Supporting Information For:

Designing Efficient Localized Surface Plasmon Resonance-Based Sensing Platforms: Optimization of Sensor Response by Controlling the Edge Length of Gold Nanoprisms

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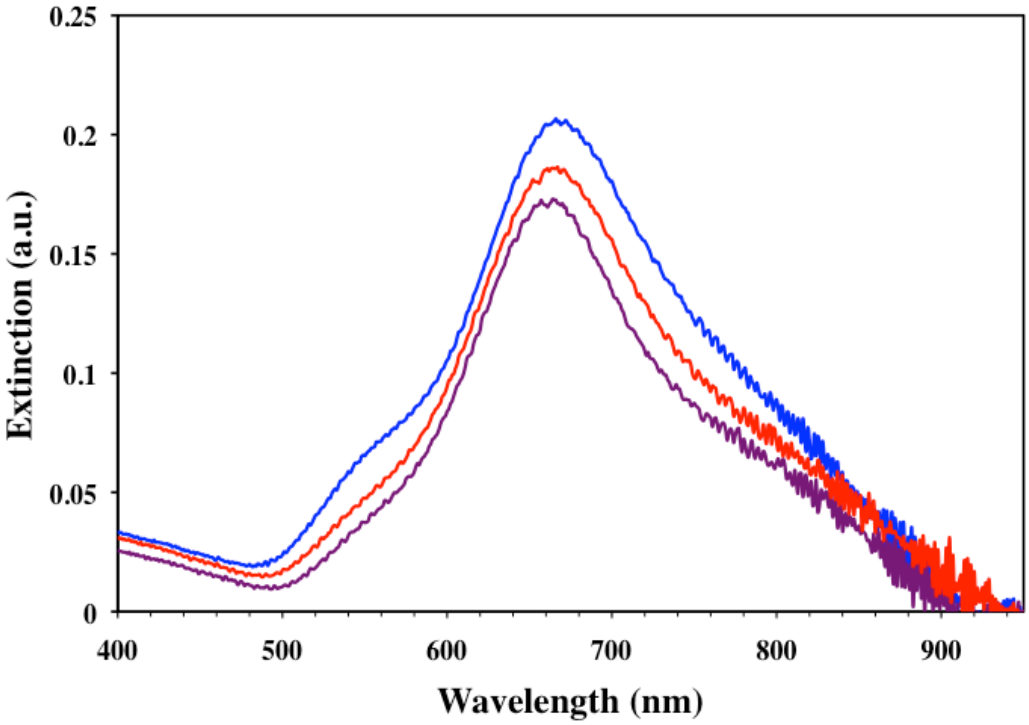
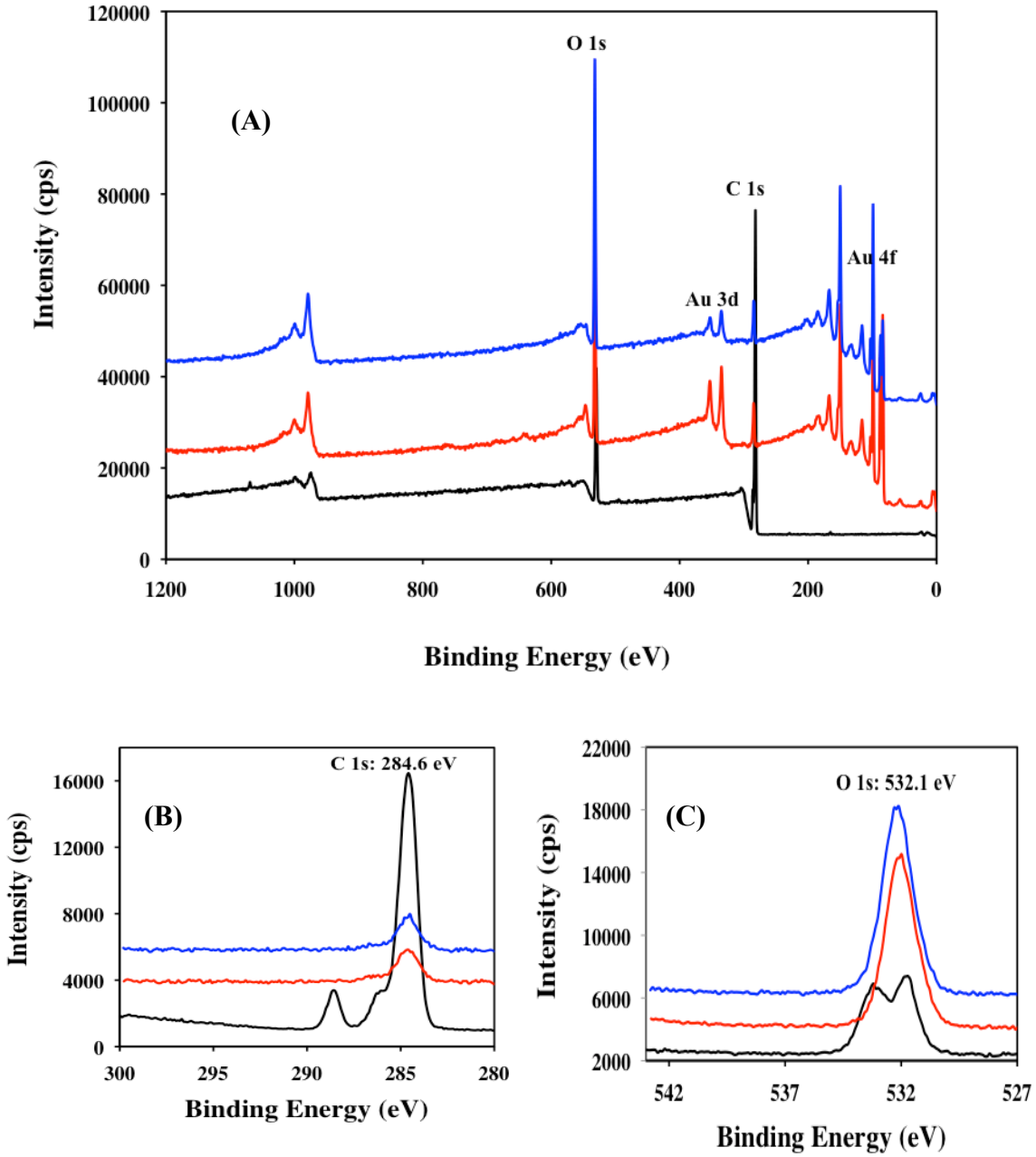
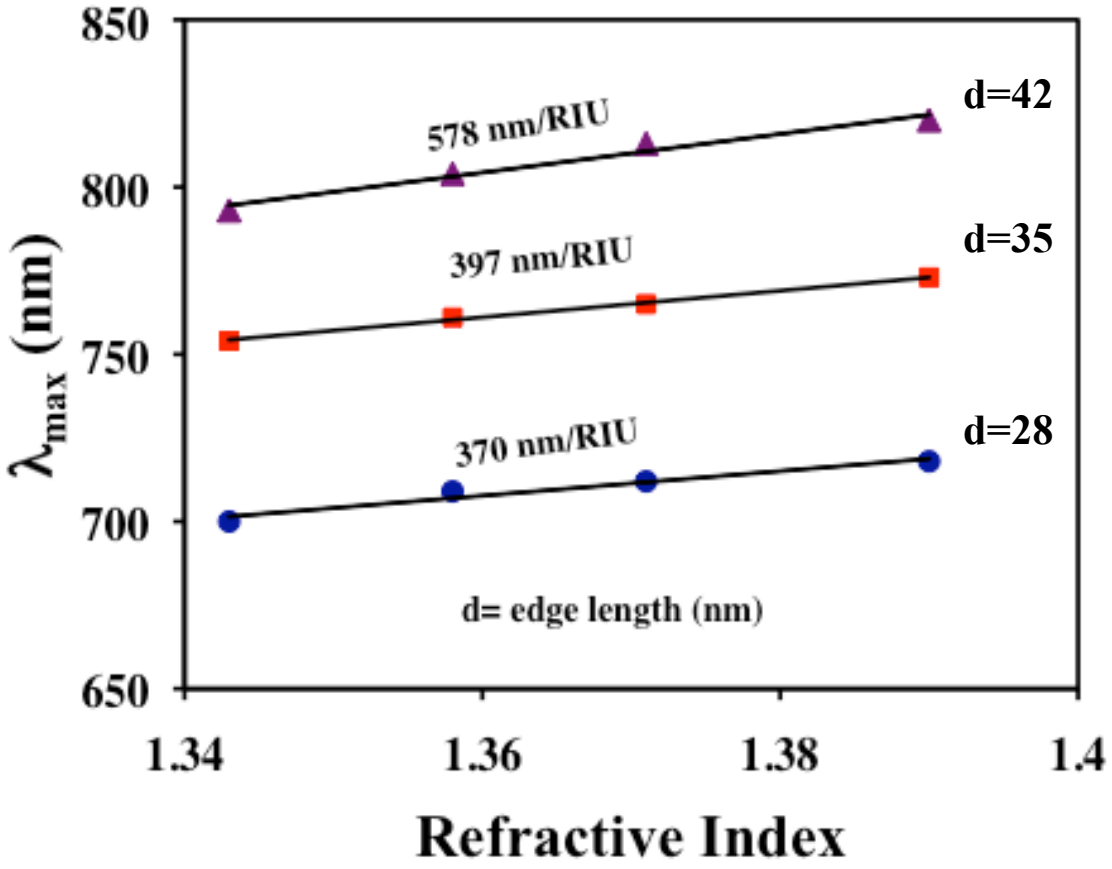


