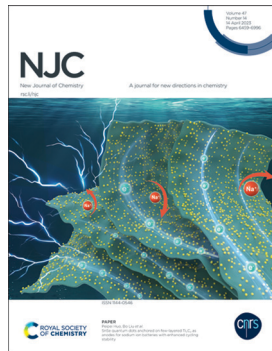


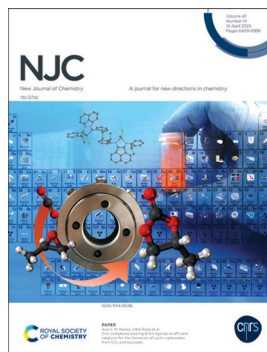
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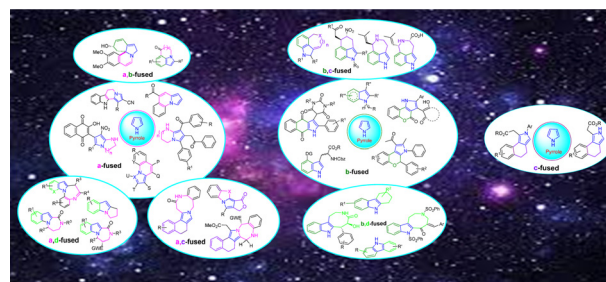
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Recent synthetic journey on pyrrole-fused compounds

Chandana Pramanik, Paritosh Barik, Sk Asraf Ali, Dipti Sovamayee Nayak, Mohammed Ikbal, Arabinda Mandal, Rathin Jana, Soumen Giri* and Shubhankar Samanta*

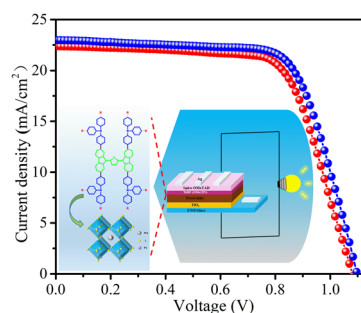


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Quinoidal-type ThBF₄-based perovskite/HTL interface materials for efficient and stable perovskite solar cells

Ye Feng, Ningxia Gu, Hua Jiang* and Lixin Song*



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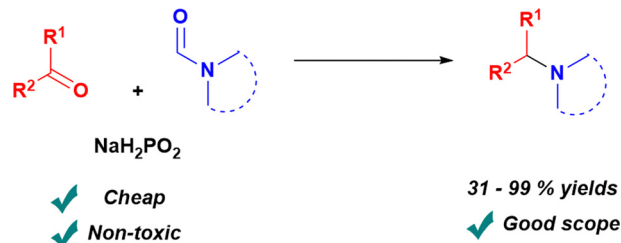


COMMUNICATIONS

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Sodium hypophosphite mediated reductive amination of carbonyl compounds with *N,N*-dialkylformamides

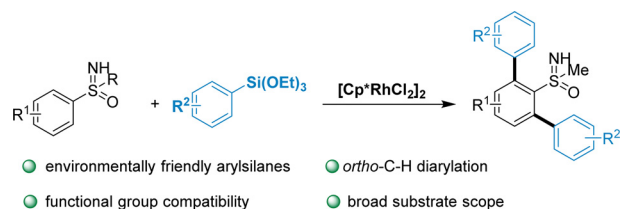
Artemy R. Fatkulín, Vasily Korochantsev, Oleg I. Afanasyev, Evgeniya Podyacheva, Olga Chusova, Dmitry V. Muratov, Maria I. Godovikova, Sergei Semenov and Denis Chusov*



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Rh(III)-catalyzed direct *ortho*-C–H diarylation of arylsulfoximines with arylsilanes

Xiuqi Zhang, Jie Zhang, Lin Li, Fukuan Zhang, Xuzhong Luo and Haiqing Luo*

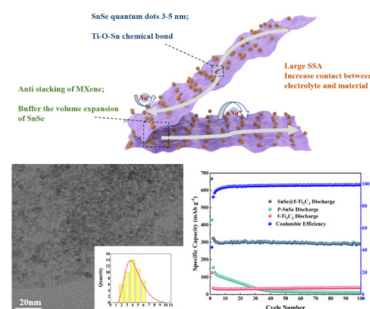


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SnSe quantum dots anchored on few-layered Ti₃C₂ as anodes for sodium ion batteries with enhanced cycling stability

