

Journal of Materials Chemistry B

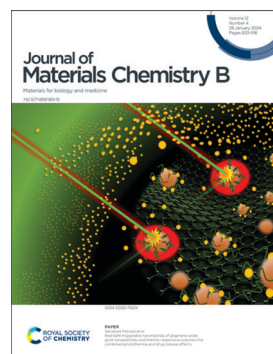
Materials for biology and medicine

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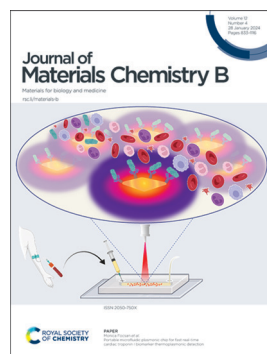
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See Salvatore Petralia *et al.*, pp. 952–961. Image reproduced by permission of Salvatore Petralia from *J. Mater. Chem. B*, 2024, 12, 952.



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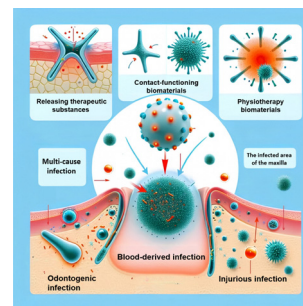
See Monica Focsan *et al.*, pp. 962–972. Image reproduced by permission of Andreea Campu and Monica Focsan from *J. Mater. Chem. B*, 2024, 12, 962.

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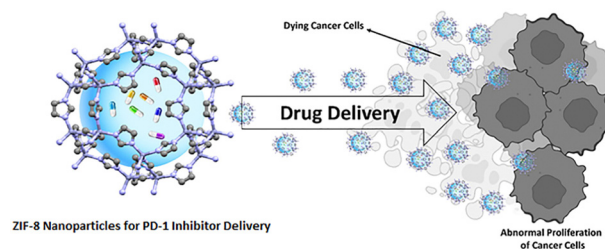
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Farangis Rastin, Mahsa Akbari Oryani, Sonia Iranpour, Hossein Javid, Alireza Hashemzadeh* and Mehdi Karimi-Shahri*



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Fundamental questions
Elemental answers

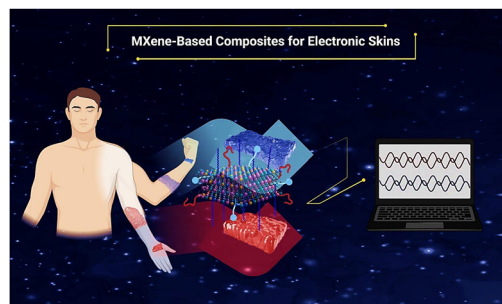


REVIEWS

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Advancements in MXene-based composites for electronic skins

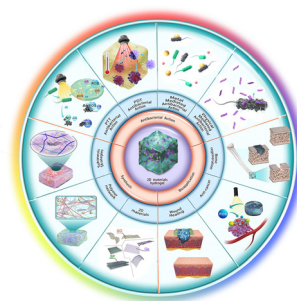
Siavash Iravani,* Navid Rabiee and Pooyan Makvandi*



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2D nanomaterial-based 3D network hydrogels for anti-infection therapy

Mingji Jiang, Yingnan Zhu, Qingsi Li, Wenxin Liu,* Alideertu Dong* and Lei Zhang*

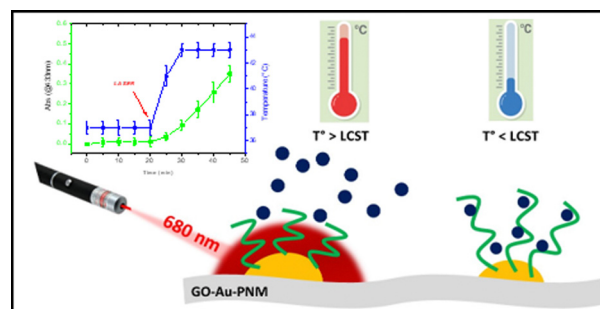


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Red light-triggerable nanohybrids of graphene oxide, gold nanoparticles and thermo-responsive polymers for combined photothermia and drug release effects

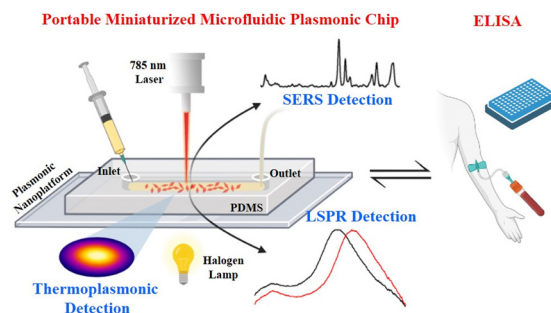
Grazia M. L. Consoli, Ludovica Maugeri, Giuseppe Forte, Gianpiero Buscarino, Antonino Gulino, Luca Lanzanò, Paolo Bonacci, Nicolò Musso and Salvatore Petralia*



