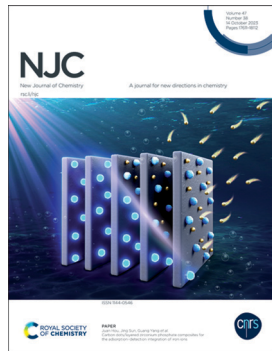


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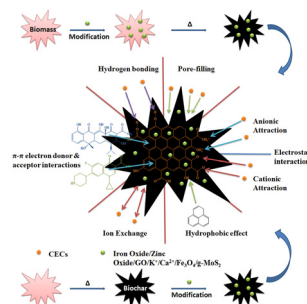
See Juan Hou, Jing Sun, Guang Yang *et al.*, pp. 17649–17656. Image reproduced by permission of Juan Hou from *New J. Chem.*, 2023, 47, 17649.

PERSPECTIVE

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Recent advances on sustainable removal of emerging contaminants from water by bio-based adsorbents

Prakash V. Bobde, Amit K. Sharma, Ranjit Kumar, Jitendra K. Pandey and Shikha Wadhwa*

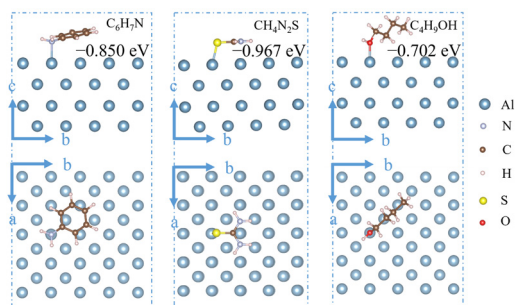


COMMUNICATION

17645

Behaviour of organic adsorbable corrosion inhibitors containing N, S, and O functional groups on aluminium in weak acetic acid solutions as simulated HVDC cooling water

Zhen Wang, Kai Xiao, Guoqing Zhang, Xue Han, Zhihong Cai, Zhen Shao, Youping Fan* and Shengping Wang*



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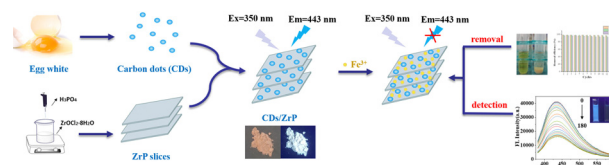


PAPERS

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Carbon dots/layered zirconium phosphate composites for the adsorption–detection integration of iron ions

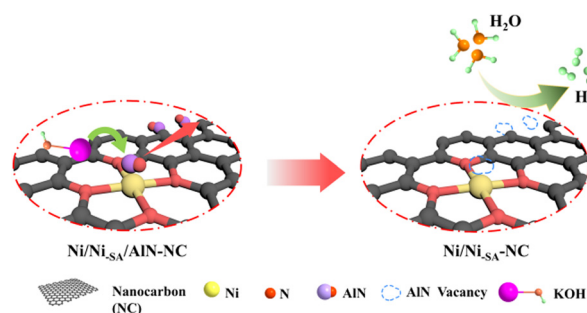
Juan Hou,* Xu Gao, Guijie Li, Huiling Liu, Qinqin Chen, Jing Sun* and Guang Yang*



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Etching-assisted synthesis of Ni/Ni single atom anchored porous graphitic nanocarbon for improved hydrogen evolution reaction

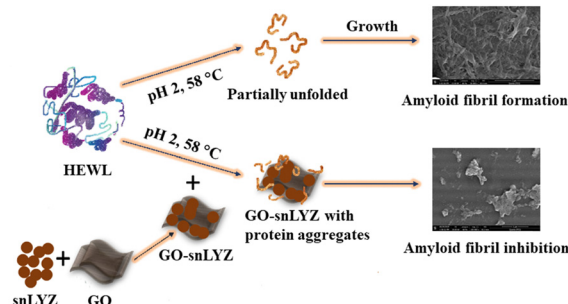
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17666

Inhibition of hen egg white lysozyme fibrillation by a self-assembled nanostructured lysozyme and graphene oxide conjugate

