Supporting information

Local Refractive Index Sensing Based on Edge Gold-Coated Silver Nanoprisms

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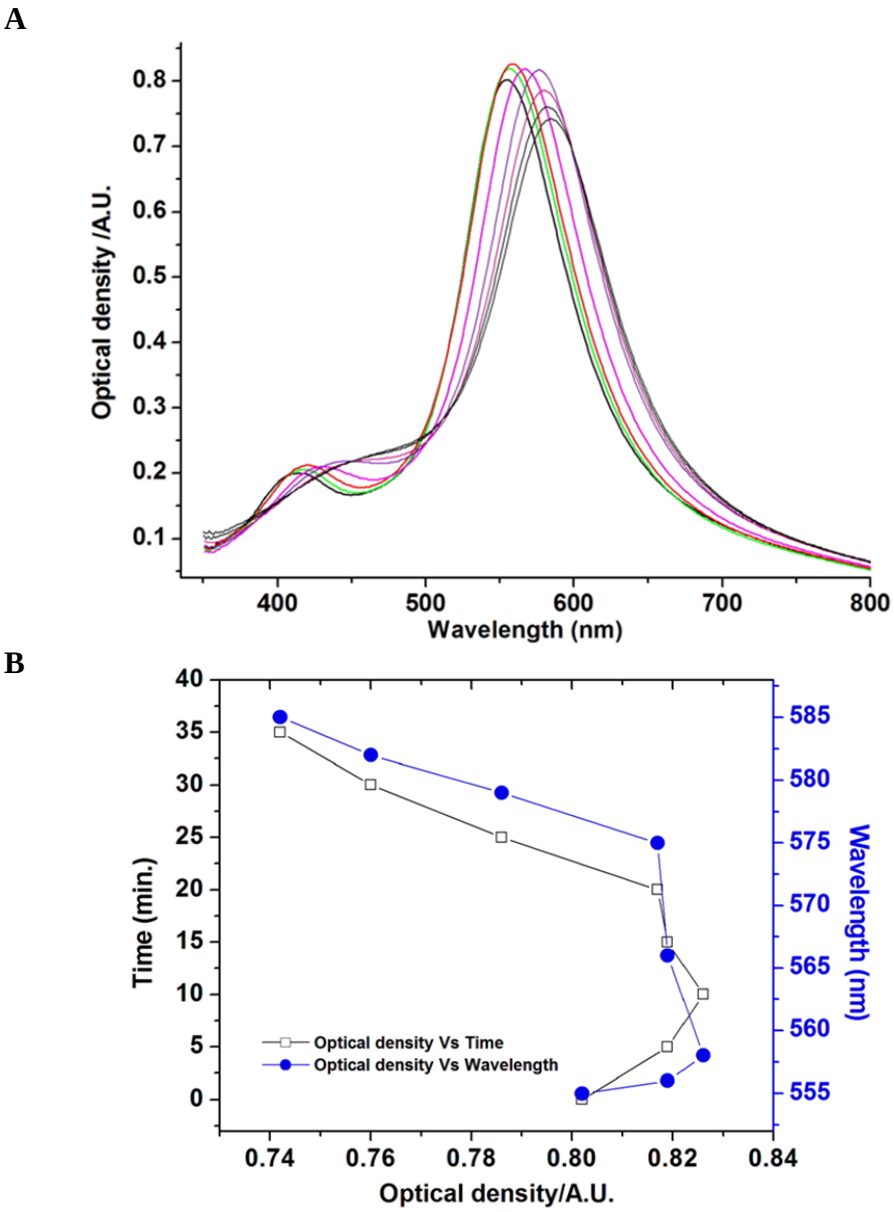

Figure S1: A) Typical SPR band evolution during 35 min edge gold-coating. B) Close look of SPR band evolution in A. The SPR band red-shifted ~30 nm after edge-gold coating.