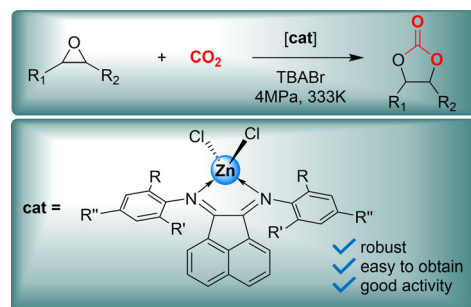
Guoxu Ni, Yingjie Zhang, Yuzheng Li, Chengxiao Xu, Jinjie Zhang, Peipei Huo* and Bo Liu*



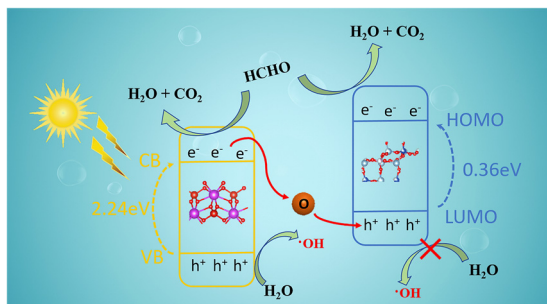
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Zinc complexes bearing BIAN ligands as efficient catalysts for the formation of cyclic carbonates from CO₂ and epoxides

Małgorzata E. Zakrzewska, Paulo J. L. André, Clara S. B. Gomes, Ana V. M. Nunes* and Vitor Rosa*



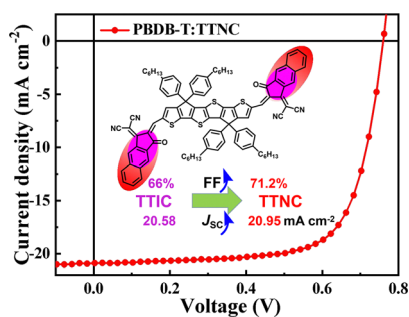
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Development and study of a bifunctional photocatalyst based on SAPO-34 molecular sieve

Run-quan Wang, Wan-ping Chen, Yue-rong Zhang, Kai Song, Yuan Tian, Jia-xian Li, Gao-feng Shi* and Guo-ying Wang*

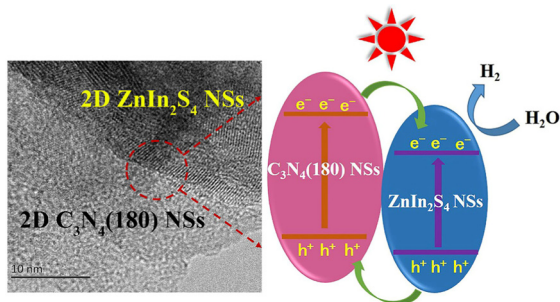
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A nonfullerene acceptor with π -conjugation extended end groups to achieve enhanced photovoltaic performance

Chunyan Liu, Zhihui Wu, Nailiang Qiu,* Chenxi Li and Yan Lu*

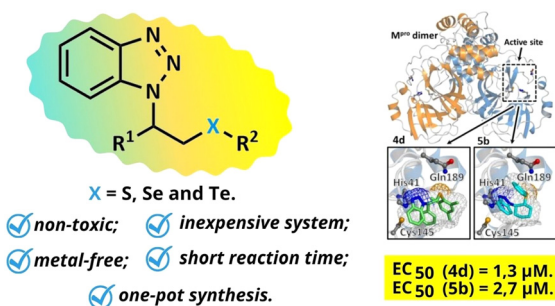
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Rational design of 2D/2D ZnIn₂S₄/C₃N₄ heterojunction photocatalysts for enhanced photocatalytic H₂ production

Peng Guan, Peigeng Han,* Bin Yang, Hang Yin, Jianyong Liu and Songqiu Yang*

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Ecofriendly aminochalcogenation of alkenes: a green alternative to obtain compounds with potential anti-SARS-CoV-2 activity

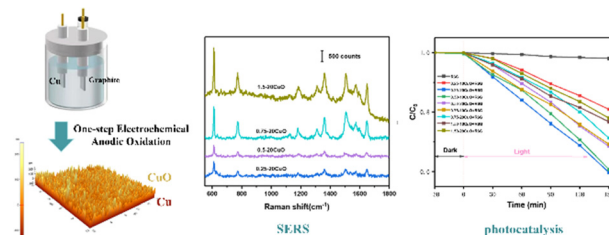
Luana S. Gomes, José S. S. Neto, Iris di Leo, Cecília G. Barbosa, Carolina B. Moraes, Lucio H. Freitas-Junior, Bruno Rizzuti, Claudio Santi and Vanessa Nascimento*



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Preparation of CuO nanosheet array thin film with controlled morphology for SERS and photocatalysis

