

Journal of Materials Chemistry B

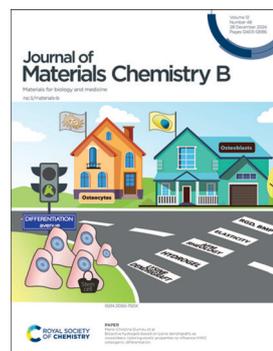
Materials for biology and medicine

rsc.li/materials-b

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 2050-750X CODEN JMCBDV 12(48) 12403–12686 (2024)



Cover

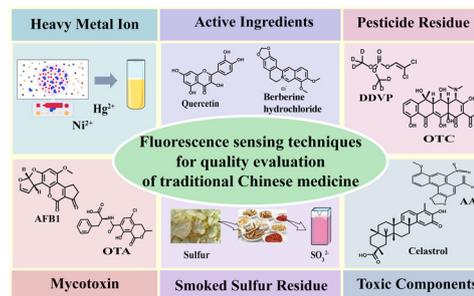
See Marie-Christine Durrieu *et al.*, pp. 12508–12522. Image reproduced by permission of Marie-Christine Durrieu from *J. Mater. Chem. B*, 2024, 12, 12508.

REVIEWS

12412

Fluorescence sensing techniques for quality evaluation of traditional Chinese medicines: a review

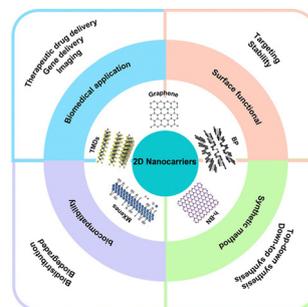
Yanyu Xiao, Hui Wang, Chenxia Gao, Xinyi Ye, Yuting Lai, Meiling Chen* and Xiaoliang Ren*



12437

Recent advances in two-dimensional materials for drug delivery

Ranran Zhang, Zichao Yan, Ming Gao, Bingxin Zheng, Bin Yue* and Meng Qiu*



ChemComm

Uncover new possibilities
with outstanding
preliminary research

Original discoveries, fuelling
every step of scientific progress



rsc.li/chemcomm

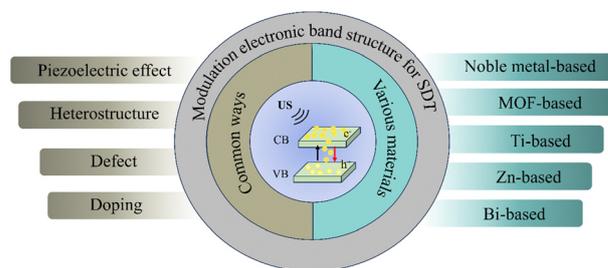
Fundamental questions
Elemental answers

REVIEWS

12470

Electronic band structure modulation for sonodynamic therapy

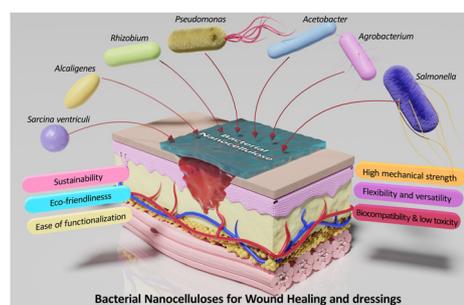
Yafang Shi, Chengzhilin Li, Linquan Li, Qingbin He, Qingyi Zhu, Ziang Xu, Yanzi Liu, Nianlei Zhang, Meng Zhang,* Jianwei Jiao* and Runxiao Zheng*



12489

Bacterial nanocelluloses as sustainable biomaterials for advanced wound healing and dressings

Atefeh Zarepour, Bahar Gok, Yasemin Budama-Kilinc, Arezoo Khosravi, Siavash Iravani* and Ali Zarrabi*

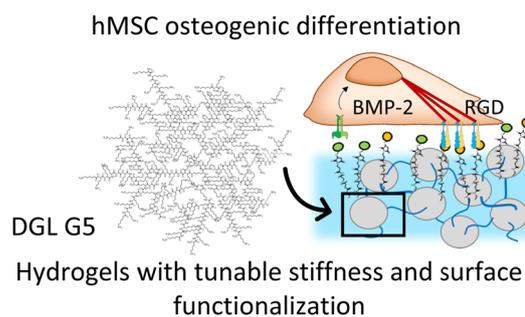


PAPERS

12508

Bioactive hydrogels based on lysine dendrigrafts as crosslinkers: tailoring elastic properties to influence hMSC osteogenic differentiation

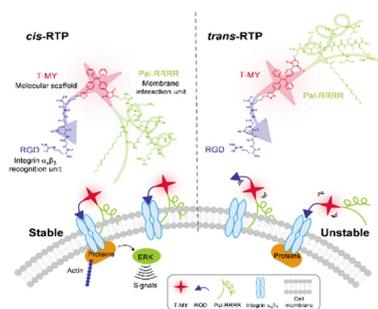
Michele Valeo, Sébastien Marie, Murielle Rémy, Tiphaine Menguy, Cédric Le Coz, Michael Molinari, Cécile Feuillie, Fabien Granier and Marie-Christine Durrieu*



