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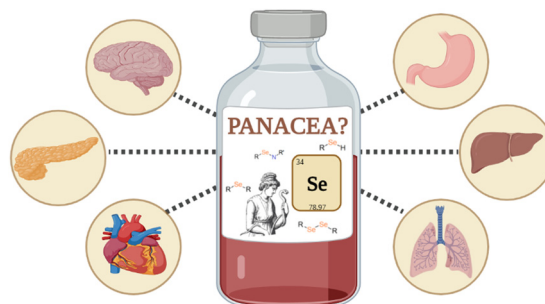
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PERSPECTIVE

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Organic selenocompounds: are they the panacea for human illnesses?

Pablo A. Nogara, Meire E. Pereira, Cláudia S. Oliveira, Laura Orian and João B. T. Rocha*

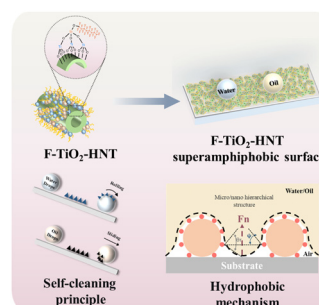


COMMUNICATIONS

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A simple preparation of a F-TiO₂-HNT superamphiphobic surface with a tube-point-like micro/nano hierarchical structure for self-cleaning and anti-fouling

Wen Si, Jun Wu* and Zhiguang Guo*



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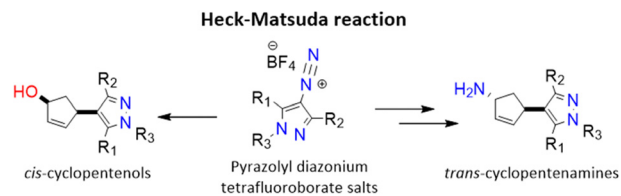


COMMUNICATIONS

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Highly diastereoselective Heck–Matsuda reaction with pyrazolyl diazonium salts

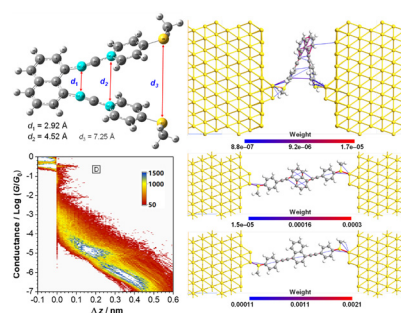
F. Bellina, F. Berti, S. M. Bertozzi, T. Bandiera and F. Bertozzi*



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Tuning multichannel conductance via through-space conjugated naphthalene

Tianwei Li, Luqing Gan, Lin Li* and Shijie Zhen*

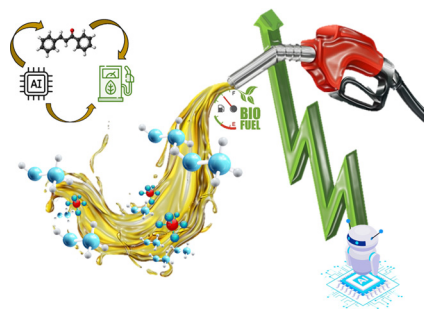


PAPERS

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Arylsulfonamide chalcones as alternatives for fuel additives: antioxidant activity and machine learning protocol studies

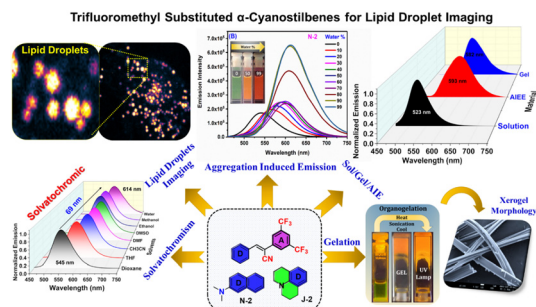
Vitor S. Duarte,* Igor D. Borges, Giulio D. C. d'Oliveira, Eduardo C. M. Faria, Leonardo R. de Almeida, Valter H. Carvalho-Silva, Caridad Noda-Pérez and Hamilton B. Napolitano*



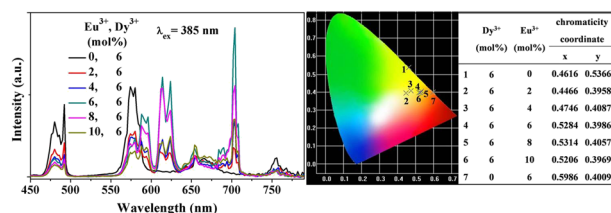
10016

AIE active cyanostilbenes for live-cell imaging of lipid droplets

Rahul Dahiwadkar, Deeksha Rajput, Deepmala Singh, Virupakshi Soppina* and Sriram Kanvah*



