

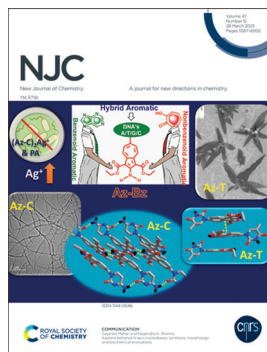
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### Inside cover

See Sagarika Meher and Nagendra K. Sharma, pp. 5593–5597. Image reproduced by permission of Aanya Sharma from *New J. Chem.*, 2023, 47, 5593.

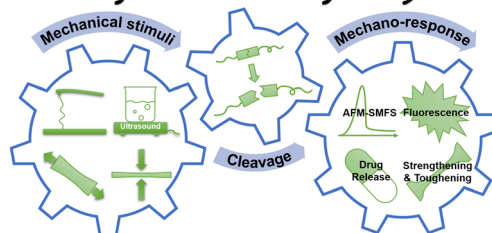
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### Mechanochemistry of dynamic chalcogen-containing polymers: a minireview

Muqing Cao, Yizheng Tan and Huaping Xu\*

### Mechanochemistry of Dynamic Chalcogen-containing Polymers

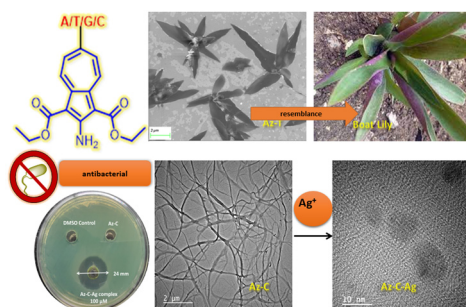


## COMMUNICATIONS

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### Azulene tethered *N*-aryl nucleobases: synthesis, morphology and biochemical evaluations

Sagarika Meher and Nagendra K. Sharma\*



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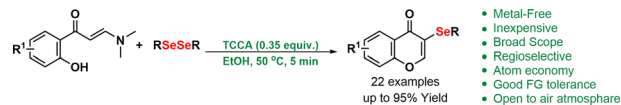


## COMMUNICATIONS

5598

### Synthesis of 3-selanyl-isoflavones from 2-hydroxyphenyl enaminones using trichloroisocyanuric acid (TCCA): a sustainable approach

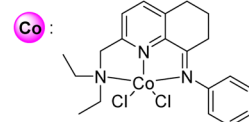
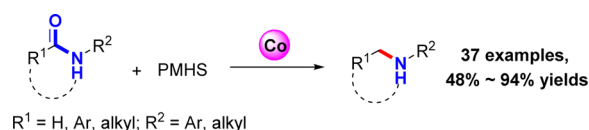
Carlos V. Doerner, José S. S. Neto, Climei R. Cabreira, Sumbal Saba, Louis P. Sandjo, Jamal Rafique,\* Antonio L. Braga\* and Francisco F. de Assis\*



5603

### Hydrosilylative reduction of secondary amides to amines catalyzed by geometry-constrained *NNN*-cobalt complexes

Shuting Dong, Zhijian Zong, Nan Sun, Baoxiang Hu, Zhenlu Shen, Xinquan Hu\* and Liqun Jin\*



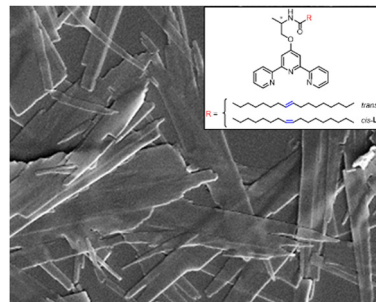
- wide substrate scope
- highly efficient & selective
- air-stable precatalyst

*N,N,N*-Co-catalyzed hydrosilylative reduction of secondary amides to amines.

5611

### Influence of conformation isomers in alkyl chains on Ag(I)-coordinated supramolecular architectures

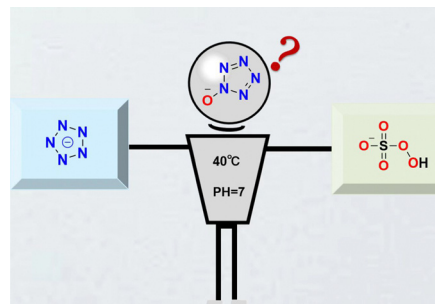
Hyeon min Han, Ka Young Kim, Jong Hwa Jung\* and Sung Ho Jung\*



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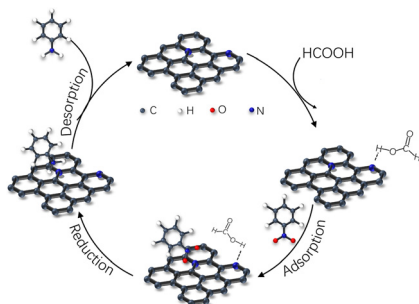
### Why does the cyclic pentazolate anion fail to undergo *N*-oxidation in oxone solution?