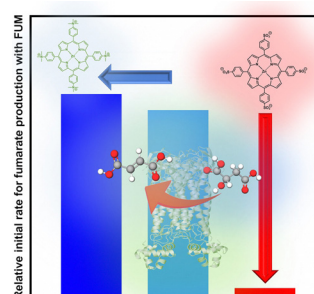
Uma Sankar Mondal and Subhankar Paul*



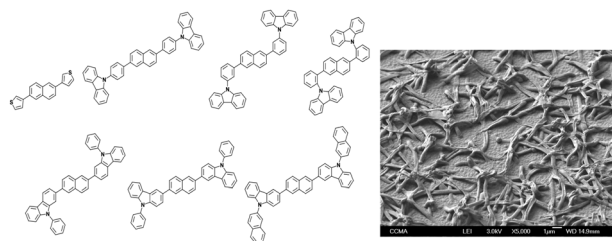
17679

Effect of water-soluble zinc porphyrin on the catalytic activity of fumarase for L-malate dehydration to fumarate

Mika Takeuchi and Yutaka Amao*



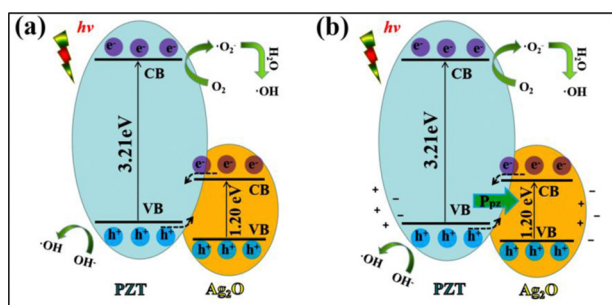
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Directional growth of nanotubes on micelles by soft-template electropolymerization with varying hydrophobicity and strong water adhesion

Diawo Diallo, Abdoulaye Dramé, Alioune Diouf, Aboubacary Sene, Frédéric Guittard and Thierry Darmanin*

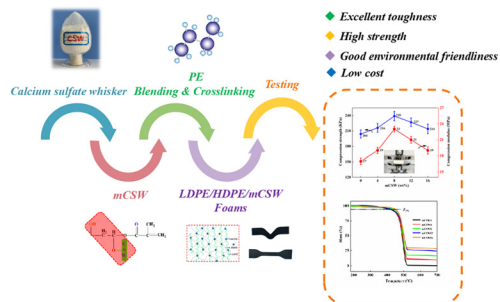
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Piezo-/photo catalysis of the PZT/Ag₂O heterostructure for dye decomposition under visible light and ultrasonic vibration

Cuina Yang,* Haifan Zou, Lei Zhao, Jicun Shi and Wenbo Wang*

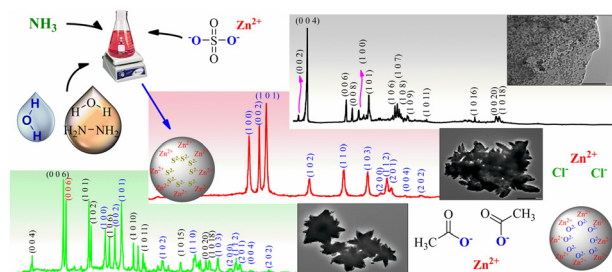
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Reinforcement of the thermal stability and mechanical properties of low-density polyethylene/high-density polyethylene foam using a modified calcium sulfate whisker

Jie Xu, Jinfu Zhong, Dongliang Fu, Guangfu Li and Xiangdong Liu*

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Investigations on the interconnection between chemical reactions and experimental results of Zn-based quantum dots

Rahul Singh and Ragini Raj Singh*

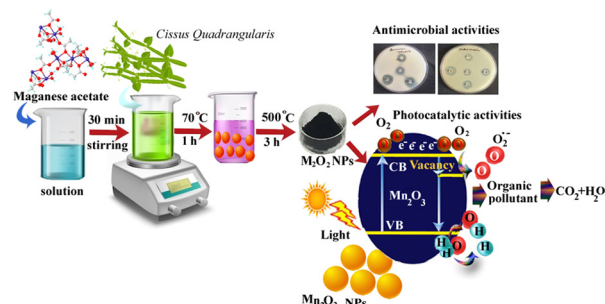


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Green synthesis of orthorhombic Mn_2O_3 nanoparticles; influence of the oxygen vacancies on antimicrobial activity and cationic dye degradation

