Supporting Information

Solution-Phase Synthesis of Single-Crystal Cu_3Si Nanowire Arrays on Diverse Substrates with Dual Functions as High-Performance Field Emitters and Efficient Anti-Reflective Layers

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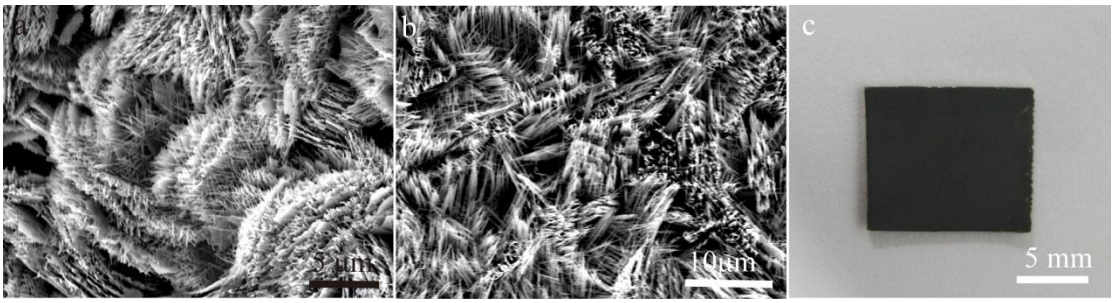

Fig. S1. (a-b) top-view SEM images of Cu_3Si nanowires grown on a Cu substrate obtained from the reaction by decomposition of monophenysilane at 495 °C, 10.3 MPa at supercritical hexane. (c) Photograph of the Cu substrate after a reaction.

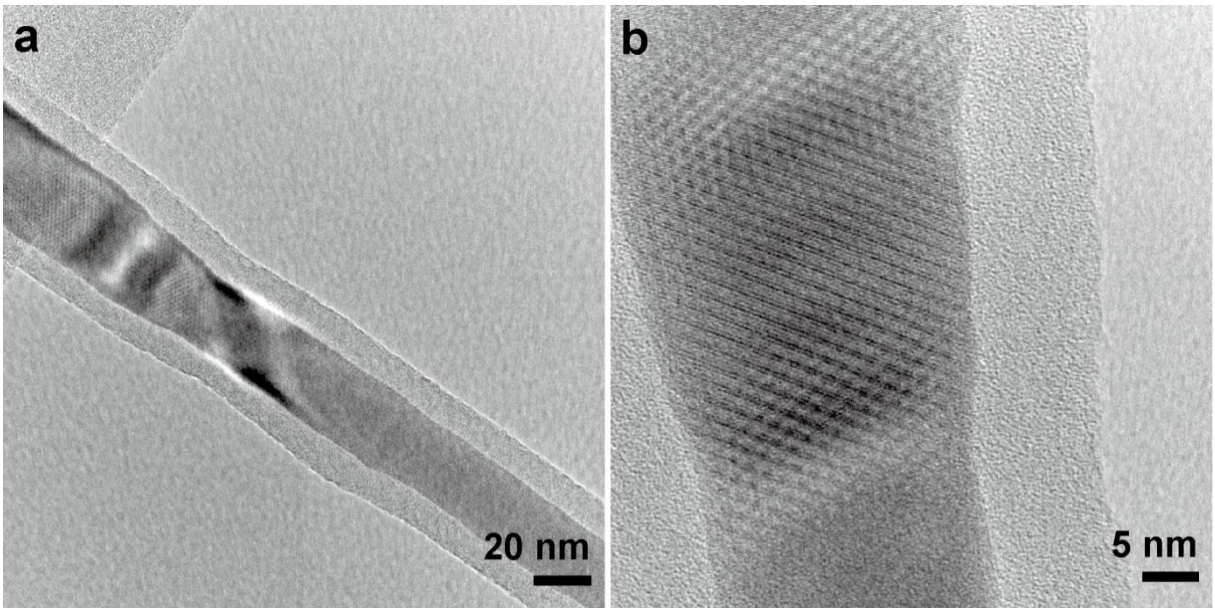

Fig. S2. TEM images of a Cu_3Si nanowire.

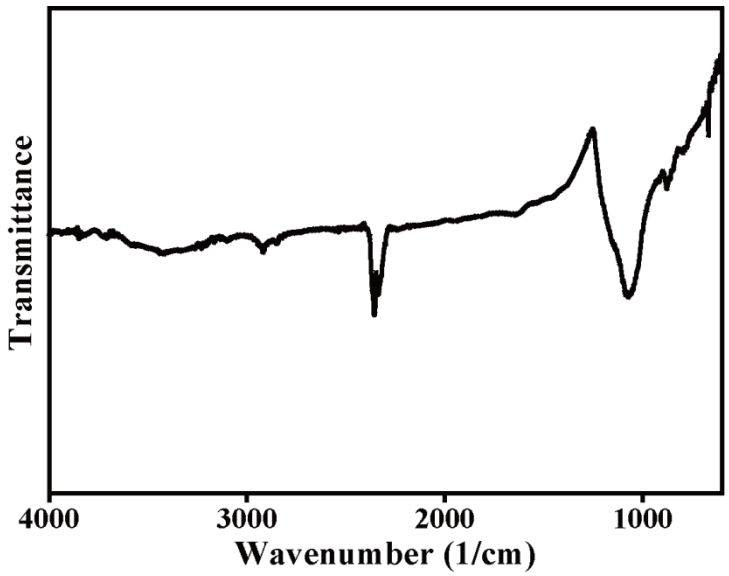

Fig. S3. FTIR spectrum of Cu_3Si nanowires.

