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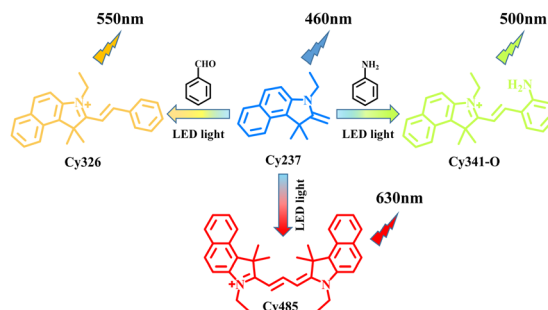


## COMMUNICATIONS

1057

## Discrimination of aniline and benzaldehyde assisted with Fisher's base

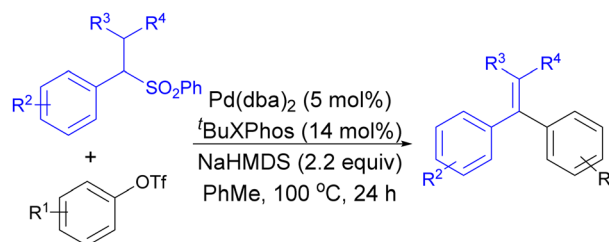
Zhiyong Zhang, Zihao Lu,\* Xiaocong Zou, Xiunan Xie, Jinmao You and Zan Li\*



1062

Palladium-catalyzed  $\alpha$ -arylation/ $\beta$ -elimination of sulfones

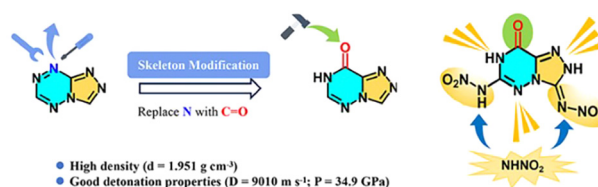
Mengzhao Yu, Luqiong Duan, Xinwei Zhang, Qian Zhang, Hongzhen Wang and Xiaolei Huang\*



1067

## Towards improved comprehensive energetic properties by skeleton modification

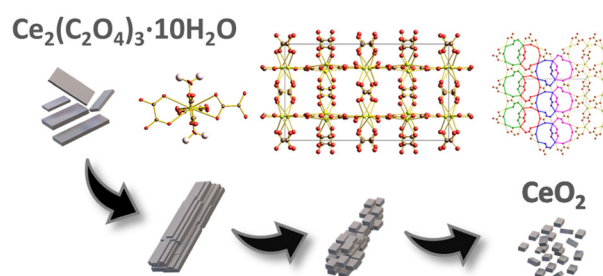
Jingwen Li, Xun Zhang, Yaxi Wang, Dongshuai Su, Siping Pang and Chunlin He\*



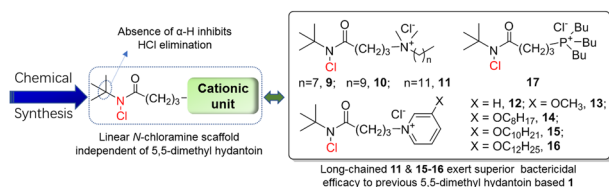
1071

Hydrothermal conversion of cerium oxalate to CeO<sub>2</sub>: a parade of oxalate and water coordination modes

Navid Assi, Christophe Lahoud, Petr Brázda, Dominika Zákutná, Daniel N. Rainer, Jakub Hraniček, Jan Rohlíček and Václav Tyrpekl\*



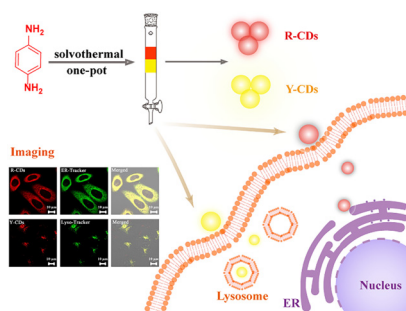
1076



### New cationic linear *N*-chloramines based on *N*-*t*-butylamide: chemical synthesis and antibacterial application

Lingdong Li,\* Songwei Zhang, Zhongtian Du, Hande Wang and Hao Zhou

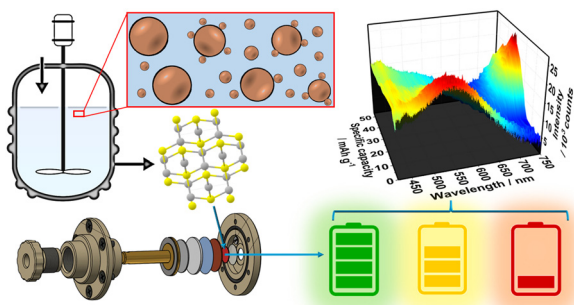
1081



### One-pot preparation of long-wavelength carbon dots with targeting ability toward different organelles

Xiao-Li Tian, Xi He, Ping Chen, Lan Zhang, Meng-Wei Hei, Xiao-Qi Yu and Ji Zhang\*

