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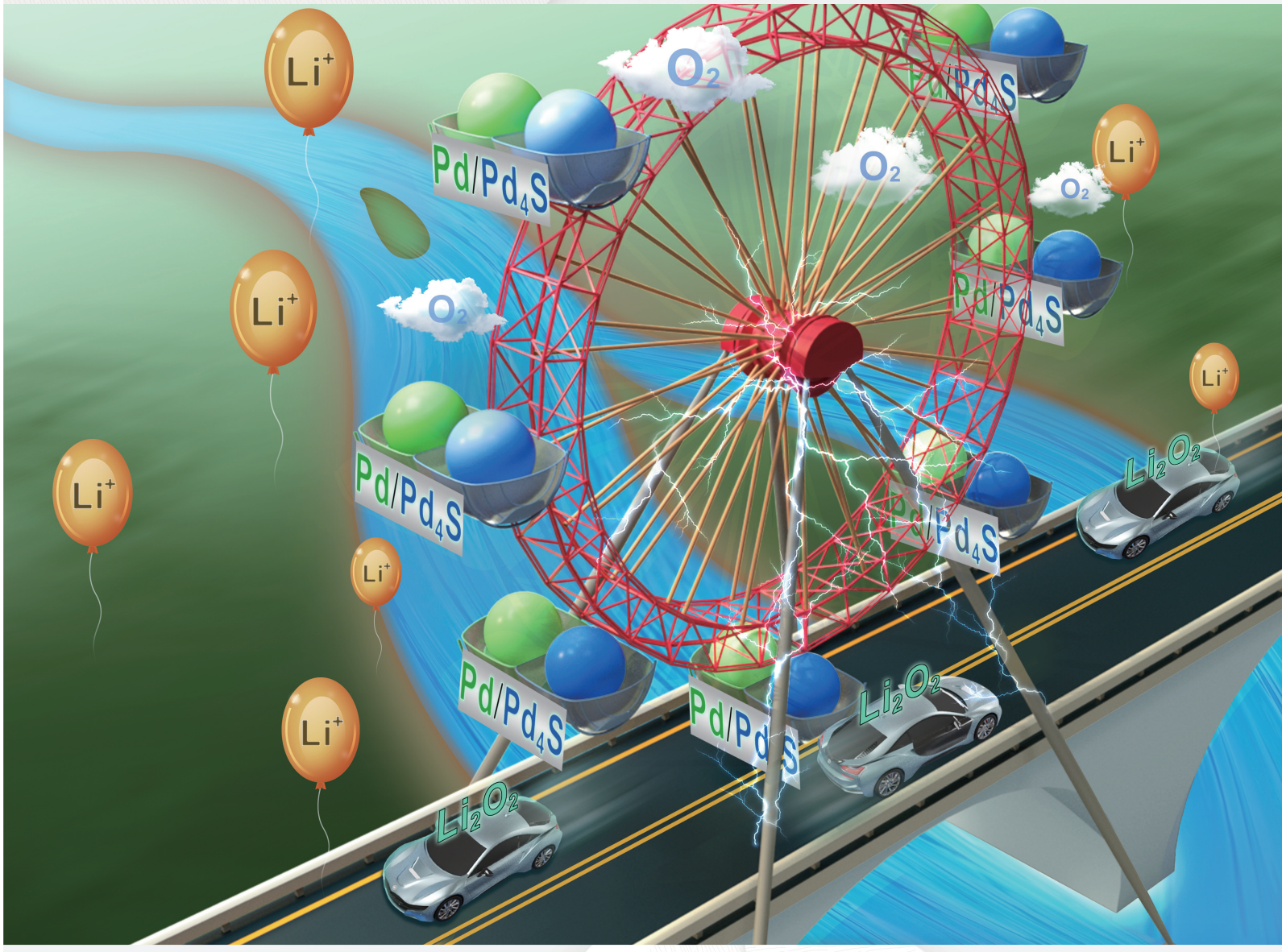
Chinese Chemical Letters (中国化学快报)



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Graphical Abstracts/Chin Chem Lett 32 (2021) iii–xiv

Highlight

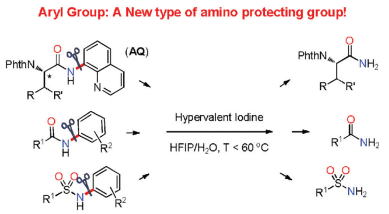
Aryl groups, supplement of amino protecting group chemistry!