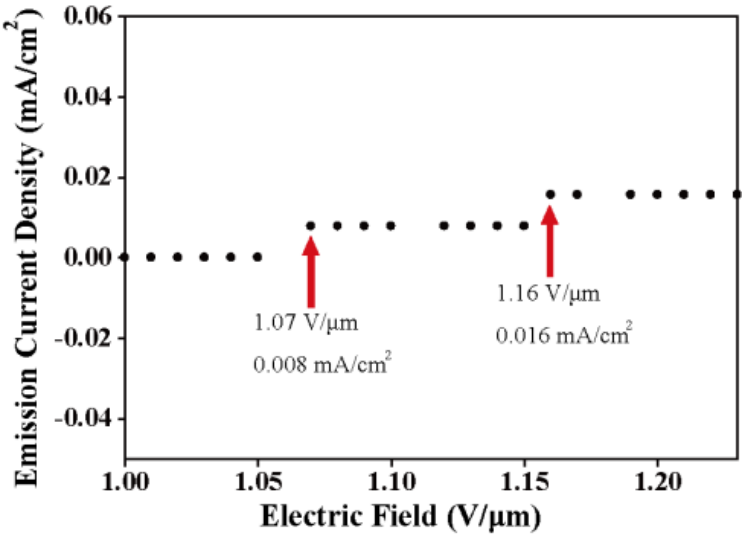

Fig. S4. Field emission profile of arrayed Cu3Si nanowires extracted from Fig. 7, at the region that the electric field ranges from 1.00 to 1.20 V/μm and emission current density ranges from 0.00 to 0.06 mA/cm^2

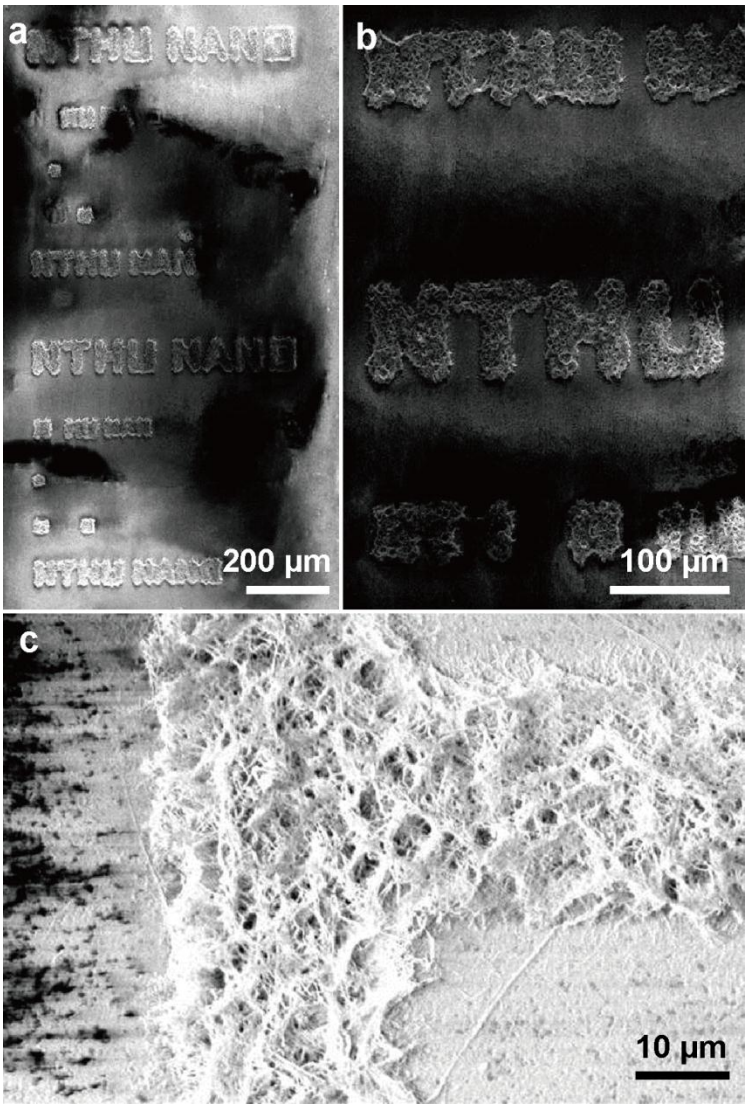

Fig. S5. SEM images of Cu_3Si nanowires grown on a Cu-patterned substrate.