

Journal of Materials Chemistry B

Materials for biology and medicine

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2023, **11**, 10761.

EDITORIALS

10757

2023 Journal of Materials Chemistry Lectureship runners-up: Dr Kwabena Bediako, University of California, Berkeley, USA and Dr Laure Biniek, Institut Charles Sadron, CNRS – Strasbourg, France



10759

2023 Journal of Materials Chemistry Lectureship winner: Dr Jovana Milić, University of Fribourg, Switzerland



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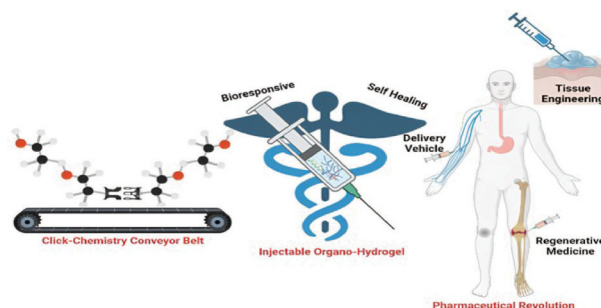


PERSPECTIVE

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Injectable organo-hydrogels influenced by click chemistry as a paramount stratagem in the conveyor belt of pharmaceutical revolution

Abhyavartin Selvam, Misba Majood, Radhika Chaurasia, Rupesh, Akanksha Singh, Tapan Dey, Omnarayan Agrawal, Yogesh Kumar Verma and Monalisa Mukherjee*

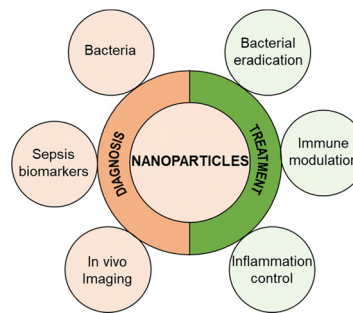


REVIEWS

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Recent advances and prospects in nanomaterials for bacterial sepsis management

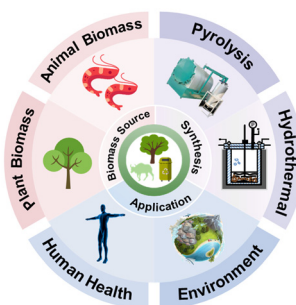
Chaoyang Zhou,* Yong Liu,* Yuanfeng Li* and Linqi Shi



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Biomass-derived 2D carbon materials: structure, fabrication, and application in electrochemical sensors

Xuanyu Xiao, Lei Li, Hui Deng, Yuting Zhong, Wei Deng, Yuanyuan Xu, Zhiyu Chen, Jieyu Zhang, Xuefeng Hu* and Yunbing Wang*

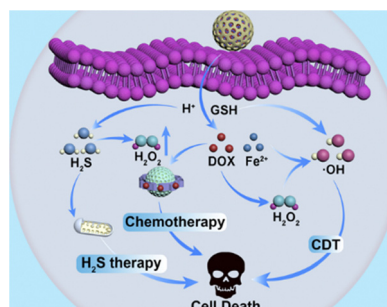


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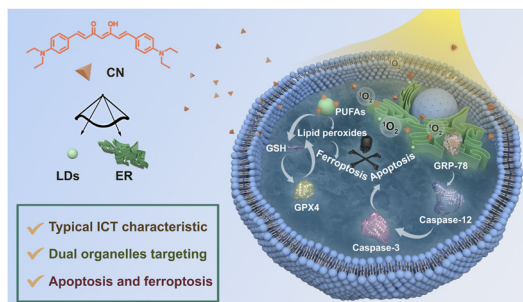
A tetrasulfide bond-bridged mesoporous organosilica-based nanoplatfrom for triple-enhanced chemodynamic therapy combined with chemotherapy and H₂S therapy