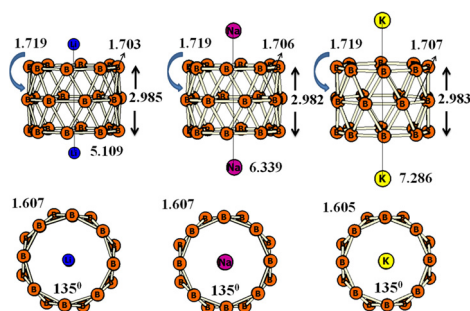
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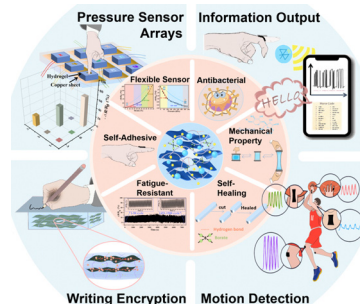
Cheng-Gang Li, Ying-Qi Cui,* Hao Tian, Zi-Gang Shen, Qin-Qin Shao, Yan-Li Ding and Bao-Zeng Ren



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A self-adhesive, self-healing and antibacterial hydrogel based on PVA/MXene-Ag/sucrose for fast-response, high-sensitivity and ultra-durable strain sensors

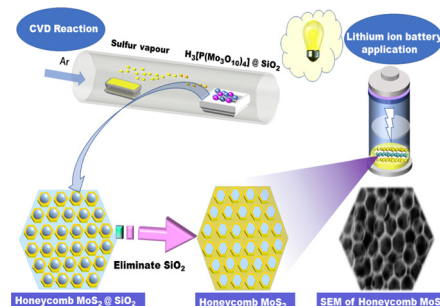
Chenxing Li, Ao Zheng, Jiayi Zhou, Wenwei Huang, Yan Zhang,* Jingxuan Han, Lingyan Cao* and Dongye Yang*



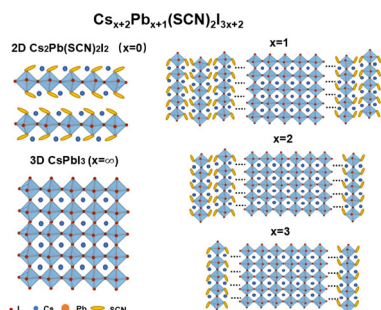
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Synthesis of homogeneous honeycomb MoS_2 as the anode material for lithium-ion batteries using chemical vapor deposition and a template method

Dongsheng Wang, Yan Liu, Yuan Li, Hao Zhang,* Zhen Fang and Zhiyong Wang*



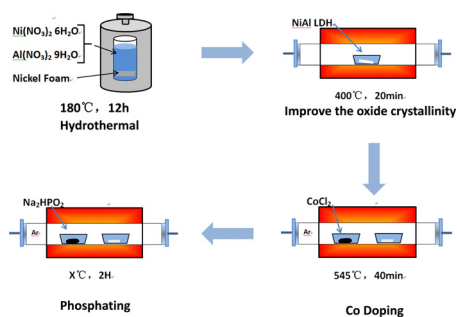
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All-inorganic 2D/3D $\text{Cs}_{x+2}\text{Pb}_{x+1}(\text{SCN})_2(\text{I/Br})_{3x+2}$ perovskites

Tianyang Chen, Shuangyan Hu, Xuechang Zhou* and Jingshan Luo*

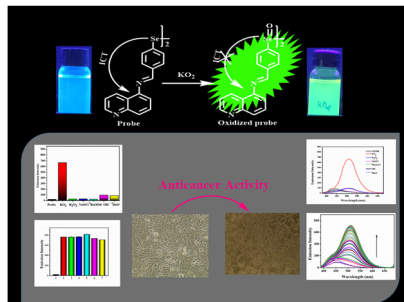
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Preparation of a self-supported nickel–aluminum–cobalt phosphating electrode and its electrocatalytic performance in total water decomposition

Qi Zhou,* JinJin Jia, GuanRu Huang and ChenChen Feng

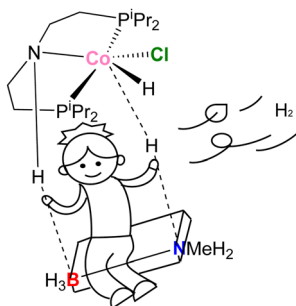
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Superoxide targeted "turn-on" fluorescence sensing enabled by a diselenide based quinoline probe and its *in vitro* anticancer activity in cancer cells

Divyesh S. Shelar, Gauri S. Malankar, Pinky R. Singh, Shashikant P. Vaidya, Rahul V. Pinjari and Sudesh T. Manjare*

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Mechanistic insights into $\text{H}_3\text{B}\cdot\text{NMeH}_2$ dehydrogenation by Co-based complexes: a DFT perspective

