nanomaterials

Suplemmentary material

Alteration of the Mitochondrial Effects of Ceria Nanoparticles by Gold: An Approach for the Mitochondrial Modulation of Cells Based on Nanomedicine

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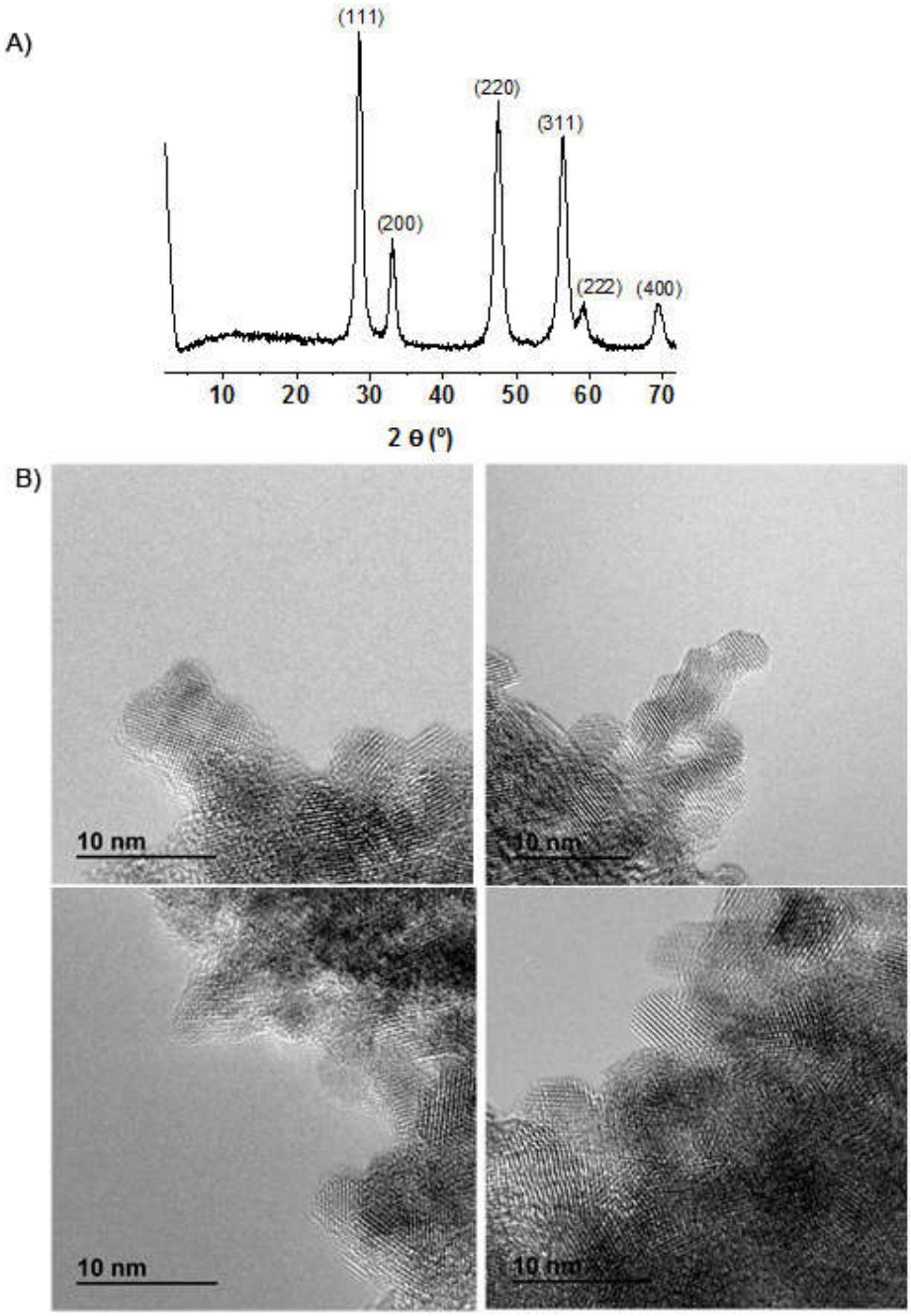

Figure S1. (**A**) Powder XRD and (**B**) representative TEM images of CeO_2 nanoparticles.

