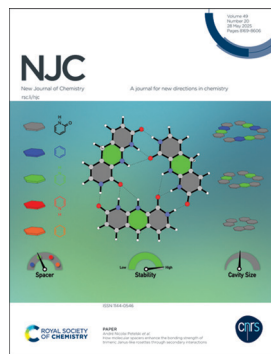


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Cover

See André Nicolai Petelski et al., pp. 8183–8191.

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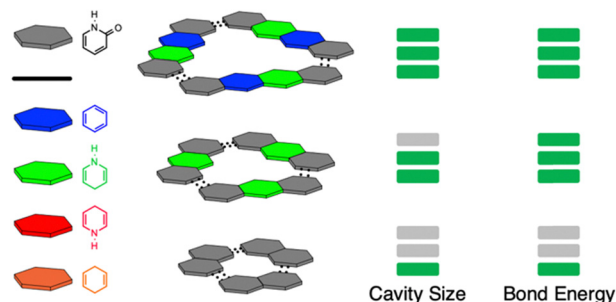
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8183

How molecular spacers enhance the bonding strength of trimeric Janus-like rosettes through secondary interactions

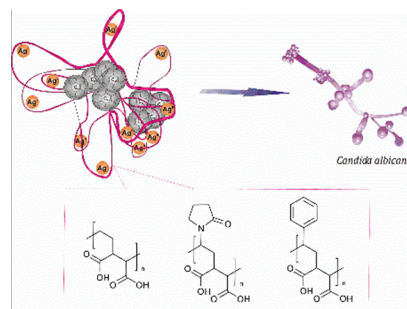
André Nicolai Petelski,* Damián Ramón López and Nélida María Peruchena



8192

Water-dispersible nanocomposites of fullerene C₆₀ and polymer-stabilized silver nanoparticles: preparation, physico-chemical properties, and antifungal activity

Nadezhda Samoilova,* Maria Krayukhina, Zinaida Klemenkova, Alexander Naumkin, Michail Buzin, Oxana Vyshivannaya, Nelya Anuchina and Dmitry Popov



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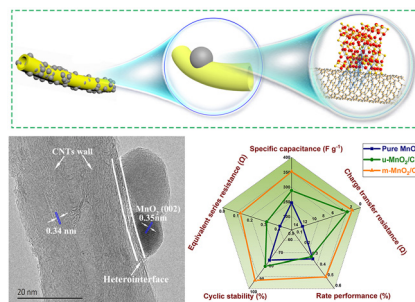
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Microwave-assisted interfacial oxygen-bridge bonding for enhanced performance of MnO₂/CNT heterostructures in asymmetric supercapacitors

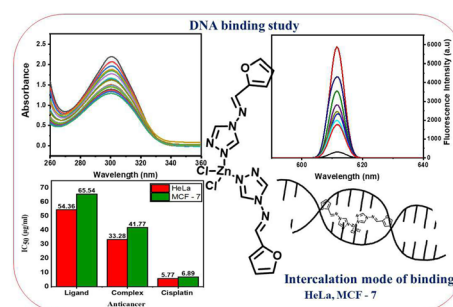
Shuhuang Tan, Yichen Liu, Xiaoran Sun, Shoujun Zhang, Chengqi Sun, Yin Sun* and Naibao Huang



8215

Anticancer activity: synthesis, characterization and DNA binding of a 1,2,4-triazole-based Zn(II) complex

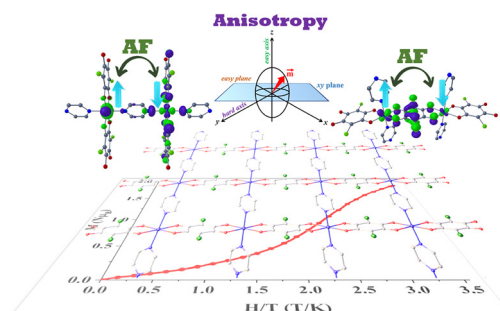
Yakkobu Gnanadeepam, Bhaskaran Shankar and Arunachalam Tamilselvi*



