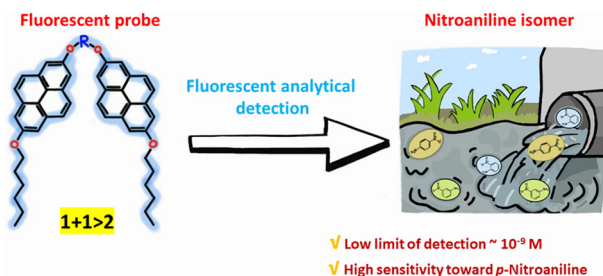
pH/hyaluronidase dual responsive nano drug delivery systems for photothermal/chemotherapy combined treatment for non-small cell lung cancer

Zihan Zhu, Peigang Zhang, Kexin An, Kaihua Zhao, Xianghui Chen, Yuheng Pei, Martin M. F. Choi, Ning Wang* and Wei Bian*



PAPERS

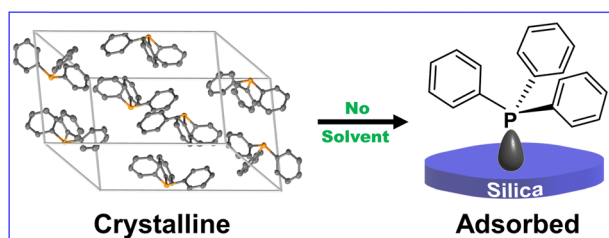
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Synergetic effect of pyrene-based fluorescent probes for trace nitroaniline sensing

Shaoling Li, Wei Liu, Xinyi Song, Chuan-Zeng Wang,*
Carl Redshaw and Xing Feng*

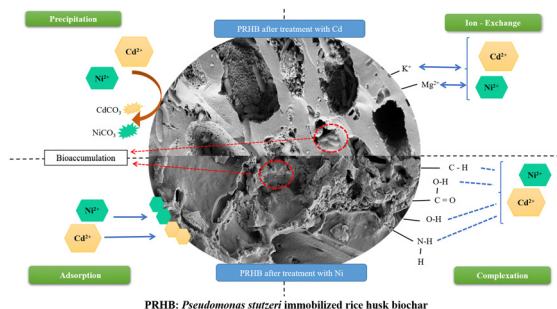
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Adsorption of solid phosphines on silica and implications for catalysts on oxide surfaces

John C. Hoefler, Yuan Yang* and Janet Blümel*

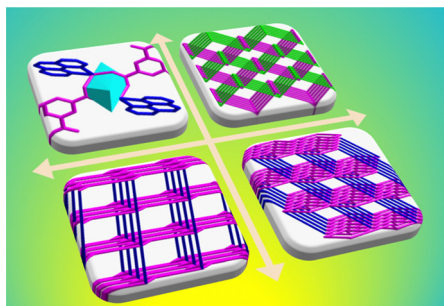
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Developing a biocatalyst showcasing the synergistic effect of rice husk biochar and bacterial cells for the removal of heavy metals

Soumay Koippully Manikandan and Vaishakh Nair*

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Structures and magnetic studies of four new Ni(II) coordination polymers built using symmetrical tetracarboxylate and N-donor linkers

Xiaoyu Zhang, Tianrui Qin, Yichen Liu, Ning An,
Mohd Afzal, Abdullah Alarifi, Mohd. Muddassir,
Hiroshi Sakiyama,* Aurobinda Mohanty* and
Xiuyan Dong*

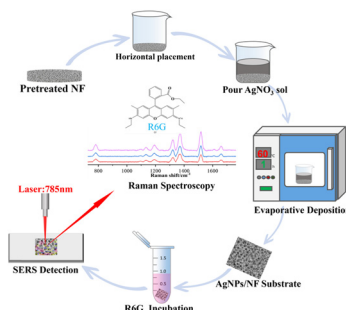


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Vacuum-assisted thermal evaporation deposition for the preparation of AgNPs/NF 3D SERS substrates and their applications

