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ISSN 2050-750X CODEN JMCBDV 11(39) 9315-9556 (2023)



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Introduction to microneedles

Ryan Donnelly, Ester Caffarel-Salvador, Harvinder Gill and Hyungil Jung

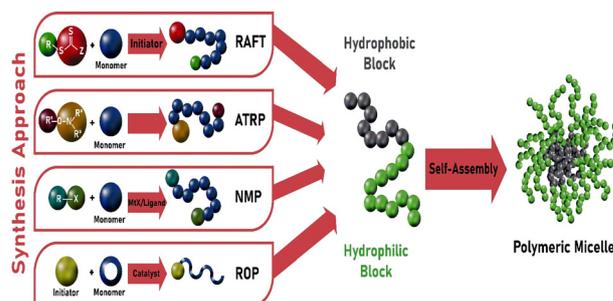


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Synthesis approaches of amphiphilic copolymers for spherical micelle preparation: application in drug delivery

Ali Aliabadi, Maliheh Hasannia, Masoume Vakili-Azghandi, Fatemeh Araste, Khalil Abnous, Seyed Mohammad Taghdisi, Mohammad Ramezani* and Mona Alibolandi*



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Journal of Materials Chemistry B (electronic: ISSN 2050-7518) is published

48 times a year by the Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, UK CB4 0WF.

All orders, with cheques made payable to the Royal Society of Chemistry, should be sent to the Royal Society of Chemistry Order Department, Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, CB4 0WF, UK

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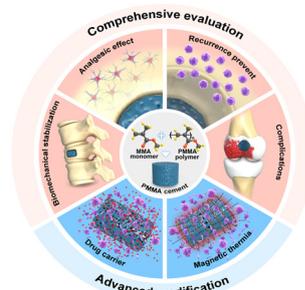


REVIEWS

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Comprehensive evaluation and advanced modification of polymethylmethacrylate cement in bone tumor treatment

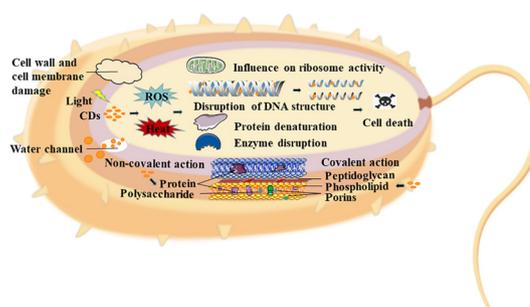
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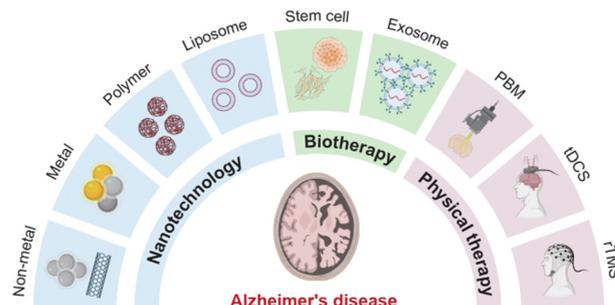
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Current emerging novel therapies for Alzheimer's disease and the future prospects of magneto-mechanical force therapy

Yajing Shen, Meng Wang, Shutang Li and Jinfei Yang*

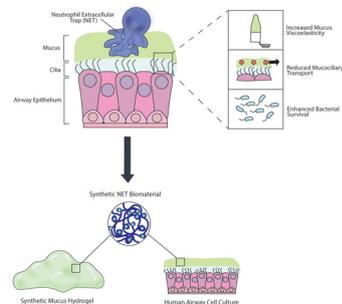


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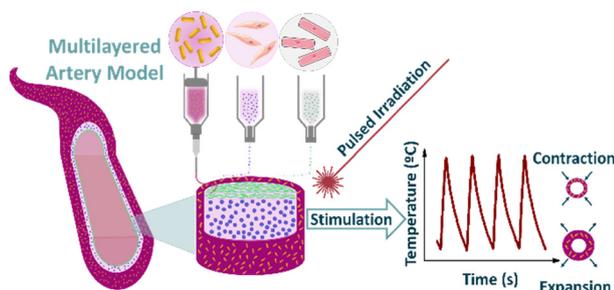
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Engineering *in vitro* models of cystic fibrosis lung disease using neutrophil extracellular trap inspired biomaterials

