

Journal of Materials Chemistry B

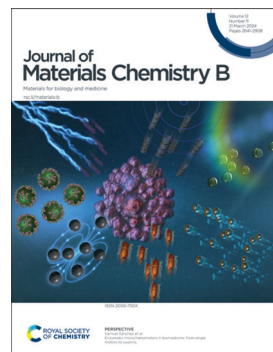
Materials for biology and medicine

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(11) 2641–2908 (2024)



Cover

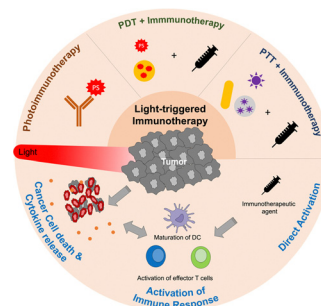
See Samuel Sánchez
et al., pp. 2711–2719.
Image reproduced
by permission of
Samuel Sánchez from
J. Mater. Chem. B,
2024, 12, 2711.

REVIEWS

2650

Recent advances in light-triggered cancer immunotherapy

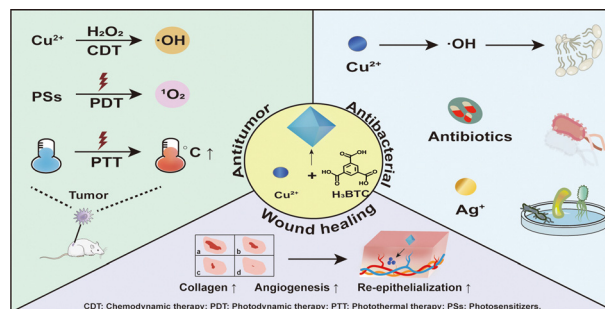
Jin-Kyoung Yang, Hayoon Kwon and Sehoon Kim*



2670

Unveiling the potential of HKUST-1: synthesis, activation, advantages and biomedical applications

Liuxuan Yang, Ke Wang, Ling Guo, Xiao Hu and Meiling Zhou*



Environmental Science journals

One impactful portfolio for
every exceptional mind

Harnessing the power of interdisciplinary
science to preserve our environment

rsc.li/envsci

Fundamental questions
Elemental answers

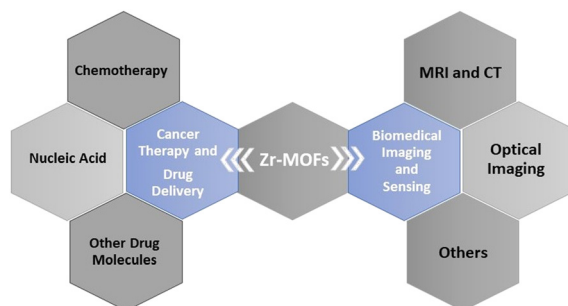


REVIEWS

2691

MOF magic: zirconium-based frameworks in theranostic and bio-imaging applications

Dinesh K. Gupta, Santosh Kumar* and Mohammad Younus Wani

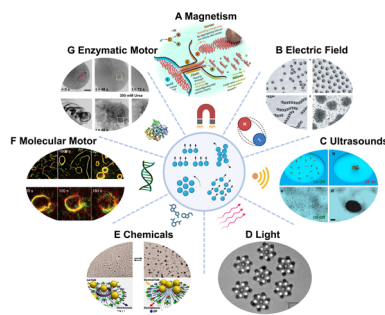


PERSPECTIVES

2711

Enzymatic micro/nanomotors in biomedicine: from single motors to swarms

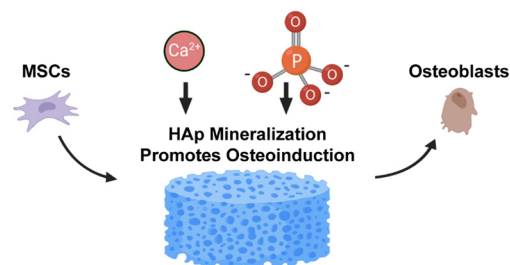
Shuqin Chen, Carles Prado-Morales, Daniel Sánchez-deAlcázar and Samuel Sánchez*



