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Materials for biology and medicine

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Cover

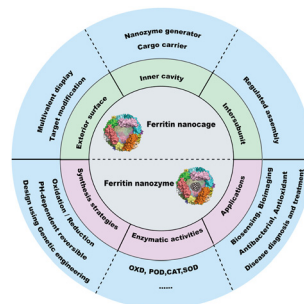
See Jiaqi Lin, Ning Chen, Xueguang Lu *et al.*, pp. 4171–4180. Image reproduced by permission of Xueguang Lu from *J. Mater. Chem. B*, 2023, 11, 4171.

REVIEW

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Ferritin nanocages: a versatile platform for nanozyme design

Chunyu Wang, Qiqi Liu, Xinglu Huang* and Jie Zhuang*

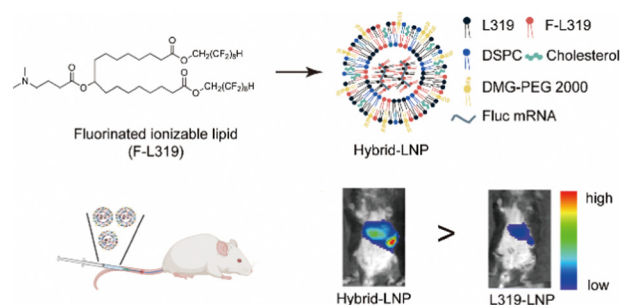


PAPERS

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A fluorinated ionizable lipid improves the mRNA delivery efficiency of lipid nanoparticles

Haonan Huo, Xingdi Cheng, Jiayi Xu, Jiaqi Lin,* Ning Chen* and Xueguang Lu*



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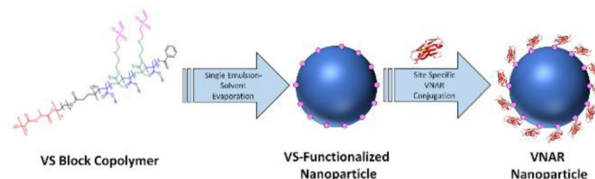


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Functionalization of polymeric nanoparticles with targeting VNAR ligands using vinyl sulfone conjugation

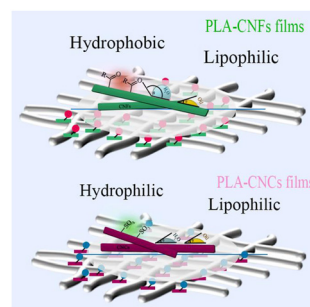
Adam Leach, Marie Finnegan, Mariana S. Machado, Laura Ferguson, John Steven, Peter Smyth, Andrew Porter, Caroline Barelle, Efrosyni Themistou* and Christopher J. Scott*



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Preparation of nanocellulose by a biological method from hemp stalk in contrast to the chemical method and its application on the electrospun composite film

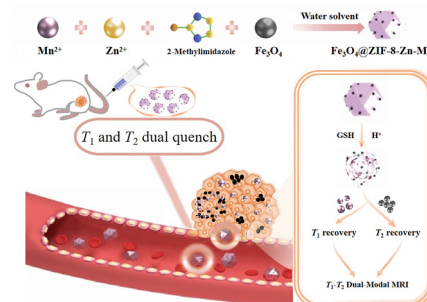
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Tumor microenvironment responsive T_1 - T_2 dual-mode contrast agent $\text{Fe}_3\text{O}_4@\text{ZIF-8-Zn-Mn}$ NPs for *in vivo* magnetic resonance imaging

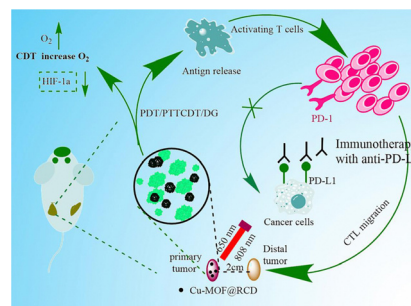
Minmin Liang, Weixiu Zhou, Haifeng Zhang, Jutian Zheng, Jiaomin Lin,* Lu An and Shiping Yang*



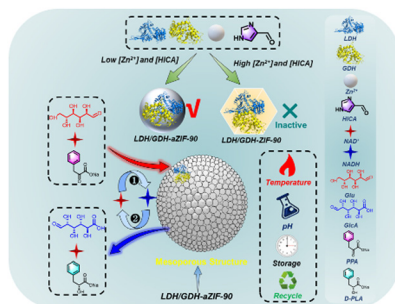
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A carbon dot-doped Cu-MOF-based smart nanoplatfrom for enhanced immune checkpoint blockade therapy and synergistic multimodal cancer therapy

