

# Journal of Materials Chemistry B

Materials for biology and medicine

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## IN THIS ISSUE

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### Cover

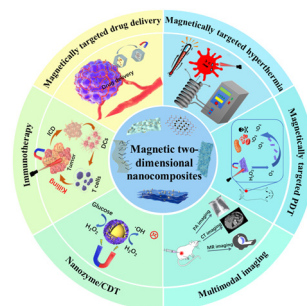
See Junyu Chen,  
Jian Wang *et al.*,  
pp. 1495–1511.  
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*J. Mater. Chem. B*,  
2024, 12, 1495.

## REVIEWS

1404

### Magnetic two-dimensional nanocomposites for multimodal antitumor therapy: a recent review

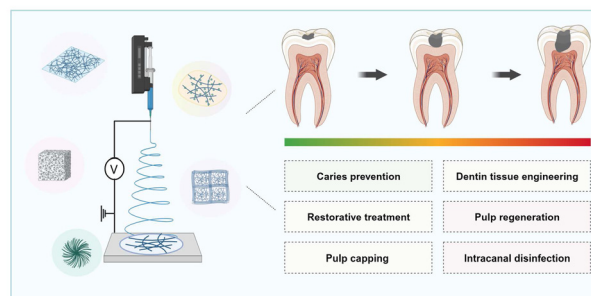
Ying Yuan, Bo Chen, Luping Song, Xingxing An,  
Qinrui Zhang, Hao Lu, Chang Ming Li\* and  
Chunxian Guo\*



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### Electrospun nanofibers applications in caries lesions: prevention, treatment and regeneration

Xiangshu Chen, Zhenqi Liu, Rui Ma, Junzhuo Lu\* and  
Linglin Zhang\*



# RSC Applied Polymers

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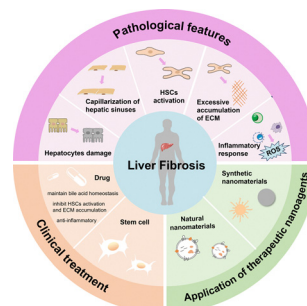
Fundamental questions  
Elemental answers

## REVIEWS

1446

### Liver fibrosis: pathological features, clinical treatment and application of therapeutic nanoagents

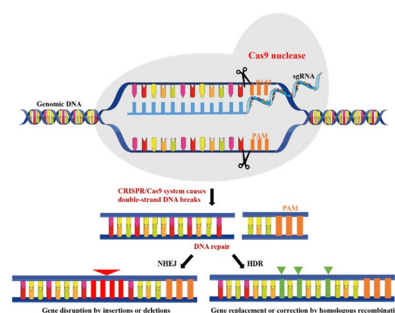
Lin Chen, Wenyan Guo, Chun Mao,\* Jian Shen\* and Mimi Wan\*



1467

### Advanced strategies for CRISPR/Cas9 delivery and applications in gene editing, therapy, and cancer detection using nanoparticles and nanocarriers

Adric Ru Khiing Hii, Xiaole Qi\* and Zhenghong Wu\*

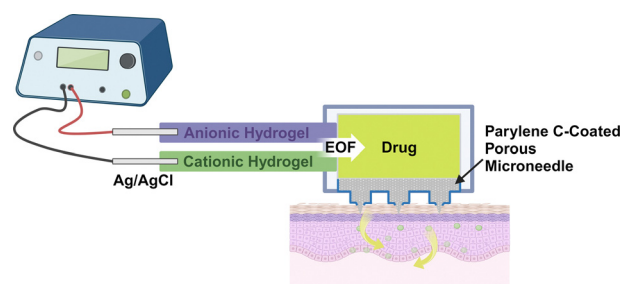


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### Transdermal drug delivery using a porous microneedle device driven by a hydrogel electroosmotic pump

Gaobo Wang, Kosuke Kato, Izuru Aoki, Sae Ichinose, Daisuke Inoue, Soichiro Tottori and Matsuhiko Nishizawa\*

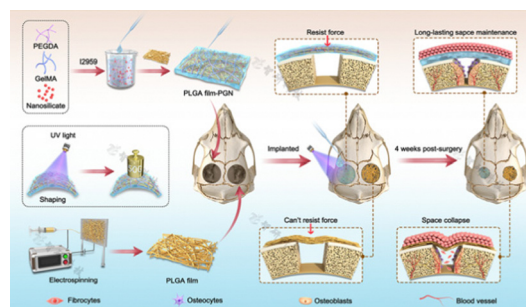


## PAPERS

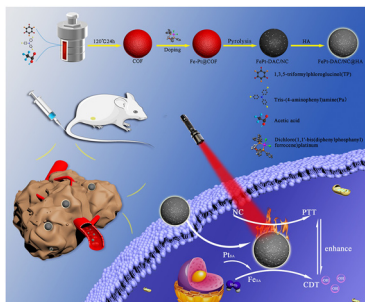
1495

### Development of a rapid-shaping and user-friendly membrane with long-lasting space maintenance for guided bone regeneration