Allison Boboltz, Sydney Yang and Gregg A. Duncan*



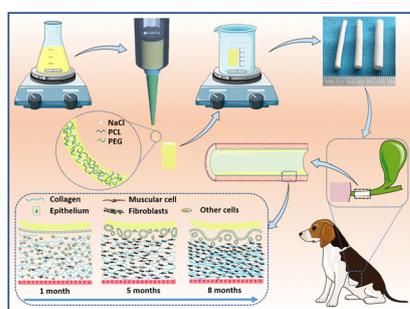
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Remodeling arteries: studying the mechanical properties of 3D-bioprinted hybrid photoresponsive materials

Uxue Aizarna-Lopetegui, Clara García-Astrain, Carlos Renero-Lecuna, Patricia González-Callejo, Irune Villaluenga, Miguel A. del Pozo, Miguel Sánchez-Álvarez, Malou Henriksen-Lacey* and Dorleta Jimenez de Aberasturi*

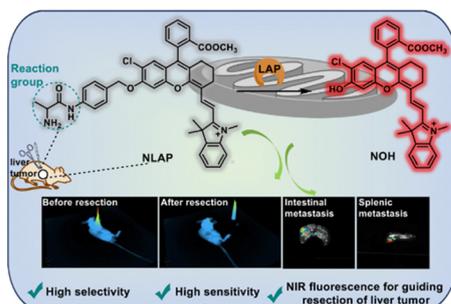
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Fabrication of 3D printed PCL/PEG artificial bile ducts as supportive scaffolds to promote regeneration of extrahepatic bile ducts in a canine biliary defect model

Yu-Long Cai, Fang Nan, Guo-Tao Tang, Yuan Ma, Yi Ren, Xian-Ze Xiong, Rong-Xing Zhou, Fu-Yu Li, Nan-Sheng Cheng and Xia Jiang*

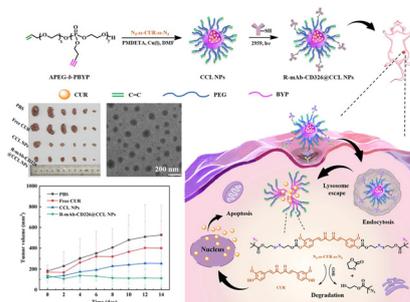
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Engineering a near-infrared LAP fluorescent probe with high sensitivity and selectivity for surgical resection of liver cancer

Renfeng Jiang, Jiayu Zeng, Qian Liu, Songjiao Li,* Longwei He* and Dan Cheng*

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A CD326 monoclonal antibody modified core cross-linked curcumin-polyphosphoester prodrug for targeted delivery and cancer treatment

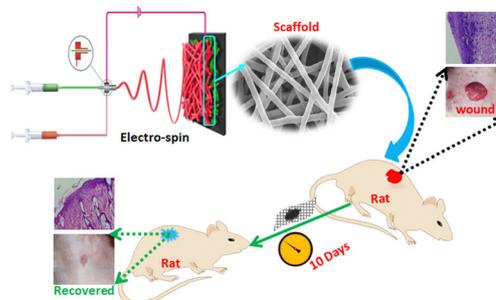
Haijiao Li, Mingzu Zhang, Jinlin He, Jian Liu, Xingwei Sun* and Peihong Ni*



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Asymmetric fabrication and *in vivo* evaluation of the wound healing potency of electrospun biomimetic nanofibrous scaffolds based on collagen crosslinked modified-chitosan and graphene oxide quantum dot nanocomposites

