

# Biomaterials Science

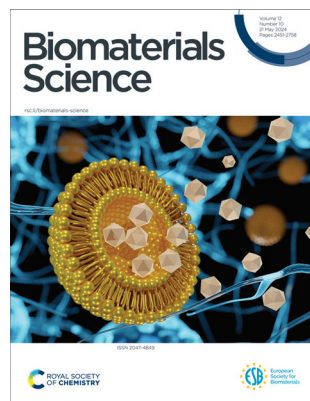
An international high impact journal exploring the underlying science behind the function, interactions and design of biomaterials

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## IN THIS ISSUE

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Cover

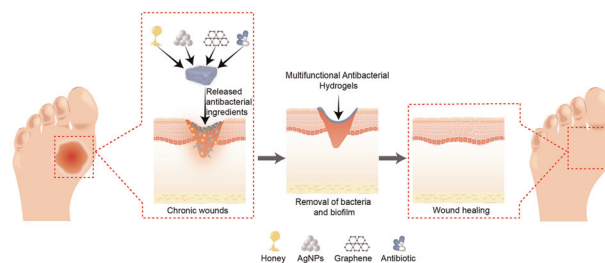
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## REVIEWS

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### Multifunctional antibacterial hydrogels for chronic wound management

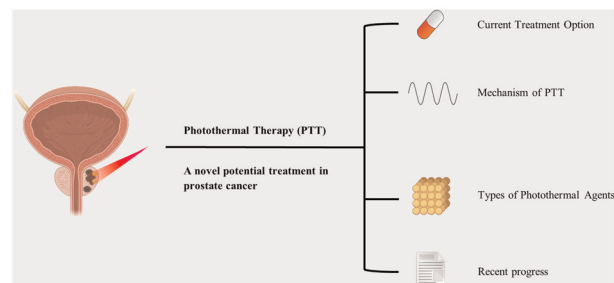
Yungang Hu, Lu Yu, Qiang Dai, Xiaohua Hu and Yuming Shen\*



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### Photothermal therapy: a novel potential treatment for prostate cancer

Zirui Dong, Kaming Xue, Anushikha Verma, Jian Shi, Zhihao Wei, Xiaotian Xia,\* Keshan Wang\* and Xiaoping Zhang\*



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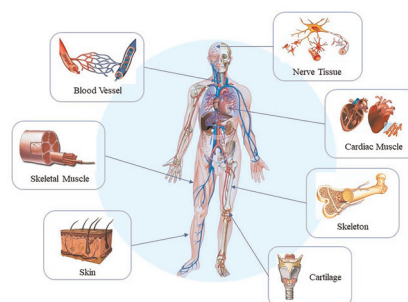
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## REVIEWS

2504

### Janus hydrogels: merging boundaries in tissue engineering for enhanced biomaterials and regenerative therapies

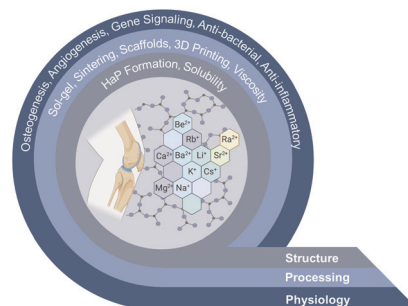
Yingxue Jiang, Chenhui Zhu, Xiaoxuan Ma\* and Daidi Fan\*



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### The unexplored role of alkali and alkaline earth elements (ALAEs) on the structure, processing, and biological effects of bioactive glasses

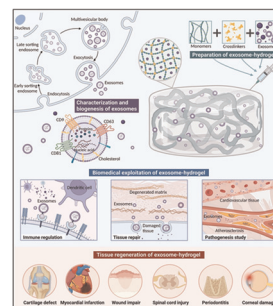
Adam Shearer, Matthew Molinaro, Maziar Montazerian,\* Jessica J. Sly, Marta Miola, Francesco Baino\* and John C. Mauro\*



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### Exosomes encapsulated in hydrogels for effective central nervous system drug delivery