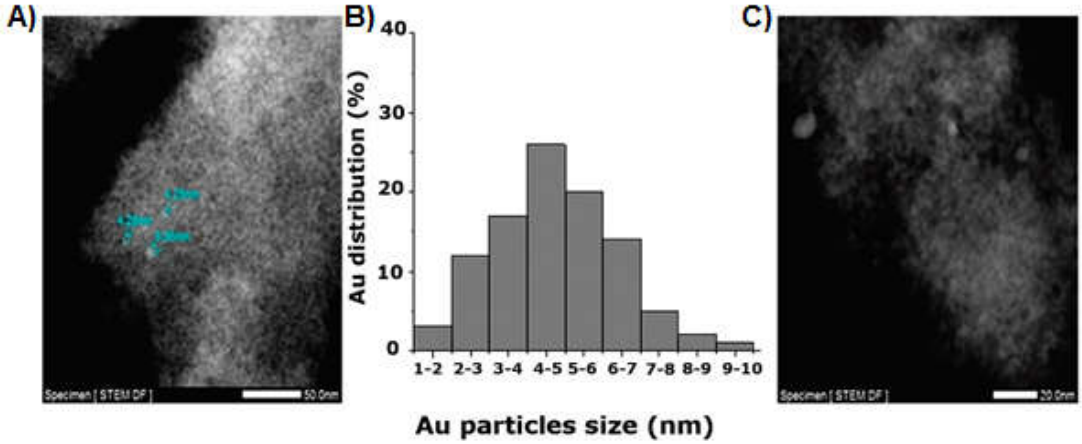

Figure S2. (**A**), (**C**) TEM image corresponding to $AuCeO_2$ sample; (**A–C**) The particle size distribution of Au NPs, (Scale bar = 50 nm, left), (Scale bar = 20 nm, right)

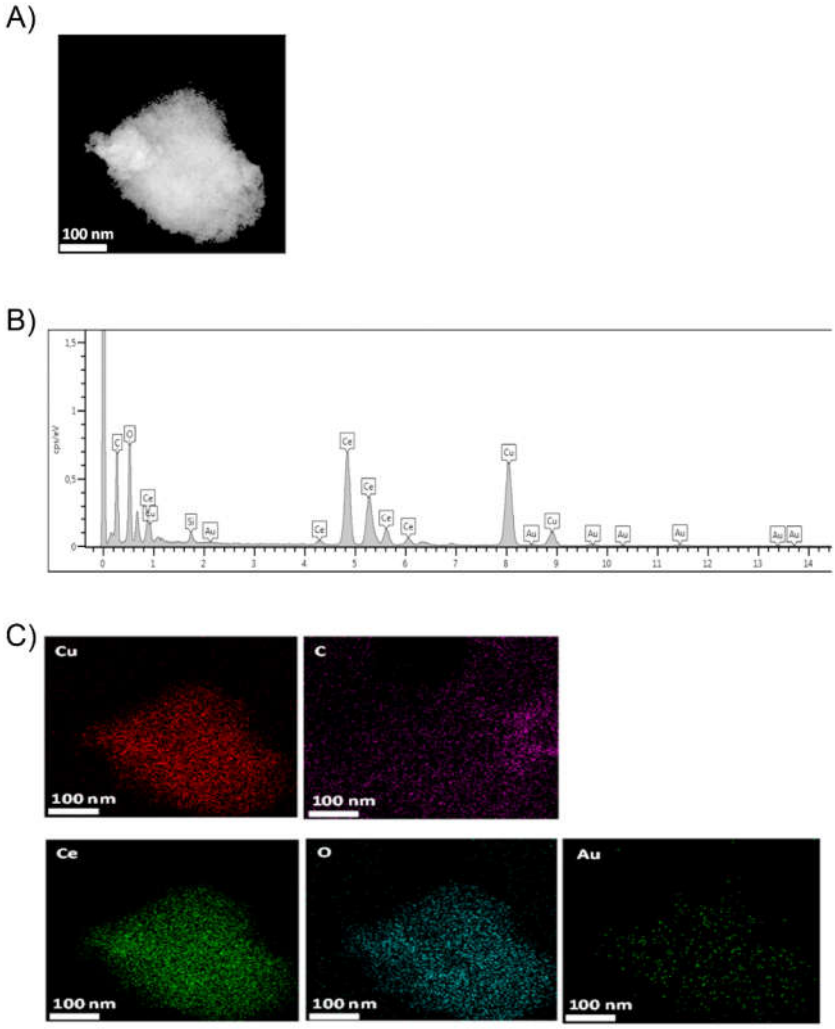

Figure S3. TEM image corresponding to: (**A**) $AuCeO_2$, (**B**) EDX spectrum, and (**C**) mapping of the different elements present in panel A.