2720

Trends in bioactivity: inducing and detecting mineralization of regenerative polymeric scaffolds

Brandon M. Nitschke, Felipe O. Beltran, Mariah S. Hahn and Melissa A. Grunlan*

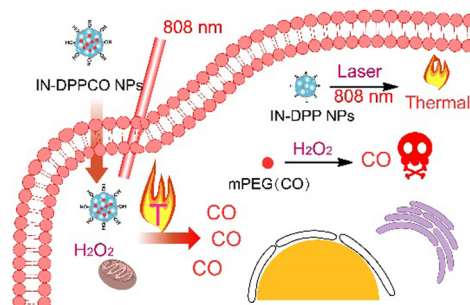
Bioactive Regenerative Polymeric Scaffold

PAPERS

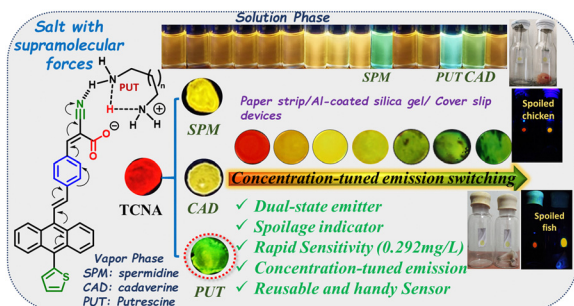
2737

H₂O₂-triggered controllable carbon monoxide delivery for photothermally augmented gas therapy

Kaiwen Chang, Xiaolin Sun, Mingying Fu, Bing Han, Xiaopeng Jiang, Qiaofang Qi, Yang Zhang, Tianjun Ni,* Chunpo Ge* and Zhijun Yang*



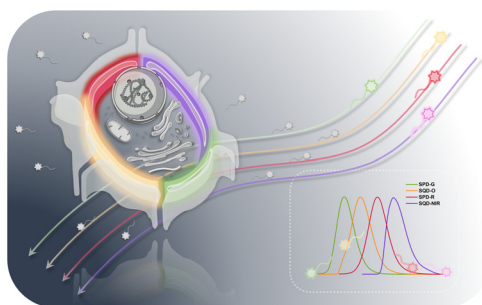
2746



Concentration-tuned diverse response to selective biogenic amines using a reusable fluorophore: monitoring protein-rich food spoilage

Madhuparna Chakraborty, Pandiyan Sivasakthi, Pralok K. Samanta and Manab Chakravarty*

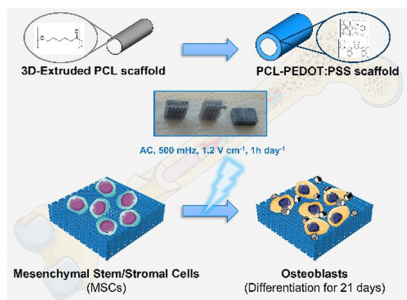
2761



Target-activated multicolor fluorescent dyes for 3D imaging of plasma membranes and tracking of apoptosis

Junjun Pan, Xin Peng, Chuangye Yao, Jiaqi Zuo, Tingting Lei, Hui Feng, Kewei Zhang, Engao Zhu* and Zhaosheng Qian*

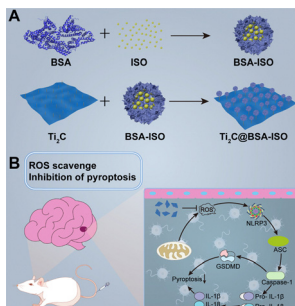
2771



Synergy between 3D-extruded electroconductive scaffolds and electrical stimulation to improve bone tissue engineering strategies

João C. Silva,* Pedro Marcelino, João Meneses, Frederico Barbosa, Carla S. Moura, Ana C. Marques, Joaquim M. S. Cabral, Paula Pascoal-Faria, Nuno Alves, Jorge Morgado, Frederico Castelo Ferreira* and Fábio F. F. Garrudo*