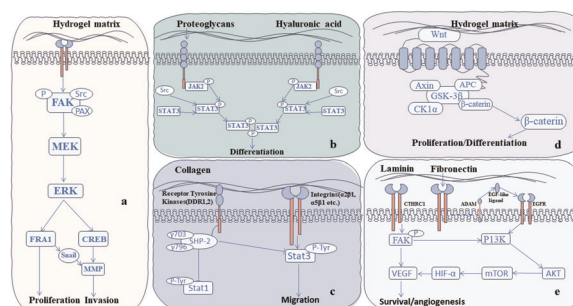
Ziba Zakeri, Morteza Heiderzadeh, Azra Kocarslan, Ecem Metin, Seyed Nasir Hosseini Karimi, Sepideh Saghati, Atay Vural, Göktuğ Akyođaş, Kemal Baysal, Yusuf Yağcı, Yasemin Gürsoy-Özdemir, Savaş Taşođlu, Reza Rahbarghazi and Emel Sokullu\*



2579

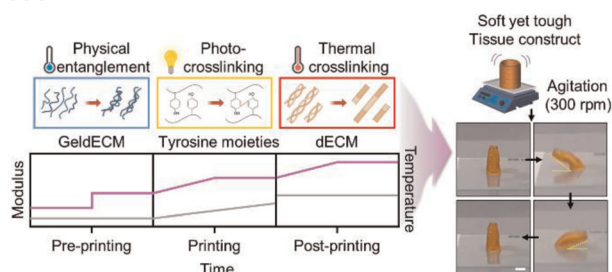
### Applications of hydrogels in tissue-engineered repairing of temporomandibular joint diseases

Xuan Wang, Fushuang Liu, Tianyi Wang, Yikai He and Yongwen Guo\*



## PAPERS

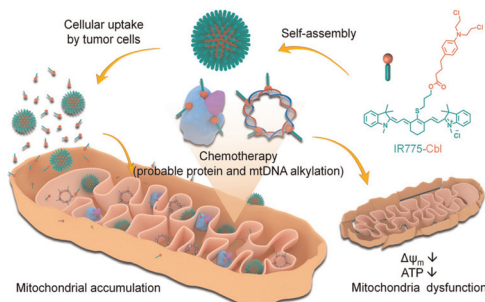
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### Tissue-specific gelatin bioink as a rheology modifier for high printability and adjustable tissue properties

Hohyeon Han, Minji Kim, Uijung Yong, Yeonggwon Jo, Yoo-mi Choi, Hye Jin Kim, Dong Gyu Hwang, Dayoon Kang and Jinah Jang\*

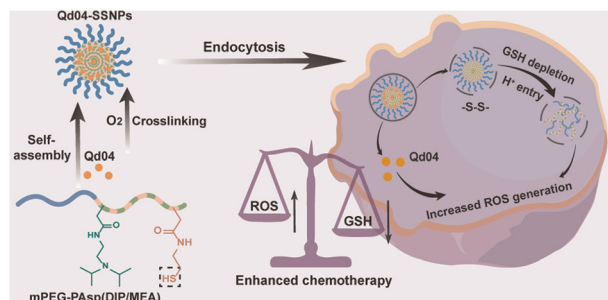
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### A mitochondria-targeting heptamethine cyanine-chlorambucil formulated polymeric nanoparticle to potentiate native tumor chemotherapeutic efficacy

Jing Liu, Jie Zhang, Yongteng Zhang, Wei Wei, Meixiao Zhan, Zhiren Zhang,\* Bing Liu,\* Xianglong Hu\* and Weiling He\*

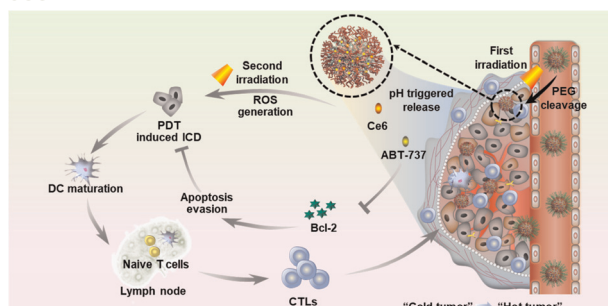
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### Reduction-sensitive polymeric carrier for the targeted delivery of a quinazoline derivative for enhanced generation of reactive oxygen species against cancer