Cheng Peng, Wei Liu and Yong Wang*

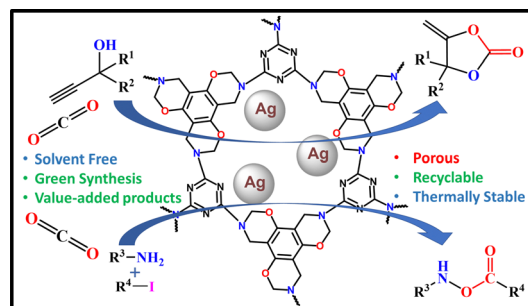


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AgNPs supported over porous organic polymers for the fixation of CO₂ on propargyl alcohols and amines under solvent-free conditions

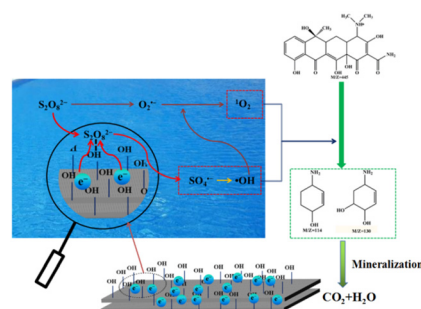
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Natural coal gangue as a stable catalyst to activate persulfate: tetracycline hydrochloride degradation and its explored mechanism

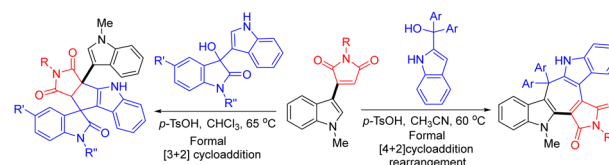
Pengfei Zhang, Rongbo Zhao, Zhiliang Liu, Yiguo Su* and Chunfang Du*



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Selective construction of polycyclic cyclohepta[b]indoles and cyclopenta[b]indoles via cycloaddition reaction of 3-(indol-3-yl)maleimides and (indol-2-yl)methanols

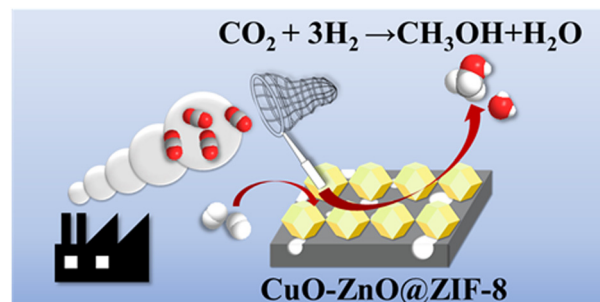
Jing Sun, Chen Yan, Qiu Sun,* Ying Han and Chao-Guo Yan*



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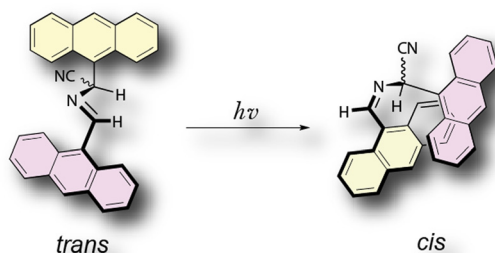
Surface conversion of CuO–ZnO to ZIF-8 to enhance CO₂ adsorption for CO₂ hydrogenation to methanol

Lei Zhang, Jia Cui, Yue Zhang, Xiaoguang San* and Dan Meng*



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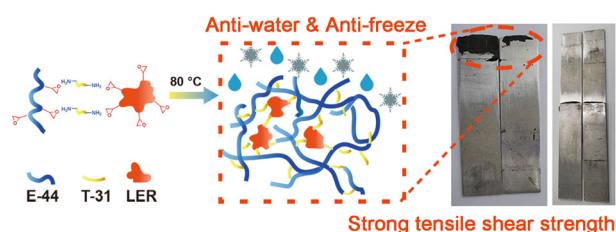
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N-Cyanomethylmethanimine tethered anthracene dimer: concise synthesis, conformational properties and photoinduced configurational isomerization

Eyad A. Younes,* Nayyef Aljaar, Maryam F. Abdollahi, Majed Shtaiwi, Maram J. Issa and Yuming Zhao*

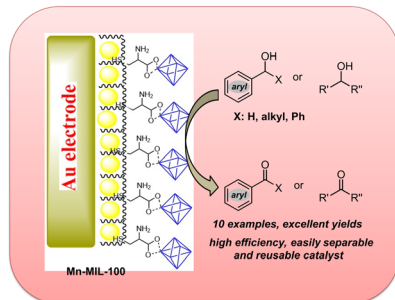
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High-performance adhesives modified by demethylated lignin for use in extreme environments