12523

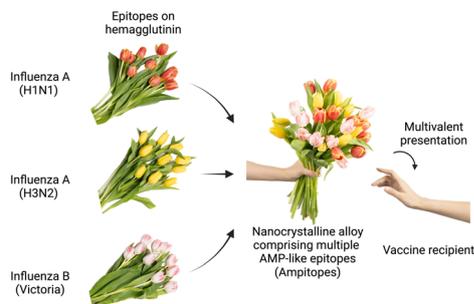
Tuning the affinity of probes with transmembrane proteins by constructing peptide-conjugated *cis*/*trans* isomers based on molecular scaffolds

Jing-Jing Hu, Juliang Yang, Yiheng Liu, Guangwen Lu, Zujin Zhao, Fan Xia and Xiaoding Lou*



PAPERS

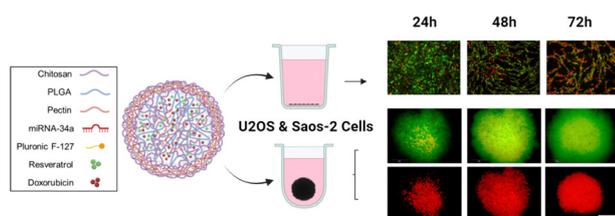
12530



Nanocrystalline alloy-mediated delivery of mosaic epitope peptides for universal influenza vaccine

Hongyu Wang, Han Fu, Liyan Zhai, Jiaqing Le, Bohan Guo, Yuyang Zhou, Chenlin Ji, Dapeng Li and Yue Zhang*

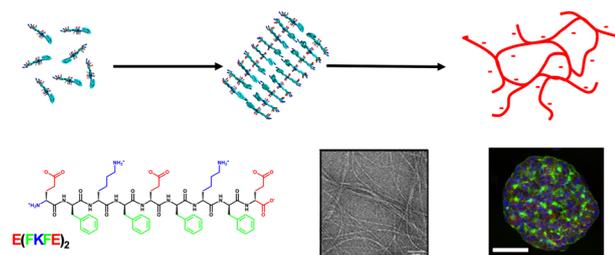
12540



Multimodal layer-by-layer nanoparticles: a breakthrough in gene and drug delivery for osteosarcoma

Eugenia Crisafulli, Annachiara Scalzone, Chiara Tonda-Turo, Joel Girón-Hernández* and Piergiorgio Gentile*

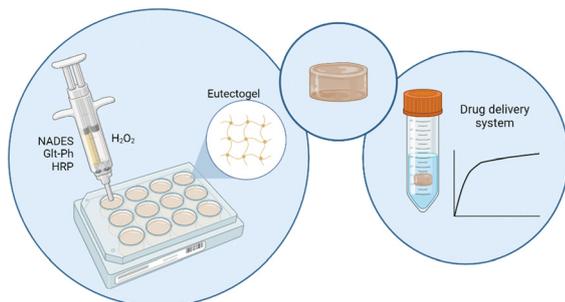
12553



Effect of supramolecular peptide hydrogel scaffold charge on HepG2 viability and spheroid formation

Yu Xin, Cosimo Ligorio, Marie O'Brien, Richard Collins, Siyuan Dong, Aline F. Miller, Alberto Saiani and Julie E. Gough*

12567



Development of enzymatically crosslinked natural deep eutectogels: versatile gels for enhanced drug delivery

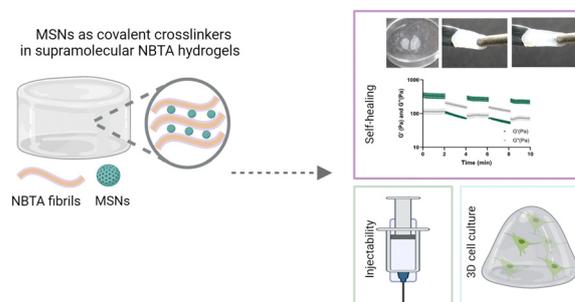
Liane Meneses, Dimitra Antonia Bagaki, Ana Roda, Alexandre Paiva and Ana Rita C. Duarte*



12577

Extracellular matrix mimetic supramolecular hydrogels reinforced with covalent crosslinked mesoporous silica nanoparticles

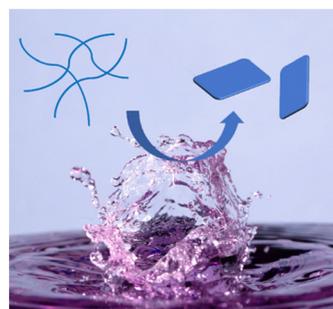
Aygül Zengin, Shahzad Hafeez, Pamela Habibovic, Matthew Baker and Sabine van Rijt*



