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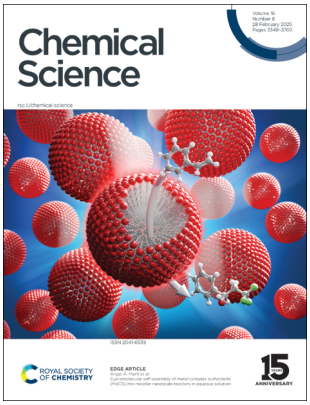

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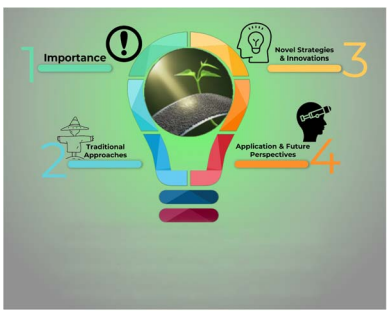
See Angel A. Martí *et al.*, pp. 3440–3446. Image reproduced by permission of Mario Norton from *Chem. Sci.*, 2025, **16**, 3440. Image by Mario Norton, Rice University.

REVIEWS



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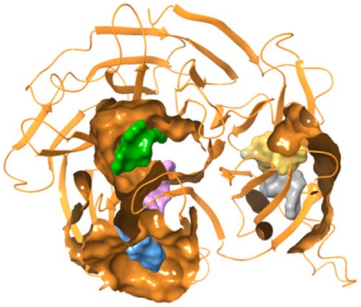

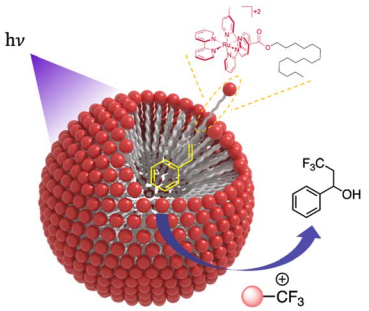

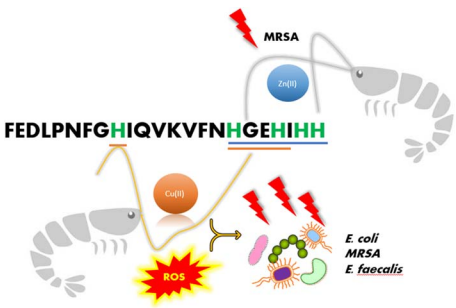

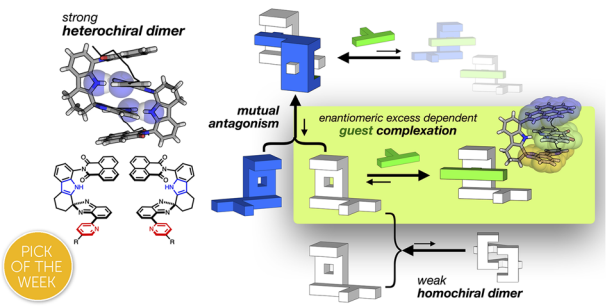

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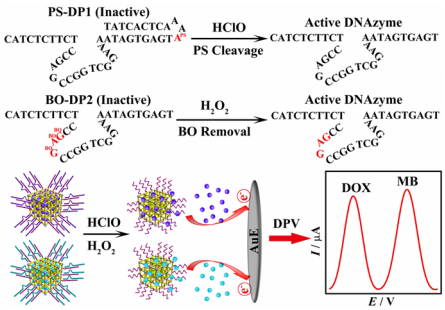
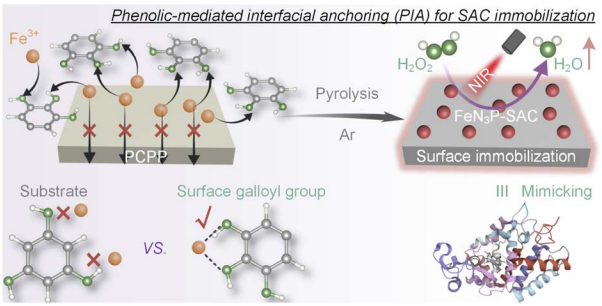


