

Biomaterials Science

An international high impact journal exploring the underlying science behind the function, interactions and design of biomaterials

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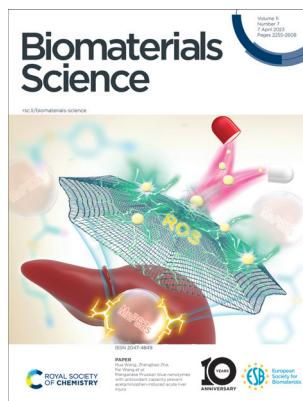
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Cover

See Sabina Quader, Rosalía Rodríguez-Rodríguez *et al.*, pp. 2336–2347.

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Inside cover

See Hua Wang, Zhengbao Zha, Fei Wang *et al.*, pp. 2348–2358.

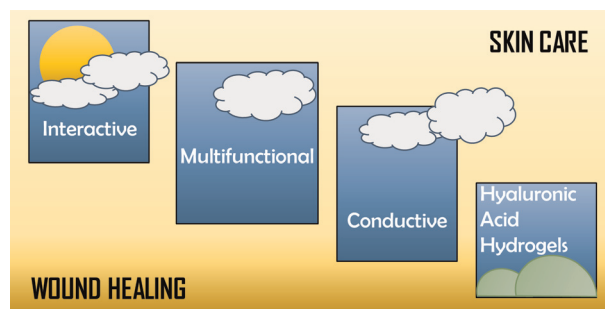
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Multifunctional conductive hyaluronic acid hydrogels for wound care and skin regeneration

Víctor Castrejón-Comas, Carlos Alemán* and María M. Pérez-Madrigal*

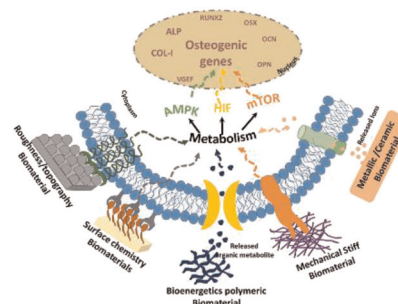


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Cellular metabolism: a link connecting cellular behaviour with the physiochemical properties of biomaterials for bone tissue engineering

Shivani Chaudhary, Doyel Ghosal, Pravesh Tripathi and Sachin Kumar*



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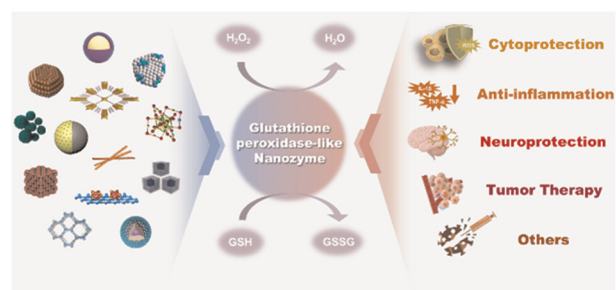


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Glutathione peroxidase-like nanozymes: mechanism, classification, and bioapplication

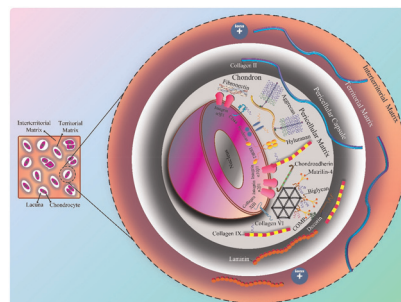
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Kiana Mokhtarinia and Elahe Masaeli*



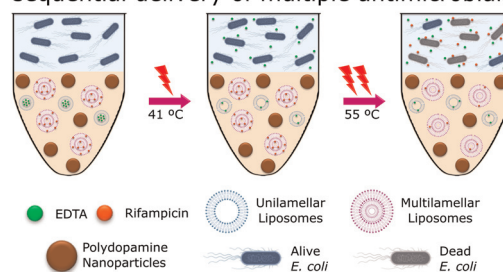
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Laser-responsive sequential delivery of multiple antimicrobials using nanocomposite hydrogels