Chinese Chemical Letters 32 (2021) 1831

Jinhuan Dong, Mengying Jia, Xianxiu Xu

College of Chemistry, Chemical Engineering and Materials Science, Collaborative Innovation Center of Functionalized Probes for Chemical Imaging in Universities of Shandong, Key Laboratory of Molecular and Nano Probes, Ministry of Education, Institute of Molecular and Nano Science, Shandong Normal University, Ji'nan 250014, China

The regiospecific cleavage of aryl C—N bond rather than amido C—N bond, allows removal of sort of aryl groups of *N*-aryl amides by hypervalent iodine reagents under mild conditions to give primary amides in high efficiency without affecting other reactive function groups. In this sense, it bestows these aryl groups with the characteristics of amino protecting groups.



Reviews

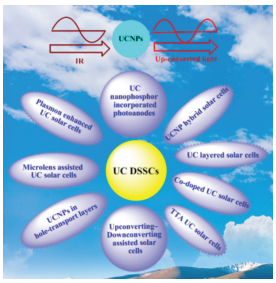
Recent research progress for upconversion assisted dye-sensitized solar cells

Chinese Chemical Letters 32 (2021) 1834

Xugeng Guo[a,b], Wenpeng Wu[a,b], Yuanyuan Li[a,b], Jinglai Zhang[a,b], Li Wang[a,b], Hans Ågren[a,b,c]

[a] *Institute of Upconversion Nanoscale Materials, College of Chemistry and Chemical Engineering, Henan University, Kaifeng 475004, China*
[b] *Henan Center for Outstanding Overseas Scientists, Henan University, Kaifeng 475004, China*
[c] *Department of Physics and Astronomy, Uppsala University, Box 516, SE-751 20 Uppsala, Sweden*

Upconversion technology makes it possible to harvest infrared light and improve the efficiency of solar cells. Fundamental principles and processes of upconversion and technologies of device fabrication are reviewed for upconversion assisted dye-sensitized solar cells.



Quinuclidine and its derivatives as hydrogen-atom-transfer catalysts in photoinduced reactions

Chinese Chemical Letters 32 (2021) 1847

Wei Xiao[a], Xinhua Wang[b], Ruixiu Liu[a], Jie Wu[a,c,d]

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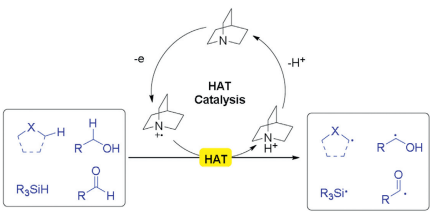
[b] *Key Laboratory of Functional Small Organic Molecules, Ministry of Education, and College of Chemistry & Chemical Engineering, Jiangxi Normal University, Nanchang 330022, China*
[c] *State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, China*
[d] *School of Chemistry and Chemical Engineering, Henan Normal University, Xinxiang 453007, China*

Hydrogen-atom-transfer (HAT) is an efficient way for direct C—H functionalization of inert C—H bonds, therefore it has attracted great interests in recent years. So far, various HAT catalysts have been developed. Among them, quinuclidine and its derivatives show different characters toward other HAT catalysts as they tend to abstract electron-rich and hydridic hydrogens in the presence of weak and neutral C—H bonds. These features enable direct C—H functionalization of compounds with various groups which are unable or difficult by other methods. This review summarizes recent advance of photoinduced reactions with quinuclidine and its derivatives as HAT catalysts and exhibits powerful synthetic potential by using quinuclidine and its derivatives as HAT catalysts.



doi:10.1016/S1001-8417(21)00322-3

Communications

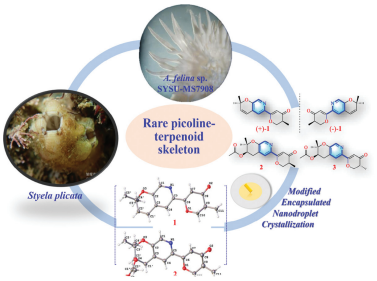
Amphichoterpenoids A–C, unprecedented picoline-derived meroterpenoids from the ascidian-derived fungus *Amphichorda felina* SYSU-MS7908

Minghua Jiang[a,c], Zhenger Wu[a], Qilin Wu[a], Huimin Yin[a], Heng Guo[a], Siwen Yuan[a], Zhaoming Liu[d], Senhua Chen[a,b,c], Lan Liu[a,b,c]

[a] *School of Marine Sciences, Sun Yat-sen University, Guangzhou 510006, China*
[b] *Southern Laboratory of Ocean Science and Engineering (Guangdong, Zhuhai), Zhuhai 519000, China*
[c] *South China Sea Bio-Resource Exploitation and Utilization Collaborative Innovation Center, Guangzhou 510006, China*
[d] *State Key Laboratory of Applied Microbiology Southern China, Guangdong Provincial Key Laboratory of Microbial Culture Collection and Application, Guangdong Open Laboratory of Applied Microbiology, Guangdong Institute of Microbiology, Guangdong Academy of Sciences, Guangzhou 510070, China*

Unprecedented picoline-derived meroterpenoids, amphichoterpenoids A–C, possessing a pyrano[3,2-*c*] pyridinyl-γ-pyranone skeleton, were characterized from the ascidian-derived fungus *Amphichorda felina* (*A. felina*) using a modified encapsulated nanodroplet crystallization method to afford the crystals.

