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Materials for biology and medicine

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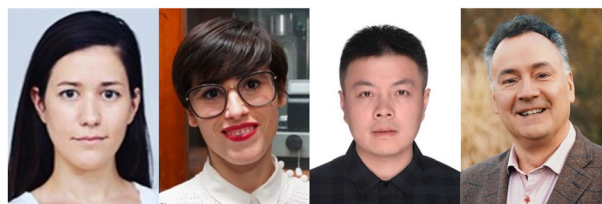
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EDITORIAL

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Bioelectronics: Emerging trends and applications

Anna-Maria Pappa, Eleonora Macchia, Hong Liu and George Malliaras

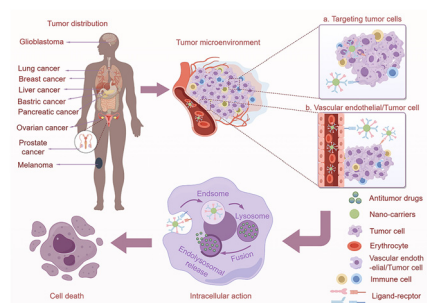


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A superior method for antitumor therapy and application: dual-ligand nanomedicines

Ailing Wang, Xuejun Wang, Dan Li, Aixue Li, Mengyuan He, Yingying Yuan, Li Ye* and Jiyong Liu*



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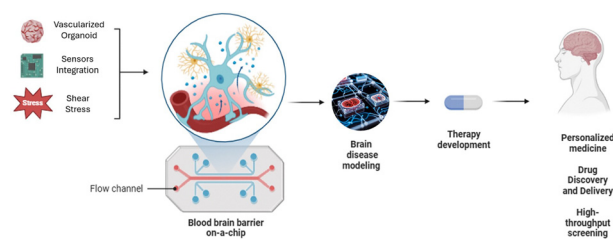
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Recent advances in 3D models for multiparametric blood–brain barrier detection in microfluidic systems

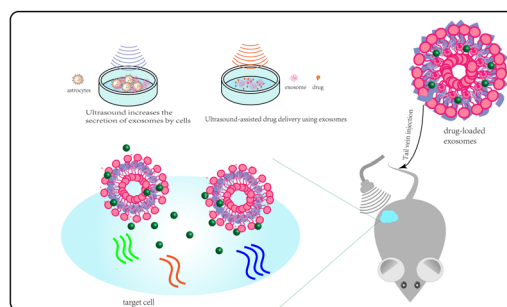
Chiara Boncristiani, Alessia Di Gilio,* Federica De Castro, Alessandra Nardini, Jolanda Palmisani, Rebeca Martínez Vázquez, Gianluigi de Gennaro, Francesco Paolo Fanizzi, Giuseppe Ciccarella and Viviana Vergaro*



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The combined application of exosomes/exosome-based drug preparations and ultrasound

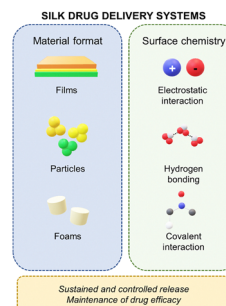
Xiuli Wen and Yi Hao*



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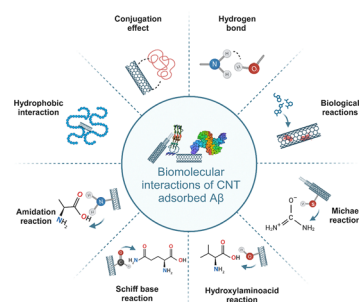
Christine Jurene O. Bacal, Benjamin J. Allardyce* and Filippo Valente*



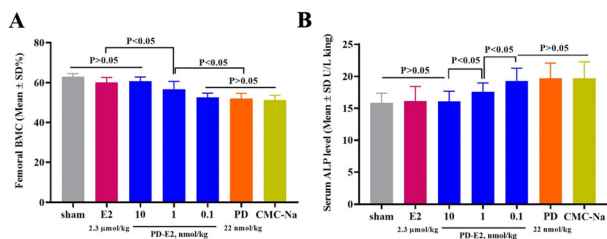
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Biomolecular interactions of carbon nanotubes with amyloid- β proteins

Jinxia Cai, Bowen Li, Guoqing Feng, Jie Zhang, Haojun Fan* and Bin Zheng*



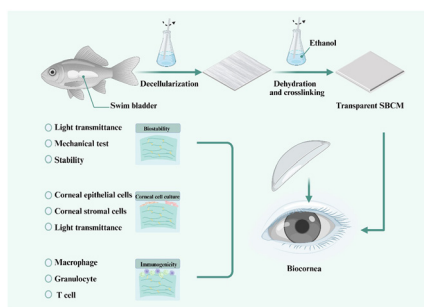
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PD-E2: a nano-scaled delivery for estradiol to decrease uterus damage and increase bone mineral density

