

SUPPORTING INFORMATION

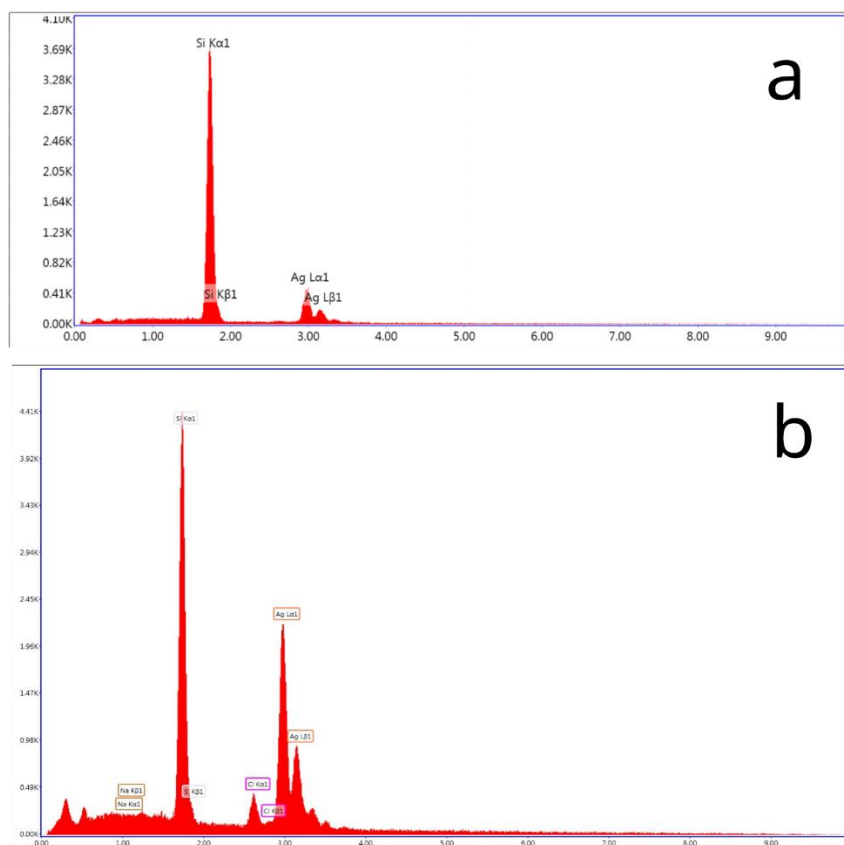


Figure S1. a) EDX spectra of the Ag nanoplatelet in Figure 3a, also representative of the spectrum of AgNP. b) EDX spectrum of the squared crystal in Figure 7 (yellow arrow).

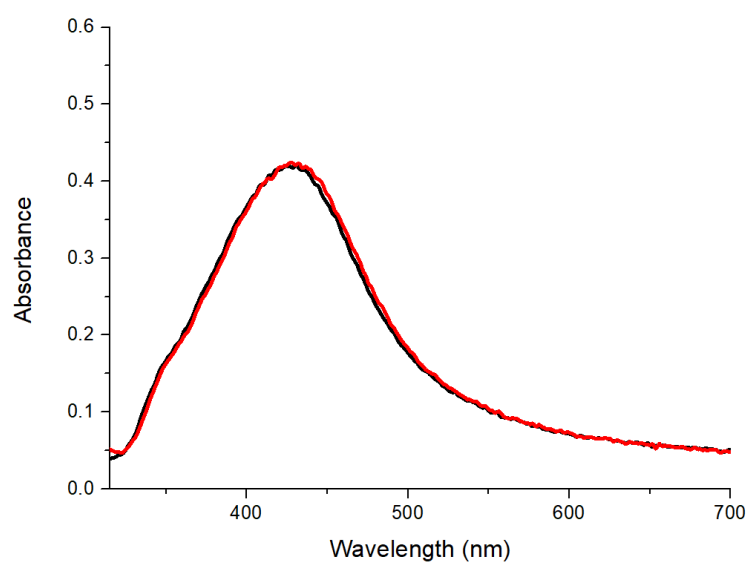


Figure S2. UV/Vis spectra of an aged AgNPs colloidal solution recorded before and after gentle homogenization (black and red curves, respectively). Experimental conditions: aging time: one week; aliquot volume: 3 mL; Ag content: 14.4 $\mu\text{g/mL}$.