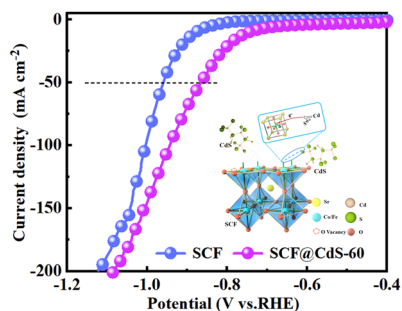
1086



### $\alpha$ - $Ag_2S$ nanoparticles: low-temperature syntheses, crystallisation pathway, and first *operando* luminescence measurements for sodium-ion battery applications

J. Ströh, L. Ohrt, A. Harder, Y. Collette, L. Liers, E. Teotonio, D. Novikov, A. Khadiev, C. L. Teske\* and H. Terraschke\*

1096



### Efficient perovskite oxide@CdS composite catalysts for hydrogen production from oilfield wastewater electrolysis

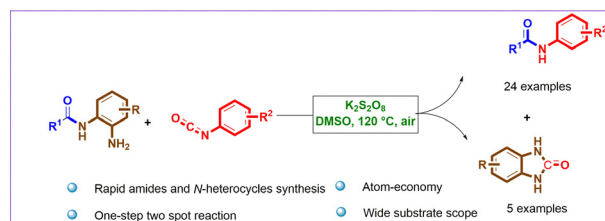
Jianzhao Cao, Rui Li, Ying Qi, Zhaoxiang Qi, Junzi Huang and Yahong Xie\*



1103

### PhNCO-enabled synthesis of secondary amides from *N*-(2-aminophenyl)benzamides

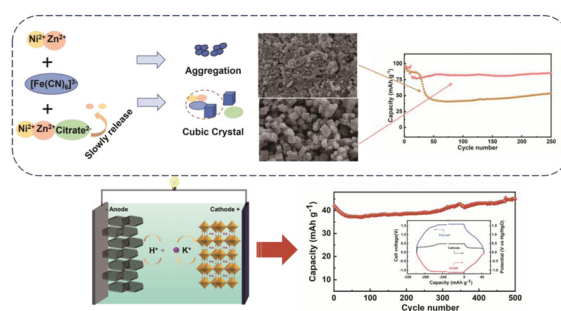
Karthick Govindan, Nian-Qi Chen, Alageswaran Jayaram and Wei-Yu Lin\*



1108

### Potassium energy storage behavior of nickel–zinc co-doped Prussian blue analogs formed by a chelating-agent-assisted route and its application in a $K^+$ -proton hybrid-ion aqueous alkaline battery

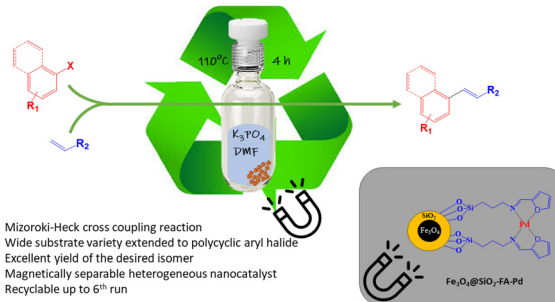
Ruiqing Hua, Caiyun Xu, Dian Lin, Deyu Qu,\* Xi Li, Ruiming Zhang, Zhizhong Xie,\* Haolin Tang, Junsheng Li and Dan Liu\*



1121

### Furaldehyde-based magnetic supported palladium nanoparticles as an efficient heterogeneous catalyst for Mizoroki–Heck cross-coupling reaction

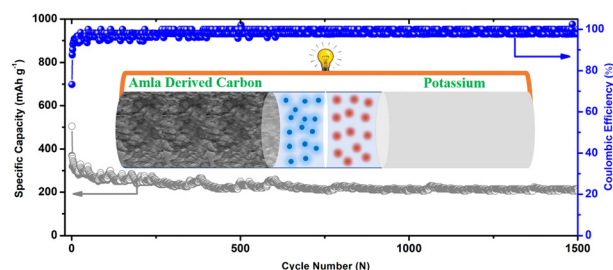
Sumanth Hegde, Aatika Nizam\* and Ajesh Vijayan



