

Self-oriented Single Crystalline Silicon Nanorod Arrays through a Chemical Vapor Reaction Route

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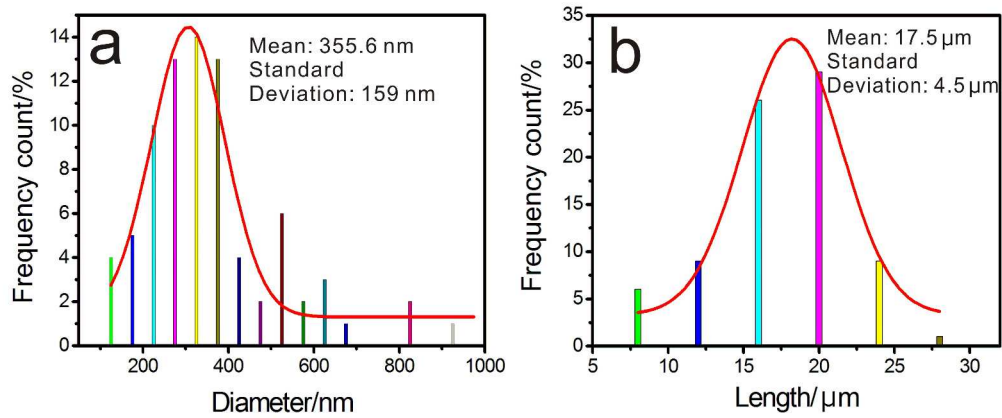


Figure S1. Frequency statistics and Gauss fit on the data of the diameter (a) and length (b) of the as-prepared Si nanorods. Statistics on eighty nanorods shows that the mean diameter and length are 356 nm and 17.5 μm with a standard deviation of 159 nm and 4.5 μm, respectively.

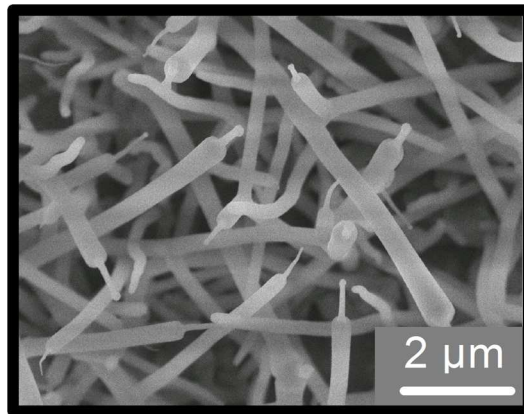


Figure S2. SEM image of the Si nanowires grown under the SiNR arrays.

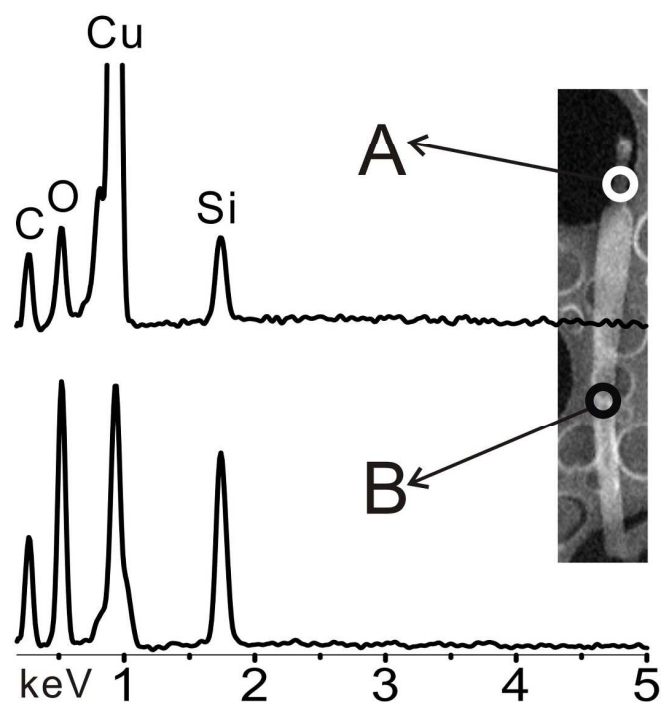


Figure S3. EDX spectra of the Si nanowires grown under the SiNR arrays.