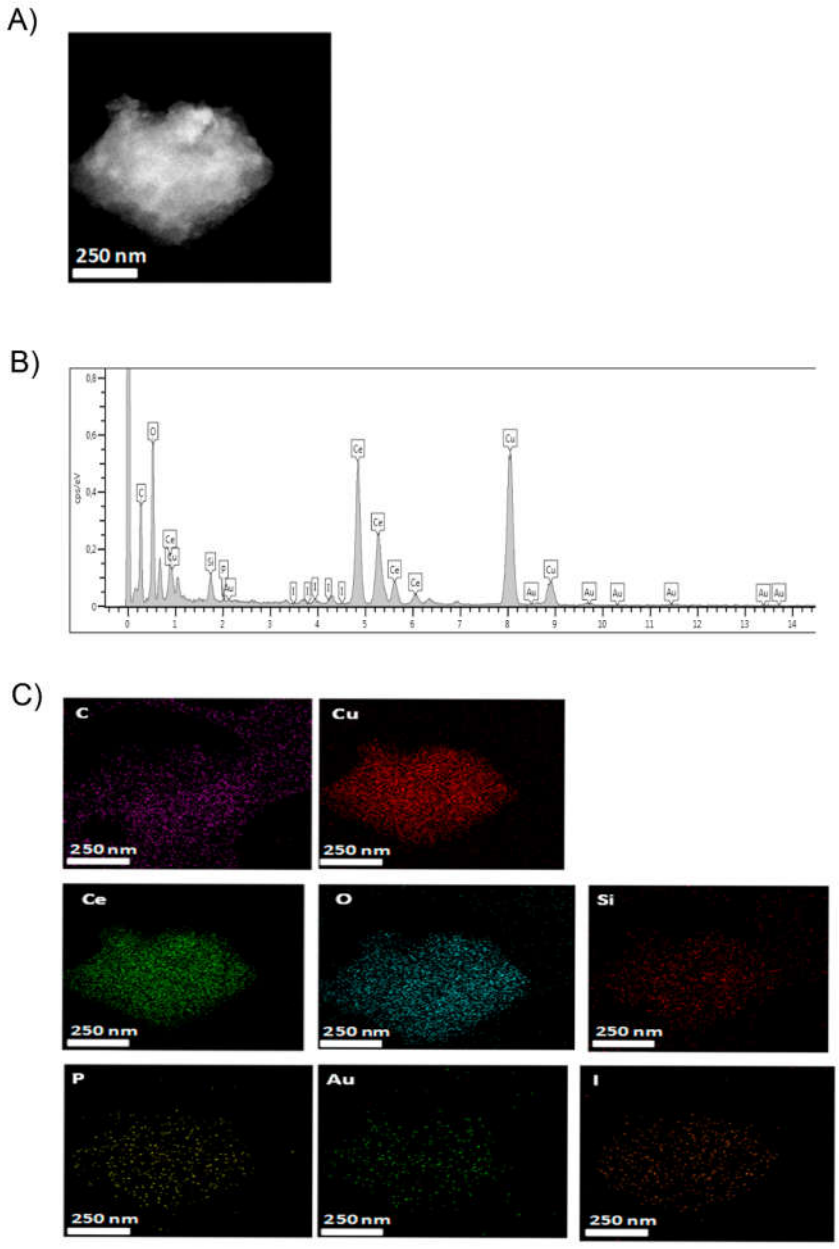

Figure S4. TEM image corresponding to: (**A**) TPP–$AuCeO_2$, (**B**) EDX spectrum, and (**C**) mapping of the different elements present in panel A.