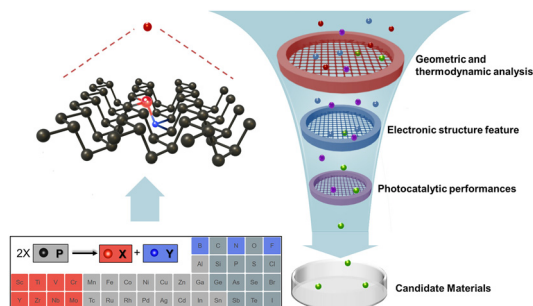
1130

### A high performance and long-cycling bi-functional carbon electrode derived from *Phyllanthus emblica* (amla) for potassium ion batteries and supercapacitors

Chandra Sekhar Bongu,\* Arthi Gopalakrishnan and Chandra Shekhar Sharma



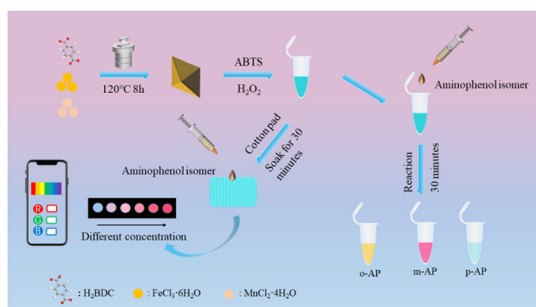
1141



### Activating black phosphorene's inert basal plane *via* nonprecious metal–nonmetal co-doping for visible-light-driven photocatalytic H<sub>2</sub> evolution

Luteng Luo, Weiting Cui, Hang Xue, Sunzai Ke, Xuhui Yang,\* Min-Quan Yang and Qingrong Qian\*

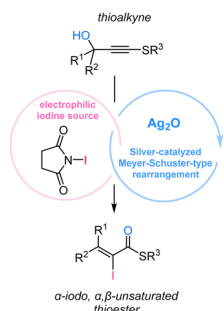
1152



### Highly selective detection and differentiation of aminophenol isomers based on a bimetallic metal–organic-framework with peroxidase-like activity

Yujie Zhang, Yingjiang Wang, Zhaohui Li, Lingbo Qu and Lanlan Yu\*

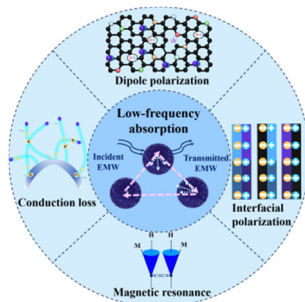
1164



### Silver(i)-catalyzed stereoselective Meyer–Schuster-type rearrangement: synthesis of densely substituted $\alpha$ -iodo $\alpha,\beta$ -unsaturated thioesters

José L. Lopes, Lucas L. Baldassari and Diogo S. Lütke\*

1172



### Tailored ternary hetero-interfaces with *in situ* formed CNTs for effective electromagnetic coupling at low/mid-frequency

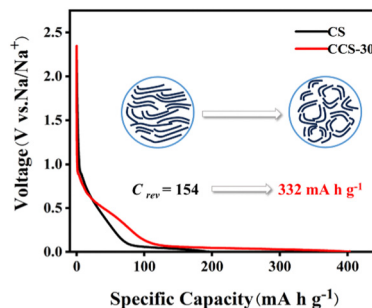
Jing Chen, Hong-Han Wang, Qing-Da An, Zuo-Yi Xiao, Xiao-Ling Dong,\* Kai-Ruo Zhu and Shang-Ru Zhai\*



1182

### Pre-crosslinking enables a promising cyclodextrin-derived carbon anode with large plateau capacity for sodium ion batteries

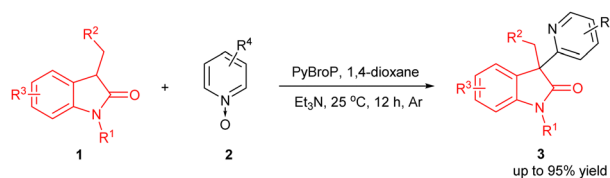
Haifeng Ding, Liang Yue, Yonghang Liu, Yi Zhang, Qing Zhao, Peipei Zhi, Yuruo Qi\* and Maowen Xu\*



1192

### PyBroP-mediated nucleophilic addition of oxindoles with pyridine N-oxides to access 3-pyridyl-3,3-disubstituted oxindoles

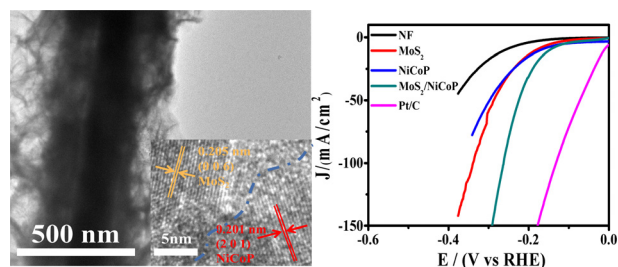
Fuzhong Han,\* Wenjia Xiao, Lina Jia and Xiangping Hu\*



