

# Materials Horizons

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See Jing Wei *et al.*, pp. 3038–3047. Image reproduced by permission of Jing Wei from *Mater. Horiz.*, 2024, 11, 3038.



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## EDITORIAL

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**Materials Horizons Emerging Investigator Series: Dr Sahnawaz Ahmed, National Institute of Pharmaceutical Education and Research (NIPER) Kolkata, India**

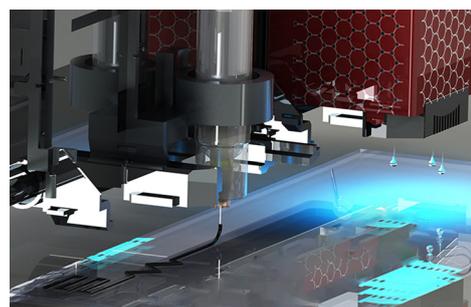


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Ali R. Jalili\* and Gordon Wallace\*



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Fundamental questions  
Elemental answers

## OPINION

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**Better nanoscience through open, collaborative, and critical discussions**

Nathanne Cristina Vilela Rost, Maha Said, Mustafa Gharib, Raphaël Lévy and Federico Boem\*

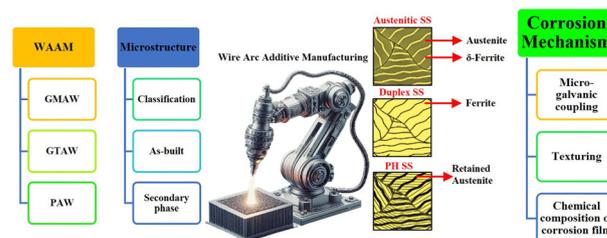


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**Corrosion response of steels fabricated through arc directed energy deposition additive manufacturing: a review**

Khashayar Morshed-Behbahani\* and Ali Nasiri\*

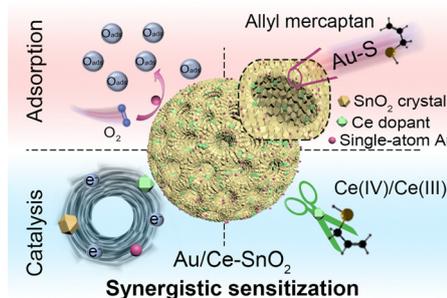


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**Synergistic sensitization effects of single-atom gold and cerium dopants on mesoporous SnO<sub>2</sub> nanospheres for enhanced volatile sulfur compound sensing**

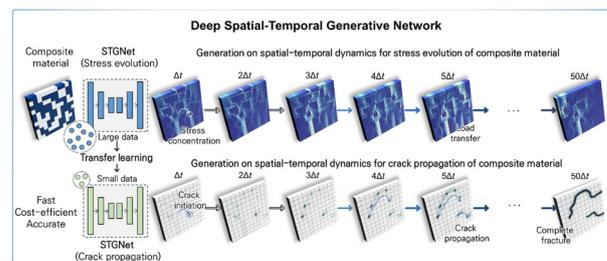
Ping Li, Zizheng Wang, Youyou Feng, Bingxi Feng, Dong Cheng and Jing Wei\*



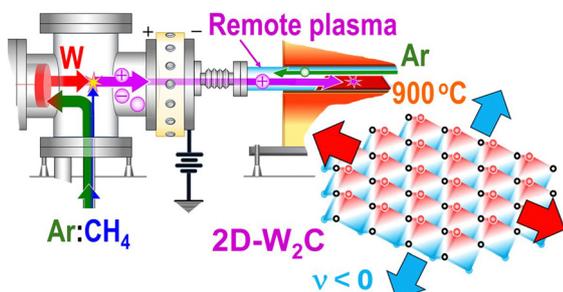
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**Deep generative spatiotemporal learning for integrating fracture mechanics in composite materials: inverse design, discovery, and optimization**

Donggeun Park, Jaemin Lee, Hugon Lee, Grace X. Gu and Seunghwa Ryu\*



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### Giant auxetic behavior in remote-plasma synthesized few-layer tungsten semicarbide

Noah B. Stoeck, Farman Ullah and Giovanni Fanchini\*

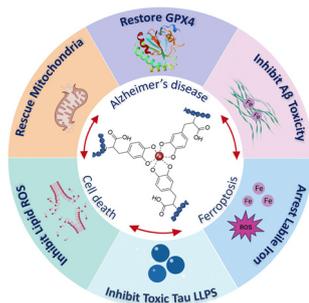
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### Aggregation-induced emission organic metal halide complex for X-ray scintillation

Tunde Blessed Shonde, He Liu, Oluwadara Joshua Olasupo, Alexander Bouchard, Sara Bouchard, Annaliese Franklin, Xinsong Lin, Luis M. Stand and Biwu Ma\*

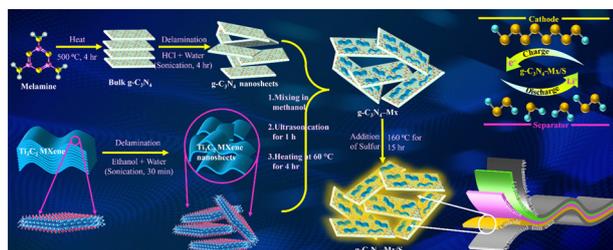
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### Polycatechols inhibit ferroptosis and modulate tau liquid–liquid phase separation to mitigate Alzheimer's disease

