

# Journal of Materials Chemistry B

Materials for biology and medicine

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### Cover

See Shengsheng Zhang, Chao Li *et al.*, pp. 10861–10876. Image reproduced by permission of Luqing Zhao, Shengsheng Zhang, and Chao Li from *J. Mater. Chem. B*, 2024, 12, 10861.



### Inside cover

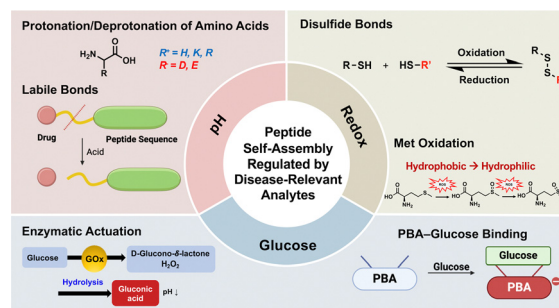
See Yongdoo Choi *et al.*, pp. 10877–10885. Image reproduced by permission of Yongdoo Choi from *J. Mater. Chem. B*, 2024, 12, 10877.

## REVIEWS

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### Engineering disease analyte response in peptide self-assembly

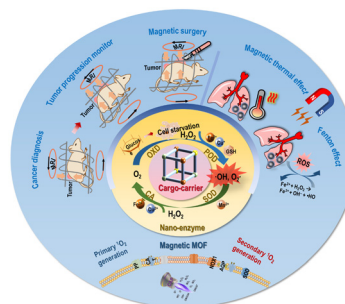
Sihan Yu and Matthew J. Webber\*



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### Metal–organic frameworks: potential synergies with cold atmospheric plasmas for cancer control

Xiaofeng Dai\* and Yixuan Yang



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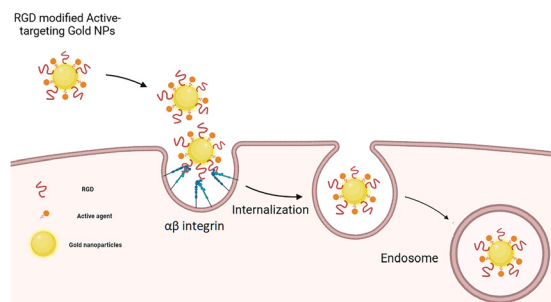
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# Unlocking the potential of RGD-conjugated gold nanoparticles: a new frontier in targeted cancer therapy, imaging, and metastasis inhibition

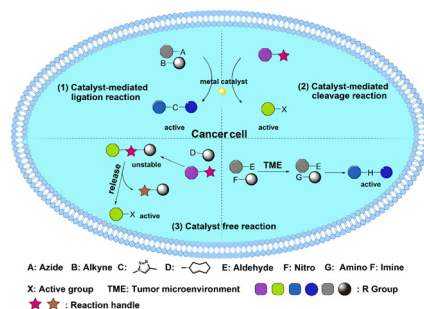
Hossein Javid, Mahsa Akbari Oryani, Nastaran Rezagholinejad,  
Alireza Hashemzadeh\* and Mehdi Karimi-Shahri\*



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Yongchao Yao, Ying Chen, Chang Zhou, Quanzhi Zhang,  
Xun He, Kai Dong, Chengli Yang, Bingyang Chu and  
Zhiyong Qian\*

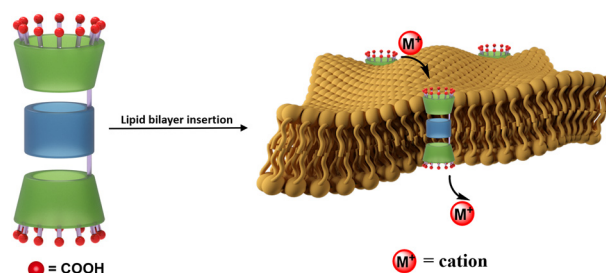


## COMMUNICATIONS

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## A unimolecular artificial cation channel based on cascaded hydrated acid groups

