

Journal of Materials Chemistry B

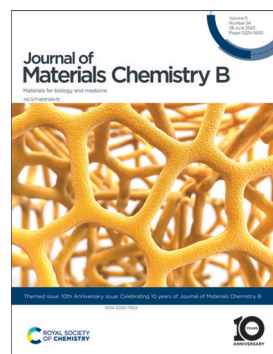
Materials for biology and medicine

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EDITORIAL

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Introducing the tenth anniversary issues of
Journal of Materials Chemistry A, B and C

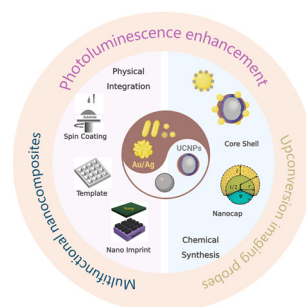


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Surface plasmon resonance of Au/Ag metals for the
photoluminescence enhancement of lanthanide ion
 Ln^{3+} doped upconversion nanoparticles in
bioimaging

Hao Peng, Shunxiang Li, Jie Xing, Fang Yang* and
Aiguo Wu*



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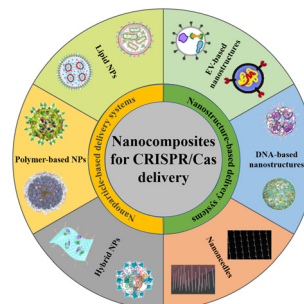


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Recent advances in nanocomposite-based delivery systems for targeted CRISPR/Cas delivery and therapeutic genetic manipulation

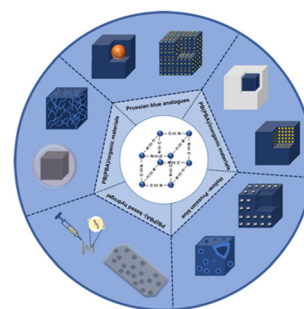
Muhammad Waseem Ghani, Ambreen Iqbal, Hammad Ghani, Sidra Bibi, Zixun Wang* and Renjun Pei*



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Progress in the preparation of Prussian blue-based nanomaterials for biomedical applications

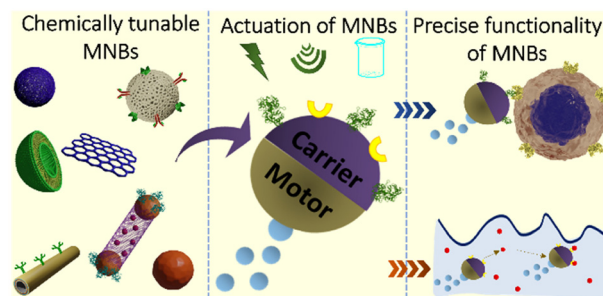
Kun Lu, Xiao-Yang Zhu, Yan Li* and Ning Gu*



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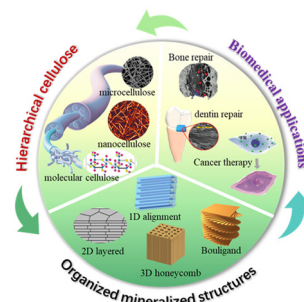
Saloni Andhari, Ganesh Khutale, Rituja Gupta, Yuvraj Patil and Jayant Khandare*



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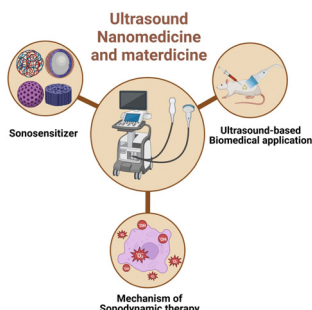
Organized mineralized cellulose nanostructures for biomedical applications

