

# Journal of Materials Chemistry B

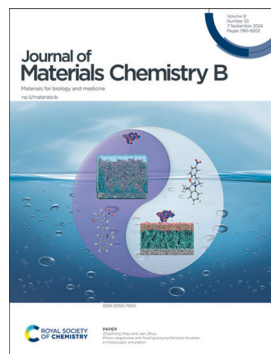
Materials for biology and medicine

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### Cover

See Zhaohong Miao and Jian Zhou, pp. 8076–8086. Image reproduced by permission of Jian Zhou from *J. Mater. Chem. B*, 2024, 12, 8076.



### Inside cover

See Juan Pellico *et al.*, pp. 8087–8098. Image reproduced by permission of Juan Pellico and Phillip Blower from *J. Mater. Chem. B*, 2024, 12, 8087.

## PERSPECTIVE

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### Sculpturing the future of water-soluble cyclodextrin branched polymers in pharmaceutical applications

Marco Agnes,\* Arianna Mazza, Milo Malanga and Ilse Manet\*

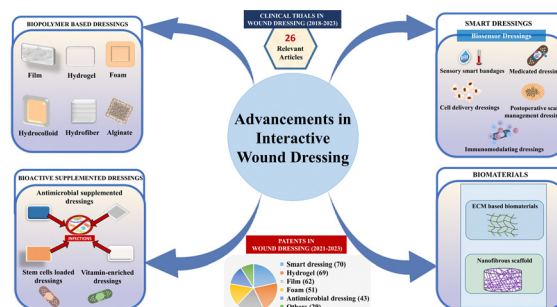


## REVIEWS

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### Innovative approaches to wound healing: insights into interactive dressings and future directions

Radhika Yadav, Rohtash Kumar, Muskan Kathpalia, Bakr Ahmed, Kamal Dua, Monica Gulati, Sachin Singh, Pushvinder Jit Singh, Suneel Kumar, Rohan M. Shah, Parneet Kaur Deol\* and Indu Pal Kaur\*



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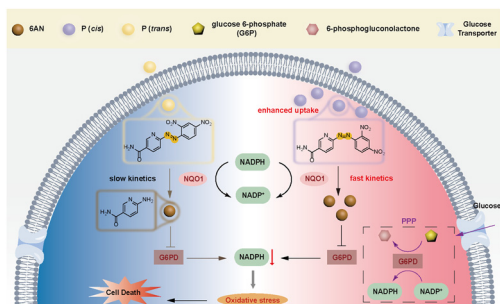


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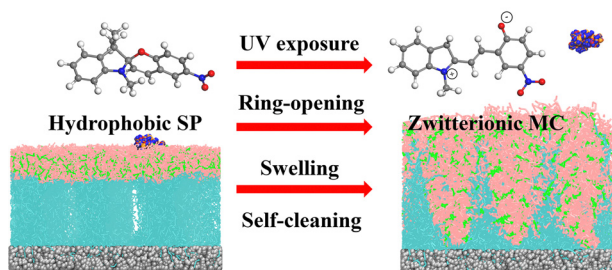
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## Engineering hypoxia-responsive 6-aminonicotinamide prodrugs for on-demand NADPH depletion and redox manipulation

Mingye Li, Yuyu Dong, Zheng Wang, Yanjun Zhao,\*  
Yujie Dai\* and Baoxin Zhang\*

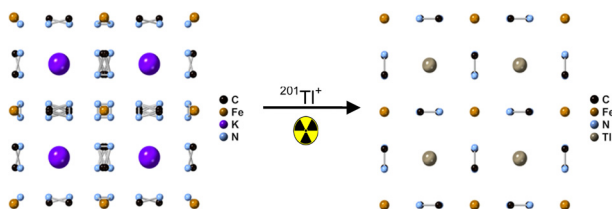
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## Photo-responsive anti-fouling polyzwitterionic brushes: a mesoscopic simulation

Zhaohong Miao and Jian Zhou\*

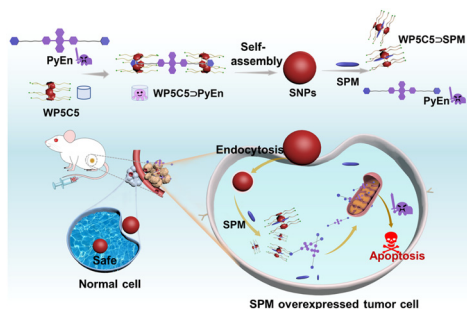
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## Mechanisms of inclusion of thallium-201 into Prussian blue nanoparticles for nuclear medicine applications

Katarzyna M. Wulfmeier, Philip J. Blower,  
Galo Paez Fajardo, Steven Huband,  
Rafael T. M. de Rosales, David Walker,  
Samantha YA Terry, Vincenzo Abbate and Juan Pellico\*

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## A spermine-responsive supramolecular chemotherapy system constructed from a water-soluble pillar[5]arene and a diphenylanthracene-containing amphiphile for precise chemotherapy

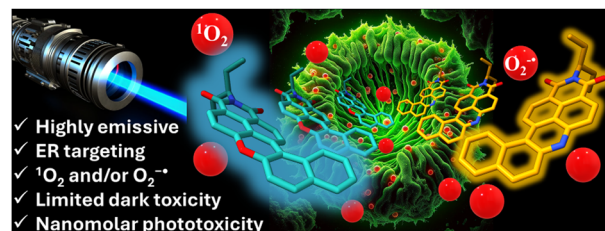
Yongfei Yin, Pei Zeng, Yifan Duan, Jun Wang, Wei Zhou,  
Penghao Sun, Zhanting Li, Lu Wang,\* Huageng Liang\*  
and Shigui Chen\*



