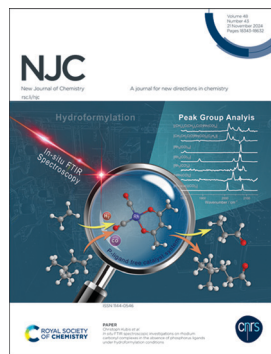


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ISSN 1144-0546 CODEN NJCHES 48(43) 18343-18632 (2024)



Cover

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EDITORIAL

18354

Vanadium Chemistry in the 21st Century

Armando J. L. Pombeiro, Manas Sutradhar and Isabel Correia*

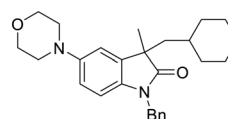
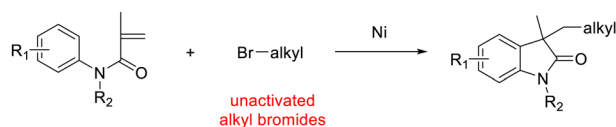


COMMUNICATIONS

18356

Synthesis of 3,3-disubstituted oxindoles from *N*-arylacrylamides and unactivated alkyl bromides via nickel-catalyzed cascade cyclization and their inhibitory effect on NO release

Jiaying Lv, Mingyu Ma, Zhiyuan Geng, Yuru Huang, Hanyu Wei, Runzhe Yang, Xianhe Fang* and Yi Bi*



IC₅₀ = 11.21 μM

inhibition of LPS-induced NO production on RAW 264.7 cells



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Fundamental questions
Elemental answers

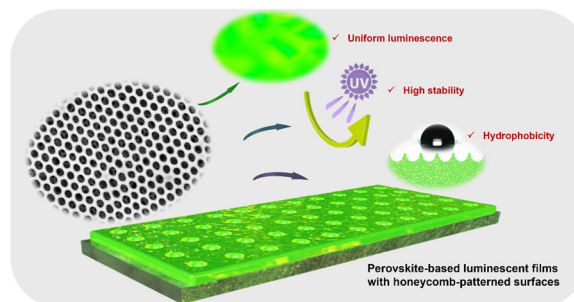


COMMUNICATIONS

18360

Highly-stable and homogenous perovskite-based luminescent films with honeycomb-patterned surfaces

Ying Zhou, Chunyu Zhao, Jiachen Ou, Yuan Li,* Ling He, Yanlu Xiong* and Aizhao Pan*

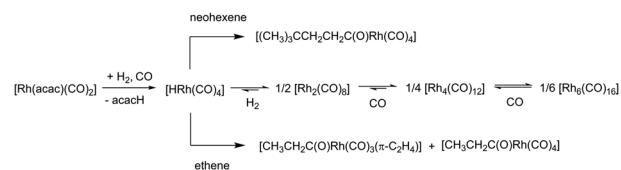


PAPERS

18365

In situ FTIR spectroscopic investigations on rhodium carbonyl complexes in the absence of phosphorus ligands under hydroformylation conditions

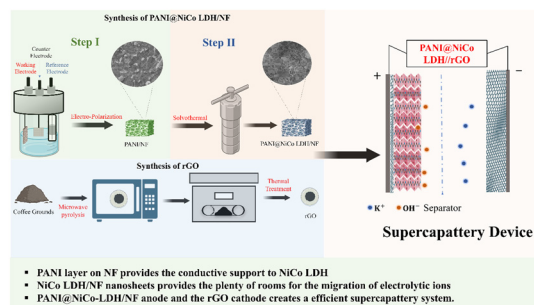
Benedict N. Leidecker, Dilver Peña Fuentes, Chunhong Wei, Mathias Sawall, Klaus Neymeyr, Robert Franke, Armin Börner and Christoph Kubis*



18376

Hierarchical NiCo-LDH layered composite on PANI coated Ni foam for highly efficient supercapattery applications

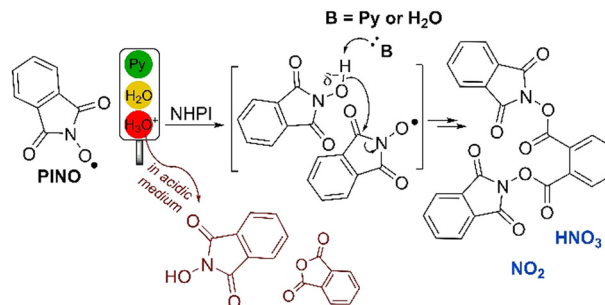
Megha Prajapati, Chhaya Ravi Kant,* Aasim Hussain and Mohan V. Jacob



