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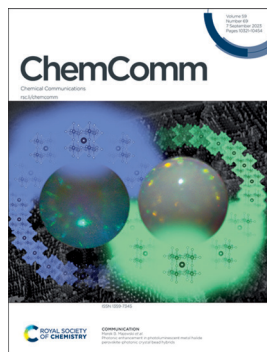
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ISSN 1359-7345 CODEN CHCOFS 59(69) 10321-10454 (2023)



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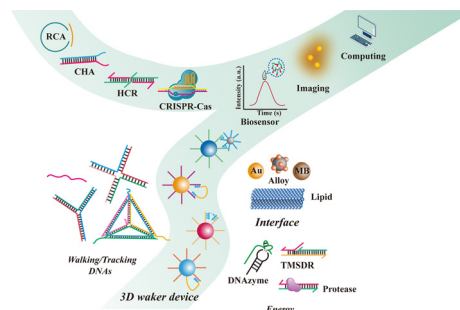
See Marek B. Majewski *et al.*, pp. 10380–10383. Image reproduced by permission of Victoria Lapointe from *Chem. Commun.*, 2023, 59, 10380.

HIGHLIGHTS

10330

The rate-limiting procedure of 3D DNA walkers and their applications in tandem technology

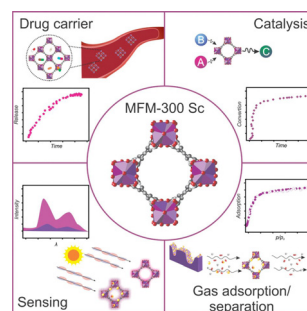
Hongmin Ma, Long Chen, Jingnan Lv, Xiaoyu Yan, Yonghao Li and Guoxin Xu*



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MFM-300(Sc): a chemically stable Sc(III)-based MOF material for multiple applications

Valeria B. López-Cervantes, Juan L. Obeso, Ana Yañez-Aulestia, Alejandro Islas-Jácome, Carolina Leyva, Eduardo González-Zamora,* Elí Sánchez-González* and Ilich A. Ibarra*



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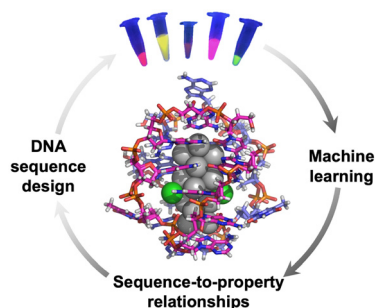


FEATURE ARTICLE

10360

Beyond nature's base pairs: machine learning-enabled design of DNA-stabilized silver nanoclusters

Peter Mastracco and Stacy M. Copp*

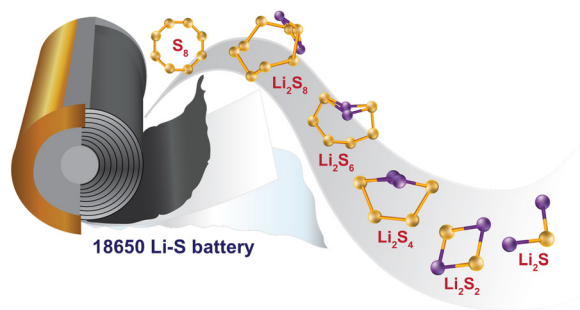


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Insight into the failure mechanism of large-scale cylindrical lithium–sulphur cells

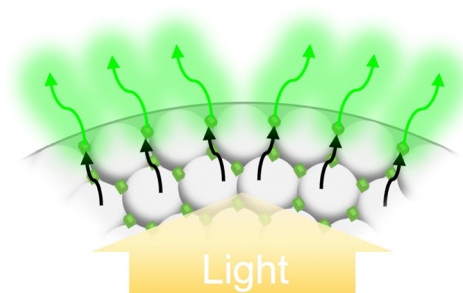
Surasak Kaenket, Salatan Duangdangchote, Kan Homlamai, Nattanon Joraleechanchai, Titipum Sangsanit, Worapol Tejangkura and Montree Sawangphruk*



