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Journal of Materials Chemistry B

Materials for biology and medicine

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See Marc R. Knecht, Tiffany R. Walsh *et al.*, pp. 4824–4832. Image reproduced by permission of Marc R. Knecht from *J. Mater. Chem. B*, 2024, **12**, 4824.

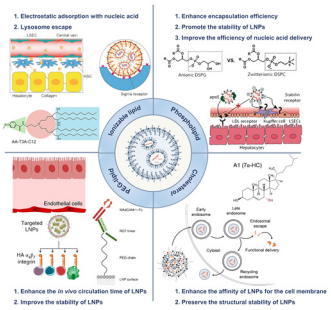
Inside cover
See Han Wang *et al.*, pp. 4833–4842. Image reproduced by permission of Han Wang from *J. Mater. Chem. B*, 2024, **12**, 4833.

REVIEWS

4759

Lipid nanoparticles as the drug carrier for targeted therapy of hepatic disorders

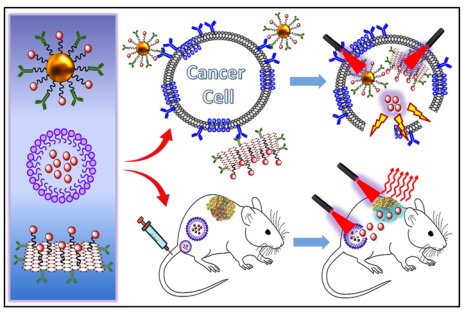
Runxuan Chu, Yi Wang,* Jianglong Kong, Ting Pan, Yani Yang* and Jun He*



4785

Review of NIR-responsive "Smart" carriers for photothermal chemotherapy

Abhijit Karmakar,* Akshay Silswal and Apurba Lal Koner*



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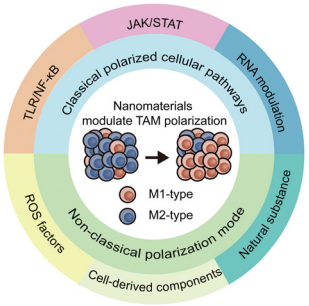
REVIEWS

4809

Nanomaterials in modulating tumor-associated macrophages and enhancing immunotherapy

Chen Liang, Yihan Zhang, Siyao Wang, Wangbo Jiao, Jingyi Guo, Nan Zhang* and Xiaoli Liu*

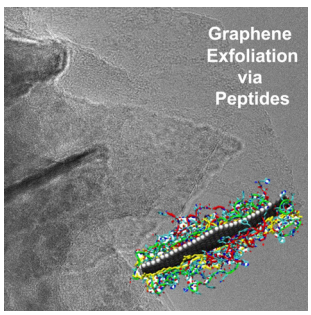


PAPERS

4824

Graphene exfoliation using multidomain peptides

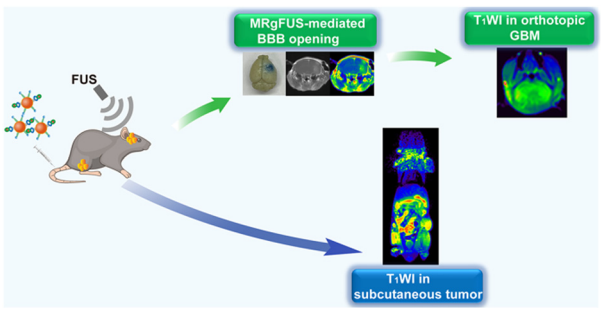
Ruitao Jin, Nermina Brljak, Joseph M. Slocik, Rahul Rao, Marc R. Knecht* and Tiffany R. Walsh*



4833

Ultrasmall iron oxide nanoparticles with MRgFUS for enhanced magnetic resonance imaging of orthotopic glioblastoma

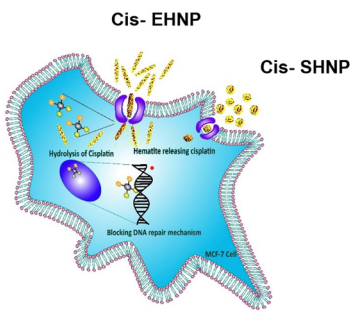
Jingwen Chen, Rui Yang, Hongwei Yu, Hao Wu, Nan Wu, Suhe Wang, Xiaorui Yin, Xiangyang Shi and Han Wang*



4843

Elucidating shape-mediated drug carrier mechanics of hematite nanomaterials for breast cancer therapeutics