Jianrong Cao, Keze Hong, Chengqi Lv, Weiting Jiang, Qi Chen, Rongze Wang\* and Yong Wang\*

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### Light-inducible nanodrug-mediated photodynamic and anti-apoptotic synergy for enhanced immunotherapy in triple-negative breast cancer

Jing Huang, Xingliang Liu, Minzhao Lin, Zecong Xiao\* and Xintao Shuai

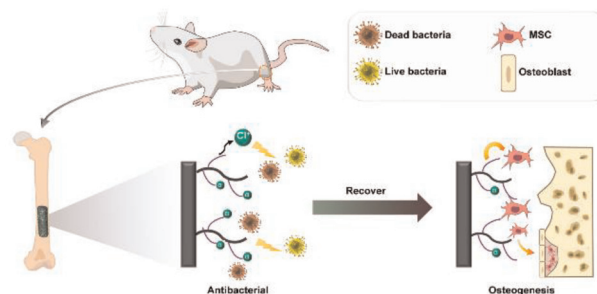


## PAPERS

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### N-Halaminated spermidine-containing polymeric coating enables titanium to achieve dual functions of antibacterial and osseointegration

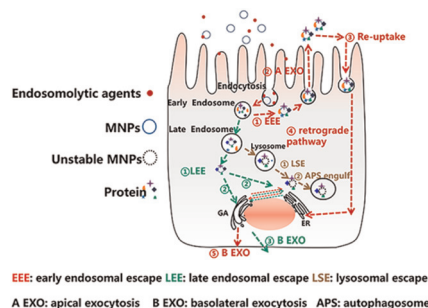
Hang Ren, Peng Wang, Hanwen Huang, Junshen Huang, Yuheng Lu, Yanfeng Wu, Zhongyu Xie, Youchen Tang,\* Zhaopeng Cai\* and Huiyong Shen\*



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### Escape sites from the endo-lysosomal trafficking route manipulate exocytosis of nanoparticles in polar epithelium

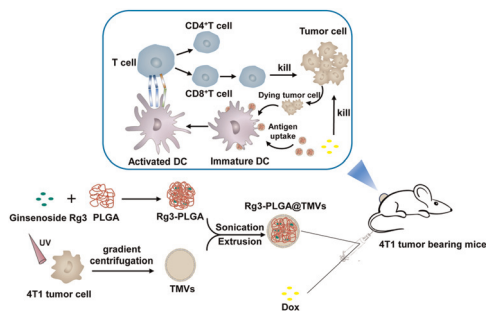
Lingling Wang, Yuting Li, Xi Liu, Liyun Xing, Ruinan Wu and Yuan Huang\*



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### Bioinspired ginsenoside Rg3 PLGA nanoparticles coated with tumor-derived microvesicles to improve chemotherapy efficacy and alleviate toxicity

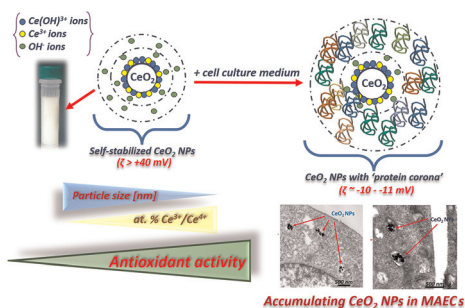
Shulei Zhang, Bo Zheng, Yiqi Wei, Yuhao Liu, Lan Yang, Yujiao Qiu, Jing Su and Mingfeng Qiu\*



