

# Journal of Materials Chemistry B

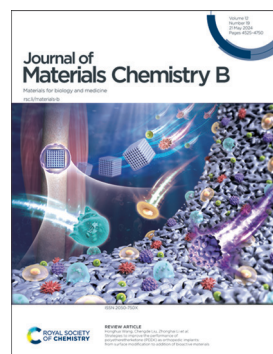
Materials for biology and medicine

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### Cover

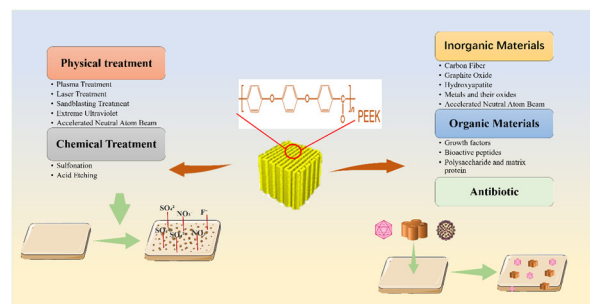
See Honghua Wang, Chengde Liu, Zhonghai Li *et al.*, pp. 4533–4552. Image reproduced by permission of Zhonghai Li from *J. Mater. Chem. B*, 2024, 12, 4533.

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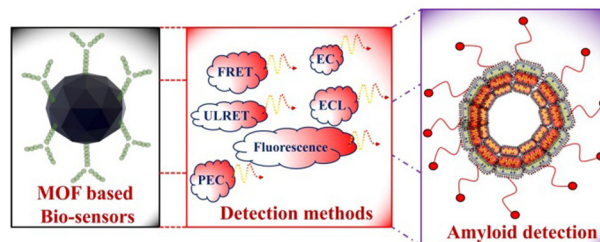
Huagui Huang, Xin Liu, Jinzuo Wang, Moran Suo, Jing Zhang, Tianze Sun, Honghua Wang,\* Chengde Liu\* and Zhonghai Li\*



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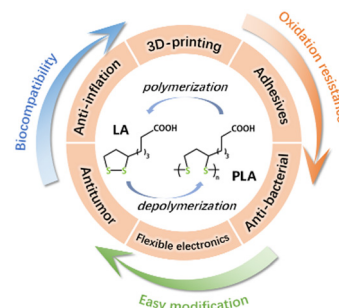
Fundamental questions  
Elemental answers

## REVIEWS

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**Biological applications of lipoic acid-based polymers: an old material with new promise**

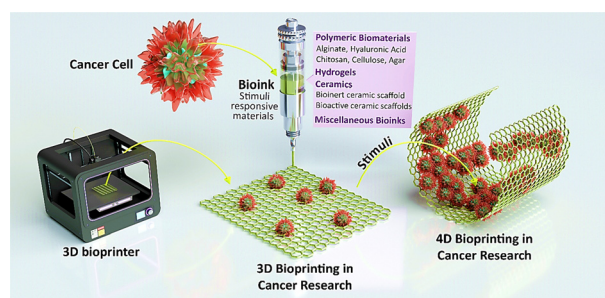
Qing Yu, Zhiyue Fang, Shifang Luan, Lei Wang\* and Hengchong Shi\*



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Danial Khorsandi, Dorsa Rezayat, Serap Sezen, Rafaela Ferrao, Arezoo Khosravi, Atefeh Zarepour, Melika Khorsandi, Mohammad Hashemian, Siavash Iravani\* and Ali Zarrabi\*

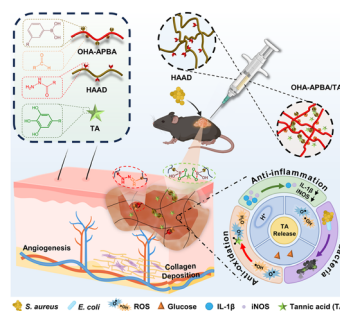


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**Micro-environment triple-responsive hyaluronic acid hydrogel dressings to promote antibacterial activity, collagen deposition, and angiogenesis for diabetic wound healing**