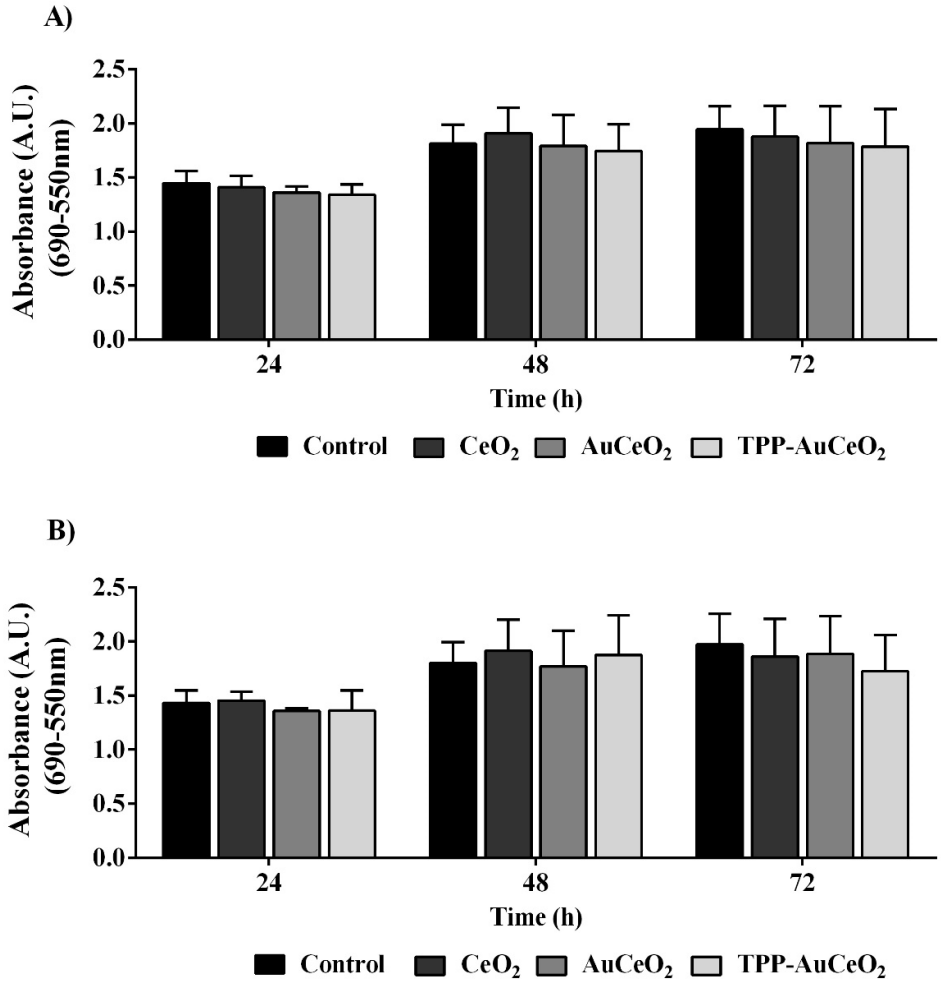

Figure S5. Determination of cellular viability and proliferation. Effect of TPP–AuCeO2, AuCeO2 and CeO2 on cellular proliferation and viability in HeLa cells assessed by MTT assay after 24, 48 and 72 h incubation. (**A**) 10 μg/mL, (**B**) 20 μg/mL.

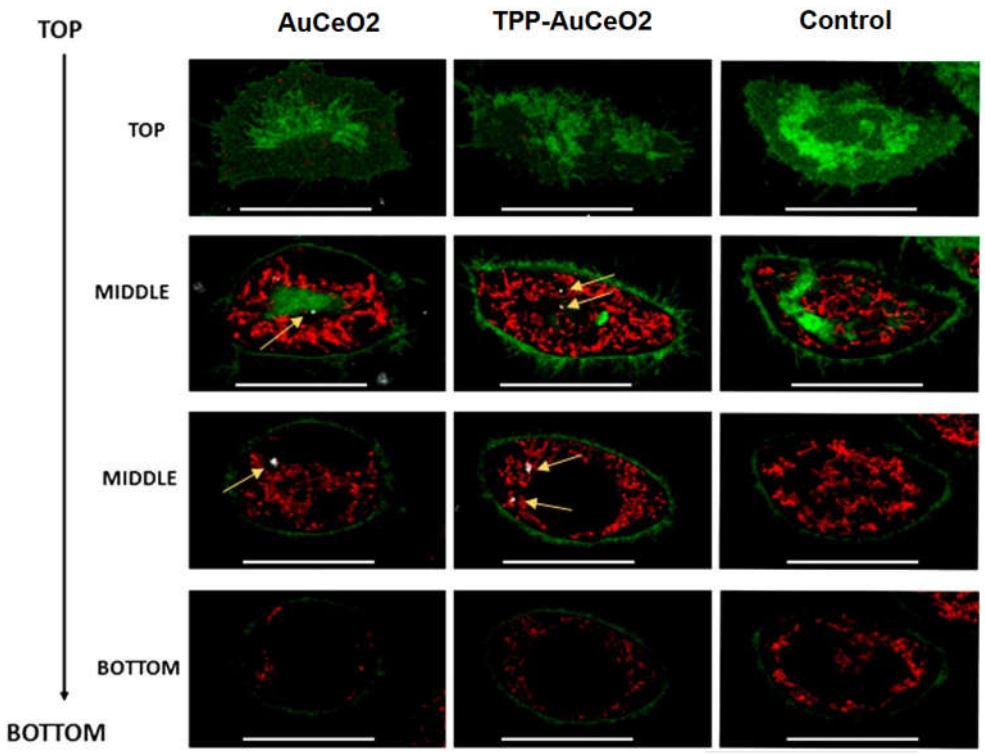

Figure S6. Z-axis scanning images of $AuCeO_2$, TPP–$AuCeO_2$ (20 μg/mL) and vehicle in HeLa cells by laser confocal microscopy obtained merging the green (CellMask™) to label the cellular membrane and red (MitoTracker™) to label the mitochondrial. Fluorescence were obtained exciting at 488 nm (exciting CellMask™, green) and 561nm (exciting MitoTracker™, red) and the emission was collected from 425 to 603 nm in separate channels. The white spots indicate the location of NPs after irradiating at 633 nm (yellow arrows). (Scale bar = 20 μm).