Meera Patel, Alexander L. Corbett, Aarushi Vardhan, Keuna Jeon, Nesha May O. Andoy and Ruby May A. Sullan*

sequential delivery of multiple antimicrobials

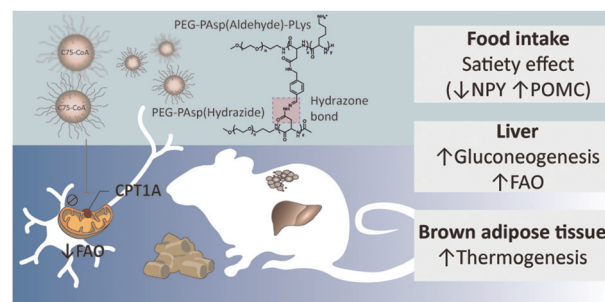


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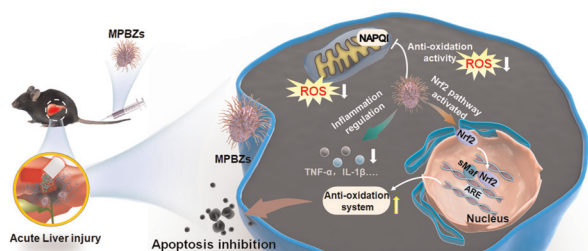
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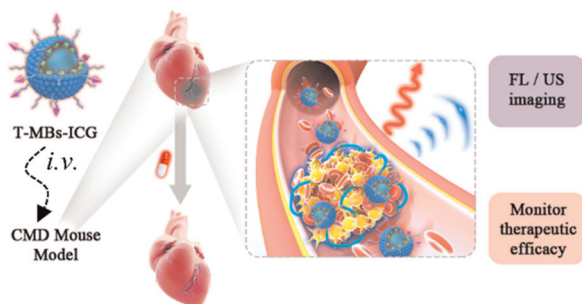
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Manganese Prussian blue nanozymes with antioxidant capacity prevent acetaminophen-induced acute liver injury

Chongqing Chen, Haitao Wu, Qianhui Li, Menghua Liu, Fan Yin, Miaomiao Wu, Xiaoli Wei, Hua Wang,* Zhengbao Zha* and Fei Wang*

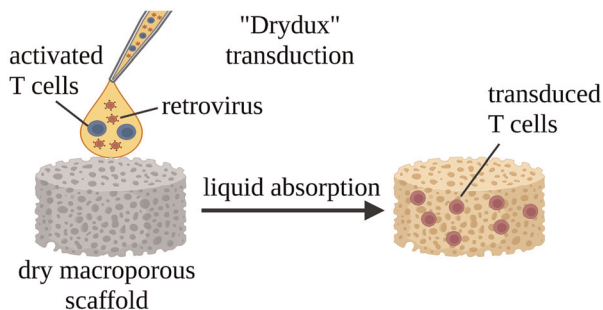
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Alimina Awen, Dehong Hu, Duyang Gao,* Zihang Wang, Yayun Wu, Hairong Zheng, Lina Guan, Yuming Mu* and Zonghai Sheng*

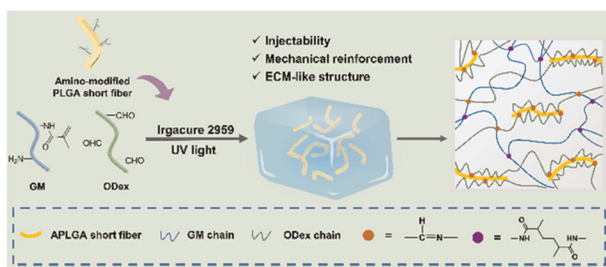
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Absorption rate governs cell transduction in dry macroporous scaffolds

Madelyn VanBlunk, Vishal Srikanth, Sharda S. Pandit, Andrey V. Kuznetsov and Yevgeny Brudno*

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In situ forming double-crosslinked hydrogels with highly dispersed short fibers for the treatment of irregular wounds

Maidi Wang, Jingtao Du, Mengya Li, Filippo Pierini, Xiaoran Li,* Jianyong Yu and Bin Ding*

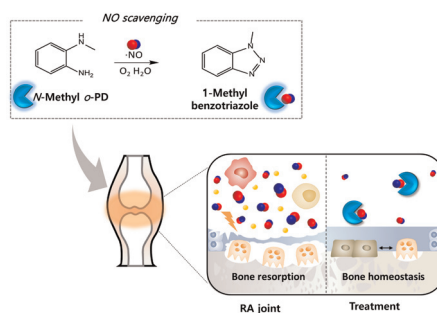


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Nitric oxide scavengers based on o-phenylenediamine for the treatment of rheumatoid arthritis

