Electronic Supplementary Material (ESI) for Energy & Environmental Science

Supporting Information

Quartz (SiO_2): a new energy storage anode material for Li-ion batteries

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Supporting Figures

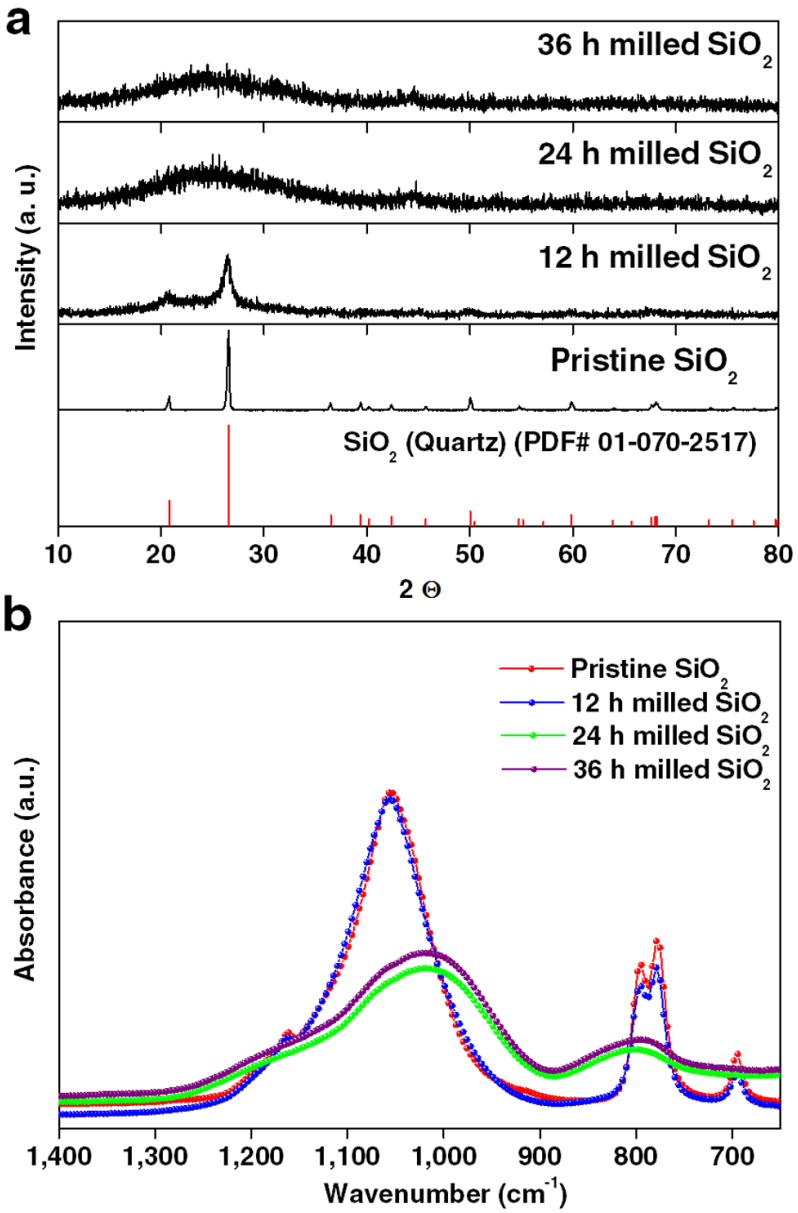

Figure S1. (a) XRD patterns of pristine, 12 h, 24 h and 36 h milled SiO_2. (b) FT-IR spectra of pristine, 12 h, 24 h and 36 h milled SiO_2.