8225

An infinite 2D sheet of tetragonal Co^{II} framework exhibiting metamagnetism

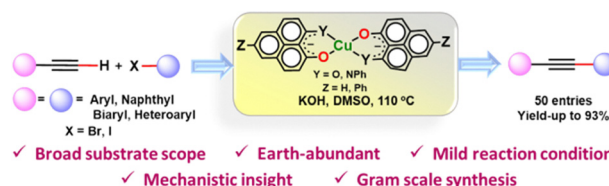
Arindam Gupta, Pramod Bhatt* and Sanjit Konar*



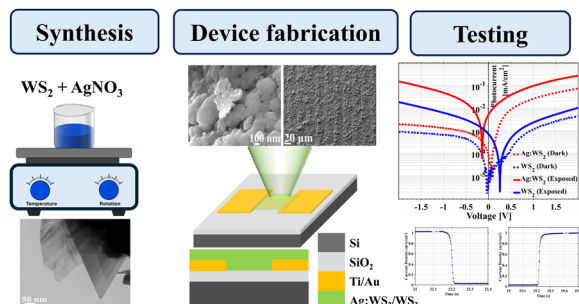
8232

Copper(II) phenalenyl complexes: structures, redox properties and catalytic activity towards Sonogashira coupling reactions

Gayetri Sarkar, Krishnendu Paramanik, Nilaj Bandopadhyay, Souvik Chatterjee, Subhajit Saha, Subhra Jyoti Panda, Chandra Shekhar Purohit, Bhaskar Biswas* and Hari Sankar Das*



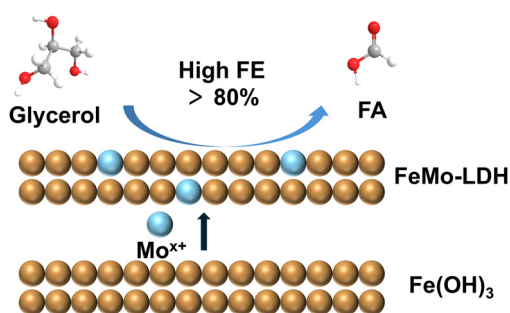
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Reduced carrier–phonon scattering and enhanced absorption in silver-doped transition metal dichalcogenide photodetectors

Md Samim Reza, Henam Sylvia Devi, Shubhangi Majumdar, Maninder Kaur, Pramit Kumar Chowdhury and Madhusudan Singh*

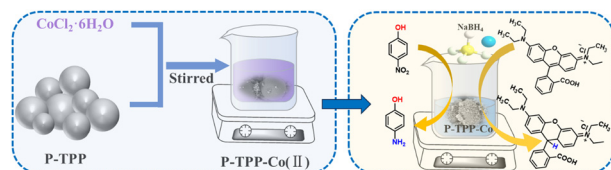
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The role of molybdenum in promoting the electrochemical glycerol oxidation performance of iron–molybdenum layered double hydroxides

Yixuan Zhou, Jing Zhang, Zhiqiang Qiao, Xinze Huang, Deqiang Ji, Dandan Yuan, Zhida Li* and Hongjun Wu*

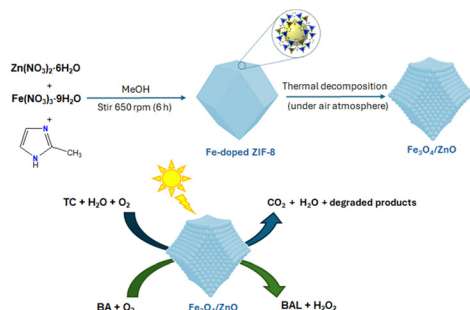
8259



Facile synthesis of spherical porphyrin polymer-supported cobalt nanoparticles for the efficient catalytic hydrogenation of 4-NP

Jing Li, Jia Li, Cheng Tang,* Fen Wang, Shuang Yan and Yanglei Li

8267



Construction of Fe₃O₄/ZnO heterostructure photocatalysts derived from Fe-doped ZIF-8 for enhanced photocatalytic degradation of tetracycline and hydrogen peroxide production

