

ChemComm

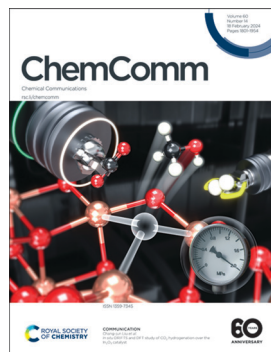
Chemical Communications

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IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 60(14) 1801-1954 (2024)



Cover

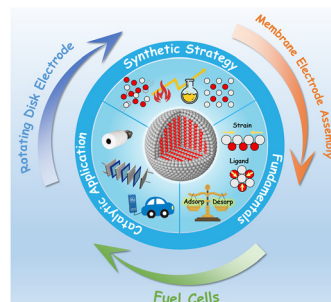
See Chang-jun Liu et al.,
pp. 1872–1875.
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Chem. Commun.,
2024, 60, 1872.

HIGHLIGHT

1811

Emerging Pt-based intermetallic nanoparticles for the oxygen reduction reaction

Jingyu Guan,* Duo Dong, Niaz Ali Khan* and Yong Zheng*

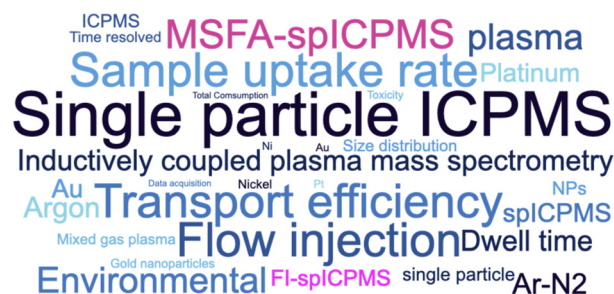


FEATURE ARTICLES

1826

Single particle inductively coupled plasma mass spectrometry and its variations for the analysis of nanoparticles

Zichao Zhou and Diane Beauchemin*



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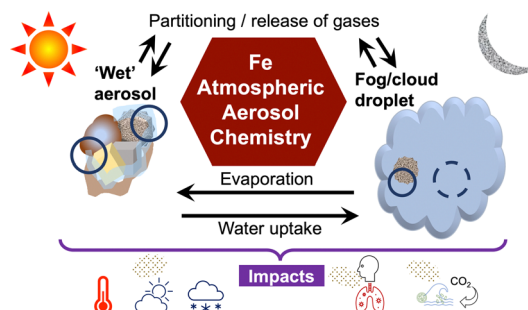


FEATURE ARTICLES

1840

Iron content in aerosol particles and its impact on atmospheric chemistry

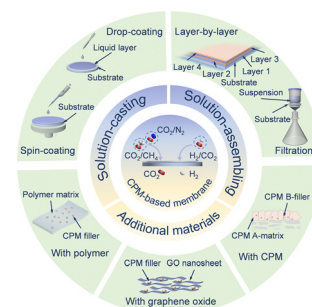
Hind A. Al-Abadleh



1856

Solution processing of crystalline porous material based membranes for CO₂ separation

Caiyan Zhang, Lili Fan, Zixi Kang* and Daofeng Sun*

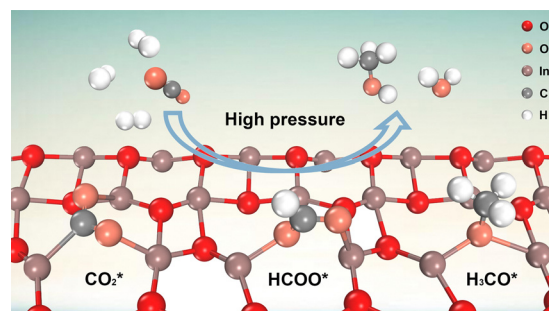


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1872

In situ DRIFTS and DFT study of CO₂ hydrogenation over the In₂O₃ catalyst

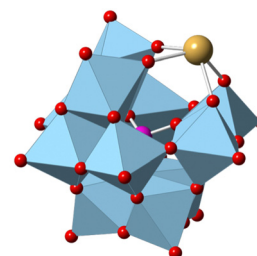
Rui Zou, Menghui Liu, Chenyang Shen, Kaihang Sun and Chang-jun Liu*