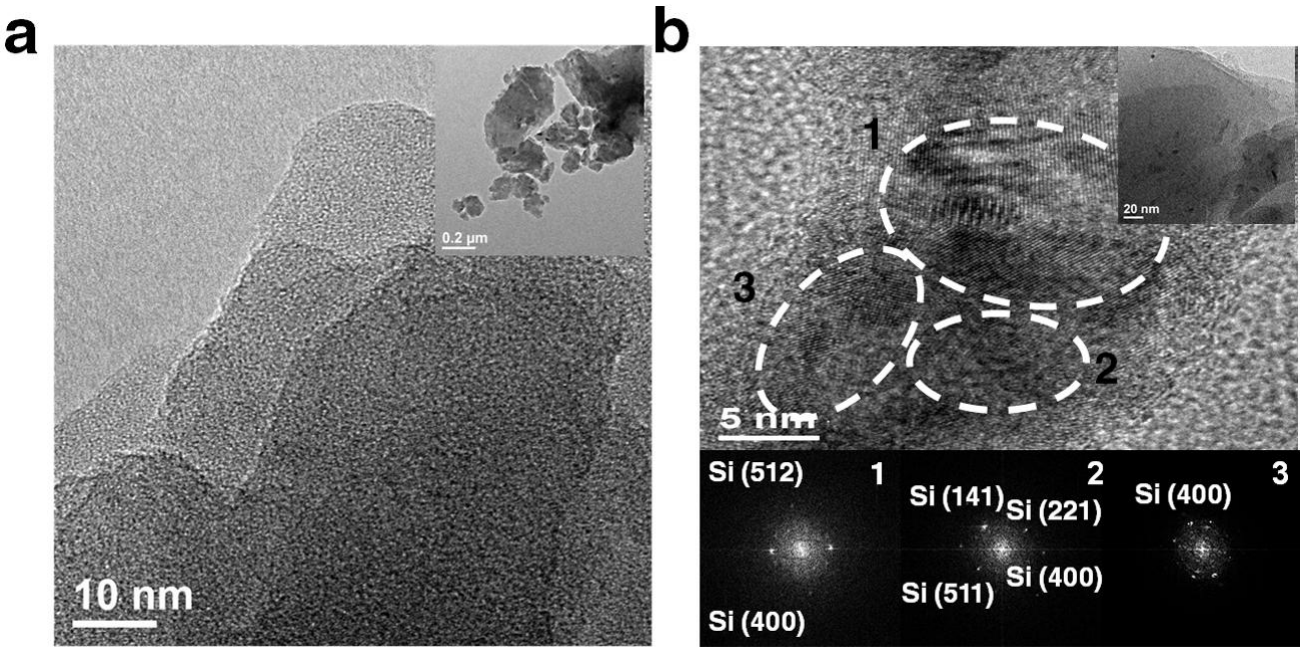

Figure S2. (a) Ex-situ HRTEM image of 12 h milled sample.

(b) Ex-situ HRTEM image of 36 h milled sample.

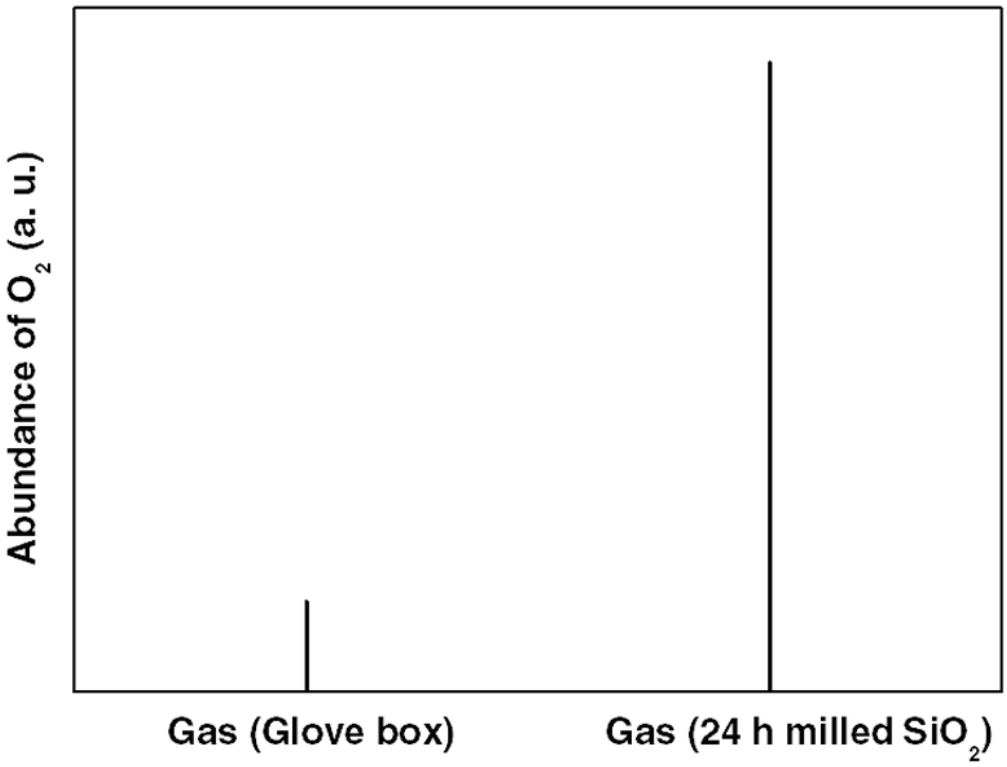

Figure S3. Gas chromatography results. Relative abundance of oxygen in glove box and the gas sample taken from 24 h milled sample vial were compared

