

Supporting Information

Nontoxic photoluminescent tin oxide nanoparticle for cell imaging: Deep eutectic solvent mediated synthesis, tuning and mechanism

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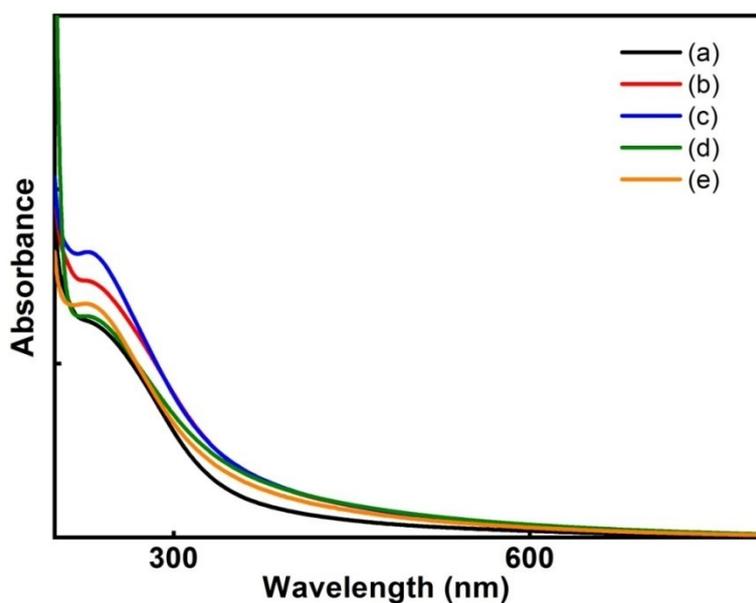


Fig. S1. UV-Vis absorption spectra of the as synthesized tin oxide nanoparticles at 80°C dissolved in nanopure water after separation from the host matrix, reline; after heating for (a) 30min; (b) 60min; (c) 90min; (d) 2hrs; (e) 3hrs.

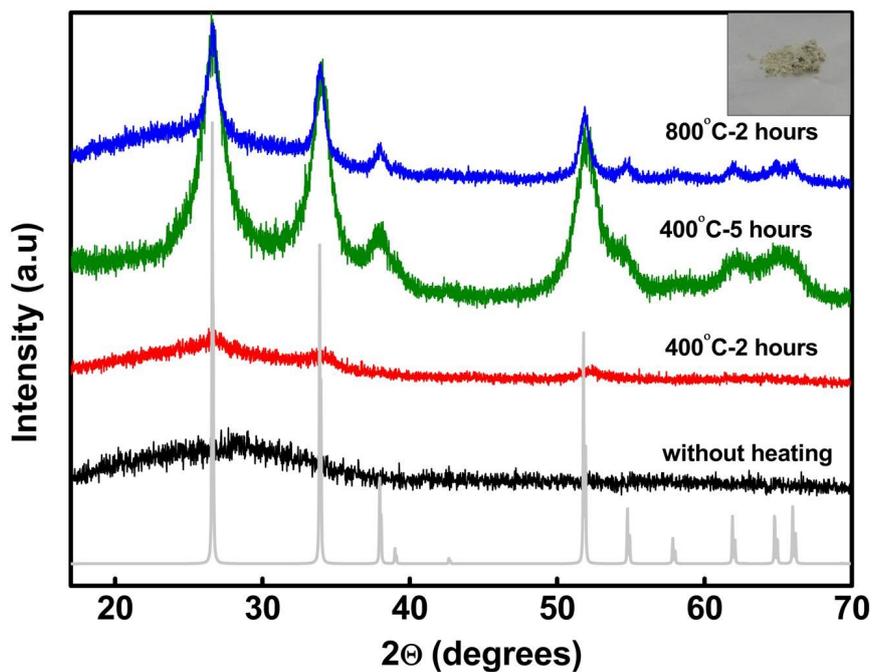


Fig. S2. XRD spectra of the synthesized tin oxide nanoparticles (a) before calcination (b) calcined at 400°C for 2 hours (c) calcined at 400°C for 5 hours (d) 800°C for 2 hours. Inset: Tin oxide nanoparticles extracted in powder form and calcined at 400°C.

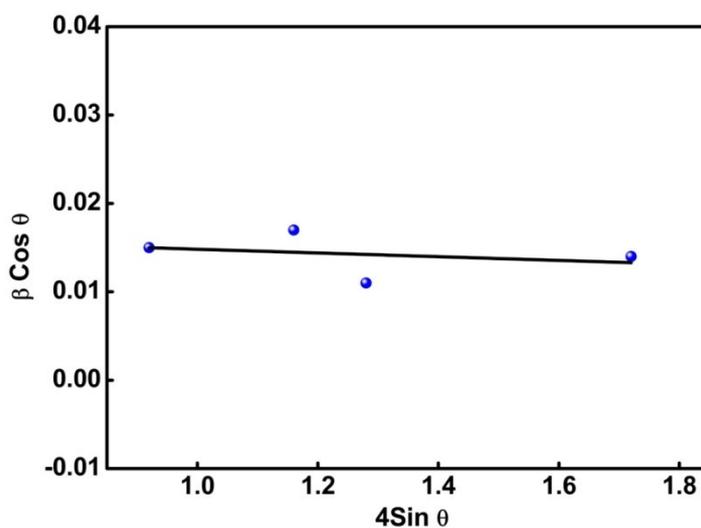


Fig. S3. Plot of $\beta \cos\theta$ vs $4\sin\theta$ for SnO_2 nanoparticles for crystal size and strain analysis from XRD peak broadening.