Chinese Chemical Letters 32 (2021) 1893



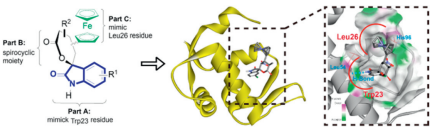
Discovery of spirooxindole–ferrocene hybrids as novel MDM2 inhibitors

Jun Mu[a], Xin Xie[b], Shanshan Xiong[a], Yuehua Zhang[a], Yuting Wang[b], Qian Zhao[b], Hongping Zhu[b], Wei Huang[b], Gu He[a]

[a] *State Key Laboratory of Biotherapy and Cancer Center, West China Hospital, Sichuan University, Chengdu 610041, China*
[b] *State Key Laboratory of Southwestern Chinese Medicine Resources, Hospital of Chengdu University of Traditional Chinese Medicine, School of Pharmacy, Chengdu University of Traditional Chinese Medicine, Chengdu 611137, China*

A series of spirooxindole-ferrocene hybrids are designed and enantioselective synthesized that combined a privileged scaffold for inhibiting mouse double minute 2 homolog (MDM2) and a reactive oxygen species (ROS)-inducing lipophilic ferrocene group for the development of small molecule cancer therapeutics.

Chinese Chemical Letters 32 (2021) 1897



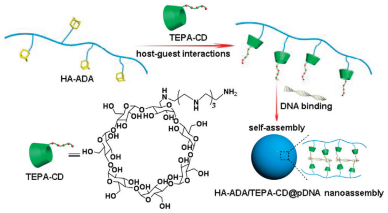
Enzyme-responsive polysaccharide supramolecular nanoassembly for enhanced DNA encapsulation and controlled release

Yuhui Zhang[a], Lijuan Wang[b], Jie Wang[a], Siqintana Xin[a], Xianliang Sheng[a]

[a] *College of Science, Inner Mongolia Agricultural University, Hohhot 010018, China*
[b] *College of Material Science and Art Design, Inner Mongolia Agricultural University, Hohhot 010018, China*

An enzyme-responsive polysaccharide supramolecular targeted nanoassembly composed of positively charged mono-(6-(tetraethylenepentamine)-6-deoxy)-β-cyclodextrin (TEPA-CD) and adamantane-grafted hyaluronic acid (HA-ADA) was constructed, possessing controlled DNA condensation and exhibited lower cytotoxicity than the commercial transfection reagent 25 kDa bPEI (PEI_{25k}), accompanied by similar gene delivery effect.

Chinese Chemical Letters 32 (2021) 1902



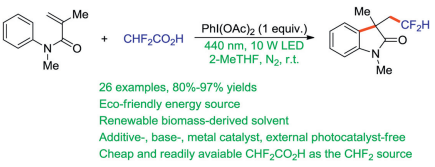
Visible-light-initiated tandem synthesis of difluoromethylated oxindoles in 2-MeTHF under additive-, metal catalyst-, external photosensitizer-free and mild conditions

Qing-Wen Gui[a], Fan Teng[a], Zhou-Chao Li[a], Zhi-Yuan Xiong[a], Xue-Feng Jin[a], Ying-Wu Lin[b], Zhong Cao[c], Wei-Min He[b]

[a] *College of Chemistry and Materials Science, Hunan Agricultural University, Changsha 410128, China*
[b] *School of Chemistry and Chemical Engineering, University of South China, Hengyang 421001, China*
[c] *Hunan Provincial Key Laboratory of Materials Protection for Electric Power and Transportation, Changsha University of Science and Technology, Changsha 410114, China*

An efficient and eco-friendly protocol for synthesizing difluoromethylated oxindoles through a visible-light-induced one-pot tandem reaction of *N*-arylacrylamides, difluoroacetic acid and $PhI(OAc)_2$ was developed. This reaction proceeded in the absence of any additive, base, metalcatalyst and external photosensitizer, using cheap CHF_2CO_2H as a difluoromethylation reagent and bulk biomass-derived 2-MeTHF as a solvent.

