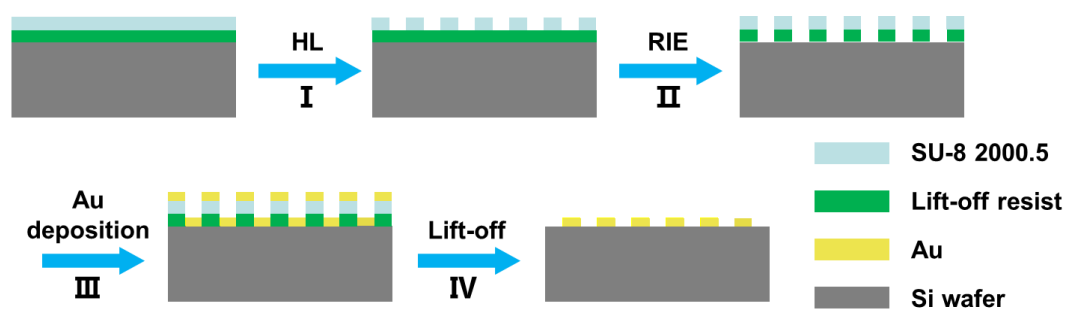# The Sensitivity Research of a Hexagonal Au Nanohole Array Under Different Incident Angle
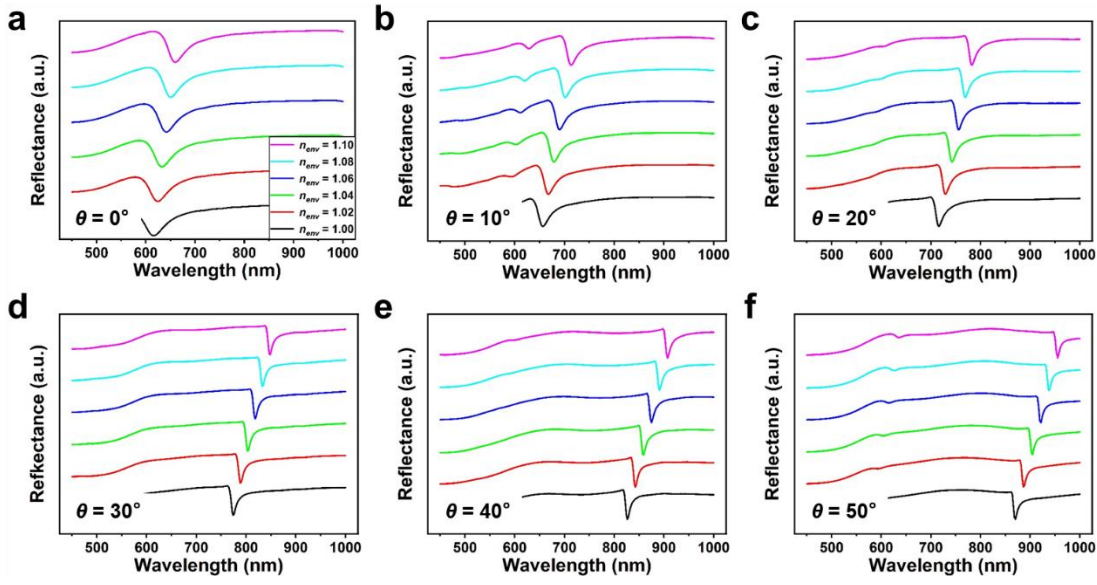
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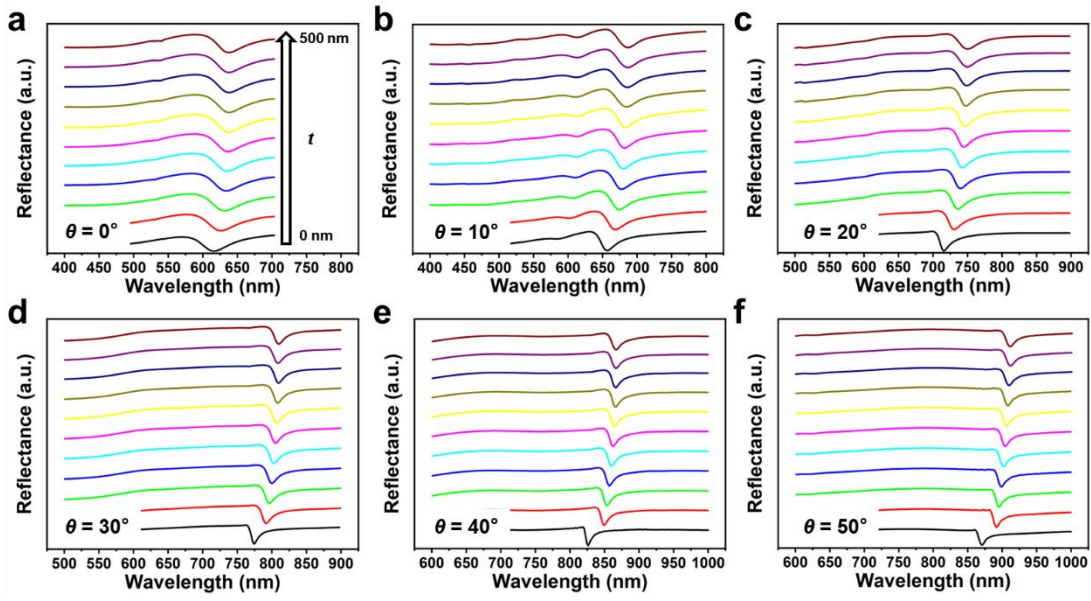
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Figure S1. Preparation procedure of the Au nanohole array. (I) Holographic lithography (HL). (II) Reactive-ion etching (RIE). (III) Au deposition. (IV) Lift-off process.

