

# Journal of Materials Chemistry B

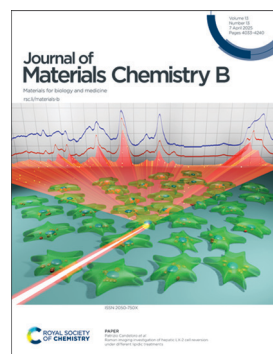
Materials for biology and medicine

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### Cover

See Patrizio Candeloro *et al.*, pp. 4085–4093. Image reproduced by permission of Patrizio Candeloro from *J. Mater. Chem. B*, 2025, 13, 4085.

## EDITORIAL

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### Writing an impactful Review: top tips from the Editors

Kaushik Chatterjee, Gemma-Louise Davies, Håkan Engqvist and Jessica Winter

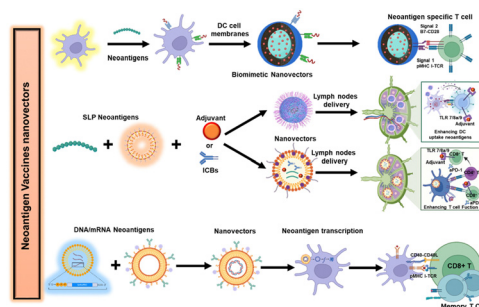


## REVIEWS

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### Tailoring nanovectors for optimal neoantigen vaccine efficacy

Youshi Zheng, Bing Wang, Zhixiong Cai, Zisen Lai, Haijun Yu, Ming Wu, Xiaolong Liu\* and Da Zhang\*



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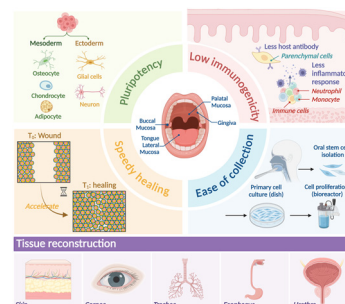
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## REVIEWS

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### Oral mucosa: anti-inflammatory function, mechanisms, and applications

Yani Chen, Bicong Gao, Wenjin Cai, Junhong Lai, Kaichen Lai\* and Ying Wang\*

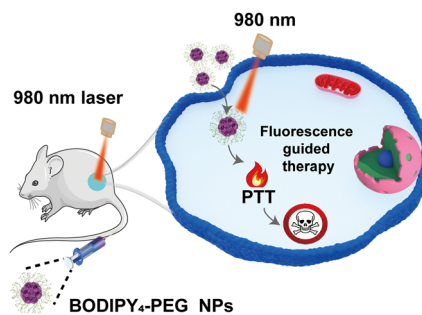


## COMMUNICATIONS

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### A PEGylated conjugated-BODIPY oligomer for NIR-II imaging-guided photothermal therapy

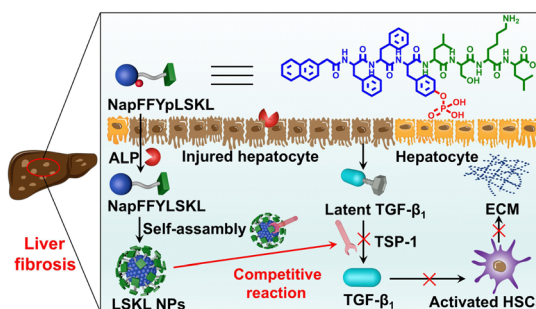
Yuan Wang, Tongtong Shan, Jiahao Zheng, Jia Tian and Weian Zhang\*



4080

### In situ self-assembled peptide nanoparticles improve the anti-hepatic fibrosis effect

Wenbin Liu, Beibei Wang, Mengxing Wei\* and Zijuan Hai\*

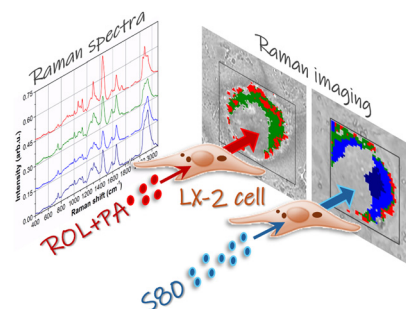


## PAPERS

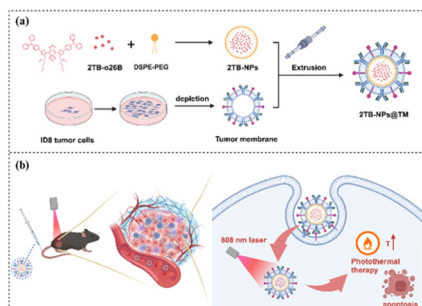
4085

### Raman imaging investigation of hepatic LX-2 cell reversion under different lipidic treatments

Gina Valentino, Assumpta Widak, Bernadette Scopacasa, Luca Tirinato, Elvira Immacolata Parrotta, Gerardo Perozziello, Arturo Pujia, Giovanni Cuda, Paola Luciani and Patrizio Candeloro\*