10380

Photonic enhancement in photoluminescent metal halide perovskite–photonic crystal bead hybrids

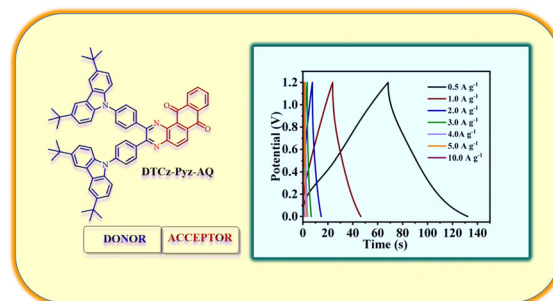
Victoria Lapointe, Christian J. Imperiale, Sollavi Chengadu, Cristina M. Pomilio, Meera Ganesh, Stephane Kéna-Cohen and Marek B. Majewski*



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Donor–acceptor molecular architecture involving carbazole/pyrazine/anthraquinone units for efficient supercapacitor applications

Sumit D. Ambore, Chepuri R.K. Rao,* Sidhanath V. Bhosale* and Sheshanath V. Bhosale*



10388

Photoinduced copper-catalyzed selective three-component 1,2-amino oxygenation of 1,3-dienes

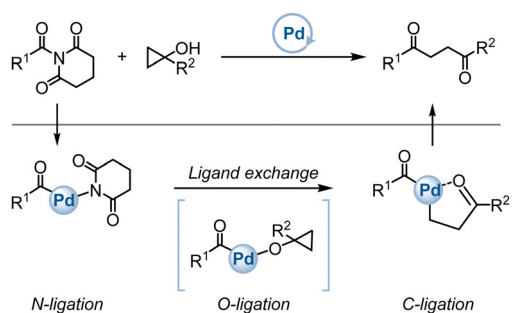
Yonghong Liu, Huaipu Yan, Yuqing Chen, Erjun Hao* and Lei Shi*



10392

Palladium-catalyzed coupling of amides and cyclopropanols for the synthesis of γ -diketones

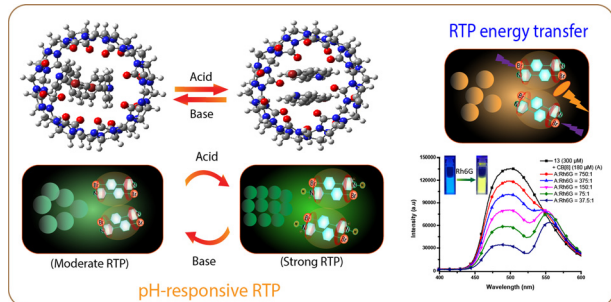
Lili Fang, Shuqi Jia, Shuaixin Fan and Jin Zhu*



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pH-tunable phosphorescence and light harvesting in cucurbit[8]uril host-guest assemblies

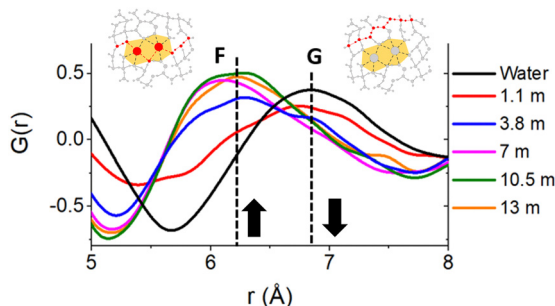
Shubhra Kanti Bhaumik, Sourav Kumar Panda and Supratim Banerjee*



10400

Cation coordination polyhedra lead to multiple lengthscale organization in aqueous electrolytes

Yihui Wei,* Emily T. Nienhuis,* Sebastian T. Mergelsberg, Trent R. Graham, Qing Guo, Gregory K. Schenter, Carolyn I. Pearce and Aurora E. Clark*