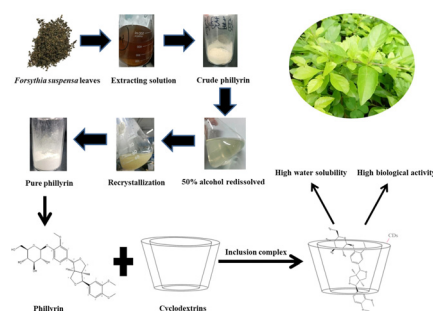
Ziyu Zhou, Atian Xie, Yuanhang Tan, Junfeng Zhang and Changguo Xue*



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Preparation of phillyrin/cyclodextrin inclusion complexes and study of their physical properties, solubility enhancement, molecular docking and antioxidant activity

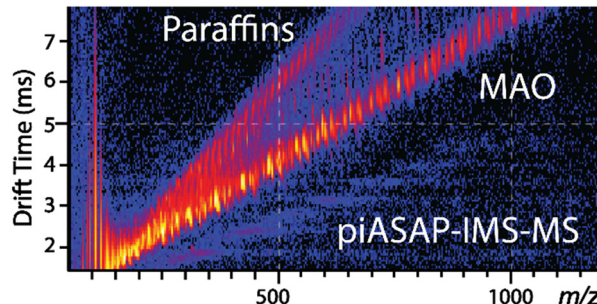
Qiao Qin, Qing-Sheng Zhao,* Hang Li, Yu-Heng Ren, Sheng-hua Zha, Rong-Rong Tian, Jing Li and Shou-bu Hou



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Characterization of modified methylaluminoxane by ion mobility spectrometry mass spectrometry and ultra-high resolution Fourier-transform ion cyclotron resonance mass spectrometry

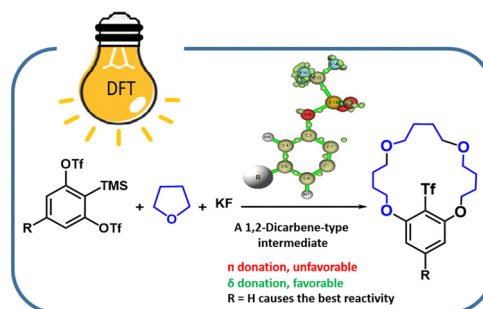
Ahmad Naim, Marie Hubert-Roux, Virginie Cirriez, Alexandre Welle, Aurelien Vantomme, Evgueni Kirillov, Jean-François Carpentier, Pierre Giusti* and Carlos Afonso*



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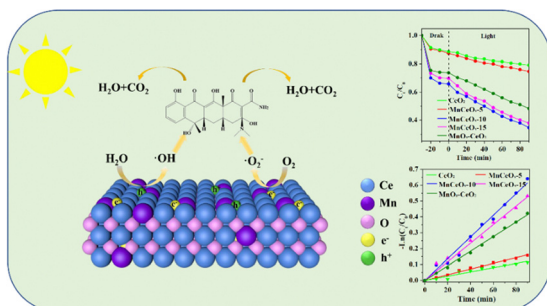
Distortion-controlled 1,2-dicarbene reactivity of 3-triflyloxybenzynes: a theoretical approach

Fatemeh Pirouzi, Hossein Eshghi* and Hossein Sabet-Sarvestani



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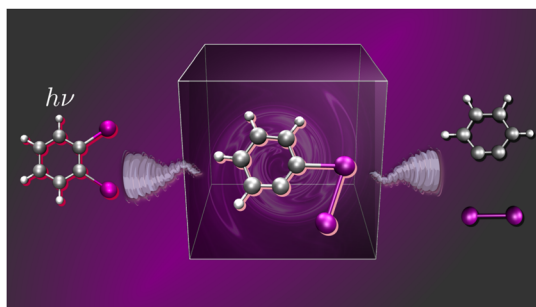
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Hollow sphere manganese–ceria solid solution enhances photocatalytic activity in tetracycline degradation

