

Journal of Materials Chemistry B

Materials for biology and medicine

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IN THIS ISSUE

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Cover

See Chunsheng Xiao,
Mingqiang Li,
Gangjian Luo, Ziqing Hei
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2025, 13, 10159.



Inside cover

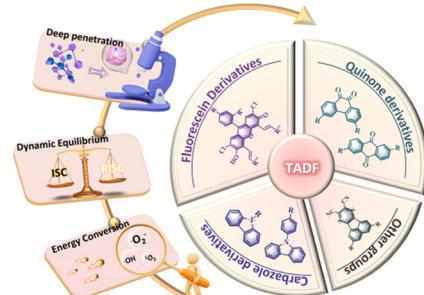
See Ariel L. Furst et al.,
pp. 10170–10176.
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REVIEWS

10071

Minimized ΔE_{ST} : drive thermally activated delayed fluorescence materials in photodynamic therapy

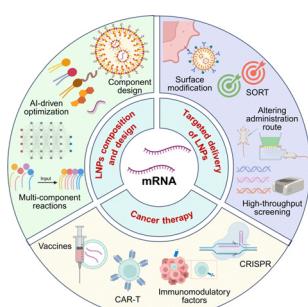
Yanling Li, Mengyan Tian, Ruofei Wang, Xingyu Lu,
Kaiyan Ren, Yi Liu* and Pai Liu*

