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Materials for biology and medicine

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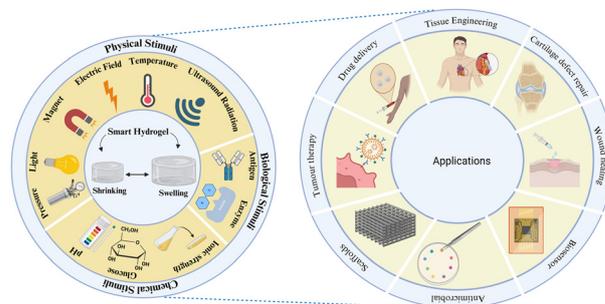
See Archana Bhaw-Luximon *et al.*, pp. 3304–3318. Image reproduced by permission of Lakshmi Yaneesha Sujeeun from *J. Mater. Chem. B*, 2025, **13**, 3304.

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Next-generation biopolymer gels: innovations in drug delivery and theranostics

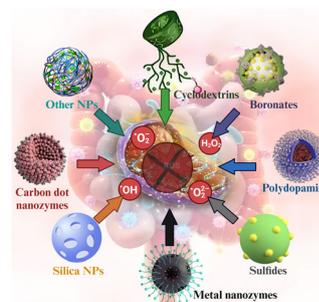
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Xiuping Wan, Caijie Zhang, Pengyu Lei, Hanbing Wang, Rongbing Chen, Qinsi Yang, Yongwei Cheng, Wei Wu,* Da Sun* and Xiaofei Hong*



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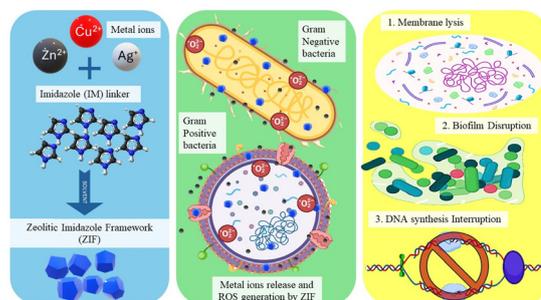
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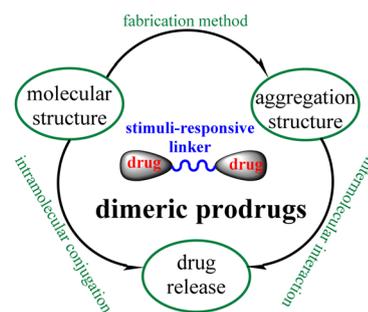


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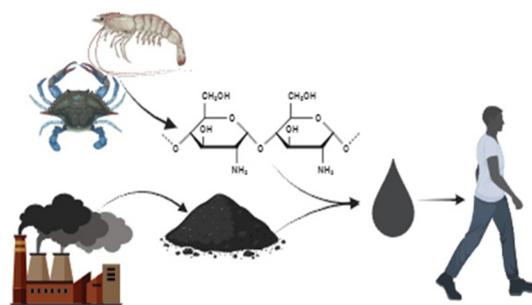
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A low-cost biocompatible and biodegradable multipurpose resistive ink for monitoring biological systems

Akshayakumar Kompa, Revathi Ravindran, Jianyu Hao and Javier G. Fernandez*

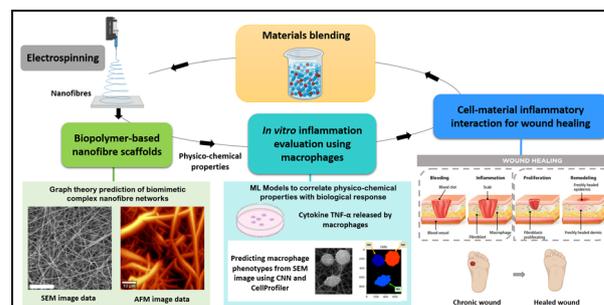


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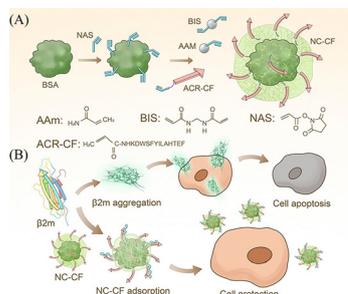
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Predicting inflammatory response of biomimetic nanofibre scaffolds for tissue regeneration using machine learning and graph theory