Ze Xu, Shuaijie Jiang, Tianyang Hou, Xiaopeng Zhang, Ming Lu\* and Yuangang Xu\*



## COMMUNICATIONS

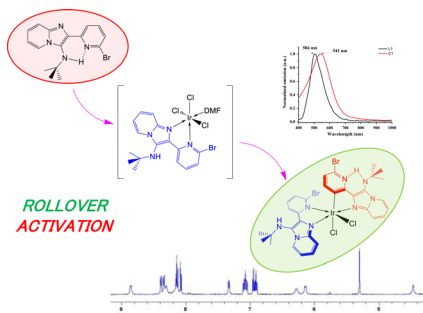
5621

**Metal-free hydrogenation with formic acid over N-doped carbon**

Ziyi Xia, Bowei Wang,\* Jiayi Li, Fangying Zhang, Ligong Chen and Yang Li\*

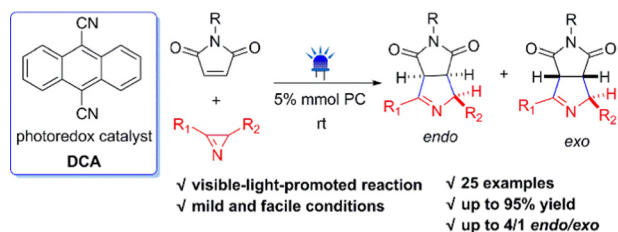
## PAPERS

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**A rollover Ir(III) complex of 2-(6-bromopyridin-2-yl)imidazo[1,2-a]pyridine**

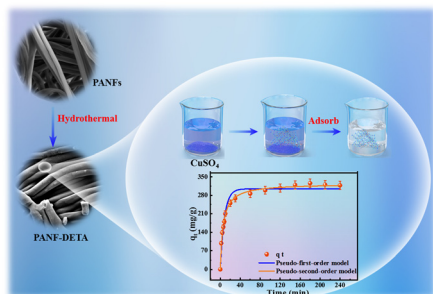
Yazmin Varela, Gonzalo Ramírez-García, J. Oscar C. Jimenez-Halla, Mariana Segovia-Mendoza, Heriberto Prado-Garcia, Katarzyna Wrobel, Kazimierz Wrobel, Silvia Gutiérrez-Granados, Cristina Lemini and Oracio Serrano\*

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**Visible light-promoted synthesis of 4,6a-dihydropyrrolo[3,4-c]pyrrole-1,3(2H,3aH)-diones via [3+2] cycloaddition reaction of 2H-azirines with maleimides**

Hao Guo, Huahao Wang, Hongyi Zhao and Dongfeng Zhang\*

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**Efficient removal of high- or low-concentration copper ions using diethylenetriamine-grafted electrospun polyacrylonitrile fibers**

Yuyin Zhang, Keyu Wang, Gaigai Duan,\* Yiming Chen,\* Kunming Liu and Haoqing Hou\*

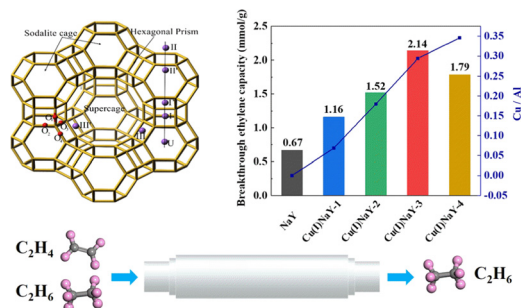


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## Regulation of the nature and sites of copper species in CuNaY zeolites for ethylene and ethane separation

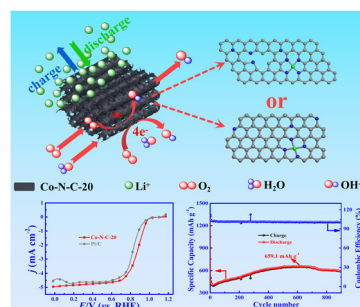
Guanhong Li, Huan Wang, Qiang Li, Xiaoxin Zhang, Yucai Qin,\* Yanfeng Bi and Lijuan Song\*



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## Nitrogen-rich hierarchical porous carbon nanoscrolls with atomically dispersed Co sites for the enhanced oxygen reduction reaction and lithium-ion batteries