1200

### Heterogeneous electrocatalysts of MoS<sub>2</sub>/NiCoP for highly stable hydrogen evolution

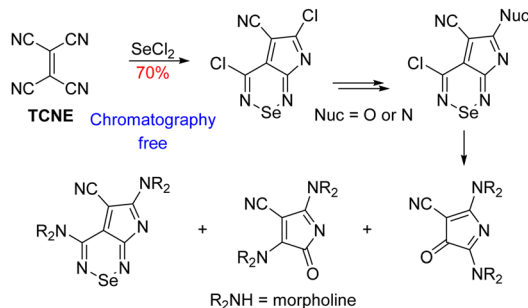
Minmin Wang, Hao Xu, Li Zhou, Tongming Sun\* and Yanfeng Tang\*



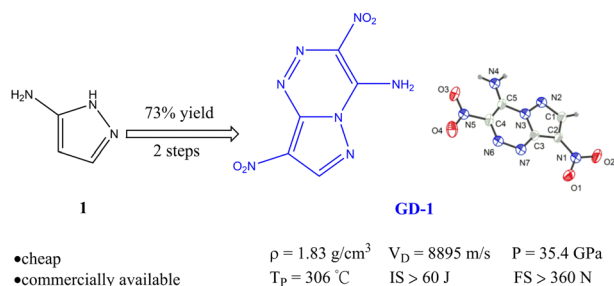
1206

### Reaction of tetracyanoethylene with diselenium dichloride: a route to pyrrolo[2,3-c][1,2,6]selenadiazines

Cory Laurent, Andreas Kourtellis and Panayiotis A. Koutentis\*



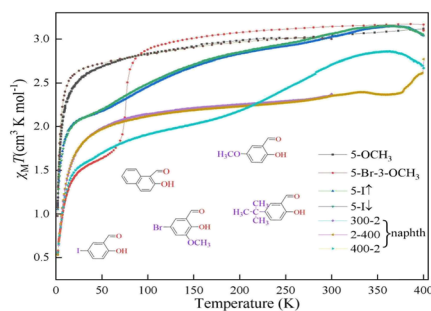
1212



### Concise synthesis of a fused energetic pyrazolotriazine with good performance

Haichuan Shi, Yuqing Wang, Xinyu Wang, Xiaotian Zhang, Ming Huang, Haijun Yang\* and Zhenghang Luo\*

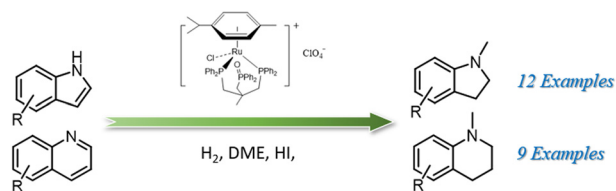
1217



### Probing the effect of substituents and solvent on [Mn(R-sal-N-1,5,8,12)]BPh<sub>4</sub>: a systematic investigation of SCO properties

Chun-Yan Qin, Sen-Yu Zhang, Hao-Ze Zhang, Hua-wei Zhou, Sheng-Ze Zhao, Yong-Hua Li,\* Chao Tang\* and Shi Wang\*

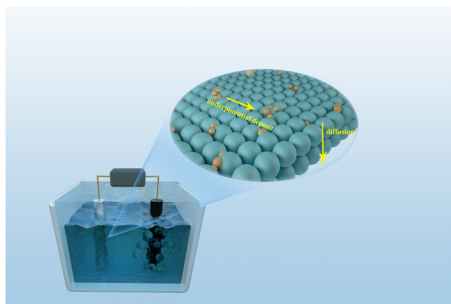
1227



### Ruthenium/HI-catalyzed direct hydromethylation of indoles and quinolines in DME

Pengxiang Gao, Zheng Wang, Ruotong Chang, Wei Li, Ziwei Zhao, Dexin Fu and Qingbin Liu\*

1233



### Electrochemical and kinetic studies on the electrolytic extraction of Gd on Bi electrode in LiCl–KCl melt

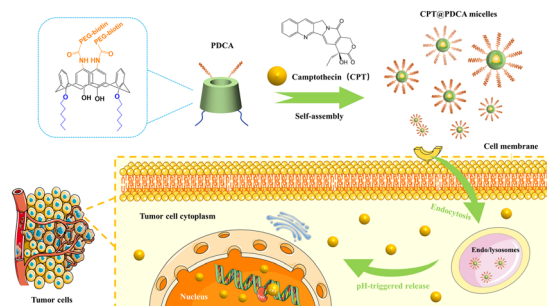
Li Ding, Xin Kong, Yan Gong, Shanxin Yang, Yongde Yan,\* Yuan Deng,\* Yun Xue, Kai Zhu,\* Fuqiu Ma and Wei Liu



