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See Elisa Chakraborty and Robin Weiss, pp. 11379–11397. Image reproduced by permission of Robin Weiss from *Chem. Soc. Rev.*, 2025, 54, 11379. The sphere was created using Blender and modified using AI.



Inside cover

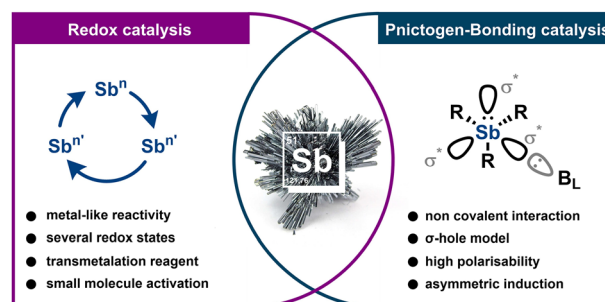
See Haitao Lei, Long Yan, Rui Cao *et al.*, pp. 11488–11544. Image reproduced by permission of Rui Cao from *Chem. Soc. Rev.*, 2025, 54, 11488.

TUTORIAL REVIEWS

11379

Organoantimony: a versatile main-group platform for pnictogen-bonding and redox catalysis

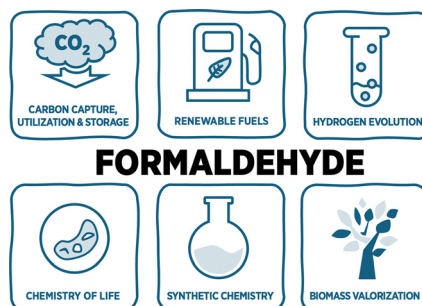
Elisa Chakraborty and Robin Weiss*



11398

Formaldehyde and its surrogates as a C1 platform for defossilised modern societies

Andrea Rodil, Jan Deska* and Martin H. G. Prechtl*



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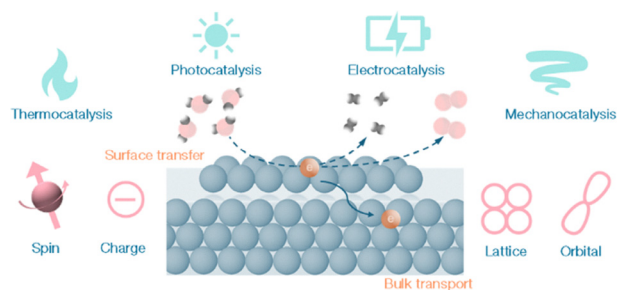


TUTORIAL REVIEWS

11423

Electron transfer in catalysis: from fundamentals to strategies

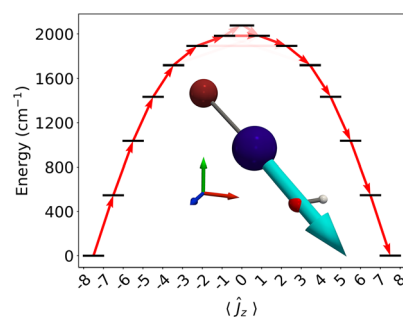
Xiaoning Li, Xinwei Guan,* Lingfeng Zhu, Hui Li, Xiaofeng Yin, Shujie Sun, Haimei Xu, Yameng Fan, Peng Li, Long Hu, Zhijun Wu, Hongge Pan, Xiaolin Wang, Zhenxiang Cheng,* Baohua Jia and Tianyi Ma*



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Ab initio electronic structure calculations of lanthanide single-molecule magnets; a practical guide

Nicholas F. Chilton

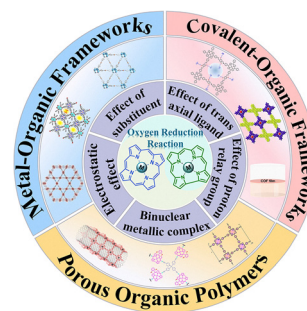


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Metalloporphyrin- and metallocorrole-based catalysts for the oxygen reduction reaction: from molecules to materials

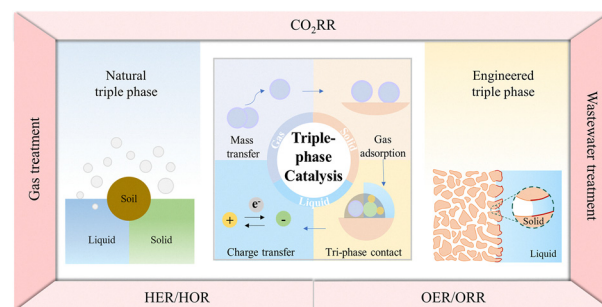
Haitao Lei,* Jinxiu Han, Qian Zhao, Jinkun Liu, Long Yan,* Wei Zhang and Rui Cao*



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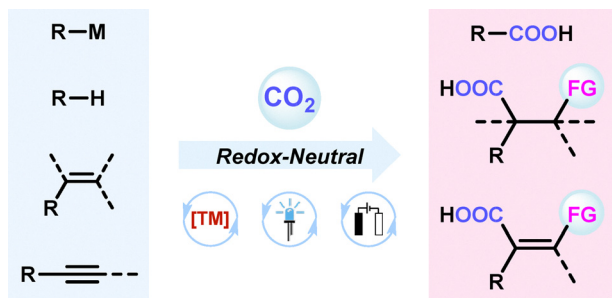
Advances in triple-phase catalysis for energy and environmental applications