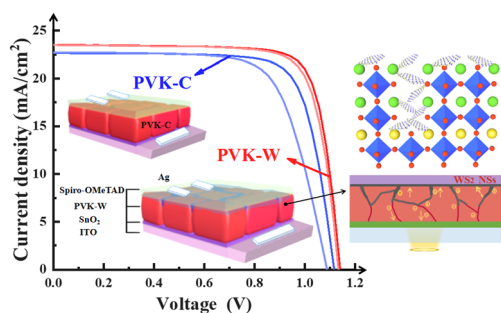
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$\text{CaAl}_2\text{Si}_2\text{O}_8:\text{Dy}^{3+}, \text{Eu}^{3+}$: synthesis, luminescence properties, energy transfer, and tunable emission

Renping Cao,* Zibin Lai, Yewen Cao, Fangrui Cheng, Chenxing Liao,* Shuijing Nie, Xuehua Yi and Jing Wang*

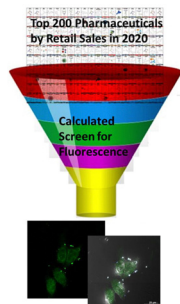
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A multifunctional strategy of two-dimensional WS₂ modified absorbers for efficient planar perovskite solar cells

Qinghua Sun, Wanting Hu, Miao Yu, Fengyou Wang, Xiaoyan Liu, Lihua Yang, Huilian Liu,* Lin Fan* and Lili Yang*

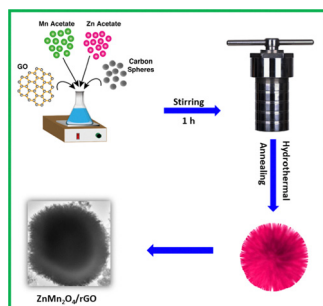
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A study on optical properties of various hot drug molecules by 2020

Chun Zhang, Yuting Yang, Xue Yan, Yi-Tao Sun, Andong Shao, Sinuo Gao, Yu-Bo Zhou, Ai-Min Ren,* Jia Li* and Wen-Long Wang*

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Bifunctional ZnMn₂O₄/reduced graphene oxide microspheres with a needle-like surface architecture as effective electrodes for energy storage

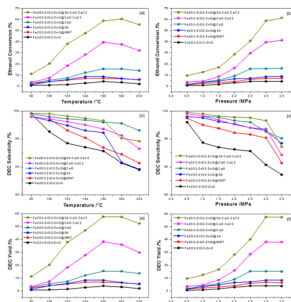
Rosaiah Pitcheri,* Guru Prakash Nunna, Dhananjaya Merum, Bandar Ali Al-Asbahi, Sambasivam Sangaraju,* Chalapathi Uppala* and Si-Hyun Park*



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Novel $\text{ZrFe}_2\text{ZnO}_6$ with multiple functional composite supports for one-step synthesis of diethyl carbonate from CO_2 and ethanol

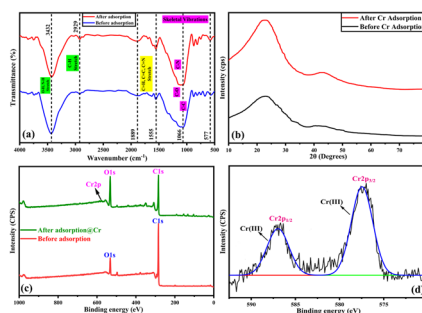
Meng Zhang*



10078

Excellent $\text{Cr}(\text{vi})$ adsorbent made from pyrolyzed green coconut trash with parametric modelling and optimization using RSM and experimental data

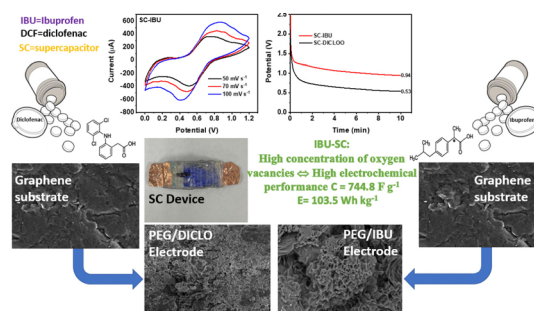
Ashwani Kumar, S. N. Upadhyay, P. K. Mishra and Monoj Kumar Mondal*



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Recycling expired pharmaceutical drugs as redox materials for efficient and sustainable flexible supercapacitors