Chinese Chemical Letters 32 (2021) 1907

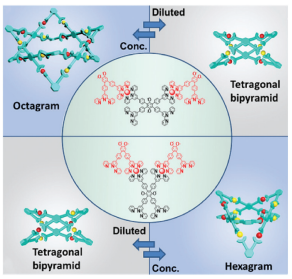


Molecular hexagram and octagram: Position determined 3D metallo-supermolecules and concentration-induced transformation

Chinese Chemical Letters 32 (2021) 1911

Tun Wu[a], Zhiyuan Jiang[b], Xiaobo Xue[b], Shi-Cheng Wang[c], Mingzhao Chen[a], Jun Wang[b], Haisheng Liu[b], Jun Yan[b], Yi-Tsu Chan[c], Pingshan Wang[a,b]

[a] *Institute of Environmental Research at Greater Bay Area, Key Laboratory for Water Quality and Conservation of the Pearl River Delta, Ministry of Education, Guangzhou University, Guangzhou 510006, China*
[b] *Department of Organic and Polymer Chemistry, College of Chemistry and Chemical Engineering, Central South University, Changsha 410083, China*
[c] *Department of Chemistry, National Taiwan University, Taipei 10617*



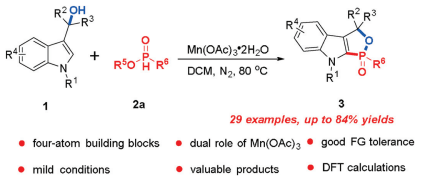
Terpyridine-based 3D supramolecular octagram and hexagram were derived through a strategic predesigned attachment of bisterpyridines to meta-or ortho-position of "X"-shaped tetraterpyridine *via* < tpy-Ru^{2+}-tpy > connectivities.

A radical addition and cyclization relay promoted by $Mn(OAc)_3{\cdot}2H_2O$: Synthesis of 1,2-oxaphospholoindoles and mechanistic study

Chinese Chemical Letters 32 (2021) 1915

Meng-Meng Xu, Lu-Yao Kou, Xiao-Guang Bao, Xiao-Ping Xu, Shun-Jun Ji

Key Laboratory of Organic Synthesis of Jiangsu Province, College of Chemistry, Chemical Engineering and Materials Science & Collaborative Innovation Center of Suzhou Nano Science and Technology, Soochow University, Suzhou 215123, China



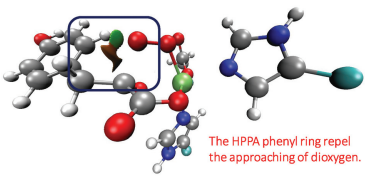
Novel and efficient $Mn(OAc)_3{\cdot}2H_2O$ promoted radical addition-[4 + 1] cyclization relay of 3-indolymethanols and phosphites was disclosed, which afforded 1,2-oxaphospholoindole derivatives in moderate to good yields. Based on the experimental and computational studies, a mechanism involving radical addition and intramolecular cyclization cascade was proposed.

The structure of 4-hydroxylphenylpyruvate dioxygenase complexed with 4-hydroxylphenylpyruvic acid reveals an unexpected inhibition mechanism

Chinese Chemical Letters 32 (2021) 1920

Xiaoning Wang[a], Hongyan Lin[b], Junjun Liu[c], Xinyun Zhao[a], Xi Chen[a], Wenchao Yang[b], Guangfu Yang[b], Chang-guo Zhan[d]

[a] *College of Chemistry and Material Science, South-Central University for Nationalities, Wuhan 430074, China*
[b] *Key Laboratory of Pesticide & Chemical Biology of Ministry of Education, College of Chemistry, Central China Normal University, Wuhan 430079, China*
[c] *School of Pharmacy, Tongji Medical College of Huazhong University of Science & Technology, Wuhan 430030, China*
[d] *Department of Pharmaceutical Sciences, College of Pharmacy, University of Kentucky, Lexington, KY 40536, United States*



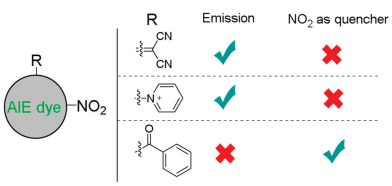
The substrate resists the electrophilic attack of the bound dioxygen by the trim of its phenyl ring.