1241

### Camptothecin-loaded supramolecular nanodelivery system based on amphiphilic calix[4]arene for targeted tumor therapy

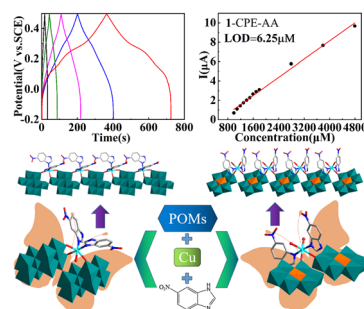
Han-yuan Zheng, Yu-dun Liu, Yu-lei Zhang, Qing-hua Shi, Xue-li Hou and Lin An\*



1248

### Two new 6-nitrobenzimidazole ligand-modified polymolybdate-based metal-organic complexes with excellent capacitive and electrocatalytic performances

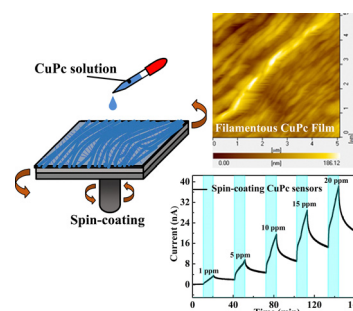
Ju-Ju Liang, Yu-Chen Zhang, Zhi-Han Chang, Yong-Zhen Chen, Ke-Ke Chen, Jun-Jun Lu and Xiu-Li Wang\*



1254

### Solution-processed filamentous copper phthalocyanine films for enhanced NO<sub>2</sub> gas sensing at room temperature

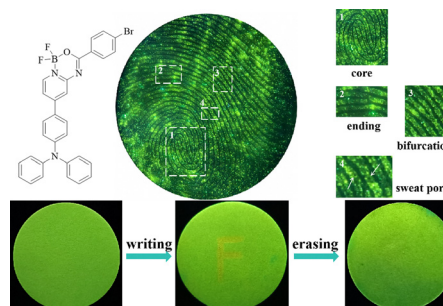
Ziyang Cui, Lu Wang,\* Yangyang Zhu, Yiqun Zhang and Li Juan Wang\*



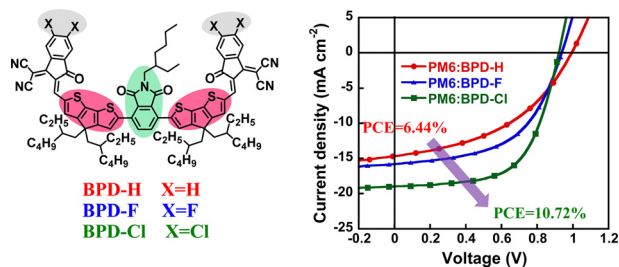
1264

### A difluoroboron compound with latent fingerprint detection and inkless writing based on aggregation-induced emission enhancement and mechanofluorochromic behavior

Shufang Yang, Jiazhuang Tian, Bangcui Zhang, Yanhua Yang,\* Xiangguang Li,\* Shulin Gao,\* Lin Shao and Fumin Li\*



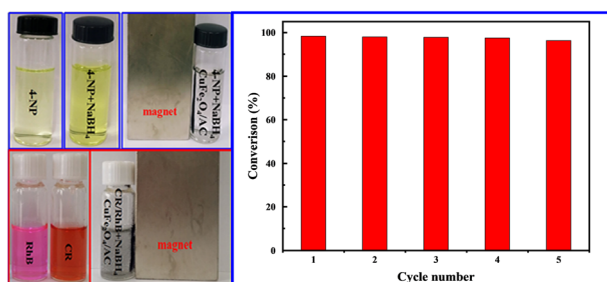
1272



### Phthalimide-based unfused-ring non-fullerene acceptors for constructing efficient organic solar cells with high open-circuit voltage

Baitian He,\* Luting Tang, Xiuhua Huang, Jinming Zhang, Manjun Xiao,\* Guiting Chen\* and Chuanbo Dai

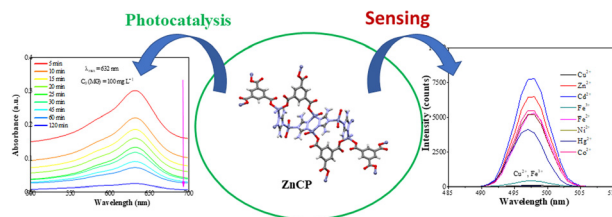
1280



### Copper-decorated iron oxide nanoparticles highly dispersed on coal-based activated carbons: a recoverable catalyst for the reduction of 4-nitrophenol, Congo red, and Rhodamine B

