

# Biomaterials Science

An international high impact journal exploring the underlying science behind the function, interactions and design of biomaterials

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## IN THIS ISSUE

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### Cover

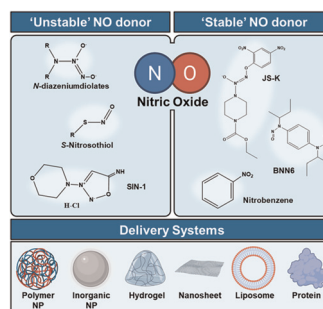
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## REVIEWS

936

### Engineering delivery platforms for controlled nitric oxide release

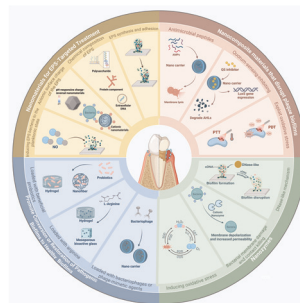
Sang-Hun Choi, Chae Yeon Han, Kyeong Jin Cho, Kangmin No and Jihoon Kim\*



952

### Dental plaque biofilm-targeting composite nanomaterials: advances and outlook

Jiaxuan Zhao, Shengyuan Huang, Yongjia Yang, Jilei Wang, Qianqian Guo, Yueming Xu, Bingyin Jiang\* and Jiang Lin\*



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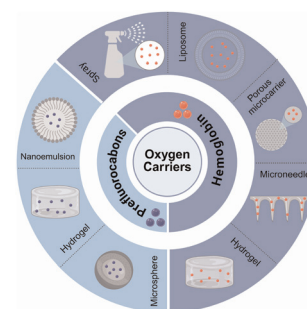
Fundamental questions  
Elemental answers

## REVIEWS

990

### Oxygen carriers: core strategies for modulating hypoxic microenvironments and promoting healing in chronic wounds

Meilin Liu, Yuzhi Chen, Kai Zhu, Shiyu Tao, Yao Xiao, Lian Zhao\* and Lianju Ma\*

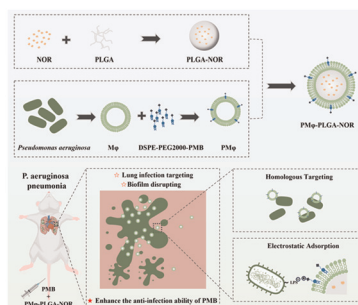


## PAPERS

1009

### Norharmane-loaded bacterial cytoplasmic membrane-coated nanoparticles synergistically enhance polymyxin B against *Pseudomonas aeruginosa* infections by disrupting biofilms

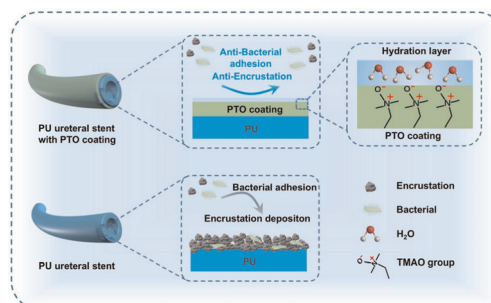
Meilin Qiao, Licheng Gao, Ruibing Yu, Jianwei Chen, Xuanrong Sun\* and Yue Cai\*



1023

### A superhydrophilic zwitterionic hydrogel coating for enhancing long-term anti-bacterial adhesion and anti-encrustation properties of ureteral stents

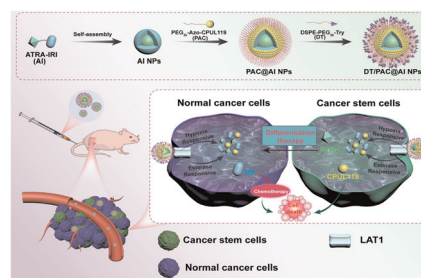
Zhenqing Li, Jiawei Li, Lei Qian, Ye Tian, Haoyu Jin, Peng Yu, Zhengao Wang,\* Chengyun Ning\* and Jinxia Zhai\*



1034

### A multiple-responsive nano-prodrug combining chemo-differentiation–cancer stem cell inhibition toward triple-negative breast cancer

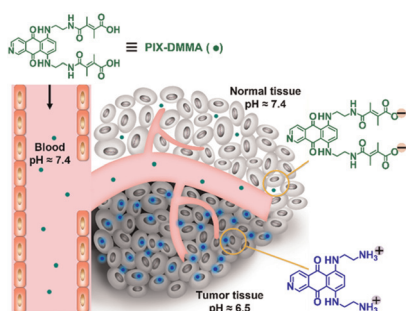
Yanting Li, Mengdan Ning, Haoping Long, Jiayi Zuo, Jinqiu Liang, Ting Yuan, Feng Cao,\* Yong Yin\* and Feng Jiang\*



