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Journal of Materials Chemistry B

Materials for biology and medicine

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Cover
See Hironori Izawa, Shinsuke Ifuku *et al.*, pp. 144–152. Image reproduced by permission of Hironori Izawa from *J. Mater. Chem. B*, 2026, **14**, 144.

REVIEWS

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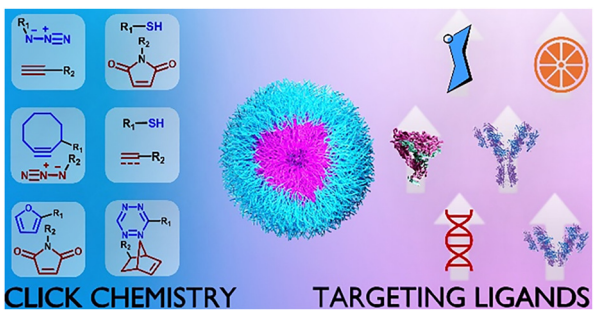
Engineering polymeric micelles for targeted drug delivery: "click" chemistry enabled bioconjugation strategies and emerging applications

Enfal Civril, Rana Sanyal* and Amitav Sanyal*



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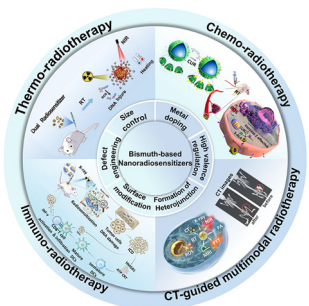
Bismuth-based nanomaterials with enhanced radiosensitivity for cancer diagnosis and treatment

Tianhao Xing, Xujiang Yu* and Wanwan Li*



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REVIEWS

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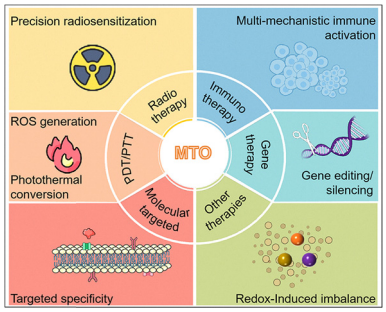
Mitoxantrone-engineered multifunctional nanoplatforms for precision imaging-guided synergistic cancer therapy: recent advances and future perspectives

Juan Yu, Zijun Qiu, Susu Yan, Aishan Lin and Yanan Li*



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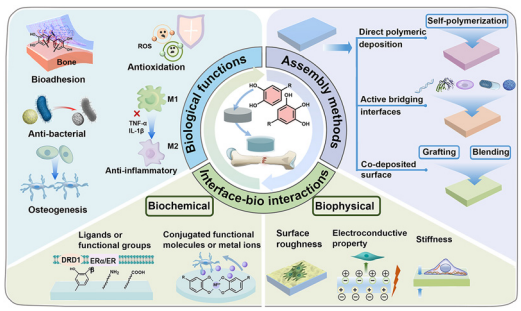
Versatile bioactive polyphenolic coatings for bone tissue regeneration: from assembly strategies to biointerface interactions

Yidan Wang, Hui Yang, Mi Chen, Wenhao Zhou,* Bo Lei* and Sen Yu*



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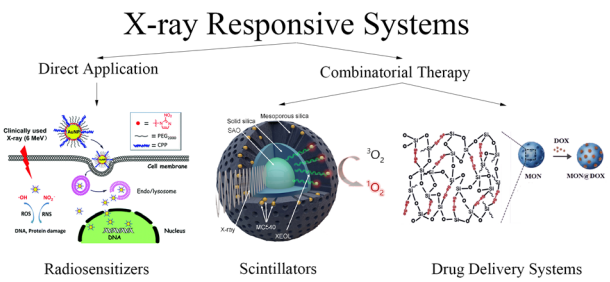
X-ray responsive therapeutic systems in tumor treatments

Runchen Sun, Yuan Cheng and Tao Zhang*



COMMUNICATION

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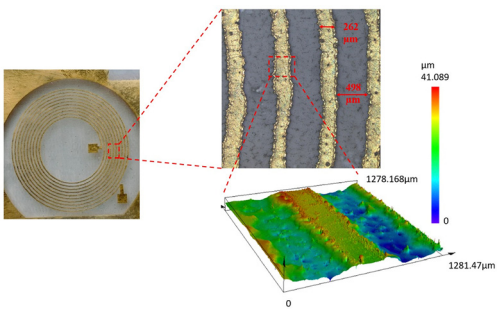
Laser ablation as a rapid prototyping approach for fabricating metallic antennas on soft polymer substrates