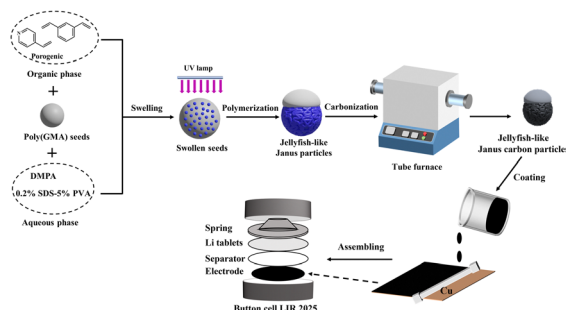
18392

Operando FT-IR spectroscopy as a useful tool for elucidating the fate of phthalimide-*N*-oxyl catalytically active species

Irina R. Subbotina,* Elena R. Lopat'eva, Igor B. Krylov* and Alexander O. Terent'ev



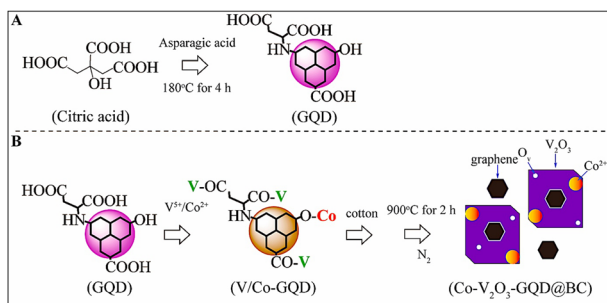
18403



Construction of Janus carbon particles with controllable morphology and their application in lithium battery anode materials

Yashuai Zhao, Yunjia Xu, Hongwei Wang, Hehang Sun, Chunping Hou, Chunmiao Bo* and Junjie Ou*

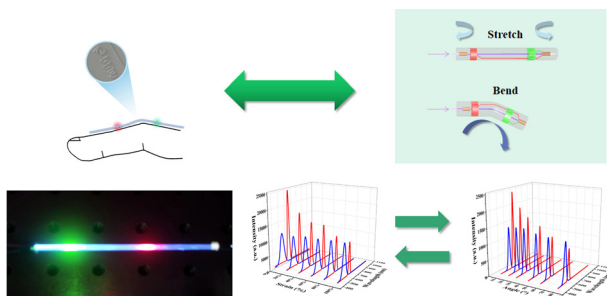
18416



Construction of an advanced Co-doped V_2O_5 electrode material with significantly enhanced conductivity and structural stability for supercapacitors using asparagic acid-functionalized graphene quantum dots

Li Ruiyi, Yang Chen, Li Zaijun* and Gao Mingjie*

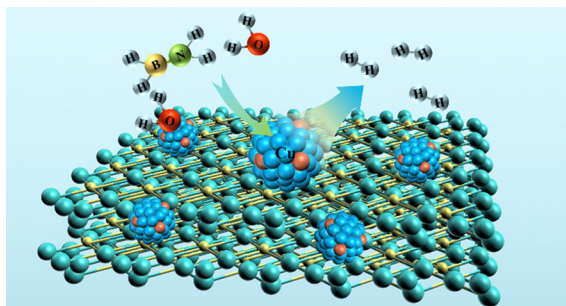
18429



Distributed and multimodal strain sensing performance of flexible hydrogel functional optical fibers

Yan Zhuang, Kai Gong, Jianhui Sun, Zishi Jiang, Yiqian Li* and Peng Li*

18347



Two-dimensional titanium carbide-supported ultrafine non-noble bimetallic nanocatalysts for remarkable hydrolytic evolution from ammonia borane

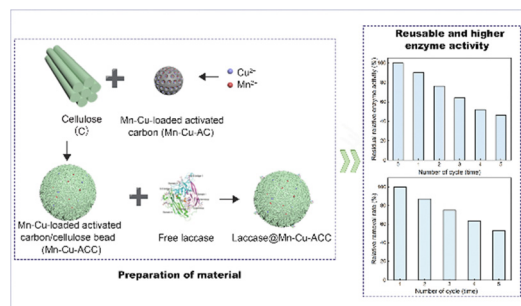
Shunyu Yao, Linlin Xu,* Haotian Qin, Xiang Ding, Sheng Zhao, Yue Ma, Meng Cui, Quanjiang Lv,* Jian Han and Fuzhan Song*



