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IN THIS ISSUE

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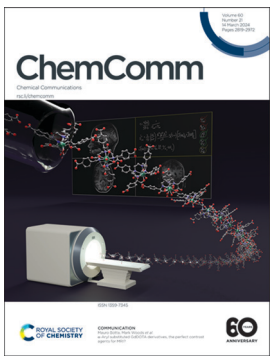
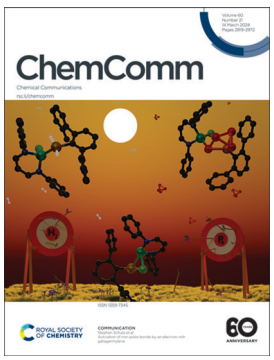


Cover
See Mauro Botta, Mark Woods *et al.*, pp. 2898–2901. Image reproduced by permission of Mark Woods from *Chem. Commun.*, 2024, **60**, 2898.



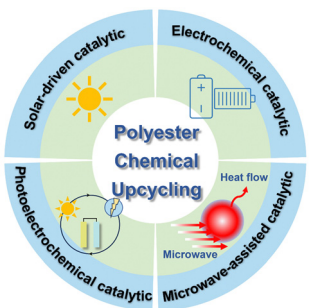
Inside cover
See Stephan Schulz *et al.*, pp. 2902–2905. Image reproduced by permission of Georg Bendt from *Chem. Commun.*, 2024, **60**, 2902.

HIGHLIGHTS

2828

Advances in solar-driven, electro/photoelectrochemical, and microwave-assisted upcycling of waste polyesters

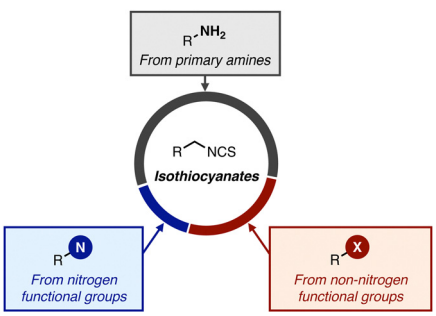
Xiangxi Lou, Fangyue Liu, Qingye Li, Mingyu Chu, Guiling Wang,* Jinxing Chen and Muhan Cao*



2839

Recent advancement in the synthesis of isothiocyanates

Bumpei Maeda and Kei Murakami*



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FEATURE ARTICLES

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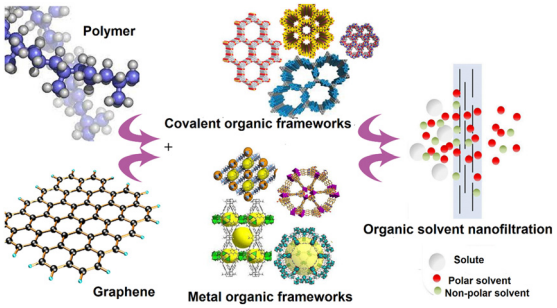
Recent advances in the fabrication of organic solvent nanofiltration membranes using covalent/metal organic frameworks

Elham Azadi, Nem Singh, Mohammad Dinari* and Jong Seung Kim*



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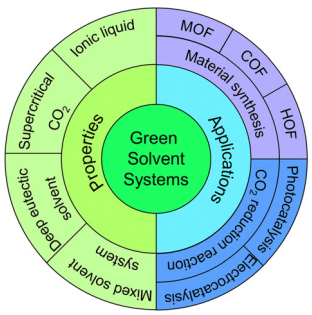
Green solvent systems for material syntheses and chemical reactions

Jingyang Hu, Jianling Zhang,* Yingzhe Zhao and Yisen Yang



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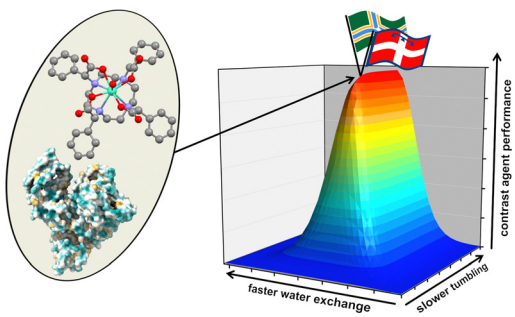
2898

α-Aryl substituted GdDOTA derivatives, the perfect contrast agents for MRI?

