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See Fengwei Bai, Kytai T. Nguyen *et al.*, pp. 3747–3758. Image reproduced by permission of Ehsan Faridi and Kytai T. Nguyen from *Nanoscale Adv.*, 2024, **6**, 3747.



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See Song Feng, Lingchen Liu, Jianing Lin, Bin Zhang *et al.*, pp. 3759–3774. Image reproduced by permission of Song Feng from *Nanoscale Adv.*, 2024, **6**, 3759.

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Introduction to Photocatalytic Materials for Clean Energy, Renewable Chemicals production, and Sustainable Catalysis

Rajeev Ahuja* and Rajendra Srivastava*

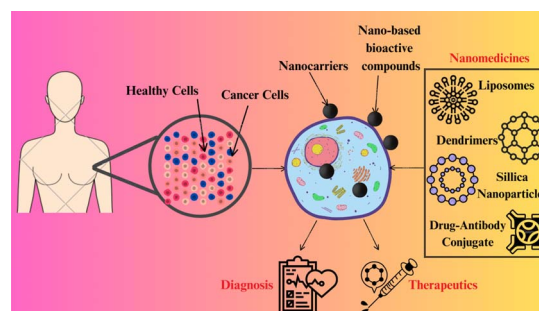


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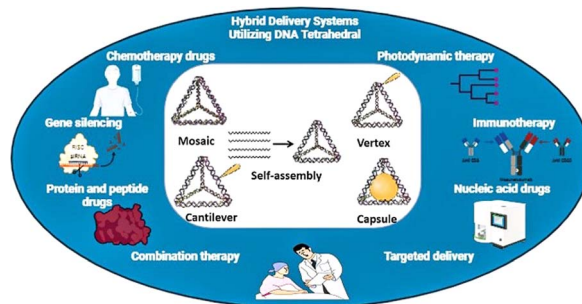
**Fundamental questions
Elemental answers**

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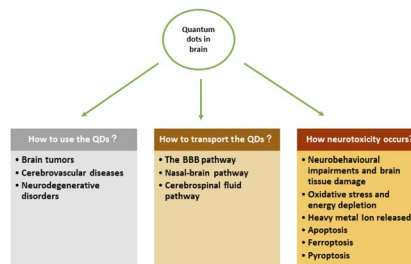
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Application of quantum dots in brain diseases and their neurotoxic mechanism

Yuanyuan Hu, Xiaoli Wang, Yiru Niu, Keyu He* and Meng Tang*



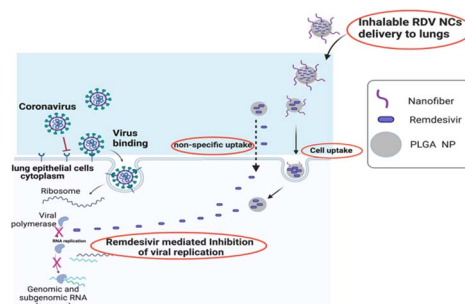
Application of Quantum Dots in Brain Diseases and its Neurotoxic Mechanism

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A novel nanocomposite drug delivery system for SARS-CoV-2 infections

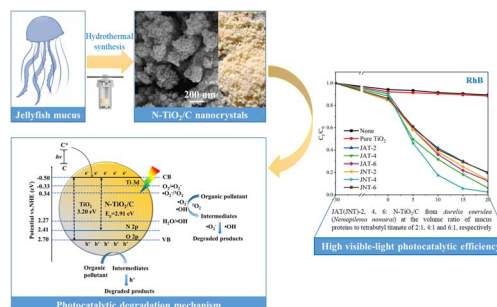
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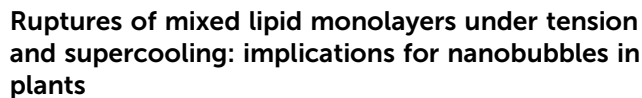
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Bio-inspired synthesis of N-doped TiO₂/C nanocrystals using jellyfish mucus with high visible-light photocatalytic efficiency

Song Feng,* Lingchen Liu,* Jianing Lin,* Ziwei Wang, Jinzeng Gu, Lutao Zhang, Bin Zhang* and Song Sun



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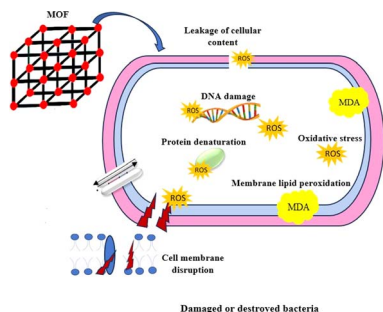
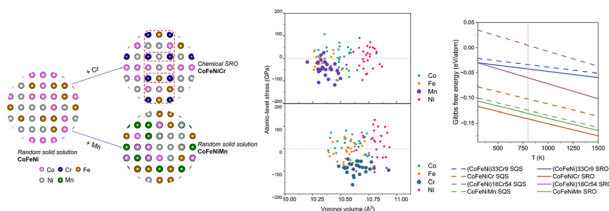


