Supporting Information

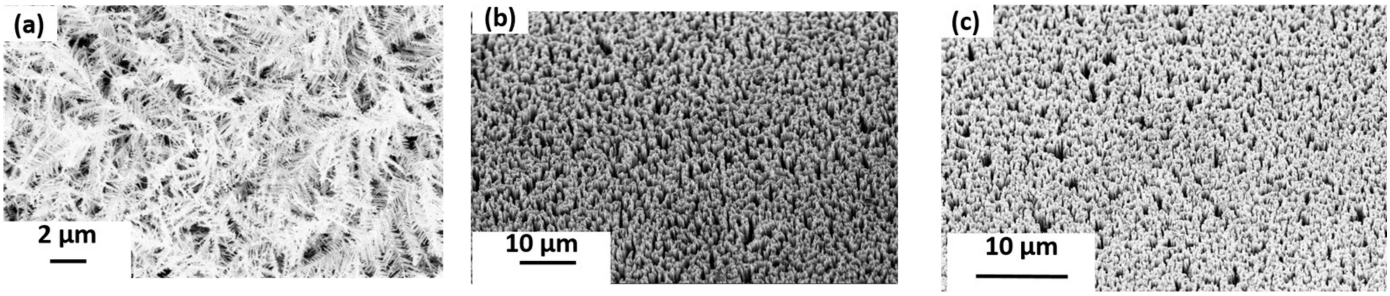

Figure S1. FESEM images (a) Ag Nano trees formed on Si substrate through the fabrication of SiNWs. (b) and (c) are top-view images (45˚ tilt) of different level of doping Si nanowires at the same etching time; (b) lightly doped wires at 30 min and (c)Medially doped wires at 30 min

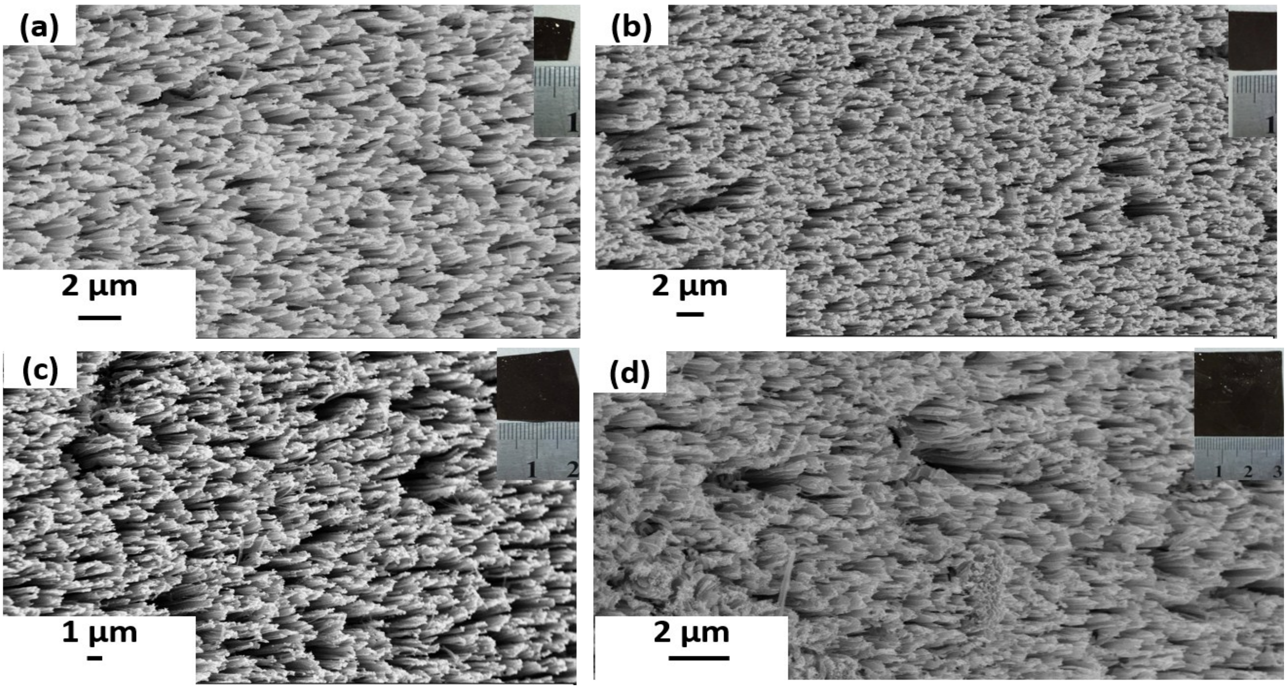

Figure S2. FESEM images (45° tilt) of vertical SiNWs array of different sample dimensions for 30 min etching time (a) 0.8 x0.8 cm^2, (b) 1x1 cm^2 ,(c) 2x 2 cm^2 ,(d) 3x3 cm^2

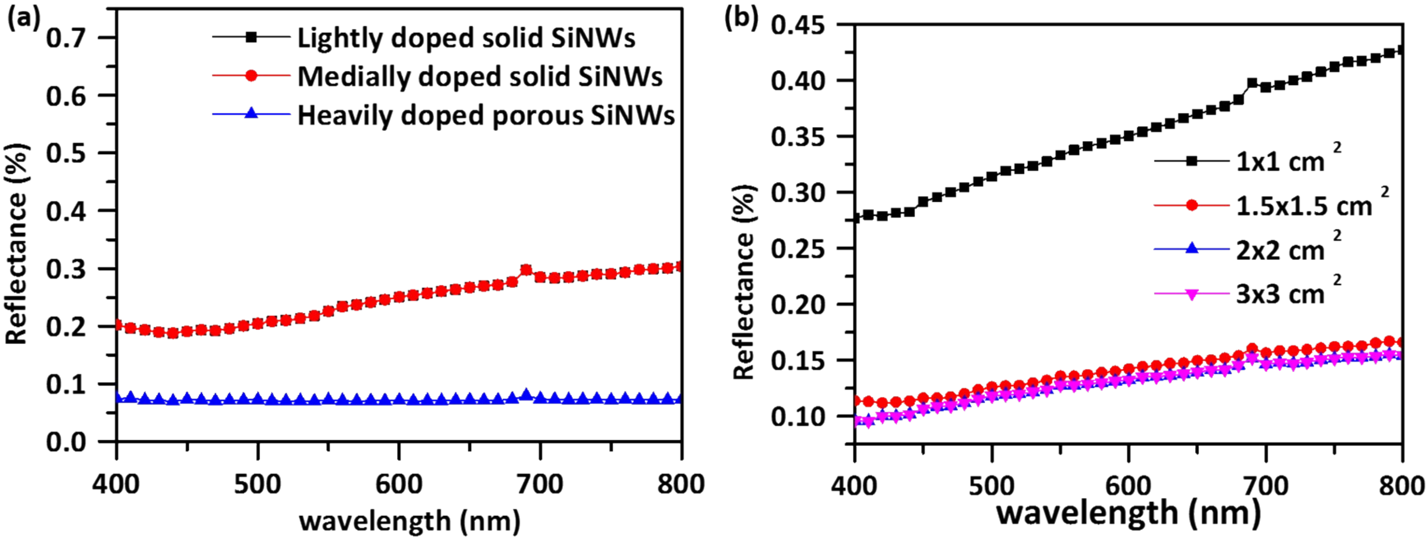

Figure S3. (a) Zoomed reflection measurement of different level of doping SiNWs and (b) variation of reflection with different sample's surface area of lightly doped solid SiNWs