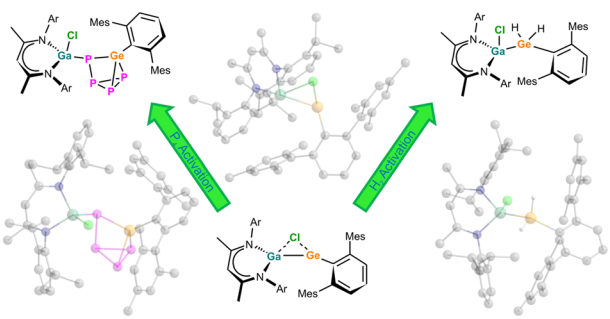
Karley B. Maier, Lauren N. Rust, Fabio Carniato, Mauro Botta* and Mark Woods*



2902

Activation of non-polar bonds by an electron-rich gallagermylene

Anna Bücker, Alexander Gehlhaar, Christoph Wölper and Stephan Schulz*



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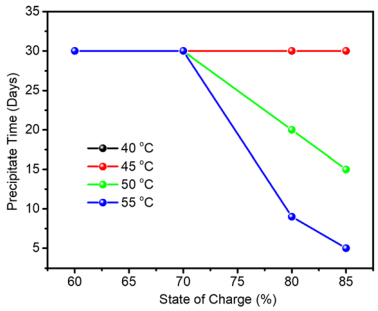

Effect of phosphoric acid additive on the electrolyte of all-vanadium flow batteries

Xuewen Wu, Jingjing Liao,* Xingrong Yin, Jun Liu, Saixiang Wu, Xiongwei Wu,* Zhiyong Xie* and Wei Ling*

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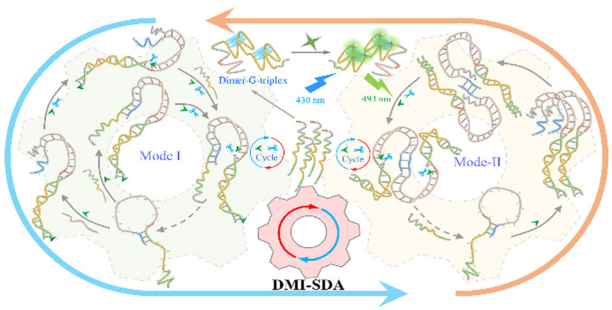

An allosteric palindromic hairpin probe based dual-mode interactive strand displacement amplification enables robust miRNA biosensing

Qi Wang, Tong Zhou, Danni Xue, Haidong Yang, Zhuqi Sui, Xinyue Yuan and Jianguo Xu*

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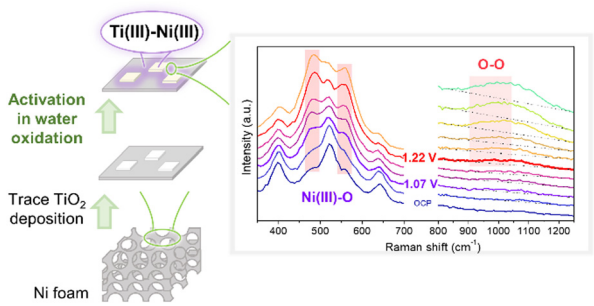

Activating nickel foam with trace titanium oxide for enhanced water oxidation

Jia-Fang Xie,* Ding Li, Hui-Wen Huo, Yi-Yin Huang, Peng Wu, Quan-Bao Zhao and Yu-Ming Zheng

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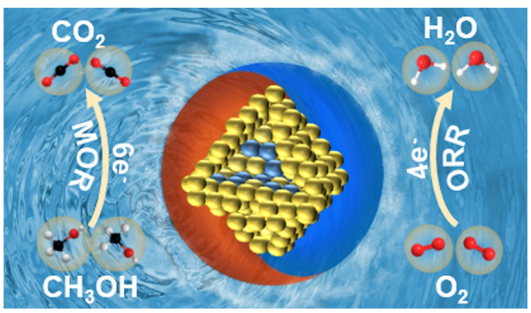

PtCu/Pt core/atomic-layer shell hollow octahedra for oxygen reduction and methanol oxidation electrocatalysis