Shuang Zhang, Xin Zhao, Pengchao Chen, Guangwei Sun,* Yao Li, Ying Han, Xing Wang and Jigeng Li

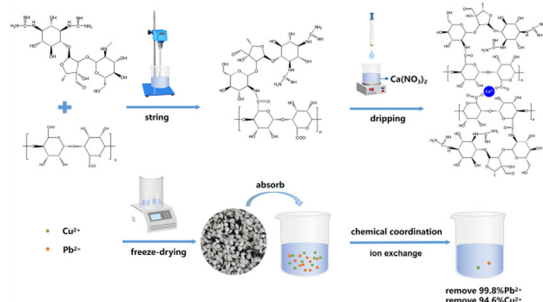
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Investigation of the electrocatalytic reaction for the oxidation of alcohols through the formation of a metal organic framework (Mn-MIL-100)/polymer matrix on the surface of an Au electrode

Hassan Keypour,* Jamal Kouhdareh, Rahman Karimi-Nami, Sedigheh Alavinia, Idris Karakaya, Somayyeh Babaei and Ammar Maryamabadi

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Effective removal of lead and copper ions from water using a novel sodium alginate–streptomycin sulfate composite aerogel

Chuanyu Zhu, Zhongmin Feng, Yupu Meng, Min Wang and Zhuqing Wang*

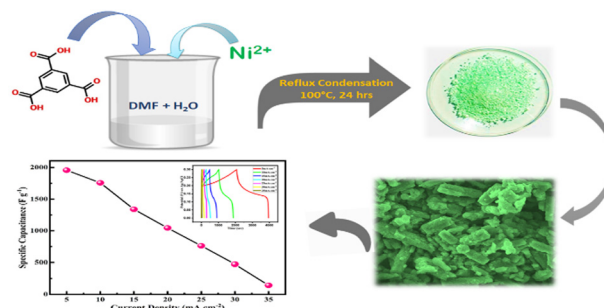


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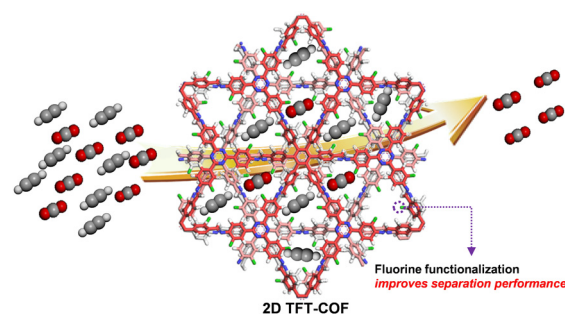
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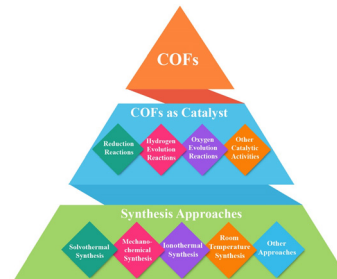
Jinxin Chen, Chuanhai Jiang, Zhihao Xing, Jiahao Li, Fangna Dai and Yongwu Peng*



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Design, synthesis, and application of covalent organic frameworks as catalysts

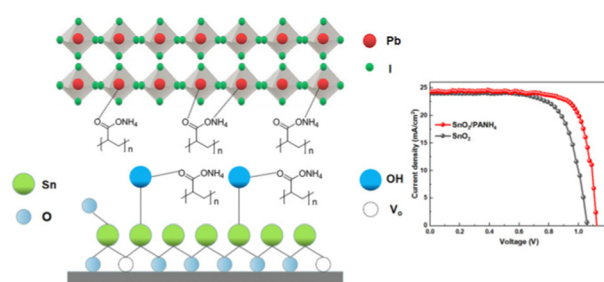
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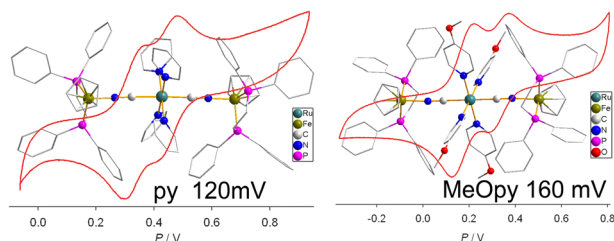
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Modifying SnO₂ with ammonium polyacrylate to enhance the performance of perovskite solar cells

Yu Wu, Yanqing Wang,* Mengzhu Li, Zhaozhao Wang, Wenfei Wu, Huifang Song, Qingsha Liu and Chengwu Shi



