

Biomaterials Science

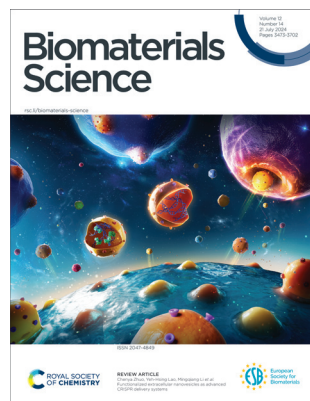
An international high impact journal exploring the underlying science behind the function, interactions and design of biomaterials

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(14) 3473–3702 (2024)



Cover

See Chenya Zhuo,
Yeh-Hsing Lao,
Mingqiang Li *et al.*,
pp. 3480–3499.

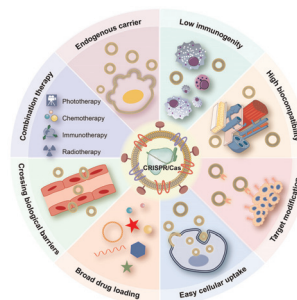
Image reproduced by
permission of Mingqiang Li
from *Biomater. Sci.*, 2024, **12**,
3480.

REVIEWS

3480

Functionalized extracellular nanovesicles as advanced CRISPR delivery systems

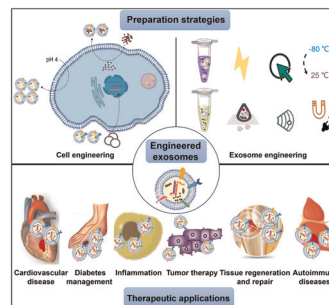
Siqing Wang, Huimin Kong, Chenya Zhuo,* Li Liu,
Shixian Lv, Du Cheng, Yeh-Hsing Lao,* Yu Tao and
Mingqiang Li*



3500

A comprehensive review of engineered exosomes from the preparation strategy to therapeutic applications

Xiyang Fan, Yiwen Zhang, Wenshuai Liu,
Mingzheng Shao, Yibo Gong, Tingya Wang, Song Xue*
and Rui Nian*



RSC Sustainability

GOLD
OPEN
ACCESS

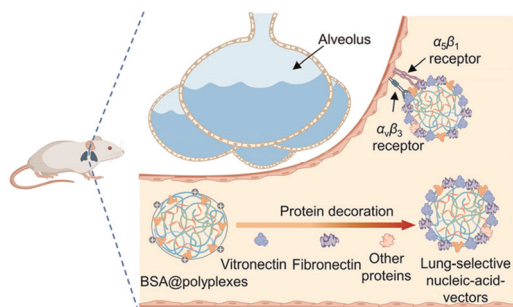
Dedicated to sustainable
chemistry and new solutions

For an open, green and inclusive future

rsc.li/RSCSus

Fundamental questions
Elemental answers

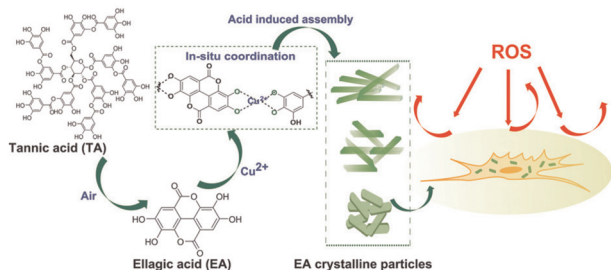
3600



Lung-selective nucleic acid vectors generated by *in vivo* lung-targeting-protein decoration of polyplexes

Xu Pu, Zejuan Li, Ran Chen, Junqiu Shi, Jinlong Qin,* Yunqing Zhu* and Jianzhong Du*

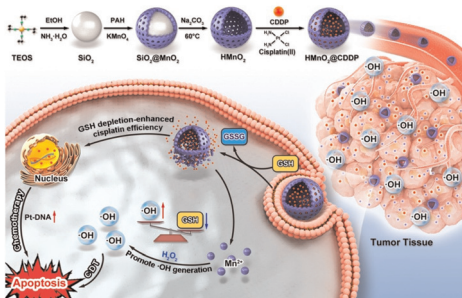
3610



Green and shape-tunable synthesis of ellagic acid crystalline particles by tannic acid for neuroprotection against oxidative stress