Sumiyyah Sabar,* Afiqah M. Jamil, Yifan Zhao, Enis Nadia Md Yusof, Raphaël Schneider, Abdul Rahman Mohamed, Yasutaka Kuwahara, Kohsuke Mori and Hiromi Yamashita*

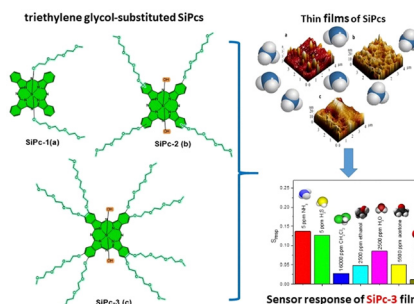


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8279

Effect of the number and position of substituents on the orientation and sensor response of triethylene glycol-substituted silicon phthalocyanine films to ammonia

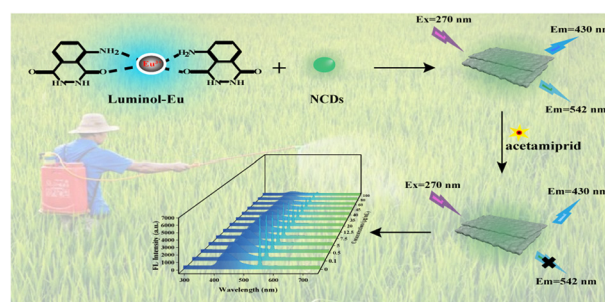
Victoria Ivanova, Tamara Basova,* Darya Klyamer, Aleksandr Sukhikh, Sebile Işık Büyükekşi, Devrim Atilla and Ayşe Gül Gürek*



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A ratiometric fluorescent sensor based on AIE nanoparticles and nitrogen-doped carbon dots for rapid and sensitive detection of acetaminophen in rice

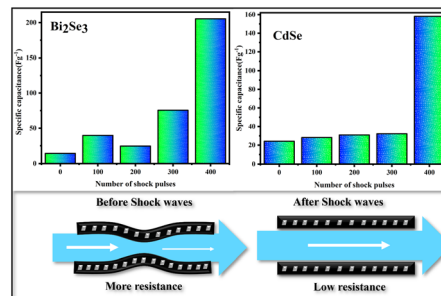
Mingsha Jie, Amei Zhu, Bing Zhu, Jiaxin He, Shengkai Lan, Xingang Lang and Yanhong Bai*



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Acoustic shock wave treatment as a pathway to enhance the specific capacitance of selenium-based layered chalcogenides for supercapacitor applications

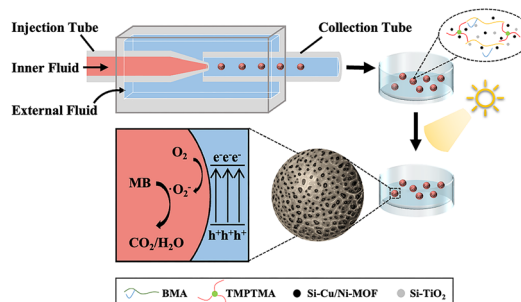
F. Irine Maria Bincy, S. Oviya, Raju Suresh Kumar, P. Kannappan, Ikhyun Kim* and S. A. Martin Britto Dhas*



8315

BMA porous microspheres loaded with silane-modified Cu/Ni@MOF-TiO₂ for the photocatalytic degradation of methylene blue

Zi-Yu Tang, Chuan-Lin Mou,* Ya-Dong Li, Shi-Hao Chen, Xian-Min Yang, Xu Ding, Hong-Bo Deng and Lin-Yuan Wang



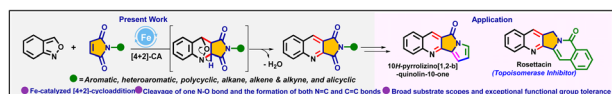
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Characterization of products from the chemical removal of thiol in hydrocarbon streams using DART-MS and NMR spectroscopy