Yuting Wang, Xin Zhang, Shu Zhang, Guangmei Yang, Yuanyuan Li, Yilin Mao, Linxin Yang, Junyu Chen\* and Jian Wang\*



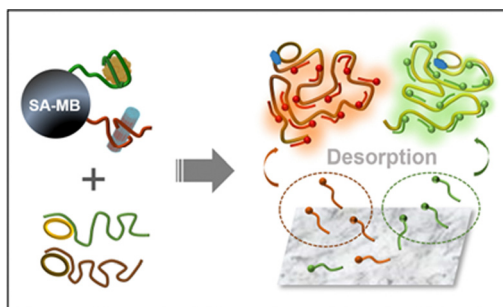
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### Precise design of dual active-site catalysts for synergistic catalytic therapy of tumors

Guodong Cheng, Fuying Chen, Shulian Li, Yu Hu, Zhichao Dai, Zunfu Hu, Zibao Gan, Yunqiang Sun\* and Xiuwen Zheng\*

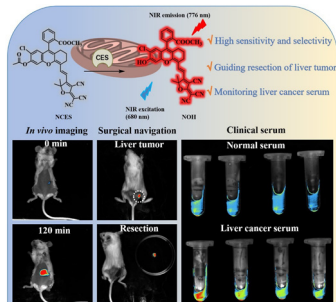
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### Template-controllable rolling circle amplification for dual protein sensitive analysis

Gang Wang, Shi Tang, Yixi Dong, Fangbo Zou, Jin Jiao\* and Yang Xiang\*

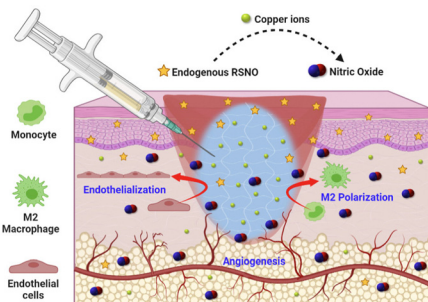
1530



### Carboxylesterase-activated near-infrared fluorescence probe for highly sensitive imaging of liver tumors

Renfeng Jiang, Yuqing Xia, Qian Liu, Hongshuai Zhang,\* Xuefeng Yang, Longwei He\* and Dan Cheng\*

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### Biocatalytic nitric oxide generating hydrogels with enhanced anti-inflammatory, cell migration, and angiogenic capabilities for wound healing applications

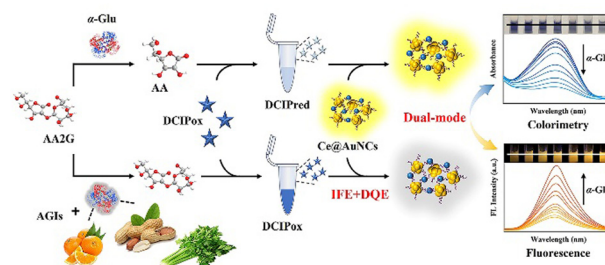
Phuong Le Thi, Dieu Linh Tran, Kyung Min Park, Simin Lee, Dong Hwan Oh and Ki Dong Park\*



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### Fluorometric and colorimetric dual-mode sensing of $\alpha$ -glucosidase based on aggregation-induced emission enhancement of AuNCs

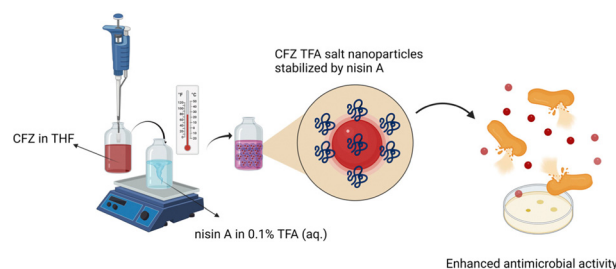
Songrui Li, Huifeng Zhang, Zhenzhen Huang and Qiong Jia\*



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### Pre-formulation of an additive combination of two antimicrobial agents, clofazimine and nisin A, to boost antimicrobial activity

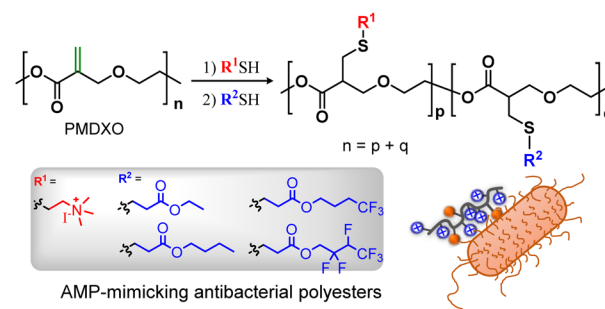
Mateo Flores Naranjo, Ajay Kumar, Poonam Ratrey and Sarah P. Hudson\*



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### Synthesis and antibacterial properties of fluorinated biodegradable cationic polyesters

