

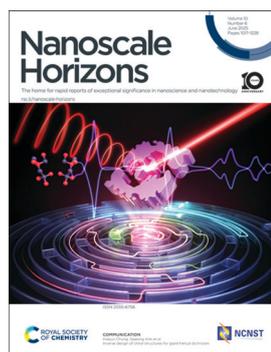
# Nanoscale Horizons

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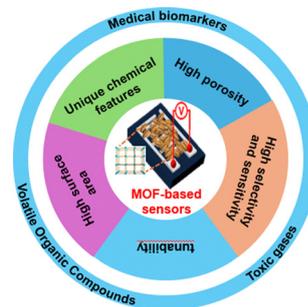
See Haejun Chung, Sejeong Kim *et al.*, pp. 1077–1083. Image reproduced by permission of Sejeong Kim, Haejun Chung from *Nanoscale Horiz.*, 2025, 10, 1077.

## REVIEWS

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### Advancements in MOF-based resistive gas sensors: synthesis methods and applications for toxic gas detection

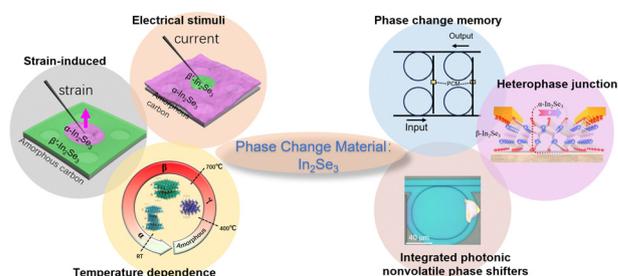
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Weiyang Zheng, Zhiquan Liu, Guoqiang Xi, Tengzhang Liu, Dinguan Wang, Lin Wang and Wugang Liao\*



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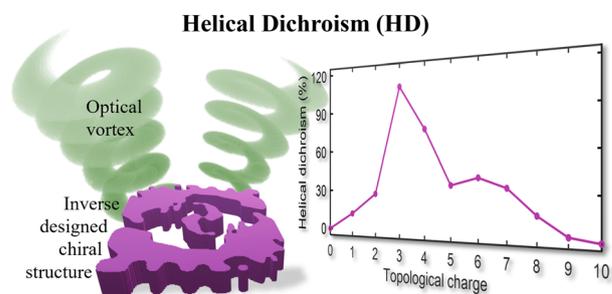
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### Inverse design of chiral structures for giant helical dichroism

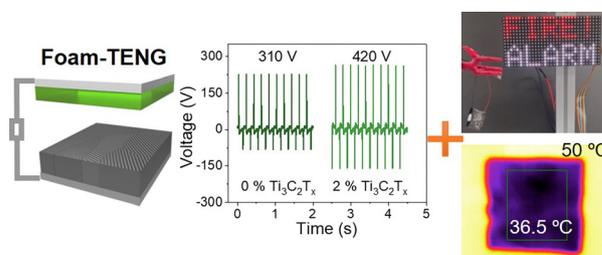
Chia-Chun Pan, Munseong Bae, Hongtao Wang, Jaesung Lim, Ranjith Rajasekharan Unnithan, Joel K. W. Yang, Haejun Chung\* and Sejeong Kim\*



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### Multifunctional $\text{Ti}_3\text{C}_2\text{T}_x$ -alginate foams for energy harvesting and fire warning

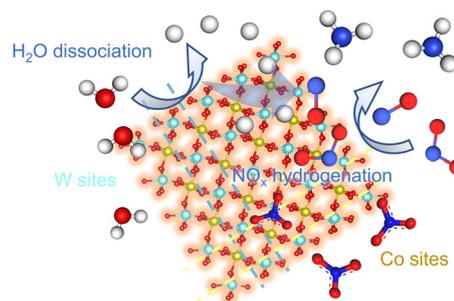
Bernd Wicklein,\* Hyunjoon Yoo, Geetha Valurouthu, Ji-Seok Kim, Mannan Khan, Manmatha Mahato, Federico Carosio, Yury Gogotsi and Il-Kwon Oh\*



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### $\text{CoWO}_4$ nanoparticles with dual active sites for highly efficient ammonia synthesis

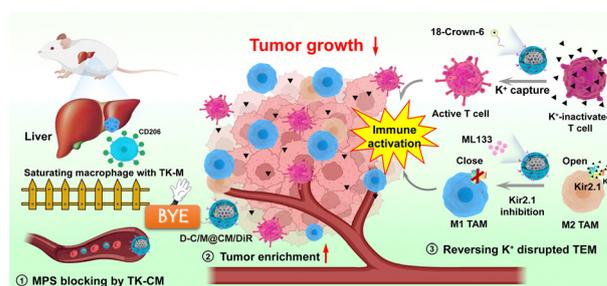
Lian Duan, Zhencong Huang, Gen Chen, Min Liu, Xiaohe Liu, Renzhi Ma\* and Ning Zhang\*



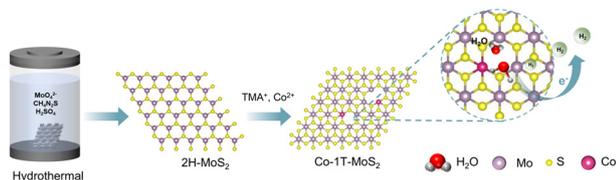
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### Reversing cancer immunosuppression via $\text{K}^+$ capture and repolarization of tumor-associated macrophages