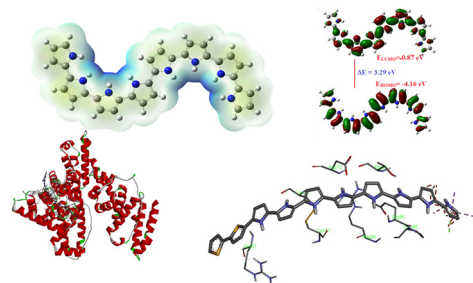
Ziyan Wen, Yangyang Chen, Da Hu, Binhong He and Minjie Zhou\*



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## Synthesis, characterization, and biophysical interaction studies of water-dispersible polypyrrole/polythiophene co-oligomers with bovine serum albumin and human serum albumin: an experimental and theoretical approach

Ufana Riaz,\* Aaliyah Farooq, Nuzhat Nabi, Faith R Nwanze and Fei Yan

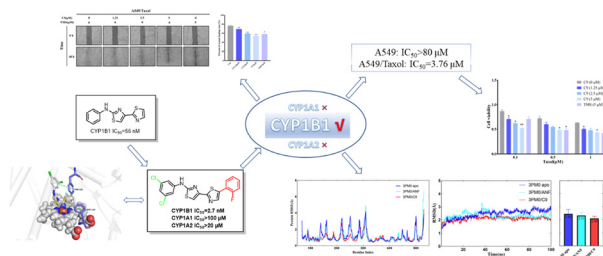


Biophysical Interaction studies of Water Dispersible Conducting Polymers

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## Design, synthesis and biological evaluation of highly potent and selective CYP1B1 inhibitors

Haoyu Zhang, Ping Xu, Ting Wang, Shiyu Wang, Weixia Li, Jianping Mao, Jian Wang,\* Fengjiao Zhang\* and Maosheng Cheng\*

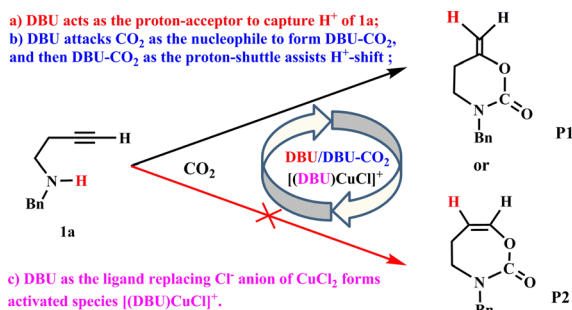




## PAPERS

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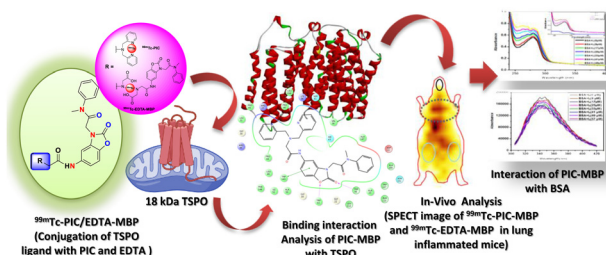
a) DBU acts as the proton-acceptor to capture  $H^+$  of 1a;  
 b) DBU attacks  $CO_2$  as the nucleophile to form  $DBU-CO_2$ ,  
 and then  $DBU-CO_2$  as the proton-shuttle assists  $H^+$ -shift;



### Mechanistic insights into the Cu(II)/DBU-catalyzed incorporation of $CO_2$ into homopropargylic amines

Binfang Yuan,\* Senmao Liu, Tian Liu, Qing Li, Yulu Wang, Zhihui Guo, Xiaogang Guo, Huisheng Huang\* and Rongxing He\*

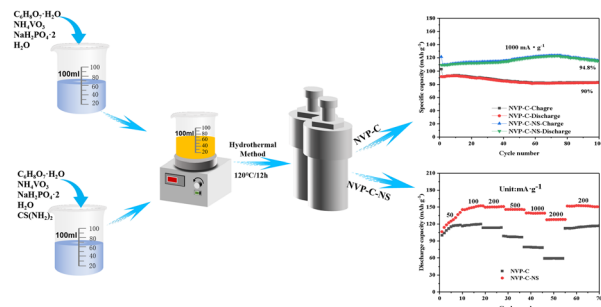
5701



### Comparison of PIC and EDTA-coupled acetamidobenzoxazolone probes as a specific marker for a 18 kDa protein (TSPQ)

Neelam kumari, Priya Singh, Deepika Singh, Akanksha Mishra, Ankur Kaul, Himanshu Ojha and Anjani Kumar Tiwari\*