Hariharan Moorthy, Madhu Ramesh, Dikshaa Padhi, Prayasee Baruah and Thimmaiah Govindaraju\*

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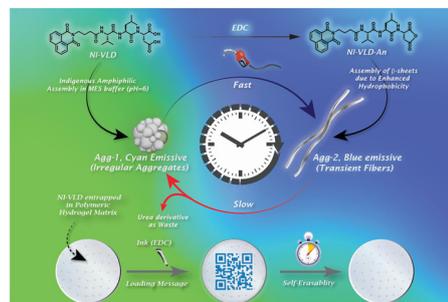
Vijay K. Tomer,\* Otavio Augusto Titton Dias, Abdelaziz M. Gouda, Ritu Malik\* and Mohini Sain\*



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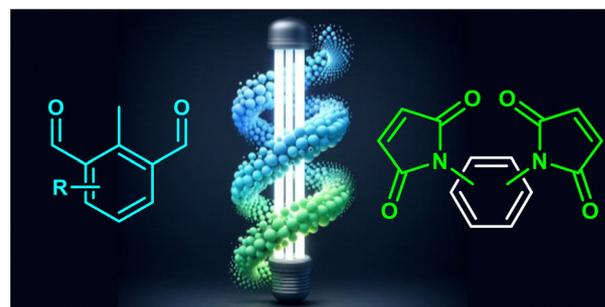
Manirul Islam, Malay Kumar Baroi, Basab Kanti Das, Aanchal Kumari, Krishnendu Das\* and Sahnawaz Ahmed\*



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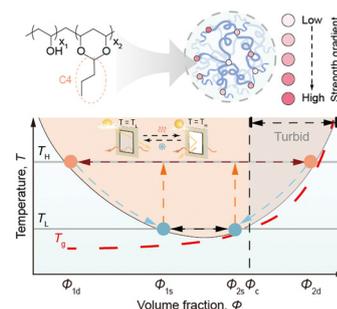
Joshua O. Holloway, Laura Delafresnaye,\* Emily M. Cameron, Jochen A. Kammerer and Christopher Barner-Kowollik\*



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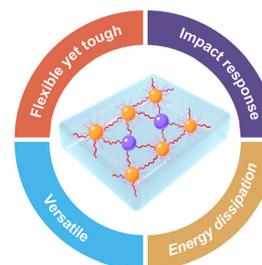
Zequn Lin, Zican Yang and Liang Gao\*



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### Intelligent anti-impact elastomers by precisely tailoring the topology of modular polymer networks

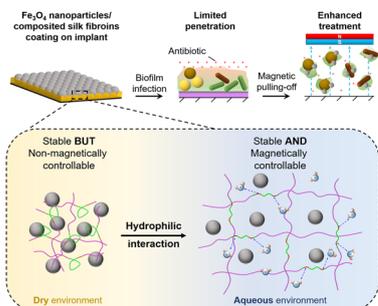
Jianfeng Cheng, Xianhua Yao, Zhipeng Zhang, Yizhong Tan, Nan Hu, Chunfeng Ma\* and Guangzhao Zhang\*



Modular construction strategy for intelligent anti-impact elastomer



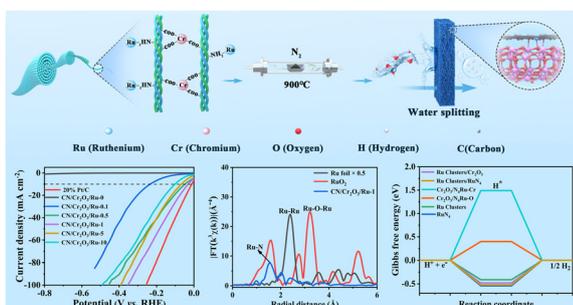
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### Composited silk fibroins ensured adhesion stability and magnetic controllability of $\text{Fe}_3\text{O}_4$ -nanoparticle coating on implant for biofilm treatment

Kecheng Quan, Zhinan Mao, Yupu Lu, Yu Qin, Shuren Wang, Chunhao Yu, Xuewei Bi, Hao Tang, Xiaoxiang Ren, Dafu Chen,\* Yan Cheng, Yong Wang,\* Yufeng Zheng\* and Dandan Xia\*

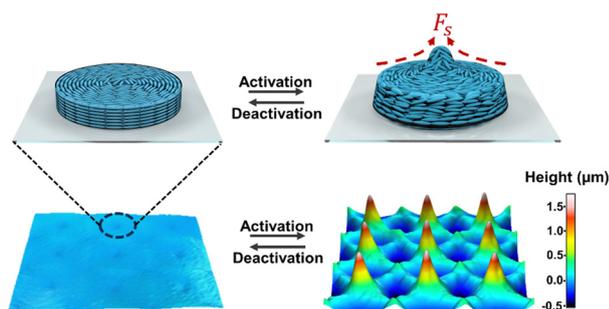
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Qingxin Han,\* Qiangqiang Lu, Xuechuan Wang, Chao Wei, Xiaoyu Guan,\* Luming Chen, Xiao Wang and Ji Li\*

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