

Journal of Materials Chemistry B

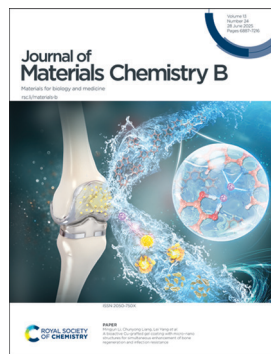
Materials for biology and medicine

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ISSN 2050-750X CODEN JMCBDV 13(24) 6887–7216 (2025)



Cover

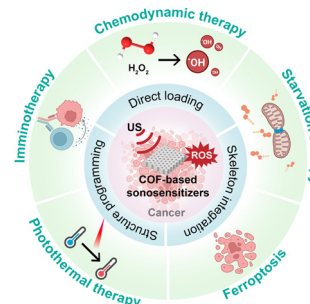
See Mingjun Li,
Chunyang Liang, Lei Yang
et al., pp. 7014–7023.
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REVIEWS

6896

Ultrasound-responsive nanoweapons: covalent organic frameworks for cancer sonodynamic therapy

Yu Zhang, Chunyuan Hou, Bin Zhu, Nan Han, Jun Wan, Shujun Feng* and Jun Luo*

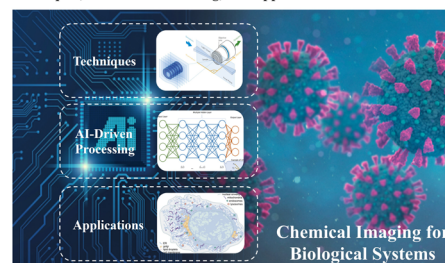


6916

Chemical imaging for biological systems: techniques, AI-driven processing, and applications

Ying Cui, Zhihan Zhang, Yuan Shi and Yongjie Hu*

Chemical Imaging for Biological Systems:
Techniques, AI-Driven Processing, and Applications



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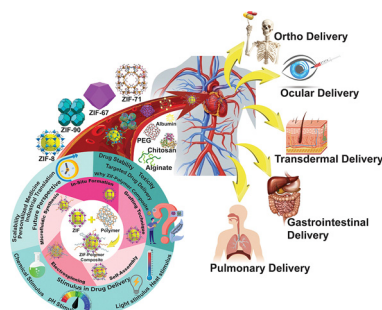


REVIEWS

6949

Recent progress in ZIF–polymer composites for advanced drug delivery applications

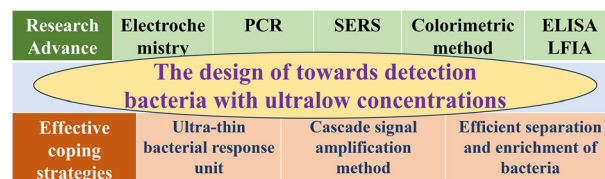
Rimsha Perveen, Shumaila Bibi,
Mohamad A. Saleem, Mohamed H. Helal, Adeel Afzal,
Muhammad Ahmad Wattoo and Aziz ur Rehman*



6990

Key challenges and coping strategies for the detection of bacteria at ultralow concentrations

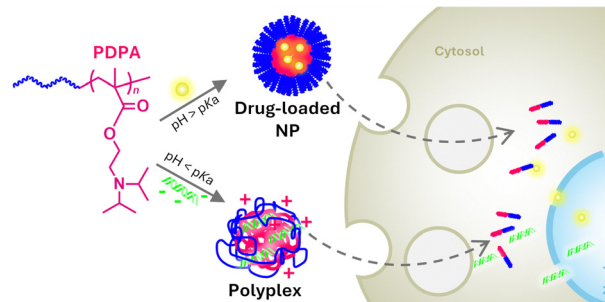
Zhentan Lu,* Siwei Zhang, Qiue Yin, Weihong Chen,
Le Zhou, Shan Liu and Dong Wang



7000

Polymeric nanocarriers for cancer treatment: the promise of sensitive poly(2-(diisopropylamino)ethyl methacrylate)

Joana S. Ferreira, João P. Vareda, A. S. Oliveira,
Jéssica S. Barbosa, Francisca Bastos,
Patrícia V. Mendonça* and A. C. Fonseca