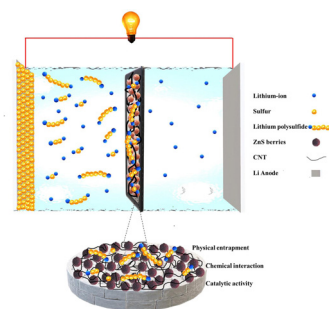
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Novel bayberry-like functional separator coating as a physicochemical polysulfide barrier for advanced lithium–sulfur batteries

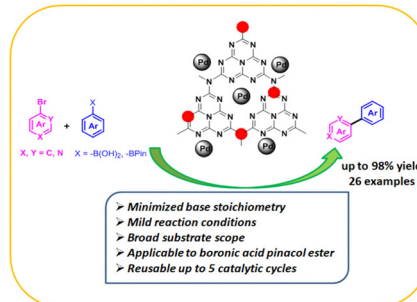
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Minimizing base stoichiometry in $\text{Pd}(0)/\text{g-C}_3\text{N}_4\text{O}$ catalyzed Suzuki–Miyaura cross-coupling reaction

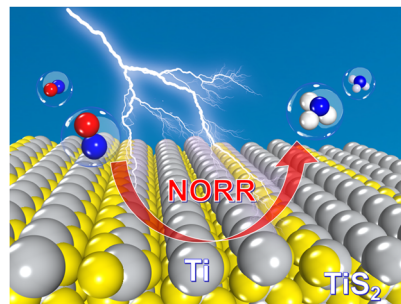
Dipika Konwar, Rakhee Saikia, Risha Kalita, Manash R. Das and Utpal Bora*



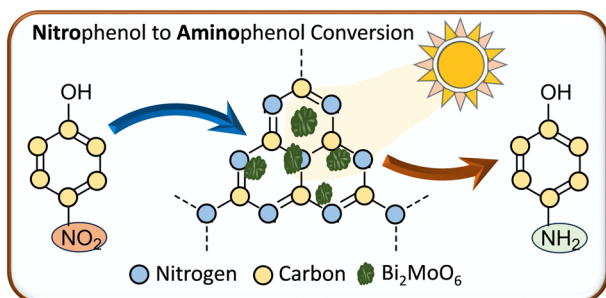
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Electrocatalytic NO reduction to NH_3 over TiS_2 nanosheets

Xiangli Wang,* Lan Yang, Guike Zhang and Ke Chu



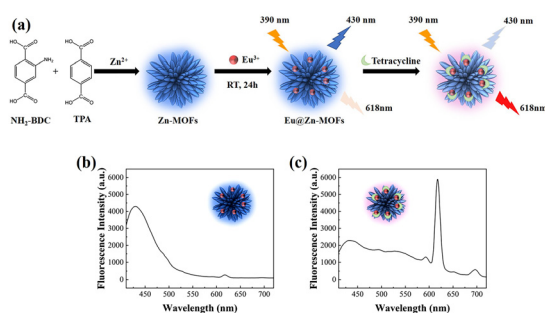
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Photocatalytic reduction of mono, di, and tri-nitrophenols over a Bi₂MoO₆/carbon nitride heterojunction

Phyu Phyu Cho, Phyu Phyu Mon, Devthade Vidyasagar, Giridhar Madras and Ch. Subrahmanyam*

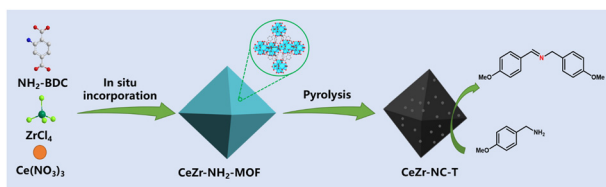
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A post-synthetically modified Eu@Zn-MOF for ratiometric fluorescence detection of tetracycline in tap water

Renwen Zhang, Lingyan Ma, Wenjing Qi and Chun Liu*

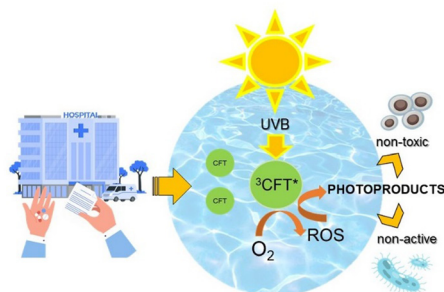
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Enhancing the efficiency of benzylamine oxidative coupling over N-doped porous carbon-supported CeO₂ and ZrO₂ nanoparticles