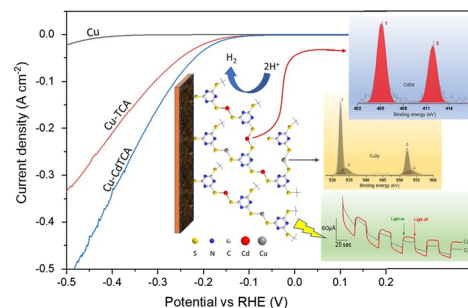
Luis Ojeda, Jorge Oliva,* Andres Ivan Oliva and Carlos Rodriguez Garcia



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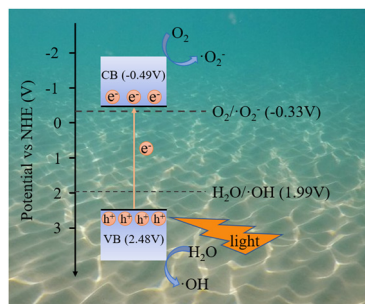
Visible light-active binary metal ion containing functional triazine metallopolymers as a stable p-type photo-electrocatalyst in protic electrolytes

Prashanth Vishwa, Charles Babbet, Bhargav Reddy, Debabrat Kotoky, Sarada K. Gopinathan, Iranna Udachyan, Vishwanath R. S. and Sakthivel Kandaiah*



PAPERS

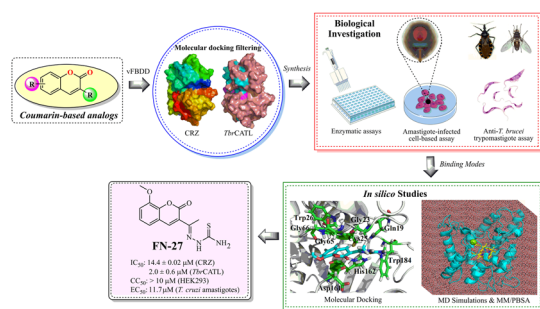
10116



Enhanced photocatalytic performance of anatase titania nanotubes via the synergistic effect of trace copper doping and oxygen vacancies

Chenguang Wang, Lijun Chen, Guanwen Su, Wanping He, Lin Hao* and Hongyuan Wei

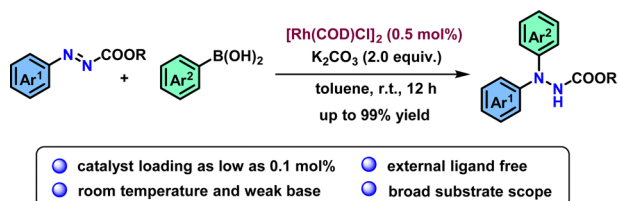
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Coumarin-based derivatives targeting *Trypanosoma cruzi* cruzain and *Trypanosoma brucei* cathepsin L-like proteases

Jéssica Alves Nunes, Fabricia Nunes da Silva, Elany Barbosa da Silva, Clara Andrezza Crisóstomo Bezerra Costa, Johnnatan Duarte de Freitas, Francisco Jaime Bezerra Mendonça-Junior, Miriam Aparecida Giardini, Jair Lage de Siqueira-Neto, James H. McKerrow, Thaiz Rodrigues Teixeira, Louis William Odeesho, Conor R. Caffrey, Sílvia Helena Cardoso* and Edeildo Ferreira da Silva-Júnior*

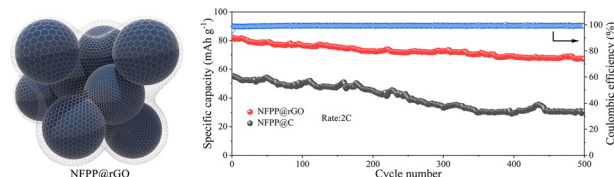
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Rhodium(I)-catalyzed *N*-arylation of arylazocarboxylates: facile access to unsymmetrical *N,N*-diarylhydrazides

Xiaofeng Rao, Wei-An Zhang and Ming-Hua Xu*

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Boosting the fast electrochemical kinetics of $\text{Na}_4\text{Fe}_3(\text{PO}_4)_2(\text{P}_2\text{O}_7)$ via a 3D graphene network as a cathode material for potassium-ion batteries

Kangsheng Shi, Wensheng Yang, Qiaodan Wu, Xingke Yang, Ruiya Zhao, Ziqiang She, Quan Xie and Yunjun Ruan*