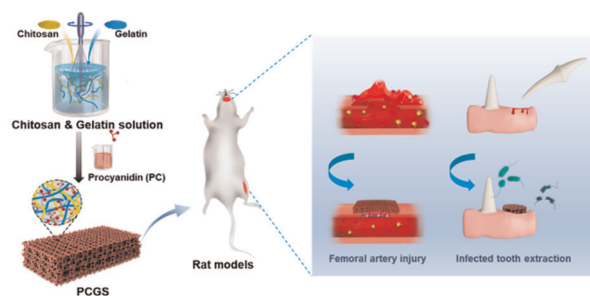
Yeong Mi Lee, Sanggi Lee and Won Jong Kim*



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A natural polyphenol-functionalized chitosan/gelatin sponge for accelerating hemostasis and infected wound healing

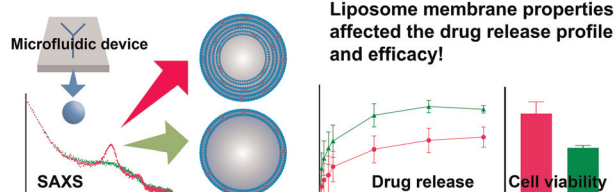
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Controlling lamellarity and physicochemical properties of liposomes prepared using a microfluidic device

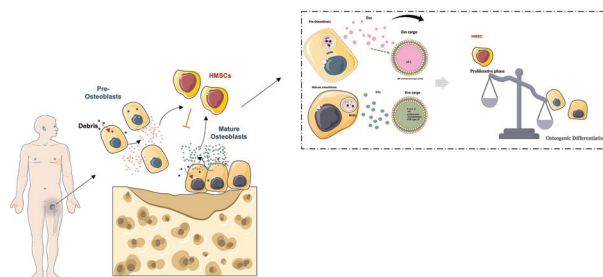
Yuka Matsuura-Sawada, Masatoshi Maeki,* Shuya Uno, Koichi Wada and Manabu Tokeshi*



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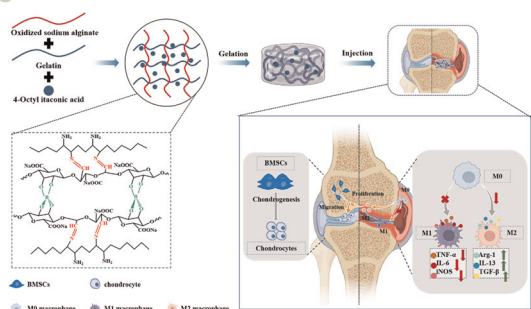
Titanium dioxide nanoparticles affect osteoblast-derived exosome cargos and impair osteogenic differentiation of human mesenchymal stem cells

Wanderson de Souza, S. Gemini-Piperni, Liliana Grenho, Luis A. Rocha, José M. Granjeiro, Sonia A. Melo, Maria H. Fernandes and Ana R. Ribeiro*



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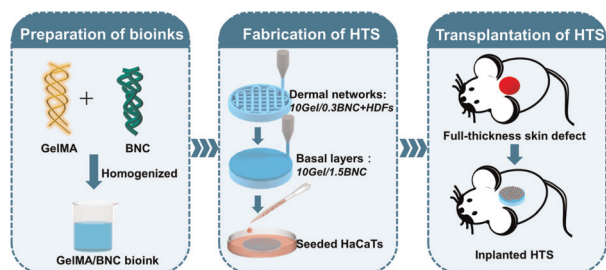
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Injectable hydrogel loaded with 4-octyl itaconate enhances cartilage regeneration by regulating macrophage polarization

Hui Xiao, Yunsheng Dong,* Dongdong Wan, Jinpeng Wan, Jiaying Huang, Lizong Tang, Jie Zhou, Tingting Yang, Yufei Liu and Shufang Wang*

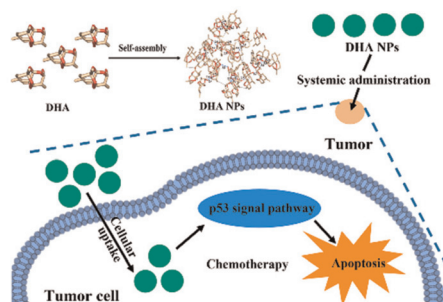
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3D bioprinting of heterogeneous tissue-engineered skin containing human dermal fibroblasts and keratinocytes