Kaviya Vijayalakshmi Babunagappan, Thilak Raj, Abirami Seetharaman, Subastri Ariraman and Swathi Sudhakar*



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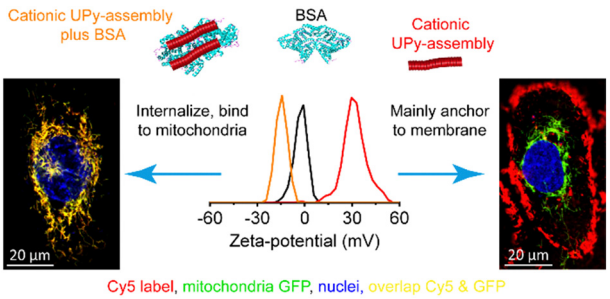
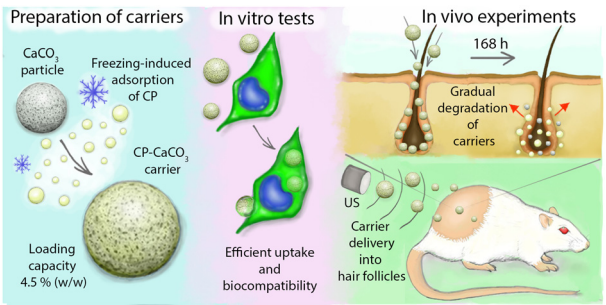
4854



The effect of charge and albumin on cellular uptake of supramolecular polymer nanostructures

Jiankang Song, Peter-Paul K.H. Fransen, Maarten H. Bakker, Sjors P.W. Wijnands, Jingyi Huang, Shuaiqi Guo and Patricia Y. W. Dankers*

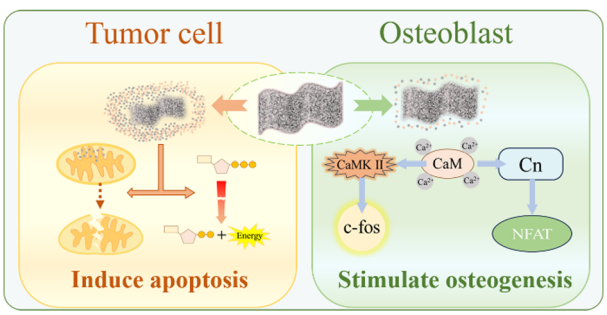
4867



Biodegradable calcium carbonate carriers for the topical delivery of clobetasol propionate

Mariia S. Saveleva, Roman A. Verkhovskii, Polina A. Demina, Yury I. Surkov, Roman A. Anisimov, Ekaterina S. Prikhozhdenko, Pavel S. Pidenko, Isabella A. Serebryakova, Sergey M. Zaytsev, Valery V. Tuchin and Yulia I. Svenskaya*

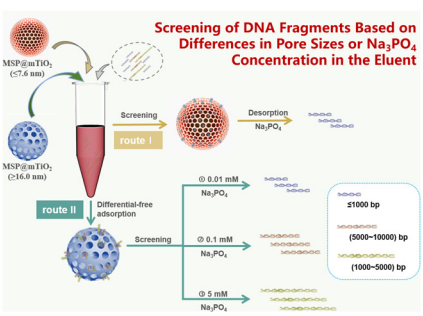
4882



Fructose-mineralized black phosphorus for syncretic bone regeneration and tumor suppression

Jun Shu, Yao Wang, Guangpeng Zhang, Xuedong Shu, Tingting Xu, Junwei Zhang, Fang Wu and Jing He*

4899



Magnetic composite microspheres with a controlled mesoporous shell for highly efficient DNA extraction and fragment screening

Xiuli Wang, Qilin Guo, Jia Guo and Changchun Wang*

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PAPERS

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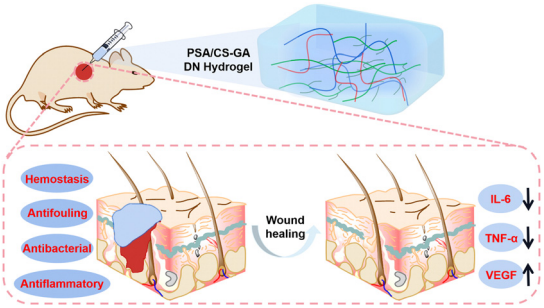
Dual network composite hydrogels with robust antibacterial and antifouling capabilities for efficient wound healing