Rolando Perez Pineiro,* Jody Hoshowski, Adnan Alhammoud and Boris Svidinskiy

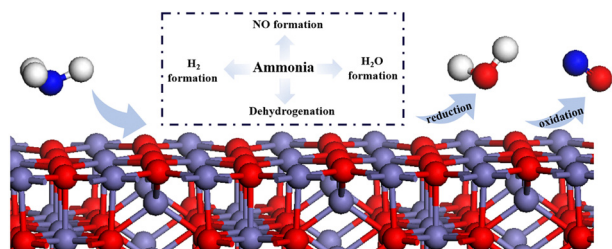
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Fe(III)-catalyzed [4+2] annulation of anthranils and maleimides for pyrrolo[3,4-*b*]quinolinedione synthesis: application to rosettacin

Khushboo Tiwari, Mayank Singh, Vanshika Nirmal and Dharmendra Kumar Tiwari*

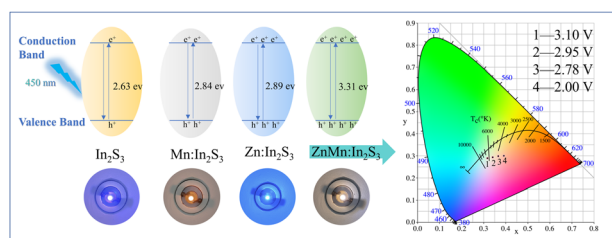
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Alternative reaction mechanisms of ammonia reduction of iron oxide examined using density functional theory modelling

Huanran Wang,* Zhezi Zhang, Chiemeka Onyeka Okoye,* Xianchun Li and Dongke Zhang

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Bandgap-engineered Zn–Mn co-doped In₂S₃ quantum dots for high-performance tunable white quantum dot light-emitting diodes (WQLEDs)

Jiayu Wang, Lili Wang,* Hong Lv, Jiayi Liu and Sichen Liu

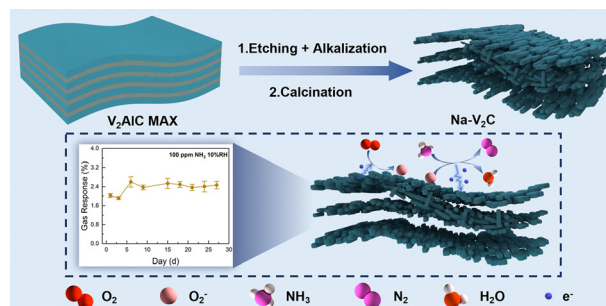


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Preparation of $\text{NaV}_6\text{O}_{15}/\text{V}_2\text{CT}_x$ composite materials for room-temperature ammonia sensing

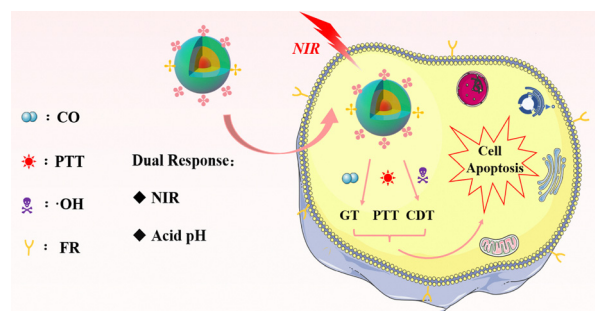
Yuanyuan Zhou, Zhe Zhang, Baojie Shi and Jiangwei Ma*



8368

A nanozyme combining multi-enzymatic activity with targeted carbon monoxide delivery for synergistic antitumor therapy

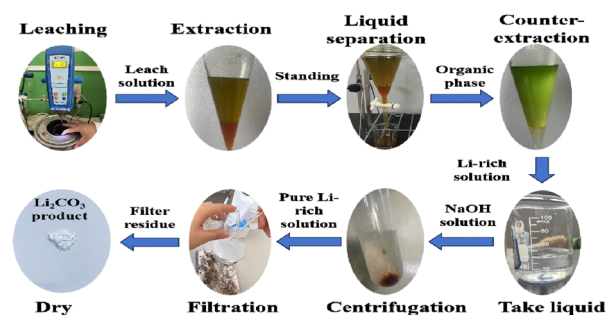
Bing Ren, Jing Liu, Qi Tang, Yi Wang, Jian Fang, Shi-Ping Yang and Jin-Gang Liu*