Yanhuizhi Feng, Helmut Cölfen* and Rui Xiong*



REVIEWS

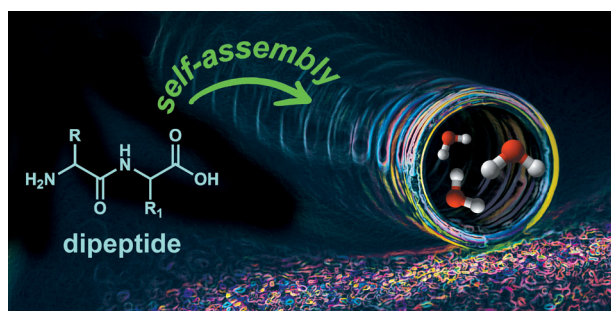
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Ultrasound nanomedicine and materdicine

Zeyu Wang, Xue Wang, Meiqi Chang,* Jia Guo* and Yu Chen*

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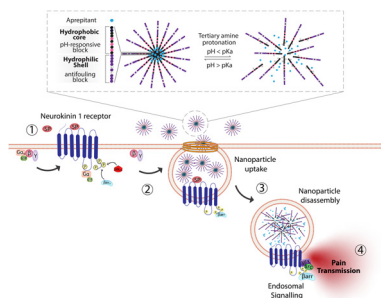


Nanotubes and water-channels from self-assembling dipeptides

Ottavia Bellotto, Paola D'Andrea and Silvia Marchesan*

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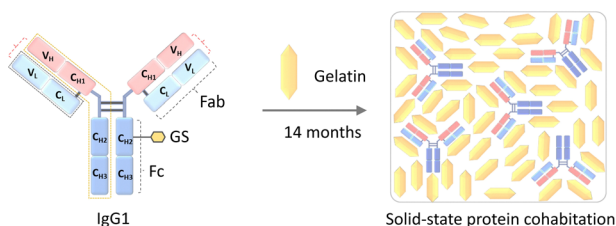
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Paulina D. Ramirez-Garcia,* Nicholas A. Veldhuis, Nigel W. Bunnett and Thomas P. Davis*

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Protein cohabitation: long-term immunoglobulin G storage at room temperature

Pankaj Bharmoria,* Saik Ann Ooi, Andrea Cellini, Daniel Tietze, Michal Maj, Kasper Moth-Poulsen* and Alesia A. Tietze*

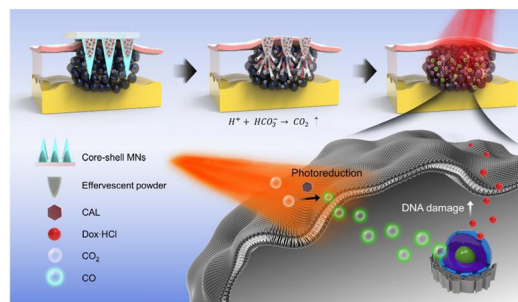


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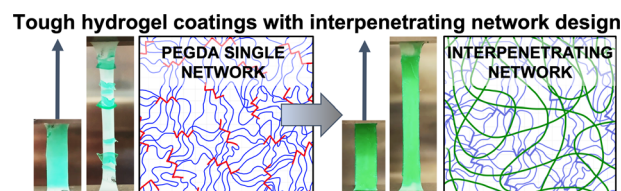
Junzhe Fu, Weijiang Yu, Xuedan Qian, Youxiang Wang* and Jian Ji*



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Interpenetrating network design of bioactive hydrogel coatings with enhanced damage resistance

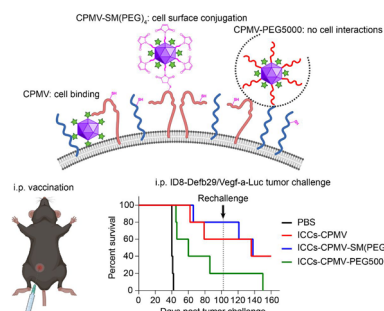
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A co-formulated vaccine of irradiated cancer cells and cowpea mosaic virus improves ovarian cancer rejection