Wei Ha, Rui Ma, Jing-Yan Kang, Yves Iradukunda and Yan-Ping Shi*

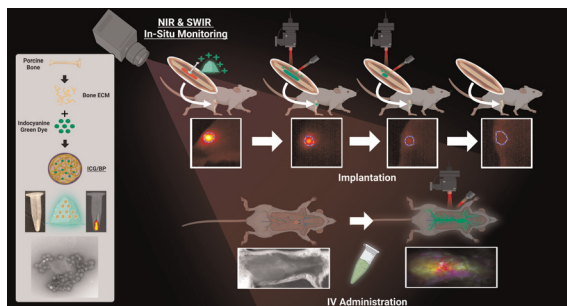
3622



Manganese self-boosting hollow nanoenzymes with glutathione depletion for synergistic cancer chemo-chemodynamic therapy

Xinyi Cai, Deng Cai, Xiaozhen Wang, Dou Zhang, Long Qiu, Zhenying Diao, Yong Liu, Jianbo Sun, Daxiang Cui,* Yanlei Liu* and Ting Yin*

3633



From bone to nanoparticles: development of a novel generation of bone derived nanoparticles for image guided orthopedic regeneration

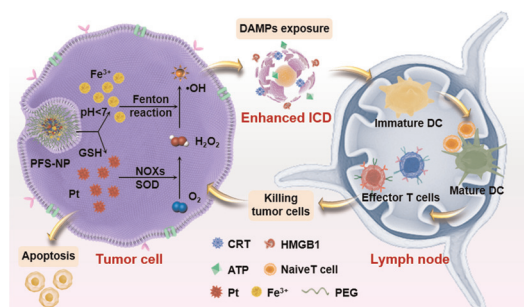
Austin Stellpflug, Jacob Walls, Christopher Hansen, Amit Joshi and Bo Wang*



3649

Self-assembled metal–phenolic network nanoparticles for delivery of a cisplatin prodrug for synergistic chemo-immunotherapy

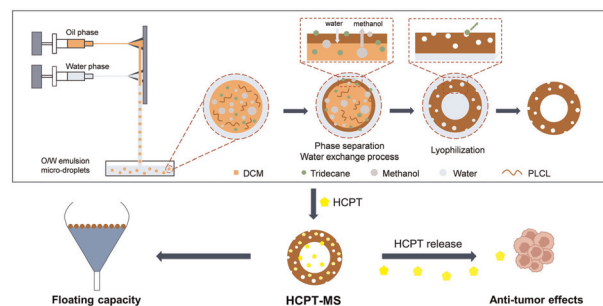
Xingzu Zhang, Qingyu Zong, Taian Lin, Ihsan Ullah, Maolin Jiang, Siyi Chen, Wenjie Tang, Yuan Guo,* Youyong Yuan* and Jinzhi Du*



3659

Encapsulation of hydroxycamptothecin within porous and hollow poly(L-lactide-co-ε-caprolactone) microspheres as a floating delivery system for intravesical instillation

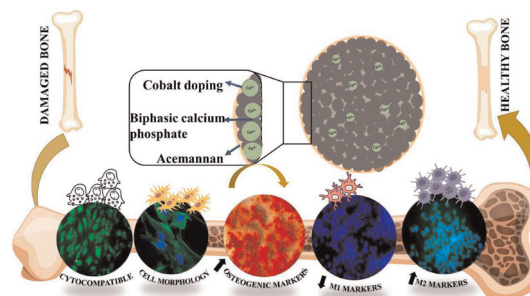
Shiya Zhuang, Xingwei Jin, Lian Cen* and Yuan Shao*



3672

Acemannan coated, cobalt-doped biphasic calcium phosphate nanoparticles for immunomodulation regulated bone regeneration

Deepa Negi, Kumari Bhavya, Durba Pal and Yashveer Singh*



3686

A photoactivatable upconverting nanodevice boosts the lysosomal escape of PROTAC degraders for enhanced combination therapy

Jiayin Zhan, Xiang Li, Yueru Mu, Huiqin Yao, Jun-Jie Zhu* and Jingjing Zhang*

