

# Journal of Materials Chemistry B

Materials for biology and medicine

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### Cover

See Johannes Gurke *et al.*, pp. 9894–9904.  
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### Inside cover

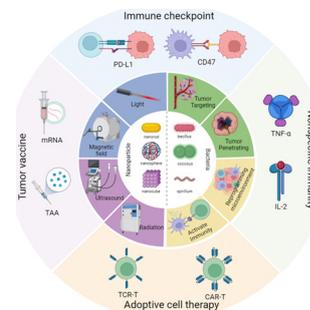
See Mohiuddin Quadir *et al.*, pp. 9905–9920.  
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## REVIEWS

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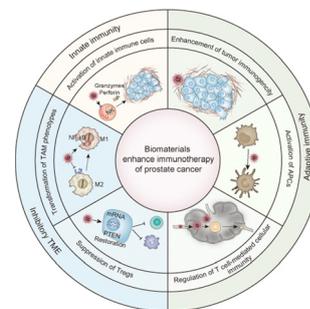
Shurong Qin, Guanzhong He and Jingjing Yang\*



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### Immunologically effective biomaterials enhance immunotherapy of prostate cancer

Siqi Liu, Hui Guo, Di Li\* and Chunxi Wang\*



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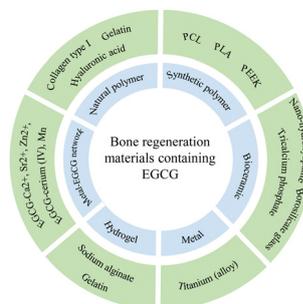
Fundamental questions  
Elemental answers

## REVIEWS

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### The recent progress of bone regeneration materials containing EGCG

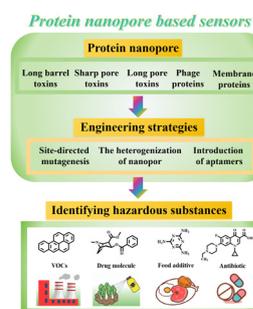
Yaoye Zhao, Guoding Cao, Zixin Wang, Desheng Liu, Liling Ren\* and Dongyang Ma\*



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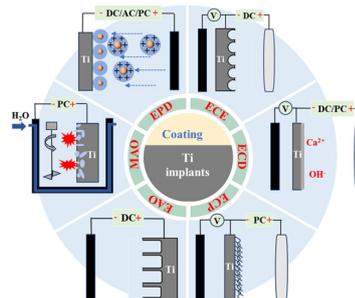
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Jialong Yi, Ming Li, Jixiang Zhu, ZuHang Wang and Xiaoyan Li\*

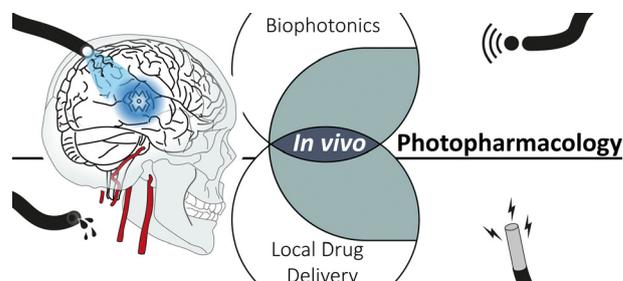


## PERSPECTIVE

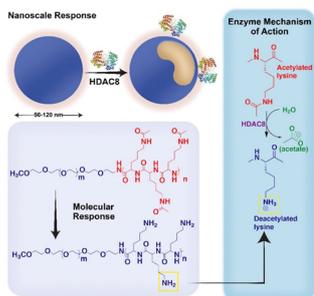
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### *In vivo* photopharmacological inhibition of hippocampal activity via multimodal probes – perspective and opening steps on experimental and computational challenges

Johannes Gurke,\* Alejandro Carnicer-Lombarte, Tobias E. Naegel, Anders K. Hansen and George G. Malliaras