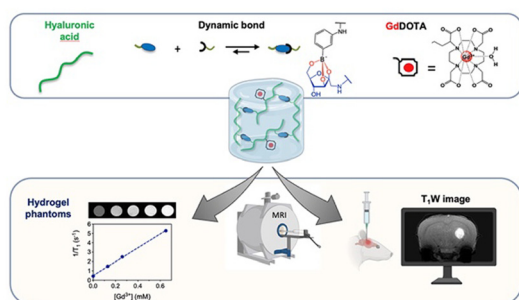
4094



### Biomimetic NIR-II aggregation-induced emission nanoparticles for targeted photothermal therapy of ovarian cancer

Ting Jiang, Chunlei Guo, Zhiwei Zhang, Chao Li, Chunbai Xiang, Jingjing Xiang, Xing Yang, Yu Liu, Lintao Cai, Ping Gong,\* Yan Hu\* and Changzhong Li\*

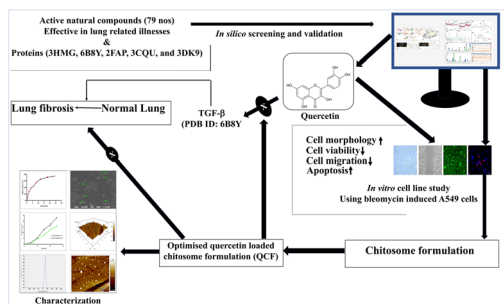
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### A $T_1$ MRI detectable hyaluronic acid hydrogel for *in vivo* tracking after intracerebral injection in stroke

Moustoifa Said, Jing Jing, Olivier Montigon, Nora Collomb, Frédérique Vossier, Benoît Chovelon, Bayan El Amine, Isabelle Jeacomine, Benjamin Lemasson, Emmanuel Luc Barbier, Olivier Detante, Claire Rome and Rachel Auzély-Velty\*

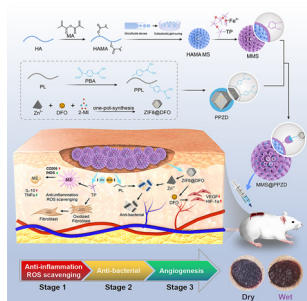
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### *In silico* screening and validation of natural compounds with fabrication and characterization of a lead compound-loaded chitosome for targeting lung fibrosis

Ajay Kakati, Amartya Banerjee, Parikshit Das, Gourav Rakshit, Rahul Ghosh, Reshmi Chakraborty, Buddhadeb Saha, Danswraig Goyary, Yangchen D. Bhutia, Sanjeev Karmakar, Sumit Kishor, Bhaskar Mazumder and Pronobesh Chattopadhyay\*

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### A smart drug delivery microgel system with phased intervention capabilities and dual physical state of use promotes healing of diabetic infected wounds

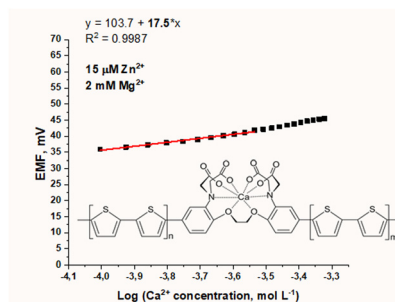
Fei Ma, Yuheng Liu, Yu Wang, Walter Munesu Chirume, Dengbo Yao, Weiqiang Lan, Zhen Zhao, Xueyuan Xu, Weifei Zhang, Chuan Guo\* and Qingquan Kong\*



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### BAPTA-based potentiometric polymer sensor: towards sensing inflammations and infections

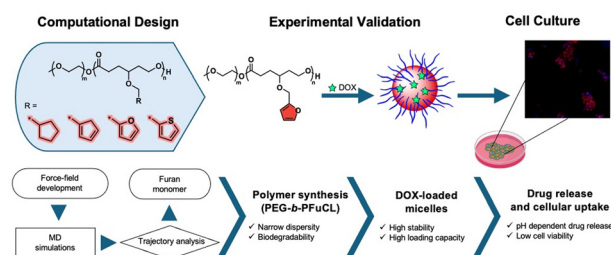
Nikol Janić, Hanna Zhukouskaya, Peter Černoč, Jiří Pánek, Jan Svoboda, Milena Hajná, Alena Řezníčková, Elena Tomšik\* and Martin Hrubý\*



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### Computational design to experimental validation: molecular dynamics-assisted development of polycaprolactone micelles for drug delivery

