Biomaterials Science

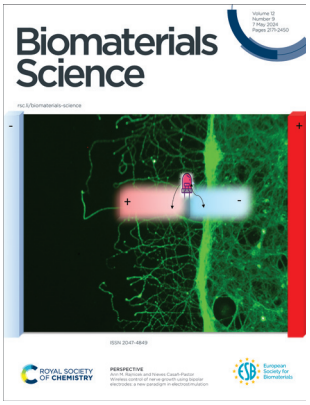
An international high impact journal exploring the underlying science behind the function, interactions and design of biomaterials

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

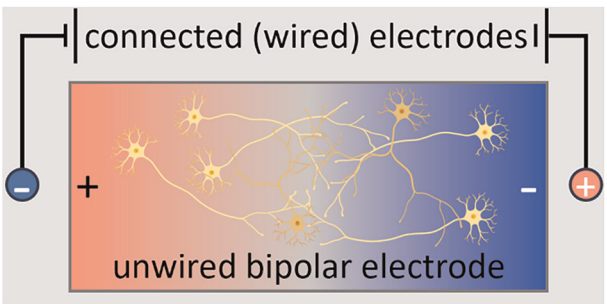
ISSN 2047-4849 CODEN BSICCH 12(9) 2171–2450 (2024)



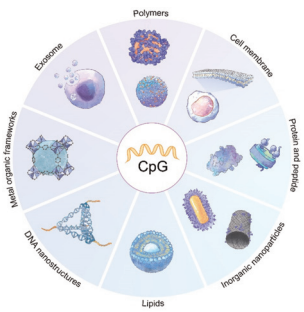
Cover
See Ann M. Rajnicek and Nieves Casañ-Pastor, pp. 2180–2202.

Image reproduced by permission of Nieves Casañ-Pastor from *Biomater. Sci.*, 2024, **12**, 2180.

PERSPECTIVE



REVIEWS



ROYAL SOCIETY OF CHEMISTRY

Royal Society of Chemistry approved training courses

Explore your options.
Develop your skills.
Discover learning that suits you.

Courses in the classroom, the lab, or online

Find something for every stage of your professional development. Search our database by:

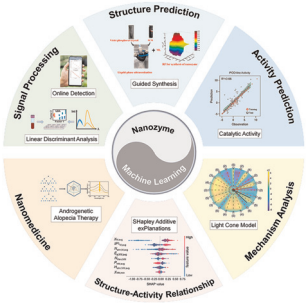
- subject area
- location
- event type
- skill level

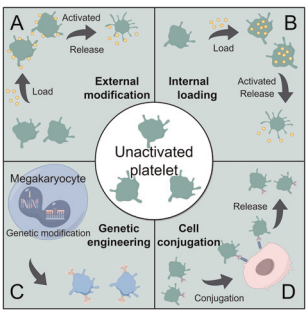
Members **get at least 10% off**

Visit **rsc.li/cpd-training**

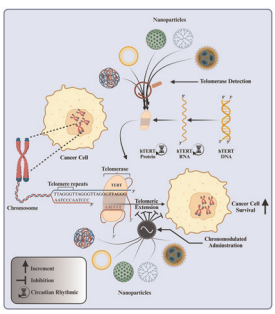
SAVE 10%

REVIEWS

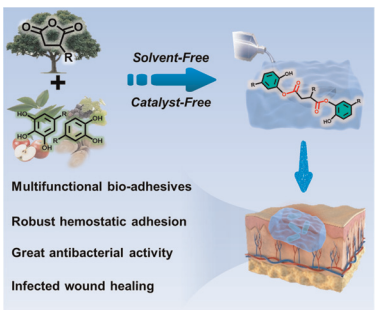




MINIREVIEW

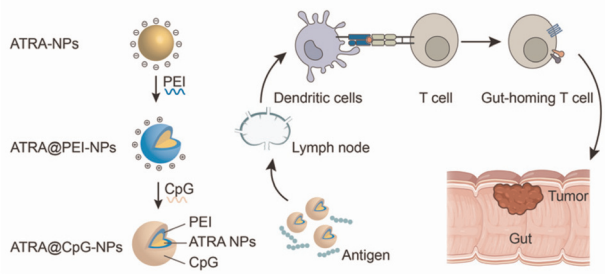


PAPERS



PAPERS

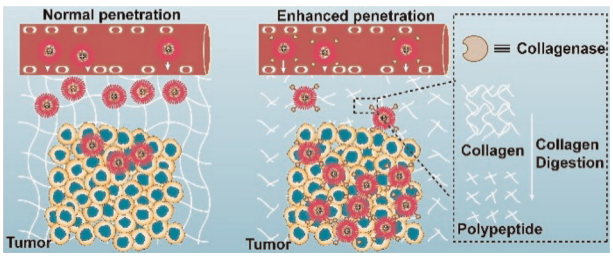
2292



Layer-by-layer nanoparticle encapsulating all-trans retinoic acid and CpG as a mucosal adjuvant targeting colorectal cancer