Jie Chen, Mingyuan Jian, Lei Zhuang, Wenting Lin, Yanghe Fu, De-Li Chen, Weidong Zhu, Guihua Chen and Fumin Zhang*

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Natural degradation of ceftriaxone promoted by direct UVB light in aqueous media. Mechanistic analysis and cytotoxic effects on a eukaryotic cell line and on bacteria

M. Agostina Biondi, R. Daniel Cacciari, M. Carola Sabini, Mariana B. Spesia, M. Alicia Biasutti, Eugenia Reynoso* and Hernán A. Montejano*

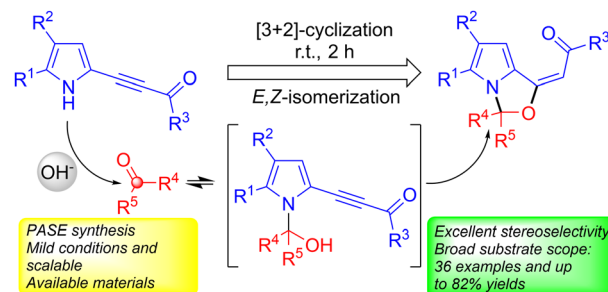


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Acylmethylidenepyrrolo[1,2-c]oxazoles via [3+2]-cyclization of 2-acylethynylpyrroles with carbonyl compounds

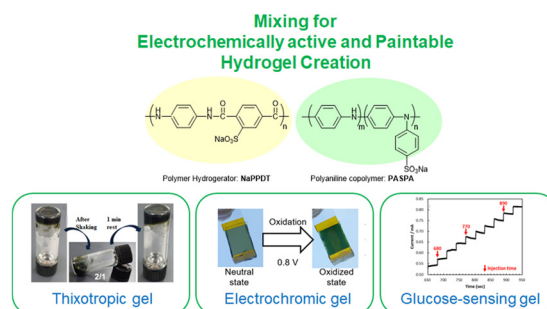
Denis N. Tomilin, Sophia A. Stepanova,
Lyubov N. Sobenina, Igor A. Ushakov and
Boris A. Trofimov*



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A thixotropic molecular hydrogel composite composed of polymer hydrogelator and self-doping polyaniline copolymer for electrochromic and glucose sensing applications

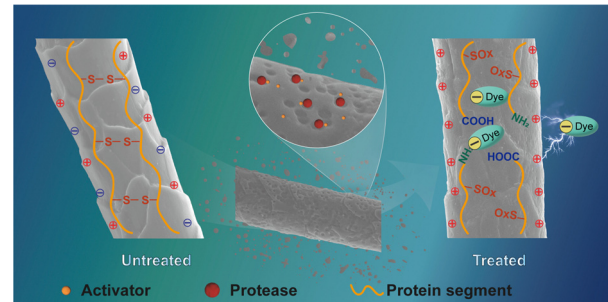
Yutaka Ohsedo* and Mayumi Sasaki



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The effect of a novel catalytic system with Savinase 16L and an organophosphine compound on the shrink-proofing and dyeing properties of wool

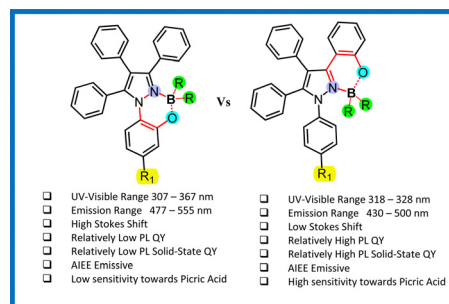
Le Wang,* Zhixin Duan, Jinbo Yao,* Liyan Liu,
Pengfei Fei, Zhifeng Yan, Youbo Di, Hua Wang and
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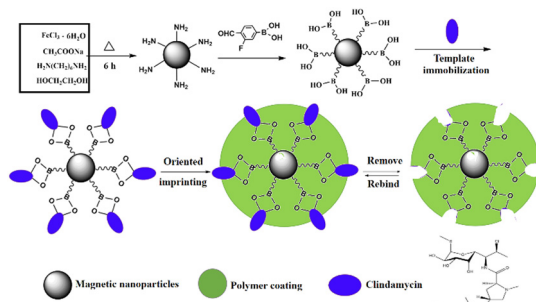
Synthesis, structural, and photophysical properties of pyrazolyl bis(pentafluorophenyl)boron complexes