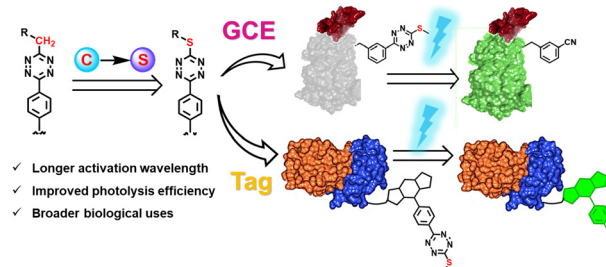
Pengyang Xin,\* Hailong Yuan, Long Zhang, Qiuhui Zhu,  
Xunpeng Ning, Yufei Song, Yuqing Shu and  
Yonghui Sun\*



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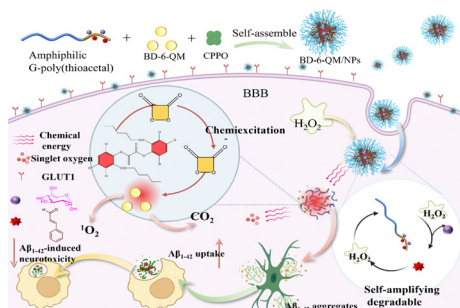
# Sulfur-tetrazine as highly efficient visible-light activatable photo-trigger for designing photoactivatable fluorescence biomolecules

Shudan Yang, Mengxi Zhang, Axel Loredo, David Soares,  
Yulun Wu and Han Xiao\*



## COMMUNICATIONS

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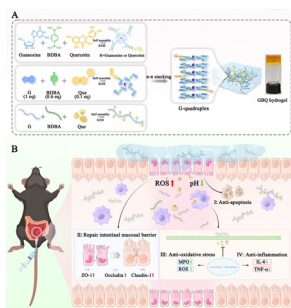


### An *in situ*-activated and chemi-excited photooxygenation system based on G-poly(thioacetal) for A $\beta_{1-42}$ aggregates

Shasha Liu, Yanping Li, Jinrong Yang, Lei Zhang\* and Jinwu Yan\*

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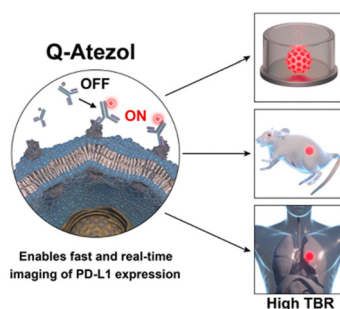
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### ROS/pH dual-responsive quercetin-loaded guanosine borate supramolecular hydrogel enema in dextran sulfate sodium-induced colitis in mice

Luqing Zhao, Dan Dou, Di Zhang, Xin Deng, Ning Ding, Yun Ma, Xingyu Ji, Shengsheng Zhang\* and Chao Li\*

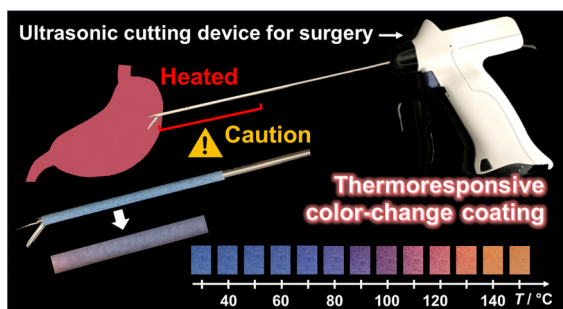
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### Activatable near-infrared fluorescence probe for real-time imaging of PD-L1 expression in tumors

Hyunjin Kim, Maixian Liu, Chan Hyeok Park, Byung Il Lee, Hyonchol Jang and Yongdoo Choi\*

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### Phase-separated structures of tunable thermoresponsive and matrix polymers for large-scale temperature monitoring coatings

Risako Shibata, Satoru Matsuda, Hirofumi Kawakubo, Hiroaki Imai and Yuya Oaki\*



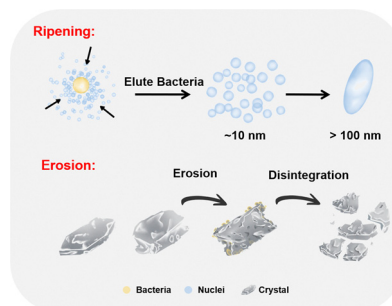


## PAPERS

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### Crystallization ripening and erosion of calcium oxalate under the effect of bacteria and a polymer materials surface