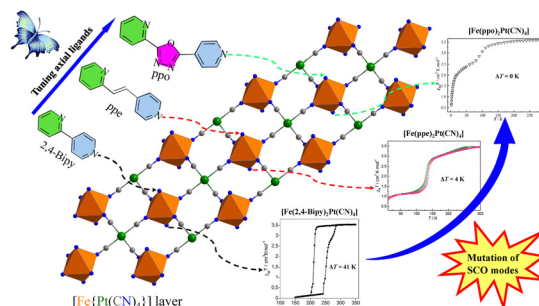


PAPERS

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Modulation of the spin transition in 2D Hofmann frameworks via $\pi \cdots \pi$ stacking between the axial 2,5-dipyridyl-1,3,4-oxadiazoles

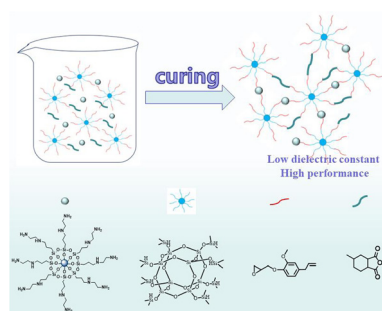
Zhe Feng, Jie-Jie Ling, Huijie Song and Dunru Zhu*



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Preparation of a low dielectric POSS/epoxy hybrid polymer without sacrificing the mechanical performance

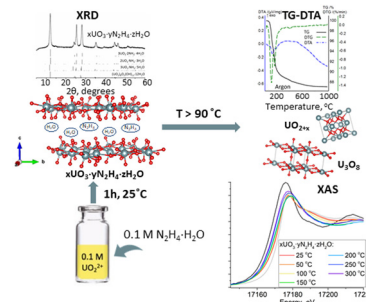
Pengbo Zhang, Kangle Xue, Hailong Liu, Zidie Song, Xiaoxue Sun, Tongjie Yao* and Li Liu*



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U(VI) hydrazinates: structural and thermal decomposition features

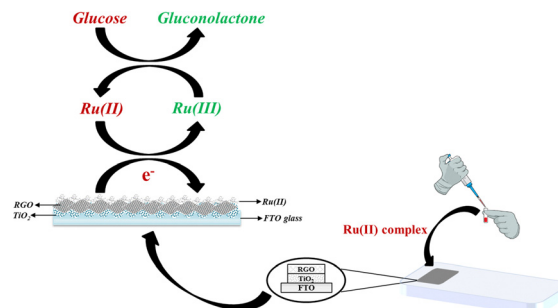
Evgeny Gerber,* Anna Krot, Karina Andreadi, Alexey Averin, Andrey Shiryaev, Alexander Trigub, Nikita Sobolev and Iurii Nevolin



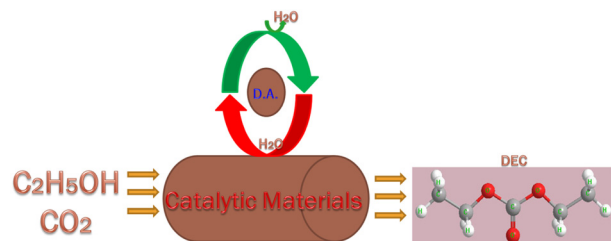
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Synthesis of a cationic ruthenium(II) complex and its non-enzymatic glucose-sensing properties

Serkan Dayan,* Namık Özdemir, Diğdem Erdener, Osman Dayan* and Bekir Çetinkaya



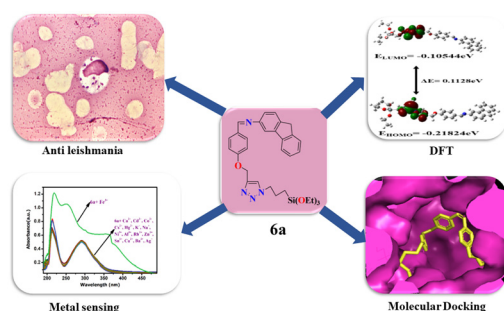
10195



A multifunctional carrier for composite ZnFe_2O_4 : a catalyst for improved one-step diethyl carbonate synthesis from CO_2 and ethanol

Meng Zhang*

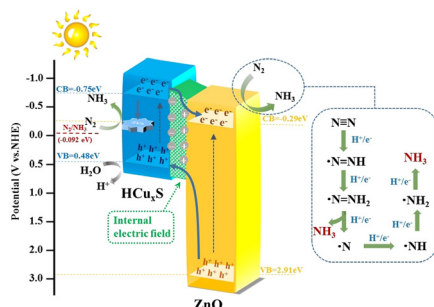
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2-Aminofluorene based triazole cocktailed with organosilane as UV-visible and fluorescence sensor for the highly selective detection of Fe(III) ion and its anti-leishmanial activity

Gurjaspreet Singh,* Sofia Gupta,* Pawan, Mohit, Diksha, Isha Saini, Vikas, Brij Mohan and Sanjeev Soni

