

# Journal of Materials Chemistry B

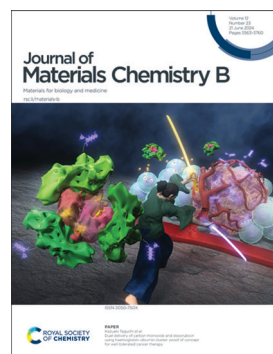
Materials for biology and medicine

[rsc.li/materials-b](https://rsc.li/materials-b)

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

## IN THIS ISSUE

ISSN 2050-750X CODEN JMCBDV 12(23) 5563-5760 (2024)



### Cover

See Kazuaki Taguchi *et al.*, pp. 5600–5608.  
Image reproduced by permission of Kazuaki Taguchi from *J. Mater. Chem. B*, 2024, 12, 5600.

## EDITORIAL

5571

### An introduction to injectable hydrogels

Julieta I. Paez\* and Khoon S. Lim \*

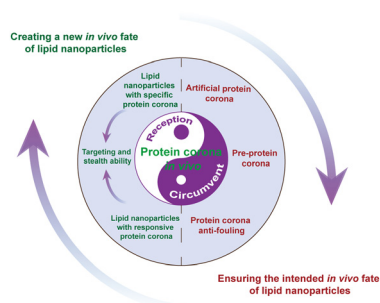


## PERSPECTIVE

5573

### Looking back, moving forward: protein corona of lipid nanoparticles

Yue Gao, Yeqi Huang, Chuanyu Ren, Peiwen Chou, Chuanbin Wu, Xin Pan, Guilan Quan\* and Zhengwei Huang\*



# Environmental Science: Atmospheres

GOLD  
OPEN  
ACCESS

## Connecting communities and inspiring new ideas



Open Access Article. Published on 12 June 2024. Downloaded on 4/2/2026 11:46:20 AM.  
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

[rsc.li/submittoEA](https://rsc.li/submittoEA)

Fundamental questions  
Elemental answers

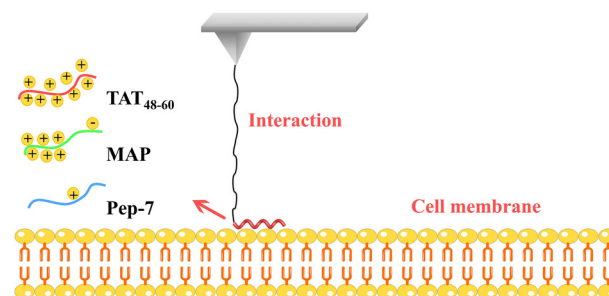


## COMMUNICATIONS

5589

## Revealing the dynamic mechanism of cell-penetrating peptides across cell membranes at the single-molecule level

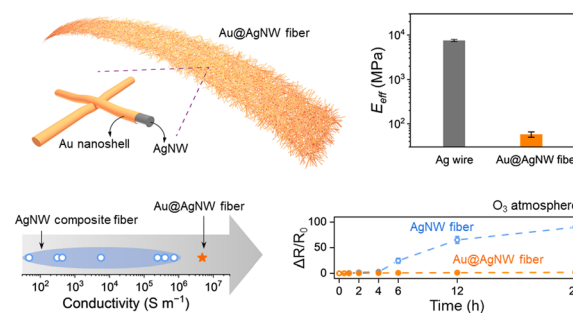
Yuhang Zhai, Siying Li, Hui Wang and Yuping Shan\*



5594

## High-performing fiber electrodes based on a gold-shelled silver nanowire framework for bioelectronics

Kailin Zhang, Chengqiang Tang, Sihui Yu, Hang Guan, Xiao Sun, Mingjie Cao, Songlin Zhang, Xuemei Sun\* and Huisheng Peng

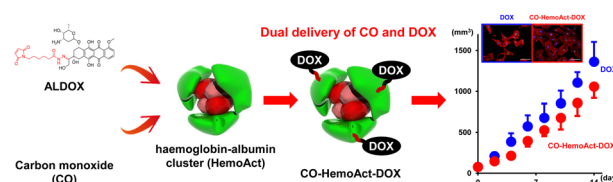


## PAPERS

5600

## Dual delivery of carbon monoxide and doxorubicin using haemoglobin–albumin cluster: proof of concept for well-tolerated cancer therapy