A chemically modified DNAzyme-based electrochemical sensor for binary and highly sensitive detection of reactive oxygen species

Baoting Dou, Hui Shen, Zhimin Li, Huanyu Cheng and Po Wang*

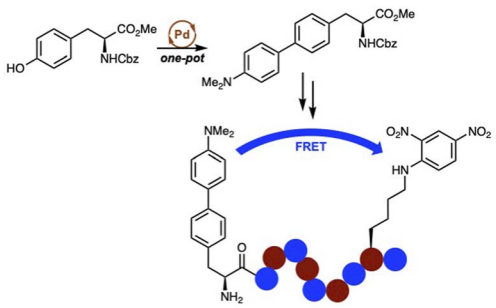
3479



Surface immobilization of single atoms on heteroatom-doped carbon nanospheres through phenolic-mediated interfacial anchoring for highly efficient biocatalysis

Yajing Zhang, Yunxiang He, Yun Jiao, Guobin Yang, Yiran Pu, Zhangmin Wan, Shuyun Li, Yanchao Wu, Wen Liao and Junling Guo*

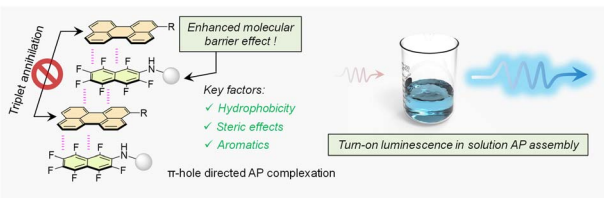
3490



Expedient discovery of fluorogenic amino acid-based probes *via* one-pot palladium-catalysed arylation of tyrosine

Olivia Marshall, Rochelle McGrory, Sineenard Songsri, Andrew R. Thomson and Andrew Sutherland*

3498



Engineering perfluoroarenes for enhanced molecular barrier effect and chirality transfer in solutions

Tianhao Wang, Zeyuan Zhang, Aiyou Hao* and Pengyao Xing*

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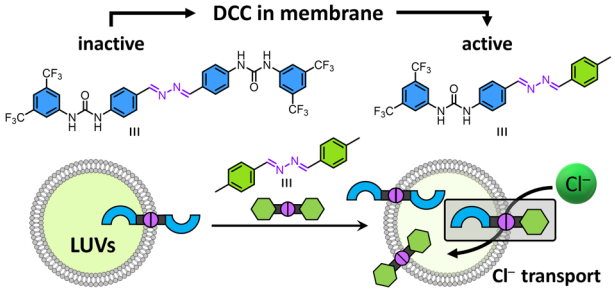