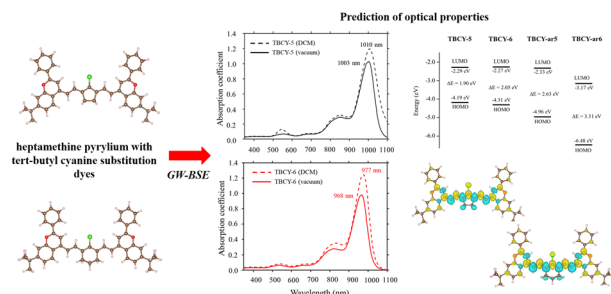
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Boosting N_2 photoreduction using a $\text{ZnO@HCu}_x\text{S}$ composite with high activity and easy recovery grown on a copper mesh

Chaojie Li, Qian Su, Weiwen Wang, Zisheng Zhang and Jihai Duan*

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Investigation of near-infrared absorption properties by the GW-BSE method in heptamethine pyrylium dyes

Nguyet N. T. Pham, Xuan-Hoang Luong, Hengquan Guo, Jong S. Park* and Seung Geol Lee*

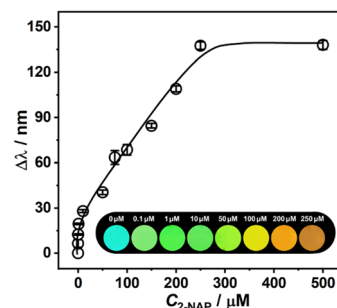


PAPERS

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A novel β -cyclodextrin-based molecular-responsive photonic hydrogel chemosensor for highly sensitive and visual detection of 2-naphthol

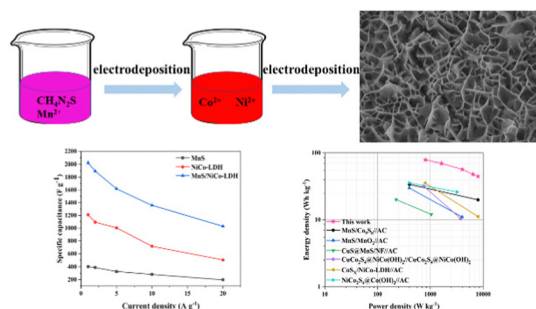
Jing-Ya Wen, Hai-Rong Yu,* Ting Liang, Xing-Bin Lv and Chang-Jing Cheng*



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Rapid synthesis of MnS/NiCo-LDH heterostructures for high-performance supercapacitors

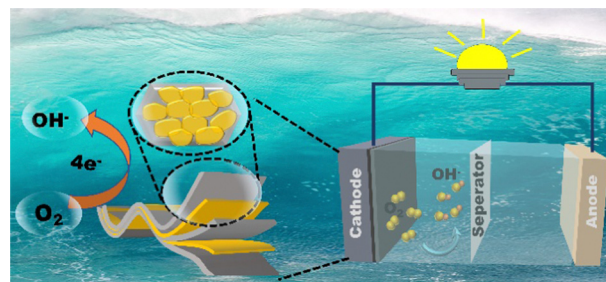
Xiaochen Cao, Meini Yuan,* Congming Ding and Xuebin Tang



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Flaky $\text{Co}_3\text{O}_4/\text{BCNO}$ composites as efficient and stable catalysts for the oxygen reduction reaction

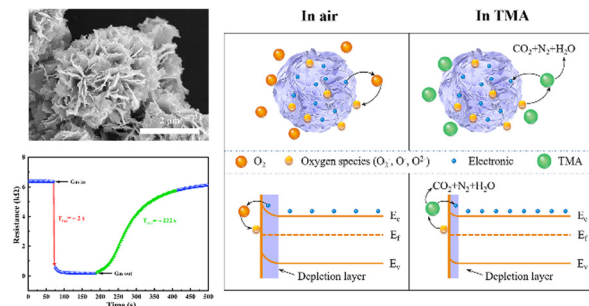
Yintao Zhang, Zehao Zang, Xiang Li,* Ping Yang, Junfang Zhang, Lanlan Li, Xiaofei Yu, Xiaojing Yang, Zunming Lu and Xinghua Zhang*



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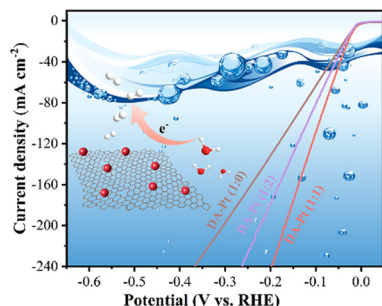
A MOF-derived porous In_2O_3 flower-like hierarchical architecture sensor: near room-temperature preparation and fast trimethylamine sensing performance