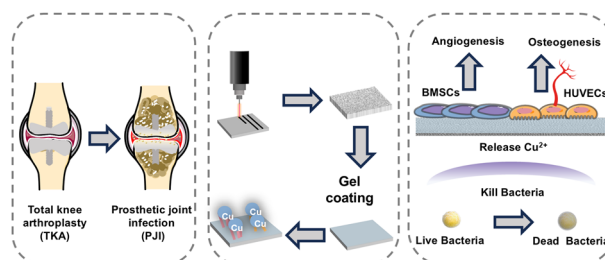


PAPERS

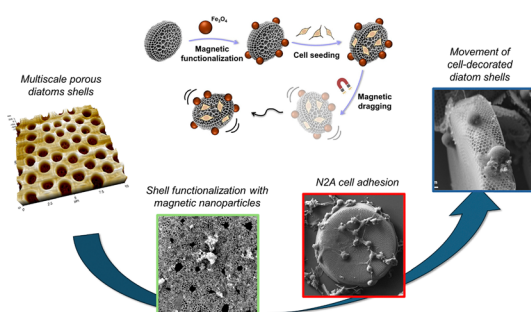
7014

A bioactive Cu-grafted gel coating with micro–nano structures for simultaneous enhancement of bone regeneration and infection resistance

Ying Hu, Mingjun Li,* Xun Xu, Nan Ma, Jiahao Luo,
Xiaoxuan Wu, Qixiang Ping, Xiao Lin, Tingbin Zhang,
Chunyang Liang* and Lei Yang*



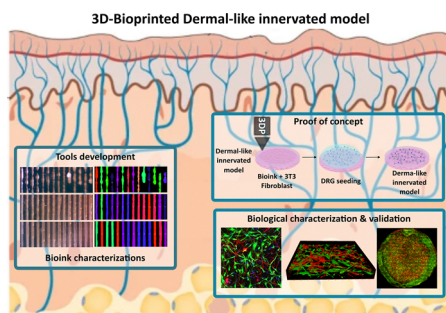
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Magnetic diatom shells: nature's blueprint for cellular transport

Alice Lunghi, Danilo Vona, Stefania Roberta Cicco, Cesar Vicente-Garcia, Fabio Biscarini, Gianluca M. Farinola* and Michele Bianchi*

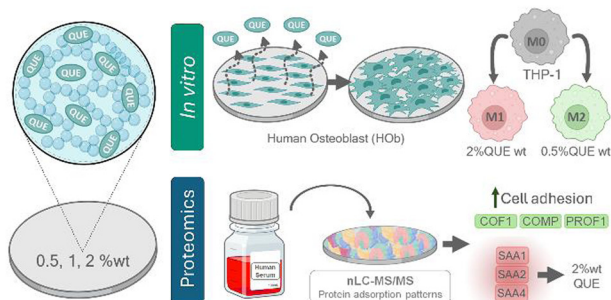
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A 3D-bioprinted dermal-like scaffold incorporating fibroblasts and DRG neurons to investigate peripheral nerve regeneration

Francesco Formaggio,* Emanuela Saracino, Marianna Barbalinardo, Eva Clemente, Franco Corticelli, Sara Buoso and Simone Bonetti*

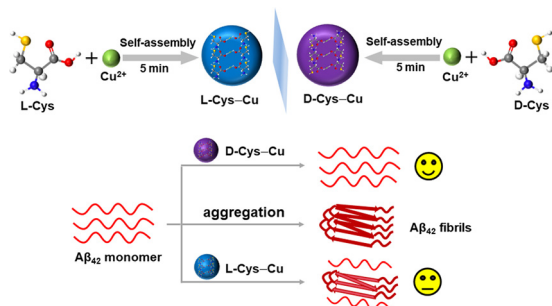
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Quercetin-doped sol-gel coatings on titanium implants: a promising approach for enhanced immune response and cell adhesion

C. Arias-Mainer, F. Romero-Gavilán,* A. Cerqueira, D. Peñarocha-Oltra, I. García-Arnáez, O. Amorrotu, M. Azkargorta, F. Elortza, M. Gurruchaga, I. Goñi and J. Suay