Qiqi Feng, Hao Gong, Haimei Zhu, Xiaoyi Zhang, Yaonan Wang, Yifan Yang, Jianhui Wu, Ming Zhao* and Shiqi Peng*

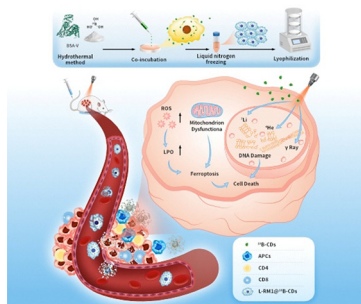
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Highly transparent and elastic acellular swim bladder with potential application in cornea implantation

Yue Yin, Linyu Long, Ningxin Wang, Ran Wei, Mengna Guo, Daihua Fu, Fanju Zhang, Ke Ma,* Li Yang* and Yunbing Wang

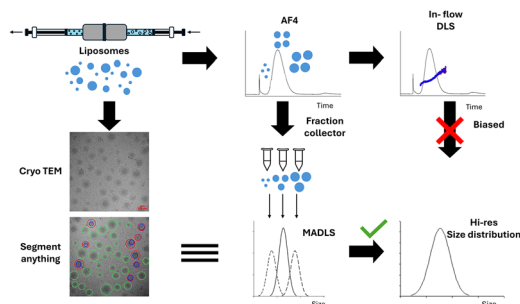
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Lyophilized tumour cell-loaded ^{10}B -doped carbon dots for simultaneous boron neutron capture therapy and enhancement of antitumor immunity of prostate cancer

Yongjin Yang, Zhiyi Zhao, Chengyu You, Miao Pang, Tianyuan Zhong, Qingchao Li, Shiwei Jing, Yanxin Qi,* Yubin Huang* and Zhilong Dong*

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Going hi-res in bulk: flowless multiangle dynamic light scattering for detection on asymmetric flow field flow fractionation

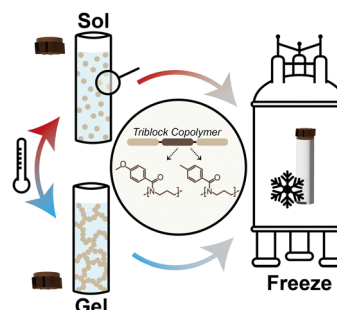
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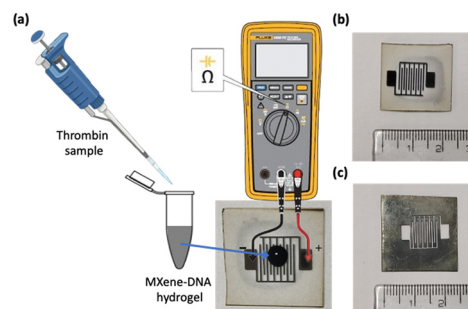
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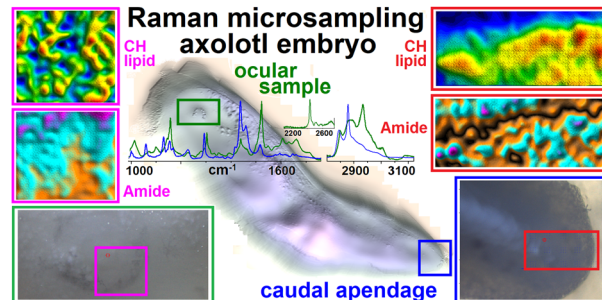
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Raman microscopy as a tool to study changes in chemical composition upon structural differentiation of *Ambystoma* embryo

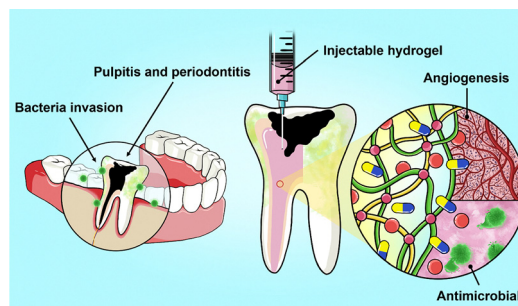
Victor V. Volkov and Carole C. Perry*



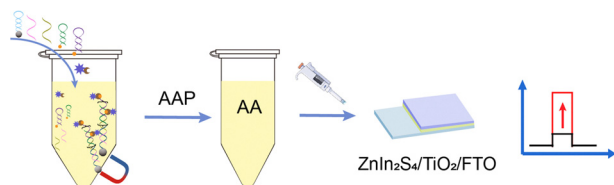
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Dual-functional injectable hydrogels as antimicrobial and angiogenic therapeutics for dental pulp regeneration