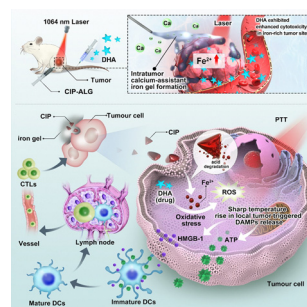
Wenquan Wang, Jingxia Zheng, Xiaojing Hong, Jiaying Zhou, Yuwen Xiong, Hailong Yang, Shengnan Li, Guoqi Chen, Qiao Su, Wenwen Li, Bin Cheng,\* Jun Fu\* and Tong Wu\*



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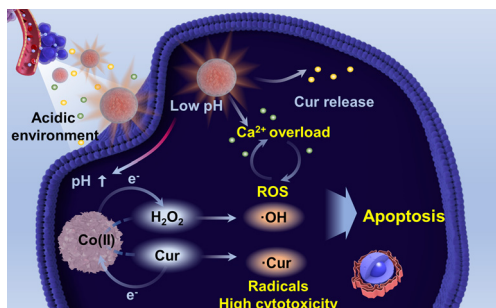
**Cancer nutritional-immunotherapy with NIR-II laser-controlled ATP release based on material repurposing strategy**

Jingsong Lu,\* Yupei Wang, Xiaohan Gao, Ying Li, Neema Ufurahi-Pambe, Abdul Fahad, Zeping Jin, Zhijun He, Zhenhu Guo, Wensheng Xie, Shi Wang, Xiaodan Sun, Xiumei Wang, Jing Yu, Shenglei Che, Guifeng Zhang, Yen Wei\* and Lingyun Zhao\*





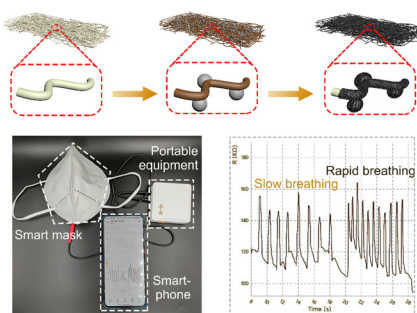
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### Cobalt-based hybrid nanoparticles loaded with curcumin for ligand-enhanced synergistic nanocatalytic therapy/chemotherapy combined with calcium overload

Mengyang Li, Zijie Lu, Chao Fang, Bingzhu Zheng, Yike Fu\* and Xiang Li\*

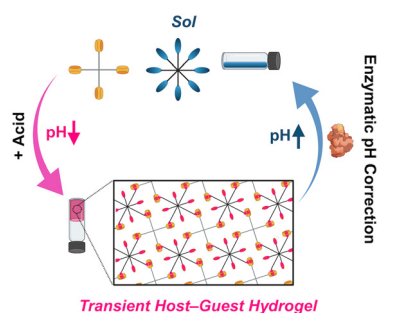
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### A liquid metal/polypyrrole electrospun TPU composite conductive network for highly sensitive strain sensing in human motion monitoring

Juan Du, Qinghui Han and Aibing Chen\*

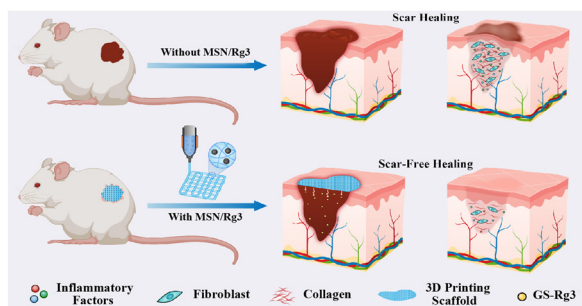
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### Using a biocatalyzed reaction cycle for transient and pH-dependent host-guest supramolecular hydrogels

Bo Su, Teng Chi, Weike Chen, Sijie Xian, Dongping Liu, Christopher J. Addonizio, Yuanhui Xiang and Matthew J. Webber\*

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### 3D printing of Rg3-loaded hydrogel scaffolds: anti-inflammatory and scar-formation related collagen inhibitory effects for scar-free wound healing