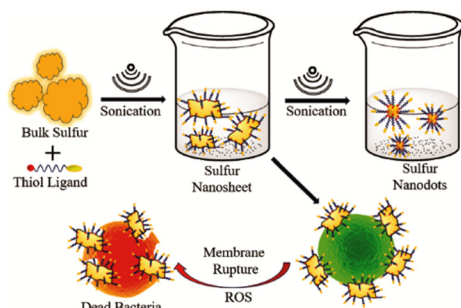
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Portable microfluidic plasmonic chip for fast real-time cardiac troponin I biomarker thermoplasmonic detection

Andreea Campu, Ilinca Muresan, Monica Potara, Diana Raluca Lazar, Florin-Leontin Lazar, Simona Cainap, Dan Mircea Olinic, Dana Maniu, Simion Astilean and Monica Focsan*



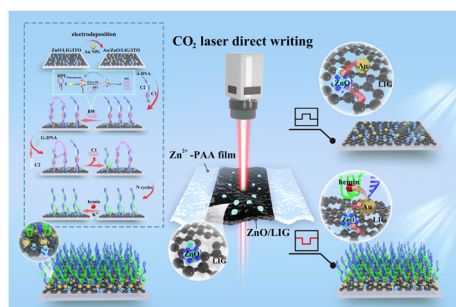
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Thiol ligand-mediated exfoliation of bulk sulfur to nanosheets and nanodots: applications in antibacterial activity

Avijit Mondal, Rashi Salampuriya, Aditya Umesh and Mrinmoy De*

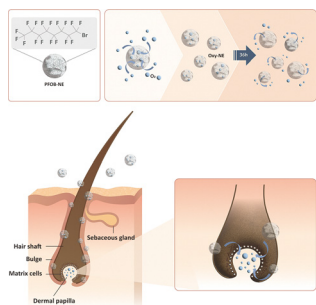
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A laser-induced zinc oxide/graphene photoelectrode for a photocurrent-polarity-switching photoelectrochemical biosensor with bipedal DNA walker amplification

Zhenli Qiu, Yufen Lei, Xintong Lin, Jinman Zhu, Ruijin Zeng, Rongjian Sa, Dianping Tang, Qiang Chen* and Yiting Chen*

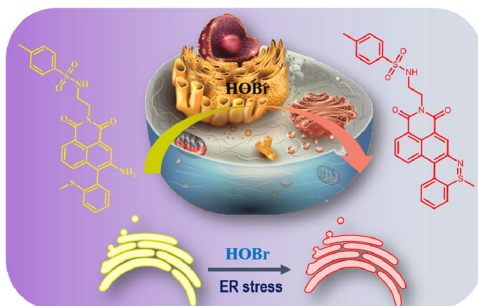
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The effect of oxygen supply using perfluorocarbon-based nanoemulsions on human hair growth

Phil June Park,* Himangsu Mondal, Bong Soo Pi, Sung Tae Kim* and Jun-Pil Jee*

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A ratiometric fluorescent probe for imaging the fluctuation of HOBBr during endoplasmic reticulum stress

Bingpeng Guo, Mengyu Li, Guiwen Hao, Liangchen Wei, Honghan Sa, Jianbin Chen,* Wei Shu* and Changxiang Shao*

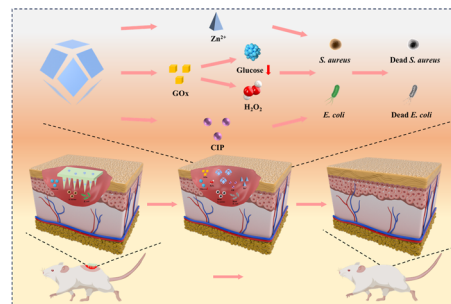


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A multimodal therapy for infected diabetic wounds based on glucose-responsive nanocomposite-integrated microneedles

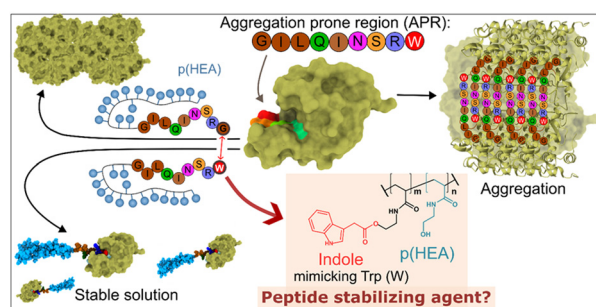
Qixin Zhou, Xiaodan Li, Nan Gao, Guixia Ling* and Peng Zhang*



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Synthetic macromolecular peptide-mimetics with amino acid substructure residues as protein stabilising excipients