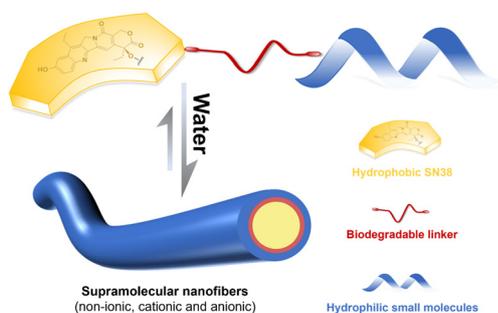
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### Design and evaluation of nanoscale materials with programmed responsivity towards epigenetic enzymes

Priyanka Ray, Abbas Sedigh, Matthew Confeld, Lina Alhathooly, Kweeni Iduoku, Gerardo M. Casanola-Martin, Hai Pham-The, Bakhtiyor Rasulev, Yongki Choi, Zhongyu Yang, Sanku Mallik and Mohiuddin Quadir\*

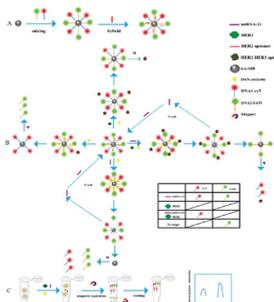
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### Spontaneous assembly of a class of small molecule prodrugs directed by SN38

Zhenhai Tang, Wenning Lan, Kaiying Wen, Wenting Li, Tao Wang,\* Dongdong Zhou\* and Hao Su\*

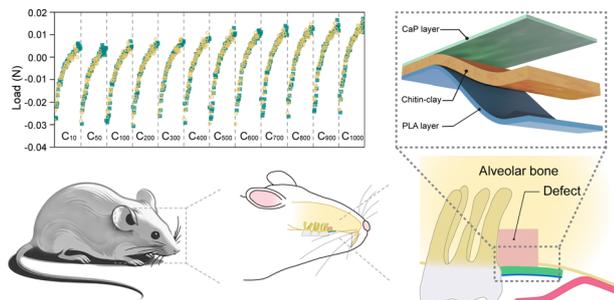
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### Simultaneous detection of breast cancer biomarkers HER2 and miRNA-21 based on duplex-specific nuclease signal amplification

Miao He, Zhiqiang Hou, Feifan Yin, Wenting Cheng, Yang Xiang\* and Zhongyun Wang\*

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### Bioinspired triple-layered membranes for periodontal guided bone regeneration applications

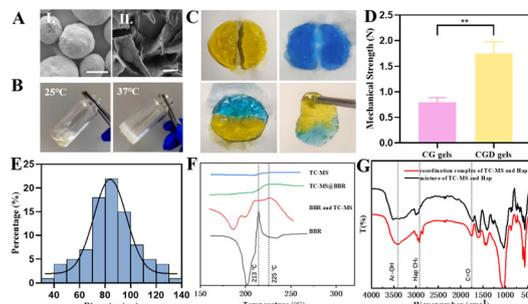
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### Dental cementum anchored microspheres embedded in a self-healing hydrogel for the antibacterial, anti-inflammation, osteogenic, and anti-osteoclastic management of periodontitis disease

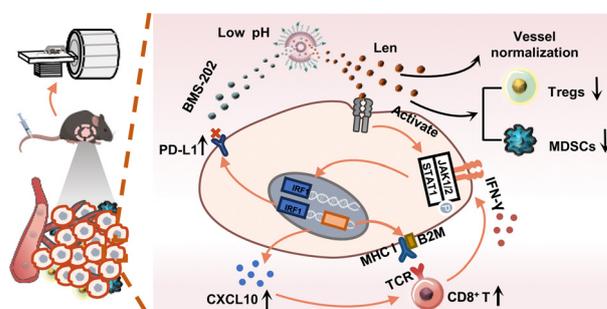
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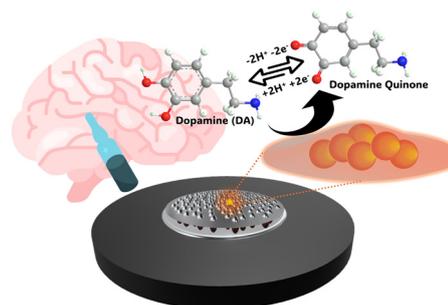
Jiamin Li, Ruili Wei, Wang Yao, Xinrui Pang, Nianhua Wang, Shengsheng Lai, Xinhua Wei, Youyong Yuan,\* Xinqing Jiang\* and Ruimeng Yang\*