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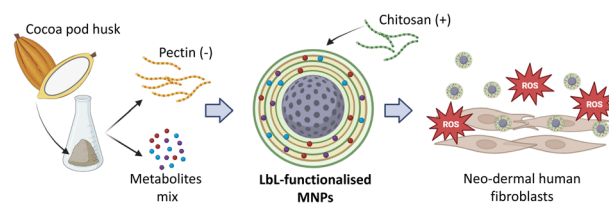


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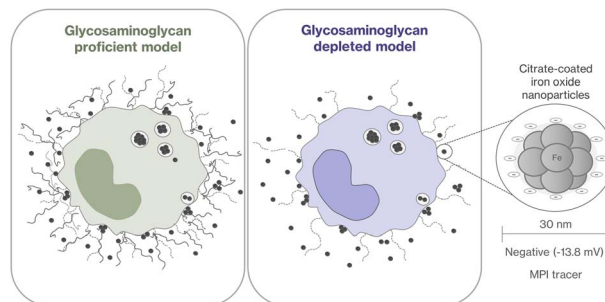
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Rapid cellular uptake of citrate-coated iron oxide nanoparticles unaffected by cell-surface glycosaminoglycans

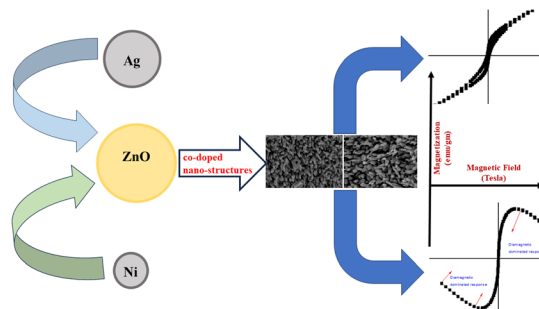
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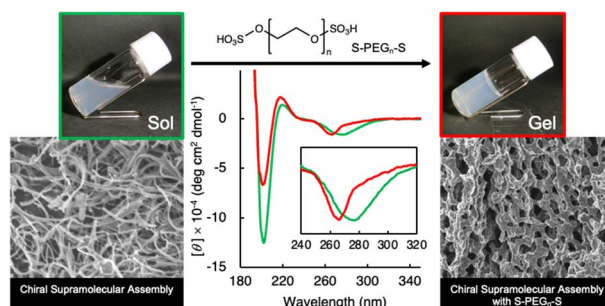
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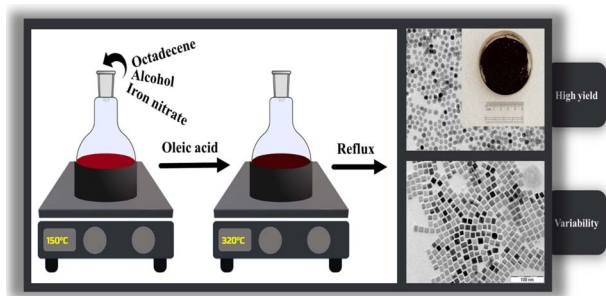
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Nanofibrous chiral supramolecular assembly-derived self-healing hydrogels with polyethylene glycol

Makoto Takafuji,* Kenji Kawamoto, Nanami Hano, Mako Otsuki and Hirotaka Ihara*



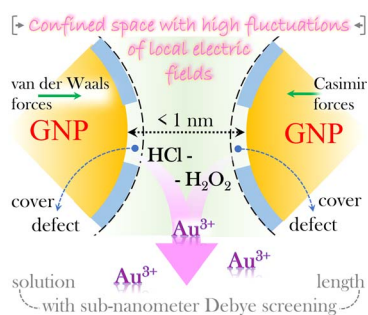
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Low-cost one-pot synthesis of hydrophobic and hydrophilic monodispersed iron oxide nanoparticles

Sohel Reja,* Manoj Kumar and Sukumaran Vasudevan

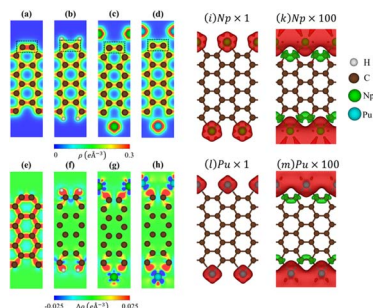
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Agglomeration compaction promotes corrosion of gold nanoparticles