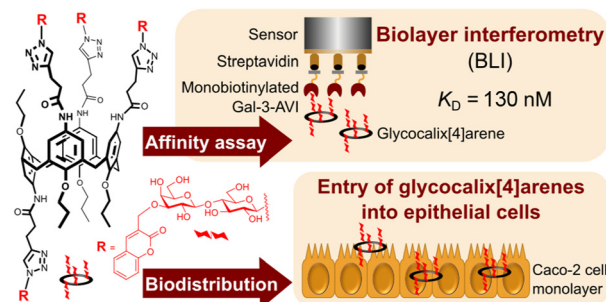


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Galectin-targeting glycocalix[4]arenes can enter the cells

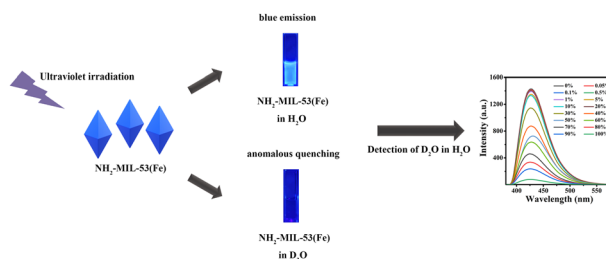
Miluše Vlachová, Van Nguyen Tran, Jakub Červený, František Dolníček, Lucie Petrášková, Helena Pelantová, Ondřej Kunderát, Josef Cvačka, Zuzana Bosáková, Vladimír Křen, Pavel Lhoták, Jitka Viktorová* and Pavla Bojarová*



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Solvent-induced luminescence behavior of $\text{NH}_2\text{-MIL-53(Fe)}$ in H_2O and D_2O : a potential approach for D_2O detection

Zhiqiang Guo, Xiaoxuan Fan, Xiaokun Wen, Wen Liu, Baijie Guan, Xia Hong, Kexin Wang* and Jiwei Wang*

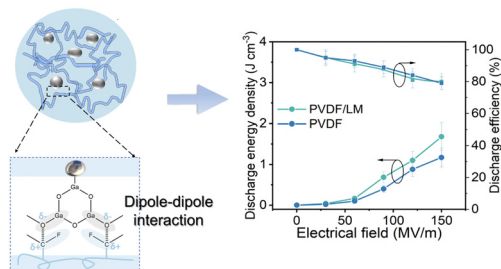


10412

Effects of polymer polarity on the interface interaction of polymer/liquid metal composites

Yuhang Li, Hangyu Guo, Zilong Xie* and Qiang Fu*

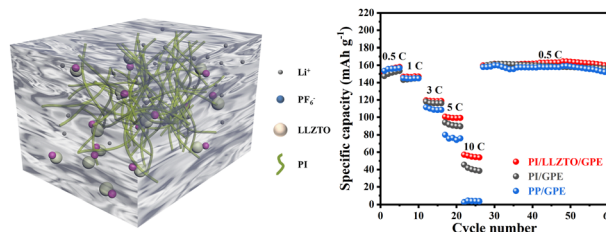
Natural interface interaction in polymer/LM composites



10416

A high-performance TPGDA/PETEA composite gel polymer electrolyte for lithium metal batteries

Zhifu Chen, Quan Pei, Zhitao An, Yiting Tong, Qingfeng Zhang* and Shuhong Xie*



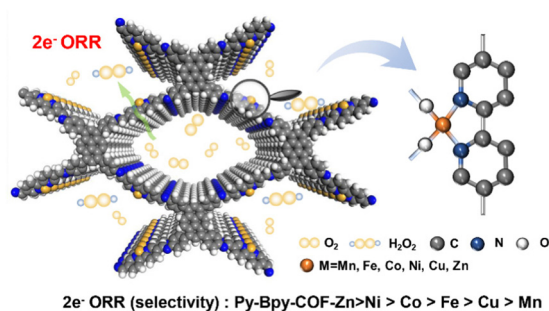
10420



Photoredox catalysis in alkene and alkyne alkylsulfonations: the construction of Markovnikov selective α-sulfones

Lingyi Lu, Haoran Wang, Shanshan Huang, Biao Xiong, Xiaobao Zeng, Yong Ling and Xiaodong Qiu*