He Wang, Sirui Li, Hang Zhu, Shaoyuan Yu, Tianye Yang* and Hongwei Zhao*



PAPERS

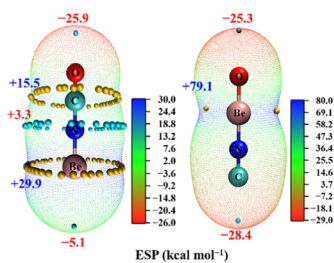
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Ultrafine Pt nanoparticle-decorated multi-folded two-dimensional nanosheets for efficient electrocatalytic hydrogen evolution

Yidan Peng, Luping Shen, Haiyan Li, Hongwei He, An Cai, Fengbao Zhang, Xiaobin Fan, Wenchao Peng and Yang Li*

10280

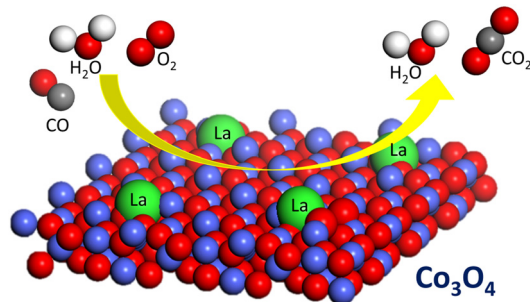


Linear BeNCO and OBeNC:
Kinetically stable radicals

Linear BeNCO and OBeNC: kinetically stable neutral Be-bearing free molecules

Ning Xi, Cai-Xin Jia and Hai-Tao Yu*

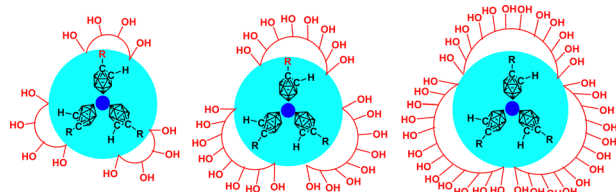
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Trace doping of cobalt oxide using lanthanum for effective catalytic oxidation of carbon monoxide

Zhou Zhicheng, Jiang Tingting, Liu Tao* and Zheng Shourong

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Synthesis and anticancer properties of dendritic glycoconjugates containing multiple o-carborane clusters

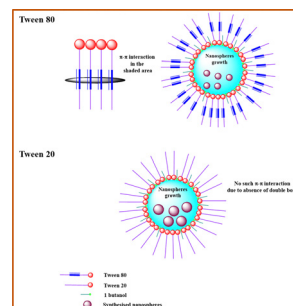
Biswa Ranjan Swain, Soumya Ranjan Jena, Swaraj Kumar Beriha, Chandra Sekhara Mahanta, Bibhuti Bhusan Jena, Thumpati Prasanth, Luna Samanta, Rashmirekha Satapathy* and Barada P. Dash*



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Understanding the effect of surfactants' hydrophobicity on the growth of lanthanum sulfide nanospheres in water-in-oil microemulsions: a detailed dynamic light scattering, small angle X-ray scattering, and microscopy study

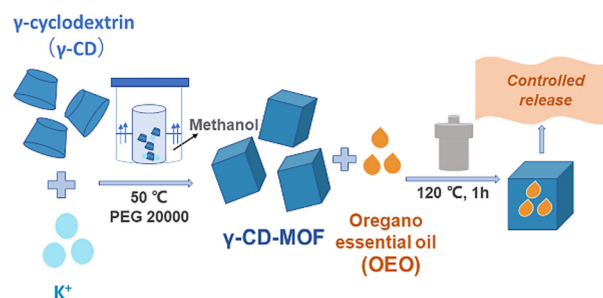
Sk Mehebab Rahaman, Anirudh Bardhan, Trishna Mandal, Madhuparna Chakraborty, Kripasindhu Karmakar, Subhendu Dhibar, Shivanjali Sharma, Manab Chakravarty, Samia M. Ibrahim and Bidyut Saha*



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Novel γ -cyclodextrin-based metal–organic frameworks for the effective encapsulation of oregano essential oil and controlled release

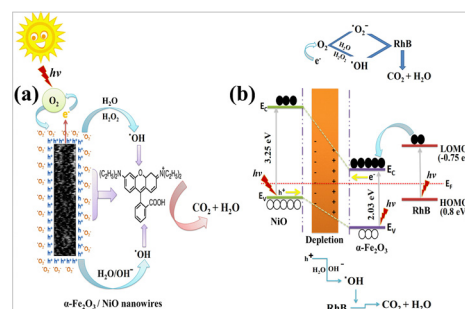
Wanping He, Kairu Ye, Huiru Li, Chenguang Wang, Hongyuan Wei and Leping Dang*