Shiwei Mi, Wei Li, Yixing Wen, Chen Yang, Shuai Liu, Jingjiao Li, Xingdi Cheng, Yuanyuan Zhao, Haonan Huo, Haowei Zu and Xueguang Lu*

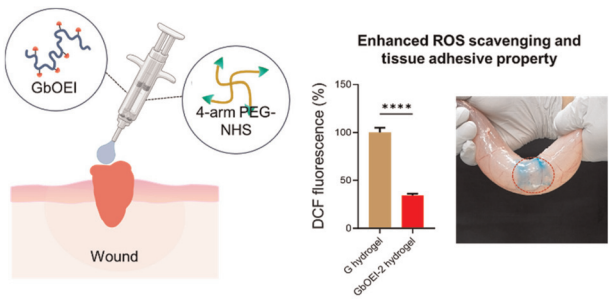
2302



Enhancing the tumor penetration of multiarm polymers by collagenase modification

Bo Yu, Weijie Wang, Yongmin Zhang, Ying Sun, Cheng Li, Qian Liu, Xu Zhen,* Xiqun Jiang* and Wei Wu*

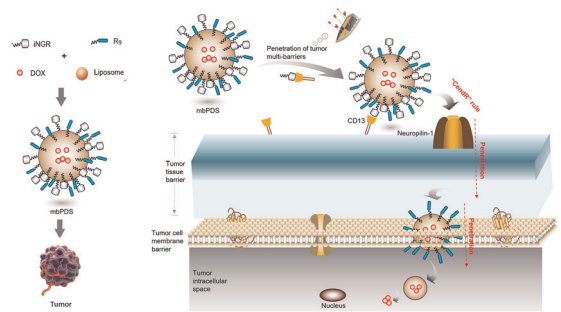
2312



Enhanced ROS scavenging and tissue adhesive abilities in injectable hydrogels by protein modification with oligoethyleneimine

Debabrata Palai, Miho Ohta, Iga Cetnar, Tetsushi Taguchi* and Akihiro Nishiguchi*

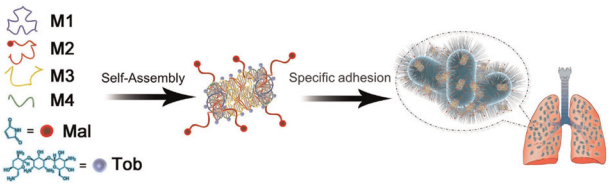
2321

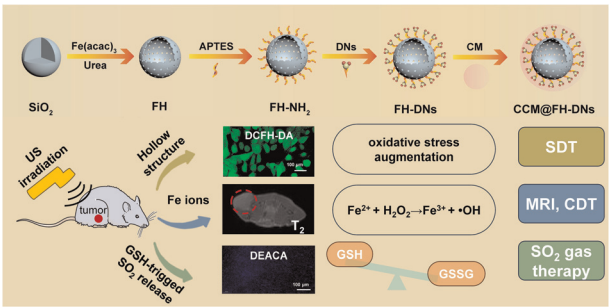


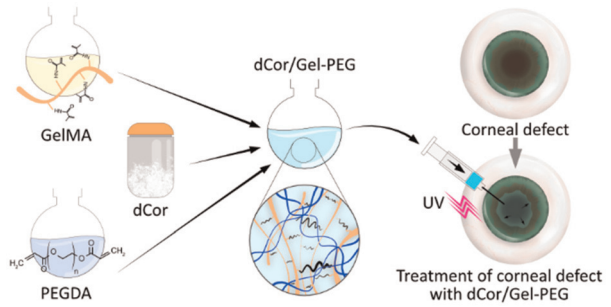
Multibarrier-penetrating drug delivery systems for deep tumor therapy based on synergistic penetration strategy

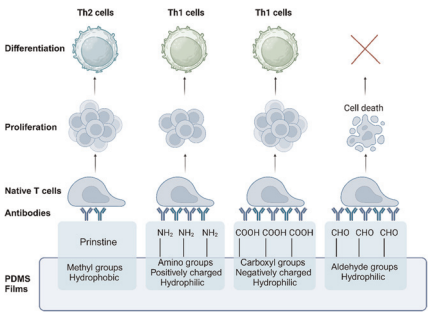
Hui-Feng Zhang, Huan Yu, Shuang-Xue Pan, Chuang Zhang, Ying-Hui Ma, Yan-Fei Zhang, Li-Li Zuo, Cheng-Yi Hao, Xiao-Ying Lin, Hao Geng, Di Wu, Shang-Qiang Mu, Wei-Lun Yu and Nian-Qiu Shi*