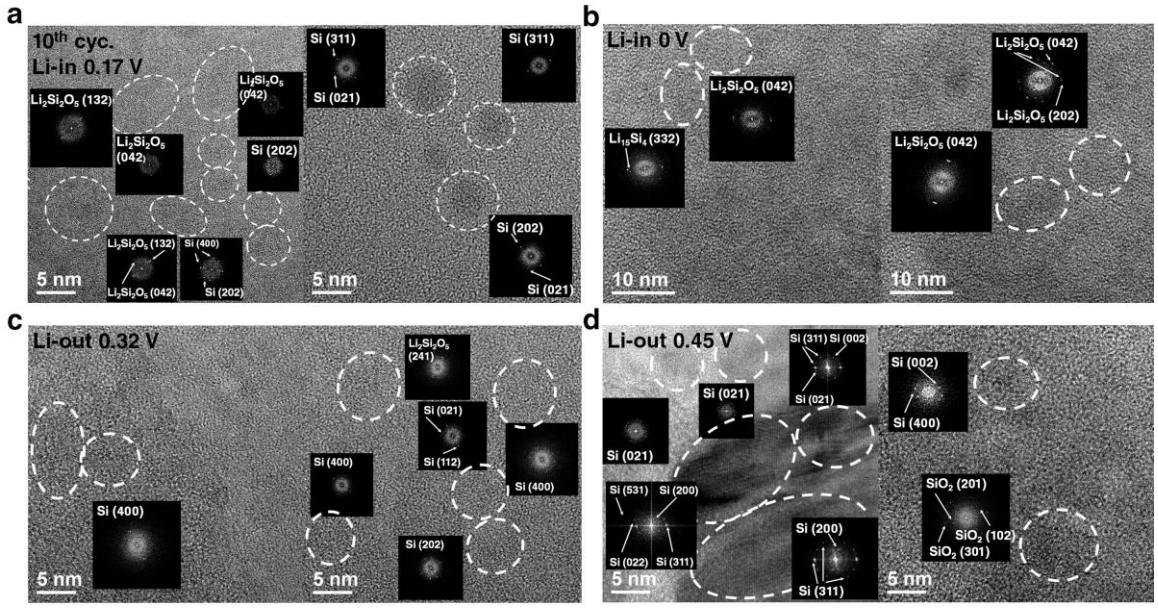

Figure S4. *Ex-situ* HRTEM images at the 10th cycle.

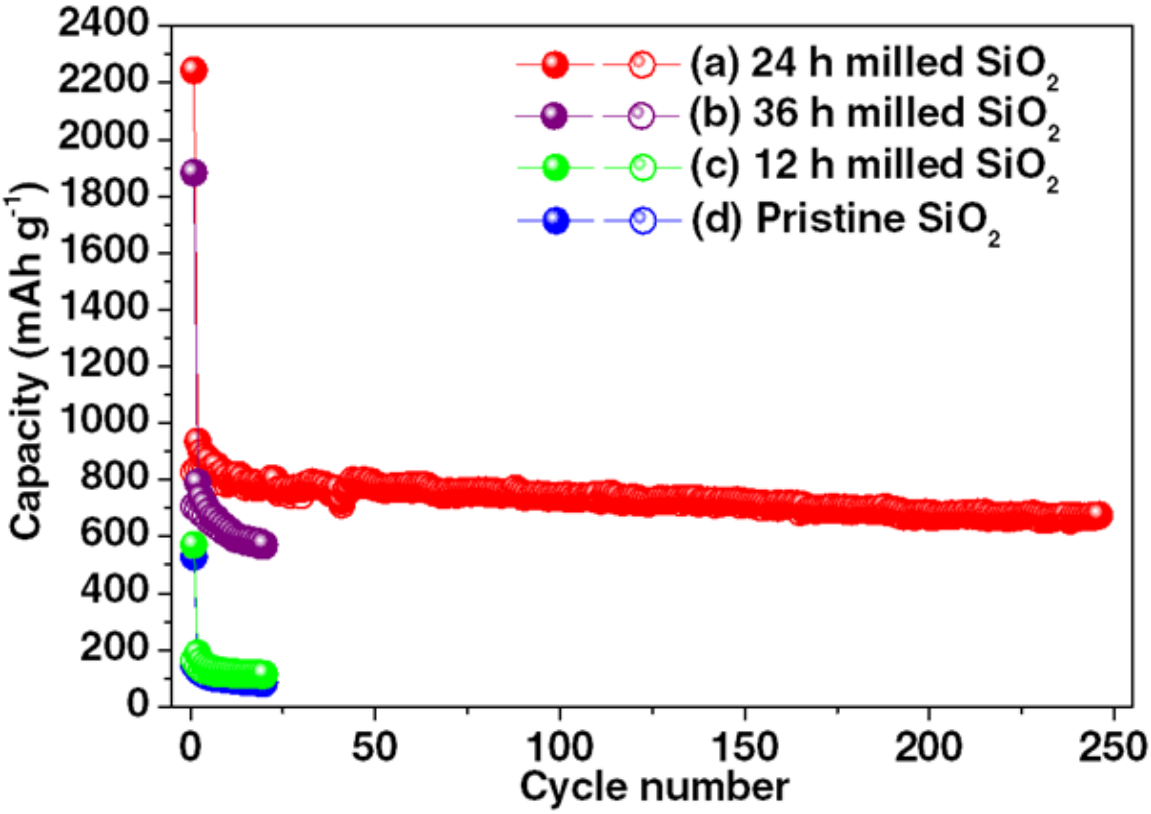

Figure S5. Cycle performance of SiO_2 (Pristine, 12 h, 24 h and 36 h milled samples)