Grishmi Rajbhandari, Andrew Nattestad, Xiao Liu,* Stephen Beirne and Gordon G. Wallace*



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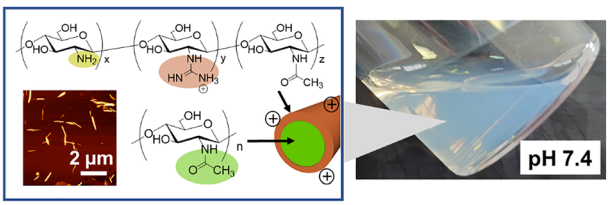

Guanidinylated nanochitins: guanidinylated chitin nanocrystals are dispersible at neutral pH

Hironori Izawa,* Sota Ando, Kensei Sone, Wataru Tajima, Dagmawi Abebe Zewude, Yusuke Yamashita and Shinsuke Ifuku*

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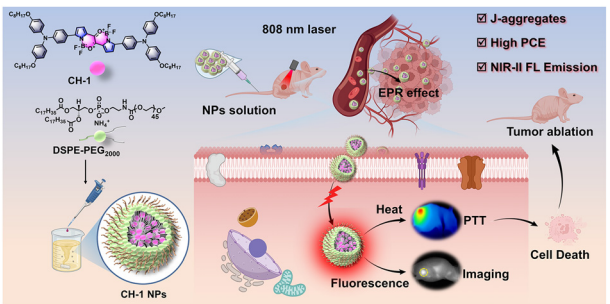

A BF_2-bridged J-aggregate on a donor–acceptor conjugated oligomer with NIR-emissive theranostics for efficient bioimaging and cancer therapy

Yuxin Guo, Yujie Ma, Zhenghao Huang, Huan Chen,* Ying Liu, Jing Zhai, Zebin Chen,* Xuejuan Li, Yijian Gao, Yu Wang* and Shengliang Li*

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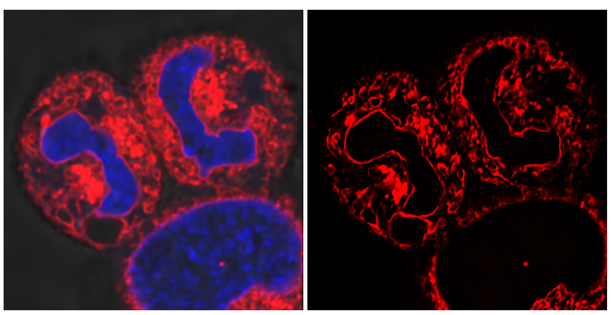

Lipid mapping of cell mitosis by non-covalent migratory fluorescence labelling

Anaïs C. Bourgès,* Massimiliano Garre and Donal F. O'Shea*

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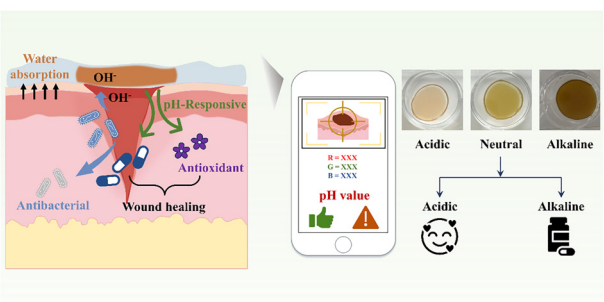

A pH-responsive anthocyanin-based hydrogel with colorimetric infection monitoring and antibacterial properties for wound healing

Jiru Miao, Haiyang Chai, Lei Song, Xiaoxiao Liao, Shuyan Chen, Ying Xiao and Rong Wang*

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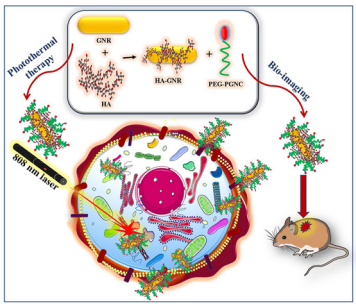
Targeted cancer theranostics using a plasmonic gold nanohybrid assembly of chiral ligand stabilized nanorods and protein nanoclusters