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Self-assembled cysteine-copper chiral nanoparticles for inhibiting aggregation of amyloid β peptides

Kairen Zhao, Yuanyuan Xue and Baoxin Li*



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Bioinspired silk protein modification to develop instant dissolvable microneedles with superior mechanical properties and long-term biomolecule stabilization

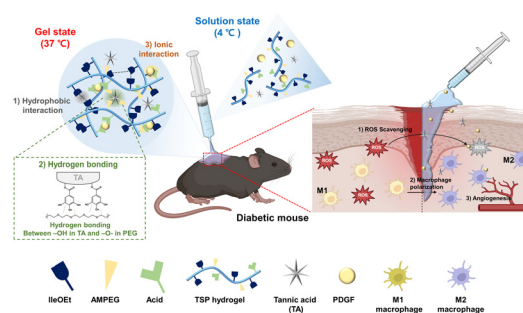
Jayakumar Rajendran, Jeyashree K., Sujith M. S.,
Lalitha Devi Alluri and Jyotsnendu Giri*



7090

Thermo-responsive hydrogel *via* sustained Co-delivery of TA and PDGF to modulate the diabetic microenvironment and accelerate diabetic wound healing

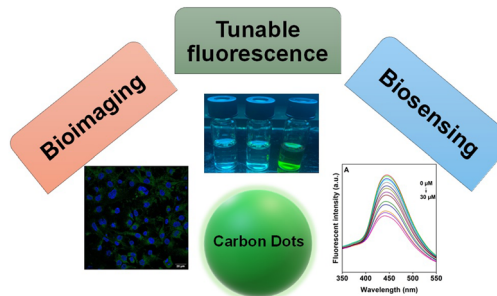
Jisun Kim, Ki Wan Bong, Jung-Kyo Cho and
Soo-Chang Song*



7106

Biogenic carbon dots derived from the microwave carbonization of amino acid mixture: cellular biocompatible, biomolecular probes, and live cell imaging agents

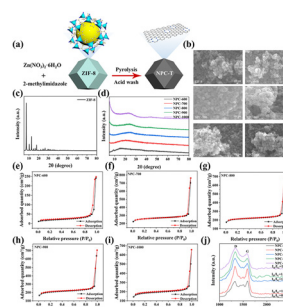
Navya P. N., Ranjith Kumar Jakku,
Harishkumar Madhyastha, Ruchika Ojha,*
Selvakannan Periasamy, Magdalena Plebanski and
Suresh K Bhargava*



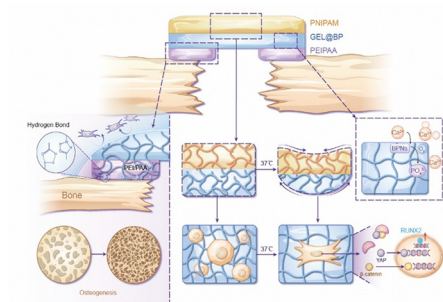
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Carbon-based nanomaterials with higher specific surface area: more expensive but more effective antimicrobials

Ye Feng, Xin Zhang, Chunyong Liang, Dan Xia,
Donghui Wang,* Baoye Li* and Ting Ma*



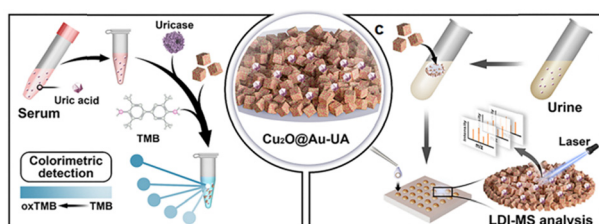
7129



Adhesive hydrogel barriers synergistically promote bone regeneration by self-constructing microstress and mineralization microenvironment

Senlin Chen, Mingxin Qiao, Yanhua Liu, Zihan He, Shihua Huang, Zhengyi Xu, Wenjia Xie, Jian Wang, Zhou Zhu* and Qianbing Wan*