Yi Zhou and Qiang Yuan*

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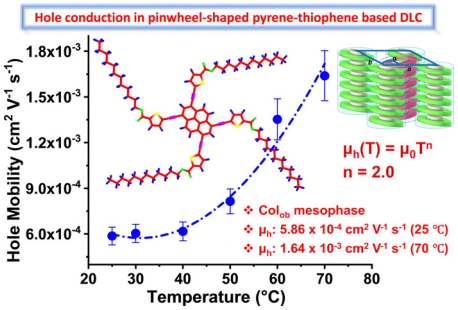
Temperature-dependent hole mobility in pyrene–thiophene-based room-temperature discotic liquid crystals

Shallu Dhingra, Santosh Prasad Gupta, Asmita Shah, Dharmendra Pratap Singh and Santanu Kumar Pal*



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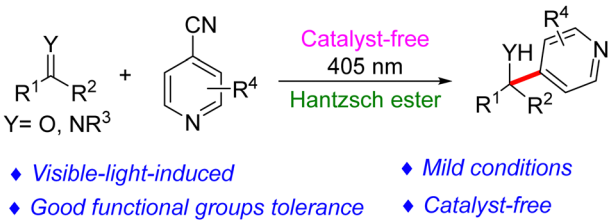
Visible-light-induced catalyst-free reductive coupling of aldehydes, ketones and imines with cyanopyridines

Xiaoting Zou, Yatao Lang, Xinlong Han, Ming-Wei Zheng, Jiayuan Wang, Chao-Jun Li* and Huiying Zeng*



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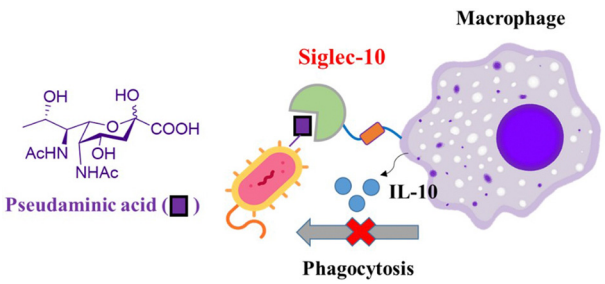
Bacterial pseudaminic acid binding to Siglec-10 induces a macrophage interleukin-10 response and suppresses phagocytosis

I-Ming Lee, Hsing-Yu Wu, Takashi Angata* and Shih-Hsiung Wu*



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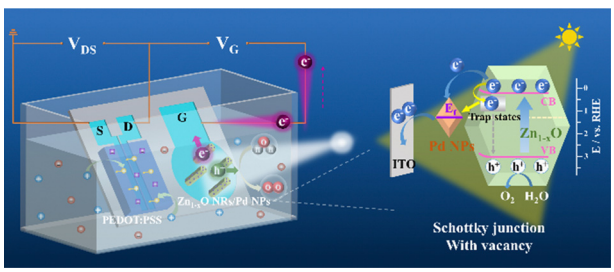
Synergistic effect of surface metal vacancies and Schottky junction on high-transconductance organic photoelectrochemical transistor aptasensing

Jingjie Lai, Cunhao Fan, Fuheng You, Yuanhao Liu, Xilong Zhou, Yuhang Lin, Lijun Ding* and Kun Wang*



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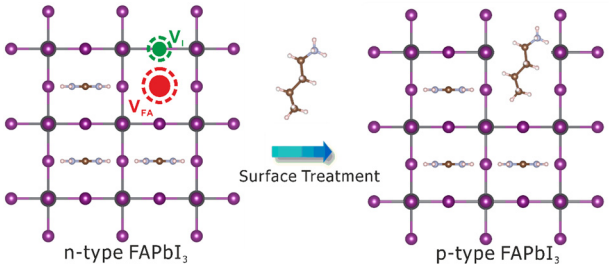

Interfacial engineering eliminates energy loss at perovskite/HTL junction

Yingke Ren, Hongyang Fu, Yun Li, Zhaoqian Li,* Cong Li and Xingtao An*

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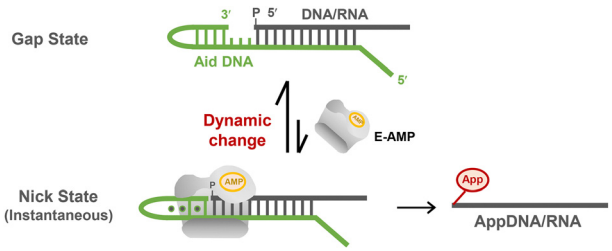

Formation of an instantaneous nick for highly efficient adenylation of oligonucleotides by ligase without subsequent jointing