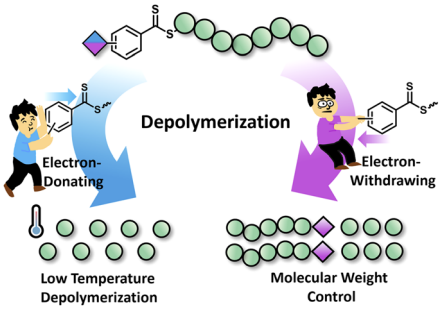

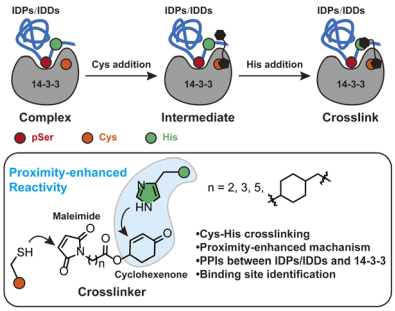

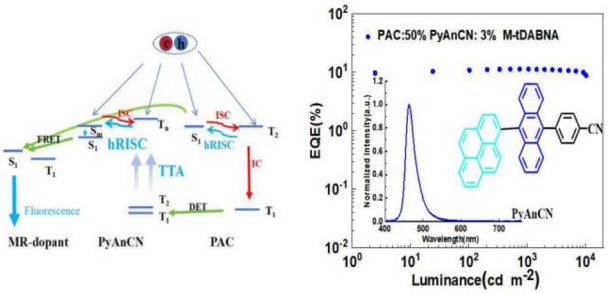

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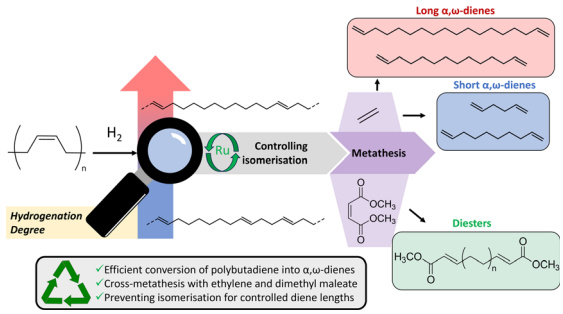
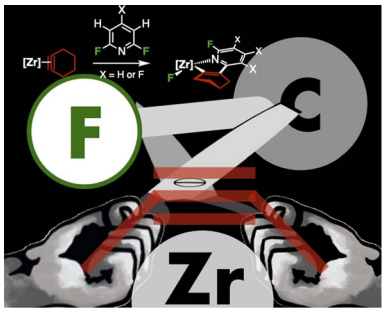


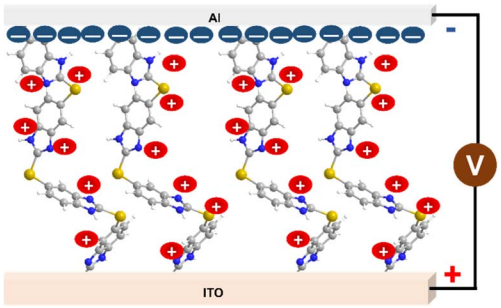
Chemical upcycling of polybutadiene into size controlled α,ω-dienes and diesters *via* sequential hydrogenation and cross-metathesis

Christophe Vos, Igor Beckers, Galahad O'Rourke and Dirk De Vos*



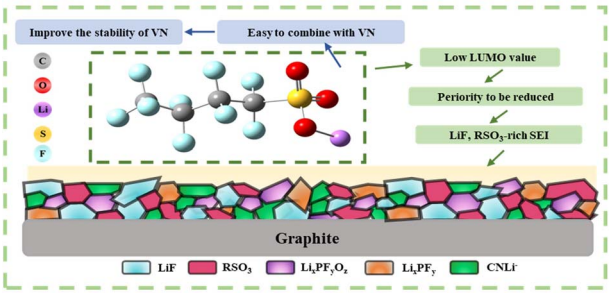
Zirconium-mediated carbon–fluorine bond functionalisation through cyclohexyne "umpolung"

Sara Bonfante, Theo F. N. Tanner, Christian Lorber,* Jason M. Lynam,* Antoine Simonneau* and John M. Slattery*



Electrochemically grafted molecular layers as on-chip energy storage molecular junctions

Rajwinder Kaur, Ankur Malik, Ritu Gupta, Kusum Kumari, Saurabh Kumar Singh, Paulo Roberto Bueno and Prakash Chandra Mondal*



Engineering the solid electrolyte interphase for enhancing high-rate cycling and temperature adaptability of lithium-ion batteries

Zhongming Wang, Zhiyuan He, Zhongsheng Wang, Kecheng Long, Jixu Yang, Shaozhen Huang, Zhibin Wu, Lin Mei* and Libao Chen*