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Synthesis of mesoporous composites based on α -Fe₂O₃/NiO nanowires for the photocatalytic degradation of rhodamine B dye

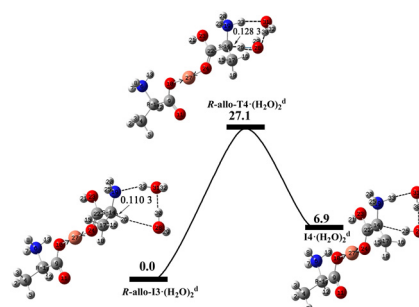
Shahid Khan, Zeeshan Ajmal, Sajid Mahmood and Mahmood ul Haq*



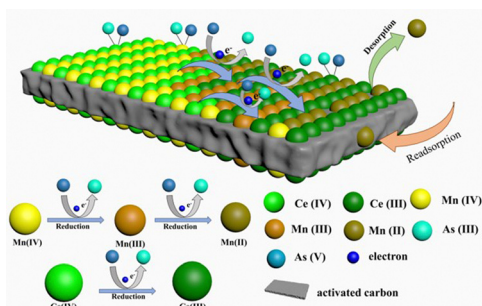
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Theoretical investigations on the chiral transition of Cu(II) chelated by bis- α -alanine in the aqueous-liquid phase

Chunxu Jiang, Yong Tan,* Tingting Wang, Zuocheng Wang,* Guoqiang Peng, Chengxin Hao and Lihong Zhao*



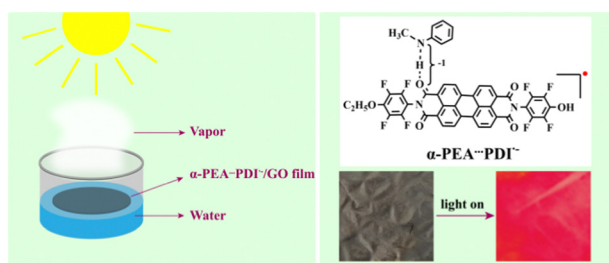
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Mn–Ce oxide-modified activated carbon composites as efficient adsorbents for removing As(III) from water: adsorption performance and mechanisms

Shengfeng Yang, Wei Fang, Qianwei Liang,* Lin Lin, Mengqing Sun, Yujia Xing and Hanjin Luo*

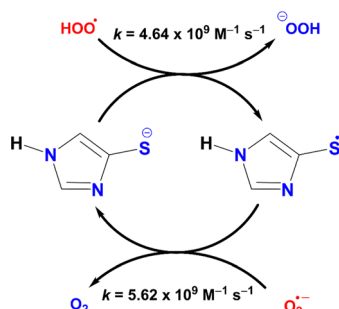
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Enhancing the photothermal performance of graphene oxide by embedding perylene diimide radical anions/ α -phenylethylamine hydrogen bonded complexes in graphene oxide films for solar water evaporation

Yuanyuan Li, Jinming Liu, Wei Li, Yingru Li, Wei Zhao and Haiquan Zhang*

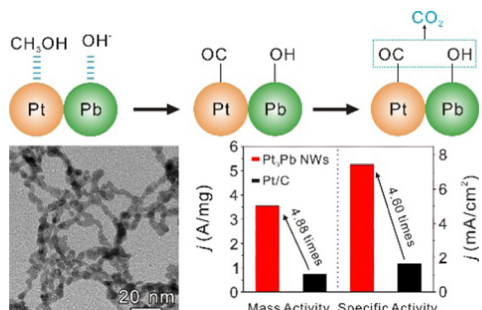
10381



The radical scavenging activity of 4-mercaptoimidazole: theoretical insights into the mechanism, kinetics and solvent effects

Quan V. Vo,* Do Thi Ngoc Hang, Nguyen Thi Hoa, Pham Cam Nam, Tuan Quang Duong and Adam Mechler

10391



Ultrathin Pt₃Pb nanowires prepared in the aqueous phase for enhanced methanol electrooxidation

Yaming Liu,* Meng Wu, Shanxiang Sheng, Yongzhen Wang, Chao Zhi, Jiaguang Meng and Xiang Li