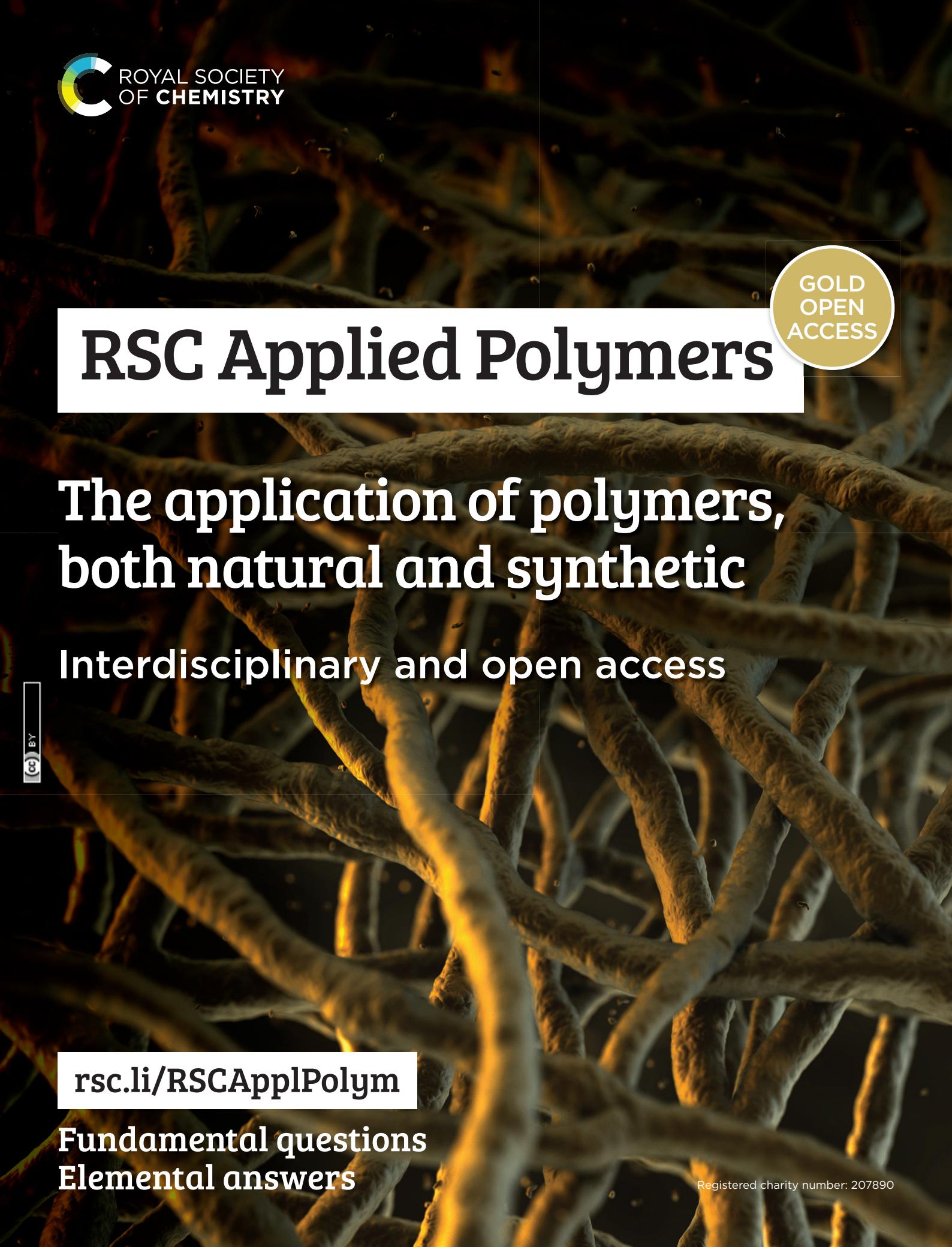


10085

Lipid nanoparticle-mediated targeted mRNA delivery and its application in cancer therapy

Yuan Sui, Xiaowen Hou, Juan Zhang, Xuechuan Hong,
Hongbo Wang,* Yuling Xiao* and Xiaodong Zeng*





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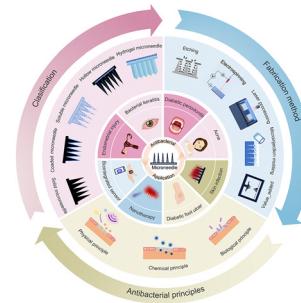
Fundamental questions
Elemental answers

REVIEWS

10118

Manufacture and application of antibacterial biofilm microneedles

Shan Wang, Hongru Liu, Haowen Zhong, Suyang Li, Xiao Yu, Yujing Lu, Yadong Tang, Chengyong Wang and Zhishan Yuan*

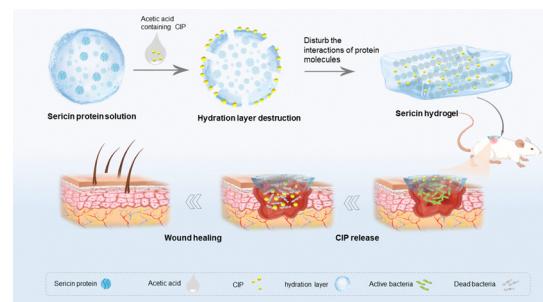


COMMUNICATION

10145

A multifunctional sericin hydrogel system fabricated via one-step acetic acid induction for wound management

Yurong Li, Yongkang Wei, Zilong Gao, Guozheng Zhang, Mingkun Zhu, Hui Yan and Yeshun Zhang*

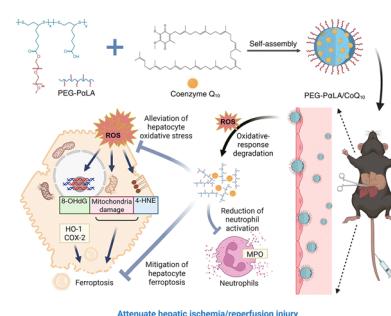


PAPERS

10159

Oxidation-responsive PEG-poly(α -lipoic acid) nanoparticles for coenzyme Q₁₀ delivery attenuate hepatic ischemia-reperfusion injury via ROS scavenging and ferroptosis inhibition

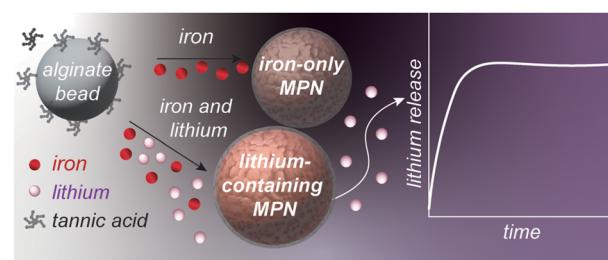
Yu Guan, Jinyu Liu, Jing Yang, Sufang Chen, Weifeng Yao, Shengyuan Gong, Chunsheng Xiao,* Mingqiang Li,* Gangjian Luo* and Ziqing Hei*