Figure S2. The reflectance spectra of the Au nanohole array when n_{env} increases from 1.00 to 1.10 with a step of 0.02. From (a) to (f), θ is 0°, 10°, 20°, 30°, 40° and 50°, respectively.

Figure S3. The reflectance spectra of the Au nanohole array when *t* increases from 0 nm to 500 nm with a step of 50 nm. From (a) to (f), *θ* is 0°, 10°, 20°, 30°, 40° and 50°, respectively.
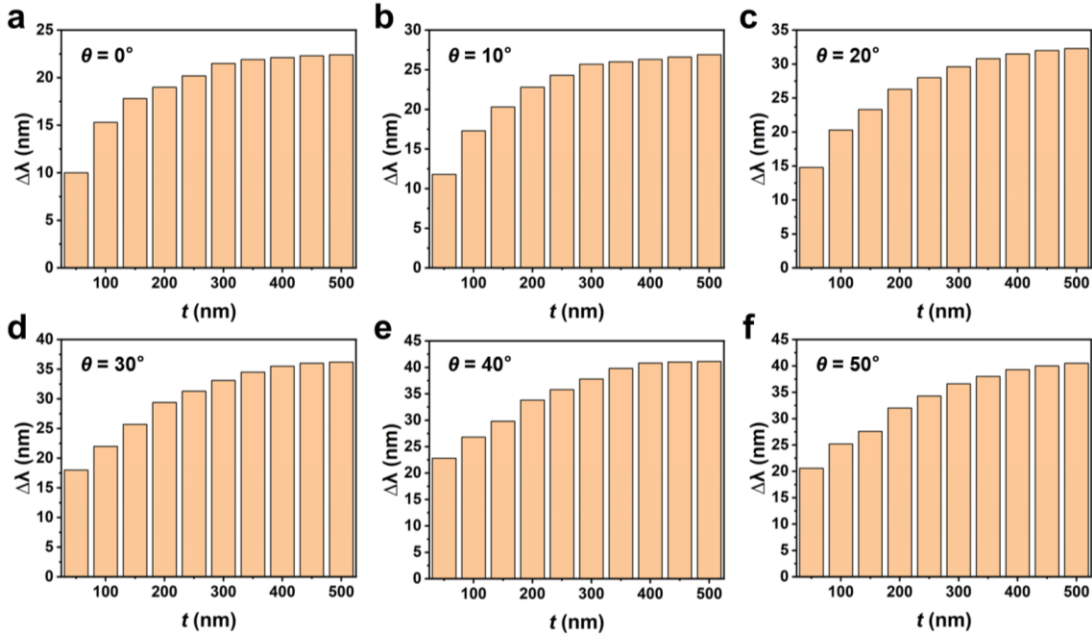
Figure S4. $\Delta\lambda$ of the Au nanohole array when t increases from 0 nm to 500 nm with a step of 50 nm. From (a) to (f), θ is 0°, 10°, 20°, 30°, 40° and 50°, respectively. n_{env}=1.00.