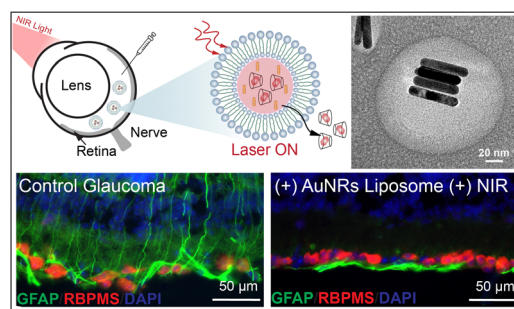
Xiran Shen, Wentao Chen, Li Guo, Huayu Li, Hong Chen\* and Fan Liu\*



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### Near-infrared activated liposomes for neuroprotection in glaucoma

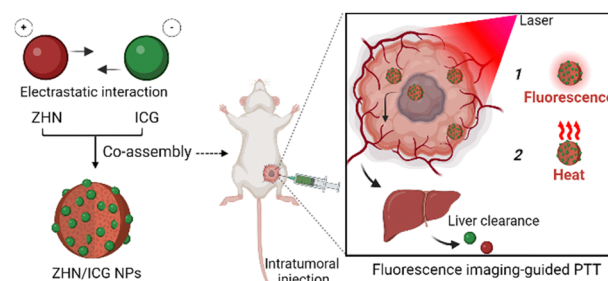
Dorcas Matuwana, Eunji Hong, Sizhe Huang, Xinxin Xu, Geunho Jang, Ruobai Xiao, Siyuan Rao\* and Qianbin Wang\*



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### Assembly-enhanced indocyanine green nanoparticles for fluorescence imaging-guided photothermal therapy

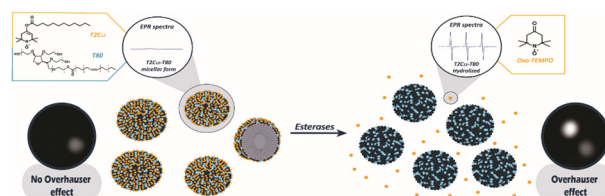
Shukun Li, Yudong Li, Mengqian Shi, Ruihui Xing,\* Jan C. M. Van Hest and Xuehai Yan\*



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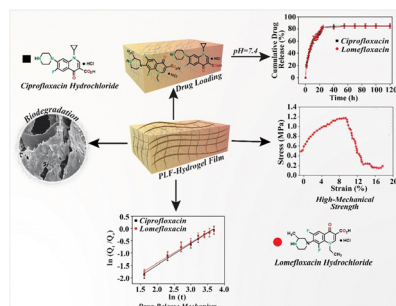
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## PAPERS

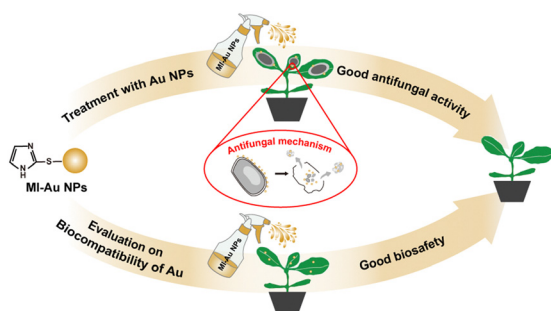
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### A chitosan- $\alpha$ -naphthaldehyde hydrogel film containing pineapple leaf fibers for wound dressing applications

Amarjyoti Mondal, Dasuklang Lyngdoh Nongbri, Kusumita Acharya, Mahabul Haque, Kripamoy Aguan, Arijit Bhattacharya and Atanu Singha Roy\*

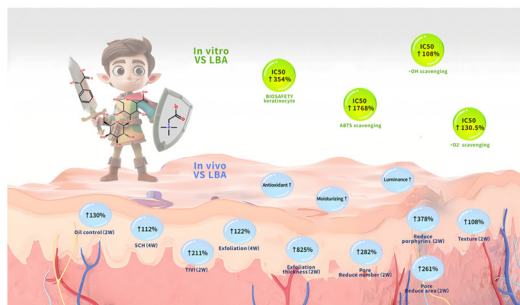
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### Mercaptoimidazole-capped gold nanoparticles as a potent agent against plant pathogenic fungi

Tang Xu, Wenshuai Hao, Ran Du, Dai Dai, Cuixia Wang, Suhua Li, Carol Sze Ki Lin, Ruitao Cha,\* Jianbin Yan\* and Chong Li\*

