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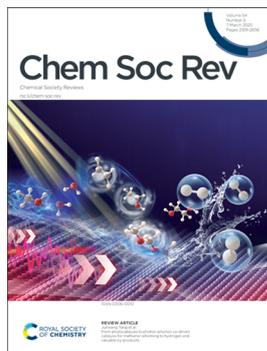
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See Jingyun Fang, Yijiang Liu, Zhiqun Lin *et al.*, pp. 2154–2187. Image reproduced by permission of Zhiqun Lin from *Chem. Soc. Rev.*, 2025, 54, 2154.



Inside cover

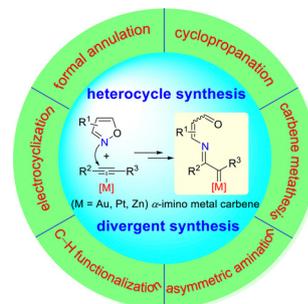
See Junwang Tang *et al.*, pp. 2188–2207. Image reproduced by permission of Junwang Tang from *Chem. Soc. Rev.*, 2025, 54, 2188.

TUTORIAL REVIEW

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Isoxazoles as efficient alkyne amination reagents in divergent heterocycle synthesis

Xin-Qi Zhu,* Zhi-Xu Meng, Bo Zhou, Ming-Yu Teng and Long-Wu Ye*

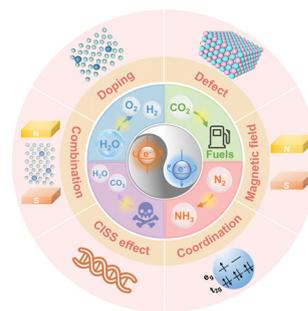


REVIEW ARTICLES

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Optimizing photocatalysis *via* electron spin control

Shaoxiong He, Yanxi Chen, Jingyun Fang,* Yijiang Liu* and Zhiqun Lin*



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Elemental answers

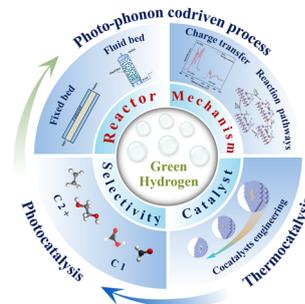


REVIEW ARTICLES

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From photocatalysis to photon–phonon co-driven catalysis for methanol reforming to hydrogen and valuable by-products

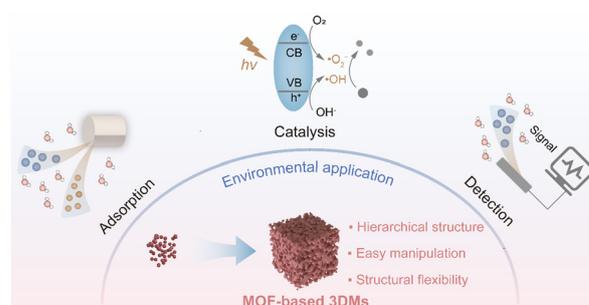
Hui Wang, Eleana Harkou, Achilleas Constantinou, Sultan M. Al-Salemc, George Manos and Junwang Tang*



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Environmental applications of metal–organic framework-based three-dimensional macrostructures: a review

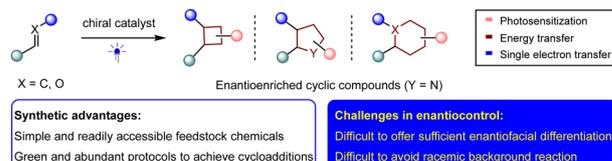
Cheng Chen, Liguo Shen,* Boya Wang, Xinchun Lu, Saleem Raza, Jiujing Xu, Bisheng Li, Hongjun Lin* and Banglin Chen*



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Catalytic asymmetric photocycloaddition reactions mediated by enantioselective radical approaches

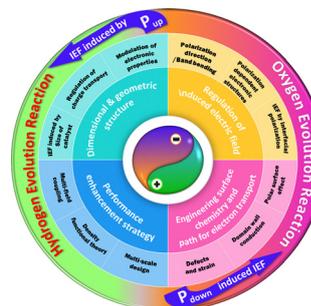
Yanli Yin, Mengdi You, Xiangtao Li and Zhiyong Jiang*



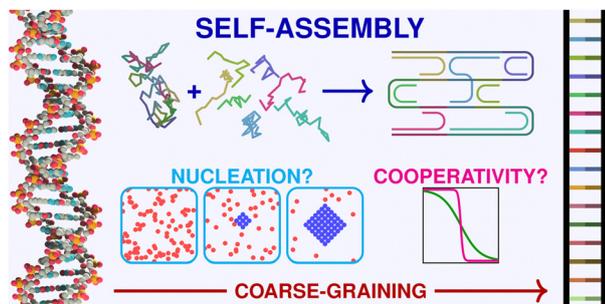
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Dynamic regulation of ferroelectric polarization using external stimuli for efficient water splitting and beyond