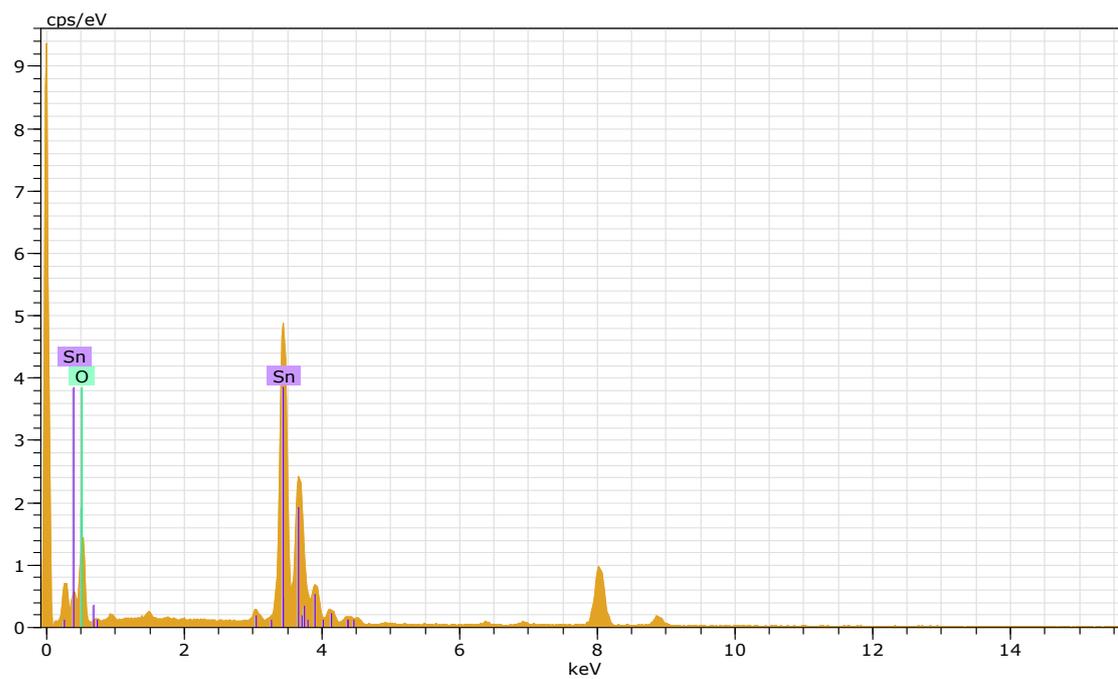


Fig. S4. EDX spectrum of the SnO₂ nanoparticles synthesized via radiation method (107kGy)

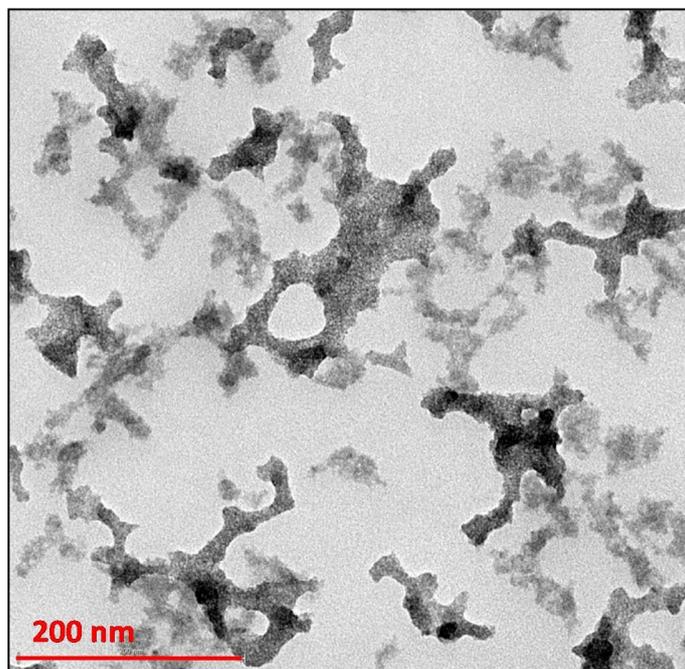


Fig. S5. TEM image of SnO₂ NPs synthesized in reline matrix via γ -irradiation