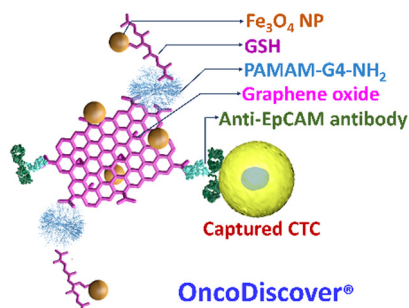
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### Lactobionic acid matrix supramolecular complexes with enhanced bioavailability and clinical efficacy as an optimal CP system

Hao Wang, Yongli Huo, Jialin Wang, Jinxu Huang, Ya Liao, Zhijian Liao, Huwu Zhou, Xin Zhang, Xiaomei Huang, Zhenyuan Wang\* and Jiaheng Zhang\*

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### A multicomponent nanosystem for capturing circulating tumor cells from cancer patients with PD-L1 as an immunotherapy oncotarget

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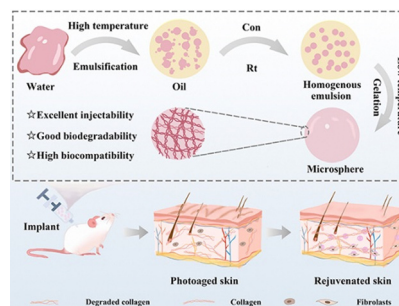


## PAPERS

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# High-temperature emulsification coupled with low-temperature gelation for fabrication of agarose microsphere implants with well-controlled size for skin tissue enhancement

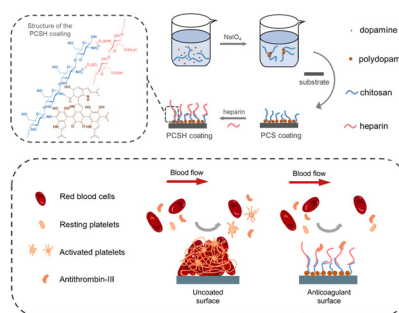
Qi Wang, Huiyu Yan, Ying Guo, Bei Tian and Jianxi Xiao\*



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# Development of substrate-independent heparin coating to mitigate surface-induced thrombogenesis: efficacy and mechanism

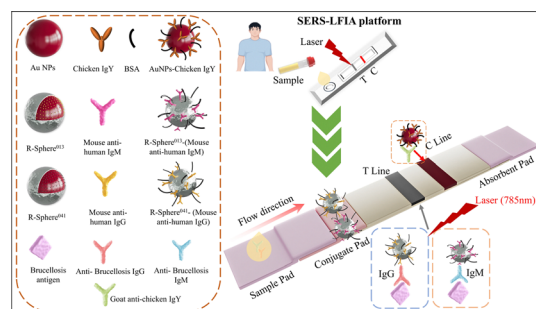
Shengjun Cheng, Haifeng Ji,\* Tao Xu, Xianda Liu, Lin Xu, Weifeng Zhao and Changsheng Zhao\*



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# Combined and rapid detection of anti-Brucella IgG/IgM in clinical samples based on surface-enhanced Raman scattering-lateral flow immunochromatography

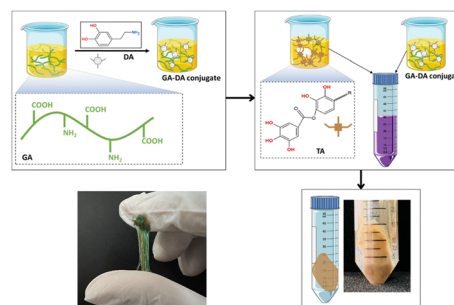
Yongwei Zhang, Ziyue Li, Aolin Zhu, Qian Zhang, Hao Zhou, Xuelei Zhou, Tingwei Liu, Chunyan Liu, Hefei Zha, Xin Zhang, Hui Zhao, Jiutong Li, Guodong Lü\* and Xinxia Li\*



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Soham Irtiza Swapnil, Md Tashdid Hossain Shoudho, Abdur Rahman, Tahmed Ahmed and M. Tarik Arafat\*



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Naohiro Kameta,\* Soo Jin Lee, Mitsutoshi Masuda and Toshimi Shimizu