Nisha Narayanan, N. S. Dhujana, R. Remyachand, M. E. Dhushyandhun and Ramapurath S. Jayasree*



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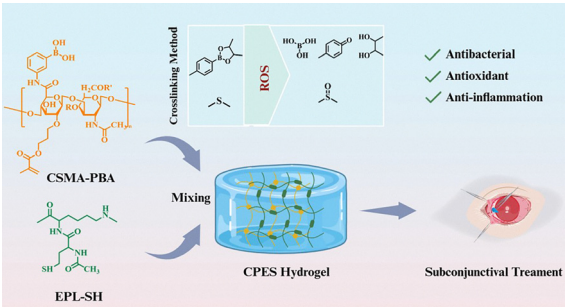
Multifunctional ROS-responsive hydrogels alleviate subconjunctival inflammation

Xing Wang, Yuting Deng, Boyuan An, Qingyun Ning, Jingfan Li, Chaojie Yu, Zhanrong Li* and Jingguo Li*



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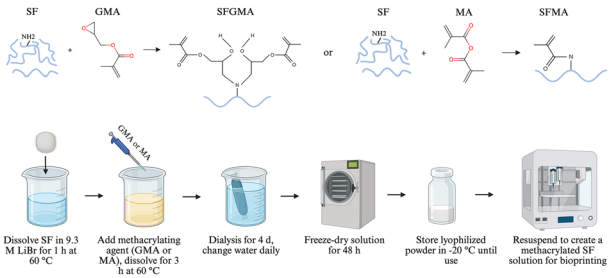
Glycidyl methacrylate and methacrylic anhydride characterization for silk fibroin methacrylation in tissue engineering

Catherine A. Wu, Yuanjia Zhu, Charles J. Stark, Seung Hyun Lee, Chris Huynh, Jacob P. LaMay and Y. Joseph Woo*



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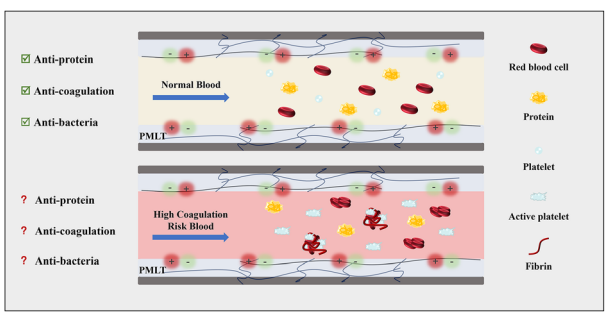
Evaluation of the anti-thrombosis efficacy of MPC-based copolymer coatings in high coagulation risk blood

Yanan Wang, Shiyu Yao, Zian Wang, Lietao Wang, Hui Yan, Fanjun Zhang, Jin Wang, Lu Zhang,* Zhongwei Zhang,* Rifang Luo* and Yunbing Wang



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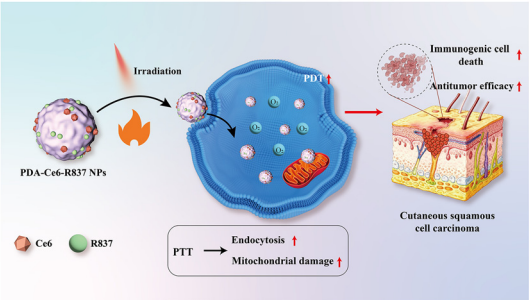

Photo-immuno nano-bomb for co-delivery of Ce6 and R837 potentiates immunogenic cell death and amplifies anti-tumor efficacy in cutaneous squamous cell carcinoma

Xiaoyan Zhang, Jiahui Zhu, Tinghua Li, Huan Cao* and Lin Wang*

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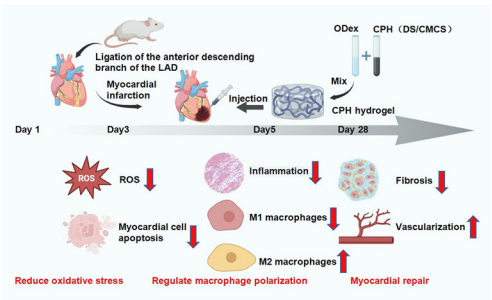