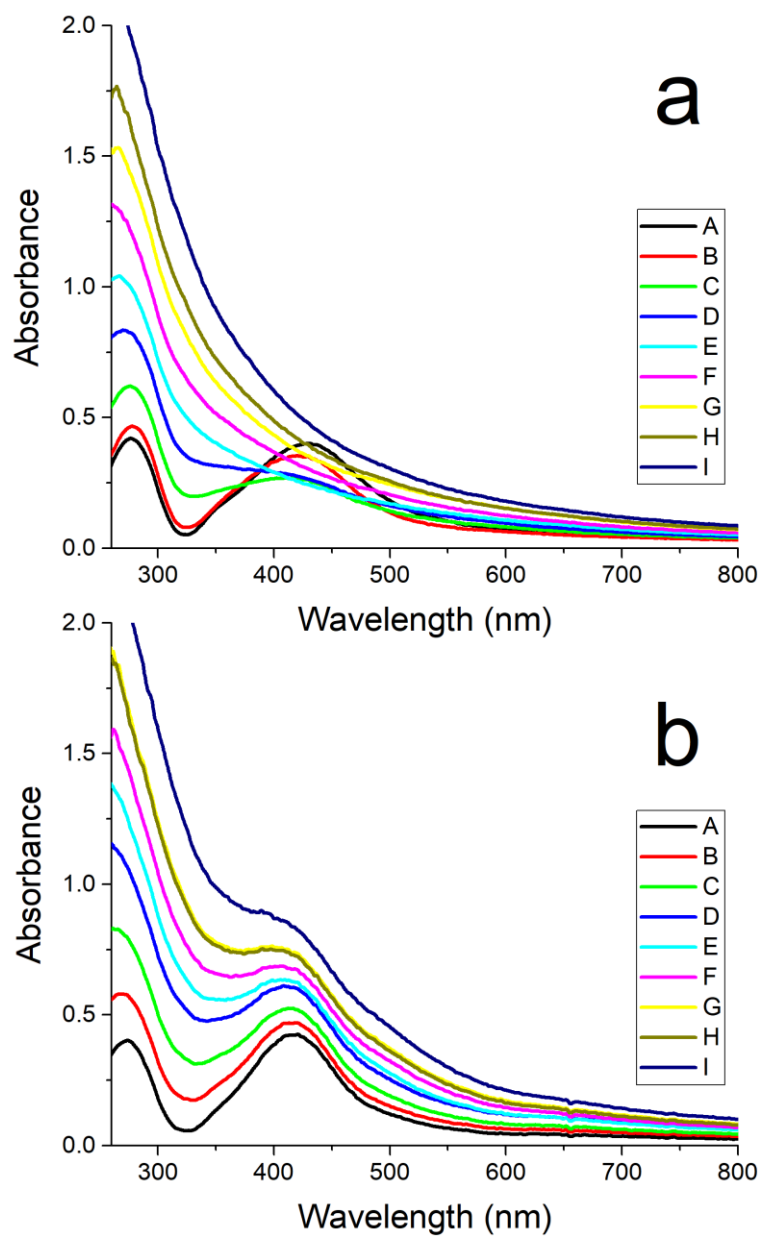


Figure S3. UV/Vis spectra of AgNPs@GO suspensions upon increasing the concentration of GO while keeping that of AgNPs constant, recorded 24 hours after mixing the components. Synthetic approach: (a) *in situ*; (b) *ex situ*. The spectra have not been corrected by the absorbance of GO (see Fig. 4a,b for corrected data). Experimental conditions: Ag content: 14.4 $\mu\text{g/mL}$; GO content: 0-67 $\mu\text{g/mL}$.

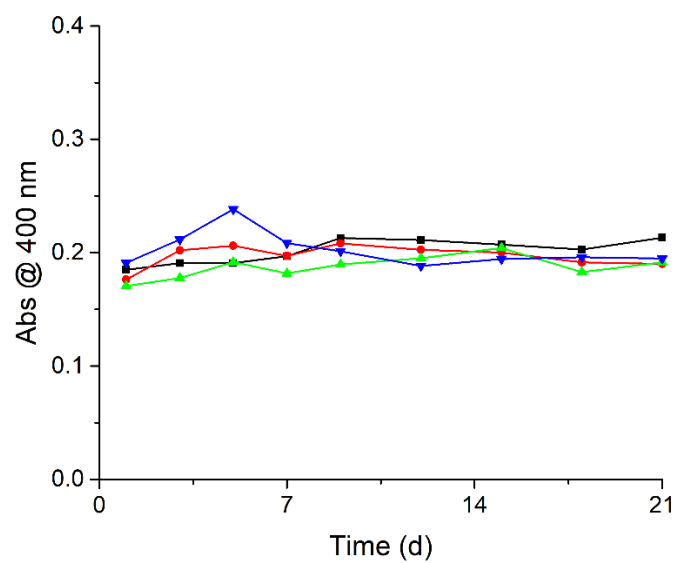


Figure S4. Absorbance of the AgNPs@GO suspensions (four replicas) monitored at a fixed wavelength (400 nm) over three weeks. Experimental: Ag content: 14.4 $\mu\text{g/mL}$; GO content: 25 $\mu\text{g/mL}$; Ag/GO ratio: 0.58.