Anna Chandrasekar Murali, Preeta Pratakshya,
Pratiksha Patel, Prakash Nayak,
Saravanan Peruncheralathan and
Krishnan Venkatasubbaiah*



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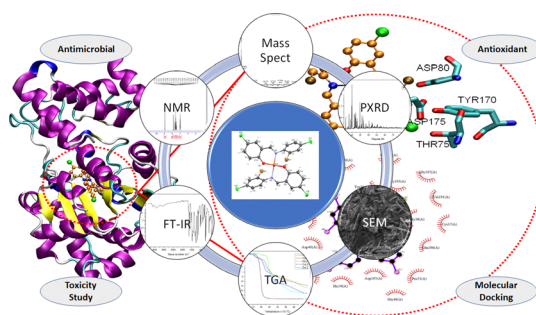
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Boronate affinity-based clindamycin-imprinted magnetic nanomaterials for rapid, efficient and selective extraction and determination of clindamycin in animal-derived food

Yansong Zhang, Zixin Zhang, Yihan Ding, Daojin Li* and Shuangshou Wang*

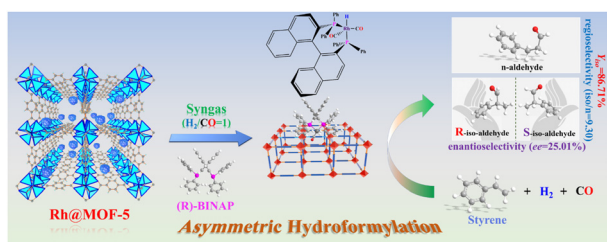
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Synthesis, characterization, biological evaluation, DFT and molecular docking studies of (Z)-2-((2-bromo-4-chlorophenyl)imino)methyl)-4-chlorophenol and its Co(II), Ni(II), Cu(II), and Zn(II) complexes

Ibrahim Waziri,* Hlonpho M. Masena, Tunde L. Yusuf, Louis-Charl C. Coetzee, Adedapo S. Adeyinka and Alfred J. Muller

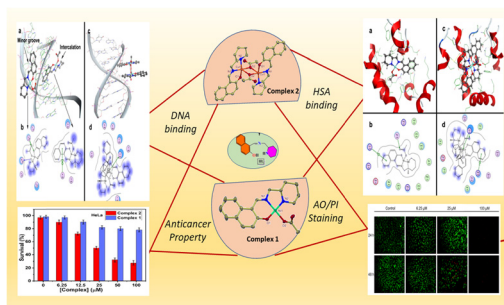
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Unique phosphine ligand synergy in asymmetric hydroformylation of styrene over the Rh@MOF-5 heterogeneous catalysis system

Mengchuan Ma, Chao Zhang,* Weiping Li, Yong Tao, Li Zhou, Lu Li, Zhenmei Guo and Zhiguo Lv*

17881



DNA/HSA binding and anticancer properties of pendant acetate bearing mono-nuclear Ni(II) and bridging acetate bearing di-nuclear Cu(II) Schiff base complexes: an experimental and molecular docking study

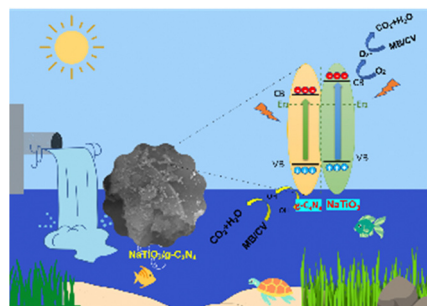
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A visible light-driven $\text{NaTiO}_3/\text{g-C}_3\text{N}_4$ heterojunction photocatalyst for ultra-fast organic dye degradation

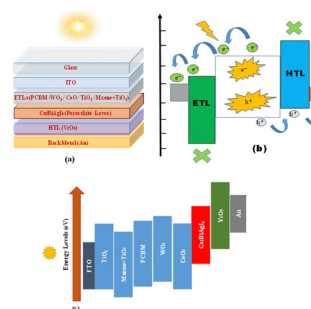
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Efficiency enhancement of perovskite solar cell devices utilizing MXene and TiO_2 as an electron transport layer