Huiming Shi, Quanquan Shi,* Jinmei Li and Gao Li*

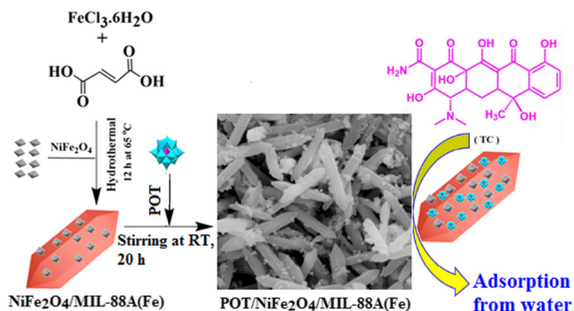
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Mechanistic insights into benzyne formation via 1,2-di-iodobenzene photolysis

Cristian Guerra,* Leandro Ayarde-Henriquez,* Yeray A. Rodriguez-Nuñez, Eduardo Chamorro and Adolfo E. Ensuncho

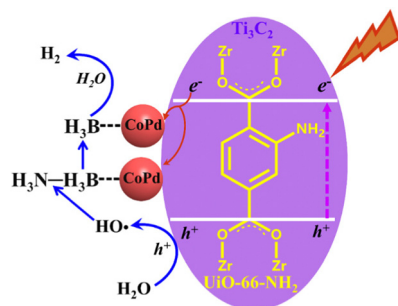
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An MIL-88A(Fe) rod-like metal–organic framework decorated with tungstophosphate polyoxoanions and nickel ferrite nanoparticles for the removal of antibiotics from water

Mona Ashrafi, Saeed Farhadi,* Keivan Javanmard and Farzaneh Mahmoudi

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Photocatalytic dehydrogenation of ammonia borane over Ti₃C₂/MOF-supported Pd-doped Co nanoparticles

Xiaodie Huang, Ziye Liu, Jingjing Tu, Changchun Ji and Ying-Hua Zhou*

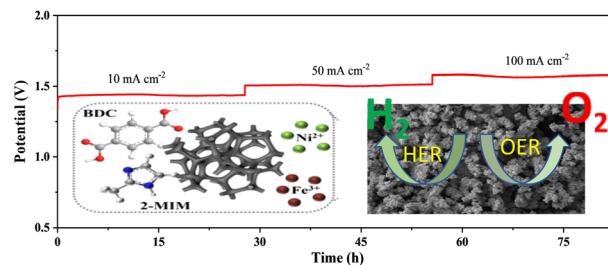


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Preparation of a metal phosphide derived from the dual-ligand NiFe-MOF and its boosted activity toward the electrolysis of water

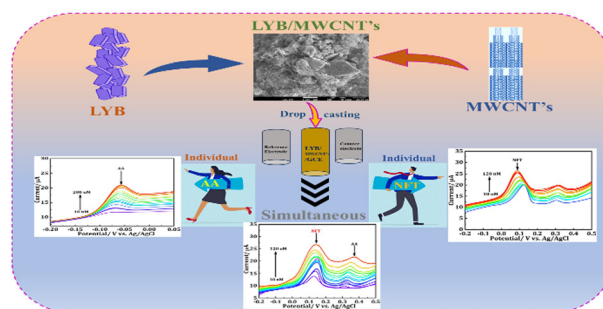
Qing Guo, Lin Wu, Jie Feng, Zhijuan Zou, Chunmei Zeng* and Kunpeng Song*



21307

Individual and simultaneous electrochemical determination of nitrofurantoin and ascorbic acid in biological samples using a novel La₂YBiO₆ double perovskite deposited on MWCNTs as a nanocomposite