Lakshmi Yaneesha Sujeeun, Itisha Chummun Phul, Nowsheen Goonoo, Nicholas A. Kotov and Archana Bhaw-Luximon*



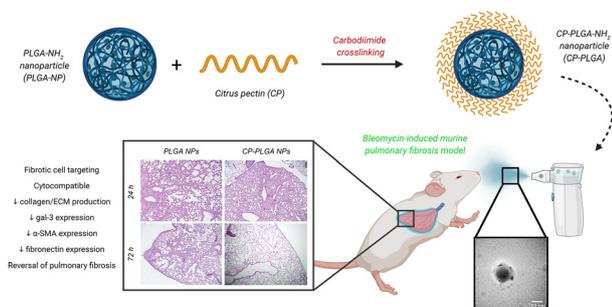
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Peptide-functionalized nanocapsules for targeted inhibition of β 2-microglobulin amyloid aggregation

Lin Tang, Miao Sun, Junnan Chen, Qiong Dai, Song Xue,* Chaoyong Liu* and Ming Zhang*

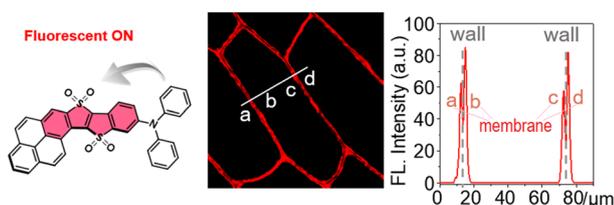
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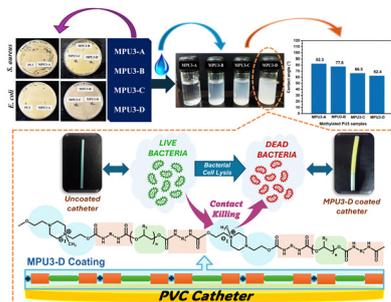
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Ultra-photostable fluorescent dye molecular engineering—for measuring plant cells' membrane-spacing through a "deposition-embedding" strategy

Wendong Jin, Jie Huang, Jie Niu, Shiqian Zhang, Zhiqiang Liu* and Xiaoqiang Yu*

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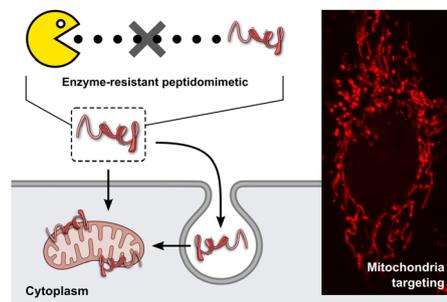
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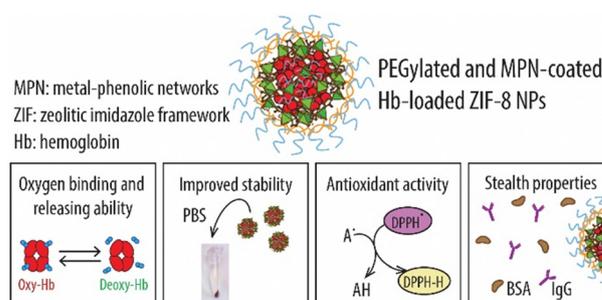
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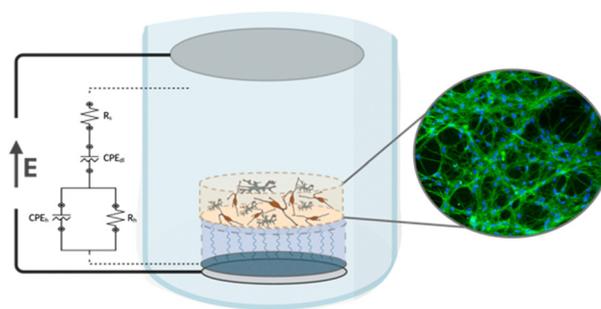
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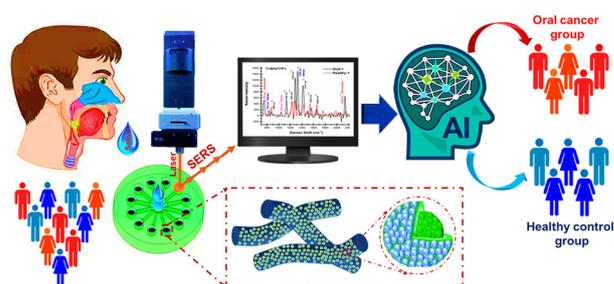
Marjolaine Boulingre, Mateusz Chodkowski, Roberto Portillo Lara, Aaron Lee, Josef Goding and Rylie A. Green*