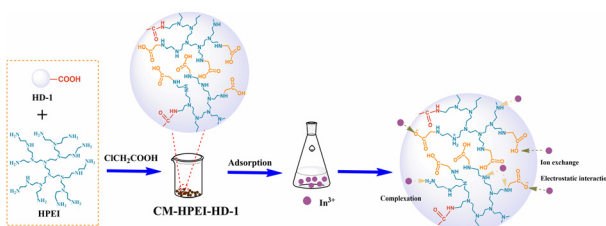
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### N/S Co-modified carbon/ $Na_3V_2(PO_4)_3$ with high rate capability for Zn-ion storage

Yongqing Liang, Shaolong Xu, Xinchao Lu, Chenxia Zhang, Zheng Liu, Pintian Zou, Yiju Lv\* and Bin Huang\*

5723



### Effective adsorption of $In(III)$ from hydrochloric acid solution using hyperbranched polyethyleneimine and sodium chloroacetate modified weakly acidic macroporous resin

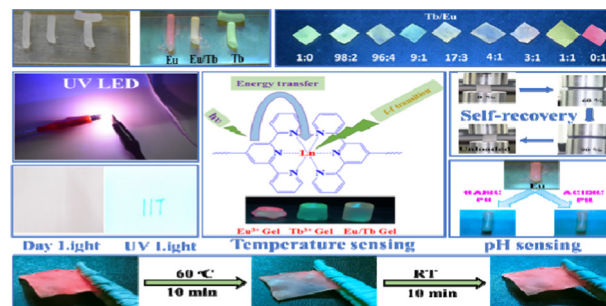
Xuezhen Gao,\* Zhiyong Cao, Junshen Liu\* and Beibei Zhang



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### Strain sensing multi-stimuli responsive light emitting lanthanide-based tough and stretchable hydrogels with tunable luminescence and fast self-recovery using metal–ligand and hydrophobic interactions

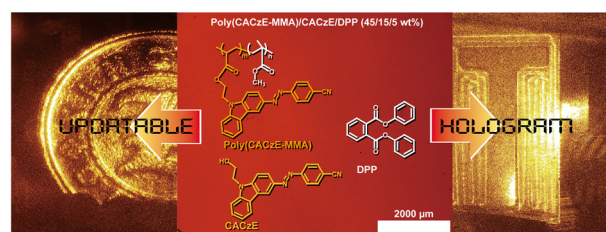
Prachishree Panda, Agniva Dutta, Sourabh Pal, Debabrata Ganguly, Santanu Chattopadhyay, Narayan Chandra Das and Rajat K. Das\*



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### Azo-carbazole copolymer-based composite films with high optical transparency for updatable holograms

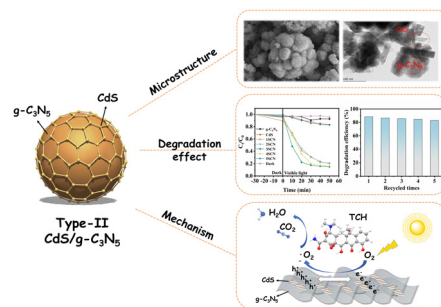
Kenji Kinashi,\* Ikumi Nakanishi, Wataru Sakai, Naoto Tsutsumi and Boaz Jessie Jackin



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### Synthesis and application of type-II heterojunctions based on CdS and g-C<sub>3</sub>N<sub>5</sub> for efficient photocatalytic degradation of antibiotics

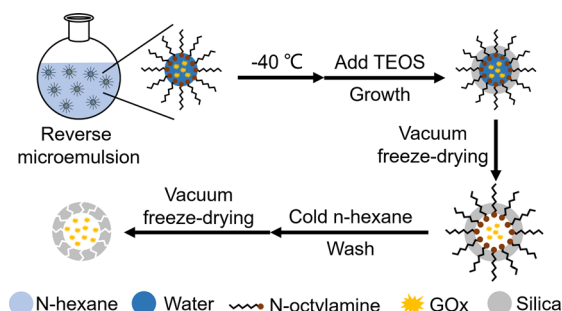
Jing Yang, Jie Wang, Haizan Huang, Liang Wei\* and Xiande Yang\*



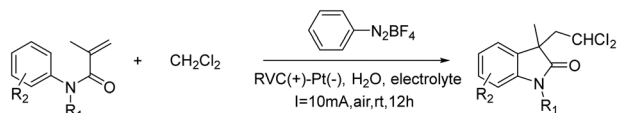
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### Freezing-assisted reverse microemulsion synthesis of hollow mesoporous silica encapsulated glucose oxidase