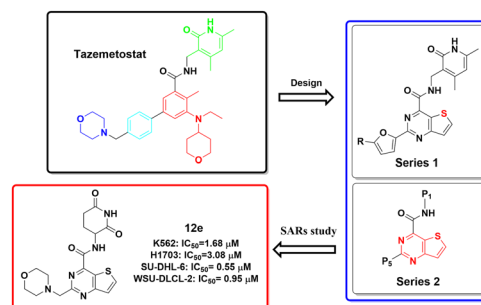
Srujan Basavapura Ravikumar, Sanjay Ballur Prasanna, Santhosh Arehalli Shivamurthy,* Sandeep Shadakshari,* Bhari Mallanna Nagaraja, Jothi Ramalingam Rajabathar and Selvaraj Arokiyaraj



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Design, synthesis, and biological evaluation of novel thieno[3,2-d]pyrimidine derivatives as potent antitumor agents

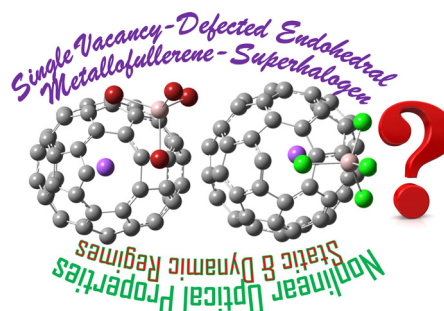
Yadong Zhang, Jiwei Shen, JiaWei Li, Zhi Wang, Yue Wang, Yan Zhu, Shi Ding, YunPeng Zhou, Ye Chen* and Ju Liu*



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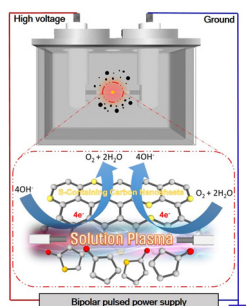
Single vacancy-defect endohedral metallofullerene-superhalogens: molecular topology and nonlinear optical responses of Na@C₅₉[9-4]([8-5])-AlX₄ (X = Cl, Br) systems

Nabil Omri,* Néji Besbes and Yuxiang Bu



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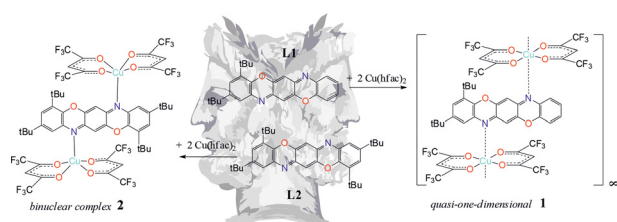
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One-step synthesis of sulfur-containing carbon nanosheets *via* solution plasma process for enhanced electrochemical catalyst

Koangyong Hyun and Sangwoo Chae*

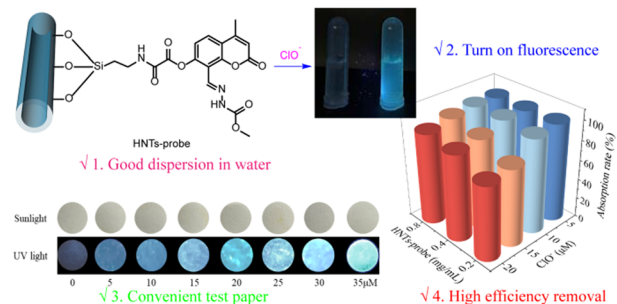
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Field-assisted slow relaxation of magnetization in Cu(II) complexes with pentaheterocyclic triphenodioxazine ligands: the quasi-one-dimensional *versus* the binuclear case

D. V. Korchagin,* E. P. Ivakhnenko, O. P. Demidov, P. A. Knyazev, N. N. Efimov, R. B. Morgunov, A. G. Starikov, A. V. Palii, V. I. Minkin and S. M. Aldoshin