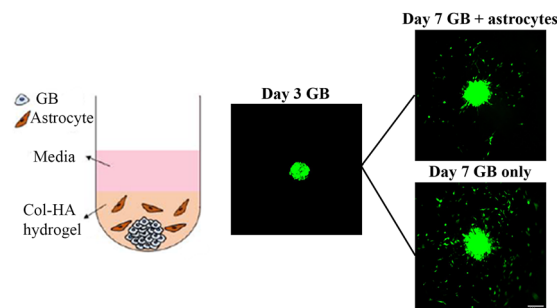
Zhongchao Zhao, Oscar A. Ortega-Rivera, Young Hun Chung, Andrea Simms and Nicole F. Steinmetz*



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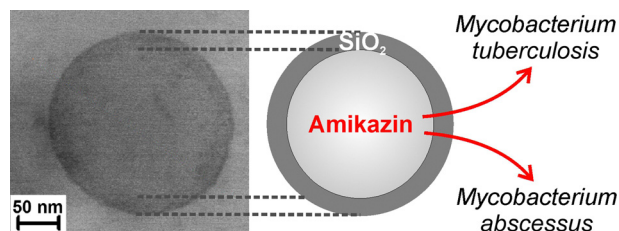
Evaluating glioblastoma tumour sphere growth and migration in interaction with astrocytes using 3D collagen-hyaluronic acid hydrogels

Yixiao Cui, Paul Lee, Jesse J. Reardon, Anna Wang, Skylar Lynch, Jose J. Otero, Gina Sizemore and Jessica O. Winter*



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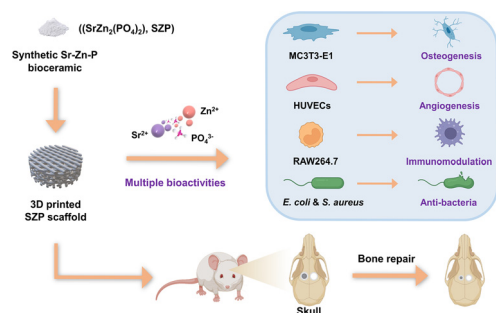
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Amikacin@SiO₂ core@shell nanocarriers to treat pulmonary bacterial infections

Mark Rutschmann, Natalja Redinger, Ulrich E. Schaible* and Claus Feldmann*

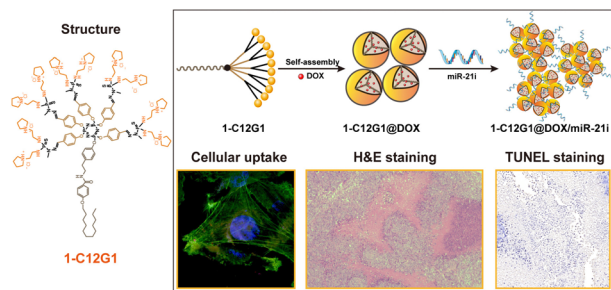
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3D printed strontium–zinc-phosphate bioceramic scaffolds with multiple biological functions for bone tissue regeneration

Li Deng, Lingwei Huang, Hao Pan, Qi Zhang, Yumei Que, Chen Fan, Jiang Chang,* Siyu Ni* and Chen Yang*

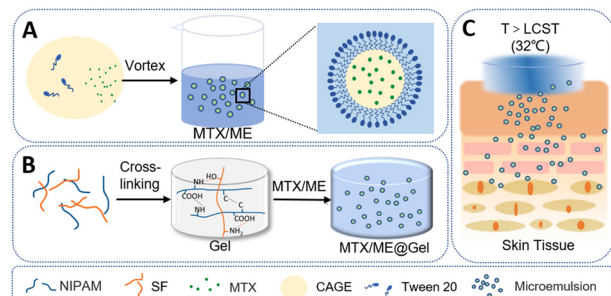
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Amphiphilic phosphorous dendron micelles co-deliver microRNA inhibitor and doxorubicin for augmented triple negative breast cancer therapy

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A thermo-responsive hydrogel loaded with an ionic liquid microemulsion for transdermal delivery of methotrexate