Jinxu Cao, Feng Shi, Long Chen, Xuemei Xu, Zhen Chen, Zhanjun Yang\* and Xingmao Jiang\*



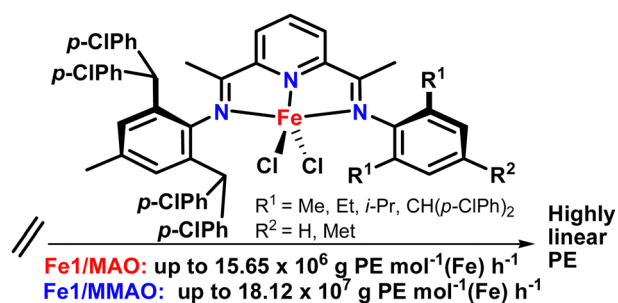
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### Polychlorinated alkylation annulation of *N*-arylacrylamide under electrochemical conditions

Yuyu Dai, Miao Cui, Xiaoqing Li, Huiming Chen and Xiangsheng Xu\*

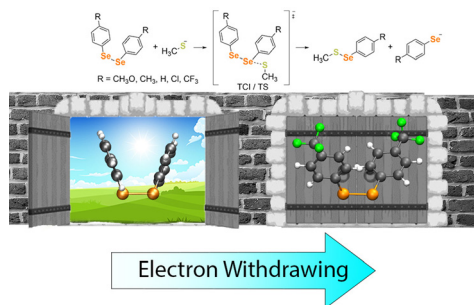
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### Unimodal polyethylenes of high linearity and narrow dispersity by using *ortho*-4,4'-dichlorobenzhydryl-modified bis(imino)pyridyl-iron catalysts

Tian Liu, Yanping Ma, Gregory A. Solan,\* Yang Sun and Wen-Hua Sun\*

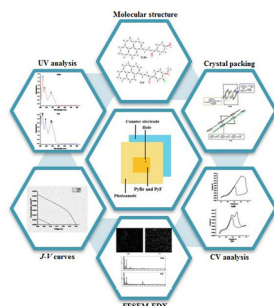
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### Thiol modifier effects of diphenyl diselenides: insight from experiment and DFT calculations

Pablo A. Nogara, Cláudia S. Oliveira, Andrea Madabeni, Marco Bortoli, João Batista T. Rocha and Laura Orian\*

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### Involvement of halogen and polyaromatic substituents in chalcone derivatives as dye sensitizers in solar cell applications

Siti Nabilla Aliya Mohd Nizar, Mohd Mustaqim Rosli, Siti Azrah Mohamad Samsuri, Ibrahim Abdul Razak and Suhana Arshad\*



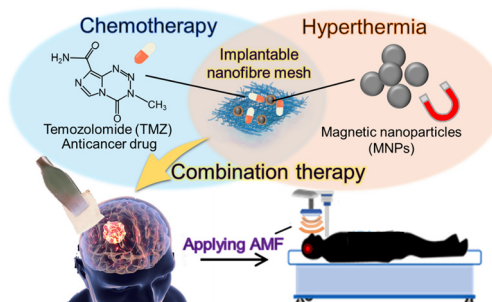


## PAPERS

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### Locally implantable nanofibre meshes by sustained release of temozolomide for combined thermo-chemotherapy to treat glioblastoma

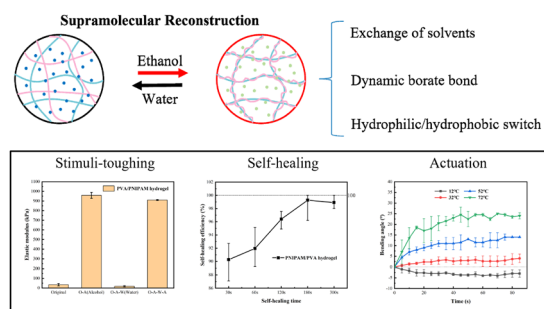
Emiho Oe, Nanami Fujisawa, Lili Chen, Koichiro Uto, Yoshitaka Matsumoto and Mitsuhiro Ebara\*



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### Ethanol stimuli-responsive toughening PNIPAM/PVA self-healing hydrogel thermal actuator