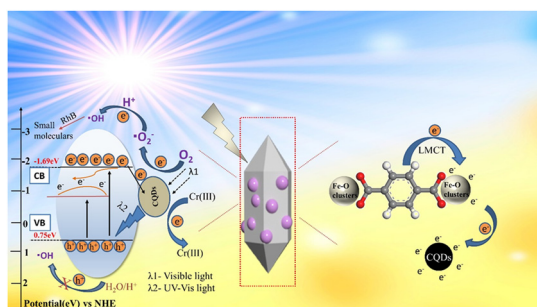
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Synthesis and structural and spectroscopic properties of a cyanido-bridged mixed-valence compound [Fe-NC-Ru-CN-Fe]

Ming Liu, Yan Xiong, Weixiu Xu and Yong Wang*

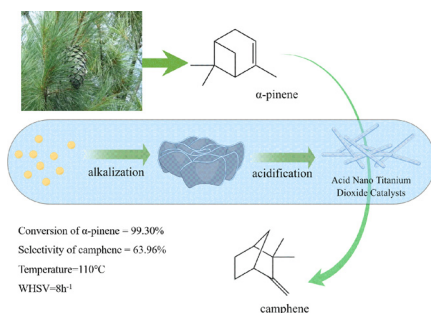
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Sulfur-modulated metal-organic framework MIL-101(Fe) with CQDs anchored as an efficient light-driven photocatalyst: photocatalytic performance and mechanism investigation

Yuwen Huang, Zongxue Yu,* Pingquan Wang,* Shuangli Li, Qiuyue Tan, Niandan He and Qingcan Xiang

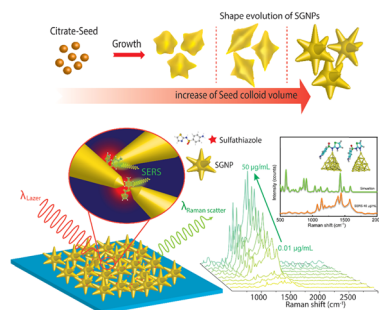
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Synthesis of camphene by α -pinene isomerization using acid nano titanium dioxide catalysts

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

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Controlled synthesis of spinous gold nanoparticles and their use for surface-enhanced Raman scattering (SERS) detection of the antibiotic sulfathiazole

Khuong Quoc Vo,* Man Van Tran,* Thu Anh Nguyen, Anh-Thi Tran Cao, Sy Van Vu, Kha Ni Tran, Nguyen Thanh Si and Vu-Nhat Pham

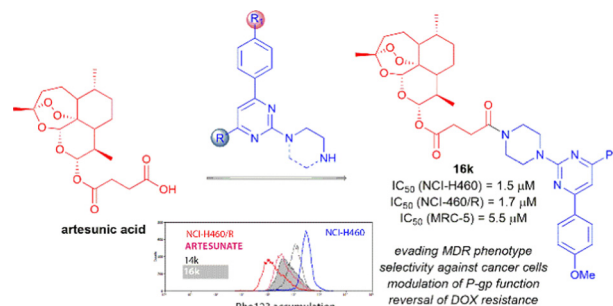


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Novel artesunate–pyrimidine-based hybrids with anticancer potential against multidrug-resistant cancer cells

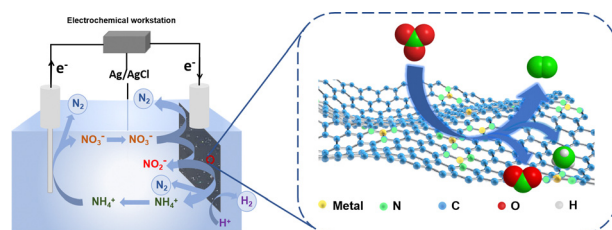
Ljiljana Koračak, Ema Lupšić, Nataša Terzić Jovanović, Mirna Jovanović, Miroslav Novaković,*
Paraskev Nedialkov, Antoaneta Trendafilova,
Mario Zlatović, Milica Pešić and Igor M. Opsenica*



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Cu^{II}porphyrin-mediated M–N–C single- and dual-metal catalysts for efficient NO₃[−] electrochemical reduction

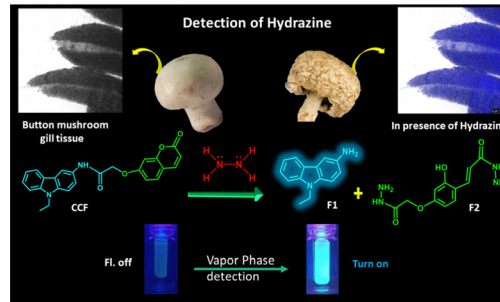
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A facile turn-on luminescence technique to trap hydrazine and its application in button mushroom (*Agaricus bisporus*)