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An investigation into the synergistic enhancement of MIBK for lithium extraction utilizing the TBP- FeCl_3 system from spent LiFePO_4 powder

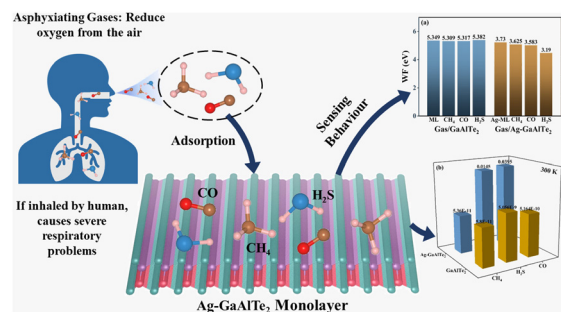
Haiyu Wang, Xiangyun Qiu,* Zhenhua Feng, Xinyu Li and Tao Wei



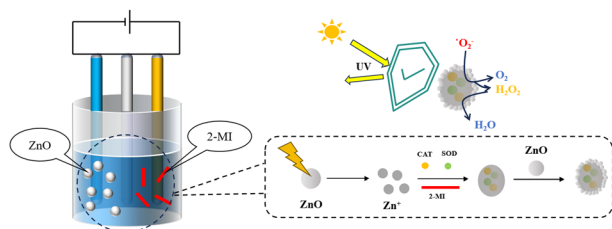
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An Ag-modified GaAlTe_2 monolayer: a high-performance gas sensor for detecting asphyxiating gases

Disha Mehta, Yashasvi Naik, Nidhi Modi and P. B. Thakor*



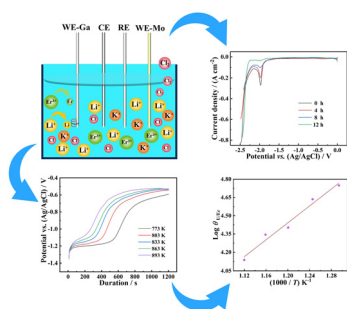
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A highly efficient and long-lasting agent for reactive oxygen species removal based on biomimetic mineralization of metal–organic frameworks

Weijie Zhu, Hao Ren, Yiwen Xie and Tianxiang Wei*

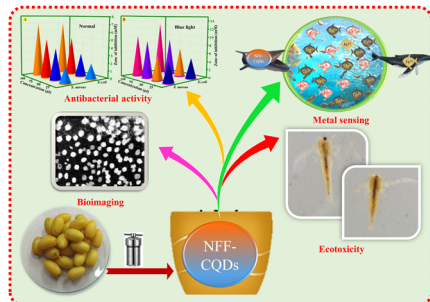
8402



Electrochemical properties and extraction of erbium on a liquid gallium electrode in the 3LiCl–2KCl molten salt

Jiabao Gao, Kewei Jiang,* Alena Novoselova,* Valeri Smolenski, Jing Yu, Qi Liu, Rumin Li* and Jun Wang

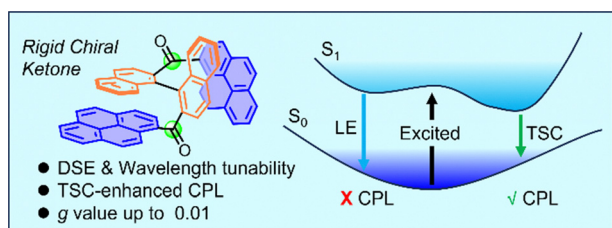
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Synthesis of carbon quantum dots from neem fruit flesh for dual metal sensing, bioimaging, and antibacterial applications

Kannan Vellaisamy, Ayerathal Velmurugan, Esakkimuthu Shanmugasundaram, Nithesh Kumar Krishnan, Vaseeharan Baskaralingam, Ashokkumar Sibiya and Stalin Thambusamy*

8428



Dual space-conjugated pyrene-based ketone exhibits dual state-tuned emission wavelengths and enhanced circularly polarized luminescence

