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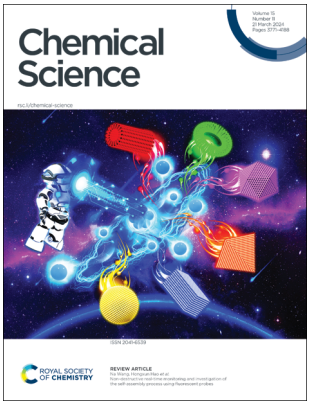
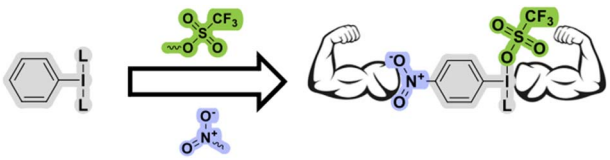
Cover
See Jake L. Greenfield *et al.*, pp. 3872–3878. Image reproduced by permission of Jake Greenfield from *Chem. Sci.*, 2024, **15**, 3872.

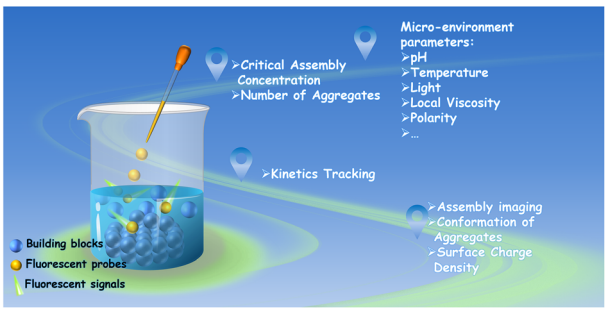


Inside cover
See Na Wang, Hongxun Hao *et al.*, pp. 3800–3830. Image reproduced by permission of Xiongtao Ji, Na Wang, Jingkang Wang, Ting Wang, Xin Huang and Hongxun Hao from *Chem. Sci.*, 2024, **15**, 3800.

PERSPECTIVE



REVIEWS



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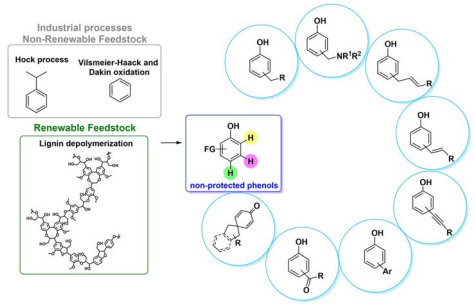
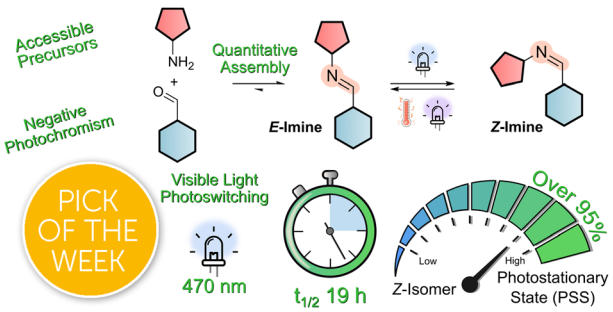
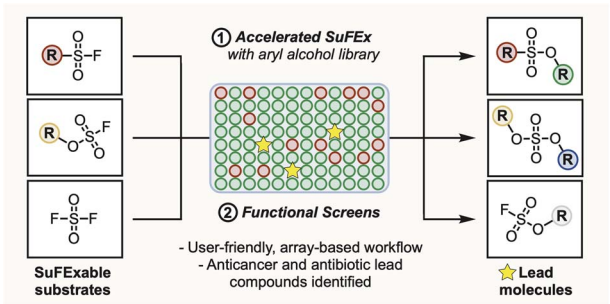
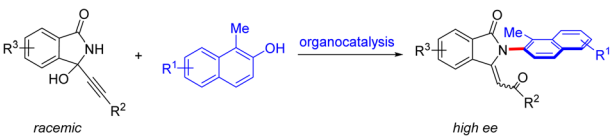
REVIEWS



EDGE ARTICLES







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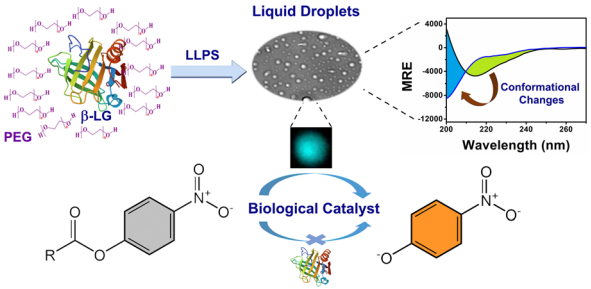