A fundamental study on the fluorescence-quenching effect of nitro groups in tetraphenylethene AIE dyes with electron-withdrawing groups

Chinese Chemical Letters 32 (2021) 1925

Cheng-Xiao Zhao[a,b], Tian Liu[a], Manyi Xu[a], Hao Lin[a], Chong-Jing Zhang[a]

[a] *State Key Laboratory of Bioactive Substance and Functions of Natural Medicines and Beijing Key Laboratory of Active Substances Discovery and Drugability Evaluation, Institute of Materia Medica, Peking Union Medical College and Chinese Academy of Medical Sciences, Beijing 100050, China*
[b] *School of Pharmaceutical Science, Shanxi Medical University, Taiyuan 030001, China*



It is highly dependent on the electron-withdrawing ability of attached substituents for the nitro group to serve as a fluorescence quencher.

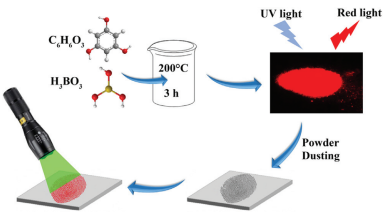
Large scale synthesis of red emissive carbon dots powder by solid state reaction for fingerprint identification

Chinese Chemical Letters 32 (2021) 1953

Xiaoqing Niu, Tianbing Song, Huanming Xiong

Department of Chemistry and Shanghai Key Laboratory of Molecular Catalysis and Innovative Materials, Fudan University, Shanghai 200438, China

A rapid and simple approach was reported to synthesize carbon dots on large scale *via* solid state reaction and the obtained carbon dots powder works well for latent fingerprint identification.



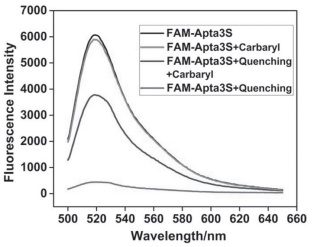
Selection of a DNA aptamer for the development of fluorescent aptasensor for carbaryl detection

Chinese Chemical Letters 32 (2021) 1957

Yuan Liu[a], Gaojian Yang[a], Taotao Li[b], Yan Deng[c], Zhu Chen[c], Nongyue He[a,c]

[a] *State Key Laboratory of Bioelectronics, School of Biological Science and Medical Engineering, Southeast University, Nanjing 210096, China*
[b] *Hunan Provincial Key Lab of Dark Tea and Jin-Hua, School of Materials and Chemical Engineering, Hunan City University, Yiyang 413000, China*
[c] *Hunan Key Laboratory of Biomedical Nanomaterials and Devices, Hunan University of Technology, Zhuzhou 412007, China*

A highly enriched carbaryl ssDNA pool was obtained based on an improved ssDNA library immobilized SELEX, and a new aptasensor using FAM labelled aptamer as fluorescent probe was developed for quantitative detection of carbaryl. The developed aptasensor exhibited the advantages of simplicity and low cost, since just two DNA probes were used in this strategy.



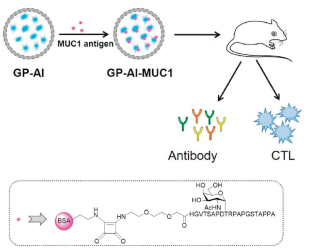
Alum colloid encapsulated inside β-glucan particles enhance humoral and CTL immune responses of MUC1 vaccine

Chinese Chemical Letters 32 (2021) 1963

Yonghui Liu[a], Mingjing Li[a], Haomiao Zhu[a], Zhe Jing[b], Xiaona Yin[a], Kun Wang[a], Zhangyong Hong[b], Wei Zhao[a]

[a] *State Key Laboratory of Medicinal Chemical Biology, College of Pharmacy and KLMDASR of Tianjin, Nankai University, Tianjin 300353, China*
[b] *State Key Laboratory of Medicinal Chemical Biology & Tianjin Key Laboratory of Protein Sciences, College of Life Sciences, Nankai University, Tianjin 300071, China*

Alum colloid encapsulated inside β-glucan particles (GP-Al) was prepared to construct MUC1 antigen-based antitumor vaccine. Immunological evaluation showed that the constructed vaccine induced strong MUC1 antigen specific IgG antibody titers and enhanced $CD8^+$ T cells cytotoxic effect to kill tumor cells.