10170

Self-assembled nanomaterials enable extended lithium release

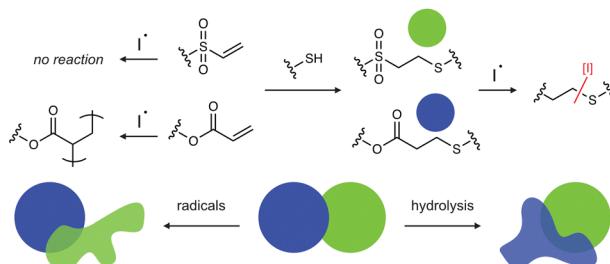
Marjon Zamani, Kirmina Monir and Ariel L. Furst*



PAPERS

10177

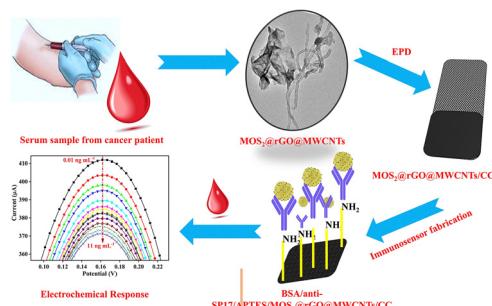
Structure dictates degradation mode in thiol–Michael hydrogels



Structure–reactivity based control of radical-mediated degradation in thiol–Michael hydrogels

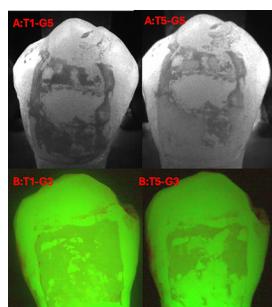
Bruce E. Kirkpatrick, Miranda T. Rubio, Tushi Yendamuri, Naomi V. Elmer, Danielle S. W. Benoit, C. Allan Guymon, Kristi S. Anseth and Tayler S. Hebner*

10187

Electrochemical biosensing of sperm protein 17 in clinical samples using a hydrothermally synthesized $\text{MoS}_2@\text{rGO}@\text{MWCNTs}$ ternary system without prior pre-treatment

Amit K. Yadav, Damini Verma and Pratima R. Solanki*

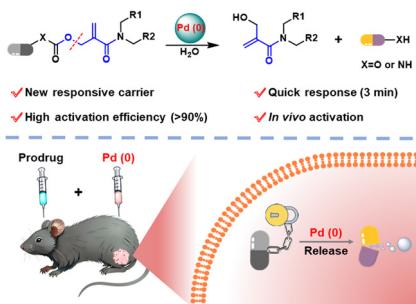
10206



Biomimetic management of orthodontic white spot lesions

Esra Tunalı,* Şeniz Karaçay, Buğra Özen and Onder Albayrak

10216

Palladium-catalyzed *in vivo* bioorthogonal activation of N,N -dialkyl- α -hydroxymethyl acrylamide for efficient payload release

Ruipeng Shen, Baoxin Zhang, Jirong Liu, Meirong Yi, Yating Chen and Jianguo Fang*

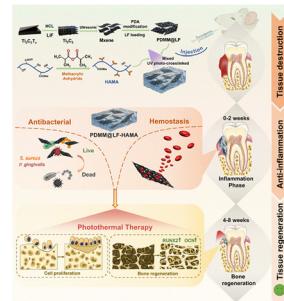


PAPERS

10225

A photothermal therapy-based composite hydrogel for sequential management of inflammation control and bone regeneration in severe periodontitis

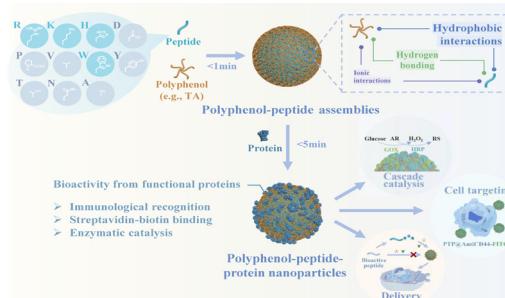
Yuan Zhou, Maojiao Li, Huiyu Zheng, Bo Huang* and Guiting Liu*