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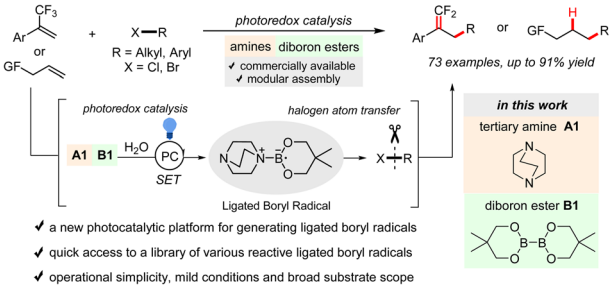

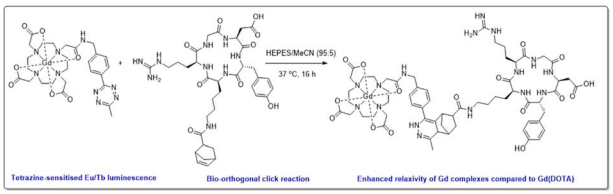

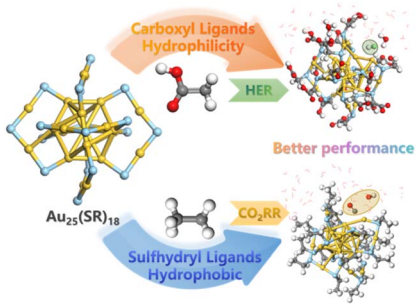

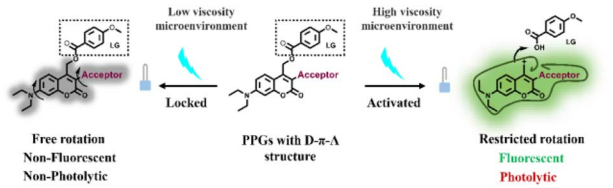

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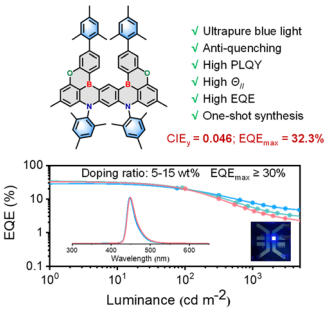