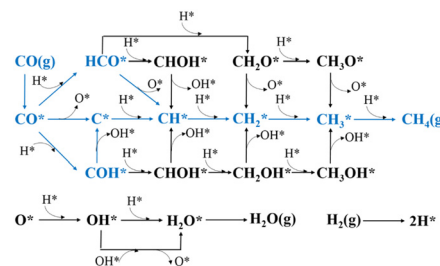
Sagar Bhattarai,* M. Khalid Hossain,* G. F. Ishraque Toki, Rahul Pandey,* Jaya Madan,* D. P. Samajdar, Safa Ezzine, Lamia Ben Farhat, Mohd Zahid Ansari,* Shaik Hasane Ahammad and Ahmed Nabih Zaki Rashed*



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Theoretical study coupling DFT calculations and kMC simulation of CO methanation on Ni(111) and $\text{Ni}_3\text{Fe(111)}$

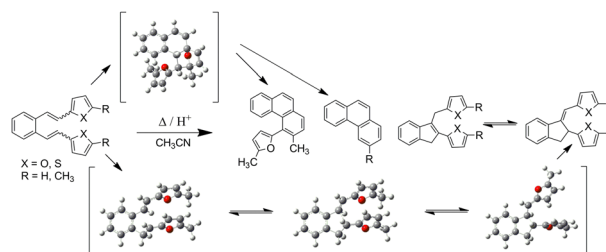
Yingzhe Yu, Peng Ji, Weiwei Zhang, Kuiwei Yang and Minhua Zhang*

Reaction networks for CO methanation[†]

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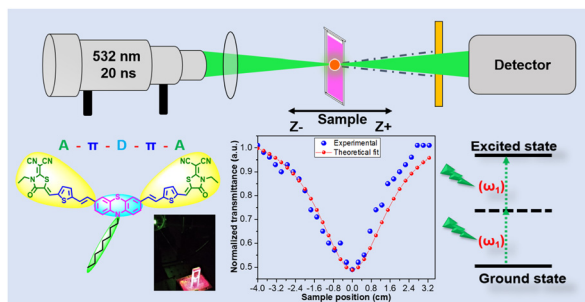
Mechanistic insights into the thermal transformations of heterocyclic *o*-distyrylbenzenes: an experimental and computational study

Vilma Lovrinčević, Dragana Vuk,* Irena Škorić and Ines Despotović*



PAPERS

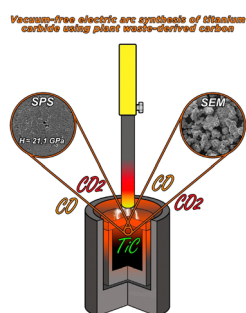
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Butterfly wing type new push-pull A- π -D- π -A organic fluorophore: synthesis, photophysical, DFT and nonlinear optical property studies

Ananthan Alagumalai, Soumya Shaswati Sahu, Upakarasamy Lourderaj, Sai Muthukumar Vijayasayee,* Ananthanarayanan Krishnamoorthy* and Senthil A. Gurusamy Thangavelu*

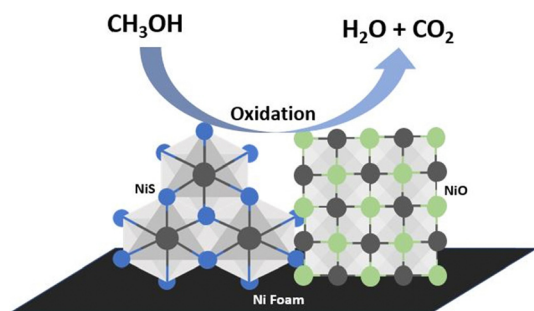
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Vacuum-free electric arc synthesis of titanium carbide using plant waste-derived carbon

Arina Gumovskaya,* Alexander Pak, Stanislav Yankovsky, Artur Nassyrbaev, Dmitriy Nikitin and Ulyana Komkina

