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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.



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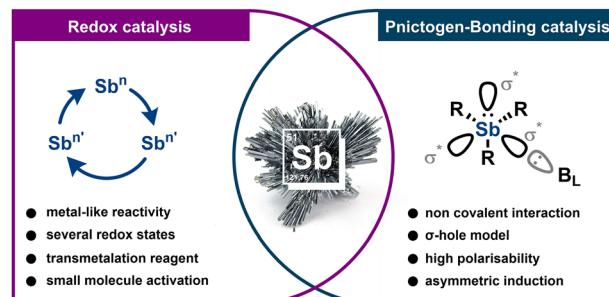
See Haitao Lei, Long Yan, Rui Cao et al., pp. 11488–11544. Image reproduced by permission of Rui Cao from *Chem. Soc. Rev.*, 2025, 54, 11488.

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

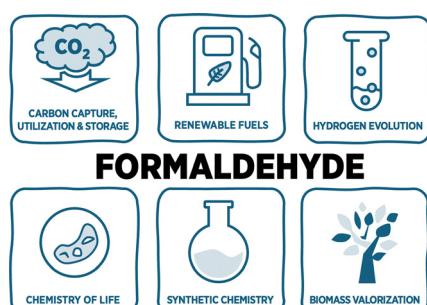
Elisa Chakraborty and Robin Weiss*



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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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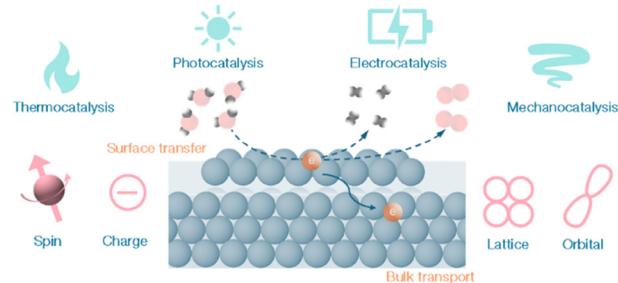


TUTORIAL REVIEWS

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Electron transfer in catalysis: from fundamentals to strategies

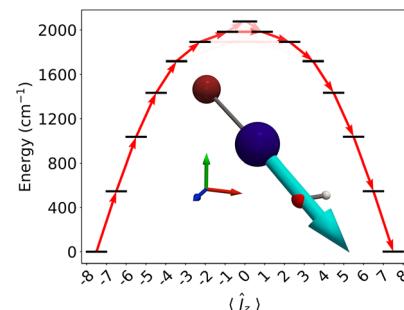
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***Ab initio* electronic structure calculations of lanthanide single-molecule magnets; a practical guide**

Nicholas F. Chilton

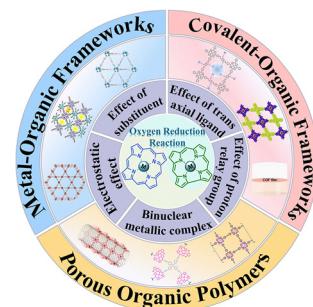


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Metalloporphyrin- and metallocorrole-based catalysts for the oxygen reduction reaction: from molecules to materials

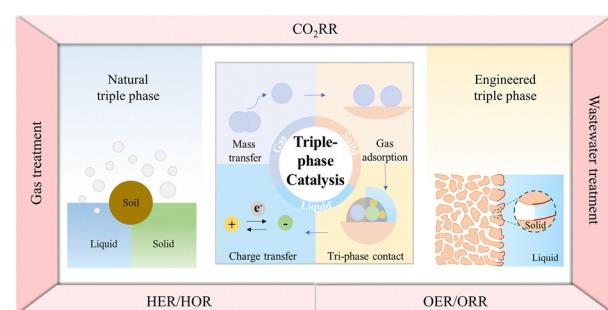
Haitao Lei,* Jinxiu Han, Qian Zhao, Jinkun Liu, Long Yan,* Wei Zhang and Rui Cao*



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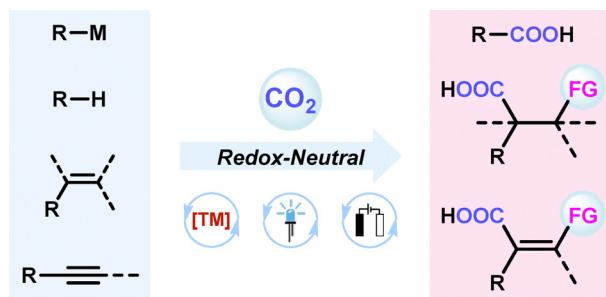
Advances in triple-phase catalysis for energy and environmental applications

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



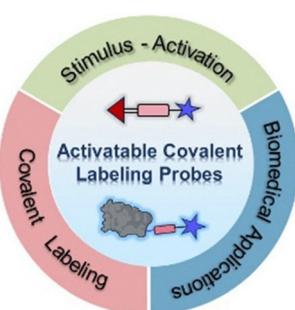
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Catalytic redox-neutral carboxylation with CO_2