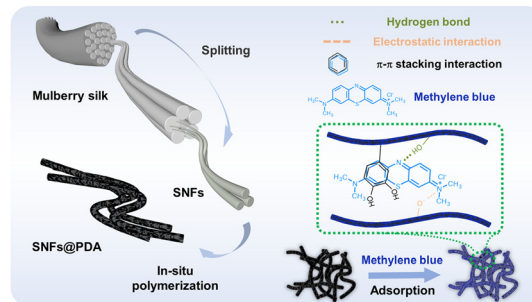
Cheng Zhou, Shengping Dai, Xiaoshuang Zhou, Hao Zhu, Guangui Cheng\* and Jianning Ding\*



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### Mussel-inspired polydopamine-modified silk nanofibers as an eco-friendly and highly efficient adsorbent for cationic dyes

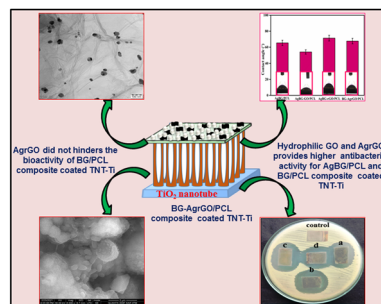
Heng He, Minggang Huang, Zhiwei Gao, Yifan Zhou, Yuxiang Zhao, Yan Chen, Yingchun Gu,\* Sheng Chen\* and Bin Yan



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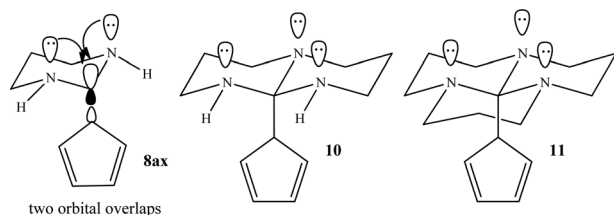
### Engineering the surface of titanium to improve its bioactivity and antibacterial activity through a multi-functional coating approach

S. A. Iynoon Jariya, N. Manivannan, B. Mohamad Ali, T. S. N. Sankara Narayanan and K. Ravichandran\*



## PAPERS

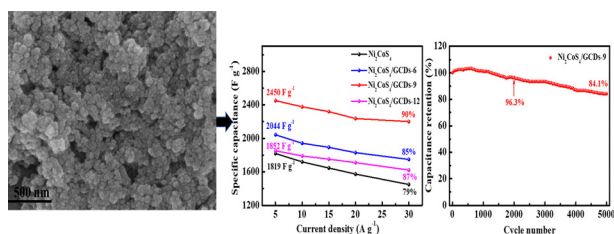
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### Aromaticity enhancement of cyclopentadiene in piperidine derivatives: a DFT study on combination of the anomeric effect and Schleyer hyperconjugative aromaticity

Mohammad Taghiboroujerdi, Zohreh Mirjafary\* and Hamid Saeidian

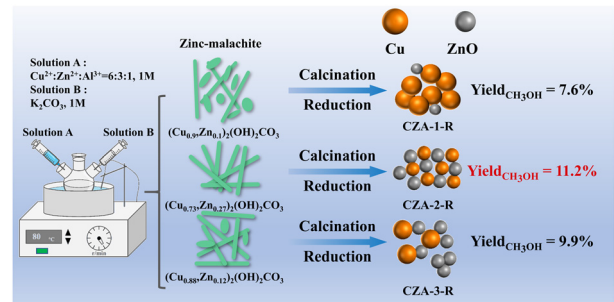
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### Enhancement of the capacitive performance of Ni<sub>2</sub>CoS<sub>4</sub> by incorporation of graphitized carbon dots

Honglin Yu, Shuihua Tang,\* Xiaohan Wang, Shuang Yang, Xiang Zhong, Limei Yu, Yuhang Xie, Mingjie Xu, Hongxi Xiong and Lei Zhang\*

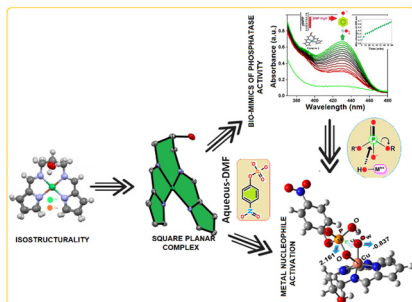
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### Design of Cu/ZnO/Al<sub>2</sub>O<sub>3</sub> catalysts with a rich Cu–ZnO interface for enhanced CO<sub>2</sub> hydrogenation to methanol using zinc-malachite as the precursor

Haotian Zhang, Caiyun Han, Congming Li, Peng Wang,\* Hao Huang, Shuang Wang\* and Jinping Li

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### Tailor-made isostructural copper(II) and nickel(II) complexes with a newly designed (N,N)-donor scaffold as functional mimics of alkaline phosphatase