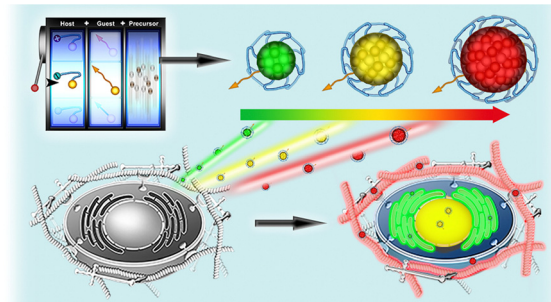
Ruggero Foralosso, Rafał Jerzy Kopiasz, Cameron Alexander,* Giuseppe Mantovani* and Snow Stolnik*



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A robust and versatile host–guest peptide toolbox for developing highly stable and specific quantum dot-based peptide probes for imaging extracellular matrices and cells

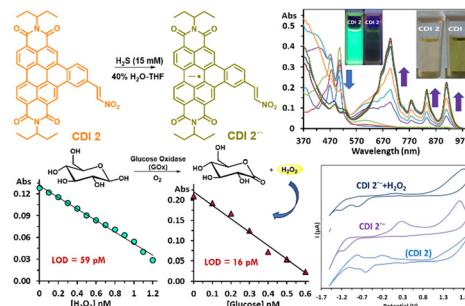
Xiangdong Cai, Bo Wang, Linge Nian, Sha Zhao and Jianxi Xiao*



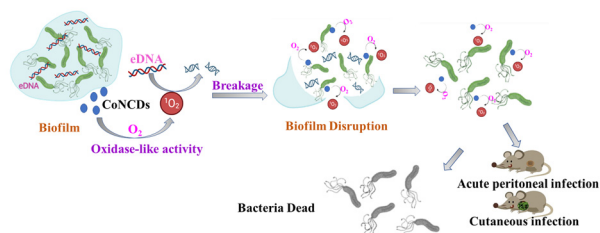
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A coronene diimide based radical anion for detection of picomolar H₂O₂: a biochemical assay for detection of picomolar glucose in aqueous medium

Navdeep Kaur and Prabhpreet Singh*



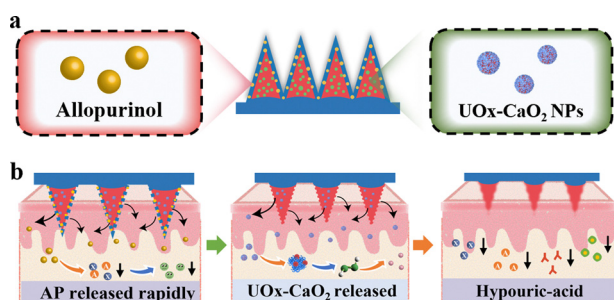
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Co-, N-doped carbon dot nanozymes based on an untriggered ROS generation approach for anti-biofilm activities and *in vivo* anti-bacterial treatment

Wenpei Dong, Lingyun Xu, Mengting Chen, Tao Jiang, Li Su,* Jinliang Ma, Chang-po Chen* and Guisheng Zhang*

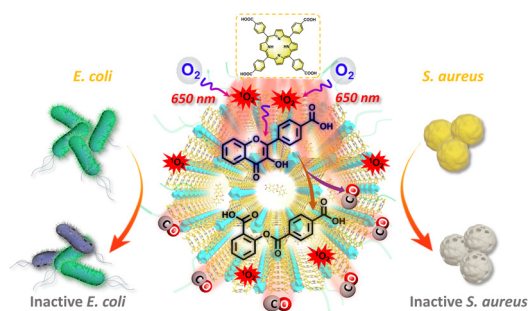
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Core-shell structured microneedles with programmed drug release functions for prolonged hyperuricemia management

Rui Wang, Yanfang Sun,* Han Wang, Tianqi Liu, Amin Shavandi, Lei Nie, Khaydar E. Yunusov and Guohua Jiang*

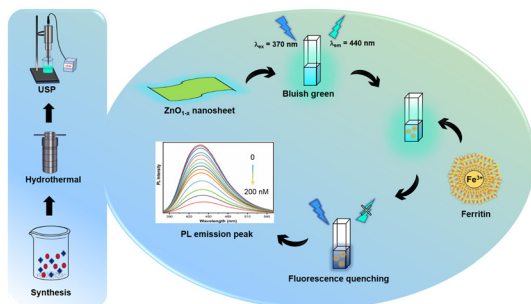
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Red light-triggered release of ROS and carbon monoxide for combinational antibacterial application

Mengdan Zhang, Jian Cheng, Zhiqiang Shen, Kewu He* and Bin Zheng*

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Two-dimensional oxygen-deficient ZnO_{1-x} nanosheet as a highly selective and sensitive fluorescence probe for ferritin detection: the electron transfer biosensor (ETBS)

Priyanka Rana, Sivakumar Musuvadhi Babulal and Hui-Fen Wu*



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A potent multifunctional ZIF-8 nanoplatform developed for colorectal cancer therapy by triple-delivery of chemo/radio/targeted therapy agents

Sonia Iranpour, Ahmad Reza Bahrami, Mahdiah Dayyani, Amir Sh. Saljooghi* and Maryam M. Matin*

