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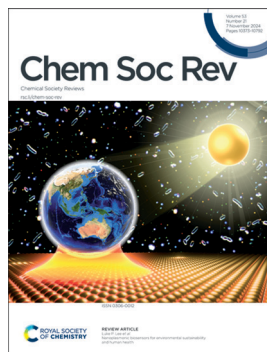
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ISSN 0306-0012 CODEN CSRVBR 53(21) 10373–10792 (2024)



### Cover

See Simon R. Bare, Ziyi Zhong, Charlotte Vogt *et al.*, pp. 10450–10490. Image reproduced by permission of Charlotte Vogt from *Chem. Soc. Rev.*, 2024, 53, 10450. Cover illustrated by Thomas Hartman Illustrates Science.



### Inside cover

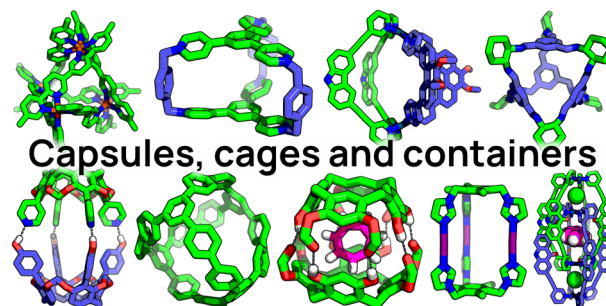
See Luke P. Lee *et al.*, pp. 10491–10522. Image reproduced by permission of Wenpeng Liu from *Chem. Soc. Rev.*, 2024, 53, 10491.

## TUTORIAL REVIEWS

10380

### Supramolecular and molecular capsules, cages and containers

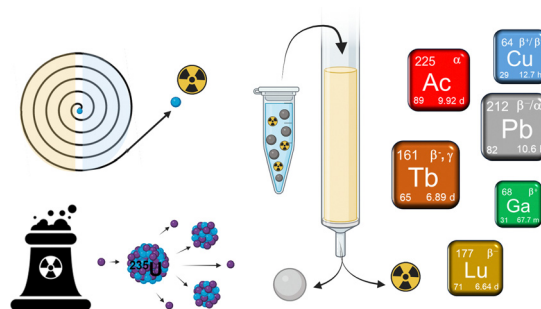
Cameron J. T. Cox, Jessica Hale, Paulina Molinska and James E. M. Lewis\*



10409

### From cyclotrons to chromatography and beyond: a guide to the production and purification of theranostic radiometals

Brooke L. McNeil and Caterina F. Ramogida\*





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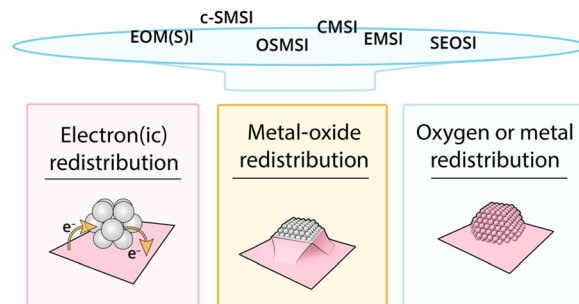


## REVIEW ARTICLES

10450

**Metal–support interactions in metal oxide-supported atomic, cluster, and nanoparticle catalysis**

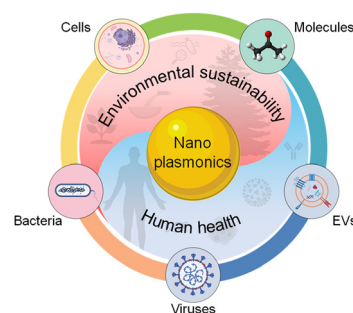
Denis Leybo, Ubong J. Etim, Matteo Monai, Simon R. Bare,\* Ziyi Zhong\* and Charlotte Vogt\*



10491

**Nanoplasmonic biosensors for environmental sustainability and human health**

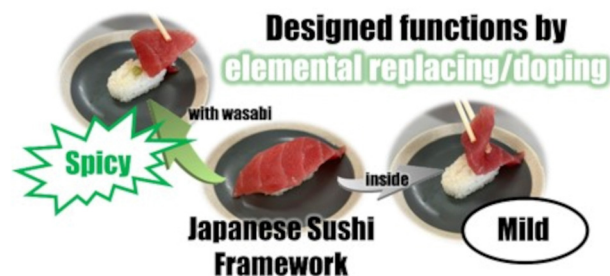
Wenpeng Liu, Kyungwha Chung, Subin Yu and Luke P. Lee\*