18443

An efficient material (Mn–Cu-AC/cellulose beads) for immobilizing laccase: excellent activity, high stability and effective pollutant removal rate

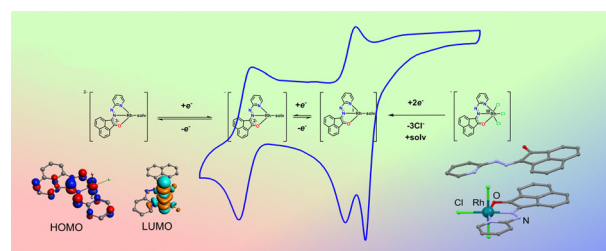
Yuying Zhang, Na Li,* Lianmei Chen, Fangrui Yu, Xueru Sheng, Jian Zhang, Qingwei Ping and Hongbin Li*



18456

Rhodium complexes bearing 2-(pyridin-2-yl)-hydrazino acenaphthene-1-one: synthesis, structure and electrochemical studies

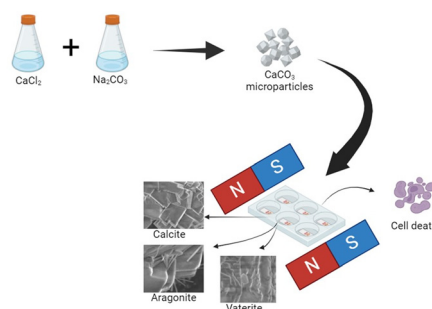
I. V. Bakaev, V. I. Komlyagina, A. A. Ulantikov, N. F. Romashev* and A. L. Gushchin*



18465

Calcium carbonate microparticles show enhanced anti-cancer properties under the influence of a magnetic field

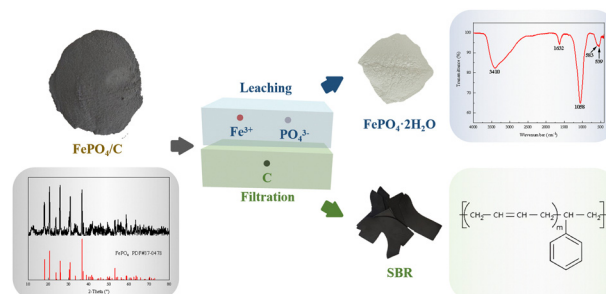
Jinan Parvin V. M., Sreya Prasannakumar, Rajyalaxmi Kothuru, Unnikrishnan B. S., P. Gopinath and S. Chockalingam*



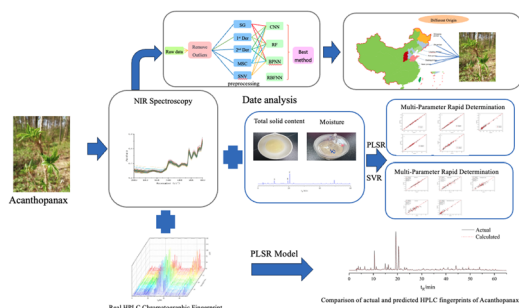
18474

A chemical method for the complete components recovery from the ferric phosphate tailing of spent lithium iron phosphate batteries

Zeguang Wu,* Huaxian Mei, Xiaoxia Wan, Fanxi Shen and Cong Peng



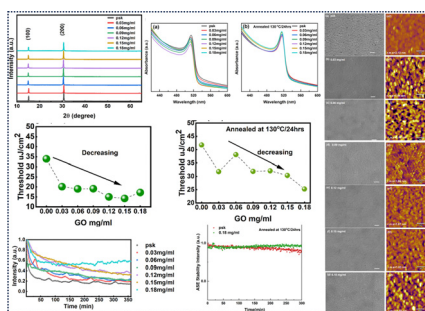
18485



Portable near-infrared spectroscopy combined with machine learning algorithms for the origin identification and quality evaluation of *Acanthopanax senticosus*

Jianguo Zhang, Yang Gao, Guoming Zhou, Jiahao Feng, Xin Sha, Jingchao Chen, Jianming Ye* and Wenlong Li*