1876

Post transition metal substituted Keggin-type POMs as thin film chemiresistive sensors for H₂O and CO₂ detection

Abigail A. Seddon, Nathan S. Hill, Osama El-Zubir, Andrew Houlton, R. John Errington, Pablo Docampo and Elizabeth A. Gibson*

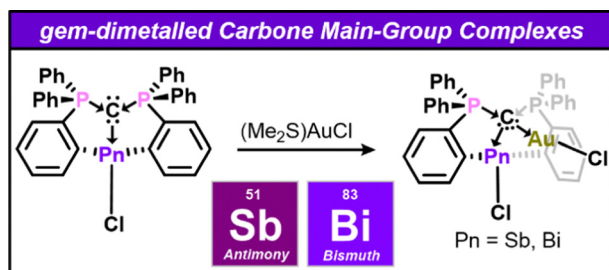


blue = W octahedra, red = O, magenta = P
yellow = Bi, Sb, or Pb



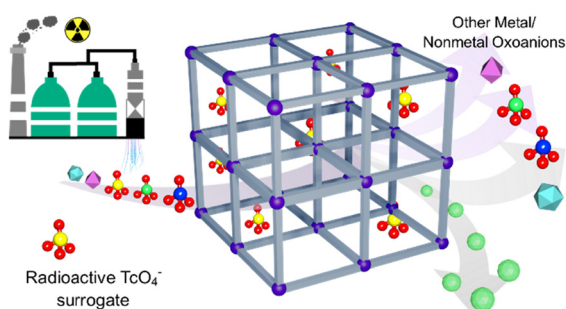
COMMUNICATIONS

1880

**Geminal bimetallic coordination of a carbene to main-group and transition metals**

Akachukwu D. Obi, Chun-Lin Deng, Andrew J. Alexis, Diane A. Dickie and Robert J. Gilliard Jr*

1884

**Preferential separation of a radioactive TcO_4^- surrogate from a mixture of oxoanions by a cationic MOF**

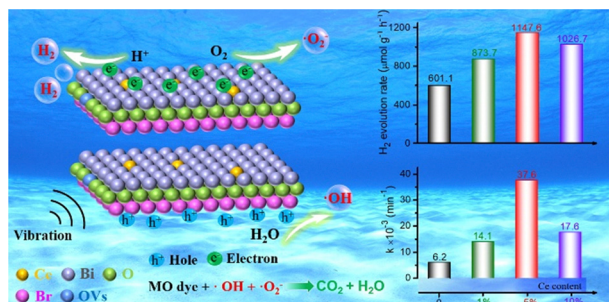
Sahel Fajal, Dipayan Ghosh, Writakshi Mandal and Sujit K. Ghosh*

1888

Green photo-oxidation reaction**Oxygen detection****Sulphur-induced structural rearrangement in the self-sensitization photo-oxidation behaviour of phenothiazine-imidazole molecules**

Jianai Chen, Haiyang Wang, Yue Yu, Jin Liu, Fengyi Zhao, Weijun Li* and Yujie Dong*

1892

**Ce-regulating defect and morphology engineering for efficiently enhancing the piezocatalytic performances of BiOBr**

Lihui Zhan, Jindou Hu, Yali Cao,* Xueer Ning, Jing Xie, Zhenjiang Lu and Aize Hao*

