

# Journal of Materials Chemistry B

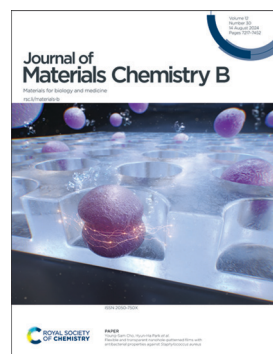
Materials for biology and medicine

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## IN THIS ISSUE

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### Cover

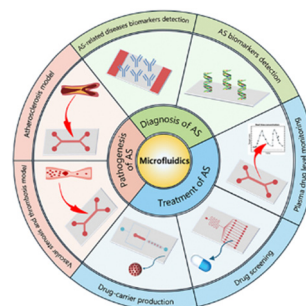
See Young-Sam Cho,  
Hyun-Ha Park *et al.*,  
pp. 7298–7310.  
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Hyun-Ha Park from  
*J. Mater. Chem. B*,  
2024, 12, 7298.

## REVIEWS

7225

### Microfluidic-based cardiovascular systems for advanced study of atherosclerosis

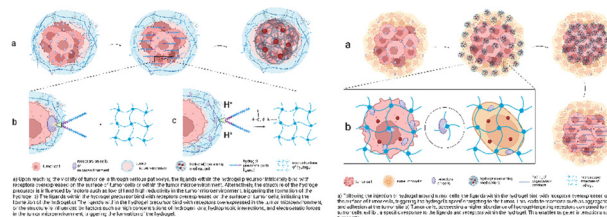
Huiyuan Zheng, Lei Tai, Chengbin Xu, Weijiang Wang, Qingming Ma\* and Wentao Sun\*



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### Recent research progress on tumour-specific responsive hydrogels

Xuan-Yi Zhou, Chen-Kai Wang, Ze-Fan Shen, Yi-Fan Wang, Yu-Hang Li, Yu-Ning Hu, Pu Zhang\* and Qi Zhang\*



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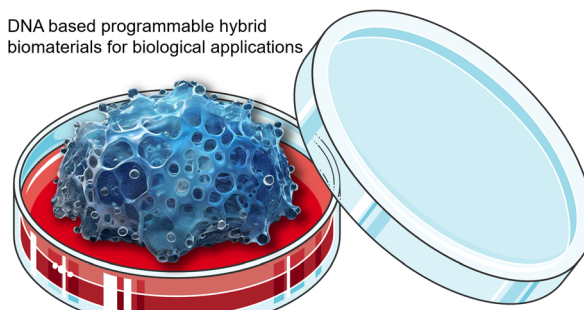
## REVIEWS

7267

## DNA functionalized programmable hybrid biomaterials for targeted multiplexed applications

Nihal Singh, Ankur Singh, Mukesh Dhanka and Dhiraj Bhatia\*

DNA based programmable hybrid biomaterials for biological applications

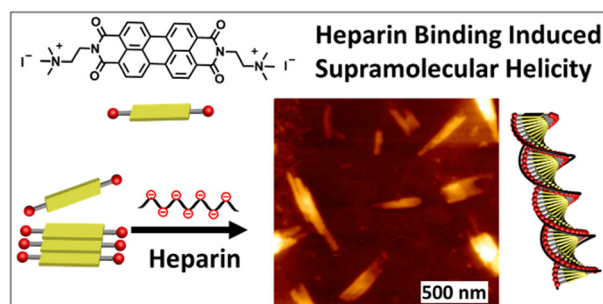


## COMMUNICATION

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## Heparin binding induced supramolecular chirality into the self-assembly of perylene-3,9,10,10-tetracarboxylic diimide bolaamphiphile

Poonam Sharma, Akhil Venugopal, Claudia Martinez Verdi, Mauri Serra Roger, Annalisa Calò and Mohit Kumar\*

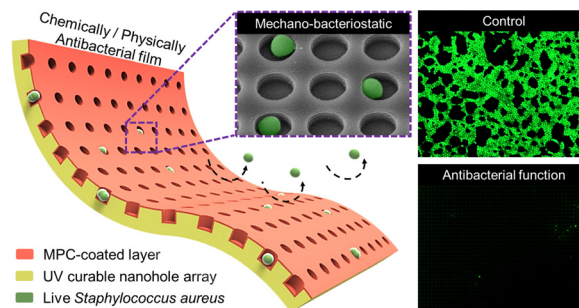


## PAPERS

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Flexible and transparent nanohole-patterned films with antibacterial properties against *Staphylococcus aureus*