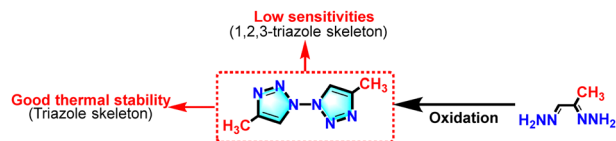
Yao Ji, Xin Meng,* Jia'ao Han, Yanchen Liu, Jian Tang, Yuanchun He, Ensheng Zhang, Xiaoxiang Zhang and Ziping Cao*



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4,4'-Dimethyl-1,1'-bi(1,2,3-triazole): exploring new insensitive energy source materials

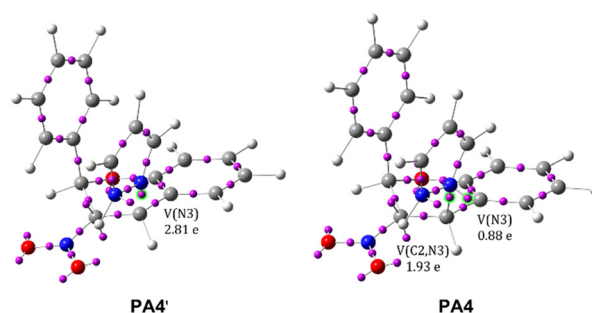
Hao Li, Guang-yuan Zhang, Ning-ning Du, Le-wu Zhan, Jing Hou* and Bin-dong Li*



8442

A new mechanistic insight into the molecular mechanisms of the addition reactions of 2-aryl-3-nitro-2H-chromenes to pyrazoles and cyclopentadienes

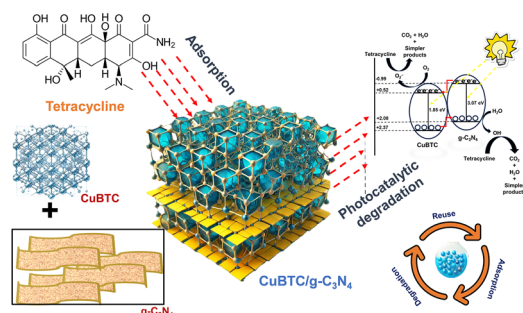
Przemysław Woliński, Ewa Dresler and Radomir Jasiński*



8454

Innovative CuBTC/g-C₃N₄ materials for tetracycline mitigation: adsorption, photocatalysis, and mechanistic perspectives

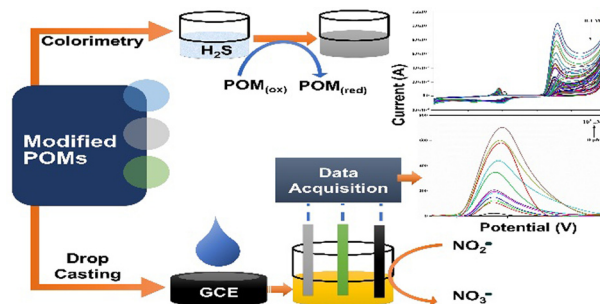
Palkaran Sethi, Soumen Basu* and Sanghamitra Barman*



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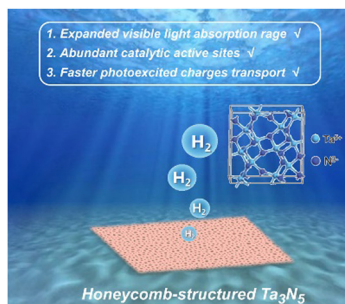
Synthesis and characterization of transition metal-based polyoxometalates for dual sensing of biomarkers such as nitrite ions and hydrogen sulphide

Celin T and Gandhimathi S*



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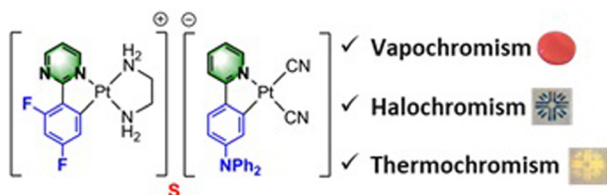
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Template-free synthesis of honeycomb-structured Ta₃N₅ foam nanoplates with expanded light absorption, abundant active sites and fast charges transport for visible-light-driven H₂ evolution