Meng Li, Lei Sun, Zixian Liu, Zhizhong Shen, Yanyan Cao, Lu Han, Shengbo Sang* and Jianming Wang*

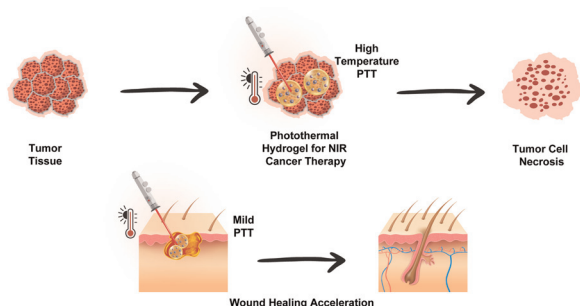
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Self-assembly and self-delivery of the pure nanodrug dihydroartemisinin for tumor therapy and mechanism analysis

Yawei Li, Wei Zhang, Naiyuan Shi, Wenqing Li, Junxia Bi, Xianmin Feng,* Nianqiu Shi,* Wenhe Zhu* and Zhigang Xie

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Kiyan Musaie, Samin Abbaszadeh, Vahideh Nosrati-Siahmazgi, Mostafa Qahremani, Shige Wang, Mohammad Reza Eskandari, Seyyed Vahid Niknezhad, Fakhri Haghi, Yulin Li, Bo Xiao* and Mohammad-Ali Shahbazi*

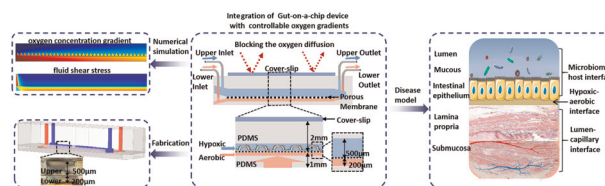


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Establishment of a gut-on-a-chip device with controllable oxygen gradients to study the contribution of *Bifidobacterium bifidum* to inflammatory bowel disease

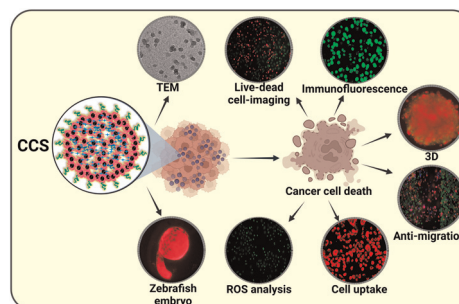
Jun Liu, Ronghao Lu, Xiaolin Zheng, Wensheng Hou, Xiaoying Wu, Hezhao Zhao, Guixue Wang and Tian Tian*



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Camptothecin loaded casein nanosystem for tuning the therapeutic efficacy against highly metastatic triple-negative breast cancer cells

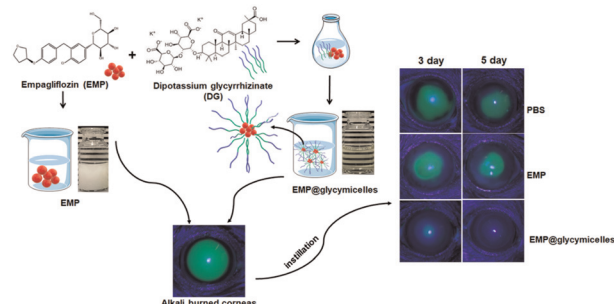
Sajmina Khatun, Monika Pebam, Chandra Lekha Putta and Aravind Kumar Rengan*



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A simple but novel glycymicelle ophthalmic solution based on two approved drugs empagliflozin and glycyrrhizin: *in vitro/in vivo* experimental evaluation for the treatment of corneal alkali burns

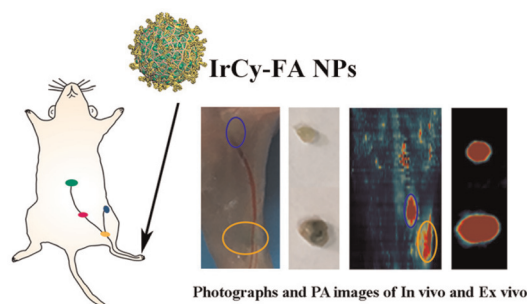
Zongjian Sun, Mingxin Zhang, Yanjun Wei, Mengshuang Li, Xianggen Wu* and Meng Xin*



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The location of metastatic lymph nodes and the evaluation of lymphadenectomy by near-infrared photoacoustic imaging with iridium complex nanoparticles