Xiaoying Li, Jinwei Xu, Yusheng Ye, Baoliang Chen* and Xin Xiao*



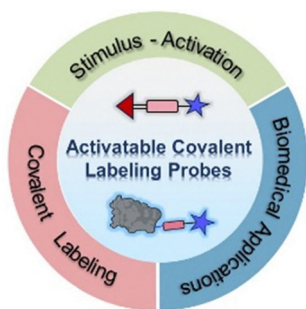
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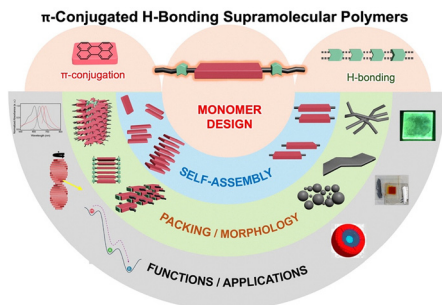
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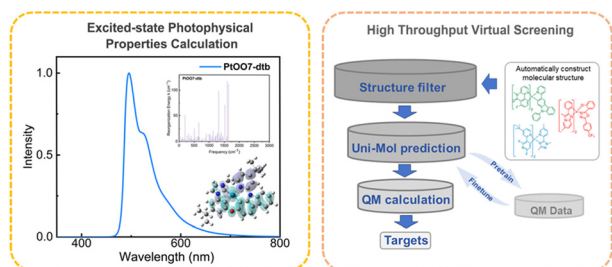
Yinxing Miao, Yuyang Tian and Deju Ye*

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Pedro Ximenis, Daniel Martínez, Llorenç Rubert and Bartolome Soberats*

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Organic Luminescent Materials**Combining quantum chemistry, machine learning and rate theory for organic luminescent materials**

Rongrong Li, Qi Ou* and Zhigang Shuai*

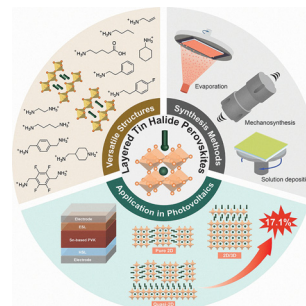


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Layered tin halide perovskites in photovoltaics

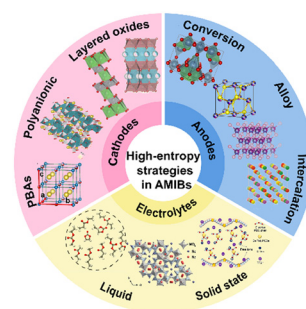
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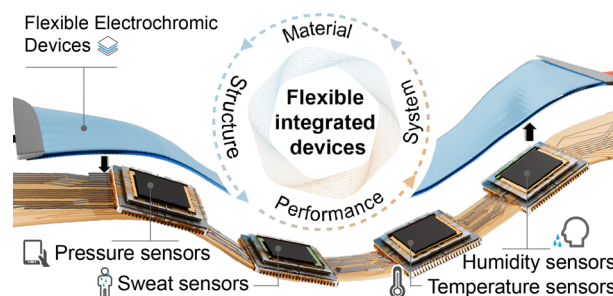
Liping Duan, Yichen Du, Yijiang Liu, Haowei Tang, Chi Zhou, Dong Ha Kim,* Zhiqun Lin* and Xiaosi Zhou*



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Electrochromic-based visualised flexible biosensing platforms: from single device to multifunctional device integration

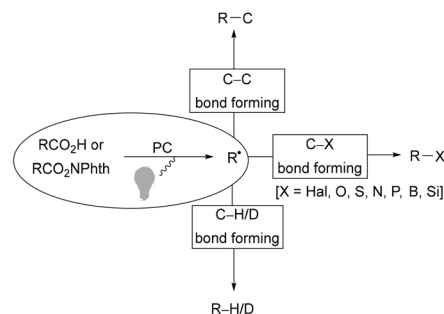
Yuxiao Zhang, Rongrong Bao, Jianbei Qiu, Yue Liu,* Zhengwen Yang* and Caofeng Pan*



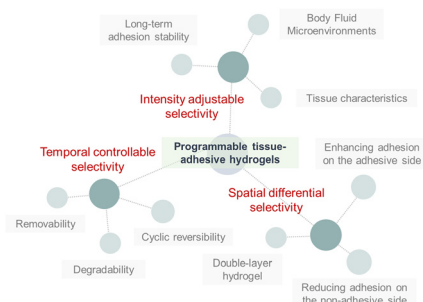
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Decarboxylative photocatalytic transformations

Francisco Foubelo, Carmen Nájera,* M. Gracia Retamosa, José M. Sansano, Ana Sirvent and Miguel Yus



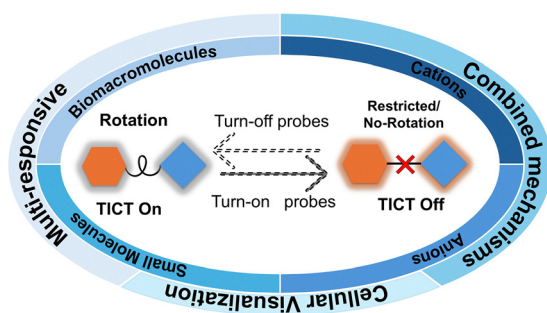
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Programmable tissue-adhesive hydrogels with temporal and spatial selectivity

Lei Liang, Hong Zhang, Fanglian Yao and Junjie Li*

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Twisted intramolecular charge transfer (TICT) based fluorescent probes and imaging agents

Yueci Wu, Han-Min Wang, Xi-Le Hu, Yi Zang, Jia Li,*
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