

Supplementary materials

Differentiating surface and bulk interactions in nanoplasmonic interferometric sensor arrays

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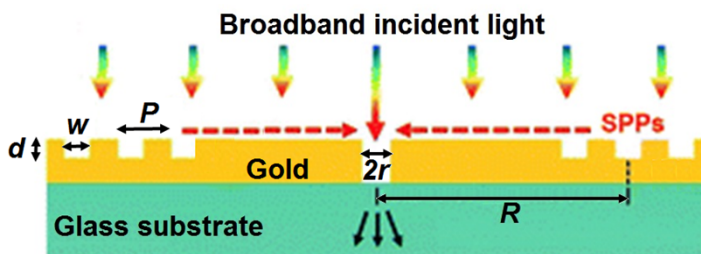


Fig. S1. Side view of the ring-hole nanostructure. The optimized structural parameters: groove periodicity $P=430\text{nm}$, $R=4.35\mu\text{m}$, $w=210\text{nm}$, $d=45\text{nm}$, and $r=300\text{nm}$.

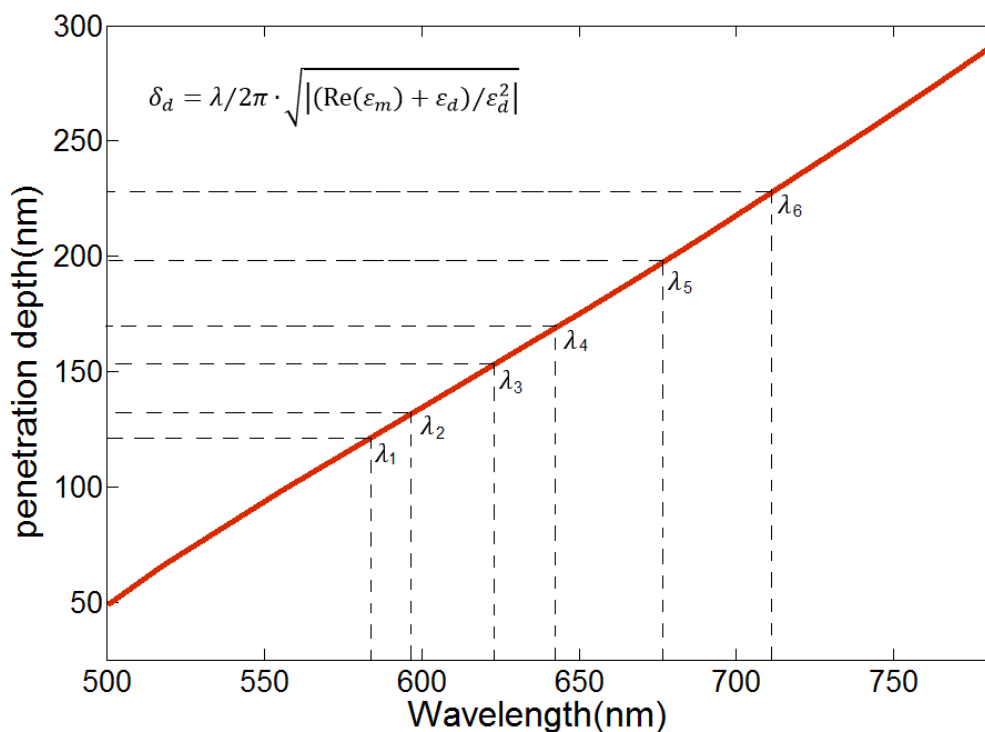


Fig. S2. Theoretical penetration depths δ_d of SPPs into the water solution at the Au/water interface as a function of wavelength. λ_1 to λ_6 represent the wavelengths of multiple interference peaks and valleys.