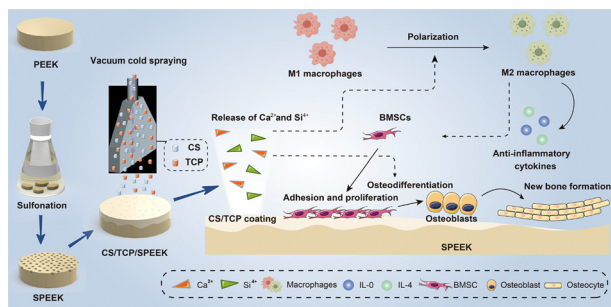
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Dual model biosensor integrated with peroxidase-like activity and self-assembly for uric acid detection

Dingyitai Liang, Ziqi Ding, Yushu Ding, Wenxuan Tang, Shouzhi Yang, Xiaoyu Xu, Yuning Wang* and Kun Qian*

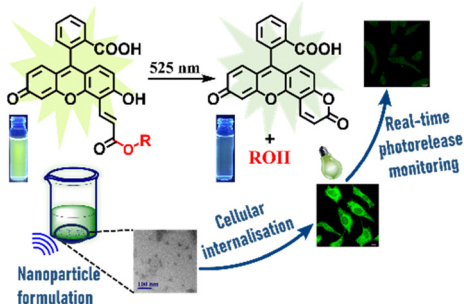
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A dual-functional biodegradable composite coating fabricated on sulfonated PEEK via vacuum cold spraying: immunomodulation-driven osteointegration

Rui Ma, Zidong Wu, Xiaoyu Guo, Zixuan Wu, Zheyue Zhu, Yuning Qu, Kunzheng Wang, Chengxin Li, Kai Ma* and Pei Yang*

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Green-light responsive fluorescein-based photoremovable protecting group: nanoparticle formulation for controlled release of bioactive molecules with real-time-monitoring ability

Subham Pal, Sayan Paul, Suchhanda Biswas, Batakrishna Jana* and N. D. Pradeep Singh*

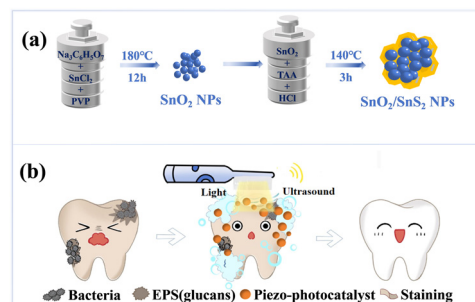


PAPERS

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Novel yellow light-responsive $\text{SnO}_2/\text{SnS}_2$ piezo-photocatalysts with excellent performances for tooth whitening and biofilm eradication

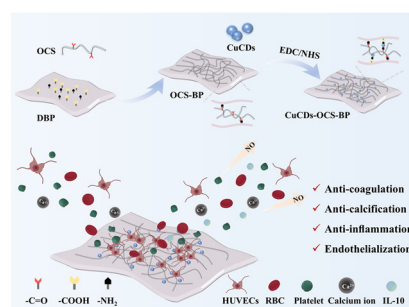
Jiahe Song, Shiping Yuan, Shujuan Liu,* Yunsong Wang, Bocan Yang, Linwan Ji, Liangcan He* and Shaoqin Liu*



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An oxidized chondroitin sulfate-crosslinked and CuCDs-loaded decellularized bovine pericardium with improved anti-coagulation, pro-endothelialization and anti-calcification properties for BHVs

Shubin Shi, Xu Wei, Xu Peng, Xinyun Pu, Shaoxiong Feng, Xi Gao and Xixun Yu*



CORRECTION

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Correction: Virus-like particles nanoreactors: from catalysis towards bio-applications

Yuqing Su, Beibei Liu, Zhenkun Huang, Zihao Teng, Liulin Yang, Jie Zhu, Shuaidong Huo* and Aijie Liu*

RETRACTION

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Retraction: Biocompatible dextran-coated gadolinium-doped cerium oxide nanoparticles as MRI contrast agents with high T_1 relaxivity and selective cytotoxicity to cancer cells

A. L. Popov, M. A. Abakumov, I. V. Savintseva, A. M. Ermakov, N. R. Popova, O. S. Ivanova, D. D. Kolmanovich, A. E. Baranchikov and V. K. Ivanov*