10239

Polyphenol-mediated assembly of peptides for engineering functional materials

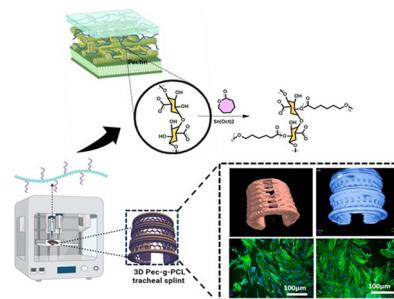
Kaizhi Wang, Lingjun Sha, Minghui Wang, Yanbing Wu, Jianyang Lu, Yiwei Han, Chenbo Ji,* Jie Yang* and Genxi Li*



10249

Design, fabrication and comprehensive testing of biodegradable 3D printable hybrid polymer airway splints

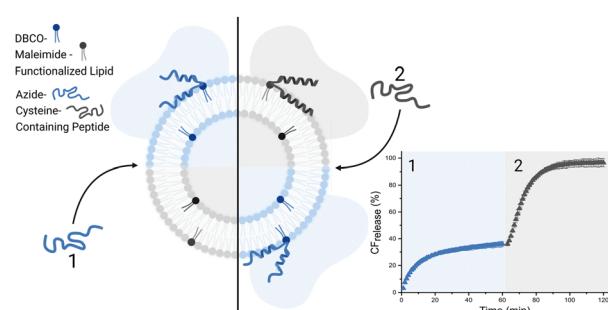
Sonali S. Naik, Jitraporn Vongsvivut, Chaitali Dekiwadia, Amanda N. Abraham, Naba K. Dutta,* Namita Roy Choudhury* and Kiran Sukumaran Nair*



10267

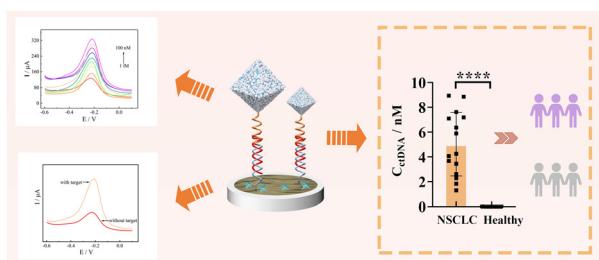
Orthogonal conjugation of anchoring-dependent membrane active peptides for tuning of liposome permeability

Alexandra Iversen, Johanna Utterström, Basab Kanti Das, Robert Selegård, Lalit Pramod Khare and Daniel Aili*



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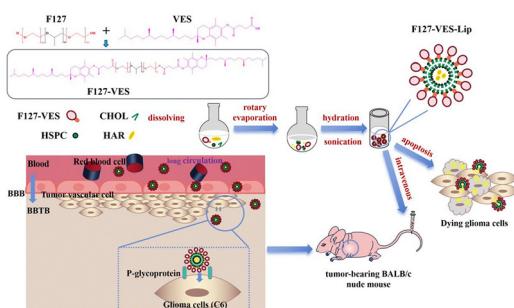
10278



Construction of a sandwich-type DNA biosensor based on functionalized MOF@COF nanomaterials for the detection of NSCLC biomarker ctDNA

Lin Fu, Yan Zhang, Peng Tang, Huiling Chen, Junxin Li, Min Shi, Yanyu Li, Gongli Hu, Zhongshu Wang, Xiaolin Yu* and Yi Xiao*

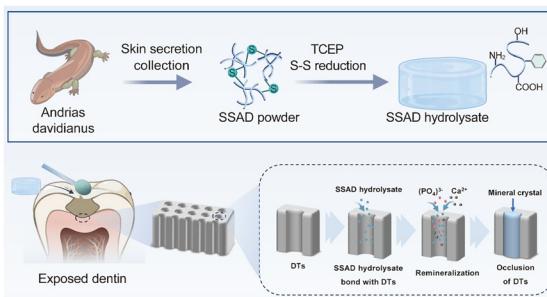
10286



Multi-functional F127-grafted vitamin E succinate-modified liposomes for enhancing glioma therapy