Mingzhe Liu, Hui Xu, FangFang Zhou, Xiyu Gong, Songwen Tan and Yongju He*



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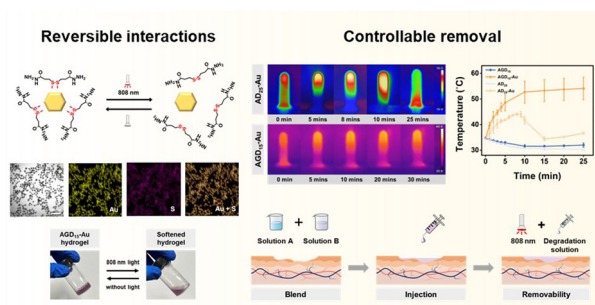
10836



A dual organelle-targeting photosensitizer based on curcumin for enhanced photodynamic therapy

Yanping Wang, Xuwei Li, Weimin Liu,* Jie Sha, Zhe Yu, Shuai Wang, Haohui Ren, Wenjun Zhang, Chun-Sing Lee and Pengfei Wang*

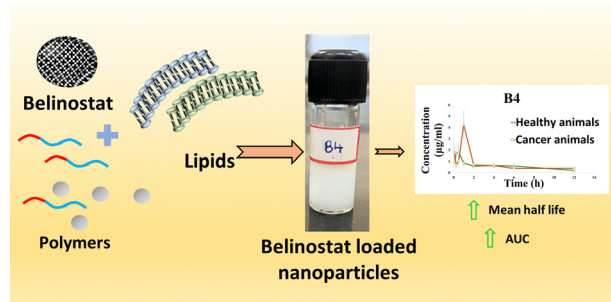
10845



Injectable spontaneously formed asymmetric adhesive hydrogel with controllable removal for wound healing

Lei Liang, Xi Li, Zhouying Tan, Min Liu, Yuwei Qiu, Qingyu Yu, Chaojie Yu, Mengmeng Yao, Bingyan Guo, Fanglian Yao, Pengcheng Che,* Hong Zhang* and Junjie Li*

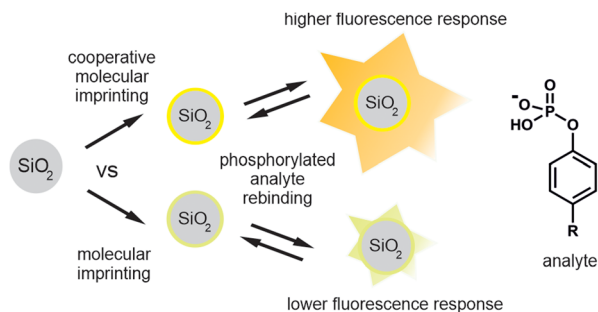
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Belinostat loaded lipid-polymer hybrid nanoparticulate delivery system for breast cancer: improved pharmacokinetics and biodistribution in a tumor model

Kommer Sai Pradyuth, Shubham A. Salunkhe, Arihant Kumar Singh, Deepak Chitkara and Anupama Mittal*

10873



Towards molecularly imprinted polymers that respond to and capture phosphorylated tyrosine epitopes using fluorescent bis-urea and bis-imidazolium receptors

Evgeniia Kisenko, Anıl İncel, Kornelia Gawlitza, Börje Sellergren and Knut Rurack*

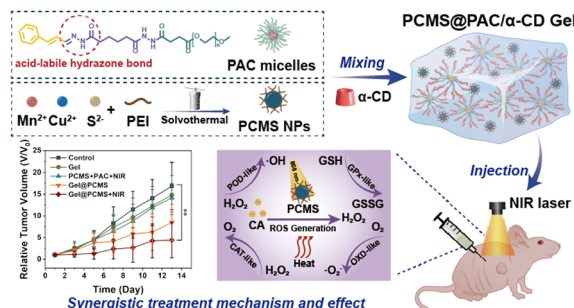


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A pH-responsive supramolecular hydrogel encapsulating a CuMnS nanoenzyme catalyst for synergistic photothermal–photodynamic–chemodynamic therapy of tumours

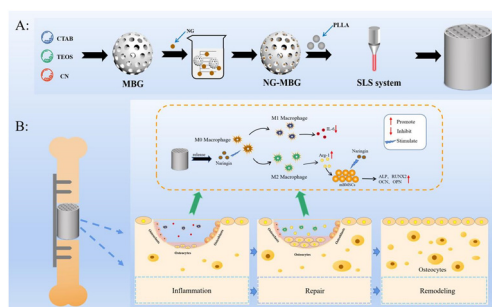
Anqin Dong, Shiwei Huang, Zhiyi Qian, Sicheng Xu, Weizhong Yuan* and Bing Wang*