Subhankar Kundu, Subhajit Saha, Subhra Jyoti Panda, Chandra Shekhar Purohit and Bhaskar Biswas\*

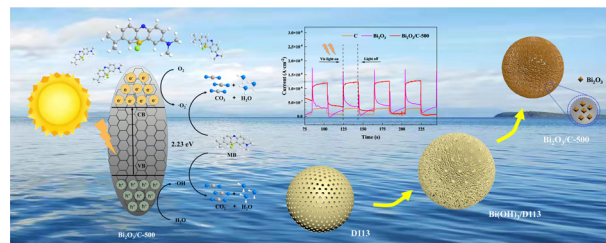


## PAPERS

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### New application of resin microspheres: preparation of $\text{Bi}_2\text{O}_3/\text{C}$ photocatalysts from an inexpensive organic carbon source and their application in dye wastewater treatment

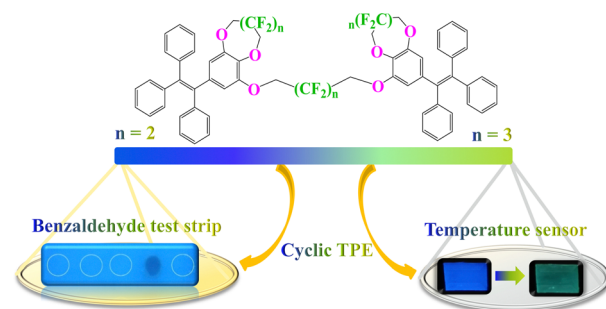
Xiaoqing Wang, Yujie Ren, Hongjing Lu, Zirui Song, Yangdong Cui, Shiyao Jin, Binhe Zhao, Yongjiang Wang, Junzi Zhao and Chunhua Xiong\*



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### Straightforward intra/intermolecular cyclization to AIE-active cyclic TPE: selectively distinguishing benzaldehyde and a temperature sensor

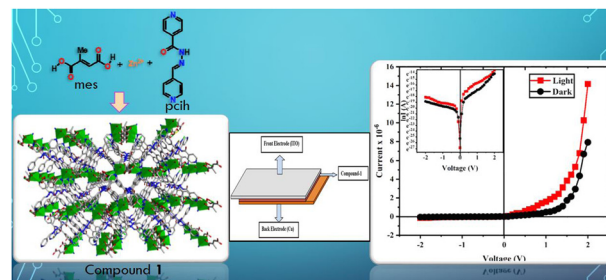
Mei Zhang, Liping Lu, Guoliang Yang, Xiaofeng Mo, Shunying Luo, Majeed Irfan\* and Zhuo Zeng\*



5922

### Strategy for the improvement of electrical conductivity of a 3D Zn(II)-coordination polymer doubly bridged by mesaconato and pyridyl-isonicotinoyl hydrazide based Schottky diode device

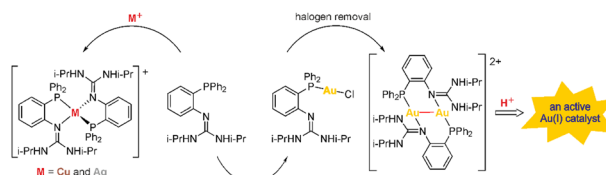
Manik Shit, Arnab Kanti Karan, Dipankar Sahoo, Nabin Baran Manik, Basudeb Dutta\* and Chittaranjan Sinha\*



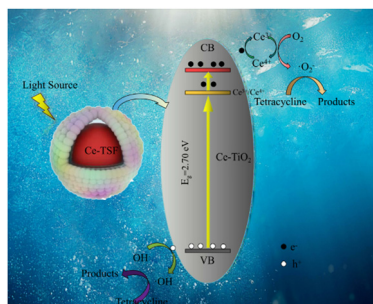
5930

### Synthesis and characterisation of group 11 metal complexes with a guanidine-tagged triphenylphosphine and evaluation of the isolated Au(I) complexes in gold-mediated organic reactions

Zdeněk Leitner, Ivana Císařová and Petr Štěpnička\*



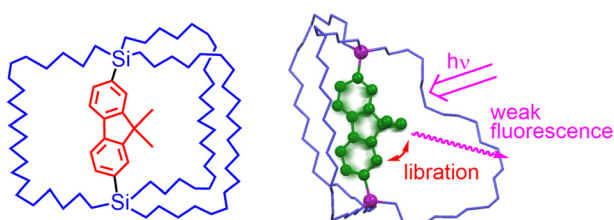
5939



### Photocatalytic degradation of tetracycline over Ce-doped $\text{TiO}_2@\text{SiO}_2@\text{Fe}_3\text{O}_4$ magnetic material