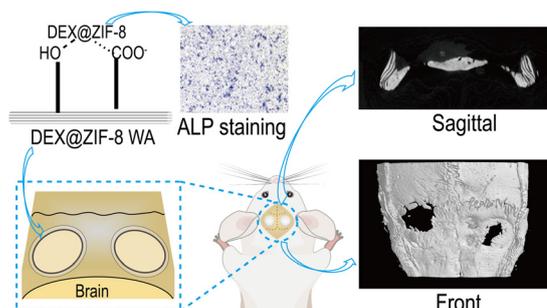
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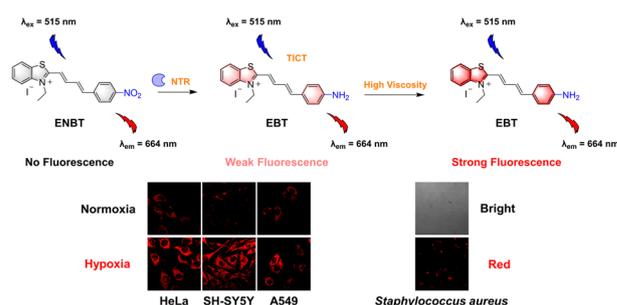
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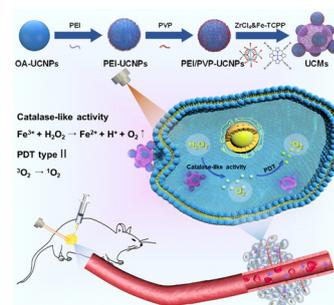
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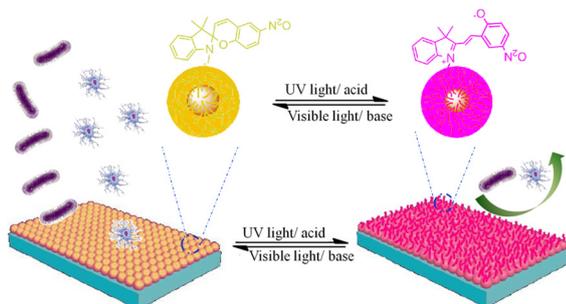
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Dual ligand-assisted assembly of metal–organic frameworks on upconversion nanoparticles for NIR photodynamic therapy against hypoxic tumors

Xinyue Zhang, Jiasen Cui, Jinhui Liu, Xi Chen, Mingli Chen* and Jianhua Wang*



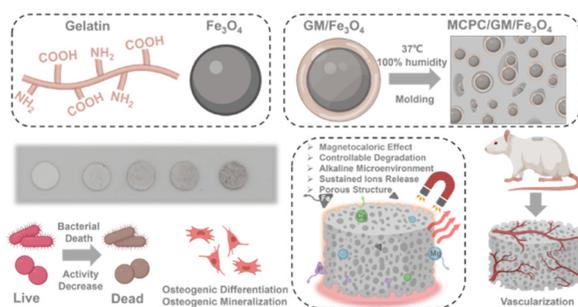
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A spiropyran-decorated nanocoating for dynamically regulating bacteria/cell adhesion and detachment

Jie Li, Zhuang Ma, Anran Li, Siyuan Huang, Yufei Zhang, Yun Xue, Xianhui Song, Ye Zhang, Shihao Hong, Mo Wang,* Zhongming Wu* and Xinge Zhang*

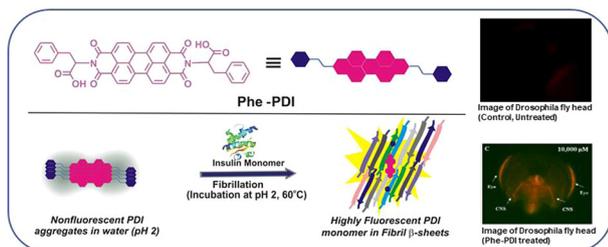
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Multifunctional magnetocaloric bone cement with a time-varying alkaline microenvironment for sequential bacterial inhibition, angiogenesis and osteogenesis

Xiaokang Yao, Yanan Zhao, Wen Hou, Kai Huang, Manqi Yan, Rong Tu, Takashi Goto and Honglian Dai*

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Spectroscopic features of a perylenediimide probe for sensing amyloid fibrils: *in vivo* imaging of A β -aggregates in a *Drosophila* model organism

Nilotpal Barooah, Puja Karmakar, M. K. Sharanya, Monalisa Mishra,* Achikanath C. Bhasikuttan* and Jyotirmayee Mohanty*