2795



Simultaneous antioxidant and neuroprotective effects of two-dimensional (2D) MXene-loaded isoquercetin for ischemic stroke treatment

Limin Fan, Xinhua Lin, Limin Hong, Lehui Li, Run Lin, Tianbin Ren, Jia Tian* and Miao Chen*

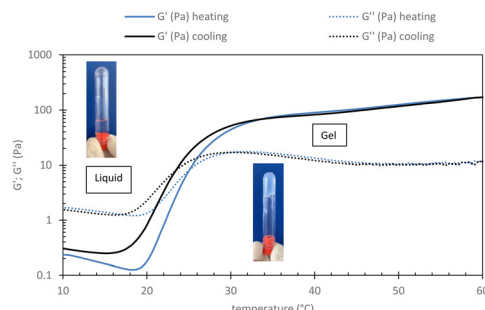


PAPERS

2807

Injectable polyoxazoline grafted hyaluronic acid thermoresponsive hydrogels for biomedical applications

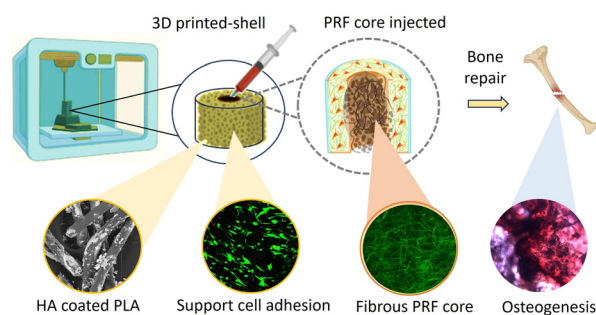
Morgane Morel, Mathieu Madau, Didier Le Cerf, Virginie Dulong, Anne-Claire Groo, Aurélie Malzert-Fréon and Luc Picton*



2818

Development of bioactive short fiber-reinforced printable hydrogels with tunable mechanical and osteogenic properties for bone repair

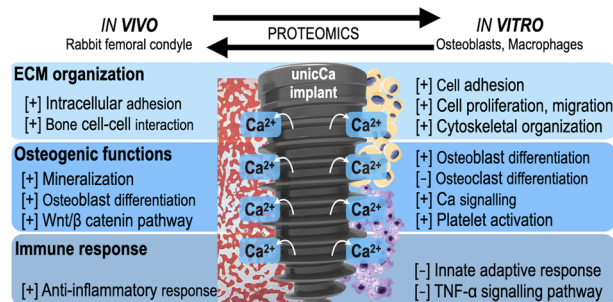
Nafiseh Moghimi,* Meenakshi Kamaraj, Fatemeh Zehtabi, Saber Amin Yavari, Mohammad Kohandel, Ali Khademhosseini* and Johnson V. John*



2831

Enhancing the correlation between *in vitro* and *in vivo* experiments in dental implant osseointegration: investigating the role of Ca ions

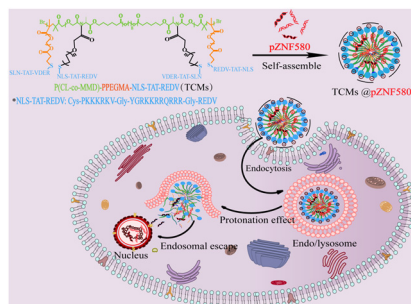
Francisco Romero Gavilán, Andreia Cerqueira, Eduardo Anitua, Fernando Muñoz, Iñaki García Arnáez, Mikel Azkargorta, Félix Elortza, Mariló Gurruchaga, Isabel Goñi, Julio Suay and Ricardo Tejero*