10523

**Designed functions of oxide/hydroxide nanosheets via elemental replacement/doping**

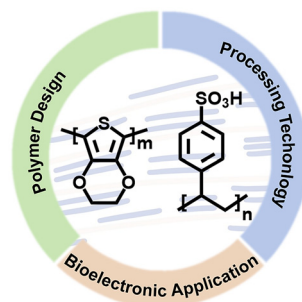
Kanji Saito, Masashi Morita, Tomohiko Okada, Rattanawadee (Ploy) Wijitwongwan and Makoto Ogawa\*



10575

**PEDOT-based stretchable optoelectronic materials and devices for bioelectronic interfaces**

Weizhen Li, Yiming Li, Ziyu Song, Yi-Xuan Wang\* and Wenping Hu\*

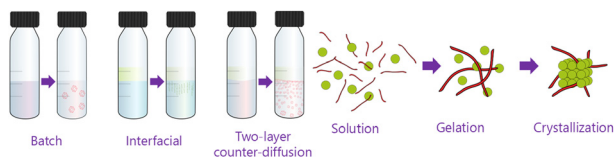


## REVIEW ARTICLES

10604

## Supramolecular gel-phase crystallization modes

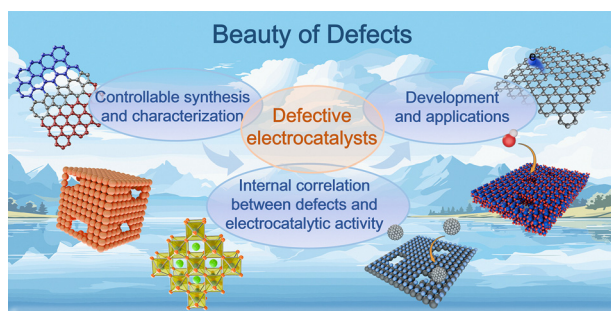
## Stepwise orthogonal self-assembly



## Supramolecular gels: a versatile crystallization toolbox

Rafael Contreras-Montoya,\* Luis Álvarez de Cienfuegos, José A. Gavira and Jonathan W. Steed

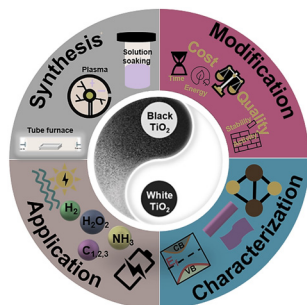
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## Design and regulation of defective electrocatalysts

Yiqiong Zhang,\* Jingjing Liu, Yangfan Xu, Chao Xie, Shuangyin Wang and Xiangdong Yao\*

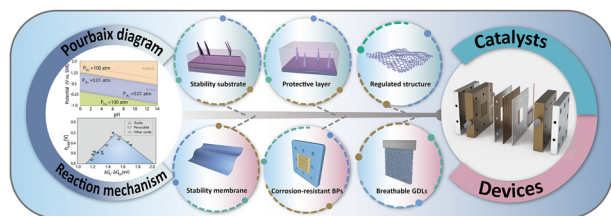
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## Black titanium oxide: synthesis, modification, characterization, physiochemical properties, and emerging applications for energy conversion and storage, and environmental sustainability

Xuelan Hou, Yiyang Li, Hang Zhang, Peter D. Lund, James Kwan\* and Shik Chi Edman Tsang\*

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## Stability of electrocatalytic OER: from principle to application

HuangJingWei Li, Yu Lin, Junyuan Duan, Qunlei Wen, Youwen Liu\* and Tianyou Zhai\*

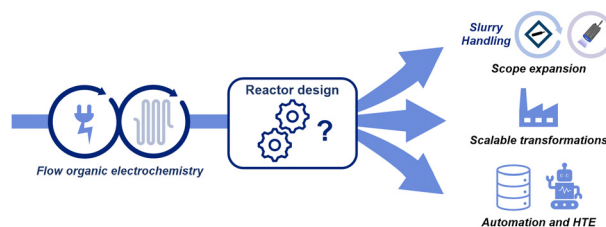


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## Enhancing electrochemical reactions in organic synthesis: the impact of flow chemistry

Morgan Regnier, Clara Vega, Dimitris I. Ioannou and Timothy Noël\*



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## Current development, optimisation strategies and future perspectives for lead-free dielectric ceramics in high field and high energy density capacitors

Hareem Zubairi, Zhilun Lu,\* Yubo Zhu, Ian M. Reaney and Ge Wang\*

