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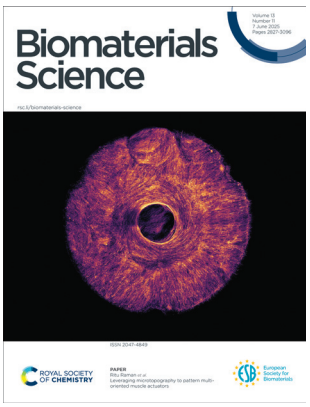

Cover
See Ritu Raman *et al.*, pp. 2891–2907.

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Inside cover
See Helen O. McCarthy *et al.*, pp. 2908–2924.

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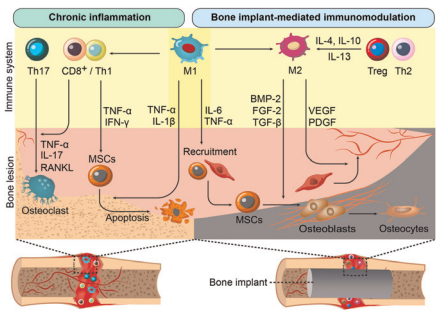
REVIEW

2836

Osteoimmunomodulation by bone implant materials: harnessing physicochemical properties and chemical composition

Mehdi Sanati,* Ines Pieterman, Natacha Levy, Tayebeh Akbari, Mohamadreza Tavakoli, Alireza Hassani Najafabadi and Saber Amin Yavari*

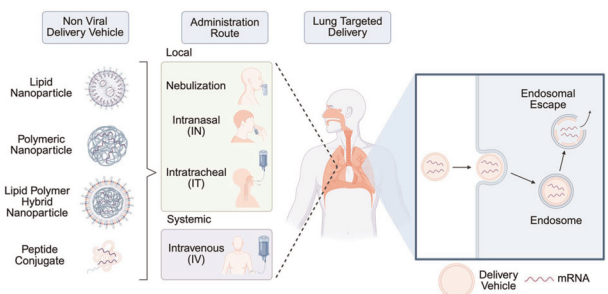


MINIREVIEW

2871

Non-viral mRNA delivery to the lungs

Lauren Healy, Breanna Y. Seto, Haissi Cui and Bowen Li*



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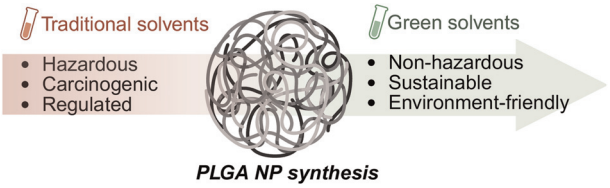
COMMUNICATION

2883

Evaluating green solvents for sustainable PLGA nanoparticle synthesis

Senjuti Karmaker, Rhea Joshi, Amartya Viravalli and Natalie Boehnke*

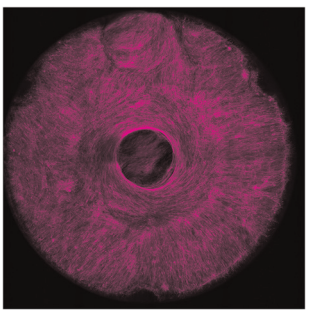


PAPERS

2891

Leveraging microtopography to pattern multi-oriented muscle actuators

Tamara Rossy, Laura Schwendeman, Sonika Kohli, Maheera Bawa, Pavankumar Umashankar, Roi Habba, Oren Tchaicheeyan, Ayelet Lesman and Ritu Raman*



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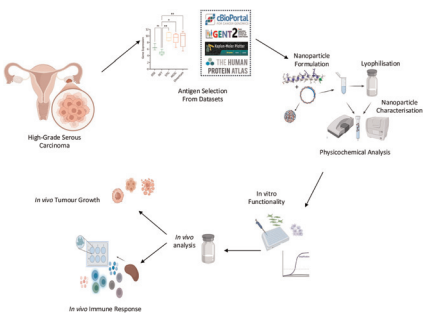
Development of a nano-vaccine for high-grade serous ovarian cancer