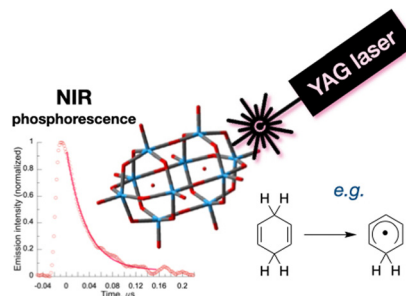


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1896

NIR phosphorescence from decatungstate anions allows the conclusive characterization of its elusive excited triplet behaviour and kinetics

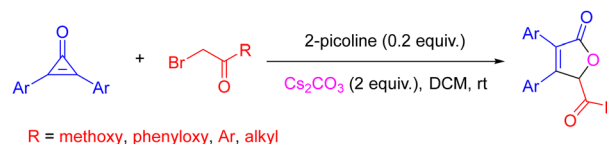
Saba Didarataee, Anastasiia Suprun, Neeraj Joshi and Juan C. Scaiano*



1900

Pyridine-catalyzed ring-opening reaction of cyclopropenone with bromomethyl carbonyl compounds toward furan-2(5H)-ones

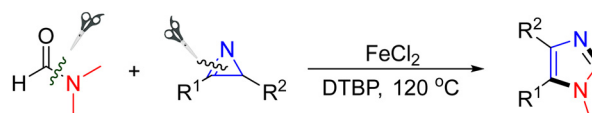
Chen Liang, Kui Zheng, Yifang Ding, Junhang Gao, Zhenlian Wang* and Jiang Cheng*



1904

DMF as an amine source: iron-catalyzed cyclization of 2H-azirines to imidazoles

Mi-Na Zhao,* Zi-Mo Yang and Lian-Qing Li*

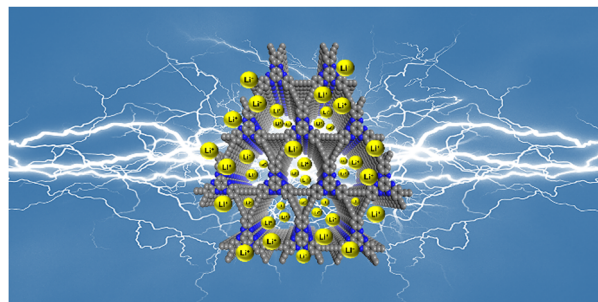


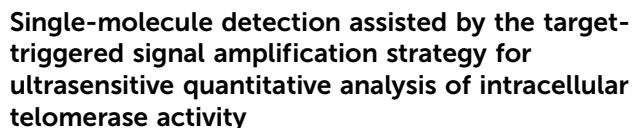
- DMF as both solvent and amine source
- Catalytic C-N and C=N bonds cleavage
- Convenient synthesis of imidazoles

1908

A nitrogen-rich graphdiyne containing hexaazatrinaphthylene for high-performance lithium-ion batteries

Jiaheng Hou, Danbo Wang, Menghuan Chao, Lin Zhang, Hui Liu* and Yingjie Zhao*

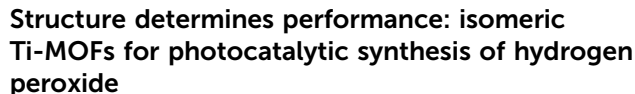




1916



1920



1924



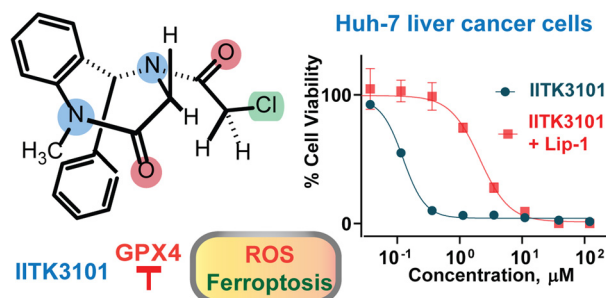
Yu Huang, Yulong Zhang, Li Pan, Qian Wu, Ning Li,
Enxue Shi* and Junhua Xiao*

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1928

Diazepam-based covalent modifiers of GPX4 induce ferroptosis in liver cancer cells

