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Cover

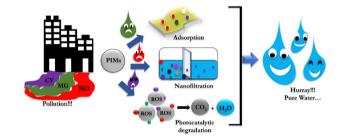
See Antonio Bauzá et al., pp. 12847–12850. Image reproduced by permission of Antonio Bauzá from Chem. Commun., 2023, **59**, 12847.

HIGHLIGHT

12799

Removal of dyes using polymers of intrinsic microporosity (PIMs): a recent approach

Abinash Gogoi, Hima Barman, Susovan Mandal and Saona Seth*



FEATURE ARTICLES

12813

Functional silicone oils and elastomers: new routes lead to new properties

Michael A. Brook



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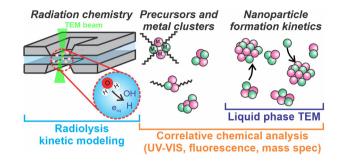


FEATURE ARTICLES

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Unraveling chemical processes during nanoparticle synthesis with liquid phase electron microscopy and correlative techniques

Amy Chen, Thilini U. Dissanayake, Jiayue Sun and Taylor J. Woehl*

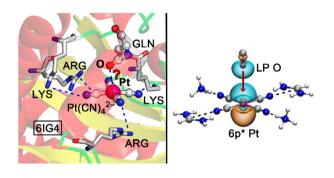


COMMUNICATIONS

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Enzymatic reversion of Pt(II) nucleophilicity through charge dumping: the case of Pt(CN)₄²⁻

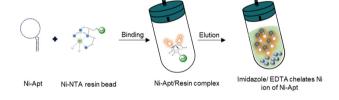
Sergi Burguera, Antonio Frontera and Antonio Bauzá*



12851

Ni aptamer: DNA mimic of His-tag to recognize Ni-NTA

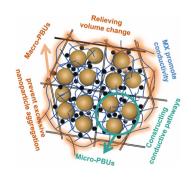
Raunak Jahan, Achut Prasad Silwal, Siddhartha Kalpa Samadhi Thennakoon, Satya Prakash Arya, Rick Mason Postema, Hari Timilsina, Andrew Michael Reynolds and Xiaohong Tan*



12855

Robust dual-cross-linked networks enable stable silicon anodes

Yun Liu, Hui Zhang,* Jinrong Zeng, Wenlu Sun, Hao Qian, Fang Fu, Hongcun Bai, Huabin Kong* and Hongwei Chen*



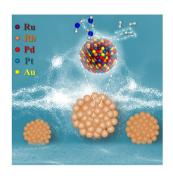
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Irreversible adduct DEK

$\alpha\beta, \alpha'\beta'$ -Diepoxyketones are mechanism-based inhibitors of nucleophilic cysteine enzymes

Mariska de Munnik, Jasper Lithgow, Lennart Brewitz, Kirsten E. Christensen, Robert H. Bates, Beatriz Rodriguez-Miguel and Christopher J. Schofield*

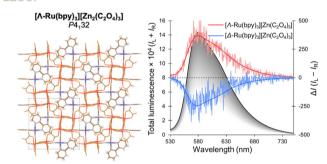
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Quinary RuRhPdPtAu high-entropy alloy as an efficient electrocatalyst for the hydrogen evolution reaction

Cheng Chen, Jiayin Guo, Jianhong Liu, Weiwei Li, Yongsheng Wei, Honghui Wang, * Xinsheng Zhao * and Lu Wei*

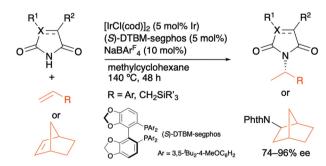
12867



Enhanced circularly polarized luminescence dissymmetry of [Ru(bpy)₃]²⁺ complexes in a 3D chiral framework: a study of transparent thin films

Songwei Zhang, David Schnable, Jocelyn Elgin, Gaël Ung* and Yiying Wu*

12871



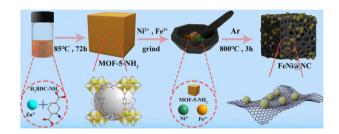
Iridium-catalyzed asymmetric addition of imides to alkenes

Kentaro Yamakawa, Kana Sakamoto and Takahiro Nishimura*

12875

Controllable fabrication of iron—nickel alloy embedded in nitrogen-doped carbon for oxygen evolution

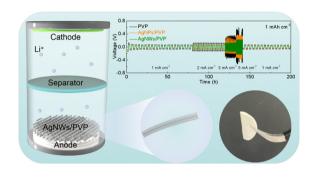
Rong Lin, Lujiao Mao, Yi Ding and Jinjie Qian*



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A multifunctional interlayer activated by lithiophilic electrospun Ag nanowires/polyvinylpyrrolidone nanofibers for efficient lithium storage

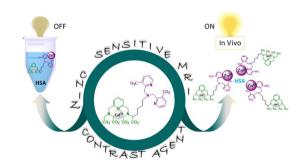
Zicheng Wang, Jianguo Song, Yuan Tian* and Cheng Wang*



