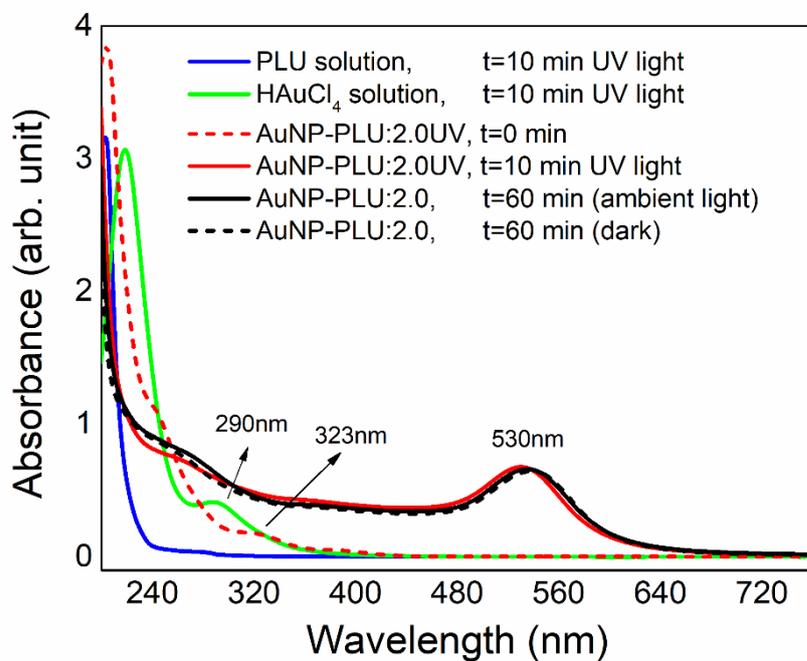
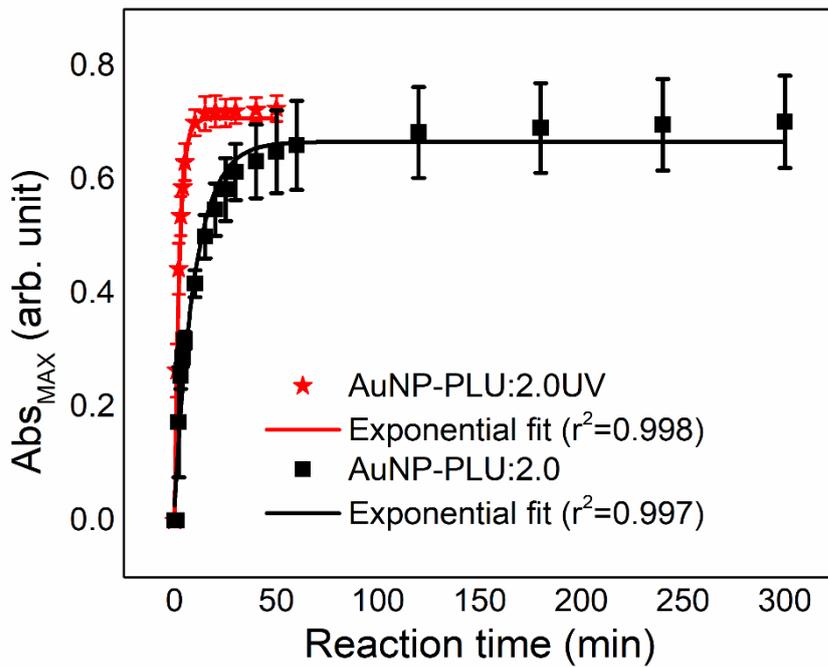