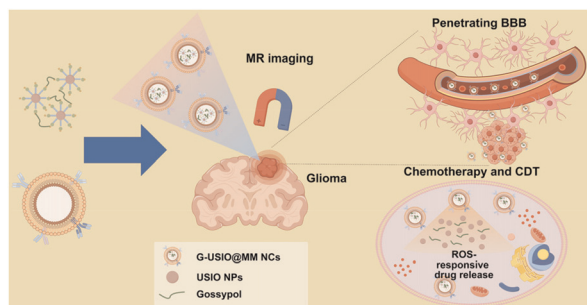
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### Bioactivity of cerium dioxide nanoparticles as a function of size and surface features

Veronika Sarnatskaya,\* Yuliia Shlapa,\* Denis Kolesnik, Olexandra Lykhova, Dmytro Klymchuk, Serhii Solopan, Svitlana Lyubchyk, Iuliia Golovynska, Junle Qu, Yurii Stepanov and Anatolii Belous



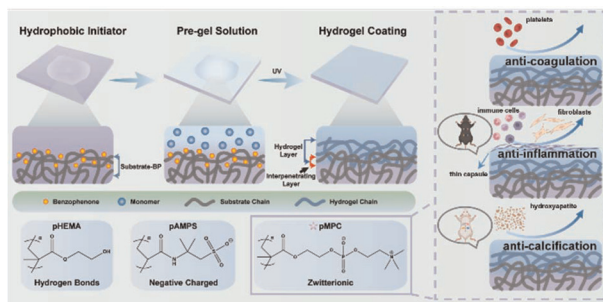
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### Macrophage membrane-camouflaged nanoclusters of ultra-small iron oxide nanoparticles for precision glioma theranostics

Bin Zhang, Rui Yang, Hongwei Yu, Yamin Peng, Haoyu Huang, Meera Moydeen Abdul Hameed, Han Wang, Guixiang Zhang,\* Mohamed EL-Newehy, Mingwu Shen, Xiangyang Shi\* and Shaojun Peng\*

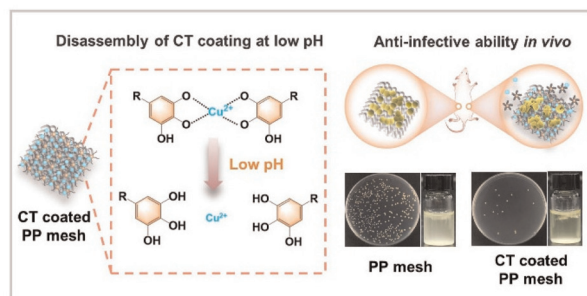
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### Comparison study of surface-initiated hydrogel coatings with distinct side-chains for improving biocompatibility of polymeric heart valves

Yiduo Chen, Yirong Guo, Xinyi Li, Yanchen Chen, Jiarong Wang, Honglin Qian, Jing Wang,\* Youxiang Wang, Xinyang Hu, Jian'an Wang and Jian Ji\*

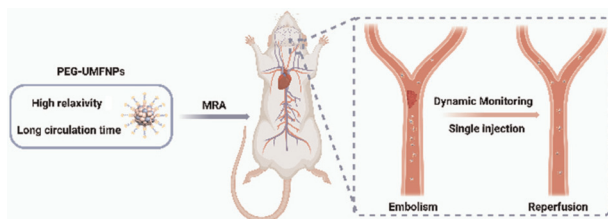
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### pH-Responsive antibacterial metal-phenolic network coating on hernia meshes

Rui Ding, Pandi Peng, Jingjing Huo, Kun Wang, Pengxiang Liu, Hanxue Wu, Likun Yan\* and Peng Li\*

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### Ultra-small catechol-PEG-anchored ferrite nanoparticles for highly sensitive magnetic resonance angiography

Yanzhi Dong, Jiaojiao Wang, Ting Zhou, Jinbing Pan, Xu Wang and Shao-Kai Sun\*



## CORRECTION

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**Correction: Hindering the unlimited proliferation of tumor cells synergizes with destroying tumor blood vessels for effective cancer treatment**

Ya Liu, Yajun Xu,\* Ying Wang, Jianlin Lv, Kun Wang and Zhaohui Tang\*

