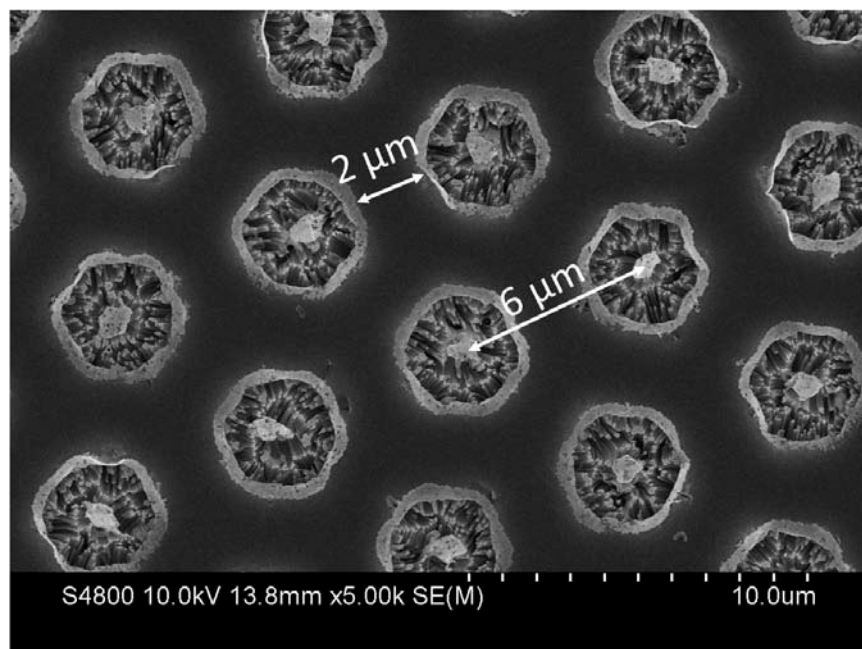


Supporting Figure 1

The fabrication process of well-ordered Ag dots on the substrate:

The process is shown in Figure a. The Si substrate was treated in advance by spin-coating AZ5214E at 3000 rpm with prebaking at 90 °C for 60 s. UV light (18 mW cm^{-2}) was used to expose the Si substrate. The Si substrate was then developed in NMD-3 for 60 s; an optical image is shown in Figure b. Next, a 40 nm Ag film was deposited on the substrate, and the substrate was left in an AZ remover solution overnight for lift-off. Figure c shows an optical image of the substrate after lift-off. Ag dots $4 \mu\text{m}$ in diameter were well ordered on the Si substrate. Finally, the Ag-patterned substrate was ready for the etching process to obtain holey arrays structure.



Supporting Figure 2

SEM image of Si holey substrate. The holes have a diameter of $4\ \mu\text{m}$, and spacing of $6\ \mu\text{m}$ center to center.