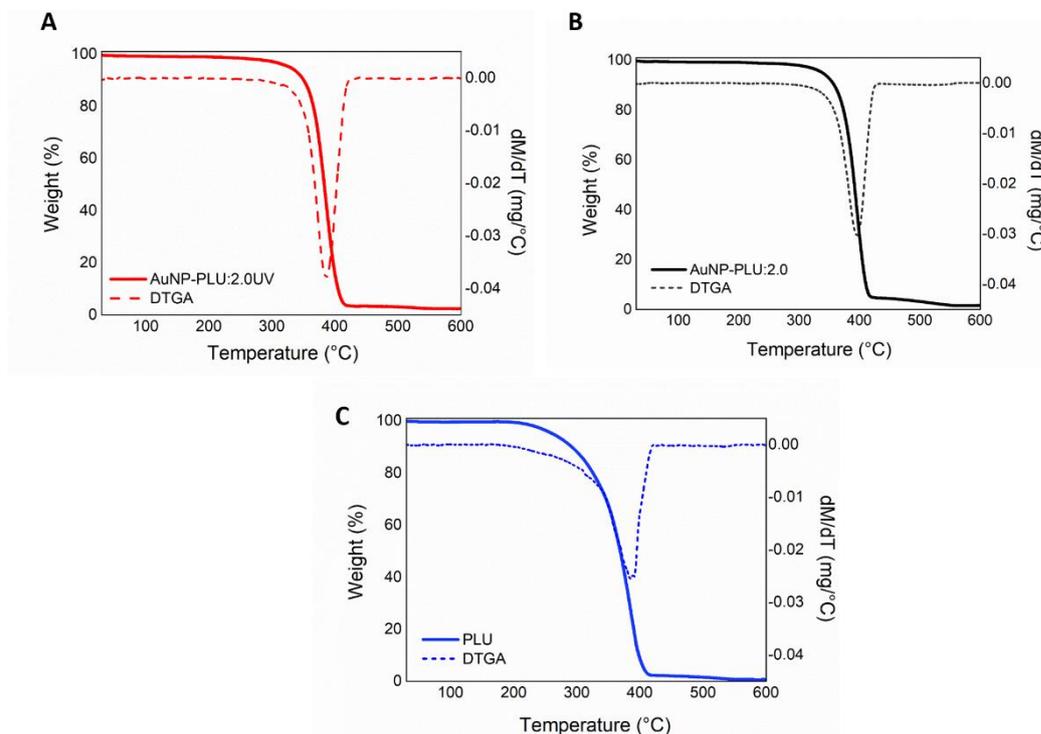
### UV-Accelerated Synthesis of Gold nanoparticle-Pluronic Nanocomposites for X-Ray Computed Tomography Contrast Enhancement



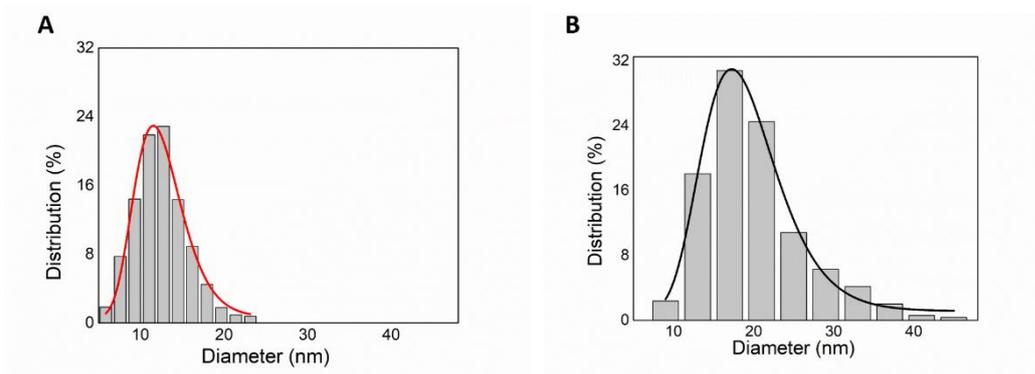
**Figure S1.** UV-vis spectra obtained solutions of HAuCl<sub>4</sub> and PLU at concentrations of 2 mmol L<sup>-1</sup>; the AuNP-PLU:2.0UV nanocomposite at t=0 (after mixing the precursors) and the formation of the AuNP-PLU nanocomposite is observed after 10 min; and the control samples AuNP-PLU:2.0 (ambient light and in the dark) after 60 min of mixing.