Si-Shun Yan, Tian-Yu Gao, Yi Liu, Yi-Fei Chen, Jun-Ze Zuo, Qin-Fang Zhang, Lei Song,* Wei Zhang, Jian-Heng Ye and Da-Gang Yu*

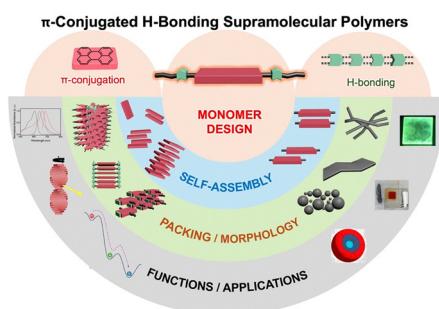
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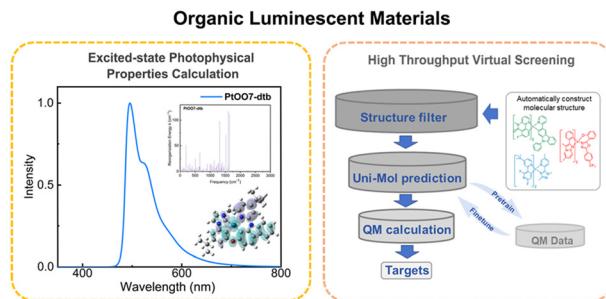
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Combining quantum chemistry, machine learning and rate theory for organic luminescent materials

Rongrong Li, Qi Ou* and Zhigang Shuai*

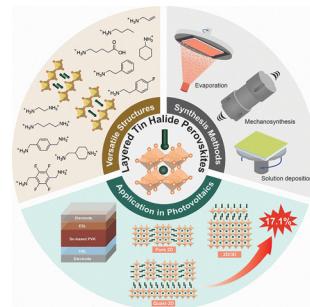


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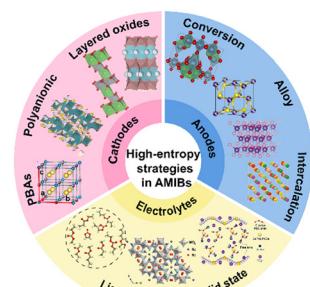
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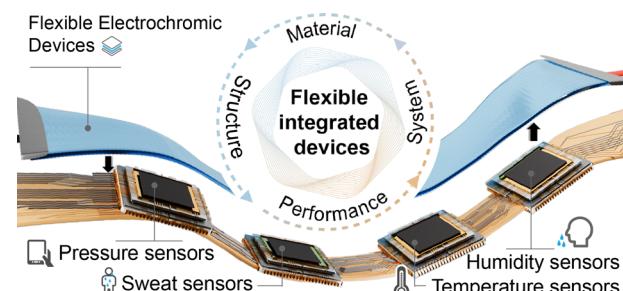
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Electrochromic-based visualised flexible biosensing platforms: from single device to multifunctional device integration

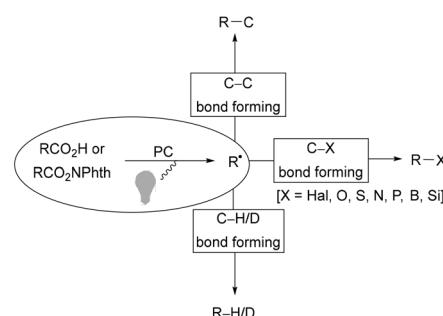
Yuxiao Zhang, Rongrong Bao, Jianbei Qiu, Yue Liu,* Zhengwen Yang* and Caofeng Pan*



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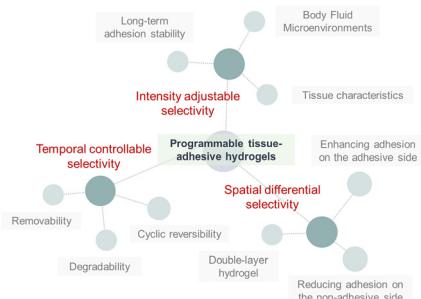
Decarboxylative photocatalytic transformations

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



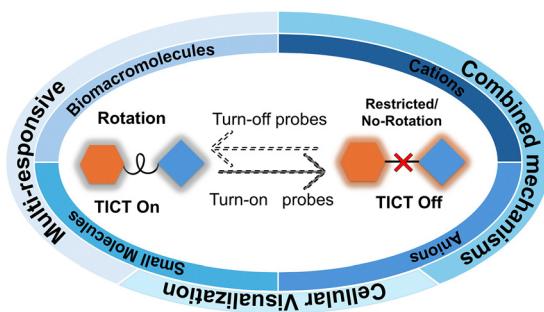
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**Programmable tissue-adhesive hydrogels with temporal and spatial selectivity**

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

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

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