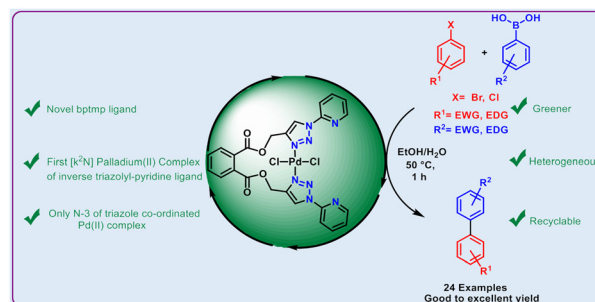
Priyotosh Ghosh, Koushik Kumar Dey,
Ansuman Chattopadhyay and Prithidipa Sahoo*



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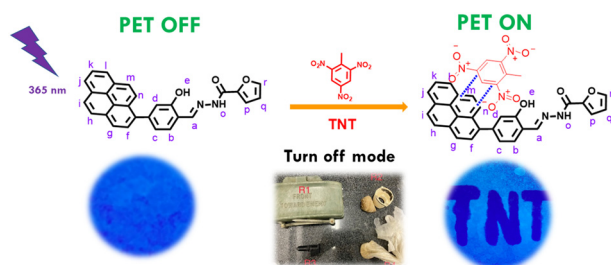
Unusual coordination of a 1,2,3-triazolyl-pyridine ligand in a Pd(II) complex: application in the Suzuki–Miyaura coupling reaction

Puneet Singh Gahlaut, Deepak Gautam, Prem Lama and Barun Jana*



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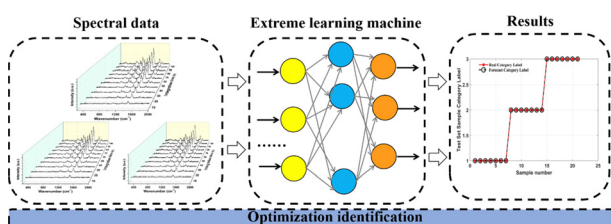
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A novel pyrenyl-furan hydrazone on paper-based device for the selective detection of trinitrotoluene

Anusorn Liabsungnoen, Pipattra Mayurachayakul, Kittiwat Srikittiwanna, Wijitar Dungchai, Mongkol Sukwattanasinit, Choladda Srisuwannaket, Withawat Mingvanish and Nakorn Niamnont*

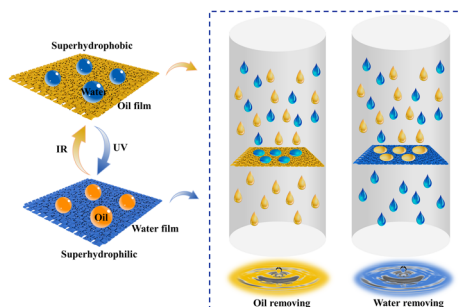
6889



Optimized identification of cheese products based on Raman spectroscopy and an extreme learning machine

Zheng-Yong Zhang, Min-Qin Jiang and Huan-Ming Xiong*

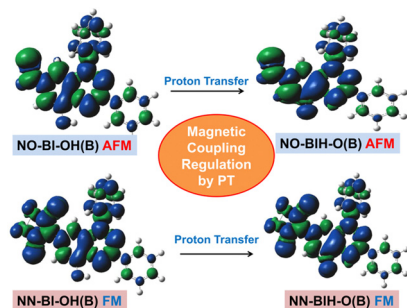
6895



A multifunctional silver@titanium dioxide composite cloth for oil and water separation

Linshan Wu and Zhiguang Guo*

6903



Proton-transfer regulated magnetic coupling characteristics in Blatter-based diradicals

Rabia Malik and Yuxiang Bu*



Yanru Huang, Ying Li, Yang Li,* Keli Zhong and Lijun Tang*

6924

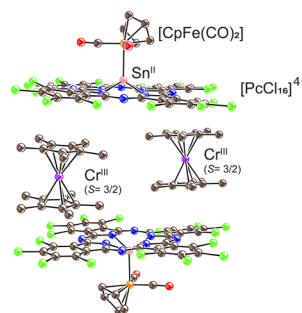
Heterotrimetallic paramagnetic complex of ring reduced tin(II) hexadecachlorophthalocyanine

Nikita R. Romanenko, Maxim A. Faraonov,*
Nikita G. Osipov, Alexey V. Kuzmin, Salavat S. Khasanov,
Akihiro Otsuka, Hideki Yamochi, Hiroshi Kitagawa and
Dmitri V. Konarev*