An injectable multifunctional hydrogel for cardiac spatiotemporal repair *via* modulating oxidative stress and the inflammatory microenvironment

Jiajun Lu, Jing Chen, Linken Lu, Yating Zhao, Ruiqi Liu, Yanru Li, Chenguang Liu, Pengcheng Che and Hong Sun*

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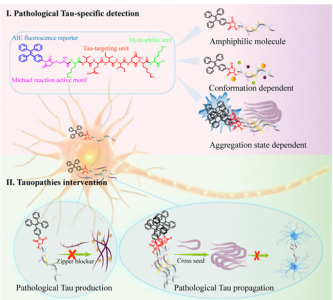

An aggregation-induced emission-active theranostic agent for selectively detecting and intervening pathological Tau protein

Jixue Yang, Youwen Deng, Shu Qin, Ziting Chen, Yuting Lu, Shunli Ji, Taijun Hang and Min Song*

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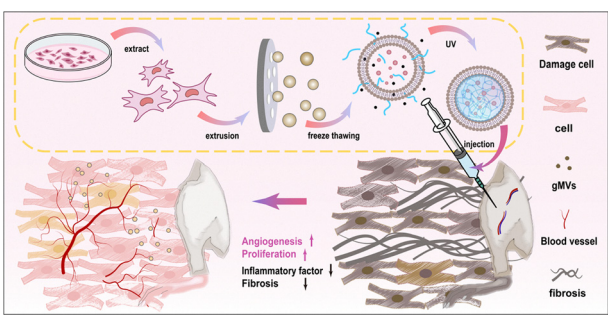

Intravesicular gelation of mesenchymal stromal cell-derived microvesicles for enhanced therapeutic angiogenesis in lower limb ischemia

Chuang Liu, Wenqi Xie, Xian Li, Zixuan Dong and Xiaoling Fu*

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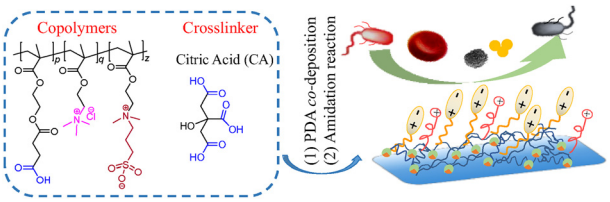
Mussel-inspired citric acid crosslinked antifouling and bactericidal coatings constructed using sulfobetaine zwitterionic/quaternary ammonium cationic copolymers

Shengnan Cui, Henan Wei, Xiaolin Zhang, Haimei Cao and Shiping Zhang*



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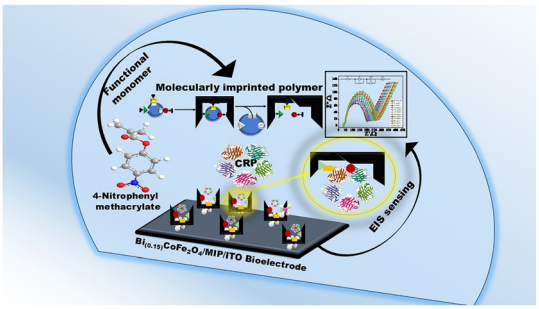
Impedimetric sensing of C-reactive protein using a novel molecularly imprinted polymer coupled with bismuth-enhanced cobalt ferrite nanocomposites for cardiovascular risk assessment

Siddhima Singh, Astha Singh, Neelottma Singh* and Jay Singh*



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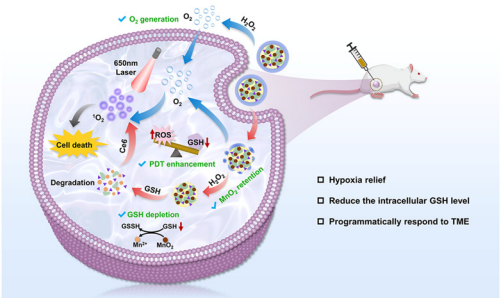
Intelligent catalase-coated MnO_2 nanoparticles with programmed oxygen supply and glutathione depletion for enhanced photodynamic therapy