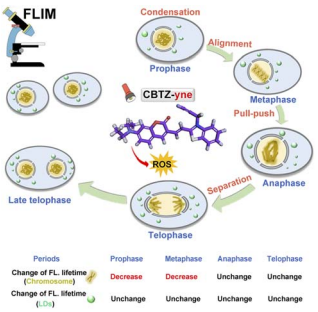

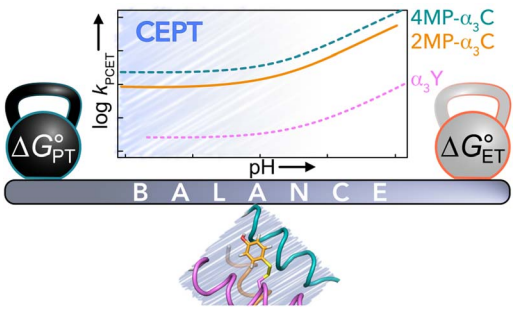

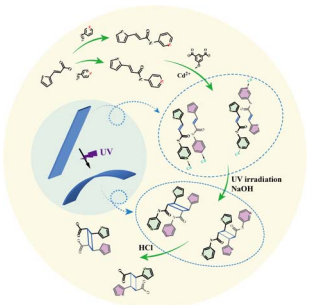

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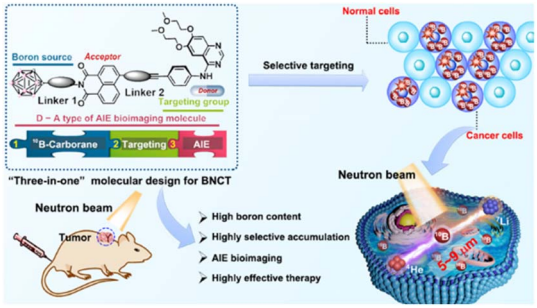

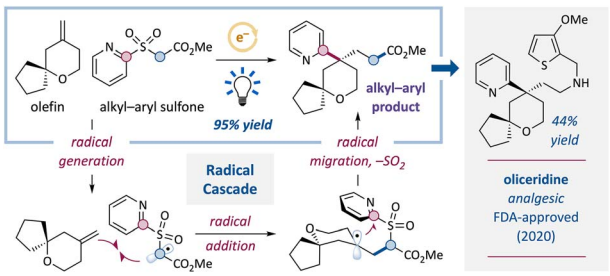

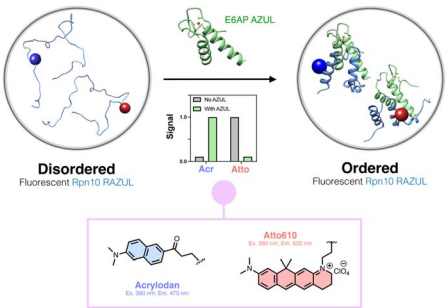

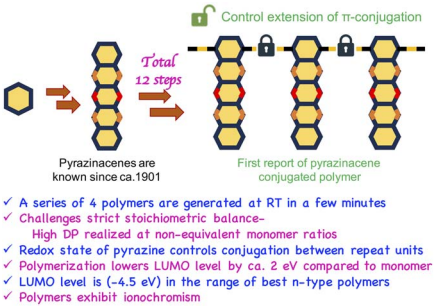

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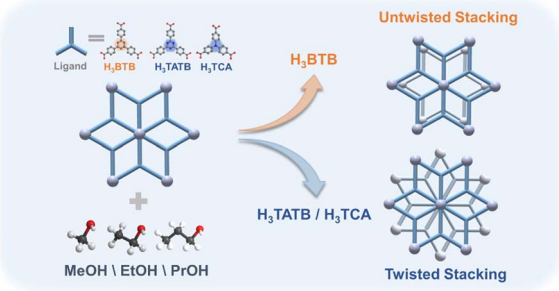