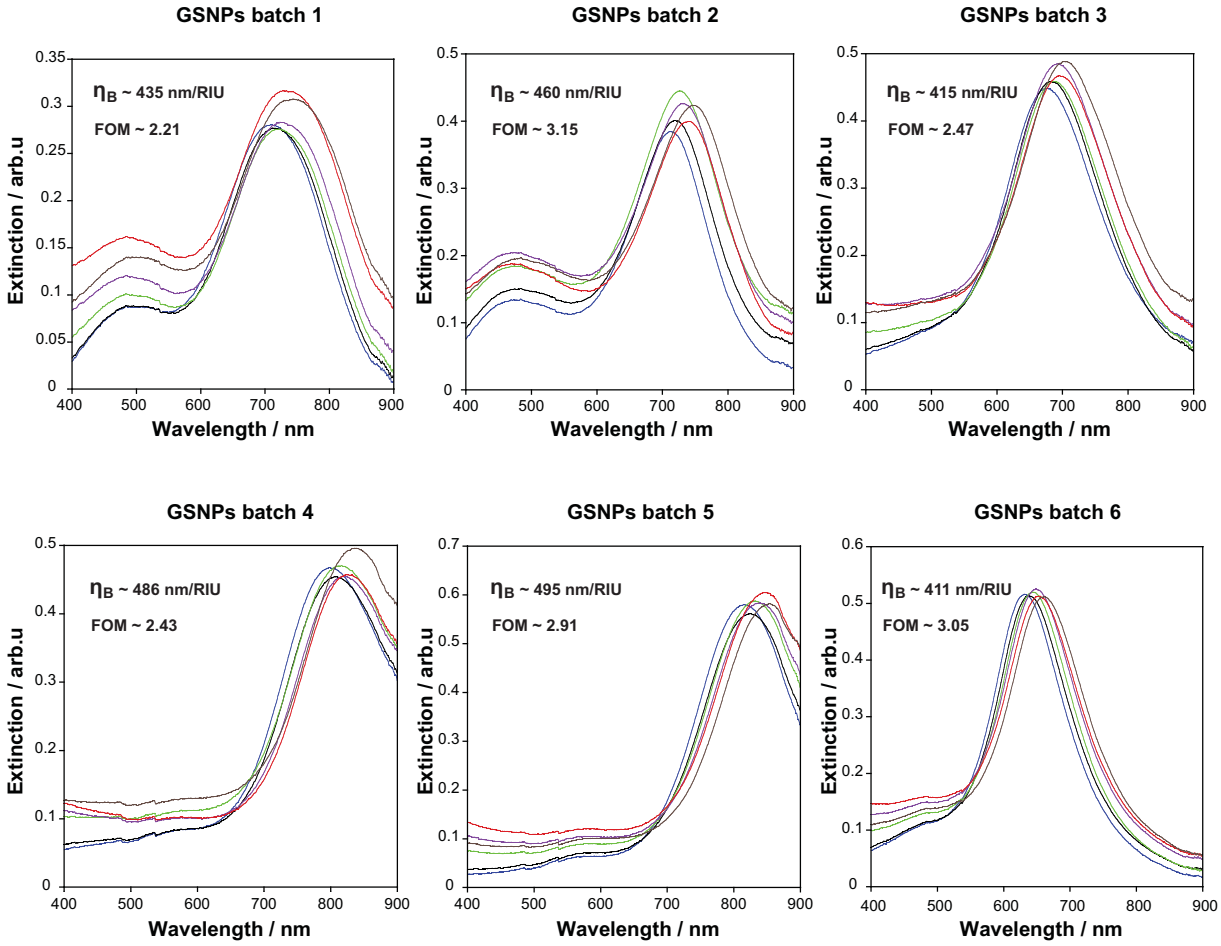

Figure S2: UV-VIS spectra for six different batches of dispersed GSNPs in various concentrations of sucrose (0-50%). Bulk RI sensitivities (η_B) and FOM-values are reported for each batch.