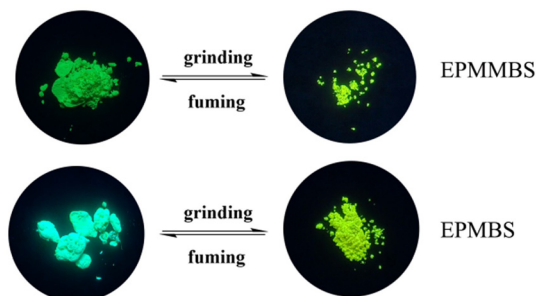
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A dual-functional halloysite nanotube-based nanoprobe for the detection and removal of hypochlorite

Yan Pan, Cuiping Zhou, Shibin Long, Lin Li, Xiongzhi Wu* and Liqiang Yan*

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AIE-active non-planar phenothiazine-based derivatives with mechanical-induced emission enhancement characteristics

Huizhuan Zhu, Jing Zhang, Huijuan Zhang, Chuchu Han, Ting Xu, Jiakun Bai, Peng Jiang and Junhui Jia*

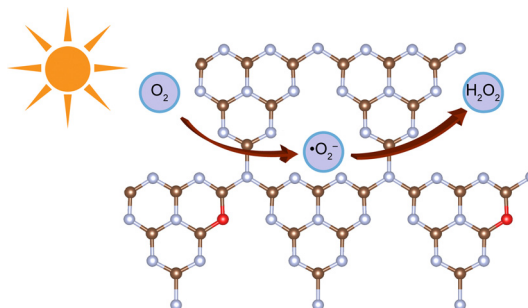


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Facile synthesis of O-doped carbon nitride nanofibers for two-step single-electron oxygen reduction to H₂O₂

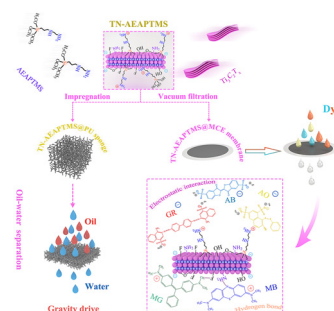
Tingshuo Ji, Xue Wei, Juanjuan Wang, Yuanjing Fan, Ziwei Wang, Shengxian Zhou, Xuefeng Wei,* Baocheng Yang* and Yanzhen Guo*



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Multifunctional applications of amino functionalized Ti₃C₂T_x: high flux oil/water separation and dye removal

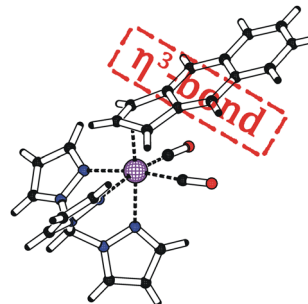
Zhen-Hui Liu, Wei-Qiu Cai, Qing-Ming Wang and Qiu-Feng Lü*



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Benz[e]indenyl and benz[f]indenyl molybdenum compounds: evidence of the η³-coordination mode

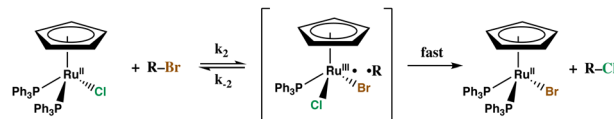
Jiří Štěpán, Jaromír Vinklár, Ivana Císařová, Libor Dostál and Jan Honzíček*



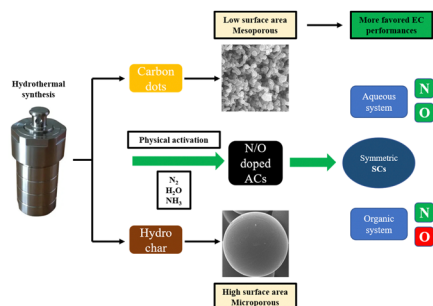
21404

Kinetics and mechanism of halide exchange in reactions of CpRu(PPh₃)₂Cl with alkyl halides: evidence for radical pairs

Katherine Carney, Lauren Polito, Kamilya Reid, Surbhi Srinivasan, Gabrielle Blake, Nithin Chintala, Sijia S. Dong* and Rein U. Kirss*