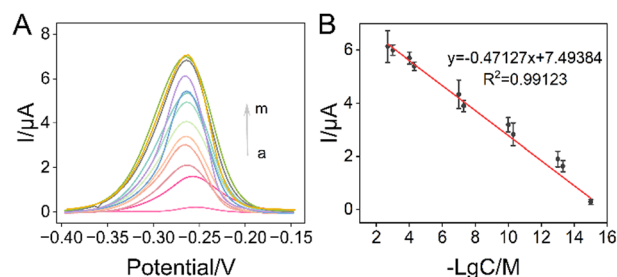
Tejas Shah, Himanshu Polara, Godwin Babanyinah, Abhi Bhadrán, Hanghang Wang, Cristina Cu Castillo, Gerik Grabowski, Michael C. Biewer, Hedieh Torabifard\* and Mihaela C. Stefan\*



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### Hybridization chain reaction-DNAzyme amplified switch microplate assay for ultrasensitive detection of magnesium ions

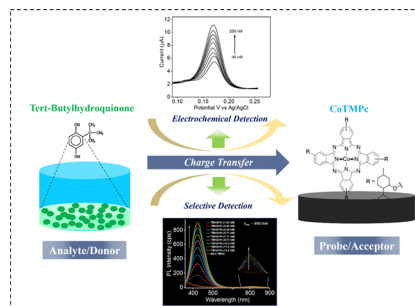
Jianjing Shen, Chengzhou Zhang, Donghao Cheng, Shan Huang\* and Xiaojun Chen\*



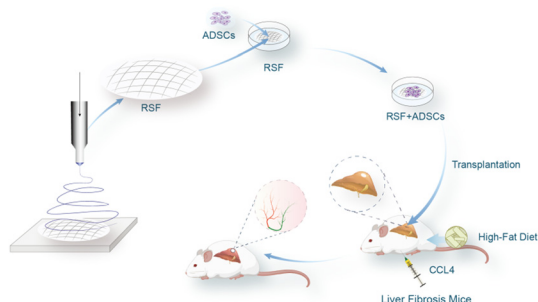
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### A bio-mimicking cobalt tetramethol-substituted phthalocyanine-based electrochemical sensor for selective and sensitive detection of tert-butylhydroquinone

Manjunatha Palanna, Mahesh Itagi, Lokesh Koodlur Sannegowda, Bhakti Kulkarni, Kiran Hiremath, Muthu Austeria and R. Geetha Balakrishna\*



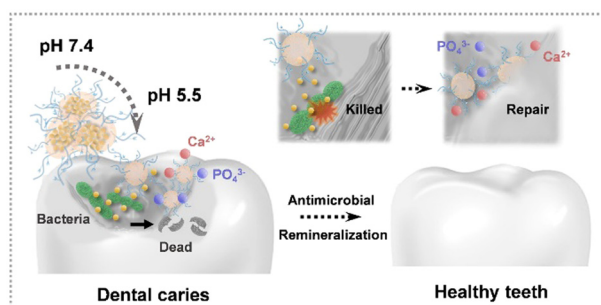
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### Adipose derived mesenchymal stem cell-seeded regenerated silk fibroin scaffolds reverse liver fibrosis in mice

Weilong Li, Xiaonan Shi, Daxu Zhang, Jingjing Hu, Shuo Zhao, Shujun Ye, Jingyi Wang, Xiaojiao Liu, Qian Zhang, Zhanbo Wang,\* Yaopeng Zhang\* and Li Yan\*

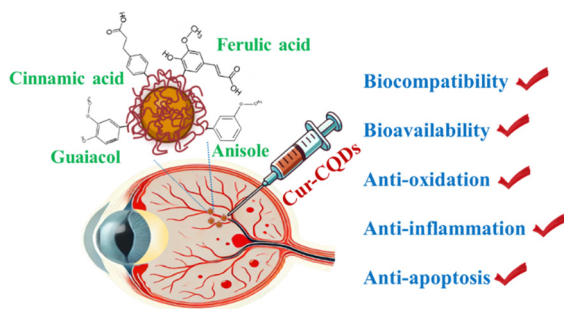
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### Dendritic polyglutamic acid-chelerythrine nanocomplex for the reversal of bacterial tooth decay

Yan Zhang, Yihua Liu, Fan Fan, Hongbo Zhang, Qiangwei Xin, Shiran Sun, Xinyuan Xu, Liwei Zheng, Yang Liu, Chunmei Ding,\* Mingming Ding\* and Jianshu Li\*

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### Surface moieties drive the superior protection of curcumin-derived carbon quantum dots against retinal ischemia-reperfusion injury

Ming-Hui Sun, Kuan-Jen Chen, Yu-Ting Tsao, Chi-Chin Sun, Jui-Yang Lai, Chin-Jung Lin, Yu-Fen Huang and Chih-Ching Huang\*