Yang Shu, Rong Xue, Yiru Gao, Wenxin Zhang and Jianhua Wang*

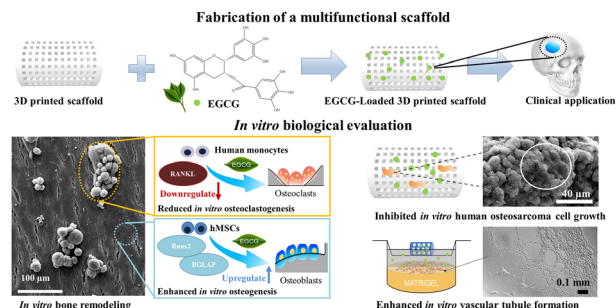


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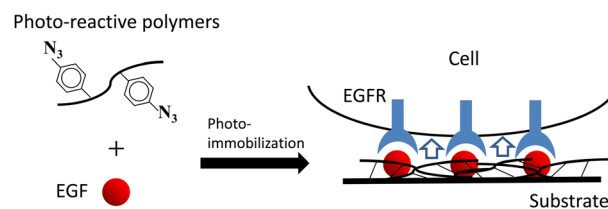
Yongdeok Jo, Naboneeta Sarkar and Susmita Bose*



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Photo-reactive polymers for the immobilisation of epidermal growth factors

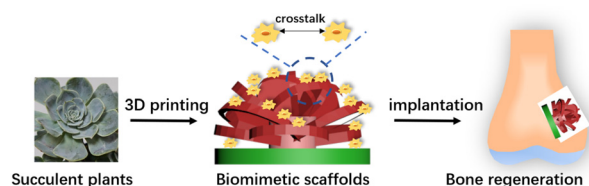
Liang-Chun Wu, Seiichi Tada, Takashi Isoshima, Takeshi Serizawa and Yoshihiro Ito*



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3D-Printing of succulent plant-like scaffolds with beneficial cell microenvironments for bone regeneration

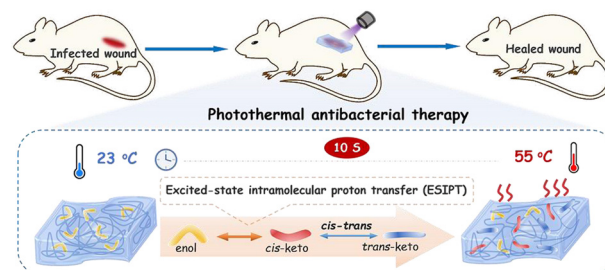
Yufeng Wang, Zikang Wang, Xiaopeng Yu, Meng Zhang, Xin Wang, Yanling Zhou, Qingqiang Yao* and Chengtie Wu*



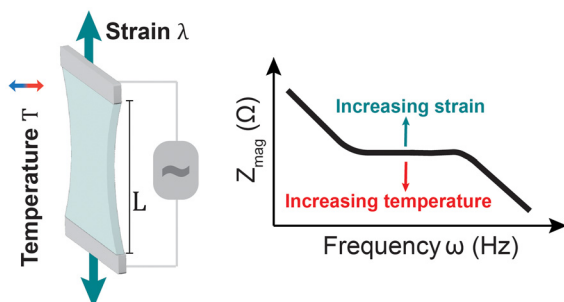
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Promoting photothermal antibacterial activity through an excited-state intramolecular proton transfer process

Wanni Yao, Tian Deng, Arui Huang, Yufeng Zhang,* Qianqian Li* and Zhen Li*



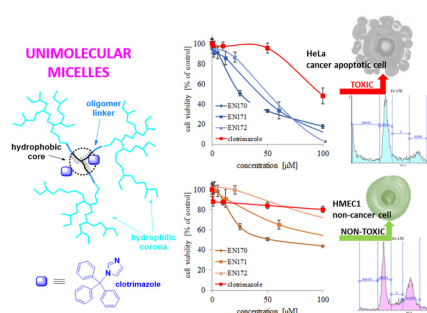
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Poisson–Nernst–Planck framework for modelling ionic strain and temperature sensors