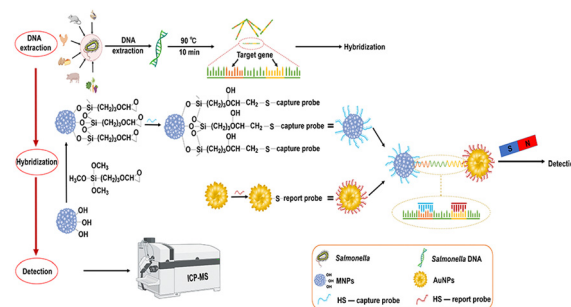
Hee-Kyeong Kim, Jeong-Hun Park, Min-Jun Jang, Su-Ji Han, Young-Sam Cho\* and Hyun-Ha Park\*



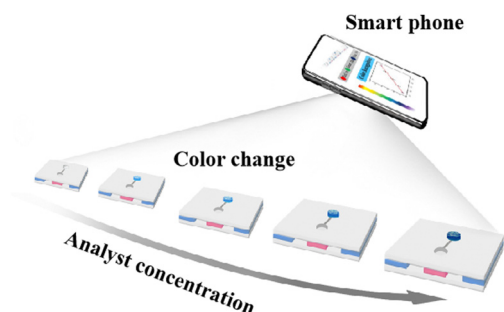
7311

Highly sensitive detection of *Salmonella typhimurium* via gold and magnetic nanoparticle-mediated sandwich hybridization coupled with ICP-MS

Yujie Zhou, Zhihui Tang, Lei Li, Yuzuo Chen, Yuanyuan Xu, Renjie Liu, Yanrong Zhang, Xiaoyan Liu, Wenjuan Yang, Baoning Wang, Jieyu Zhang,\* Qing Jiang\* and Yunbing Wang



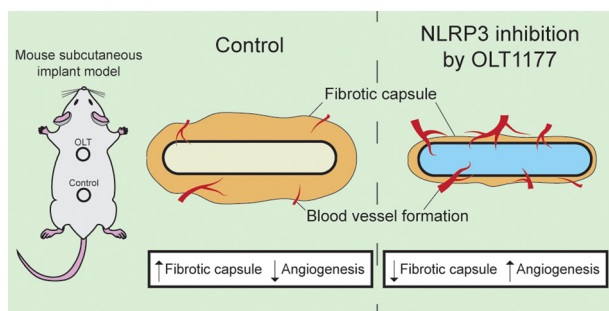
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### A separation-free paper-based hydrogel device for one-step reactive oxygen species determination by a smartphone

Jie Chu, Yiyi Zhang, Jingwen Li, Jun Hong, Lin Sun\* and Jianshe Wei\*

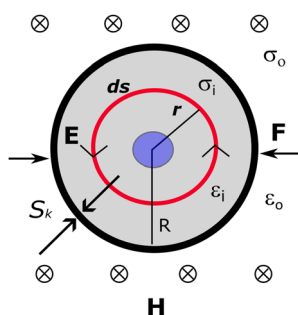
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### Dapansutril OLT1177 suppresses foreign body response inflammation while preserving vascularisation of implanted materials

Alex H. P. Chan, Xueying S. Xu, Ian L. Chin, Angus J. Grant, Kieran Lau, Yunfei Hu, Praveesuda L. Michael, Yuen Ting Lam, Steven G. Wise and Richard P. Tan\*

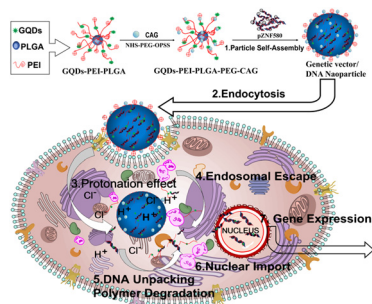
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### On the origin of the biological effects of time varying magnetic fields: quantitative insights

Ravikumar K., Aditya N. Roy Choudury, Ashutosh Kumar Dubey, V. Kumaran and Bikramjit Basu\*

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### CAG peptide functionalized graphene quantum dots-cationic polymer composite gene carriers

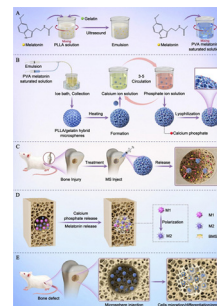
Xinghong Duo,\* Qirong Xu, Chen Li, Xiangyan Meng and Yakai Feng