PAPERS



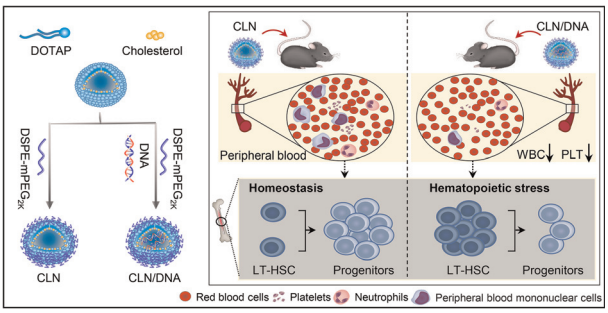






PAPERS

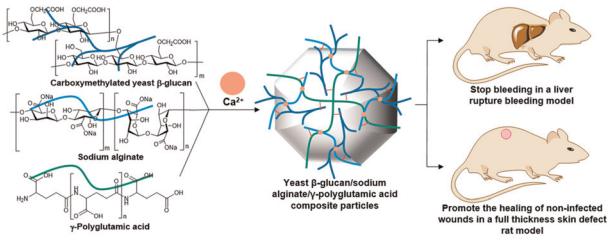
2381



Impacts of cationic lipid–DNA complexes on immune cells and hematopoietic cells *in vivo*

Xiuxiu Cong, Huizhu Tan, Yue Lv, Kuirong Mao, Yanbao Xin, Jialiang Wang, Xiandi Meng, Meng Guan, Haorui Wang, Yong-Guang Yang and Tianmeng Sun*

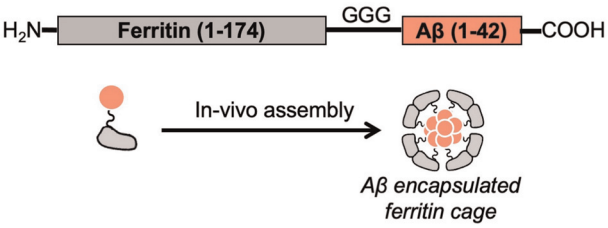
2394



Fabrication of yeast β-glucan/sodium alginate/γ-polyglutamic acid composite particles for hemostasis and wound healing

Qinglin Zou, Hongdong Duan, Shimin Fang, Wenlong Sheng, Xiaobin Li, Rostyslav Stoika, Nataliya Finiuk, Rostyslav Panchuk, Kechun Liu* and Lizhen Wang*

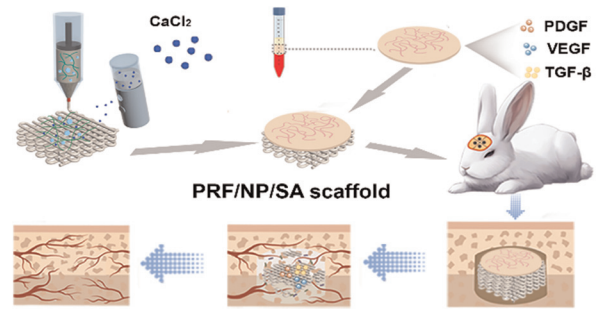
2408



Fusion of amyloid beta with ferritin yields an isolated oligomeric beta-sheet-rich aggregate inside the ferritin cage

Basudev Maity, Shiori Kameyama, Jiaxin Tian, Thuc Toan Pham, Satoshi Abe, Eri Chatani, Kazuyoshi Murata and Takafumi Ueno*

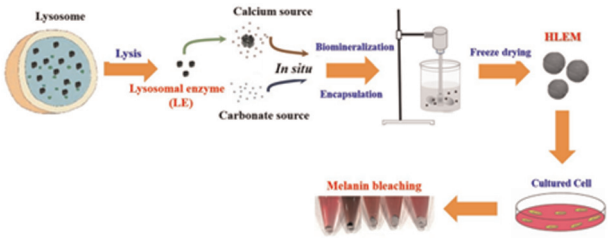
2418



3D printing nacre powder/sodium alginate scaffold loaded with PRF promotes bone tissue repair and regeneration

Bin Liu, Cewen Hu, Xinyue Huang, Kaiqi Qin, Lei Wang, Zhilong Wang, Jiachen Liang, Fuqiang Xie* and Zengjie Fan*

PAPERS



CORRECTIONS