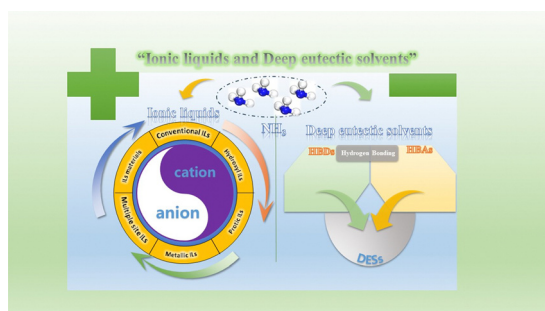
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Mesoporous and microporous carbons from one-pot hydrothermal products for supercapacitor electrodes: effects of porous structures and surface functionality

Siwen Wang, Zhongxing Geng* and Wei Sun*

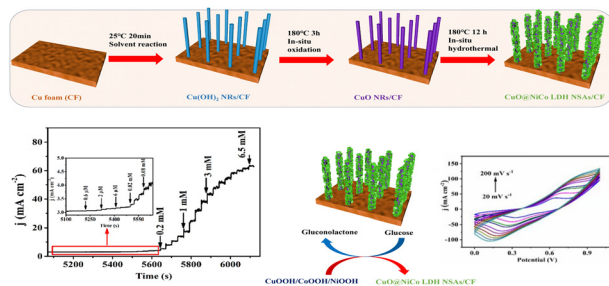
21426



Ionic liquids and deep eutectic solvents for NH_3 absorption and separation: a review

Ke Li, Kai Zong, Xiuqin Wang, Guokai Cui and Dongshun Deng*

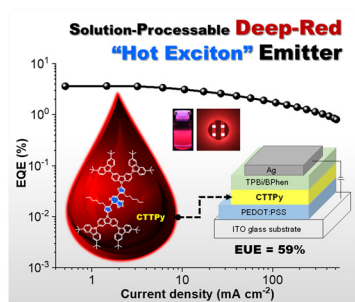
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In situ preparation of hierarchical CuO@NiCo LDH core-shell nanosheet arrays on Cu foam for highly sensitive electrochemical glucose sensing

Ming Yuan, Zhiyuan He, Liwen Tan, Zhangyu Liao, Yujun Liu, Yi Zhang* and Xiaoli Xiong*

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Efficient solution-processable deep-red hot exciton emitters based on thiadiazole[3,4-c]pyridine for a simple electroluminescent device

Patteera Funchien, Nuttapong Chantanop, Pongsakorn Chasing, Taweesak Sudyoosuk and Vinich Promarak*

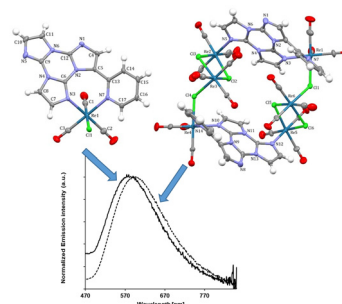


PAPERS

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2-Pyridine cyclic triimidazole as a chelating and bridging ligand in mono- and hexa-nuclear Re(I) complexes with emissive properties in solution and in the solid state

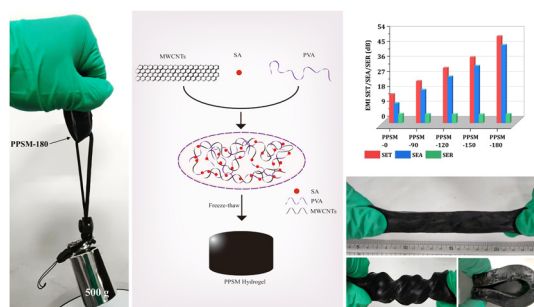
Daniele Malpicci, Daniele Maver, Daniela Maggioni, Pierluigi Mercandelli, Lucia Carlucci, Elena Cariati, Patrizia Mussini and Monica Panigati*



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Mechanical, robust and conductive eco-friendly self-assembling hydrogel: a novel material for electromagnetic shielding