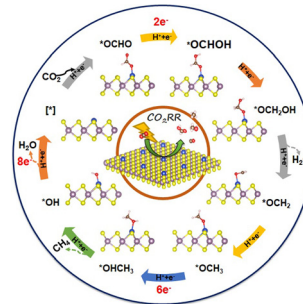
Heterotrimetallic paramagnetic complex of ring reduced tin(II) hexadecachlorophthalocyanine

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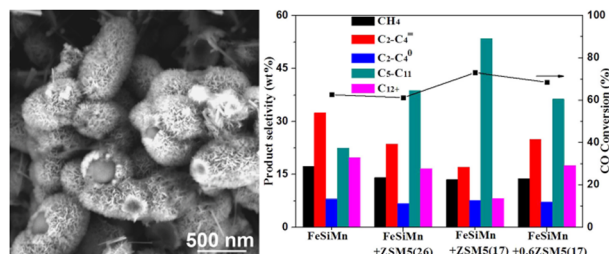


An effective strategy for CO₂ reduction to C1 products using Cu-embedded MoS₂ electrocatalyst: DFT study

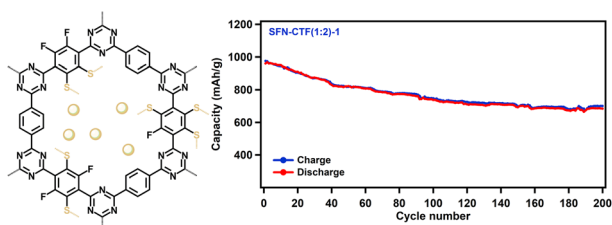
Thamarainathan Doulassiramane, Natarajan Arumugam,
Abdulrahman I. Almansour, Sakkarapalayam M. Mahalingam
and Ramanathan Padmanaban*

Hierarchical porous ZSM-5-promoted FeSiMn catalyst for gasoline selectivity *via* Fischer–Tropsch synthesis: effect of acid sites

Yulan Zhang* and Xizhu Lin



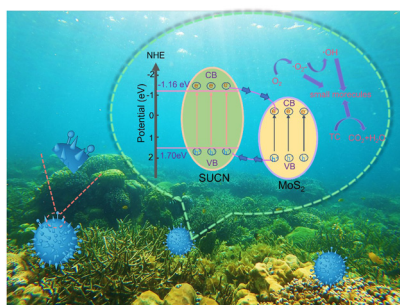
6951



Facile synthesis of elemental sulfur-mediated fluorine-containing covalent triazine frameworks and their performance in lithium–sulfur batteries

Shuhao Wang, Yue Song, Zhao Wang, Wei Xie, Shuran Zhang, Chan Yao, Yanning Zhao* and Yanhong Xu*

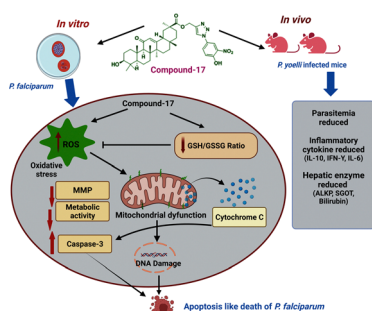
6958



Regulating the interfacial charge separation between MoS₂ QDs and sea-urchin graphitic carbon nitride for deep photodegradation of tetracycline under visible light

Xingyu Zhan, Hao Zhang, Yunxiong Zeng,* Jingcai Xu, Ao Jin, Xinqing Wang, Jing Li, Yanting Yang and Bo Hong*

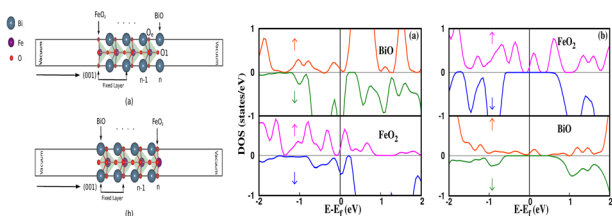
6967



Design and synthesis of novel glycyrrhetic acid-triazole derivatives that exert anti-plasmodial activity inducing mitochondrial-dependent apoptosis in *Plasmodium falciparum*

Deepak Singh Kapkoti, Saurabh Kumar, Ashish Kumar, Mahendra P. Darokar, Anirban Pal* and Rajendra Singh Bhakuni*

6983



Evidence of half-metallicity at the BiFeO₃(001) surface

Soumyasree Jena and Sanjoy Datta*



CORRECTION

6993

Correction: WS₂ quantum dots harvesting *via* sonication assisted liquid exfoliation for the electrochemical sensing of xanthine

Arunkumar Sakthivel, Anitha Chandrasekaran, Charlin Soosaimanickam, Chen-Zhong Li and Subbiah Alwarappan*