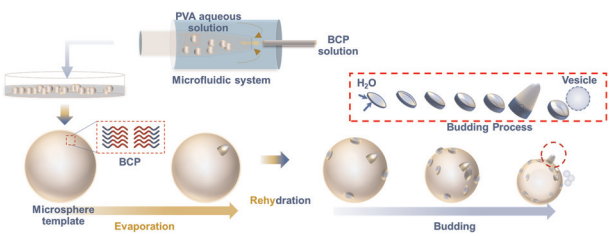
Chayanika Saha, Ahmed Elkashif, Elaine J. Gilmore, Binyumeng Jiang, Ying Sun, Raj Kumar Duary, Niamh Buckley, Nicholas J. Dunne and Helen O. McCarthy*



2925

Microfluidics-driven templating preparation of polymer vesicles with tailorable dimensions and rapid cellular internalization

Donghua Dong, Tong Zhu, Guoxing Liao, Fangrong Tan, Lei Chen, Qianqian Yu* and LinGe Wang*



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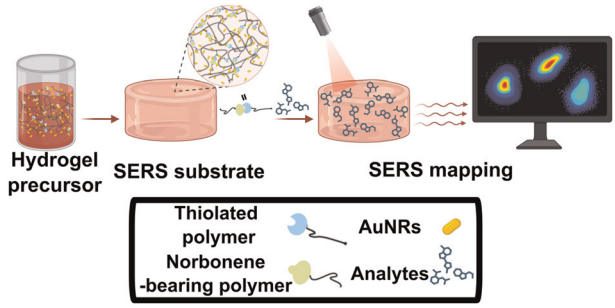

Using thiol–ene click chemistry to engineer 3D printed plasmonic hydrogel scaffolds for SERS biosensing

Lara Troncoso-Afonso, Yolany M. Henríquez-Banegas, Gail A. Vinnacombe-Willson, Junkal Gutierrez, Gorka Gallastegui, Luis M. Liz-Marzán and Clara García-Astrain*

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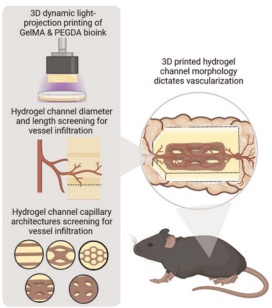

Guiding vascular infiltration through architected GelMA/PEGDA hydrogels: an *in vivo* study of channel diameter, length, and complexity

Martha Fowler, Alvaro Moreno Lozano, Julian Krause, Patrick Bednarz, Shalini Pandey, Mina Ghayour, Qixu Zhang and Omid Veiseh*

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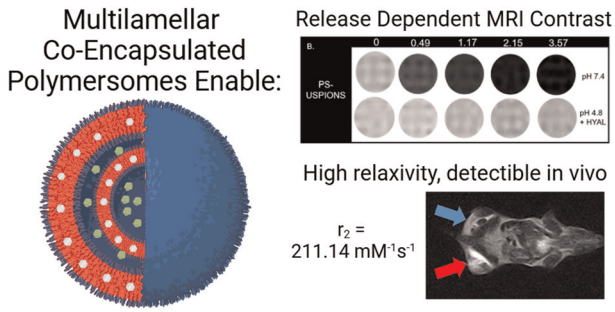

Multilamellar hyaluronic acid-*b*-poly(lactic acid) polymersomes for pathology-responsive MRI enhancement

Dorian Foster,* Naisha Shah, Alaura Cakley, Ronald Beyers and Jessica Larsen

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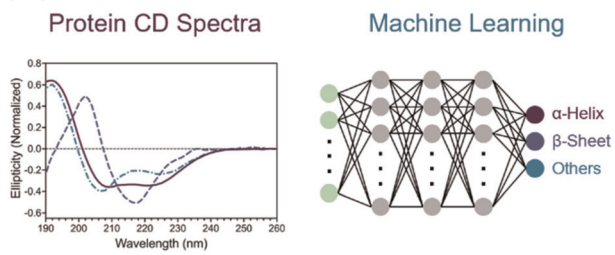