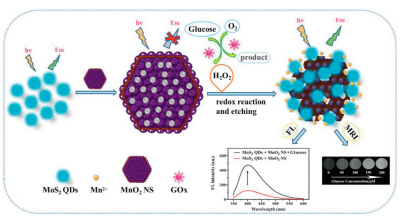
Signal-on bimodal sensing glucose based on enzyme product-etching MnO_2 nanosheets for detachment of MoS_2 quantum dots

Chinese Chemical Letters 32 (2021) 1967

Lingzhi Chen[a], Xueqin Huang[b], Xueyi Zeng[a], Guiting Fang[c], Weijian Chen[c], Haibo Zhou[d], Xing Zhong[c], Huaihong Cai[a]

[a] *Department of Chemistry, College of Chemistry and Materials Science, Jinan University, Guangzhou 510632, China*
[b] *State Key Laboratory of Quality Research in Chinese Medicines, Macau University of Science and Technology, Macau 000583, China*
[c] *Department of Ultrasonography, The First Affiliated Hospital of Jinan University, Guangzhou 510632, China*
[d] *Institute of Pharmaceutical Analysis and Guangdong Province Key Laboratory of Pharmacodynamic Constituents of Traditional Chinese Medicine & New Drug Research, College of Pharmacy, Jinan University, Guangzhou 510632, China*

A bimodal sensing strategy based on MoS_2 QDs-MnO_2 NS nanocomposites is proposed for glucose detection using H_2O_2-mediated switchable "off-on" fluorescent/magnetic signals.



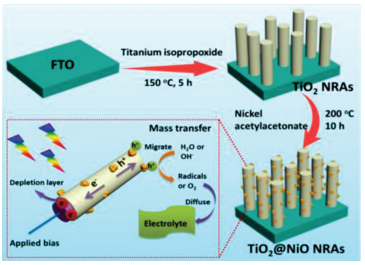
Chinese Chemical Letters 32 (2021) 1993

Enhancement of mass transfer efficiency and photoelectrochemical activity for TiO_2 nanorod arrays by decorating Ni^{3+}-states functional NiO water oxidation cocatalyst

Ningchao Zheng[a], Xi He[a], Weiqing Guo[b], Zhuofeng Hu[a]

[a] *School of Environmental Science and Engineering, Guangdong Provincial Key Laboratory of Environmental Pollution Control and Remediation Technology, Sun Yat-sen University, Guangzhou 510006, China*
[b] *School of Environmental and Chemical Engineering, Foshan University, Foshan 528000, China*

The key scientific problem of slow mass transfer efficiency in NRAs was solved by decorating the surface of NRAs by NiO with rich Ni^{3+} states.



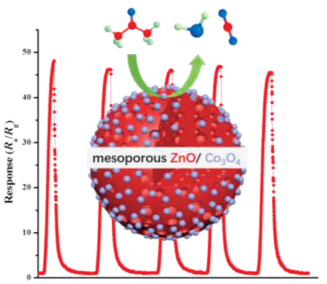
Chinese Chemical Letters 32 (2021) 1998

A facile construction of heterostructured ZnO/Co_3O_4 mesoporous spheres and superior acetone sensing performance

Mengli Lei[a], Xinran Zhou[a], Yidong Zou[b], Junhao Ma[a], Fahad A. Alharthi[c], Abdulaziz Alghamdi[c], Xuanyu Yang[a], Yonghui Deng[a,d]

[a] *Department of Chemistry, State Key Laboratory of Molecular Engineering of Polymers, Shanghai Key Laboratory of Molecular Catalysis and Innovative Materials, iChEM, Fudan University, Shanghai 200433, China*
[b] *Institute of Translational Medicine, Shanghai University, Shanghai 200444, China*
[c] *Department of Chemistry, College of Science, King Saud University, P.O. Box 2455, Riyadh 11451, Saudi Arabia*
[d] *State Key Lab of Transducer Technology, Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, Shanghai 200050, China*

Uniform mesoporous ZnO/Co_3O_4 spheres have been fabricated through combined impregnation and formaldehyde-assisted metal-ligand crosslinking strategy. Mesoporous ZnO/Co_3O_4 spheres showed prominent acetone response (*ca.* 46 for 50 ppm), which was about 11.5 times higher than that in pure mesoporous ZnO sensing device. Excellent sensing performance is dependent on synergistic effect, heterojunction effect and confinement size effect between ultrasmall Co_3O_4 nanocrystals and smart mesoporous ZnO.



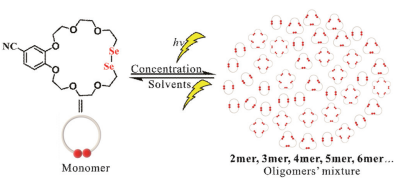
Chinese Chemical Letters 32 (2021) 2005

The dynamic covalent reaction based on diselenide-containing crown ether irradiated by visible light

Jie Shang, Hanlin Gong, Qian Zhang, Zhiliyu Cui, Shuangran Li, Ping Lv, Tiezheng Pan, Yan Ge, Zhenhui Qi

Sino-German Joint Research Lab for Space Biomaterials and Translational Technology, Synergetic Innovation Center of Biological Optoelectronics and Healthcare Engineering (BOHE), Shaanxi Provincial Synergistic Innovation Center for Flexible Electronics & Health Sciences (FEHS), School of Life Sciences, Northwestern Polytechnical University, Xi'an 710072, China

The diselenide-containing crown ether (**BC7Se2**) can polymerize to form cyclic oligomers through intermolecular dynamic covalent reaction by irradiation of visible light, the size and distribution of which are related to the monomer concentration. The decomposition reaction of oligomers is controlled by topology, solvents and guest.



