Electronic Supplementary Material (ESI) for RSC Advances.

Ultraviolet emission of amorphous SiO_{2+x} nanowires with connected bead-chain morphology

Hui Cao, Yin Zhang and Renchao Che*

Advanced Materials Laboratory and Department of Materials Science,

Fudan University, Shanghai 200438, P. R. China.

Electronic Supplementary Information

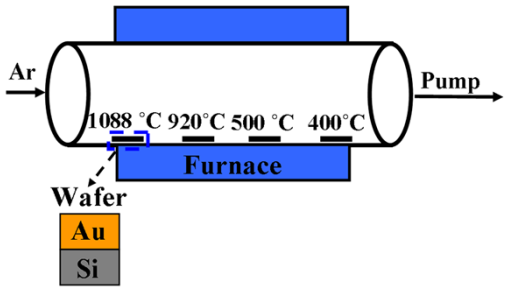

Fig. S1 Schematic of the experimental set up for growth of SiO_{2+x} nanowires in a horizontal tube furnace with different temperatures.

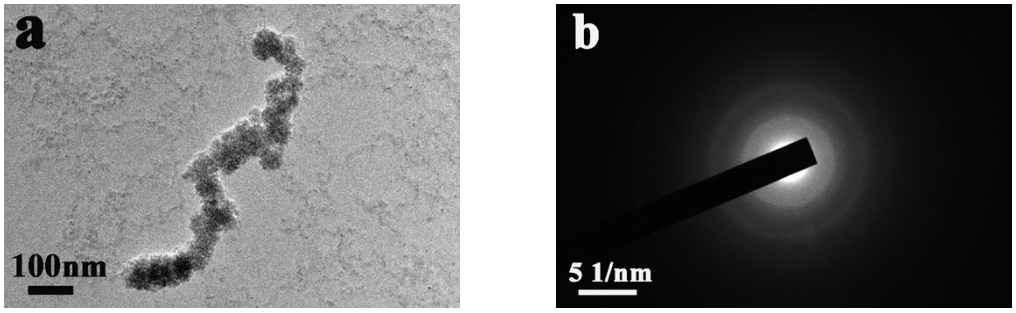

Fig. S2 (a) TEM image of SiO_{2+x} nanowire prepared at lower temperature (~ 400°C). (b) The corresponding of electron diffraction pattern recorded from the region, showing the nanowire had an amorphous phase structure.

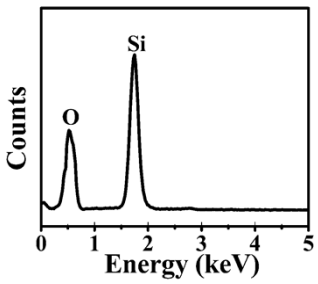

Fig. S3 EDX spectrum of a quartz sample with high purity.

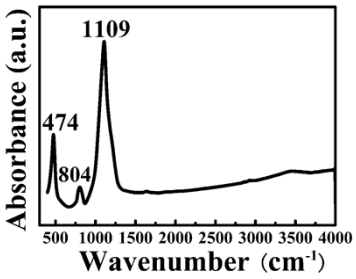

Fig. S4 FTIR spectrum of the SiO_{2+x} nanowires prepared at lower temperature (~ 400°C).

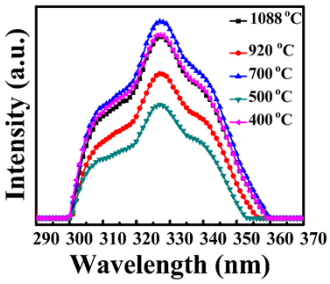

Fig. S5 Photoluminescence spectra of the synthesized SiO_{2+x} nanowires grown at different temperatures.