Xin Hao, Jingzhi Tian,\* Yunpeng Zhao,\* Tao Jing, Yongjie Zheng and Zhirui Lu

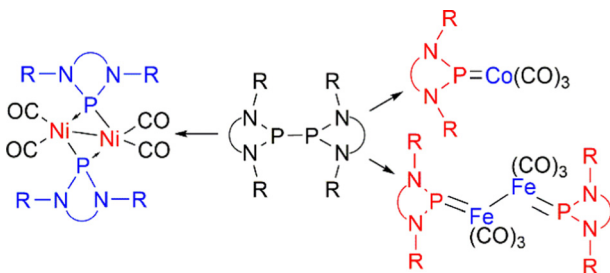
5946



### Synthesis and fluorescence properties of 9,9-dimethylfluorene-diyl bridged molecular gyrotops: effects of slight fluorophore motion on fluorescence efficiency in the solid state

Reina Yoshizawa, Yusuke Inagaki, Hiroyuki Momma, Eunsang Kwon, Kazuaki Ohara, Kentaro Yamaguchi and Wataru Setaka\*

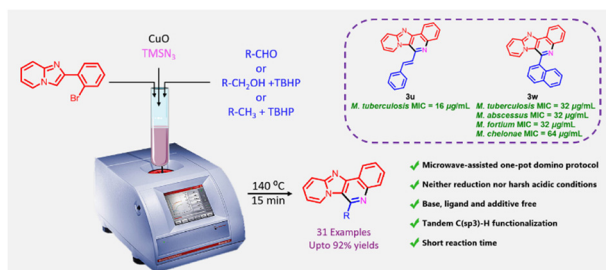
5953



### The reactivity of N-heterocyclic diphosphenes towards iron triad carbonyls

Gennady G. Kazakov, Nikolay O. Druzhkov, Roman V. Romyantsev, Georgy K. Fukin, Andrey G. Starikov, Alexandr V. Piskunov\* and Vladimir K. Cherkasov

5961



### Microwave-assisted Cu(I)-catalyzed one-pot tandem synthesis of pyridoimidazole-fused quinolines as new antimycobacterial agents: DFT and ESI-HRMS study

Gaurav Pawar, Shaik Mohammad Ghouse, Swanand Vinayak Joshi, Md Naiyaz Ahmad, Arunava Dasgupta, Venkata Madhavi Yaddanapudi, Siddharth Chopra and Srinivas Nanduri\*

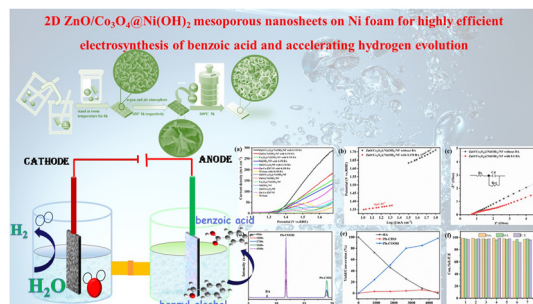


## PAPERS

5970

### Construction of 2D C,N-co-doped ZnO/Co<sub>3</sub>O<sub>4</sub> over Ni(OH)<sub>2</sub> mesoporous ultrathin nanosheets on Ni foam as high-performance electrocatalysts for benzyl-alcohol oxidation and accelerating hydrogen evolution

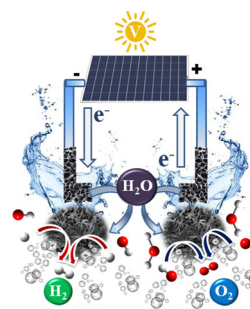
Jin-Kun Li, Ao Wang, Xin-Yue Dong, Sai Huang, Yan Meng and Jun-Ling Song\*



5977

### Green synthesis of fusiform-shaped Fe-PANI as a phenomenal dual electrocatalyst for overall water splitting and assessment of its sustainability standards

Bakthavachalam Vishnu, Sundarraj Sriram and Jayaraman Jayabharathi\*



5991

### Sustainable solutions for removing aged wax-based coatings from cultural heritage: exploiting hydrophobic deep eutectic solvents (DESs)

Chiara Biribicchi,\* Andrea Macchia, Gabriele Favero, Romina Strangis, Bartolo Gabriele, Raffaella Mancuso and Mauro Francesco La Russa



**Hydrophobic  
Deep Eutectic  
Solvents**  
for the removal of  
wax from Cultural  
Heritage