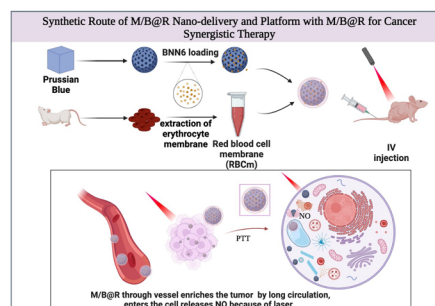
Zhao-Yue Li, Xiaoying Zhang, Yi-Lin Qian, Fu-Sheng Du\* and Zi-Chen Li\*



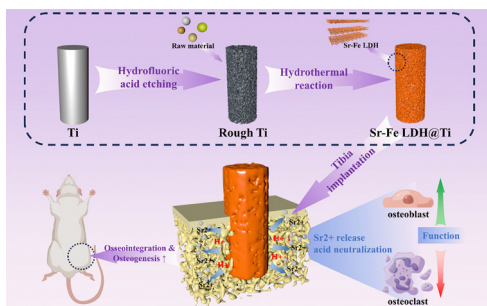
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### Red cell membrane-coating Prussian blue for combined photothermal and NO gas therapy for nasopharyngeal carcinoma

Wenbo Wang, Zhaoyi Cheng, Hui Xing, Shihao Zhou, Qiaozhang Ye, Gaofei Xiong,\* Guanhai Wang\* and Dong Ma\*



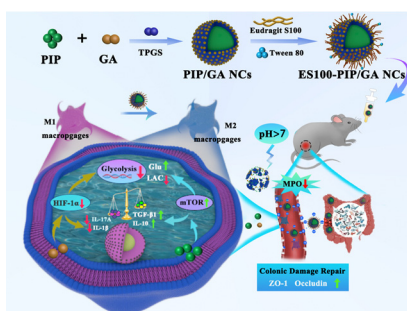
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### Effect of the Sr–Fe layered double hydroxide coating based on the microenvironment response on implant osseointegration in osteoporotic rats

Chenyu Liao, Dongcai He, Kaiwen Yin, Yuhung Lin, Yihan Chen, Ziqiang Zhang, Jing Zhang, Hongrong Luo, Xianchun Chen\* and Yunfeng Li\*

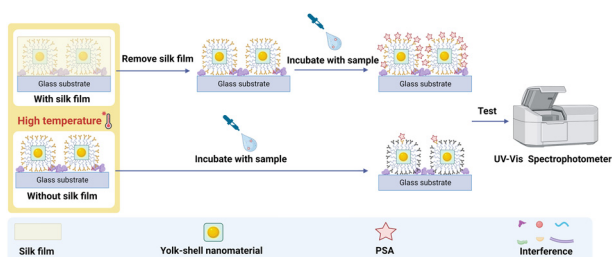
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### Colon-targeted piperine–glycyrrhizic acid nanocrystals for ulcerative colitis synergetic therapy via macrophage polarization

Xia Wu, Qian Zhang, Li Peng, Zonghua Tian, Guojing Gou,\* Wenbao Zuo\* and Jianhong Yang\*

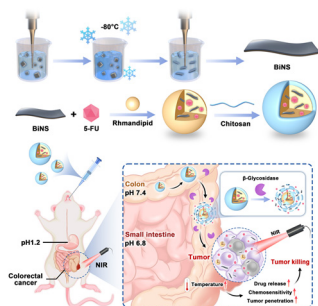
1617



### Plasmonic biochips with enhanced stability in harsh environments for the sensitive detection of prostate-specific antigen

I-Hsiu Yeh, Hui-Fang Shi, Evan Darius, Mei-Chin Lien, Yin-Cheng Lu, Congzhou Wang and Keng-Ku Liu\*

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### $\beta$ -Glycosidase sensitive oral nanoparticles for combined photothermal and chemo treatment of colorectal cancer

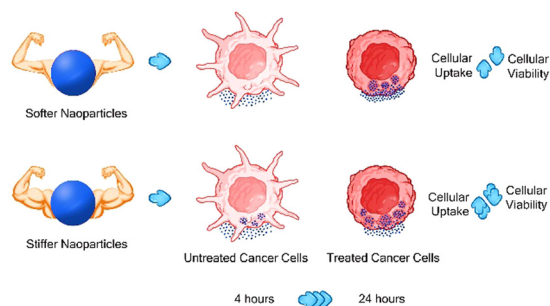
Jingning Zhou, Zequn Zhuang, Rui Gao, Ran Li and Yigang Chen\*



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### Quantification and biological evaluation of $Zn_xFe_{3-x}O_4$ nanoparticle stiffness in a drug delivery system of MCF-7 cancer cells

Hamzah Al-madani, Yiqian Yang, Moath Refat, Qingxin He, Hao Peng, Aiguo Wu\* and Fang Yang\*



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### Effect of zwitterionic sulfobetaine incorporation on blood behaviours, phagocytosis, and *in vivo* biodistribution of pH-responsive micelles with positive charges

Chengwei Wang, Hao Liu, Hu Lin, Rui Zhong, Hao Li, Jiaxin Liu, Xianglin Luo and Meng Tian\*