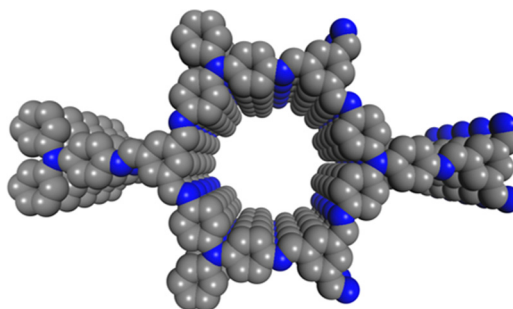
Yuhuan Xu, Meng Pei, Xiao Zhan, Hongwei Wang, Daohai Zhang* and Shuhao Qin*



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Construction of microporous covalent organic frameworks for high gas uptake capacities

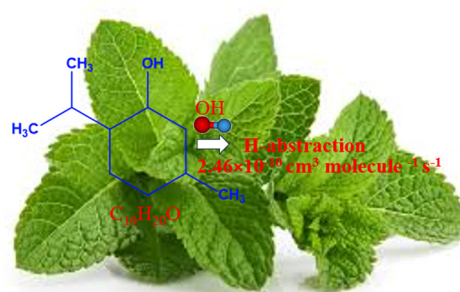
Chunyu Zhang, Yanning Zhao,* Jiajun Li, Yuwei Zhang, Dongxue Wei, Ce Xing and Xiaolong Luo*



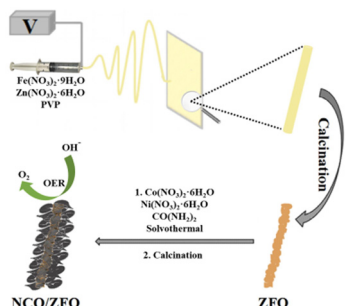
21490

Mechanism and kinetics of atmospheric degradation of menthol initiated by hydroxyl radical

Angappan Mano Priya and Basheer Azaad*



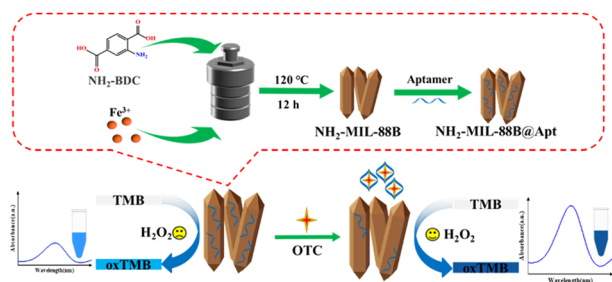
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ZnFe₂O₄ nanofibers decorated with NiCo₂O₄ nanosheets as an efficient electrocatalyst for the oxygen evolution reaction

Xianchun Liu and Yan Xing*

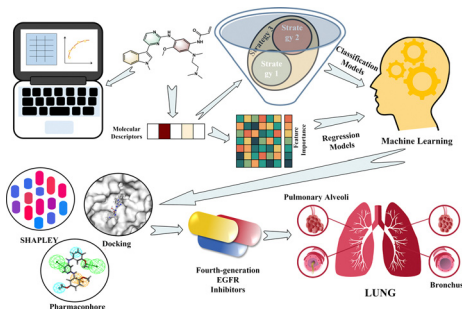
21505



A colorimetric aptasensor based on NH₂-MIL-88B for highly selective detection of trace oxytetracycline in water

Yuhao Lu, Tao Wang, Chengshun Tang, Qijian Niu* and Tianyan You

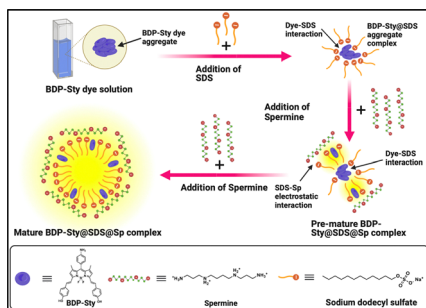
21513



Machine learning method aided discovery of the fourth-generation EGFR inhibitors

Yu Zhang and Yan Li*

21526



A simplified and cost-effective detection of cancer bio-markers using BODIPY and surfactant-templated fluorogenic self-assembly

