Supporting Information

Enhancing the Tactile and Near-Infrared Sensing Capabilities of Electrospun PVDF Nanofibers with the Use of Gold Nanocages

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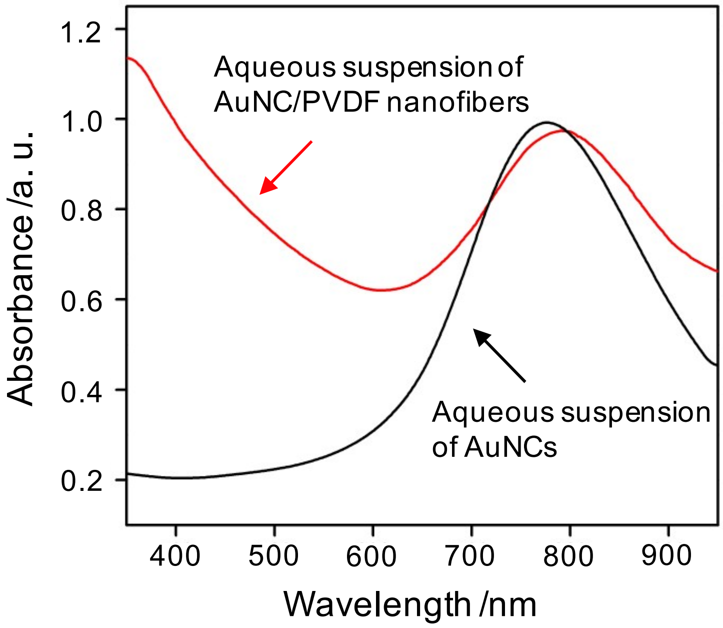

Fig. S1. UV-vis-NIR spectra recorded from an aqueous suspension of the AuNCs and AuNC/PVDF nanofibers, respectively. The absorption at wavelengths below 600 nm can be attributed to the PVDF and nanofibers. Note that the spectra were recorded from a new batch of AuNCs slightly different from those used in the experiments described in the main text. The main purpose of this Figure is to illustrate the red shift in LSPR peak position when the medium surrounding AuNCs was switched from water to PVDF.

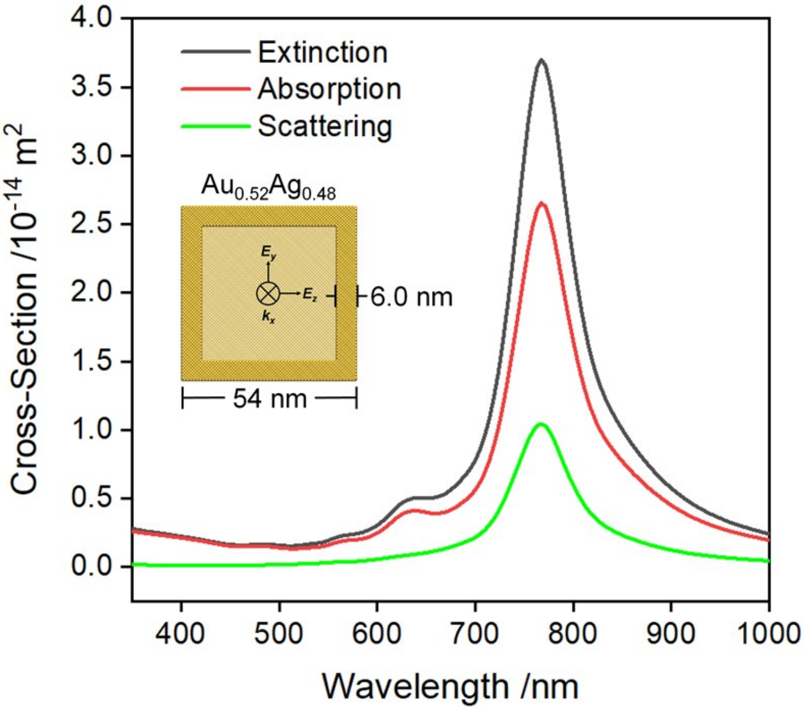

Fig. S2. Extinction, absorption, and scattering spectra calculated from one individual AuNC using the discrete dipole approximation (DDA) method. We modeled the nanocage with an atomic composition of 52% Au and 48% Ag based on the ICP-MS data, and assumed that it was surrounded by and completely filled with water. The nanocage was approximated as a nanobox, together with an outer edge length of 54 nm and a wall thickness of 6 nm.