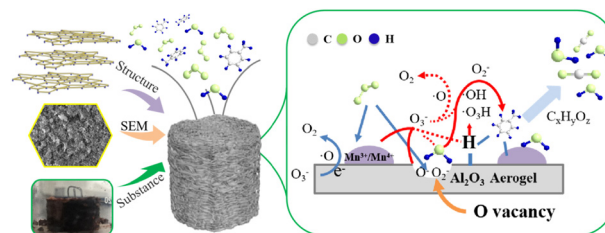


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10397

Preparation of $\text{MnO}_x\text{-Al}_2\text{O}_3$ aerogels and synergistic catalytic oxidation of toluene via ozone

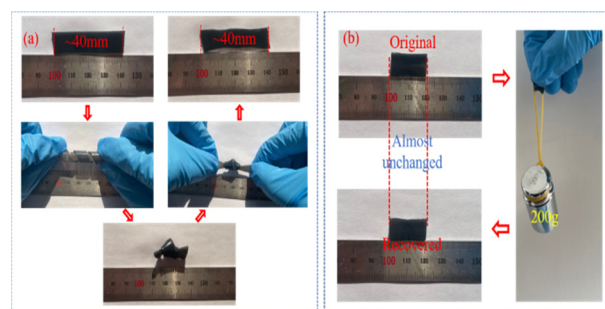
Ning Gao, Xuanyu Gu, Jining Liu,* Mengjie Fan and Yingwen Chen*



10409

Mechanical and electrical properties of a modified carbon nanotube-mediated hydrogel as a strain sensor

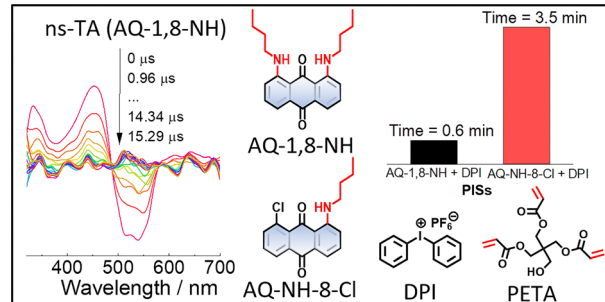
Xinmin Huang,* Zhongjie Yan, Lianhe Yang and Lingling Meng



10415

Preparation of amino-substituted anthraquinone: study of the intersystem crossing and application as efficient photoinitiators for photopolymerization

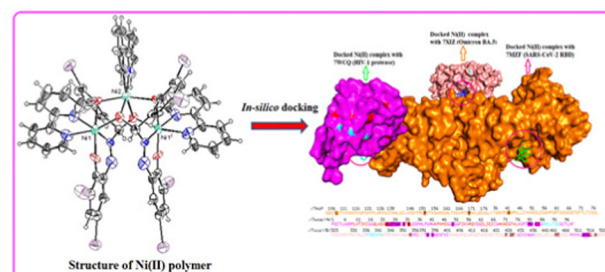
Ruilei Wang, Huaiman Cao, Jianzhang Zhao* and Fabiao Yu*



10424

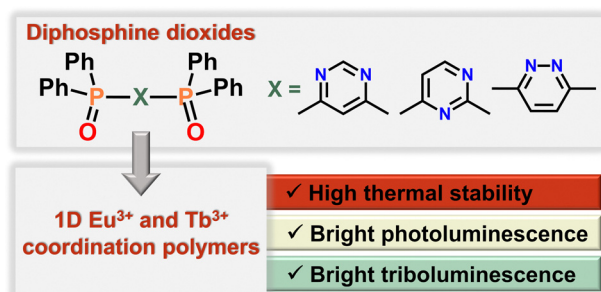
A phenoxy-bridged trinuclear Ni(II) complex: synthesis, structural elucidation and molecular docking with viral proteins

Sunil Kumar and Mukesh Choudhary*



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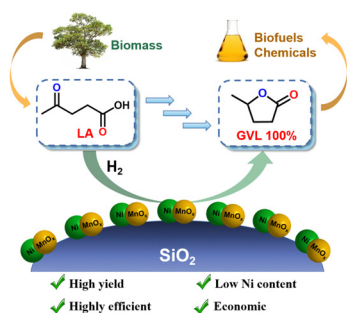
10446



Highly photo- and triboluminescent lanthanide(III) coordination polymers based on diphosphine dioxides containing azaheterocyclic linkers

Yuliya A. Bryleva,* Vladislav Yu. Komarov, Ludmila A. Glinskaya, Alexander V. Artem'ev, Maria P. Davydova, Mariana I. Rakhmanova and Denis G. Samsonenko

10455



Highly efficient Ni–Mn/SiO₂ catalyst for the selective hydrogenation of biomass-derived levulinic acid to γ -valerolactone under mild conditions

Mengting Chen, Qifeng Zhong, Jiao Ma, Zhiyang Zhang, Yingxin Liu,* Zuojun Wei* and Shuguang Deng*