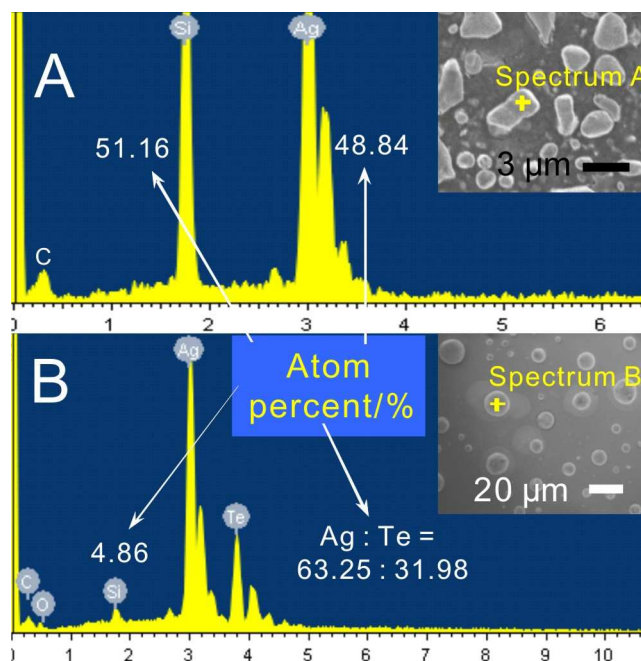


Figure S4. (A) EDX spectrum of the product obtained by using silver alone as the catalyst. The inset presents the morphology of the products. (B) EDX spectrum of the product obtained with untreated Si wafer as the substrate. The inset shows the sphere-morphology of the product. The EDX data were collected on the marked regions.

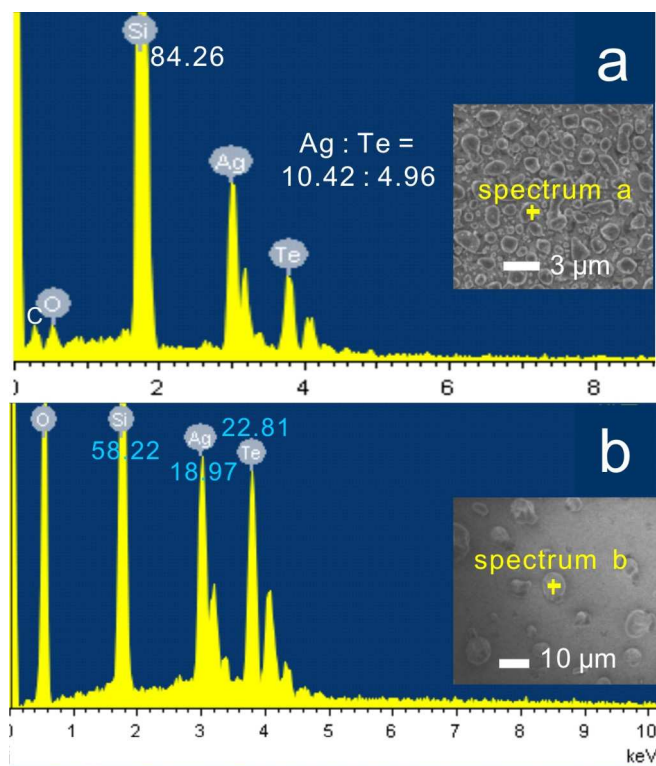


Figure S5. EDX spectra of the products obtained at (a) 450 °C and (b) 730 °C. The insets show the corresponding SEM images.