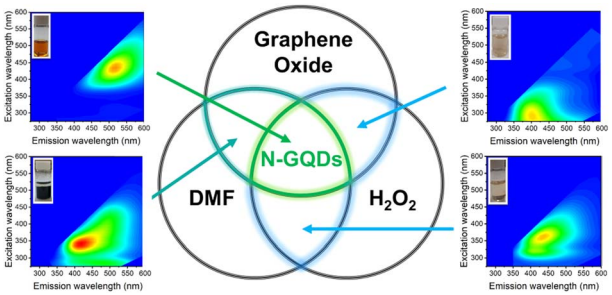

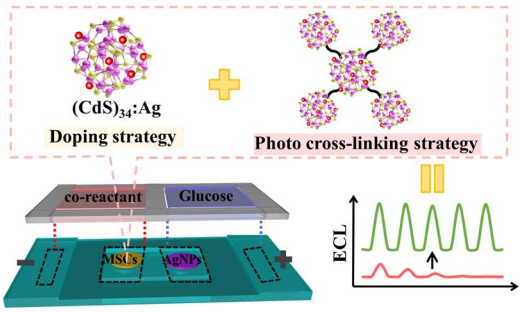

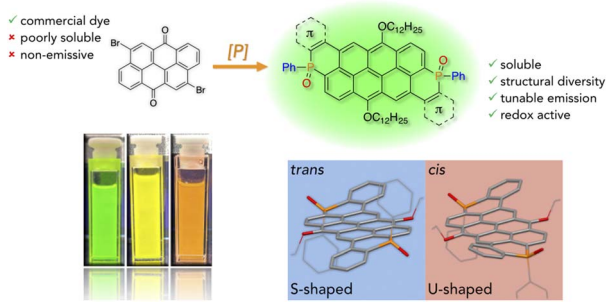

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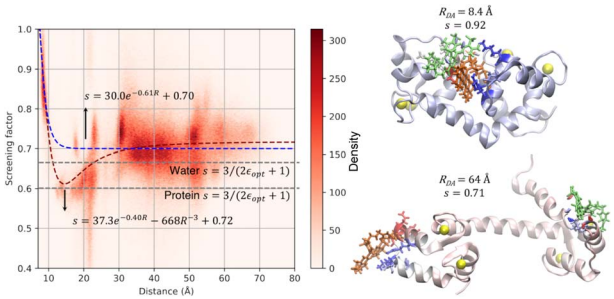
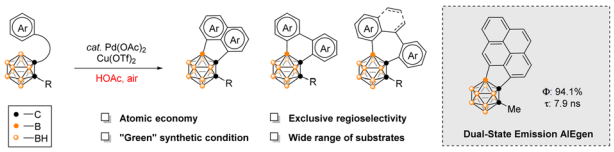


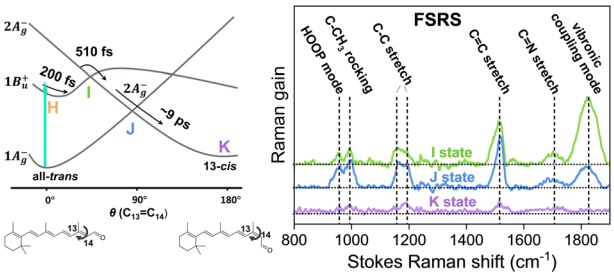
On the breakdown of Förster energy transfer theory due to solvent effects: atomistic simulations unveil distance-dependent dielectric screening in calmodulin

Daniel Gonzalo, Lorenzo Cupellini and Carles Curutchet*



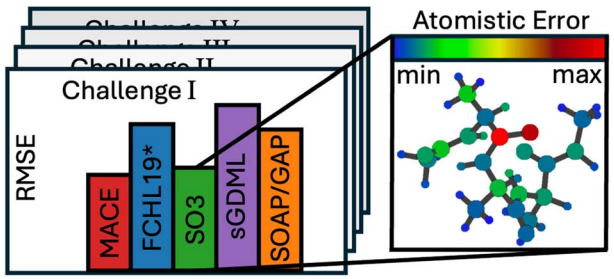
Palladium-catalyzed intramolecular aerobic oxidative cross-coupling of BH/CH between *o*-carborane and arenes

Zhen Wang, Jiahui Yu, Jie Zhang, Dengsong Zhang, Zaozao Qiu* and Zuowei Xie*



Mapping photoisomerization dynamics on a three-state model potential energy surface in bacteriorhodopsin using femtosecond stimulated Raman spectroscopy

Ziyu Wang, Yu Chen, Jiaming Jiang, Xin Zhao and Weimin Liu*



Crash testing machine learning force fields for molecules, materials, and interfaces: model analysis in the TEA Challenge 2023

Igor Poltavsky,* Anton Charkin-Gorbulin, Mirela Puleva, Grégory Fonseca, Ilyes Batatia, Nicholas J. Browning, Stefan Chmiela, Mengnan Cui, J. Thorben Frank, Stefan Heinen, Bing Huang, Silvan Käser, Adil Kabylda, Danish Khan, Carolin Müller, Alastair J. A. Price, Kai Riedmiller, Kai Töpfer, Tsz Wai Ko, Markus Meuwly, Matthias Rupp, Gábor Csányi, O. Anatole von Lilienfeld, Johannes T. Margraf, Klaus-Robert Müller and Alexandre Tkatchenko*

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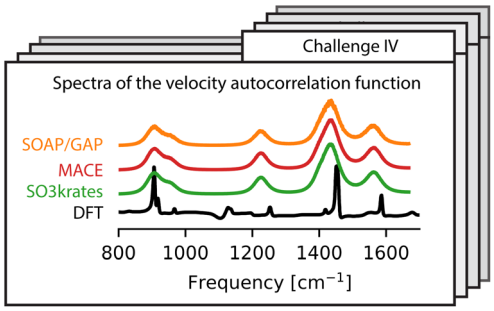

COMMENT