

# Biomaterials Science

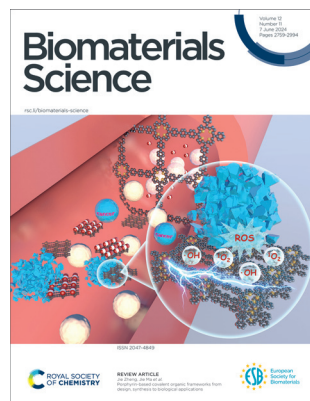
An international high impact journal exploring the underlying science behind the function, interactions and design of biomaterials

[rsc.li/biomaterials-science](https://rsc.li/biomaterials-science)

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 2047-4849 CODEN BSICCH 12(11) 2759-2994 (2024)



### Cover

See Jie Zheng, Jie Ma *et al.*, pp. 2766–2785.

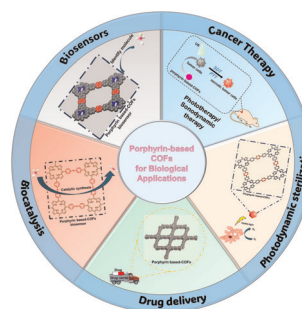
Image reproduced by permission of Jie Zheng from *Biomater. Sci.*, 2024, **12**, 2766.

## REVIEWS

2766

### Porphyrin-based covalent organic frameworks from design, synthesis to biological applications

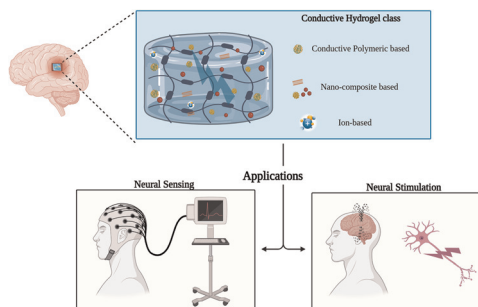
Xin-Gui Li, Junjian Li, JinFeng Chen, Liangmei Rao, Libin Zheng, Fei Yu, Yijing Tang, Jie Zheng\* and Jie Ma\*



2786

### Advances in conductive hydrogels for neural recording and stimulation

Hewan Dawit, Yuewu Zhao,\* Jine Wang\* and Renjun Pei\*



# Environmental Science journals

One impactful portfolio for  
every exceptional mind

Harnessing the power of interdisciplinary  
science to preserve our environment

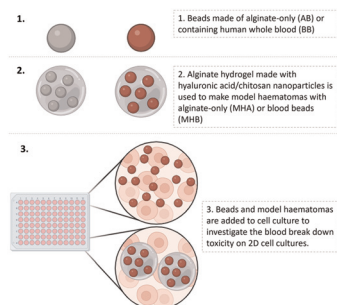
[rsc.li/envsci](https://rsc.li/envsci)

Fundamental questions  
Elemental answers





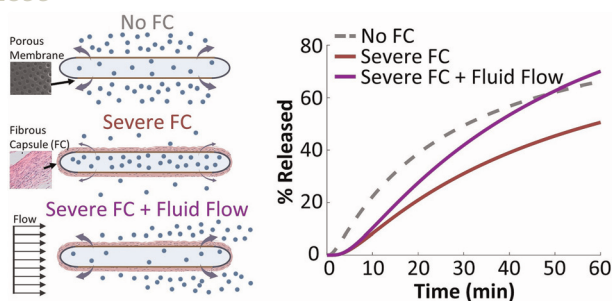
2885



### Developing an *in vitro* model of haematoma for study of intracerebral haemorrhage

Siobhan Crilly,\* Victor Sebastian Tapia, Carlo Bawn and Annalisa Tirella

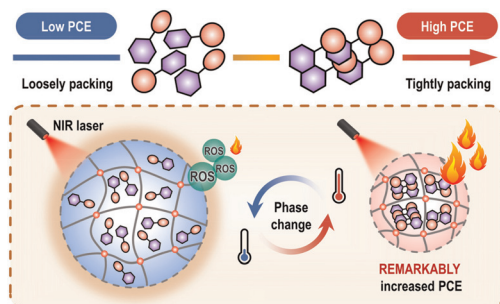
2899



### Exploring therapy transport from implantable medical devices using experimentally informed computational methods

Lesley Trask, Niamh A. Ward, Ruth Tarpey, Rachel Beatty, Eimear Wallace, Joanne O'Dwyer, William Ronan, Garry P. Duffy and Eimear B. Dolan\*