Jiudi Zhang, Ruyu Zhang, Xiaowei Jia,* Jinming Li, Mingliang Sun, Shikang Zhang, Zhenfu Guo, Xiaoyan Jiao, Xianchun Liu, Zhanshuang Jin, Junjie Li* and Yan Xing*

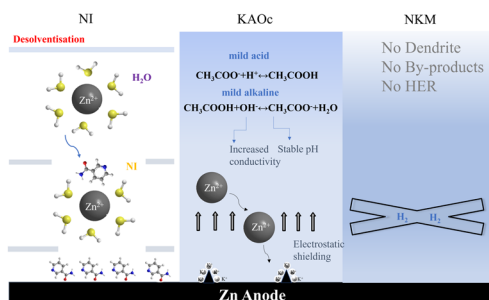
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Cyclometalated platinum(II) complex-based soft salt with multistimuli-responsive properties

Alexandre Rico, Pascal Le Poul, Antonin Lyčka, Julián Rodríguez-López, Sylvain Achelle and Sébastien Gauthier*

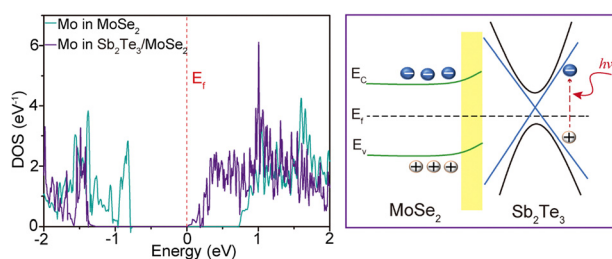
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A dual-additive electrolyte enables highly reversible Zn electrochemistry

Weimin Yuan, Chengze Li, Qianqian Ma, Hao Luo, Ximei Sun, Xiaoyi Chen, Lina Ye, Zhenjie Sun* and Lingyun Zhu*

8512



Two-dimensional Sb₂Te₃/MoSe₂ van der Waals heterojunction for high-sensitivity photodetectors

Meng Li, Qian Cai,* Wenting Hong, Xu He and Wei Liu*

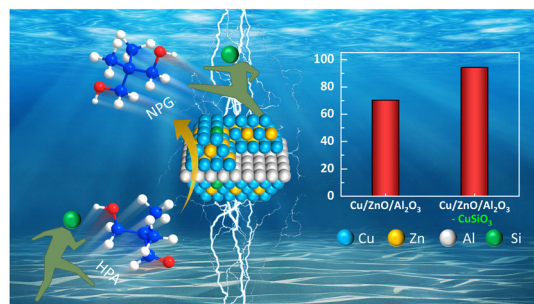


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Insights into the copper silicate modification on Cu/ZnO/Al₂O₃ catalysts during HPA hydrogenation: influence of copper species on catalytic selectivity

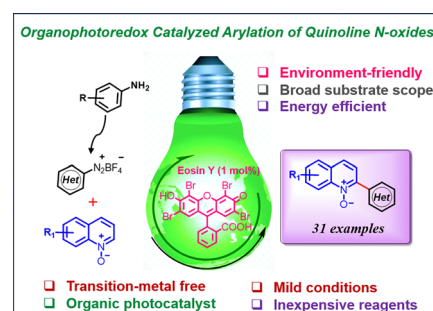
Wanbang Zhu, Bing Wei, Liancheng Bing, Dezhi Han, Guangjian Wang and Fang Wang*



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Eosin Y-mediated visible light photoredox catalysis for C(2)-H arylation of quinoline N-oxides using arenediazonium salts

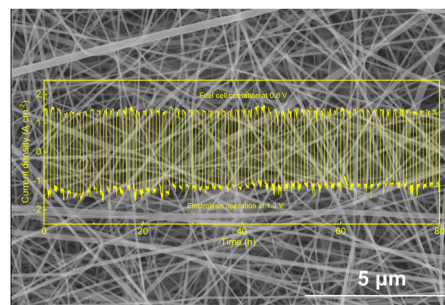
Shubhanjali Choudhary and Rakesh Kumar*



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La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3-δ}@(Ce_{0.80}Gd_{0.20})O₂ nanofibre composites as oxygen electrodes for reversible solid oxide cells