Si-Ye Tong, Cong-Min Huo, Yu-Cheng Zuo, Shuo Gao, David Tai Leong,\* Wei Xue and Jing-Yi Zhu\*



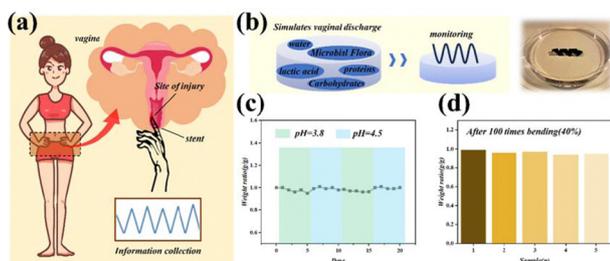
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### Achieving highly efficient electrocatalytic hydrogen evolution with Co-doped MoS<sub>2</sub> nanosheets

Fengrui Sun, Kebin Yang, Xinbo Qin, Weibing Wu\* and Yizhong Lu

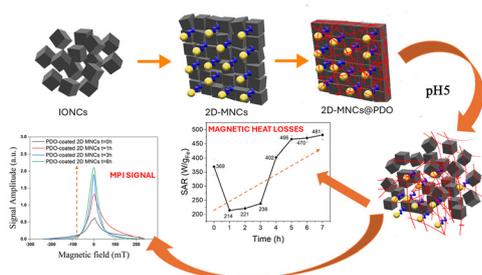
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### A bioinspired helical hydrogel scaffold with real-time sensing for enhanced precision in gynecological digital vaginal examination

Weipeng Lu, Qing He, Zheng Mao, Songchao Fu, Yue Wang, Zhiwei Jiang, Ying Wang, Yue Cao, Sunlong Li, Cihui Liu\* and Qian Dong\*

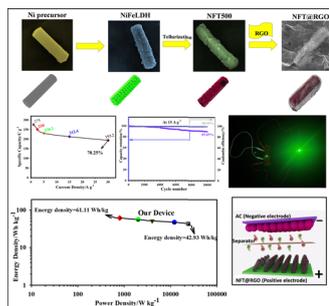
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### Magnetic nanosheets: from iron oxide nanocubes to polydopamine embedded 2D clusters and their multi-purpose properties

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### Reinforced supercapacitor electrode via reduced graphene oxide encapsulated NiTe<sub>2</sub>-FeTe<sub>2</sub> hollow nanorods

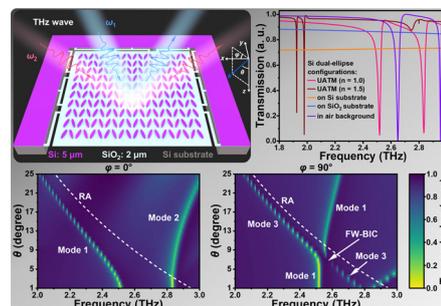
Mohammad Ali Saghafizadeh, Akbar Mohammadi Zardkhoshoui\* and Saied Saied Hosseiny Davarani\*



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### An ultrathin all-dielectric terahertz metamaterial with quasi-BIC induced angular dispersion

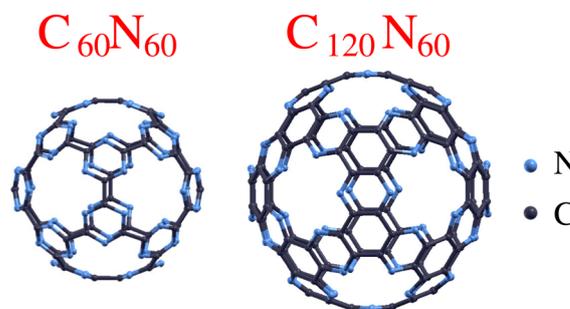
Daoye Zheng and Yu-Sheng Lin\*



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### Porous carbon nitride fullerenes: a novel family of porous cage molecules

Zacharias G. Fthenakis\* and Nektarios N. Lathiotakis\*



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### Emulating working memory consolidation with a 1D supramolecular nanofibre-based neuromorphic device

Tejaswini S. Rao, Subi J. George and Giridhar U. Kulkarni\*



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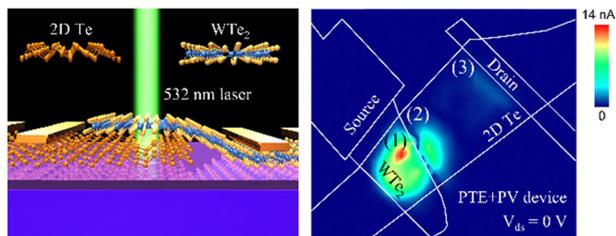
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Mujtaba Aminu Muhammad, Yangjie Liu, Baffa Haruna, Ahmed Abdel-aziz, Zul Qarnain, Amir Mahmoud Makin, Jiaqi Yu, Bo Zheng, Xiang Hu\* and Zhenhai Wen\*



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Jinghua Li, Yun Liu, Xiaonan Li, Gaofeng Liang, Changshun Ruan\* and Kaiyong Cai\*