Yingchong Chen,* Wenhui Hu, Lizhen Huang, Yuling Liu,* Fang Li, Haibin Zou and Pengfei Yue*

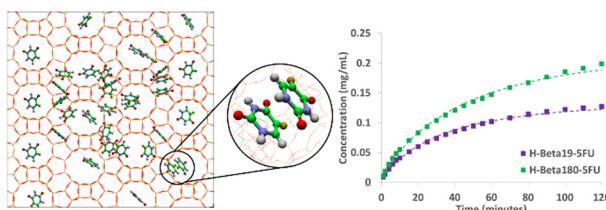
10300



A novel biomaterial derived from the skin secretion of *Andrias davidianus* for dentinal tubule occlusion

Yongxiang Zeng, Lin Yang, Na Wu, Hong Chen, Ximu Zhang* and Deqin Yang*

10314



The effect of Si/Al ratio and drug loading level on the molecular behaviour and controlled release of 5-fluorouracil from zeolite H-Beta

G. A. Dunkley, S. L. McHugh, A. J. Porter, A. J. Wise, M. Appel, P. A. Cox and A. J. O'Malley*

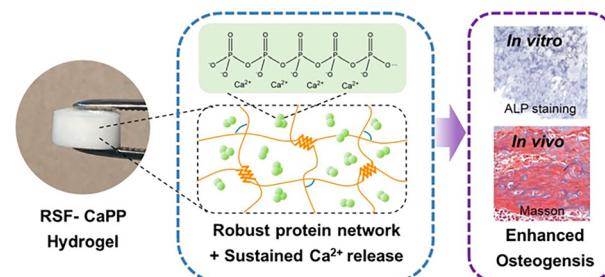


PAPERS

10331

Calcium polyphosphate endows silk fibroin hydrogels with enhanced osteogenesis for bone function restoration

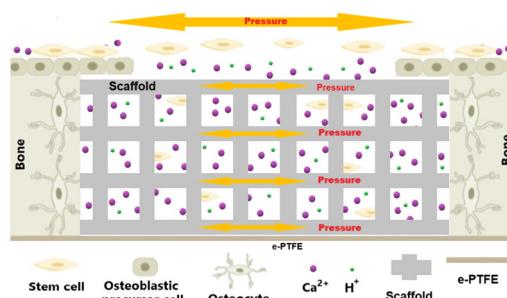
Zhiyu Liu, Mili Tilieke, Yi Zhou, Mindi Ming, Haotian Zhang, Lei Chen, Rui Zheng, Yongsheng Jie, Xiong Shu,* Juan Guan,* Shengjie Ling, Xin Chen and Zhengzhong Shao*



10343

Calcium-releasing elastic hydrogel scaffolds for *in situ* bone regeneration

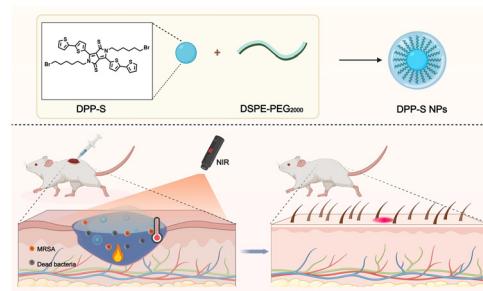
Zhe Li, Zhen Wu, Yanmei Wu and Youliang Hong*



10359

Near infrared-triggered diketopyrrolopyrrole nanoparticles for photothermal applications against bacterial infections

Qijia Sun, Xijia Zhou, Ke Wang,* Tingting Sun* and Zhigang Xie



CORRECTIONS

10369

Correction: An implantable composite scaffold for amplified chemodynamic therapy and tissue regeneration

Jiafei Chen, Shiqi Wan, Yike Fu, Yi Zhou,* Xiang Li* and Huiming Wang*



CORRECTIONS

10371**Correction: Decoding tissue complexity: multiscale mapping of chemistry–structure–function relationships through advanced visualization technologies**

Zhiyuan Zhao, Haijun Cui* and Haitao Cui*