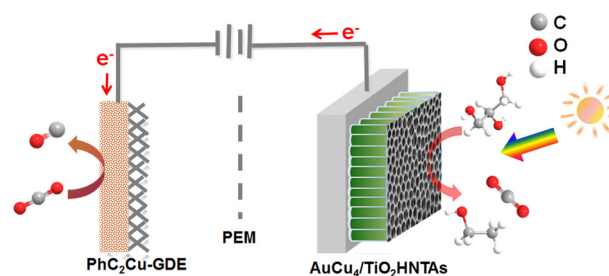
Keda Wang, Jing Yu* and Yuyang Zu



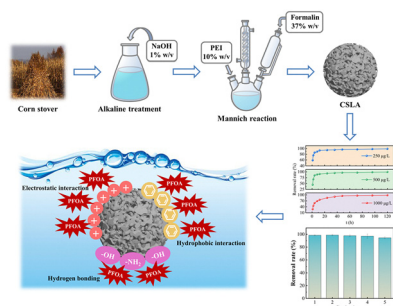
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Coupling EC CO₂ reduction on PhC₂Cu-gas diffusion electrode with PEC glycerol oxidation on AuCu₄/TiO₂HNTAs

Danfeng Liu, Yiwei Zhou, Bingxu Chen and Jian Zhao*



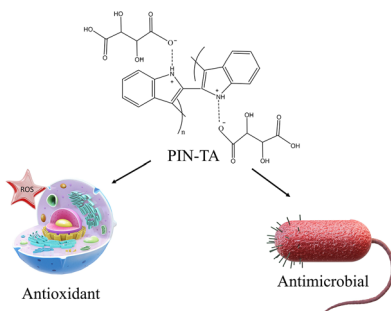
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Adsorption of low-concentration perfluorooctanoic acid on corn stover-based lignin amine by synergy of electrostatic and hydrophobic interactions

Baoyuan Shi, Jun Dong,* Yunhao Li, Weihong Zhang and Yongxin Li

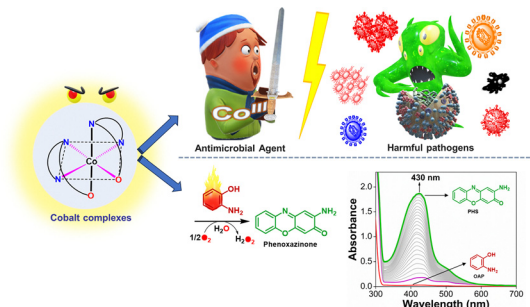
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Facile one-pot synthesis of tartaric acid-doped polyindole with antibacterial and antibiofilm activities against ESKAPE pathogens

Sresha Sarkar, Adrija Ghosh, Subhajit Ghosh, Koushik Dutta, Arghya Adhikary* and Dipankar Chattopadhyay*

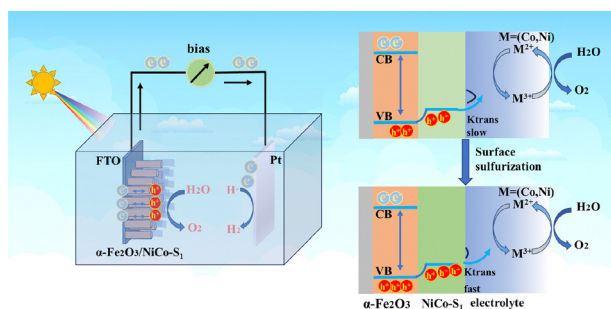
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Impact of ligand steric hindrance on the phenoxazinone synthase-like reactivity and antibacterial activity of cobalt(III) complexes of N₂O donor ligands

Kannan Sree Vidya, Ganesh Yamuna, Nattamai Bhuvanesh, Ayyan Ghosh, Sreeja Dasgupta, Sukanta Mandal, Rajkumar Vasanthkumar, Packiaraj Gurusaravanan and Karuppasamy Sundaravel*

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Surface vulcanization activates α -Fe₂O₃/NiCo-LDH photoelectrode surface activity leading to high photoelectrochemical performance

Yue Meng,* Zhiling Huang and Di Liu