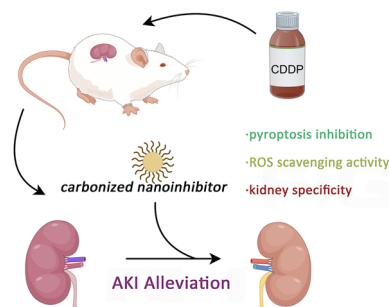
Chihiro Ito, Kazuaki Taguchi,\* Taiga Yamada, Kengo Hanaya, Yuki Enoki, Takeshi Sugai, Teruyuki Komatsu and Kazuaki Matsumoto



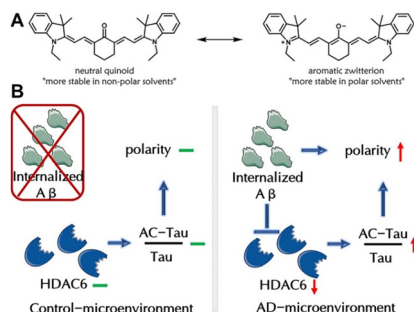
5609

## Targeted inhibition of pyroptosis via a carbonized nanoinhibitor for alleviating drug-induced acute kidney injury

YanJun Ji, Huan Wang,\* Xinchen Liu, Zitong Zhu, AnJun Song, Li Chen and Jinsong Ren\*



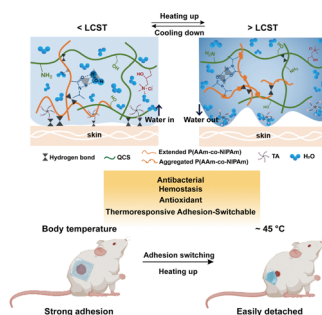
5619



### A ratiometric fluorescent probe revealing the abnormality of acetylated tau by visualizing polarity in Alzheimer's disease

Panpan Sun, Hai-Chao Chen, Wenting Guo, Zefan Zhang, Shihao Sun, Ningshuang Gao, Yu-Hong Jing\* and Baodui Wang\*

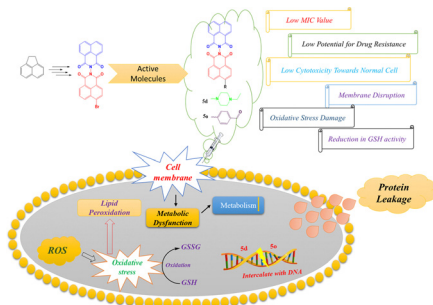
5628



### An adhesion-switchable hydrogel dressing for painless dressing removal without secondary damage

Zhiling Yu, Weiqiang Huang, Fei Wang, Xuan Nie, Guang Chen, Lei Zhang, Ai-Zong Shen,\* Ze Zhang,\* Chang-Hui Wang\* and Ye-Zi You\*

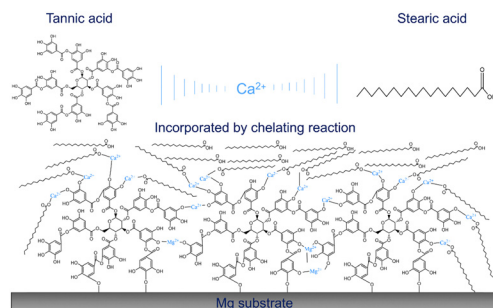
5645



### Bacterial cell death to overcome drug resistance with multitargeting bis-naphthalimides as potent antibacterial agents against *Enterococcus faecalis*

Saurabh Gupta, Vijay Luxami and Kamaldeep Paul\*

5661



### Metal-organic complex coating for enhanced corrosion control and biocompatibility on biodegradable magnesium alloy for orthopaedic implants

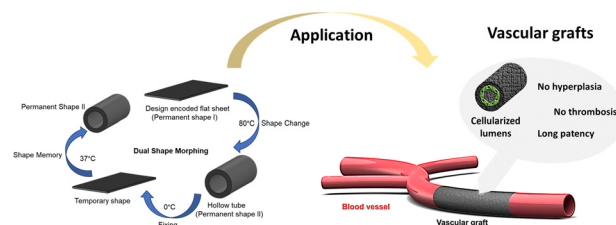
Jiacheng Wang, Zhenglong Dou, Li Xia and Nan Huang\*



5678

## Design-encoded dual shape-morphing and shape-memory in 4D printed polymer parts toward cellularized vascular grafts

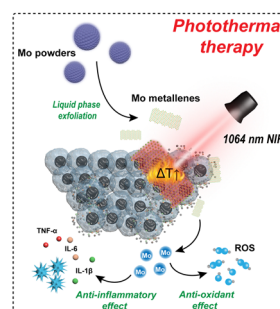
Saswat Choudhury, Akshat Joshi, Vageesh Singh Baghel, G. K. Ananthasuresh, Sonal Asthana, Shervanthi Homer-Vanniasinkam and Kaushik Chatterjee\*