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## Heavy-atom-free $\pi$ -twisted photosensitizers for fluorescence bioimaging and photodynamic therapy

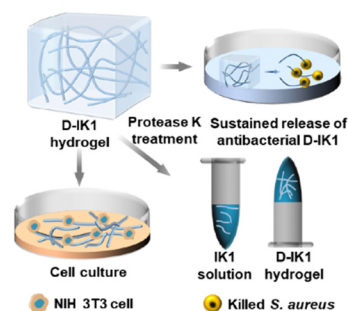
Dario Puchán Sánchez, Korentin Morice, Monika G. MUTOVSKA, Lhoussain Khrouz, Pierre Josse, Magali Allain, Frédéric Gohier, Philippe Blanchard, Cyrille Monnereau, Tanguy Le Bahers, Nasim Sabouri, Yulian Zagranjarski,\* Clement Cabanetos\* and Marco Deiana\*



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## D-Peptide cell culture scaffolds with enhanced antibacterial and controllable release properties

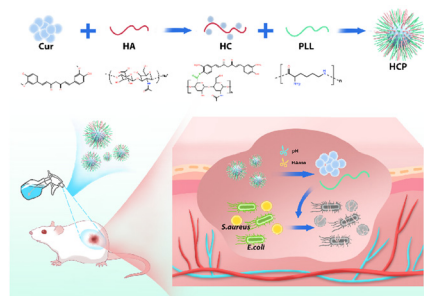
Yu Tian, Yangqian Hou, Jiakun Tian, Jin Zheng, Zeyu Xiao, Jun Hu and Yi Zhang\*



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## A multifunctional nanoplatform for precision-guided therapeutic intervention in bacterial infection

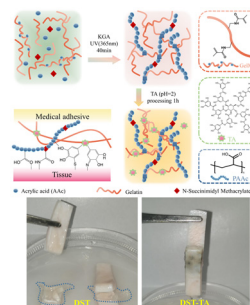
Jinli Dou, Juan Li, Jingjing Liu, Jinmeng Shang, Wei Tan, Xia Miao,\* Jin Zhou\* and Guifang Guo\*



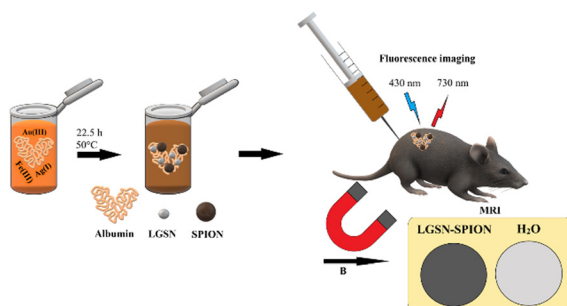
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## A dry double-sided tape post-treated with tannic acid for long-term adhesion in a wet environment

Yi Ju, Junjie Wang, Yang Lei\* and Yunbing Wang



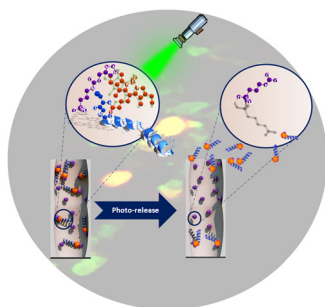
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### Trimetallic nanocomposites developed for efficient *in vivo* bimodal imaging via fluorescence and magnetic resonance

Veronika Svačinová, Aminadav Halili, Radek Ostruszka, Tomáš Pluháček, Klára Jiráková, Daniel Jiráček and Karolína Šišková\*

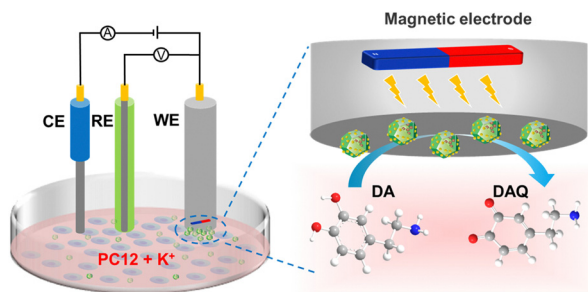
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### Grafting and controlled release of antimicrobial peptides from mesoporous silica

Mohadeseh Bagherabadi, Marie Fleckenstein, Oleksandr Moskalyk, Andrea Belluati, Olga Avrutina and Annette Andrieu-Brunsen\*

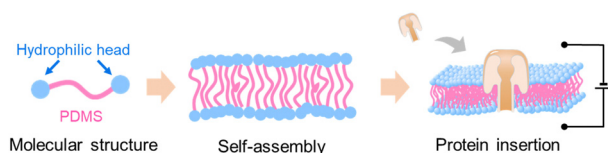
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### Magnetic MOF composites for the electrocatalysis and biosensing of dopamine released from living cells

Jiarong Guo, Ying Ma, Tongyu Han, Jiao Yang\* and Peng Miao\*

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### Formation of a planar biomimetic membrane with a novel zwitterionic polymer for nanopore sequencing

Xiaowei Yang, Jinfeng Yang, Lai Wei, Yuning Zhang, Jingnan Yang,\* Ming Ni\* and Yuliang Dong\*