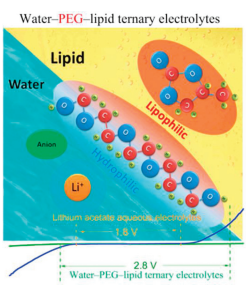
Chinese Chemical Letters 32 (2021) 2009

Preparation of safe water–lipid mixed electrolytes for application in ion capacitor

Miaofeng Huang[a], Aihua Tang[a], Zhenyin Wang[a], Jingkun Shi[a], Xiaoping Jiang[b], Chubin Wan[a], Xin Ju[a]

[a] *University of Science and Technology Beijing, Beijing 100083, China*
[b] *Qilu University of Technology (Shandong Academy of Sciences), Ji'nan 250014, China*

Water and lipid were mixed using amphiphilic polymers to prepare ternary electrolytes, which have the combined advantages of water and organic solvents.



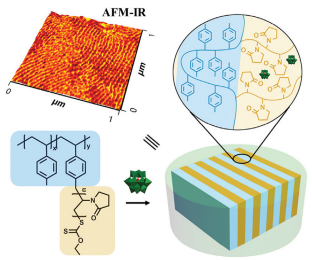
Self-assembled lamellar nanochannels in polyoxometalate-polymer nanocomposites for proton conduction

Haibo He, Gang Wang, Shengchao Chai, Xiang Li, Liang Zhai, Lixin Wu, Haolong Li

State Key Laboratory of Supramolecular Structure and Materials, College of Chemistry, Jilin University, Changchun 130012, China

Nanocomposite electrolytes with lamellar proton-conducting channels were prepared through the electrostatic self-assembly of a polyoxometalate ($H_3PW_{12}O_{40}$) and a comb copolymer poly(4-methlstyrene)-*graft*-poly(*N*-vinyl pyrrolidone).

Chinese Chemical Letters 32 (2021) 2013



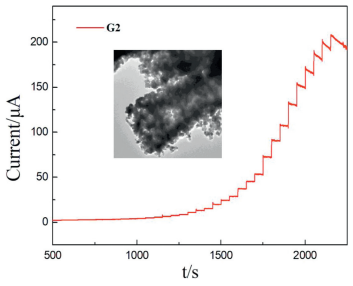
Porous Ni/NiO nanohybrids for electrochemical catalytic glucose oxidation

Jiawei Gu[a], Yuxia Xu[b], Qing Li[a,b], Huan Pang[a]

[a] *School of Chemistry and Chemical Engineering, Yangzhou University, Yangzhou 225009, China*
[b] *Guangling College, Yangzhou University, Yangzhou 225009, China*

The strategy demonstrated herein is the design and development of a highly efficient, stable and inexpensive porous Ni/NiO nanostructures electrocatalyst *via* a controllable and facile a low temperature heat treatment of the precursor $NiC_2O_4{\cdot}2H_2O$ in N_2. The as-synthesized Ni/NiO nanostructure exhibited outstanding electrocatalytic performance for the glucose, including good stability, excellent sensitivity and remarkable selectivity

Chinese Chemical Letters 32 (2021) 2017



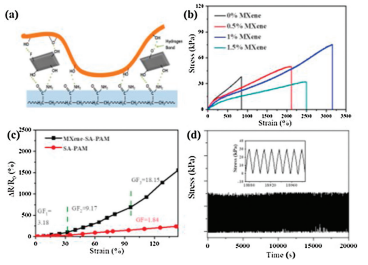
MXene-composited highly stretchable, sensitive and durable hydrogel for flexible strain sensors

Wei Yuan[a], Xinyu Qu[a], Yao Lu[a], Wen Zhao[a], Yanfang Ren[b], Qian Wang[a], Wenjun Wang[b], Xiaochen Dong[a,c]

[a] *Key Laboratory of Flexible Electronics (KLOFE) & Institute of Advanced Materials (IAM), School of Physical and Mathematical Sciences, Nanjing Tech University (NanjingTech), Nanjing 211800, China*
[b] *School of Physical Science and Information Technology, Liaocheng University, Liaocheng 252059, China*
[c] *School of Chemistry and Materials Science, Nanjing University of Information Science & Technology, Nanjing 210044 China*

The hydrogel sensor composited with MXene presents high stretchability, high sensitivity and high durability.