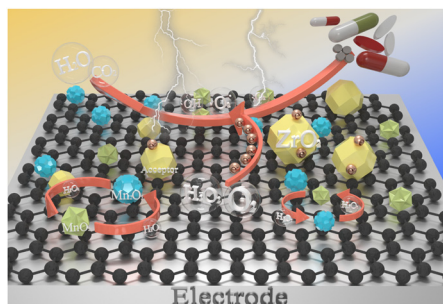
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Fabrication of a nickel sulfide/nickel oxide heterostructure for efficient electrochemical oxidation of methanol

Faria Sheikh, Aleena Arshad, Fareeha Marriam, Zubair Ahmad, Ali Haider, Mudassir Iqbal and Muhammad Adil Mansoor*

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Controllable growth on nano-graphite-supported ZrO₂-MnO_x bimetallic oxides for electrocatalytic antibiotic degradation: mechanism to boost the Mn³⁺/Mn⁴⁺ redox cycle

Si Duan, Guihong Lan,* Xiaoting Yang, Yongqiang Liu, Haiyan Qiu, Bo Xu, Yuan Gao and Zhuang Xie

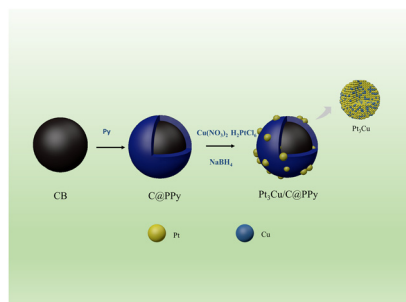


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Preparation and properties of polypyrrole-modified carbon black supported Pt₃Cu alloy catalyst

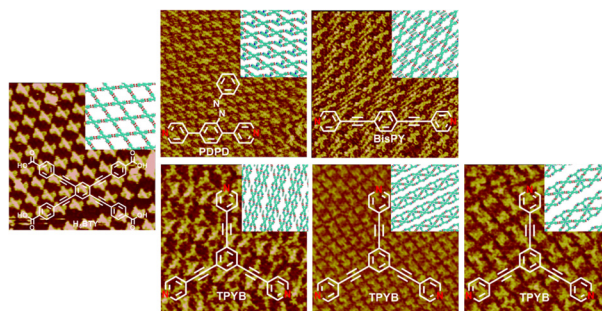
Jinghua Yu, Yueling Guo, Yajie Dai, Ziren Jin, Zhiqian Wang, Fanghui Wang and Hong Zhu*



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Abundant two-dimensional hydrogen-bonded co-assemblies of tetracarboxylic acid derivatives and pyridine derivatives studied by means of scanning tunneling microscopy

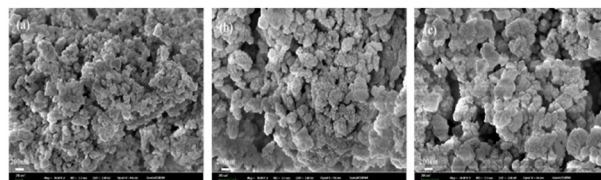
Peng Lei, Wendi Luo, Ke Deng, Bin Tu, Xunwen Xiao,* Qiaojun Fang,* Chen Wang* and Qingdao Zeng*



18018

Preparation of H β zeolites with hierarchical pores and a study on the isomerization performance of α -pinene

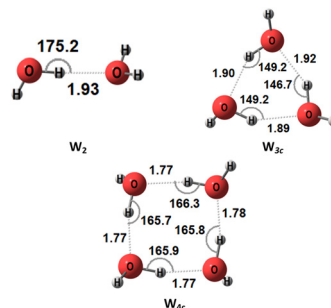
Yanqi Chen, Wenxing Wu, Naiwang Liu, Li Shi and Xuan Meng*



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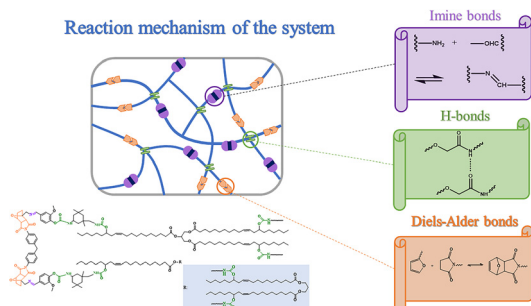
Reactivity of hydrogen-bonded complexes of water, methanol, phenol and methyl amine