Zhongping Su, Haiying Xu, Ying Zhang, Huanli Zhang, Hui Zhang, Yujun Bao, Xiaodan Wu, Rui Yan, Guanghui Tan,* Zhiqiang Wang* and Yingxue Jin*



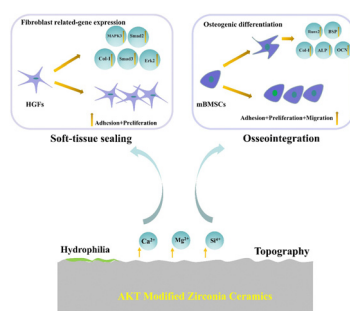
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A two-enzyme system in an amorphous metal–organic framework for the synthesis of D-phenyllactic acid

Yifeng Wang, Xiaolong Sun, Jiahuan Hu, Qing Guo, Ping Zhang, Xi Luo,* Baoxing Shen* and Yongqian Fu*

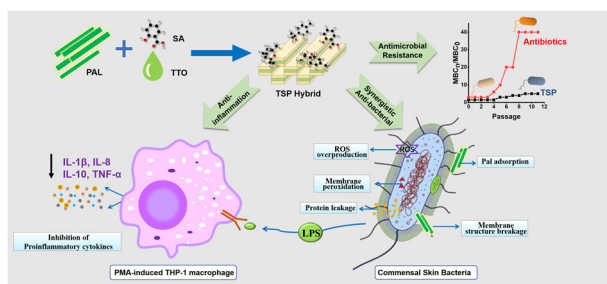
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Improving the osseointegration and soft tissue sealing of zirconia ceramics by the incorporation of akermanite via sol infiltration for dental implants

Wenmin Zhang, Wenhao Fu, Xiaolan Wang* and Jiandong Ye*

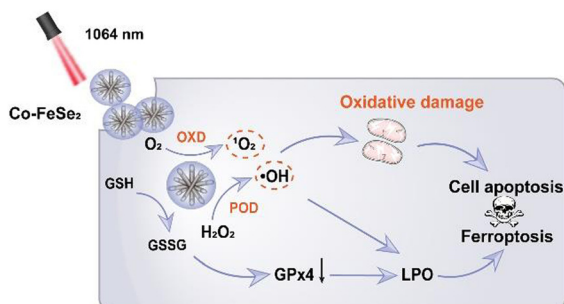
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Construction of tea tree oil/salicylic acid/palygorskite hybrids for advanced antibacterial and anti-inflammatory performance

Xi Zhang, Lihua Cao, Huiyu Li, Ziyi Xiong, Zhengpeng Fu, Zhaolun Zhang, Wenjing Xie, Hongyan Cui, Shuang Zhang, Ying Tang* and Yongjun Feng*

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Dual enzyme-like Co–FeSe₂ nanoflowers with GSH degradation capability for NIR II-enhanced catalytic tumor therapy

Jingge Zhang, Enna Ha,* Danyang Li, Shuqing He, Luyang Wang, Shaolong Kuang and Junqing Hu*

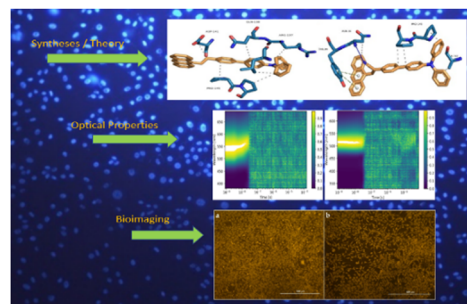


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Exploring the potential of anthracene derivatives as fluorescence emitters for biomedical applications

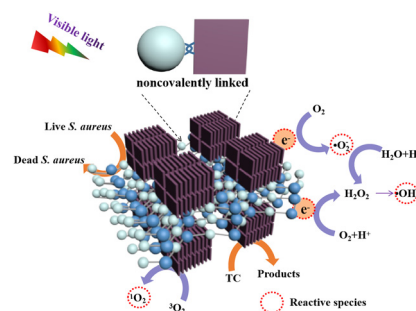
Murat Aydemir,* Gulcin Haykir, Harun Selvitopi, Ozge Caglar Yildirim, Mehmet Enes Arslan, Bahattin Abay and Figen Turksoy*