Machine-learning-guided identification of protein secondary structures using spectral and structural descriptors

Ziqi Wang and Kenry*

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PAPERS

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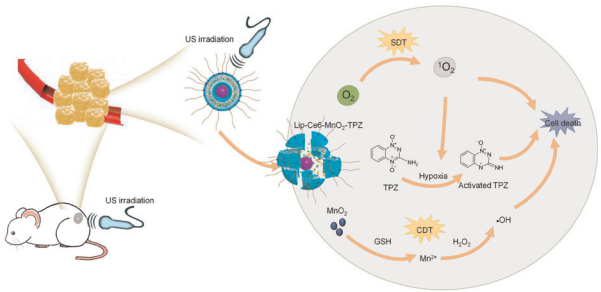
A hypoxia-activated and tumor microenvironment-remodeling nanoplatform for augmenting sonodynamic–chemodynamic-chemotherapy of breast cancer

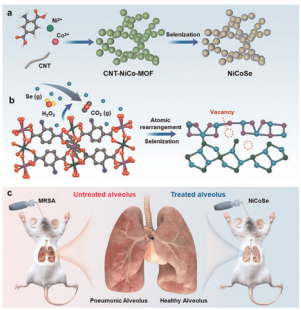
Chengxi Li, Can Yang, Tiantian Jiang, Zheming Song, Danling Cheng, Jingchao Li,* Yong Han* and Ting Su*



2994

Selenium-vacancy-mediated NiCoSe nanoplatforms with NIR-II amplified nanozymes for methicillin-resistant *Staphylococcus aureus*-infected pneumonia

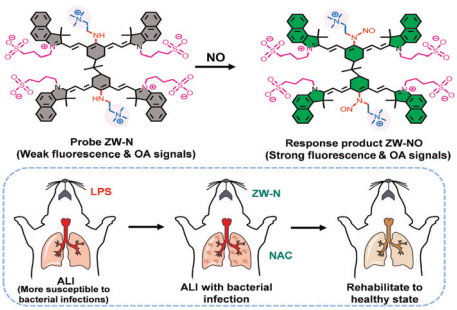
Liqin Wu, Lida Jin, Xintong Zou, Xiaojun He,* Yuanrong Dai* and Jianan Huang*



3006

A zwitterionic chromophore as both a biomarker-activatable optical imaging probe and a therapeutic agent for the detection and treatment of acute lung injury with bacterial infection

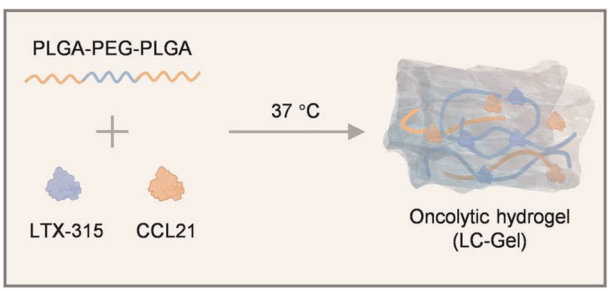
Zunpan She, Fang Zeng* and Shuizhu Wu*



3016

An injectable oncolytic hydrogel platform for *in situ* dendritic cell vaccination to boost antitumor immunity

Zi-Lu Wang, Si-Yu Qiu, Yi-Qun Sun, Xiao-Jiao Du, Cong-Fei Xu, Zi-Yang Cao* and Zi-Dong Lu*