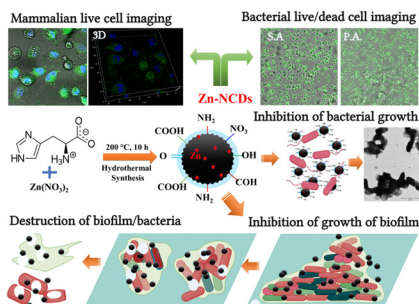
2843

Amphiphilic multi-targeting copolymer micelles efficiently deliver pZNF580 to promote endothelial cell proliferation and migration

Chen Li, Qirong Xu, Xiangyan Meng, Xinghong Duo* and Yakai Feng*



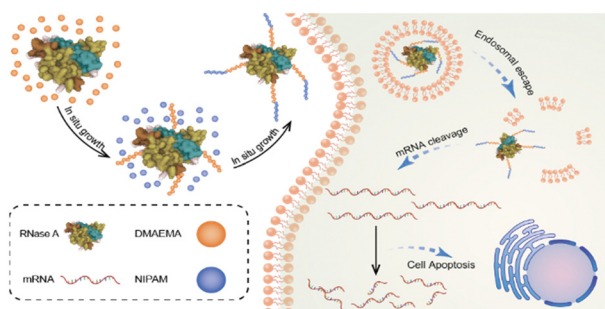
2855



Preventing biofilm formation and eradicating pathogenic bacteria by Zn doped histidine derived carbon quantum dots

Vijay Bhooshan Kumar,* Maoz Lahav and Ehud Gazit*

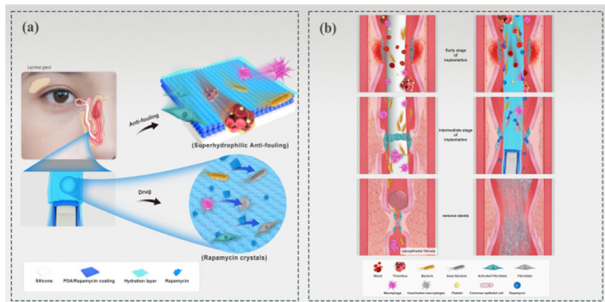
2869



Ribonuclease A-polymer conjugates *via in situ* growth for cancer treatment

Lin Jiang, Xiao Liang, Jiaxin Jia, Haobo Han,* Jun Tang* and Quanshun Li*

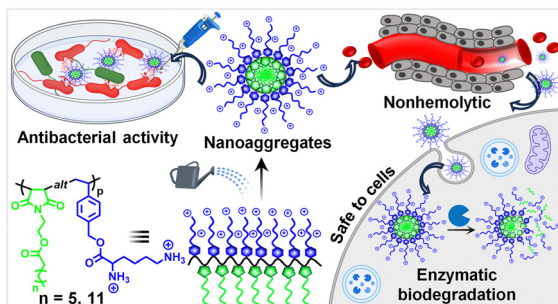
2877



Two-electron oxidized polyphenol chemistry-inspired superhydrophilic drug-carrying coatings for the construction of multifunctional nasolacrimal duct stents

Wenzhe Xiao, Binjian Wang, Xuemei Wang, Guanghong Zhang, Yihao Zhao, Zezhen Zhang, Linhua Li* and Chao Qu*

2894



Antibacterial activity of hydrophobicity modulated cationic polymers with enzyme and pH-responsiveness

Desoshree Ghosh, Sandeep Yadav, Sagar Bag, Amirul Islam Mallick* and Priyadarsi De*



EXPRESSION OF CONCERN

2905

Expression of Concern: One-pot synthesis of acid-degradable polyphosphazene prodrugs for efficient tumor chemotherapy

Na Zhou, Ning Zhang, Zhe Zhi, Xunan Jing, Daomeng Liu, Yongping Shao, Daquan Wang* and Lingjie Meng*

CORRECTION

2906

Correction: Investigating the effect of acidic and basic precipitation on the antibacterial activity of ZnO nanoparticles against Gram-negative and Gram-positive bacteria

Sreekanth R.,* S. Naveen Kumar, Madhusudana Reddy MB, Jayadev Pattar and Vaddi Damodara Reddy