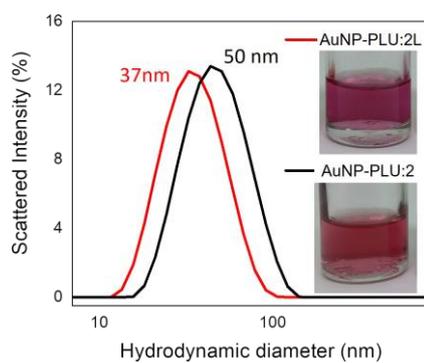
**Figure S2.** Changes in the maximum absorption AuNP-PLU:2.0UV (red) and AuNP-PLU:2.0 (black) of the plasmonic band during the reaction time. Data of (AuNP-PLU:2.0 were reproduced with permission [32].  
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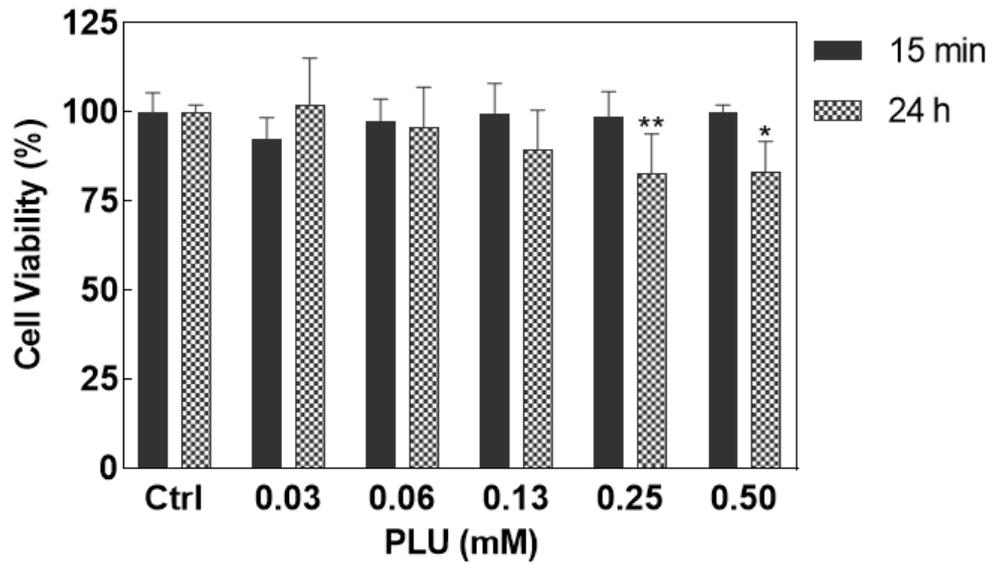
**Figure S3.** The nanocomposites thermogravimetric analysis. The thermogravimetric curves and the derivative thermogravimetric curves for AuNP-PLU:2.0UV, (A) AuNP-PLU:2.0 (B) and PLU (C)



**Figure S4.** Nanoparticle diameter histogram (vertical bars) obtained from TEM images, fitted with a log-normal distribution function (solid line) for AuNP-PLU:2.0UV in (A) and AuNP-PLU:2.0 in (B).



**Figure S5.** Scattered light intensity distribution profiles as a function of the hydrodynamic diameter of the AuNP-PLU:2.0UV (red line) and AuNP-PLU:2.0 (black line). Inset: digital images of colloidal dispersions, as indicated.



**Figure S6.** Effect of PLU on viability of the NIH-3T3 cells determined by MTT assay. Cells were incubated with PLU for 15 minutes or 24 hours. Data were presented as mean  $\pm$  standard deviation (SD) from three independent experiments. Differences among groups were determined by Kruskal-Wallis test and Dunn's multiple comparison post-hoc test. Asterisks indicate significant differences compared to the respective control group: \*  $p < 0.05$ , \*\*  $p < 0.001$ , \*\*\*  $p < 0.0001$ .