Biao Zhang, Yakun Tang, Shasha Gao, Shan Wang and Lang Liu\*

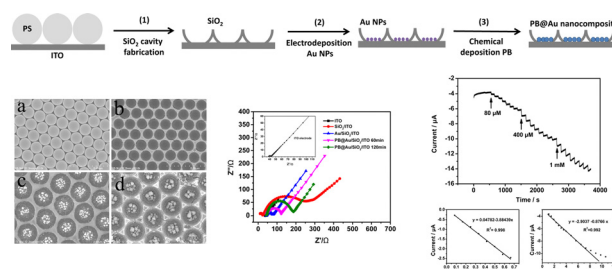
1287



### Multifaceted properties of an engineered three-dimensional Zn(II)-metal-organic coordination polymer: synthesis, crystal structure, efficient photocatalytic degradation of an organic dye and selective luminescent sensing

Rais Ahmad Khan,\* Amal AlFawaz, Imran Hasan, Nouf A. AlMuryyi, Afnan A. Alhamed, Sameen Laeeq, Sandeep Dey, Anup Paul and Ali Alsalmeh\*

1300



### Prussian blue@Au nanoparticles/SiO<sub>2</sub> cavity/ITO electrodes: application as a hydrogen peroxide sensor

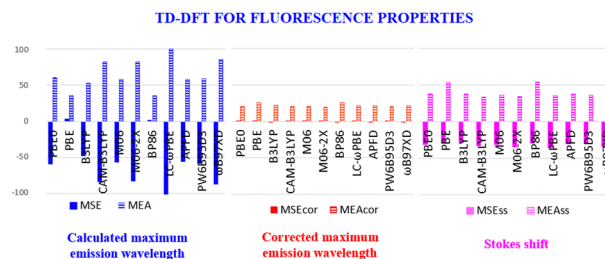
Na Li,\* Hongying Zhou, Yinghong Liu, Xianjiu Yu, Lei Cao, Youjie Xu, Luxin Xi, Gui Zhao and Xinxin Ban\*



1307

### Evaluation of using the time-dependent density functional theory in studying the fluorescence properties of coumarin derivatives

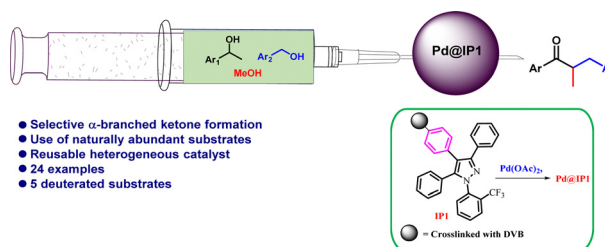
Nguyen Khoa Hien, Mai Van Bay, Quan V. Vo, Ngo Duy Y., Duong Tuan Quang\* and Pham Cam Nam\*



1320

### One-pot three-component synthesis of $\alpha$ -methylated ketones from secondary and primary aryl alcohols

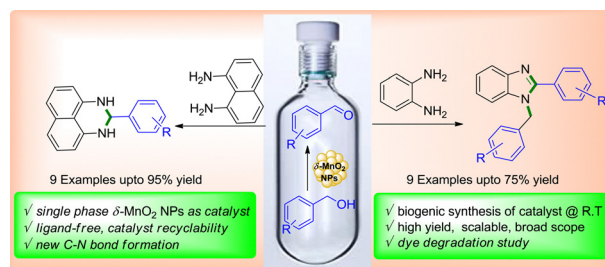
Shaikh Samsar, Priyabrata Biswal, Omkar Mohapatra, Sanu Siyad Pullarat, Sushanta Kumar Meher and Krishnan Venkatasubbaiah\*



1327

### Facile access to 1,2-disubstituted benzimidazoles and 2,3-dihydro-1H-perimidines using a biogenically synthesized single phase $\delta$ -MnO<sub>2</sub> NP catalyst and its dye removal study

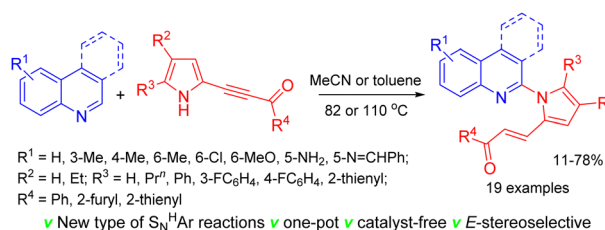
Nandini R., Thrilokraj R., Umesh A. Kshirsagar, Rajeev V. Hegde, Arnab Ghosh, Siddappa A. Patil, Jan Grzegorz Malecki and Ramesh B. Dateer\*