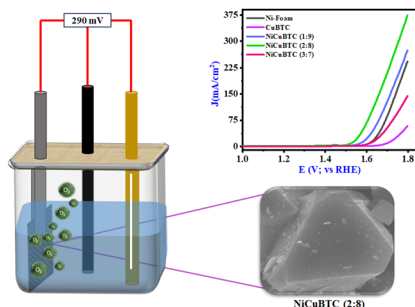
18497



Improving the thermal- and photo-stability of CsPbBr₃ perovskite films by adding graphene oxide for low threshold amplified spontaneous emission

Ayesha Azeem, Xinyang Wang, Guochao Lu, Meiyi Zhu, Xingliang Dai, Jing Li,* Zhizhen Ye, Jun Pan and Haiping He*

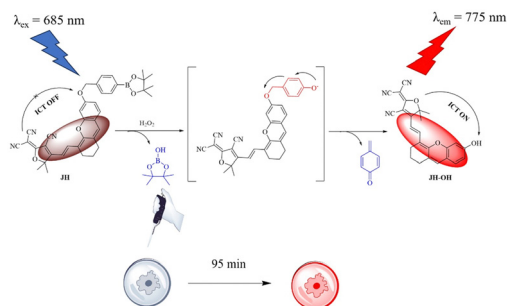
18506



A polyhedral Ni/Cu bimetallic metal–organic framework for electrocatalytic oxygen evolution reaction

Mahesh Burud, Vidhya Jadhav, Akshata Pattanshetti, Prathamesh Chougale, Vijay Chavan, Honggyun Kim, Supriya A. Patil, Deok-kee Kim, Amit Supale* and Sandip Sabale*

18514



A near-infrared fluorescence probe based on the ICT (intramolecular charge transfer) mechanism for the detection of hydrogen peroxide in cells

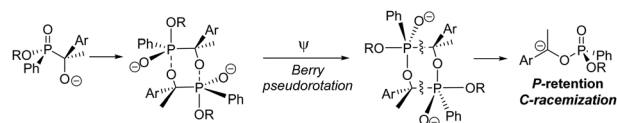
Han Zeng, Yuanyuan Wu, Shijun Chen, Haijie Wang, Yaping Wang, Mingchao Huang, Yiyi Li, Xiaodong Ma and Shicong Hou*



18520

Stereoselective O-phosphorylation of aldehydes and ketones via phospho-Brook rearrangement: the stereochemistry and intermolecular mechanism

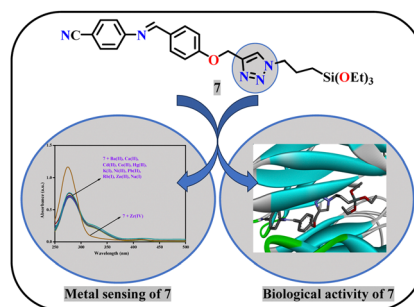
Qiang Li, Yong-Ming Sun, Lan Yao, Si-Yu Ji, Hong-Xing Zheng, Jing-Hong Wen,* Qing Xu and Chang-Qiu Zhao*



18526

Enlightening the sensing behaviour of click-derived 1,2,3-triazole for the selective detection of zirconium(IV) and its potential ability against Kelch-Neh2 via an *in silico* approach

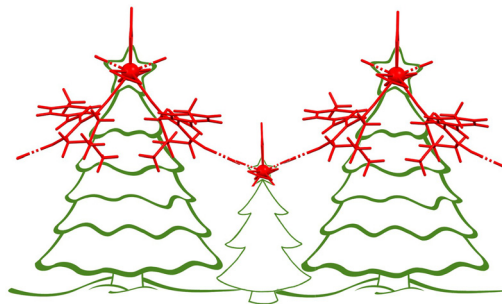
Gurjaspreet Singh,* Mithun,* Sumesh Khurana, Harshbir Kaur, Bhavana Rani, Tsering Diskit, Jyoti, Parul and Vikas



18536

Photoluminescent lanthanide(III) coordination polymers based on 2-[[[(4-methylphenyl)amino]methylene]-5,5-dimethylcyclohexane-1,3-dione

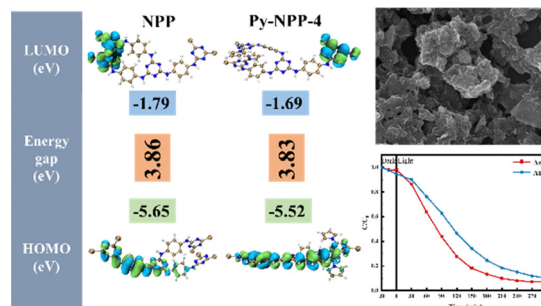
Ksenia S. Smirnova, Elizaveta A. Sanzhenakova, Iliia V. Eltsov, Ivan P. Pozdnyakov, Alena A. Russkikh, Victor V. Dotsenko and Elizaveta V. Lider*