Soumyadeep Sarkar, Sudip Gorai, Akhilesh Potnis, Padma Nilaya Jonnalagadda, Soumyaditya Mula and Goutam Chakraborty*

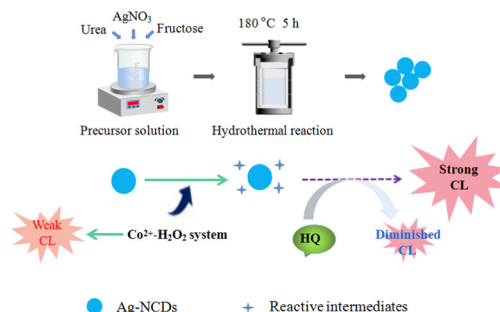


PAPERS

21533

Ag and N-doped carbon dot-enhanced H_2O_2 - Co^{2+} chemiluminescence and its application for the determination of Co^{2+} and hydroquinone

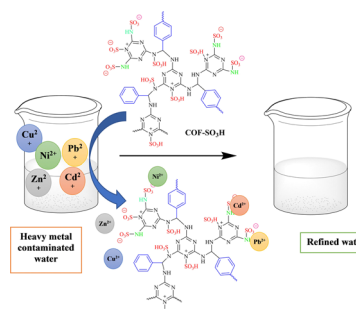
Xiaowei Wang, Zixuan Wang, Yamei Jiang and Suqin Han*



21540

Simultaneous removal of heavy metal ions by a sulfonic acid-functionalized melamine-based covalent organic framework: optimization by response surface methodology

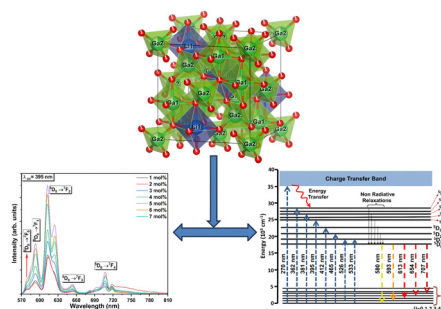
Asieh Salami, Arash Larki* and Seyyed Jafar Saghanezhad



21553

Effect of Eu^{3+} doping on the structural, optical, and photoluminescent properties of LiGa_5O_8 phosphor

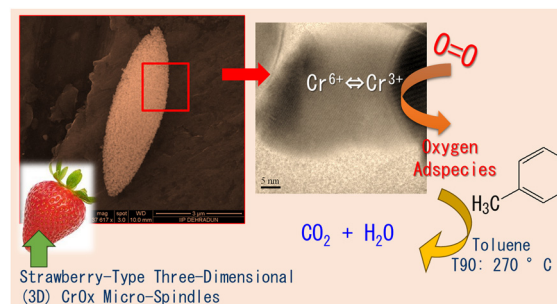
Umer Mushtaq and Vijay Kumar*



21568

Tailoring oxygen vacancies and active surface oxygen species in CrO_x hierarchical strawberry-type three-dimensional (3D) micro-spindle catalysts for total catalytic oxidation of VOCs

Shankha S. Acharyya,* Swati Rana, Sachin K. Sharma, Mukesh K. Poddar, Vinod Kumar, Takehiko Sasaki, Shilpi Ghosh* and Rajaram Bal*



CORRECTION

21577

Correction: A sequential Ugi–Smiles/transition-metal-free *endo*-dig Conia–ene cyclization: the selective synthesis of saccharin substituted 2,5-dihydropyrroles

Hassan Seyrani, Sorour Ramezanpour,* Aref Vaezghaemi and Farzad Kobarfard