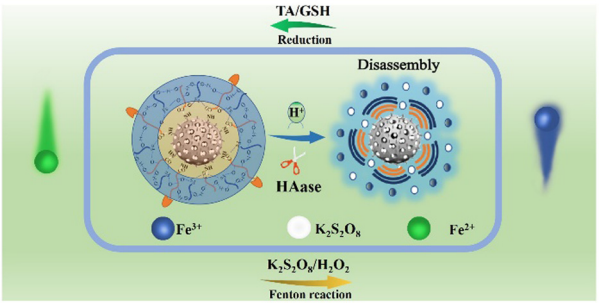
Hongzhi Jiang, Xueping Huang, Jiachao Yang, Xunbin Yu, Weibo Yang, Yunhao Song, Na Wen,* Ying Wang, Jinlin Long, Shiyun Lu, Xiaoling Zheng* and Zhihui Lin*



4922

Fe-based cyclically catalyzing double free radical nanogenerator for tumor-targeted chemodynamic therapy

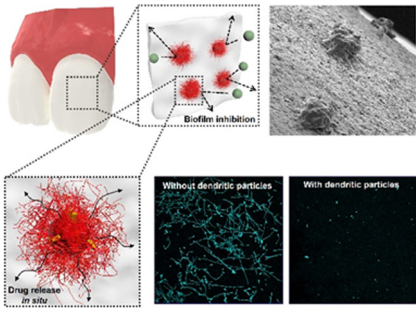
Yang Wang, Chunquan Zhu, Xiaohui Fan, Yuanyuan Yang, Zhaoxia Chen,* Li Yu* and Yuhong Zhang*



4935

Drug-loaded adhesive microparticles for biofilm prevention on oral surfaces

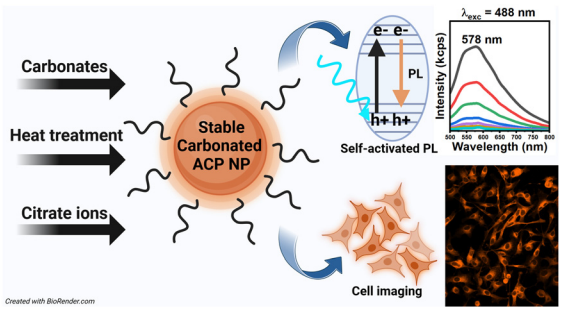
Min Jun Oh, Jae-Hyun Kim, Jaekyoung Kim, Sunghee Lee, Zhenting Xiang, Yuan Liu, Hyun Koo* and Daeyeon Lee*



4945

Tailoring the structure and self-activated photoluminescence of carbonated amorphous calcium phosphate nanoparticles for bioimaging applications

Thales R. Machado,* Carlos E. Zanardo, Raquel R.C. Vilela, Renata R. Miranda, Natália S. Moreno, Celisnolia M. Leite, Elson Longo and Valtencir Zucolotto*



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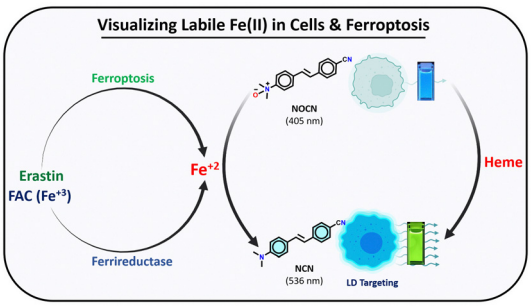
PAPERS

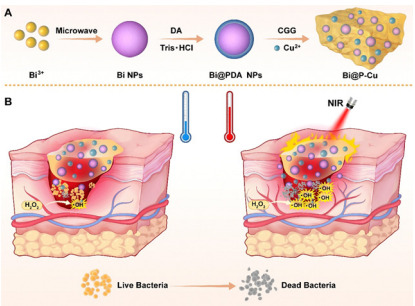
4962



Detecting labile heme and ferroptosis through 'turn-on' fluorescence and lipid droplet localization post Fe^{2+} sensing

Yogesh Dubey, Shabnam Mansuri and Sriram Kanvah*

4975



A bismuth-based double-network hydrogel-mediated synergistic photothermal-chemodynamic therapy for accelerated wound healing

Linyan Song, Kui Luo, Chen Liu,* Huanying Zhao, Ling Ye* and Hao Wang*

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