Chinese Chemical Letters 32 (2021) 2021



One-pot synthesis of CoO–ZnO/rGO supported on Ni foam for high-performance hybrid supercapacitor with greatly enhanced cycling stability

Mingsheng Xu[a], Mingze Sun[a], Sajid ur Rehman[a], Kangkang Ge[a], Xiaolong Hu[a], Haizhen Ding[a], Jichang Liu[b], Hong Bi[a]

[a] *School of Chemistry and Chemical Engineering, Anhui University, Hefei 230601, China*
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A series of interconnected CoO–ZnO/rGO supported on Ni foam samples were prepared by *insitu* growth *via* hydrothermal synthesis and subsequent annealing treatment. The optimized sample exhibits excellent electrochemical performances with a higher specific capacitance of 1951.8 F/g (216.9 mAh/g) at a current density of 1 A/g with a good rate capability. The CoO–ZnO/ rGO based hybrid supercacitor delivers a high energy density up to 45.9 Wh/kg at a power density of 800 W/kg with a decent cycling stability (90.1% capacitance retention after 5000 cycles).

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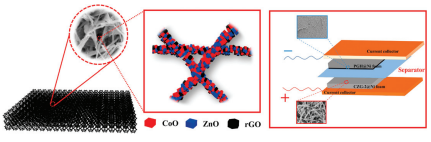


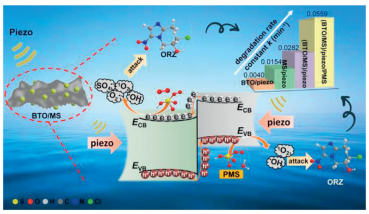
Construction of piezoelectric $BaTiO_3/MoS_2$ heterojunction for boosting piezo-activation of peroxymonosulfate

Chinese Chemical Letters 32 (2021) 2052

Yanxi Chen, Shenyu Lan, Mingshan Zhu

Guangdong Key Laboratory of Environmental Pollution and Health, School of Environment, Jinan University, Guangzhou 511443, China

A piezoelectric $BaTiO_3/MoS_2$ (BTO/MS) heterojunction was constructed for improving piezoelectric charge separation, which results in high performance of peroxymonosulfate activation for the removal of antibiotic pollutants.



Immobilizing ultrafine bimetallic PtAg alloy onto uniform MnO_2 microsphere as a highly active catalyst for CO oxidation

Chinese Chemical Letters 32 (2021) 2057

Shengpeng Mo[a,b,c], Peng Peng[a], Yinchang Pei[a], Taiming Shen[a], Qinglin Xie[a], Mingli Fu[b], Yunfa Chen[d], Daiqi Ye[b]

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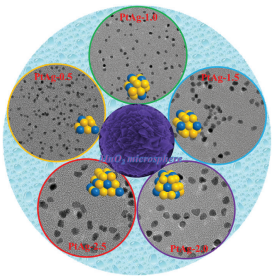
A series of ultrafine bimetallic PtAg alloys were immobilized onto MnO_2 microspheres, which remarkably enhanced the catalytic activity for CO oxidation.



Conducting polymer engineered covalent organic framework as a novel electrochemical amplifier for ultrasensitive detection of acetaminophen

Chinese Chemical Letters 32 (2021) 2061

Yao Xie[a], Yuling Chen[a], Xin Sun[a], Yang Wang[a], Yi Wang[b]

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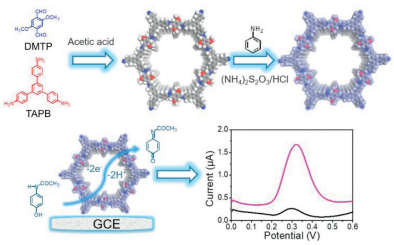
A novel core-shell structured covalent organic framework hybrid composite was successfully designed and used for electrochemical detection of acetaminophen.



The capacity and mechanisms of various oxidants on regulating the redox function of ZVI

Chinese Chemical Letters 32 (2021) 2066

Siqi Zou[a,b], Qun Chen[c], Yang Liu[a,b,f], Yuting Pan[a,b], Gang Yao[b,d], Zhicheng Pan[f], Bo Lai[a,b,e]

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This study confirmed the enhancement on the reducibility of ZVI from both the additional H^+ and generated ROS after the addition of oxidizers. The contribution of generated ROS for reductive reaction was quantified.