"Chemo-differentiation–cancer stem cells inhibition" nano-prodrug platform against triple-negative breast cancer



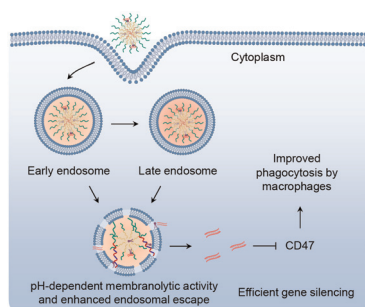
1052



### A charge-reversal prodrug activated by tumor-acidity for selective cancer chemotherapy

Bing Liu, Guanchun Wang,\* Quanjun Yang, Yang Yu, Yue Su, Wei Huang, Ping Wang, Deyue Yan\* and Ping Huang\*

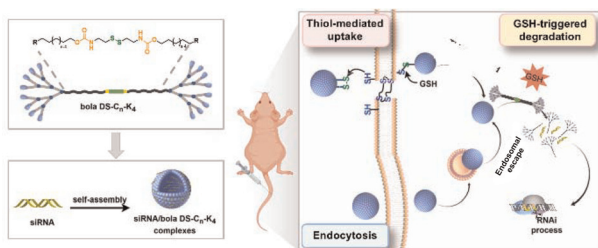
1062



### A pH-ultrasensitive membranolytic polymer-assisted delivery system for enhanced siRNA delivery

Yue Yu, Houbing Zhang, Xianzhu Yang, Jun Wang, Menghua Xiong\* and Xiaoqiao Du\*

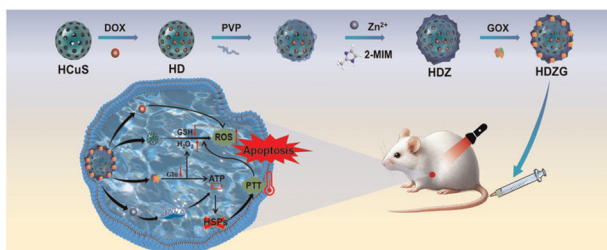
1073



### Glutathione-activatable bola dendrimers mediate tumor-specific cytosolic siRNA delivery via dynamic thiol-disulfide exchange

Dandan Zhu, Huiling Zhu, Yaoyun Yu, Junyue Zheng, Xianhui Lin, Huimin Cheng, Aoxue Mei, Ming Chen, Yun Li, Haijuan Dong, Jiehua Zhou, Juan Liu\* and Xiaoxuan Liu\*

1086



### Self-enhanced multifunctional nanoplatforms for tumor-specific synergistic therapy via NIR-induced mild photothermal and chemodynamic effects

Xi Zhang, Zhiping Song, Yu Han, Jingtong An, Qishan Xu, Xiangyan Chen\* and Yantao Li\*

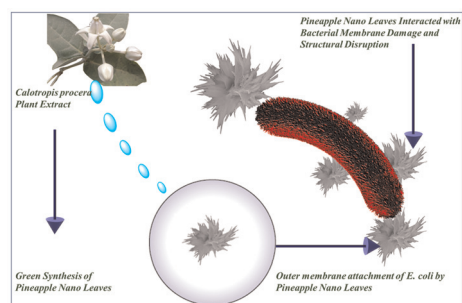


## PAPERS

1098

### *Calotropis procera* flower extracts: a green approach to zinc oxide with a pineapple-like nanoleaf morphology for biological applications

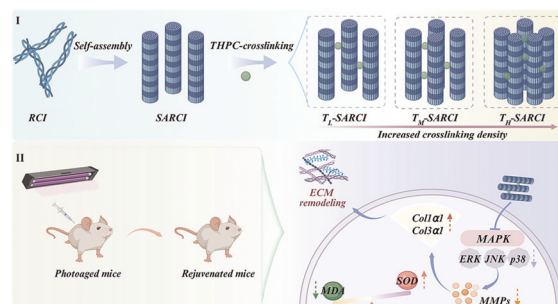
Karvelan Murugan,\* Udayadasan Sathiskumar, Rajakannu Subashini, Ramachandran Chelliah, Govindasamy Hariharan, Mohan Vedhanayagam and Narasimman Selvakumar



1110

### Injectable crosslinked recombinant collagen nanofiber implants enable robust regenerative repair of photoaged skin

Nannan Wei, Yuchen Zhang, Xinyu Tian, Linyan Yao and Jianxi Xiao\*



## CORRECTION

1122

### Correction: Ciprofloxacin-loaded bioadhesive hydrogels for ocular applications

Islam A. Khalil, Bahram Saleh, Dina M. Ibrahim, Clotilde Jumelle, Ann Yung, Reza Dana and Nasim Annabi\*