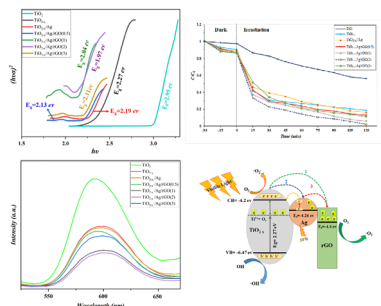
18546

Short-range conjugated nitrogen-rich porous polymers for uranium(VI) photocatalysis

Jiaxin Hu, Qihang Sun, Baoyu Li, Yunwen Liao, Juan Zhang, Jinming Chang, Hejun Gao* and Hongquan Fu*



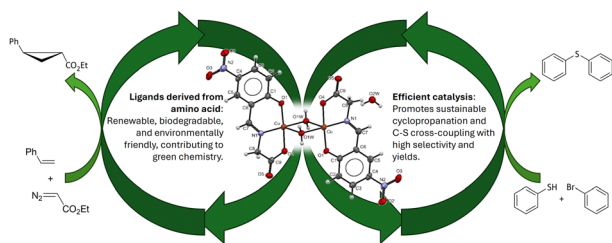
18558



TiO_{2-x}/Ag/rGO composites as effective photocatalysts for the degradation of organic pollutants

Ali Baqaei, Ali Asghar Sabbagh Alvani,* Hassan Sameie and Federico Rosei

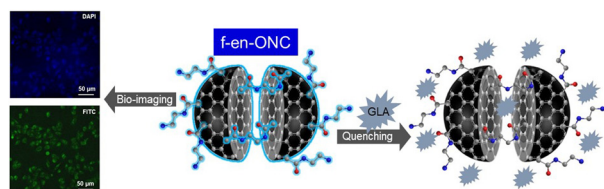
18569



Synthesis, structural analysis, DFT study, and catalytic performance of a glycine-Schiff base binuclear copper(II) complex

Karla-Alejandra López-Gastélum, Iván-Fernando Chávez-Urías,* Luis E. López-González, Juventino J. García, Marcos Flores-Alamo, David Morales-Morales, Jordi R. Galindo, Rocío Sugich-Miranda, Felipe Medrano Valenzuela, Enrique F. Velázquez-Contreras and Fernando Rocha-Alonzo*

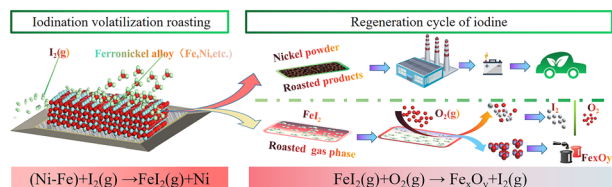
18580



Small amine-functionalized diesel soot-derived onion-like nanocarbon for selective sensing of glutamic acid and imaging application

Kiran Gupta, Nandini Tiwari, Prashant Dubey, Ranju Yadav, Ruchi Aggarwal,* Chumki Dalal* and Sumit Kumar Sonkar*

18589



Iodination volatilization roasting of ferronickel alloys for selectively volatilizing iron and simultaneously obtaining nickel containing powder

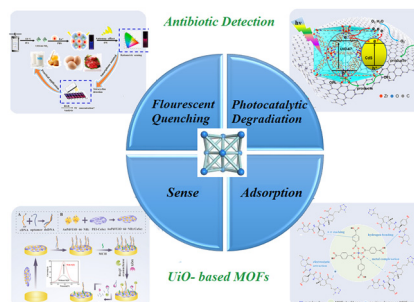
Hong Qin, Xueyi Guo, Qinghua Tian, Dawei Yu, Tianshuang Li* and Lei Zhang



18600

A review of UiO-based MOF detection and removal strategies for antibiotics in water

Vahid Amani,* Fataneh Norouzi and Zakyeh Akrami



18618

Development of α -acyloxycarboxamides targeting *Leishmania amazonensis* parasite

Saraliny B. França, Jamilly E. da Silva, Leandro R. Silva, Emanuely K. A. Padilha, Fernando Almeida-Souza, Lucas S. Barbosa, Katia S. Calabrese, Dimas J. P. Lima* and Edeildo F. da Silva-Júnior*