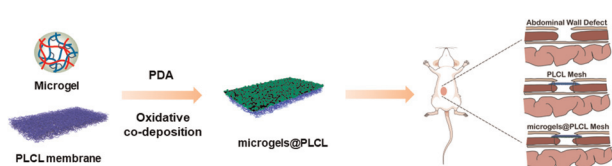
2914



### A universal strategy to enhance photothermal conversion efficiency by regulating the molecular aggregation states for safe photothermal therapy of bacterial infections

Hao Fu, Yongxin Zhang, Cheng Wang, Zhencheng Sun, Shuyi Lv, Minghui Xiao, Kaiyu Wu, Linqi Shi and Chunlei Zhu\*

2930



### Bioactive microgel-coated electrospun membrane with cell-instructive interfaces and topology for abdominal wall defect repair

Renquan Xing, Rui Gao, Yini Huangfu, Yufeng Zhang, Shuangyang Li, Chuangnian Zhang,\* Pingsheng Huang, Weiwei Wang, Anjie Dong\* and Zujian Feng\*

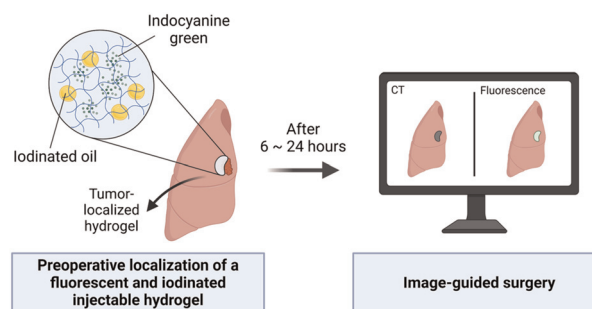


## PAPERS

2943

### An injectable fluorescent and iodinated hydrogel for preoperative localization and dual image-guided surgery of pulmonary nodules

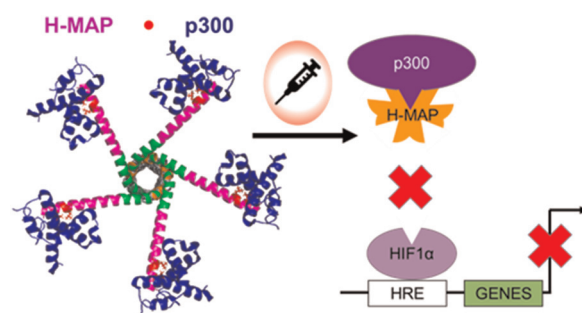
Woojin Back, Jiyun Rho, Kyungsu Kim, Hwan Seok Yong, Ok Hwa Jeon, Byeong Hyeon Choi, Hyun Koo Kim\* and Ji-Ho Park\*



2951

### Engineered coiled-coil HIF1 $\alpha$ protein domain mimic

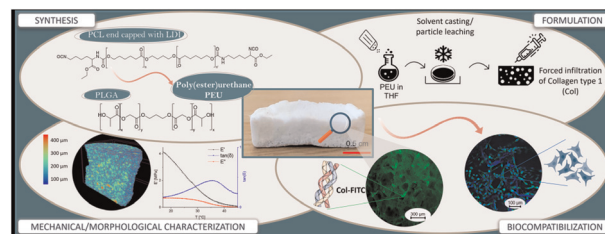
Dustin Britton, Olga Katsara, Orin Mishkit, Andrew Wang, Neelam Pandya, Chengliang Liu, Heather Mao, Jakub Legocki, Sihan Jia, Yingxin Xiao, Orlando Aristizabal, Deven Paul, Yan Deng, Robert Schneider, Youssef Z. Wadghiri and Jin Kim Montclare\*



2960

### Collagen/polyester-polyurethane porous scaffolds for use in meniscal repair

Gaëlle Savin, Sylvain Caillol, Audrey Bethry, Eric Rondet, Michel Assor, Ghislain David and Benjamin Nottelet\*



2978

### Lipid sulfoxide polymers as potential inhalable drug delivery platforms with differential albumin binding affinity

Gayathri R. Ediriweera, Neville J. Butcher, Ashok Kothapalli, Jiacheng Zhao, Joanne T. Blanchfield, Christopher N. Subasic, James L. Grace, Changkui Fu, Xiao Tan, John F. Quinn, David B. Ascher, Michael R. Whittaker, Andrew K. Whittaker\* and Lisa M. Kaminskas\*