Borys A. Snopok,* Shavkat N. Nizamov, Tetiana V. Snopok and Vladimir M. Mirsky

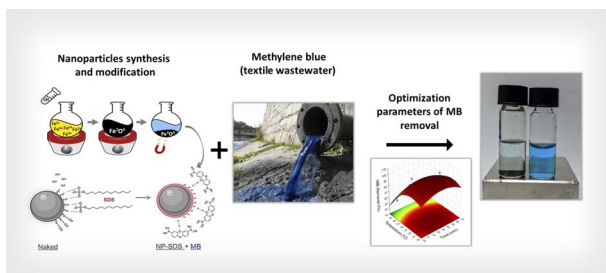
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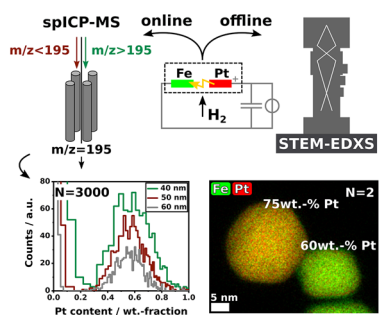
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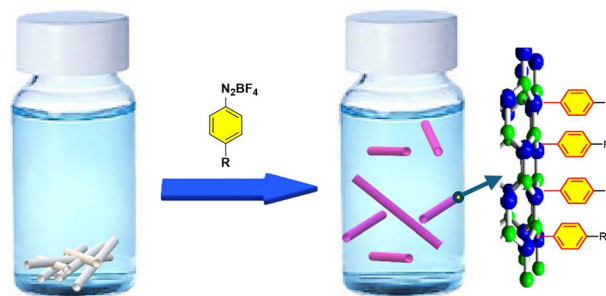
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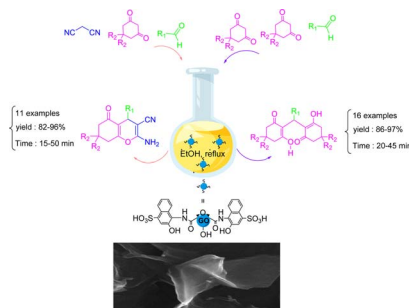
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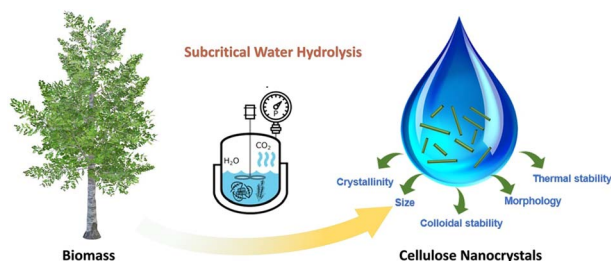
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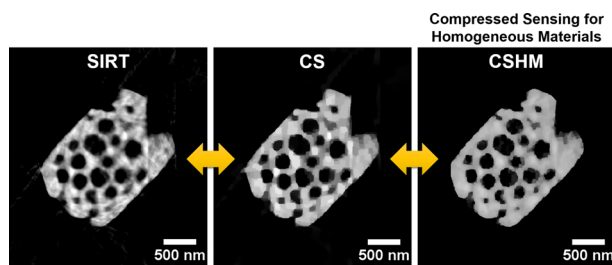
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Subcritical water digestion of woody biomass: extraction of cellulose nanomaterials under acid-lean condition

Ruby Osei-Bonsu, Mahfuzul Hoque, Philip S. McMichael and E. Johan Foster*



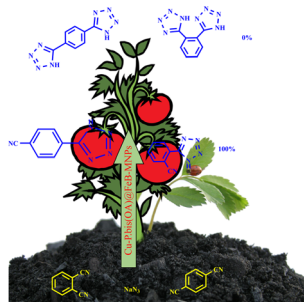
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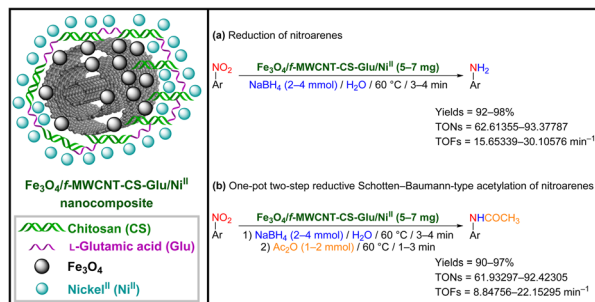
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Marwan Majeed Maseer, Tavan Kikhavani* and Bahman Tahmasbi*

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