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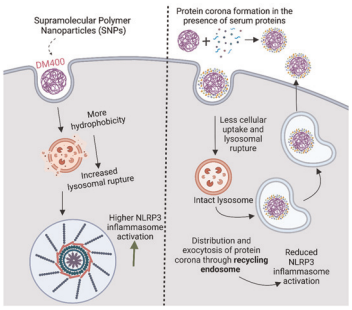

Protein corona formation on supramolecular polymer nanoparticles causes differential endosomal sorting resulting in an attenuated NLRP3 inflammasome activation

Maharshi Debnath, Mehak Malhotra and Ashish Kulkarni*

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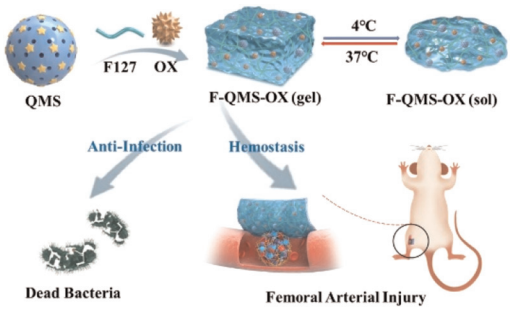

A thermosensitive poloxamer hydrogel with ofloxacin and cationic microparticles for antibacterial and hemostatic applications

Kan Ji, Hanlu Chen, Yang Su, Bing Yuan, Zhenfei Song, Kai Zhang, Guochao Zhang,* Yang Hu,* Feng Duan* and Fu-Jian Xu

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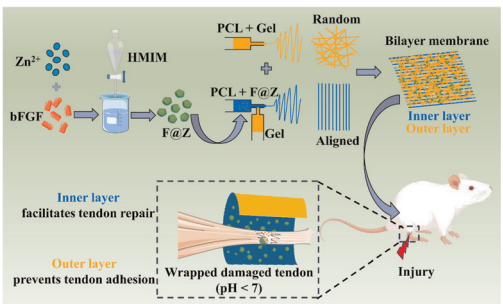

ZIF-8 composite nanofibrous membranes loaded with bFGF: a new approach for tendon adhesion prevention and repair

Min Sun, Jinke Cao, Yang Zou, Haiyan Ju and Yonggang Lv*

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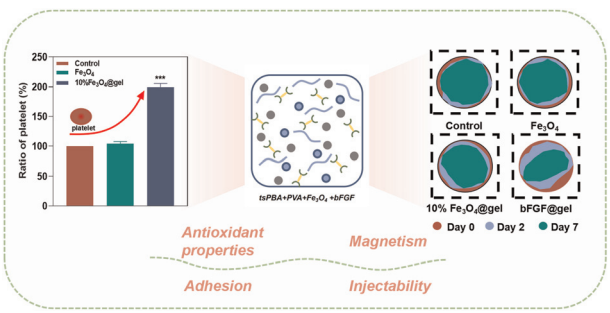

Borate ester-based multifunctional self-healing hydrogels for tissue adhesion and hemostasis

Ashleigh Tinotenda Chitakunye, Shihui Zhang, Qin Zhu, Jianan Ni, Qiuyu Sun, Yuxin Lei, Jie Xu, Odinaka Cassandra Ezekiel, Bingxin Li, Hanxuan Lin, Miao Zhang and Lin Cai*

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CORRECTIONS

3090

Correction: Urethral reconstruction using an amphiphilic tissue-engineered autologous polyurethane nanofiber scaffold with rapid vascularization function

Yuqing Niu, Guochang Liu, Chuangbi Chen, Ming Fu, Wen Fu, Zhang Zhao, Huimin Xia* and Florian J. Stadler*

3093

Correction: Dual bioresponsive antibiotic and quorum sensing inhibitor combination nanoparticles for treatment of *Pseudomonas aeruginosa* biofilms *in vitro* and *ex vivo*

Nishant Singh, Manuel Romero, Alessandra Travanut, Patricia F. Monteiro, Elena Jordana-Lluch, Kim R. Hardie, Paul Williams, Morgan R. Alexander and Cameron Alexander*

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