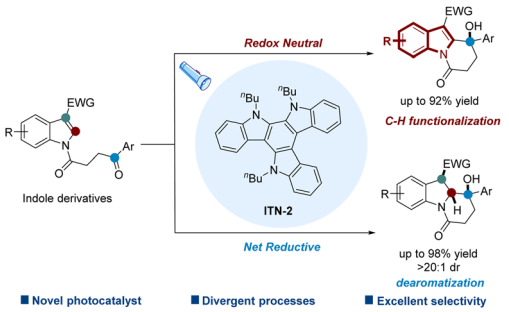

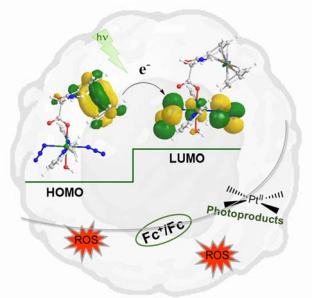

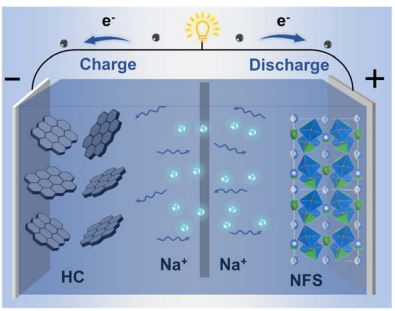

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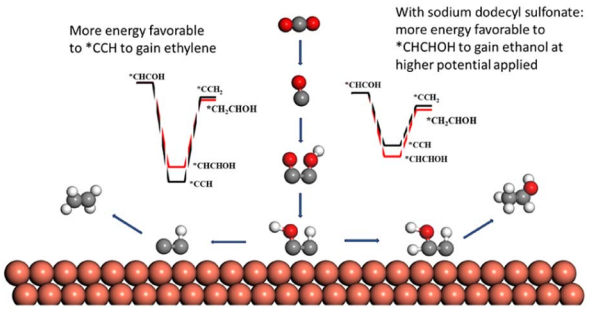
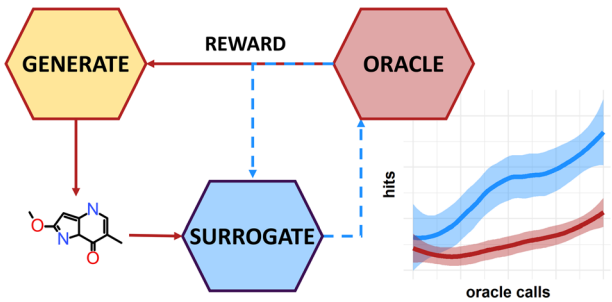


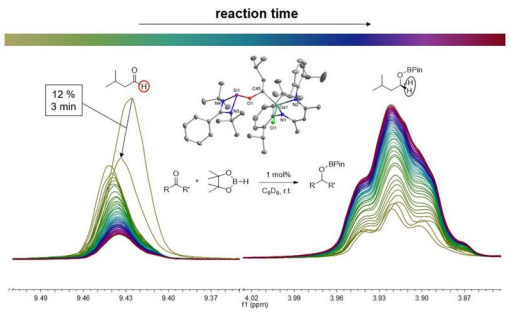
Alkyl sulfonate surfactant mediates electroreduction of carbon dioxide to ethylene or ethanol over hydroxide-derived copper catalysts

Yiding Wang, Runyao Zhao, Yunpeng Liu, Fengtao Zhang, Yuepeng Wang, Zhonghua Wu, Buxing Han and Zhimin Liu*



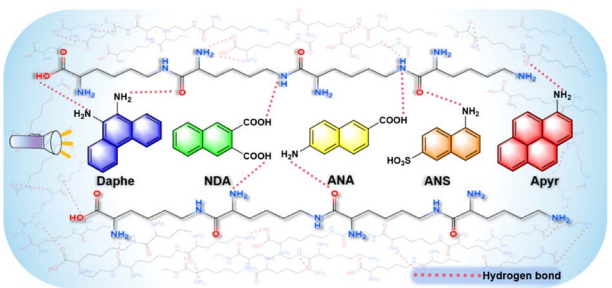
Sample efficient reinforcement learning with active learning for molecular design

Michael Dodds, Jeff Guo, Thomas Löhr, Alessandro Tibo, Ola Engkvist and Jon Paul Janet*



Catalytic hydroboration of aldehydes and ketones with an electron-rich acyclic metallasilylene

Leon Kapp, Christoph Wölper, Hannah Siera, Gebhard Haberhauer* and Stephan Schulz*



ε-Polylysine organic ultra-long room-temperature phosphorescent materials based on phosphorescent molecule doping

Jiaying Cui, Syed Husnain Ali, Zhuoyao Shen, Wensheng Xu, Jiayi Liu, Pengxiang Li, Yang Li,* Ligong Chen and Bowei Wang*