12883

Zinc-sensitive MRI contrast agents: importance of local probe accumulation in zinc-rich tissues

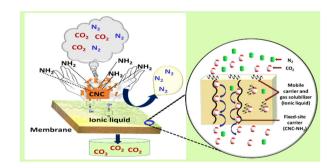
Kyangwi P. Malikidogo, Manon Isaac, Adrien Uguen, Sandra Même, Agnès Pallier, Rudy Clémençon, Jean-François Morfin, Sara Lacerda, Éva Tóth and Célia S. Bonnet*



12887

A Gemini basic ionic liquid and functionalized cellulose nanocrystal-based mixed matrix membrane for CO₂/N₂ separation

Prarthana Bora, Chinmoy Bhuyan, Parashmoni Rajguru and Swapnali Hazarika*



12891

X = Br, I, OTf,

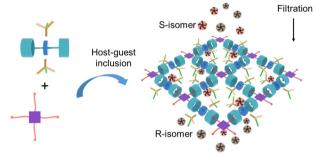
- Mo(CO)₆ as CO source and reductant direct use of aromatic nitro compounds
 - > 25 examples, 27-94% yields

Direct synthesis of phthalimides via palladiumcatalysed double carbonylation of o-dihaloarenes with nitroarenes

Chenwei Liu, Tongshun An, Weiheng Yuan, Huiying Dai, Xiaolan Liang and Zhiping Yin*

12895

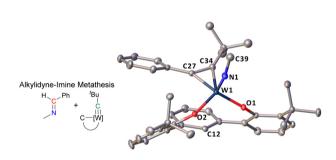
broad functional group tolerance



Enantiomeric filtration separation of supramolecular framework membranes

Jingbo Ding, Zexi Zhu, Mingfeng Wei, Bao Li* and Lixin Wu*

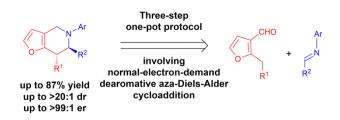
12899



A case of alkylidyne-imine metathesis

Rinku Yadav, Ion Ghiviriga, Khalil K. Abboud and Adam S. Veige*

12903



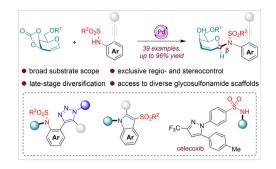
Dearomative, aminocatalytic formal normalelectron-demand aza-Diels-Alder cycloaddition in the synthesis of tetrahydrofuropyridines

Mateusz Dyguda, Artur Przydacz and Łukasz Albrecht*

12907

Facile and stereospecific synthesis of diverse β-N-glycosyl sulfonamide scaffolds via palladium catalysis

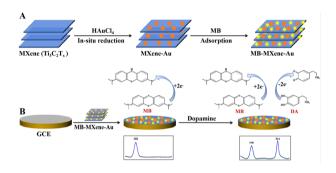
Lei Zhong, Qunliang Wang, Yujuan Wang, Yiyang Cheng, Yimeng Xiong, Haibo Peng, Zhen Zhou, Yun He* and Yuanwei Dai*



12911

An electrochemical ratiometric biosensor for the detection of dopamine based on an MXene-Au nanocomposite

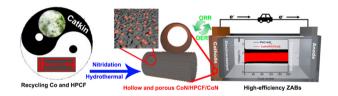
Wen-Jie Jing, Fei-Fei Li, Yu Liu, Rong-Na Ma, Wei Zhang, Lei Shang, Xiao-Jian Li, Qing-Wang Xue, Huai-Sheng Wang* and Li-Ping Jia*



12915

Recycling cobalt in spent lithium ion batteries to design CoN/HPCF/CoN electrocatalysts for advanced zinc-air batteries

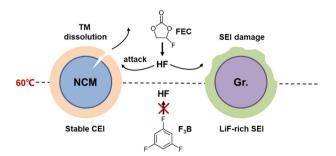
Yibin Wang, Lan Xiao, Yingjie Zhang, Mian Li* and Tingting Liu*



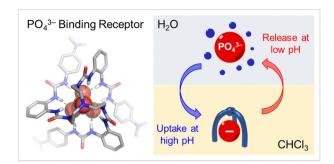
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1,3,5-Trifluorobenzene, an electrolyte additive with high thermal stability and superior film-forming properties for lithium-ion batteries

Xinlan Wang, Ziqi Zeng,* Han Zhang, Mingsheng Qin, Yanli Zhu* and Jia Xie*



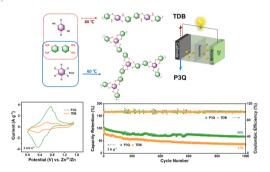
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pH-Dependent phosphate separation using a tripodal hexaurea receptor

Zhong-Yu Sun, Si-Qi Chen, Lin Liang, Wei Zhao,* Xiao-Juan Yang and Biao Wu*

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An imine-rich polymer with enlarged π -conjugated planes for aqueous zinc-ion batteries

Yaxin Liang, Yuanhao Xia, Xinlei Wang and Jie Zhou*