

In this issue

Pooja Bhatia, Suhas Vasaikar
and Anil Wali

A landscape of nanomedicine innovations in India

<https://doi.org/10.1515/ntrev-2017-0196>
Nanotechnol Rev 2018; 7(2): 131–148

Social impact of nanotechnology contribution:

An attempt to portray the status of nanomedicine research and development in India.

Keywords: investments; nanomedicine; research indicators; startups and innovation quotient.



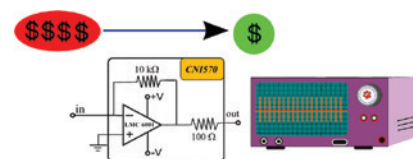
Sai Sunil Kumar Mallineni,
Herbert Behlow, Ramakrishna Podila
and Apparao M. Rao

A low-cost approach for measuring electrical load currents in triboelectric nanogenerators

<https://doi.org/10.1515/ntrev-2017-0178>
Nanotechnol Rev 2018; 7(2): 149–156

Communications: This work provides an ultra-low-cost approach for measuring triboelectric currents.

Keywords: current preamplifier; low-cost measurement; triboelectric nanogenerator.

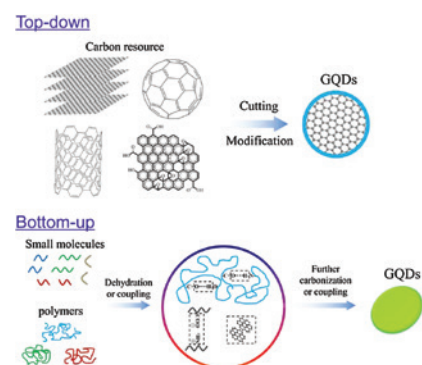


Weifeng Chen, Guo Lv, Weimin Hu,
Dejiang Li, Shaona Chen and Zhongxu Dai
Synthesis and applications of graphene quantum dots: a review

<https://doi.org/10.1515/ntrev-2017-0199>
Nanotechnol Rev 2018; 7(2): 157–185

Review: This review describes the top-down and bottom-up strategies for the preparation of GQDs with tunable photoluminescence, low toxicity, and good water solubility, and introduces their potential applications, including sensors, bio-imaging, drug carriers, solar cells, supercapacitors, etc.

Keywords: bottom-up; graphene quantum dots; photoluminescence; quantum confinement effect; top-down.

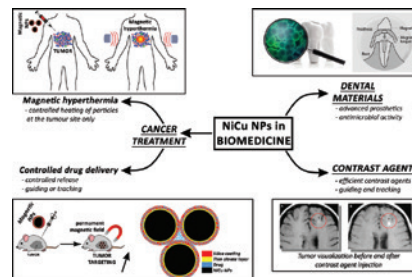


Irena Ban, Janja Stergar and Uroš Maver
NiCu magnetic nanoparticles: review of synthesis methods, surface functionalization approaches, and biomedical applications

<https://doi.org/10.1515/ntrev-2017-0193>
 Nanotechnol Rev 2018; 7(2): 187–207

Review: This is a comprehensive review of the studies related to the use of NiCu nanoparticles in biomedicine.

Keywords: biomedical applications; magnetic hyperthermia; magnetic nanoparticles; NiCu; synthesis.



Chinedu I. Ossai and Nagarajan Raghavan
Nanostructure and nanomaterial characterization, growth mechanisms, and applications

<https://doi.org/10.1515/ntrev-2017-0156>
 Nanotechnol Rev 2018; 7(2): 209–231

Review: Lattice mismatch, differential thermal expansion, and high deposition temperature have affected uniform deposition of nanoparticles on substrates and caused heteroepitaxy, which has resulted in defective nanostructures but has opened new areas of applications of nanostructures in electronics, medicine, solar energy, and asset management.

Keywords: anisotropic growth models; crystallographic nature; growth mechanisms; heteroepitaxy; nanofabrication processes; nanostructures characteristics.