Gaurav Balakrishnan, Jiwoo Song, Aditya S. Khair and Christopher J. Bettinger*

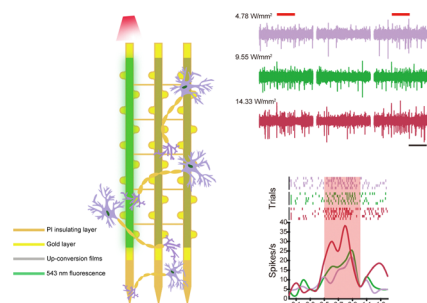
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Cross-linkable star-hyperbranched unimolecular micelles for the enhancement of the anticancer activity of clotrimazole

Mateusz Gosecki, Piotr Ziemczonek, Monika Gosecka,* Malgorzata Urbaniak, Ewelina Wielgus, Monika Marcinkowska, Anna Janaszewska* and Barbara Klajnert-Maculewicz

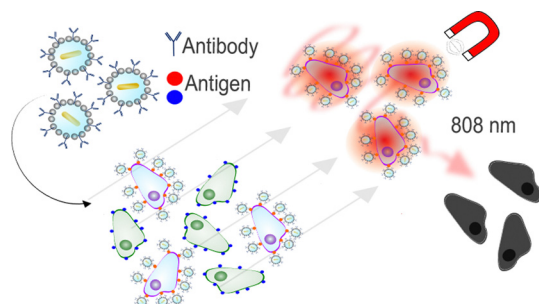
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Electrodeposited NaYF₄:Yb³⁺, Er³⁺ up-conversion films for flexible neural device construction and near-infrared optogenetics

Xuran Zhang, Jianfei Ding, Liang Zou, Huihui Tian, Ying Fang* and Jinfen Wang*

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Hybrid core–shell nanoparticles for cell-specific magnetic separation and photothermal heating

Cristina de la Encarnación, Felix Jungwirth, David Vila-Liarte, Carlos Renero-Lecuna, Safiyye Kavak, Iñaki Orue, Claire Wilhelm, Sara Bals, Malou Henriksen-Lacey, Dorleta Jimenez de Aberasturi* and Luis M. Liz-Marzán*

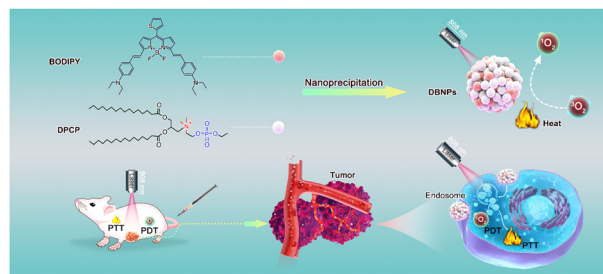


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Choline phosphate lipid-hitchhiked near-infrared BODIPY nanoparticles for enhanced phototheranostics

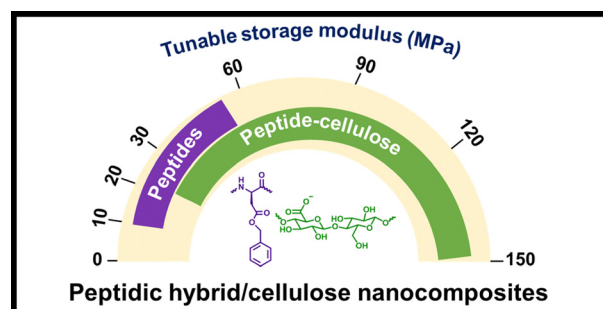
Huafeng Geng, Wenhai Lin, Junbao Liu,* Qing Pei* and Zhigang Xie*



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Leveraging peptide–cellulose interactions to tailor the hierarchy and mechanics of peptide–polymer hybrids

Daseul Jang, Laura E. Beckett, Jong Keum and LaShanda T.J. Korley*



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X-ray sensitive selenium-containing Ru complexes sensitize nasopharyngeal carcinoma cells for radio/chemotherapy

Changhe Shi, Zhongwen Yuan, Ting Liu, Leung Chan, Tianfeng Chen* and Jianfu Zhao*

