Electronic Supplementary Information

Superior CoO/SiC Nanowire Field Emitters with Substantially Increased Stable Emission Sites: Ultralow Turn-on field, High Current Density and High Stability

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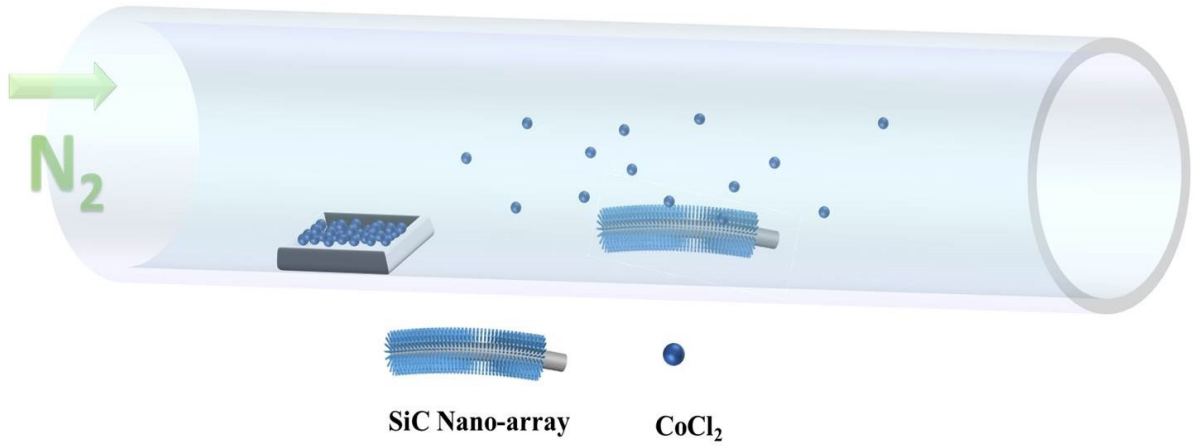

Fig. S1 Schematic diagram of cation exchange experimental process about the fabrication of CoO/SiC heterojunction nanowires.

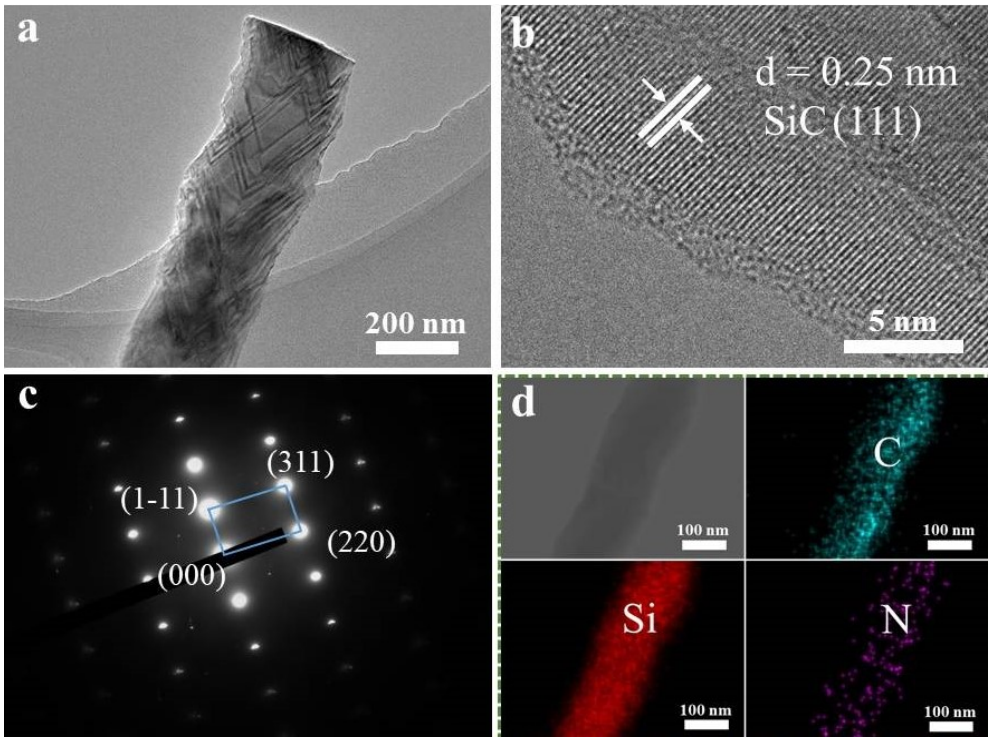

Fig. S2 The typical TEM images of the bare single SiC nanowire: (a) low-resolution and (b) high-resolution TEM images, (c) selected area electron diffraction patterns (SEAD) and (d) element mappings of bare SiC samples, respectively.

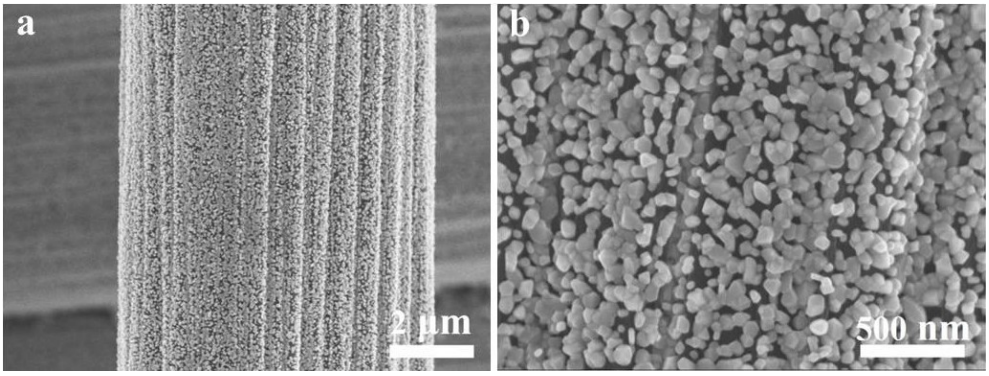

Fig. S3 The typical SEM images of the fabricated CoO nanoparticles on the carbon fiber substrate at different magnifications. The purpose of preparing pure CoO nanoparticles is to avoid the impact of SiC on the final results during UPS testing.