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Self-assembled A–D–A type indacenodithiophene-based small conjugated molecule/TiO₂ for enhancing the photocatalytic activity

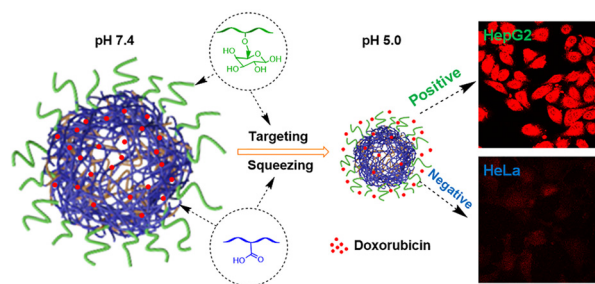
Enwei Zhu, Tingyu Yang, Juan Du, Chunbo Liu,* Chunhong Ma* and Haiyong Guo*



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Sub-50 nm core–shell nanoparticles with the pH-responsive squeezing release effect for targeting therapy of hepatocellular carcinoma

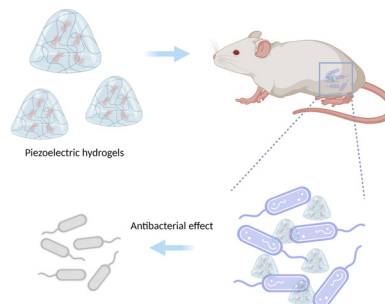
Jian-Bo Qu,* Huan-Jie Che, Bo Gao, Gang-Feng Li, Xue-Fei Zhang, Yi-Bo Zhang and Xiaojuan Wang*



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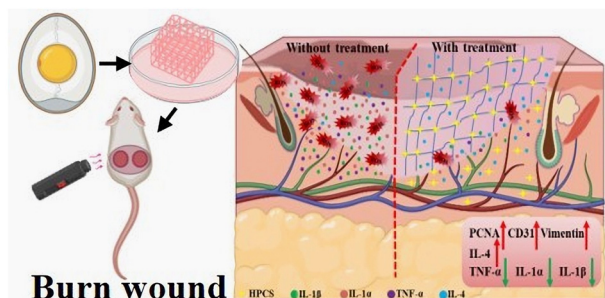
Engineering ultrasound-activated piezoelectric hydrogels with antibacterial activity to promote wound healing

Min Xu, Shaozhen Wu, Li Ding, Caijiao Lu, Huangjing Qian, Jinmiao Qu* and Yu Chen*



PAPERS

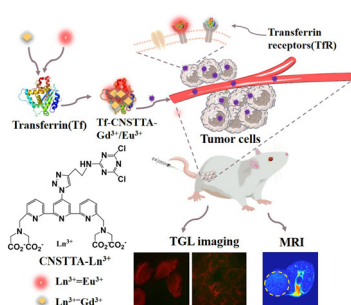
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Facile synthesis of hydroxypropyl chitosan-egg white hydrogel dressing with antibacterial and antioxidative activities for accelerating the healing of burn wounds

Ying Zhao, Yulan Zhao, Yuguo Chu and Qiang Chang*

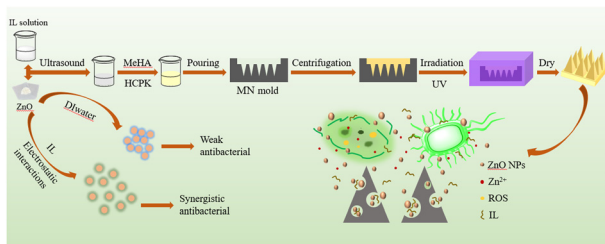
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A tumor-targetable probe based on europium(III)/gadolinium(III) complex-conjugated transferrin for dual-modal time-gated luminescence and magnetic resonance imaging of cancerous cells *in vitro* and *in vivo*

Bo Song,* Jiao Jiang, Huinan Yan, Shengjun Huang and Jingli Yuan*

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Dissolving microneedles based on ZnO nanoparticles and an ionic liquid as synergistic antibacterial agents

Xiaodan Li, Wenzhen Du, Wenxin Xu, Guixia Ling* and Peng Zhang*

CORRECTION

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Correction: Bio-related applications of porous organic frameworks (POFs)

He Zhang, Guoliang Li, Chunyang Liao,* Yaqi Cai and Guibin Jiang