Alexander Samuilov and Yakov Samuilov*



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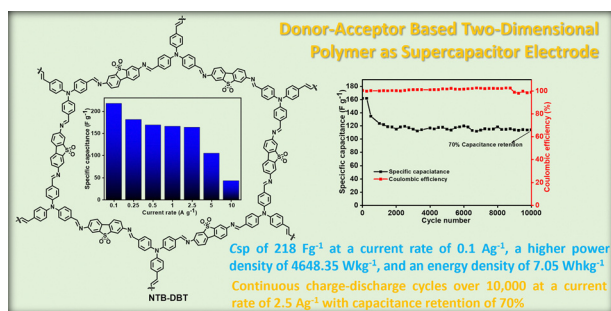
18039



Self-healing, recyclable, thermally adaptive shape memory functional biopolymers based on multiple dynamic covalent bonds and hydrogen bonds derived from castor oil and vanillin

Yuan Nie, Mei Li, Shouhai Li,* Mingtao Lin, Na Yao, Tianxiang Deng, Xiao Feng, Xiaohua Yang, Haiyang Ding and Lina Xu

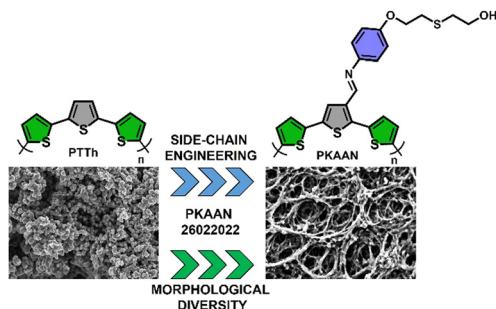
18049



Donor-acceptor-based two-dimensional polymer as a supercapacitor electrode with long cycling stability

Bhagyasree T. M., Priyanka Pandinhare Puthiyaveetil, Viksit Kumar, Kiran Asokan, K. Sreekumar and Sukumaran Santhosh Babu*

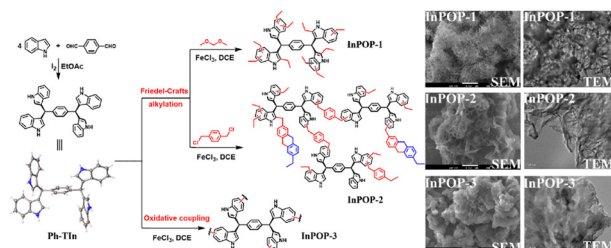
18055



Improvement of morphological structure and electrochemical charge storage performance of a new poly(terthiophene)-based conducting film through side-chain engineering

Deniz Yiğit

18070



Three novel indole-bearing porous organic polymers for efficient iodine capture from both vapor and organic phases

Jingwen Yu, Luna Song, Yeshuang Wang, Haowen Li, Jiawen Liu, Mengmeng Wu,* Yu Feng and Jie Mi*

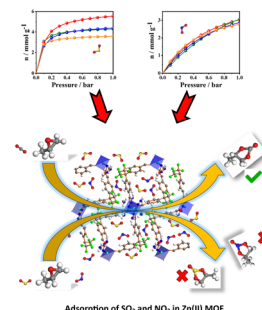


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18086

Computer modelling of trace SO₂ and NO₂ removal from flue gases by utilizing Zn(II) MOF catalysts

D. Muthukumar, C. M. Nagaraja, Michael Badawi* and Renjith S. Pillai*



18096

Natural deep eutectic solvent extraction of chlorogenic acid from *Eucommia* leaves: high extractability, stability, antibacterial, and antioxidant activity

Yuan Zhu, Hang Li, Peng-Wei Xu, Xiao-Fan Yuan* and Bing Zhao*



EXPRESSION OF CONCERN

18108

Expression of concern: Solar-driven photodegradation of 17- β -estradiol and ciprofloxacin from waste water and CO₂ conversion using sustainable coal-char/polymeric-g-C₃N₄/RGO metal-free nano-hybrids

Amit Kumar,* Ajay Kumar, Gaurav Sharma, Mu. Naushad, Renato Cataluna Veses, Ayman A. Ghfar, Florian J. Stadler and Mohammad Rizwan Khan

CORRECTION

18109

Correction: Green synthesis and characterization of Ag nanoparticles in a phytic acid/ascorbic acid/sodium hydroxide system and their application in the electrochemical detection of H₂O₂

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