Weijuan Jia, Aoxue Zhang, Haiwei Hou, Yazhong Bu, Di Liu,* Ching-Husan Tung* and Baoji Du*



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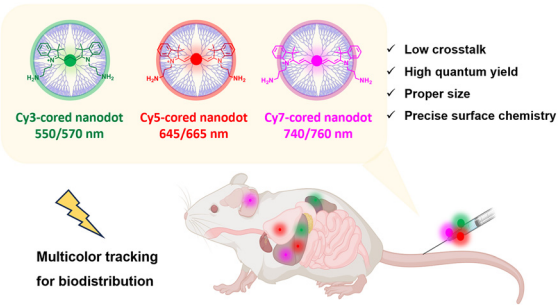
Multicolor cyanine dendritic dots for real-time, high-resolution tracking of nanoparticle biodistribution

Zhehao Wang, Changran Yang, Yuji Sun,* Ying Piao, Youqing Shen and Zhuxian Zhou*



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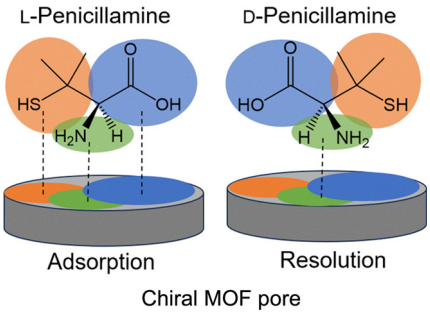

Tuning enantioselective drug adsorption in isoreticular homochiral metal–peptide frameworks through proximity pore interactions

James Ho, Ankit K. Yadav, Andrzej Gładysiak, Andrew P. Carpenter, Anjali Verma, Matthew A. Cranswick, Adrian Henle, Mas A. Subramanian, Joe Baio and Kyriakos C. Stylianou*

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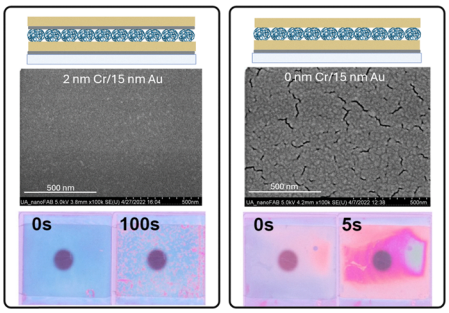

Elucidation of how metal layer deposition conditions impact the optical responses of microgel-based etalon devices to stimuli

Haley Hunter and Michael J. Serpe*

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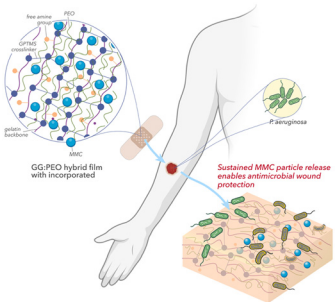

Smart antimicrobial wound dressings based on mechanically and biologically tuneable hybrid films

Sara Sadati, Marcus J Swann, Rui Chen, Jérôme Charmet, Meera Unnikrishnan, Steven L Percival and Dmitry Isakov*

EXPRESSION OF CONCERN

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Expression of concern: The design and synthesis of redox-responsive oridonin polymeric prodrug micelle formulation for effective gastric cancer therapy

Luzhou Xu, Lei Zhu, Kai Zheng, Junlou Liu, Panpan Tian, Di Hu, Qianqian Wang, Qiaoyun Zuo, Xiaosong Ouyang, Yanna Dai, Yuxian Fu, Xinyi Dai, Fang Huang* and Jun Cheng*

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CORRECTIONS

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Correction: Encapsulation of living cells into sporopollenin microcapsules

Shwan Abdullah Hamad, Amro F. K. Dyab, Simeon D. Stoyanov and Vesselin N. Paunov*

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Correction: Dual-functional guanosine-based hydrogel: high-efficiency protection in radiation-induced oral mucositis

Zihan Ding, Xiaopei Hu, Wenhui Liang, Shuhao Zheng, Xiaobo Luo and Hang Zhao*

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Correction: 3D bioprinting of biomimetic self-assembling peptides and neural stem cells for nervous tissue engineering

Hugues Mondésert, Chiara Malloggi, Andrea Lazzaro, Giulia Sala, Valentina Corvaglia, Mahdi Forouharshad and Fabrizio Gelain*