Kunling Hu, Wenhua Sun, Hui Chen, Jian Luo, Ziting Song, Ran An,* Makoto Komiyama and Xingguo Liang*

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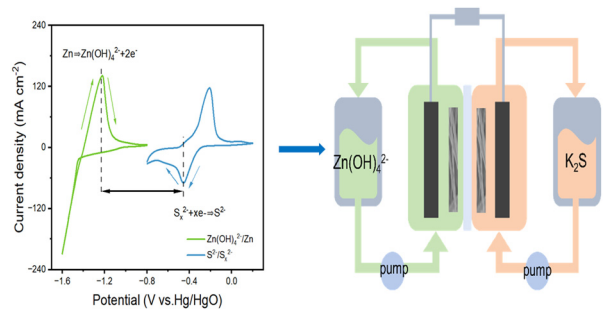

An aqueous alkaline zinc–sulfur flow battery

Rui Nie, Yizhe Nie, Jiajun Wu, Lihong Yu,* Le Liu and Jingyu Xi*

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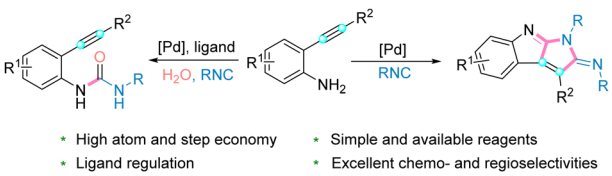

Palladium-catalyzed ligand-regulated divergent synthesis of pyrrole[2,3-*b*]indoles and ureas from 2-ethynylanilines and isocyanides

Min Zhang, Yongpeng Zheng, Yangbin Jin, Huanfeng Jiang and Wanqing Wu*

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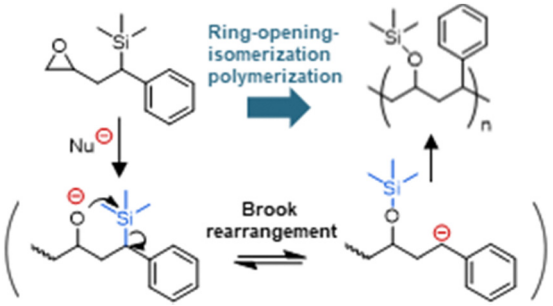
Ring-opening-isomerization anionic polymerization *via* Brook rearrangement

Asuka Hamaguchi, Masaya Terasaki and Kaoru Adachi*



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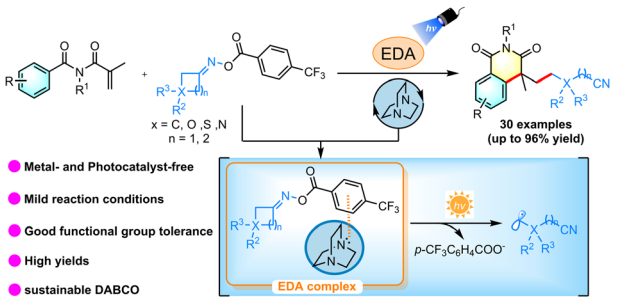
Visible-light-driven EDA complex-promoted cascade cyclization to construct 4-cyanoalkyl isoquinoline-1,3-diones

Dong-Liang Zhang, Zhang-Gao Le,* Qing Li, Zong-Bo Xie, Wen-Wen Yang and Zhi-Qiang Zhu*



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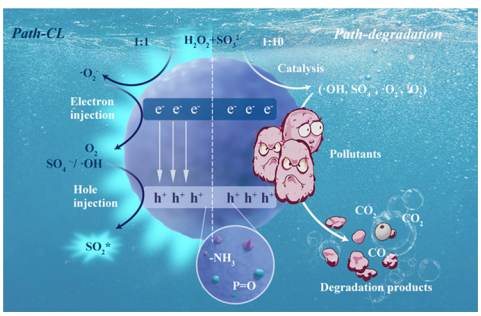
Phosphorous nitride dots induced efficient advanced oxidation with intrinsic chemiluminescence for organic pollutant degradation

Jing Gou, Tong Sun, Yuxian Zhou and Houjing Liu*



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Temperature induced single-crystal to single-crystal transformation of uranium azide complexes

Kai Li, Thayalan Rajeshkumar, Yue Zhao, Tianwei Wang, Laurent Maron* and Congqing Zhu*