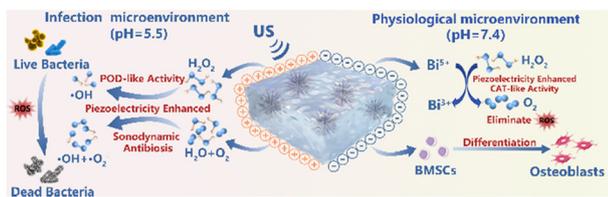
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Navami Sunil, Rajesh Unnathpadi, Rajkumar Kottayasamy Seenivasagam, T. Abhijith, R. Latha, Shina Sheen and Biji Pullithadathil*



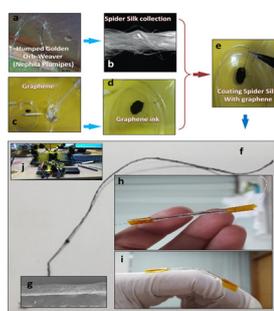
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A piezoelectric hydrogel containing bismuth sulfide with cationic vacancies with enhanced sonodynamic/nanozyme activity for synergistically killing bacteria and boosting osteoblast differentiation

Xiaowen Xi, Susu Ma, Ping Sun,* Zhitao Hu, Jie Wei* and Yunfei Niu*

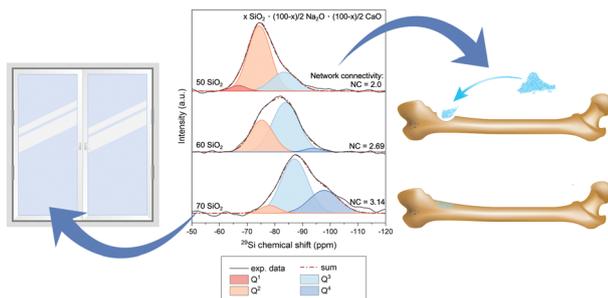
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Polyurethane packed graphene-coated spider silk by dip-casting for a highly stretchable strain sensor

Zaigham Abbas, Gul Hassan,* Muhammad Umair Khan, Haider Abbas, Basheer Ahmad, Ahmed Shuja, Memoon Sajid, Jinho Bae* and Changwan Choi*

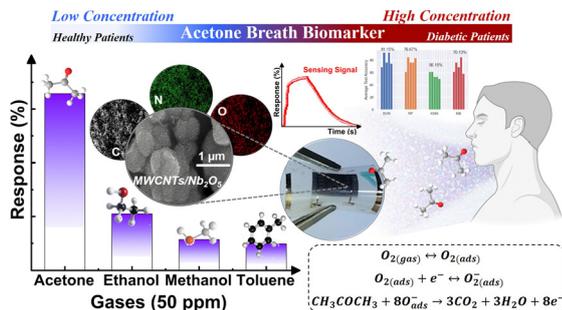
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From window panes to bone regeneration: structure, viscosity and bioactivity of soda lime silicate glasses

Zhaorui Jin, Daniel R. Neuvill,* Coraline Chartier, Pavel Kachanov, Scott Kroeker, Stéphane Gin, Jincheng Du* and Delia S. Brauer*

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Gulshan Verma, Sonu Sarraf, Aviru K. Basu, Pranay Ranjan and Ankur Gupta*



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Polycaprolactone/ α -cyclodextrin polyrotaxanes with cellular uptake enhancing properties

Gergely Kali,* Alexander H. Mayer, Dennis To, Martyna Truszkowska, Anna Seybold, Doris Elfriede Braun, Raphael Plangger, Markus Gallei and Andreas Bernkop-Schnürch*