5690

## Liquid exfoliation of molybdenum metallenes for non-inflammatory photothermal therapy of tumors

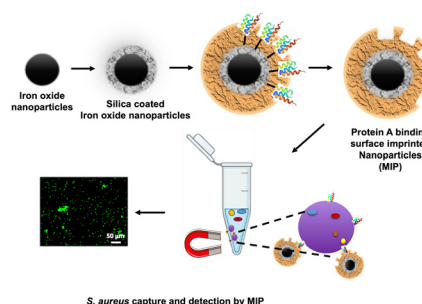
Chenxin Lu, Xiang Huang, Zhaoying Jin, Junwei Deng, Zhengbao Zha\* and Zhaohua Miao\*



5699

## Rationally designed protein A surface molecularly imprinted nanoparticles for the capture and detection of *Staphylococcus aureus*

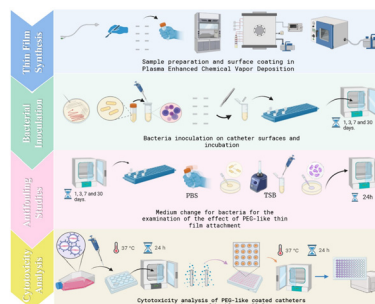
Kritika Narula, Soumya Rajpal, Snehasis Bhakta, Senthilguru Kulanthaivel and Prashant Mishra\*



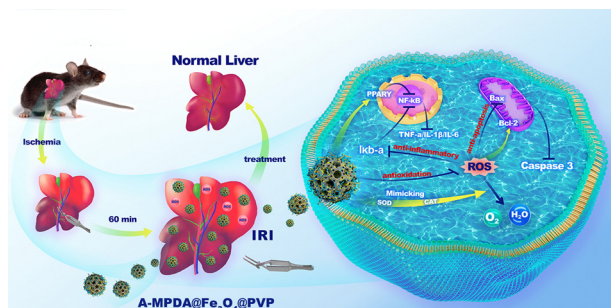
5711

## Long-term antifouling surfaces for urinary catheters

Mustafa Tüfekçi, Sena Hamarat, Tuğba Demir Çalışkan, Hatice Ferda Özgüzar, Ahmet Ersin Meydan, Julide Sedef Göçmen, Ebru Evren, Mehmet Ilker Gökçe and Hilal Goktas\*



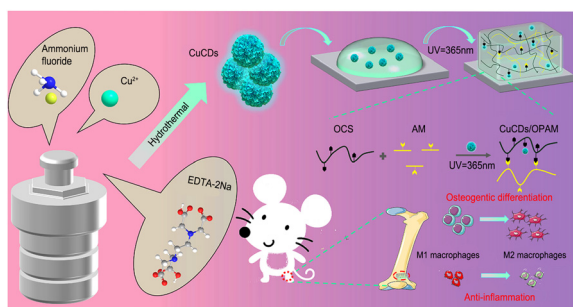
5722



### Activation of the PPAR $\gamma$ /NF- $\kappa$ B pathway by A-MPDA@Fe $_3$ O $_4$ @PVP via scavenging reactive oxygen species to alleviate hepatic ischemia-reperfusion injury

Dong Mo, Wei Cui, Linxin Chen, Juanjuan Meng, Yuting Sun, Kaiyong Cai, Jixi Zhang,\* Jianrong Zhang,\* Kui Wang\* and Xiaohe Luo\*

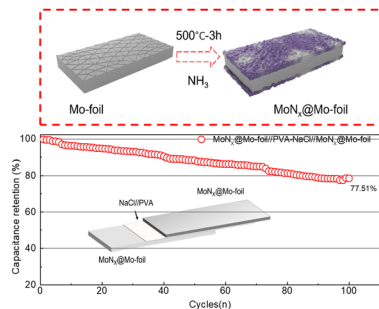
5734



### Copper-based carbon dots modified hydrogel with osteoimmunomodulatory and osteogenesis for bone regeneration

Xu Wei, Chang Wan, Xu Peng, Yihao Luo, Mengyue Hu, Can Cheng, Shaoxiong Feng and Xixun Yu\*

5749



### Biodegradable MoN $_x$ @Mo-foil electrodes for human-friendly supercapacitors

Hongjia Ren, Hongru Zhao, Muhammad Sufyan Javed,\* Sajid Hussain Siyal, Xinze Zhang, Xiaofeng Zhang, Awais Ahmad, Iftikhar Hussain, Mohamed A. Habila and Weihua Han\*