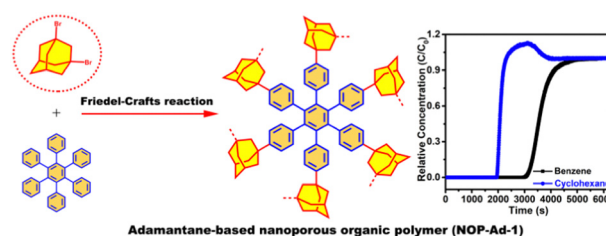
Dharmendra K. Yadav, Sona Tiwari, Sathyapriya Senthil, Sai Kumari Vechalapu, Santhosh Duraisamy, Viral Rawat, Mohammed Isfahur Rahman, Shweta Khanna and Dharmaraja Allimuthu*



1932

A nanoporous organic polymer using 1, 3-dibromoadamantane as a crosslinker for adsorption/separation of benzene and cyclohexane

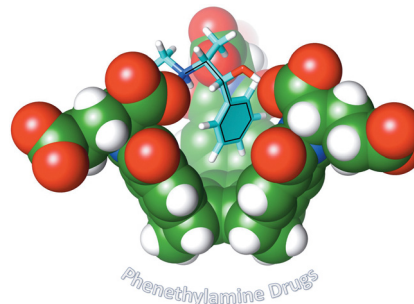
Jun Yan,* Jiangli Zhu, Sihan Tong and Zefeng Wang*



1936

Molecular baskets form inclusion complexes with phenethylamine drugs in water

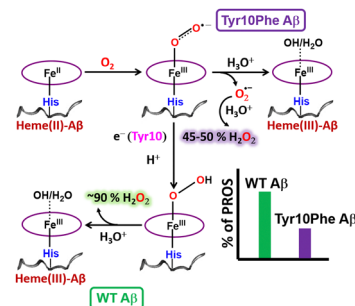
Tyler J. Finnegan, Christopher Mortensen and Jovica D. Badjić*



1940

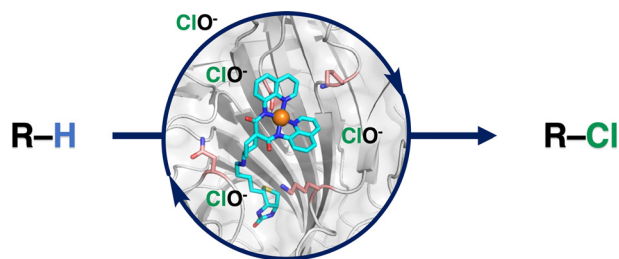
Rapid autoxidation of ferrous heme-A β complexes relevant to Alzheimer's disease

Madhuparna Roy, Abhishek Dey* and Somdatta Ghosh Dey*



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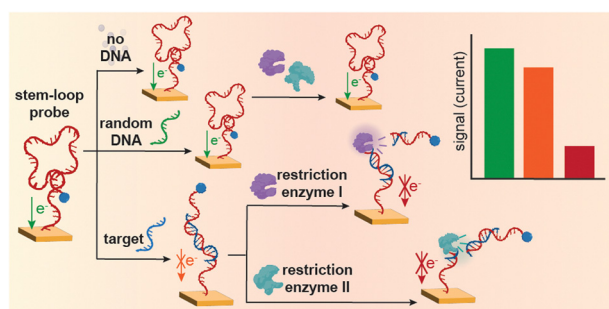
1944



An artificial nickel chlorinase based on the biotin–streptavidin technology

Kun Yu, Kailin Zhang, Roman P. Jakob, Timm Maier and Thomas R. Ward*

1948



Improving electrochemical hybridization assays with restriction enzymes

Xingcheng Zhou, Marjon Zamani, Katherine Austin, Marieke De Bock, Joshua Chaj Ullola, Smah Riki and Ariel L. Furst*