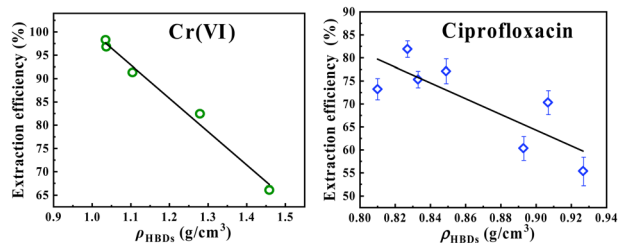
1336

### Catalyst-free nucleophilic substitution of hydrogen in quinoline rings by acylethylnylpyrroles: stereoselective synthesis of 2-(E-2-acylethylnylpyrrolyl)quinolines

Kseniya V. Belyaeva, Lina P. Nikitina, Ludmila A. Oparina, Veronika S. Saliy, Denis N. Tomilin, Anton V. Kuzmin, Andrei V. Afonin and Boris A. Trofimov\*



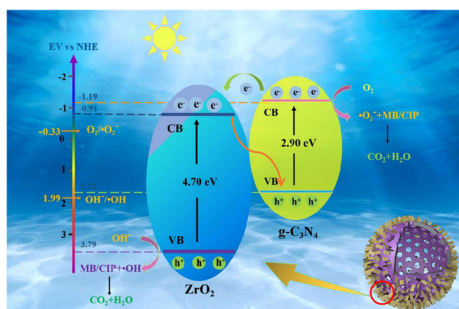
1350



### A density model for screening hydrogen bond donors to improve the efficiency of hydrophobic deep eutectic solvents

Chengjin Xu and Hongfei Wang\*

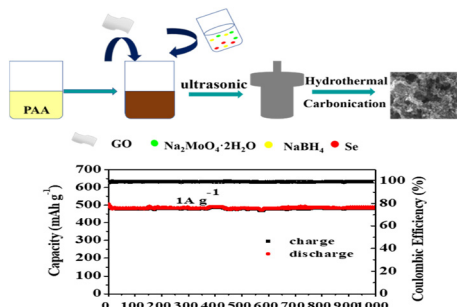
1359



### Polymethylacrylic acid-induced fabrication of hollow hZrO<sub>2</sub>/g-C<sub>3</sub>N<sub>4</sub> composite photocatalysts: study on solar photocatalytic performance and mechanism insight

Weilong Zhang, Xian Li, Huan Cheng, Jie Yang and Jumei Li\*

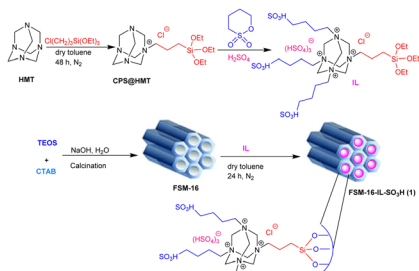
1372



### 1T–2H MoSe<sub>2</sub>/N-doped rGO composites as anodes for high performance lithium-ion batteries

Peng Sun, Menglu Zhang, Yue Liu, Jiahua Zhao, Jiawei Yang, Yufeng Wang, Yongfei Wang\* and Zhiqiang Zhang\*

1381



### A novel ionic liquid immobilized on FSM-16: a novel recoverable nanocatalyst for the synthesis of biscoumarin derivatives

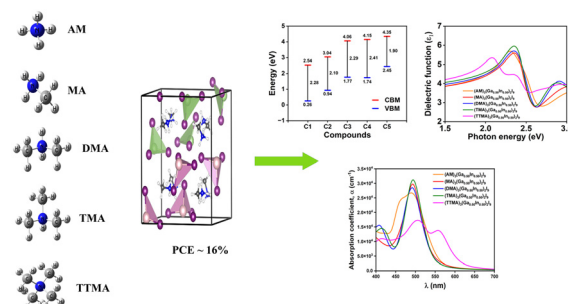
Azar Jahanbakhshi, Sanaz Eskandari and Mahnaz Farahi\*



1390

## The feasibility of mixed Ga and In hybrid halide perovskites as alternatives to Pb halide perovskites

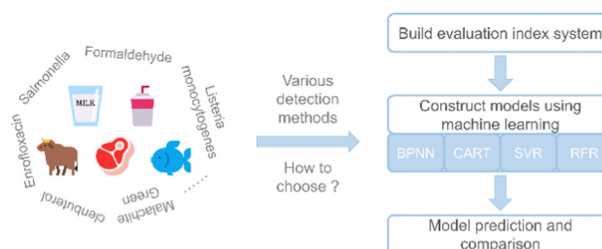
Tanmoy Kalita, Tridip Chutia, Ranjit Tumung and Dhruva Jyoti Kalita\*



