## **Chem Soc Rev**

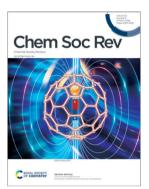
### Chemical Society Reviews

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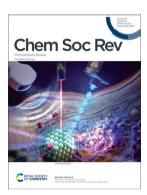
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ISSN 0306-0012 CODEN CSRVBR 53(6) 2763-3208 (2024)



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See Ziqi Hu and Shangfeng Yang, pp. 2863-2897. Image reproduced by permission of Shangfeng Yang from Chem. Soc. Rev., 2024, 53, 2863.



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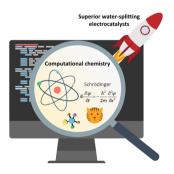
See Chung Yin Tsang and Yong Zhang, pp. 2898-2931. Image reproduced by permission of Chung Yin Tsang and Yong Zhang from Chem. Soc. Rev., 2024, 53, 2898.

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#### Computational chemistry for water-splitting electrocatalysis

Licheng Miao, Wenqi Jia, Xuejie Cao and Lifang Jiao\*



#### Reactivity umpolung (reversal) of ligands in transition metal complexes

Robert H. Morris



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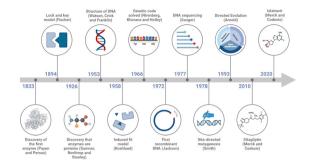


#### TUTORIAL REVIEWS

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## Biocatalysis: landmark discoveries and applications in chemical synthesis

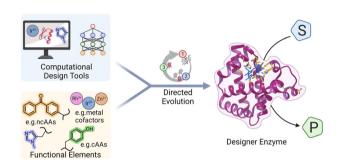
Adam O'Connell, Amber Barry, Ashleigh J. Burke, Amy E. Hutton, Elizabeth L. Bell, Anthony P. Green\* and Elaine O'Reilly\*



#### 2851

## Strategies for designing biocatalysts with new functions

Elizabeth L. Bell, Amy E. Hutton, Ashleigh J. Burke, Adam O'Connell, Amber Barry, Elaine O'Reilly\* and Anthony P. Green\*

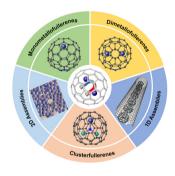


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## Endohedral metallofullerene molecular nanomagnets

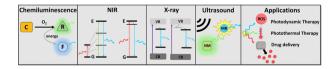
Ziqi Hu\* and Shangfeng Yang\*



#### 2898

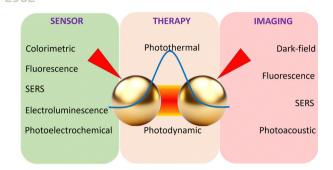
## Nanomaterials for light-mediated therapeutics in deep tissue

Chung Yin Tsang and Yong Zhang\*



#### **REVIEW ARTICLES**

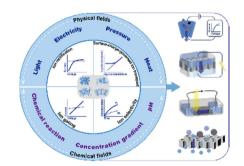
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Plasmonic silver and gold nanoparticles: shape- and structure-modulated plasmonic functionality for point-of-caring sensing, bio-imaging and medical therapy

Yingjie Hang, Anyang Wang and Niangiang Wu\*

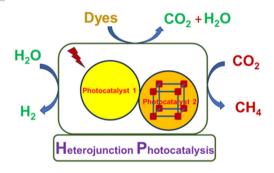
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#### Ion transport in nanofluidics under external fields

Pei Liu, Xiang-Yu Kong,\* Lei Jiang and Liping Wen\*

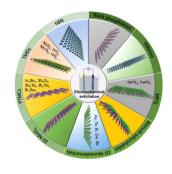
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#### Metal-organic framework heterojunctions for photocatalysis

Amarajothi Dhakshinamoorthy,\* Zhaohui Li, Sihai Yang and Hermenegildo Garcia\*

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#### Electrochemical exfoliation of 2D materials beyond graphene

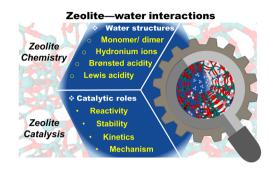
Minghao Zhao, Cinzia Casiraghi\* and Khaled Parvez\*

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Water structures on acidic zeolites and their roles in catalysis

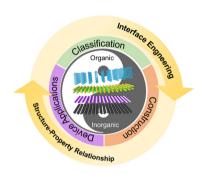
Qiang Liu and Jeroen A. van Bokhoven\*



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Recent progress in emerging two-dimensional organic-inorganic van der Waals heterojunctions

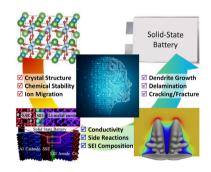
Qing Zhang, Menghan Li, Lin Li,\* Dechao Geng,\* Wei Chen\* and Wenping Hu\*



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Computational approach inspired advancements of solid-state electrolytes for lithium secondary batteries: from first-principles to machine learning

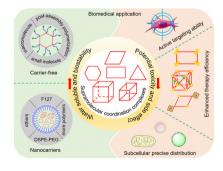
Zhuoyuan Zheng,\* Jie Zhou and Yusong Zhu\*



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Strategies to address key challenges of metallacycle/metallacage-based supramolecular coordination complexes in biomedical applications

Dongdong Xu, Yang Li,\* Shouchun Yin\* and Feihe Huang\*



#### CORRECTION

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Correction: The route for commercial photoelectrochemical water splitting: a review of large-area devices and key upscaling challenges

António Vilanova, Paula Dias, Tânia Lopes and Adélio Mendes\*