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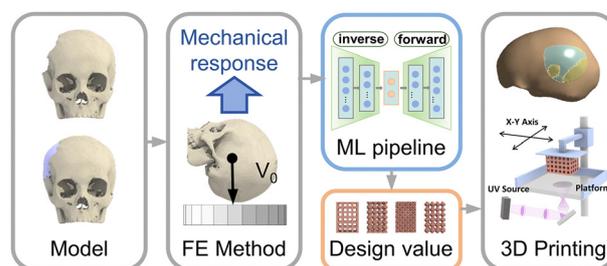
Hemarani Annadurai, Renganathan Vengudusamy, Shen-Ming Chen\* and C. R. Kao\*



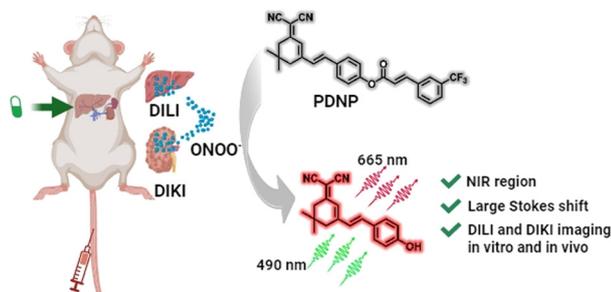
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### Inverse design of skull osteoinductive implants with multi-level pore structures through machine learning

Jixin Zhang, Yan Zhuang, Cong Feng, Xiangfeng Li,\* Ke Chen,\* Lin Han, Yilei Wang, Xiangdong Zhu, Mingli Yang, Guangfu Yin, Jiangli Lin\* and Xingdong Zhang



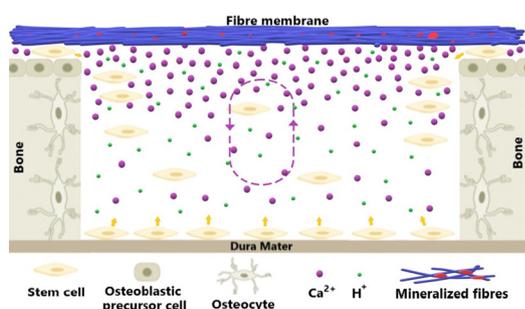
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### Imaging of ONOO<sup>-</sup> fluctuations during drug-induced liver/kidney injury *in vitro* and *in vivo* via a dicyanoisophorone-based NIR fluorescent probe with a large Stokes shift

Fei Kong, Hengqing Liu, Jie Huang and Jingcan Qin\*

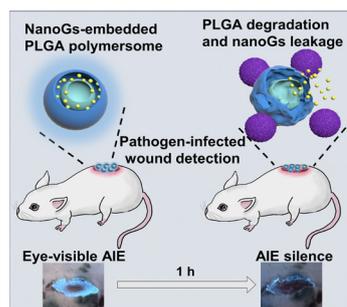
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### Simulation of the bone remodelling microenvironment by calcium compound-loaded hydrogel fibrous membranes for *in situ* bone regeneration