Nhu-Quynh Thi Nguyen, Cuong Hung Luu, Ngoc-Dan Ho Nguyen, Duy Quoc Vo, Ngoc Hong T. Luu, Nhu-Y Ngoc Ha, Thanh-Truc Ngoc Vo, Que-Phuong Le Huynh, Thavasyappan Thambi, Chau T. T. Ngo* and Giang V. H. Phan*



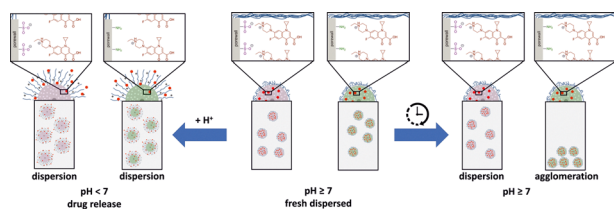
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Ying Zheng, Fan Mo, Qian Sun, Xinzhou Huang, Yijie Du, Xiaomei An, Haoning Ma, Guoqiu Wu, Yuanjian Zhang and Yanfei Shen*

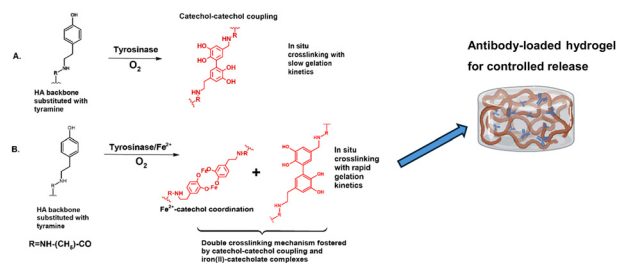
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Stimuli-responsive core-shell-shell nanocarriers for implant-directed magnetic drug targeting

Timo Herrmann, Nina Angrisani, Janin Reifenrath, Jessica Meißner, Adrian Hannebauer, Lukas Mönkeberg, Valentin Hagemann, Irene Morales, Peter Behrens, Nina Ehlert* and Sebastian Polarz*

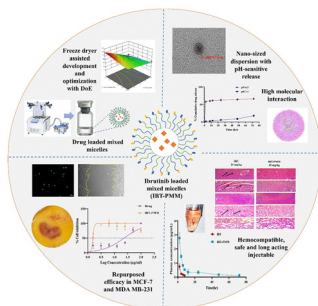
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Iron(II)-catalysed tyrosinase crosslinked hyaluronic acid hydrogel for the controlled release of human antibodies

Seth Asamoah,* Martin Pravda,* Jana Matonohová, Tereza Bártová, Eva Šnejdrová, Sebastian Spiegel, Andrew Chan, Vincent Pernet and Vladimír Velebný

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Benchmarking of pH-responsive mixed micelles for repurposed breast cancer therapy of ibrutinib with molecular modeling and pharmacokinetic insights

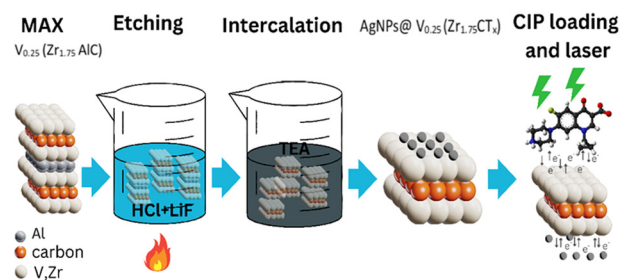
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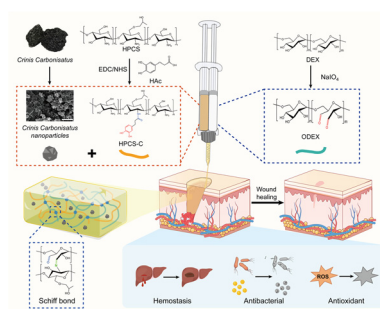
Nasurullah Mahar, Areej H. Al-Mebti, Sajjad Hussain and Abdulaziz A. Al-Saadi*



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Rui Tian, Fazhen Luo, Yilin Yu, Jinxia Mi, Xiaoya Gao, Zhengtao Wang* and Yan Xie*



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Rational design of near-infrared carbon dots as polarity-sensitive fluorescent probes for imaging of lipid droplets

Zheng Yang,* Ying Peng, Mengyao Qu, Haonan Yang, Xiaodan Jia and Xiangrong Liu