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## Melatonin and calcium phosphate crystal-loaded poly(L-lactic acid) porous microspheres reprogram macrophages to improve bone repair

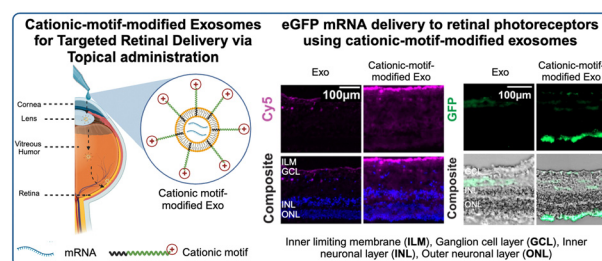
Yiyang Huang, Yichang Xu, Ziyang Huang, Jiannan Mao, Yujian Hui, Min Rui, Xinzhao Jiang, Jie Wu, Zhouye Ding, Yu Feng,\* Yong Gu\* and Liang Chen\*



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## Cationic-motif-modified exosomes for mRNA delivery to retinal photoreceptors

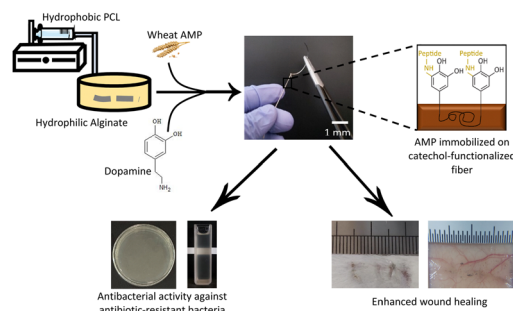
Héctor A. Millán Cotto, Tanvi Vinod Pathrikar, Bill Hakim, Helna M. Baby, Hengli Zhang, Peng Zhao, Ronak Ansari-pour, Rouzbeh Amini, Rebecca L. Carrier and Ambika G. Bajpayee\*



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## Antimicrobial peptide immobilization on catechol-functionalized PCL/alginate wet-spun fibers to combat surgical site infection

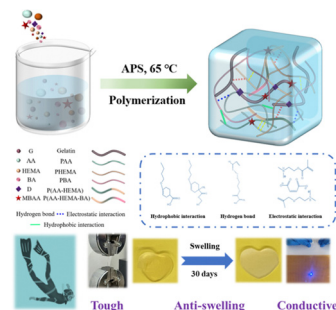
Taufiq Hasan Aneem, Mridul Sarker, Siew Yee Wong, Sierin Lim, Xu Li, Asif Rashed, Saumitra Chakravarty and M. Tarik Arifat\*



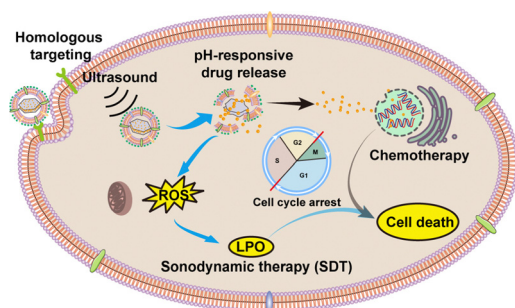
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## A gelatin-based ionogel with anti-swelling properties for underwater human physiological signal detection

Xin Guan, Mengliang Bi, Shengyu Sun, Yongqi Yang, Jian Sun, Zhaohui Jin, Hailun Ren and Zijian Gao\*



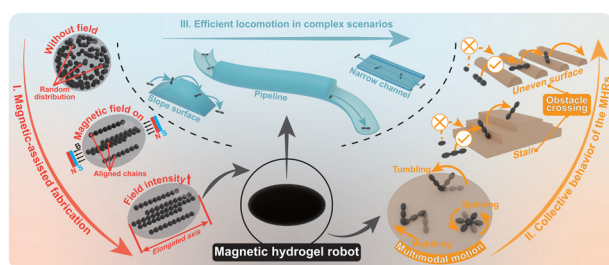
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### A functionalized cell membrane biomimetic nanoformulation based on layered double hydroxide for combined tumor chemotherapy and sonodynamic therapy

Gaoming Li, Yunqi Guo, Cheng Ni, Zhiqiang Wang, Mengsi Zhan, Huxiao Sun, Goeun Choi, Jin-Ho Choy, Xiangyang Shi\* and Mingwu Shen\*

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### Magnetic-actuated hydrogel microrobots with multimodal motion and collective behavior

Xi Chen, Chenyao Tian, Hao Zhang\* and Hui Xie\*