Qi Yang, Yajun Yu, Chaojie Tang, Yucong Gao, Wu Wang,* Zhiguo Zhou, Shiping Yang and Hong Yang*

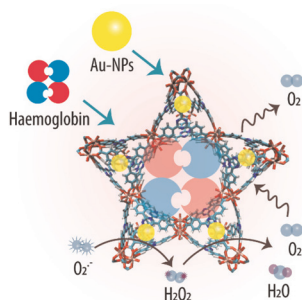


Photographs and PA images of In vivo and Ex vivo



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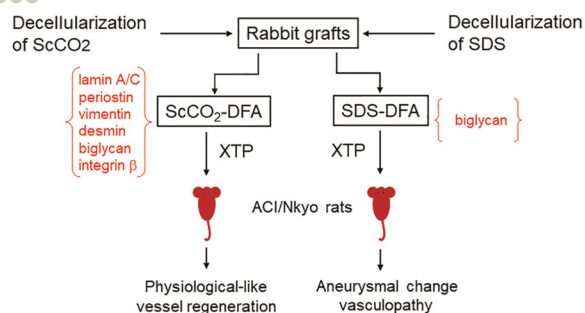
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Metal–organic framework-based oxygen carriers with antioxidant activity resulting from the incorporation of gold nanozymes

Xiaoli Liu, Nancy Patricio Domingues, Emad Oveisi, Clara Coll-Satue, Michelle Maria Theresia Jansman, Berend Smit and Leticia Hosta-Rigau*

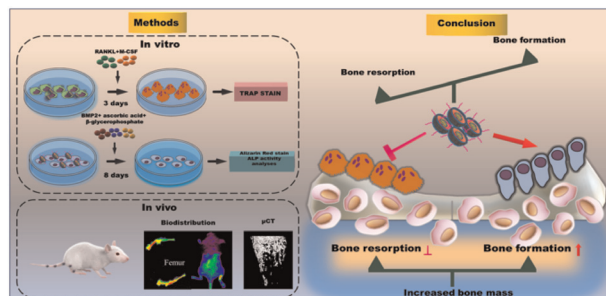
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Supercritical carbon dioxide-decellularized arteries exhibit physiologic-like vessel regeneration following xenotransplantation in rats

Shih-Ying Sung, Yi-Wen Lin, Chin-Chen Wu, Chih-Yuan Lin, Po-Shun Hsu, Srinivasan Periasamy, Balaji Nagarajan, Dar-Jen Hsieh, Yi-Ting Tsai,* Chien-Sung Tsai* and Feng-Yen Lin*

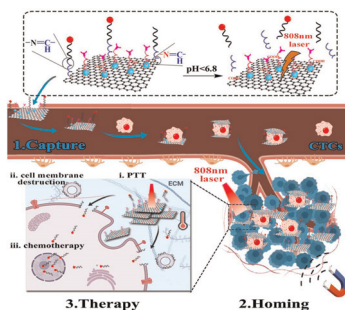
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Nano-formulations for bone-specific delivery of siRNA for *Crkl* silencing-induced regulation of bone formation and resorption to maximize therapeutic potential for bone-related diseases

Semun Seong, Veena Vijayan, Jung Ha Kim, Kabsun Kim, Inyoung Kim, Kondareddy Cherukula, In-Kyu Park* and Nacksung Kim*

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Manipulation and elimination of circulating tumor cells using multi-responsive nanosheet for malignant tumor therapy

Tao Liu, Bolei Cai, Pingyun Yuan, Le Wang, Ran Tian, Taiqiang Dai, Lin Weng and Xin Chen*



CORRECTIONS

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Correction: Carbazate-modified cross-linked dextran microparticles suppress the progression of osteoarthritis by ROS scavenging

Yanfeng Ding, Zhimin Li, Wenwen Hu, Xianjing Feng, Ying Chen, Guohua Yan, Yonglin Wang, Bo Zhu, Wei Yao, Li Zheng,* Maolin He,* Ming Gao* and Jinmin Zhao

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Correction: Preparation and characterizations of an injectable and biodegradable high-strength iron-bearing brushite cement for bone repair and vertebral augmentation applications

Luguang Ding, Huan Wang, Jiaying Li, Dachuan Liu, Jianzhong Bai, Zhangqin Yuan, Jiaojiao Yang, Lu Bian, Xijiang Zhao,* Bin Li* and Song Chen*