Sundaram Chandrasekaran,* Qingping Wang, Qiong Liu, Huihui Wang, Dingrong Qiu, Huidan Lu, Yongping Liu,* Chris Bowen* and Haitao Huang*



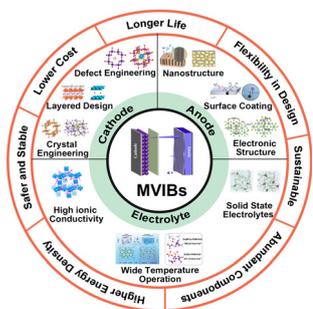
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Models and simulations of structural DNA nanotechnology reveal fundamental principles of self-assembly

Alexander Cumberworth and Aleks Reinhardt*

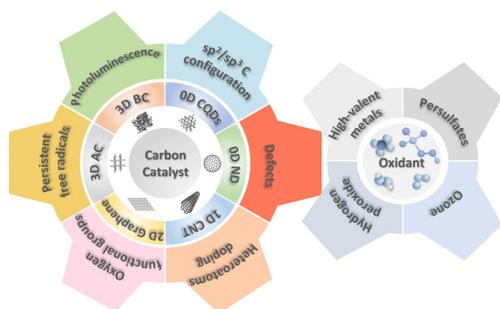
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Enabling high-performance multivalent metal-ion batteries: current advances and future prospects

Asif Mahmood,* Zhe Bai, Tan Wang, Yaojie Lei, Shijian Wang, Bing Sun, Hajra Khan, Karim Khan, Kening Sun* and Guoxiu Wang*

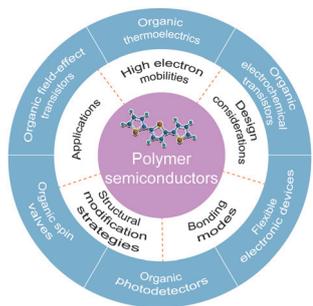
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Carbonaceous materials in structural dimensions for advanced oxidation processes

Yunpeng Wang, Ya Liu, Huayang Zhang, Xiaoguang Duan, Jun Ma,* Hongqi Sun, Wenjie Tian* and Shaobin Wang*

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Recent developments in polymer semiconductors with excellent electron transport performances

Yunchao Zhang, Weifeng Zhang, Zhihui Chen, Liping Wang and Gui Yu*

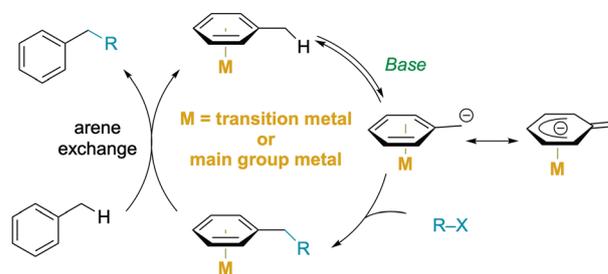


REVIEW ARTICLES

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C–H functionalization through benzylic deprotonation with π -coordination or cation– π -interactions

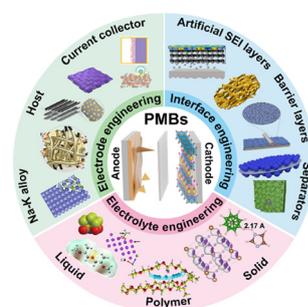
Hui Zhu(s), Yu Wu, Jianyou Mao, Jingkai Xu, Patrick J. Walsh* and Hang Shi*



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Recent advances in potassium metal batteries: electrodes, interfaces and electrolytes

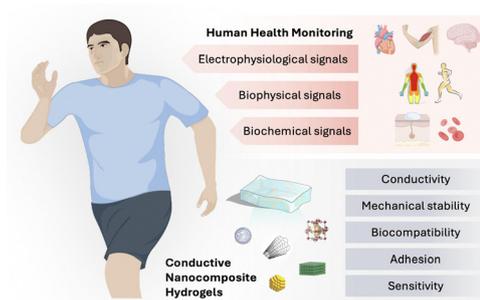
Jianlu Sun, Yichen Du, Yijiang Liu, Dongbo Yan, Xiaodong Li, Dong Ha Kim,* Zhiqun Lin* and Xiaosi Zhou*



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Advances in conducting nanocomposite hydrogels for wearable bionitoring

Arpita Roy, Ronak Afshari, Saumya Jain, Yuting Zheng, Min-Hsuan Lin, Shea Zenkar, Junyi Yin, Jun Chen, Nicholas A. Peppas and Nasim Annabi*



CORRECTIONS

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Correction: From photocatalysis to photon–phonon co-driven catalysis for methanol reforming to hydrogen and valuable by-products

Hui Wang, Eleana Harkou, Achilleas Constantinou, Sultan M. Al-Salem, George Manos and Junwang Tang*



CORRECTIONS

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Correction: Unified approaches in transition metal catalyzed C(sp³)-H functionalization: recent advances and mechanistic aspects

Jagrit Grover, Amal Tom Sebastian, Siddhartha Maiti, Alex C. Bissember* and Debabrata Maiti*