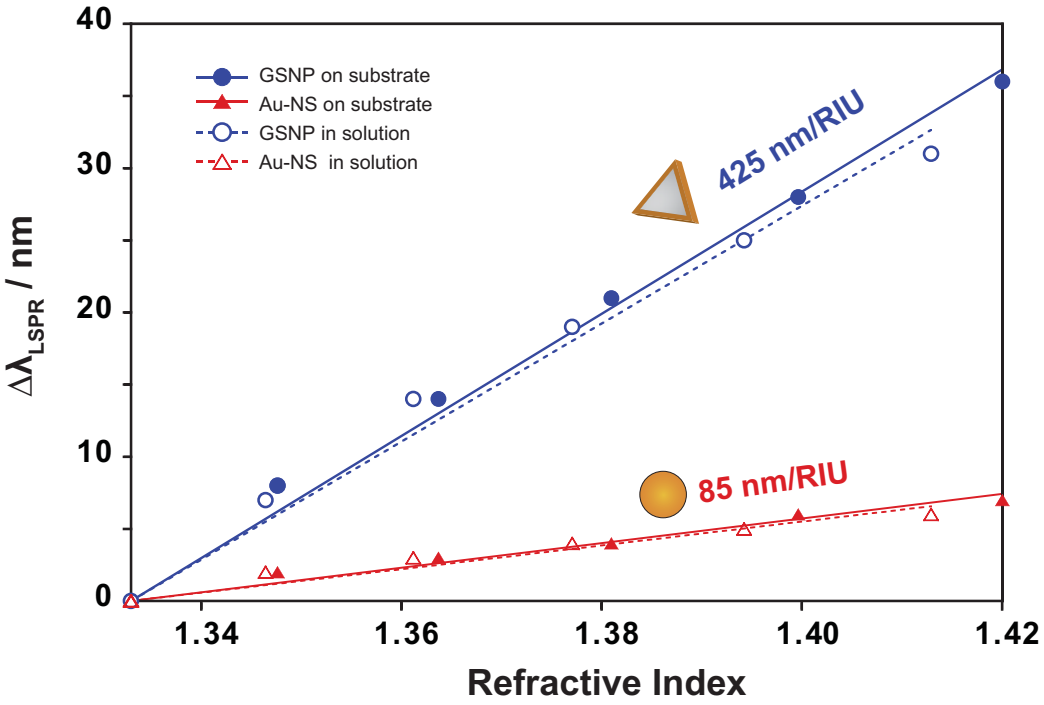

Figure S3: Comparison of bulk refractive index sensitivity for GSNPs and gold nanospheres immobilized on a substrate and in solution. No difference in sensitivity can be observed. Bulk refractive index sensitivity for dispersed nanoparticles was determined by mixing 10 µl of highly concentrated nanoparticles together with 100 µl of various sucrose solutions (0-50%, w/w)

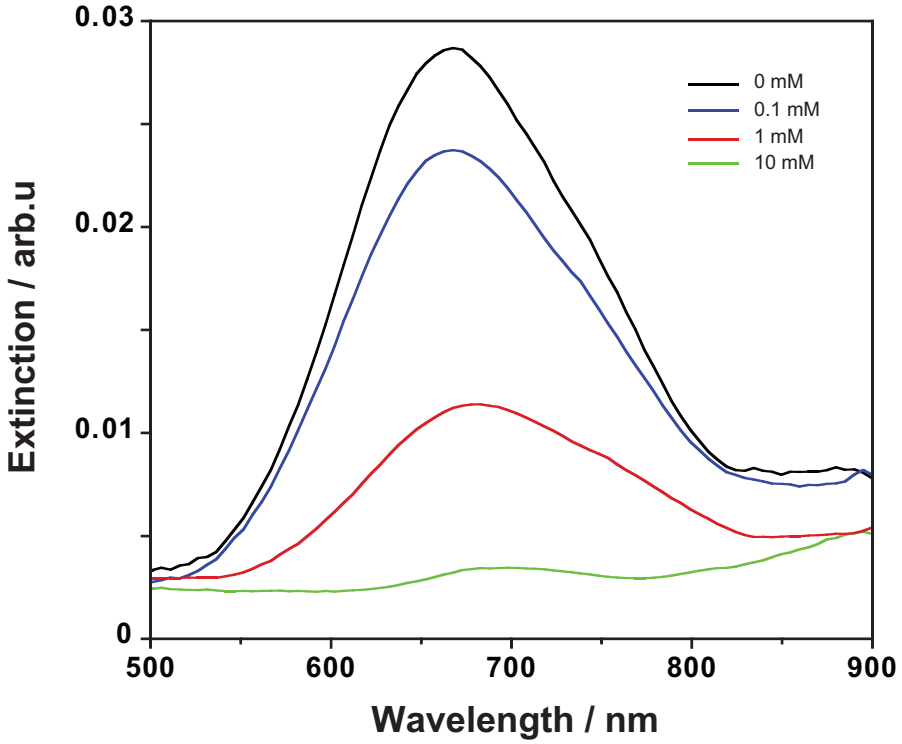

Figure S4: UV-VIS spectra of GSNPs exposed to H_20_2 at different concentrations. GSNPs were immobilized in a microtiter plate using PEI/PSS/PAH with the protocol described in the methods section. Various concentration of hydrogen peroxide was added to the particles, incubated for 15 min followed by rinsing and finally, extinction spectra were recorded using UV-Vis spectroscopy.