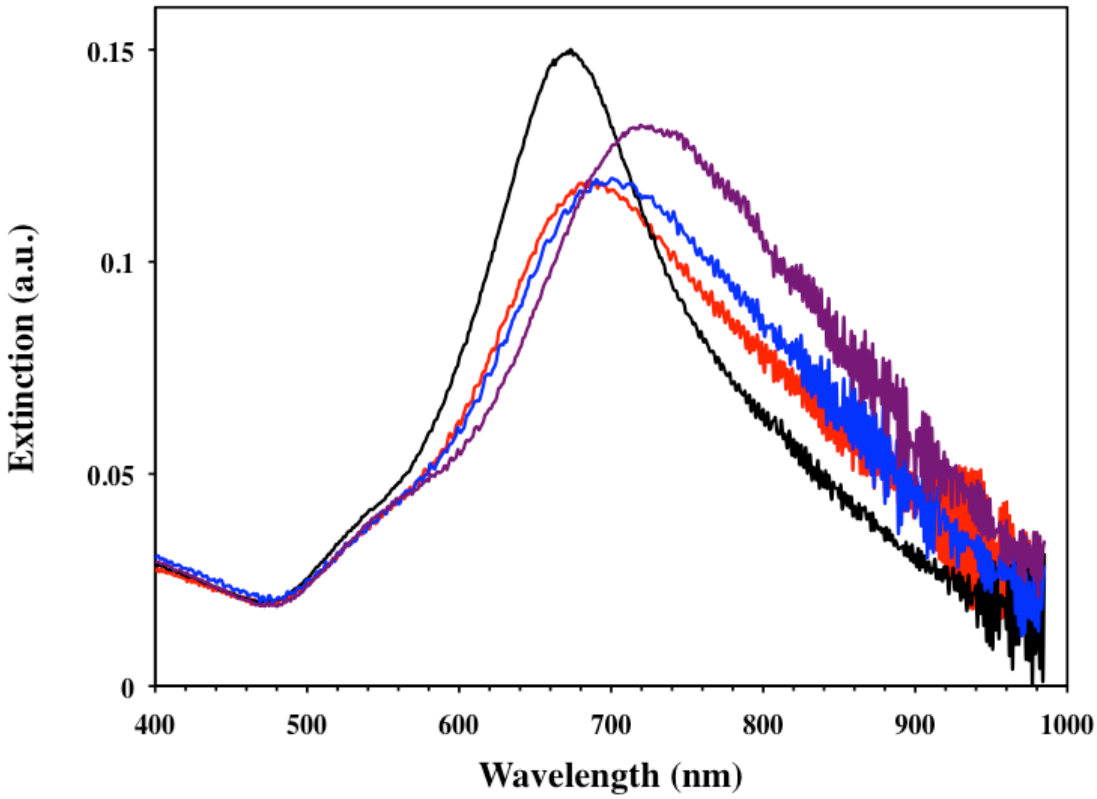
SI-Figure 1. The effect of tape cleaning on the UV-visible spectrum of supporting-substrate-bound nanoprisms. Ensemble extinction spectra before tape cleaning (blue, λ_{LSPR}: 673 nm), after tape cleaning (red, λ_{LSPR}: 673 nm), and after tape cleaning followed by washing with CH_2Cl_2 (purple, λ_{LSPR}: 671 nm).



SI-Figure 2. The effect of tape cleaning on the XPS spectrum of supporting substrate-bound nanoprisms. (A) Survey scan showing spectrum of nanoprism before (red) and after (blue) tape cleaning and CH2Cl2 wash, and of tape alone (black). Expansion of the carbon 1s (B) and oxygen 1s (C) signals.



SI-Figure 3. The relationship between LSPR dipole peak position of the nanoprisms of different edge length in solution and refractive index of the bulk solutions.



SI-Figure 4. Functionalization steps of supporting substrate-bound nanoprisms followed by UV-visible spectroscopic analyses. Ensemble extinction spectra recorded before nanoprism functionalization (black, λ_{LSPR}: 677 nm), after modification with mixed thiols (red, λ_{LSPR}: 695 nm), after attachment of biotin via amide coupling (blue, λ_{LSPR}: 704 nm), and after incubation with 1.0 μM SA (purple, λ_{LSPR}: 734 nm).