1399

## Evaluation of methods for the detection of hazardous substances in food based on machine learning

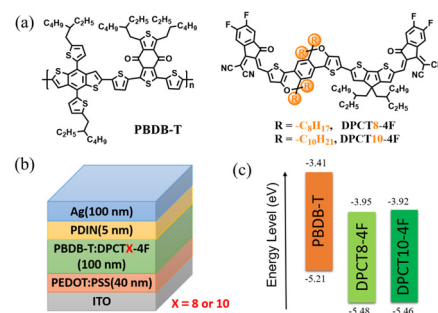
Long-yu Zhu, Lijuan Yan, Fang Zhao, Xuwen Guo,\* Dunming Xu,\* Jingzhang Lv, Lin Ding, Na Niu, Jun-qin Qiao, Shumian Ma, Xindi Huang, Huiling Liu and Hong-zhen Lian\*



1407

## Enhancing the performance of non-fullerene organic solar cells through side-chain engineering of asymmetrical non-fused-ring electron acceptors

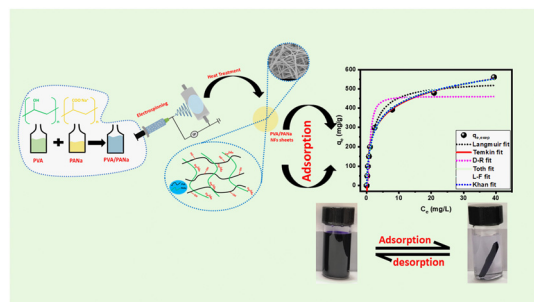
Jun Yang, Yingyi Lu, Zhongxin Zhou, Shiyue Zhang, Zhonglian Wu,\* Shujing Jin, Yongtao Zhao, Weiguo Zhu\* and Yu Liu\*



1414

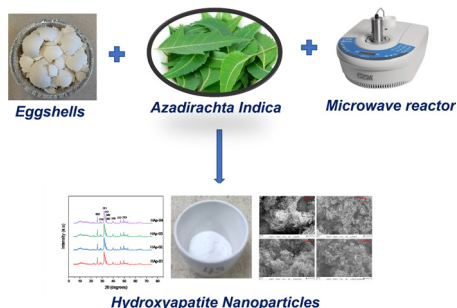
## Highly efficient and reusable polymeric nanofibers for cationic dye removal: isotherm, kinetics and thermodynamic study

Badr M. Thamer\* and Faiz A. Al-aizari



## PAPERS

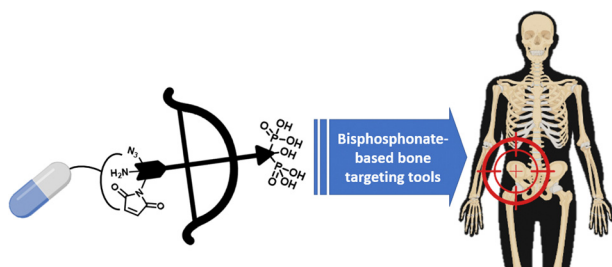
1424



### Facile synthesis of hydroxyapatite nanoparticles from eggshell biowaste using *Azadirachta indica* extract as a green template

Punita Upadhyay and Aman Ullah\*

1436



### Synthesis of new alendronate analogs for bone-targeted drug delivery strategies

Nicolas Guedeney,\* Julia Deschamp, Thibaut Legigan, Maëlle Monteil, Evelyne Migianu-Griffoni\* and Marc Lecouvey\*

## CORRECTIONS

1443

### Correction: NaCMC-decorated ZnO nanocomposite polymer membranes for the separation of reactive dyes from textile water

R. Robin, Vinoth Kumar Raja, R. Sathish Kumar, G. Arthanareeswaran\* and Wirach Taweepreda\*

1444

### Correction: Novel (*E*)-3-(1-substituted-1*H*-indazol-5-yl)-*N*-hydroxypropenamides as histone deacetylase inhibitors: design, synthesis and structure–activity relationships

Minh Sang Doan, Eun Jae Park, Duong Tien Anh, Do Thi Mai Dung, Le Quang-Bao, Pham-The Hai, Dao Thi Kim Oanh, Truong Thanh Tung, Ik Ho Na, Joo Hee Kwon, Jong Soon Kang, Sang-Bae Han,\* Dinh Thi Thanh Hai and Nguyen-Hai Nam\*