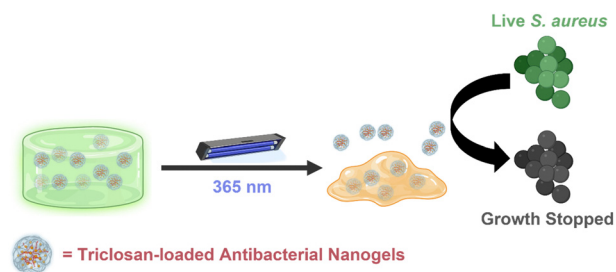
Xusen Wang, Pengyu Wei, Cewen Hu, Huajing Zeng and Zengjie Fan\*



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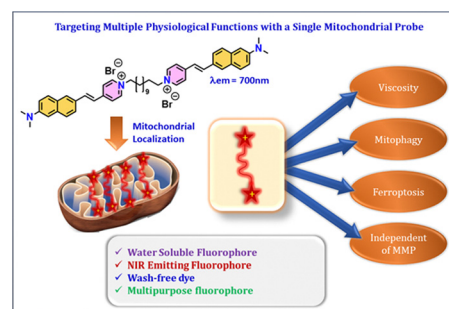
Changhao Fang, Qiming Shen, Yingnan Zhang, Karen Kanemaru and Michael J. Serpe\*



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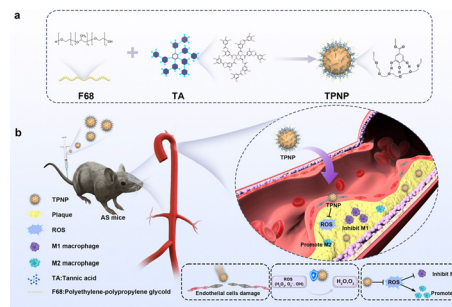
Deeksha Rajput, Nachiket Pradhan, Shabnam Mansuri, Virupakshi Soppina\* and Sriram Kanvah\*



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## Tannic acid–poloxamer self-assembled nanoparticles for advanced atherosclerosis therapy by regulation of macrophage polarization

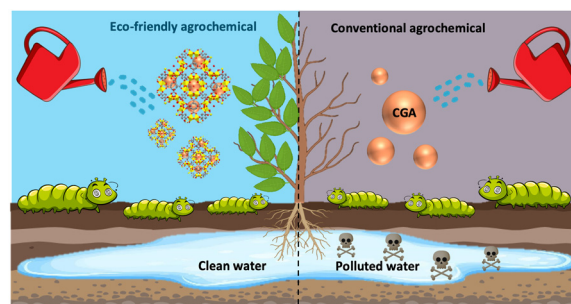
Haoguang Wu, Jie Sheng, Zhiyue Wang, Ziyue Zu, Kaiyan Xiang, Jianchen Qi, Zhicheng Wang, Guangming Lu and Longjiang Zhang\*



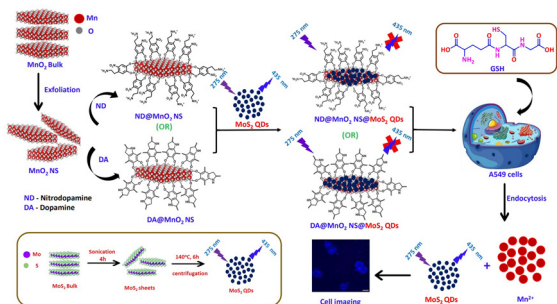
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## Long-lasting insecticidal activity in plants driven by chlorogenic acid-loaded metal–organic frameworks

Irene Rincón, MCarmen Contreras, Beatriz Sierra-Serrano, Fabrice Salles, Antonio Rodríguez-Diéguez, Sara Rojas\* and Patricia Horcajada\*



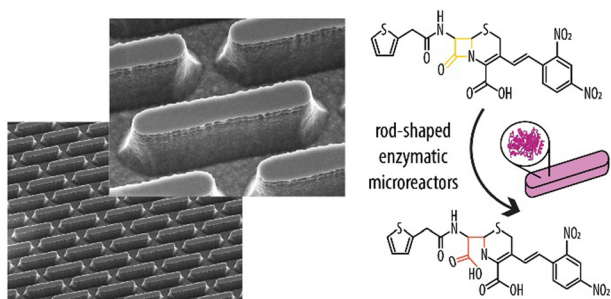
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### Nitrodopamine modified $\text{MnO}_2$ NS- $\text{MoS}_2$ QDs hybrid nanocomposite for the extracellular and intracellular detection of glutathione

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