12589

A water playground for peptide re-assembly from fibrils to plates

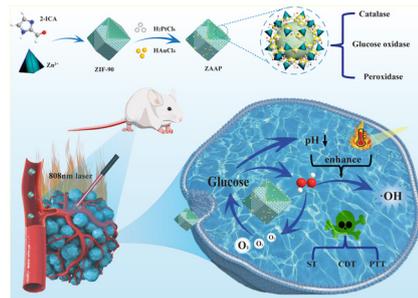
Simone Adorinni, Marina Kurbasic, Ana M. Garcia, Slavko Kralj, Ottavia Bellotto, Erica Scarel, Paolo Pengo, Rita De Zorzi, Michele Melchionna, Attilio V. Vargiu* and Silvia Marchesan*



12597

Efficient bionic nanozyme based on AuPt NPs@ZIF-90 used for cyclic catalysis multimodal tumor therapy

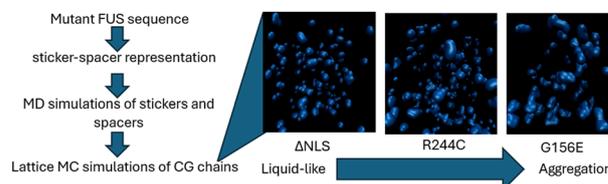
Wan Huang, Song Zhang, Li Luo, Yalong Pan, Lijun Han and Yao Yu*



12608

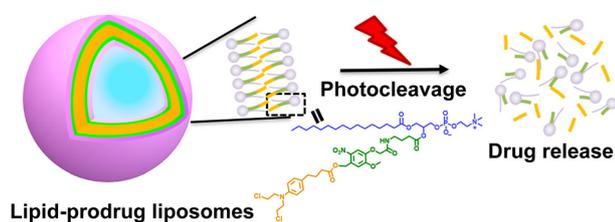
Multi-scale *in silico* analysis of the phase separation behavior of FUS mutants

Kalindu S. Fernando and Ying Chau*



PAPERS

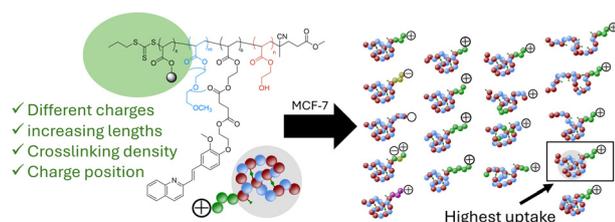
12618



Photoresponsive prodrug-based liposomes for controllable release of the anticancer drug chlorambucil

Xiaoting Wang, Guangtian Suo, Shinan Ma, Chunxi Yang* and Chunyan Bao*

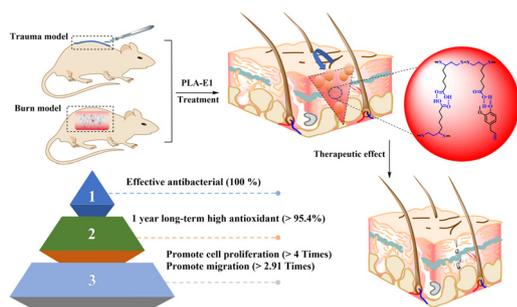
12627



Tadpole-like cationic single-chain nanoparticles display high cellular uptake

Yen Vo, Radhika Raveendran, Cheng Cao, Linqing Tian, Rebecca Y. Lai and Martina H. Stenzel*

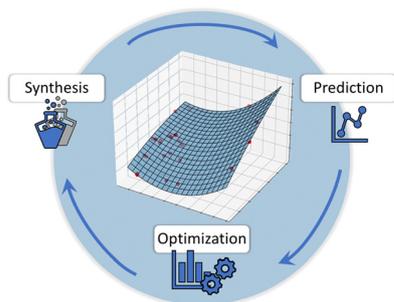
12641



One-pot rapid preparation of long-term antioxidant and antibacterial biomedical gels based on lipoic acid and eugenol for accelerating cutaneous wound healing

Yungang Feng, Fangrui Xie, Rui Ding, Qingrong Zhang, Youzhi Zeng, Li Li, Lianbin Wu,* Yunlong Yu* and Linxuan Fang*

12652



Navigating predictions at nanoscale: a comprehensive study of regression models in magnetic nanoparticle synthesis

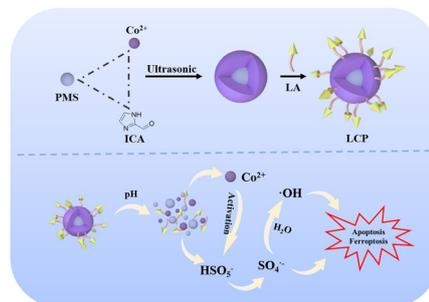
Lukas Glänzer, Lennart Göpfert, Thomas Schmitz-Rode and Ioana Slabu*



12665

Lactobionic acid modified cobalt coordination polymer-coated peroxymonosulfate nanoparticles generate sulfate/hydroxy dual-radicals for targeted cancer therapy

Jiahui Li, Jiaxuan Li, Zelong Chen, Yichen Wan, Yi Wang, Zhichao Pei and Yuxin Pei*



12672

Exchange of free and capsule conjugated cyanine dyes between cells

Zhanna V. Kozyreva, Polina A. Demina, Olga I. Gusliakova, Gleb B. Sukhorukov* and Olga A. Sindeeva*

