Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supporting Materials

Photoluminescence of pure silicon quantum dots embedded in amorphous silica wire array

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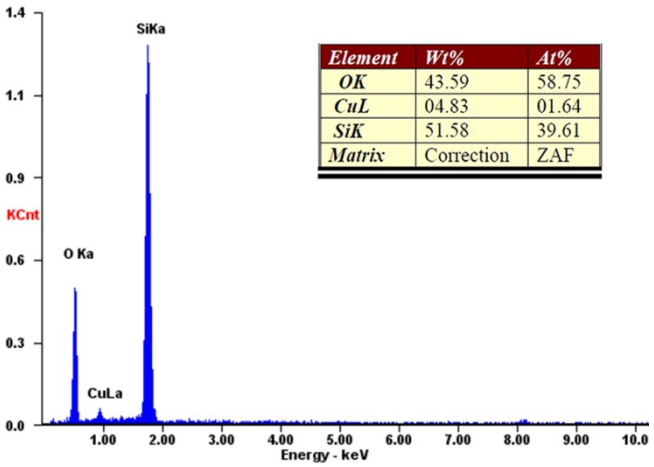

Element	Wt%	At%
OK	43.59	58.75
CuL	04.83	01.64
SiK	51.58	39.61
Matrix	Correction	ZAF

Fig. S1 EDX analysis of the products. The products were dispersed on the copper sheet for analysis.

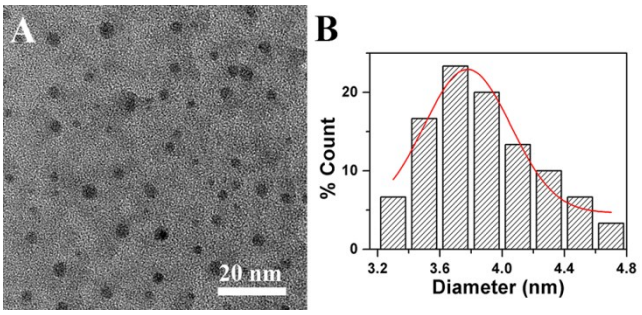

Fig. S2 (A) TEM image and (B) size distribution of SiQDs treated by HF.

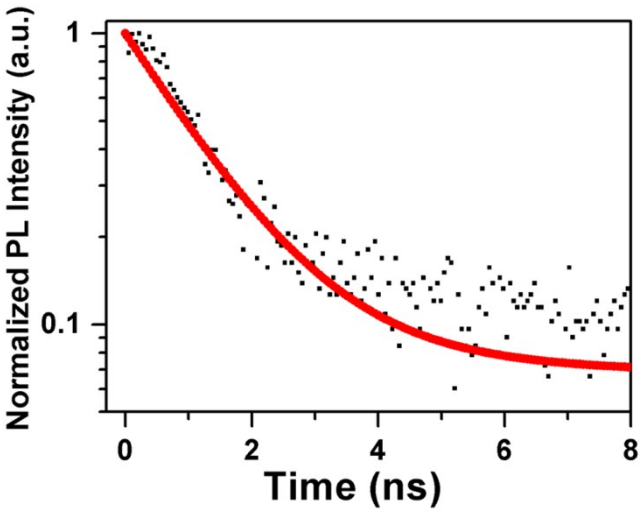

Fig. S3 Time-resolved PL decays of SiQDs embedded in silica taken at 800 nm emission wavelength. The wavelength of excitation source is 635 nm.

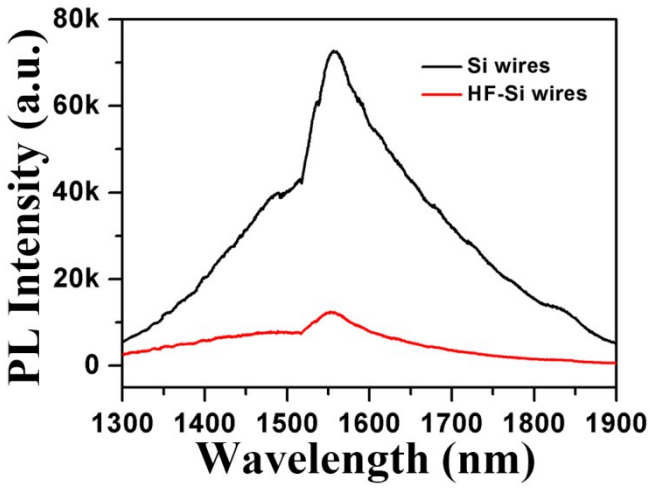

Fig. S4 Infrared PL spectra of the products with (red line) and without (black line) hydrofluoric acid treatment.