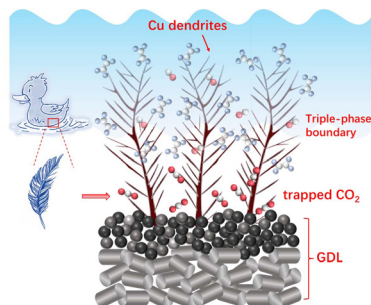
10424



Constructing single atom sites on bipyridine covalent organic frameworks for selective electrochemical production of H₂O₂

Shaoda Huang, Bingyan Zhang, Huimin Sun, Hongyin Hu, Jinyan Wang, Fang Duan, Han Zhu, Mingliang Du and Shuanglong Lu*

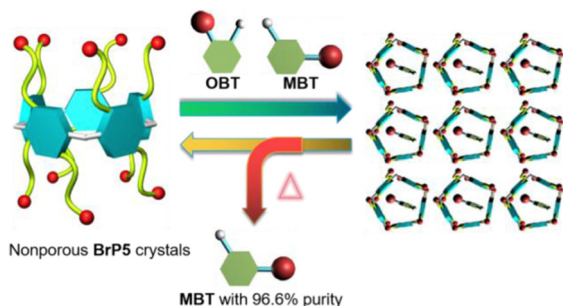
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Chlorine-mediated electrodeposition of hierarchical and hydrophobic copper electrocatalysts for efficient CO₂ electroreduction to ethylene

Yinqiong Wu, Jiye Feng, Danni Shi, Wenbiao Zhang, Yi Tang and Qingsheng Gao*

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Efficient separation of monobromotoluene isomers by nonporous adaptive perbromoethylated pillar[5]arene crystals

Bohan Zhao, Jianwei Wang, Li Shao, Yitao Wu, Ming Li,* Bin Hua* and Feihe Huang*

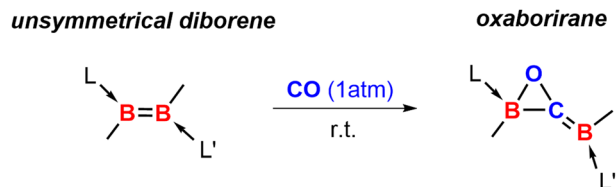


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Insertion of carbon monoxide into an unsymmetrical diborene to form an oxaborirane

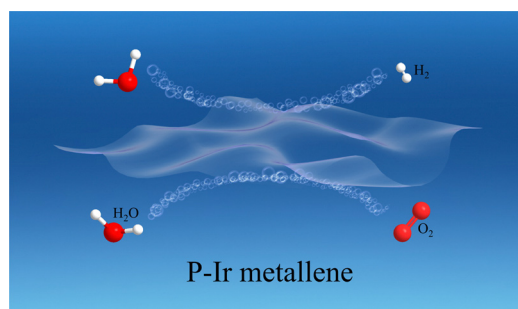
Lizhao Zhu and Rei Kinjo*



10440

Phosphorus-induced activation of Ir metallene for efficient acidic overall water electrolysis

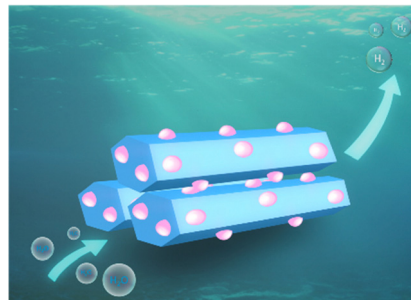
Ziqiang Wang, Xinmiao Li, Hugang Zhang, Kai Deng, Hongjie Yu, You Xu, Xiaonian Li, Hongjing Wang* and Liang Wang*



10444

Copper nanoparticle-embellished Zr-based metal–organic framework for electrocatalytic hydrogen evolution reaction

Ravari Kandy Aparna, Arun Karmakar, Rathnam Tharayil Arsha, Subrata Kundu and Sukhendu Mandal*



10448

Switchable reactivity of 2-benzoyl glycals towards stereoselective access of 1-3 and 1-1 *S/O* linked disaccharides

Irshad Ahmad Zargar, Bisma Rasool, Norein Sakander and Debaraj Mukherjee*