10896

Direct osteogenesis and immunomodulation dual function *via* sustained release of naringin from the polymer scaffold

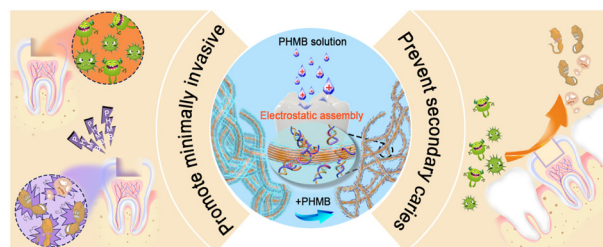
Wei Xiong, Lingmei Yuan, Jinyang Huang, Bin Pan, Ling Guo, Guowen Qian,* Cijun Shuai* and Zhikui Zeng*



10908

A polyhexamethylene biguanide-assembly assisted strategy of dentin bonding greatly promotes bonding effects and caries treatment

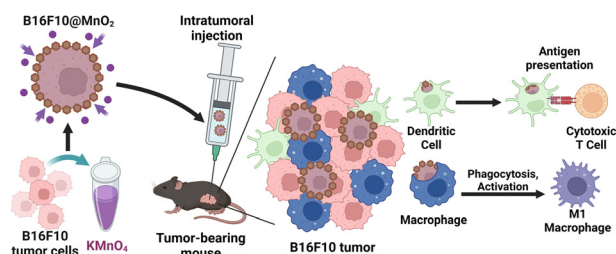
Chang Shu, Yadong Chen, Zhenzhen Zhang, Yuqing Lei, Jiajia Xu, Weiwei Lao, Qingping Xi, Qiang Sun, Xiaojun Li, Hongbing Liao, Qiaojie Luo* and Xiaodong Li



10923

Manganese-mineralized cancer cells as immunogenic cancer vaccines for tumor immunotherapy

Zhenyu Liu, Jiake Lin, Benke Li, Yuemin Zhou, Chen Li, Yihao Cui, Fengchao Tian, Ruikang Tang* and Xiaoyu Wang*



The diagram illustrates the mechanism of the INH@HTI-3 nanocomposite. It starts with the **INH@HTI-3** nanocomposite, which is a 3D grid of HTI-3 (represented by blue and red cubes) with INH (represented by blue circles) encapsulated within it. The process involves **INH Encapsulation** (green arrow) and **INH Release** (purple arrow). The nanocomposite is shown interacting with **Mycobacteria** (green rod-shaped bacteria). The nanocomposite **Inhibits Mycobacteria biofilm** (indicated by a red 'I' and a biofilm being blocked) and **Kills Mycobacteria** (indicated by a red 'X' over a biofilm).

Pawan Kumar, Ananyaashree Behera, Pranav Tiwari,
Sibi Karthik, Mainak Biswas, Avinash Sonawane and
Shaikh M. Mobin*

Yang Cao, Linlin Kang, Yumei Wang, Zekai Ren, Han Wu,
Xin Liu, Hailin Cong,* Bing Yu* and Youqing Shen

2% HES 1.2 g
1,2-Hexadecanediol 3 mg
0.37% ascorbyl palmitate 225 mg
3% tween-60 2 mL
1 N NaOH 350 µL

C_{16}
 negative charge
 positive charge
 non-VEGFR2 antibody
 VEGFR2

Sonication

Nanobubble

Targeted nanobubble

US Transducer

Liver

Blood vessel

US image

Lunging bubble
 Targeted bubble

Endothelial cell
 VEGFR2
 Tumor

Houqiang Yu, Shuanghua Zheng, Cai Wang, Jun Xing
and Ling Li*

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Abhyavartin Selvam, Misba Majood, Radhika Chaurasia, Rupesh, Akanksha Singh, Tapan Dey, Omnarayan Agrawal, Yogesh Kumar Verma and Monalisa Mukherjee*