Yanmei Wu, Zhen Wu, Zhe Li and Youliang Hong\*

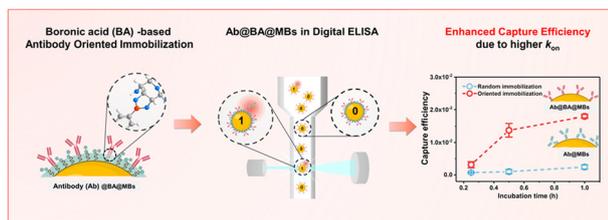
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### Aggregation-induced emission silence-mediated pathogen detection using a rapidly degradable nanographene-embedded polymersome

Chia-Yi Cheng, Eldhose V. Varghese, Wen-Jyun Wang, Chia-Yu Yao, Chia-Hsiang Chen\* and Wei-Peng Li\*

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### Revolutionizing the capture efficiency of ultrasensitive digital ELISA via an antibody oriented-immobilization strategy

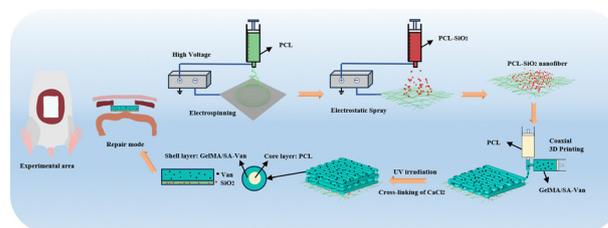
Yutong Zhang, Xiaojun Kuang, Jingwei Yi, Tong Sun, Qingsheng Guo, Hongchen Gu and Hong Xu\*



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### 3D printing/electrospinning of a bilayered composite patch with antibacterial and antiadhesive properties for repairing abdominal wall defects

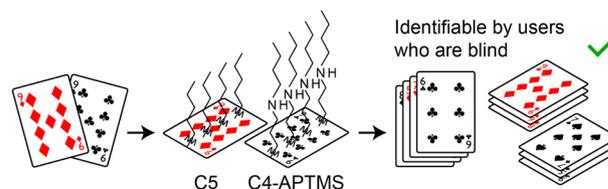
Qingxi Hu, Yu Zhang, Yongteng Song, Hekai Shi, Dongchao Yang, Haiguang Zhang\* and Yan Gu\*



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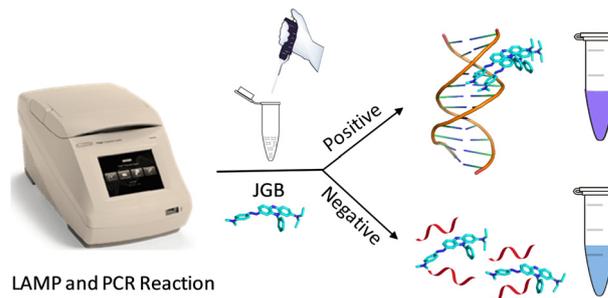
Zachary Swain, Maryanne Derkaloustian, Kayla A. Hepler, Abigail Nolin, Vidhika S. Damani, Pushpita Bhattacharyya, Tulaja Shrestha, Jared Medina, Laure V. Kayser and Charles B. Dhong\*



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### New insights into the photophysical properties and interaction mechanisms of Janus green blue dye with polyanions and its applications in colorimetric visualization of loop-mediated isothermal amplification and polymerase chain reaction

Arumugam Selva Sharma, Sung Min Ryou, Ji Hyeok Lee and Nae Yoon Lee\*



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### Surface modification of medical grade biomaterials by using a low-temperature-processed dual functional Ag-TiO<sub>2</sub> coating for preventing biofilm formation

Lipi Pradhan, Sobhan Hazra, Satya Veer Singh, Bajrang, Anjali Upadhyay, Bhola Nath Pal\* and Sudip Mukherjee\*



## CORRECTION

10110

**Correction: Surface modification of medical grade biomaterials by using a low-temperature-processed dual functional Ag–TiO<sub>2</sub> coating for preventing biofilm formation**

Lipi Pradhan, Sobhan Hazra, Satya Veer Singh, Bajrang, Anjali Upadhyay, Bhola Nath Pat\* and Sudip Mukherjee\*

