nanomaterials

MDPI

Supplementary Materials

Micron-Sized SiOx-Graphite Compound as Anode Materials for Commercializable Lithium-Ion Batteries

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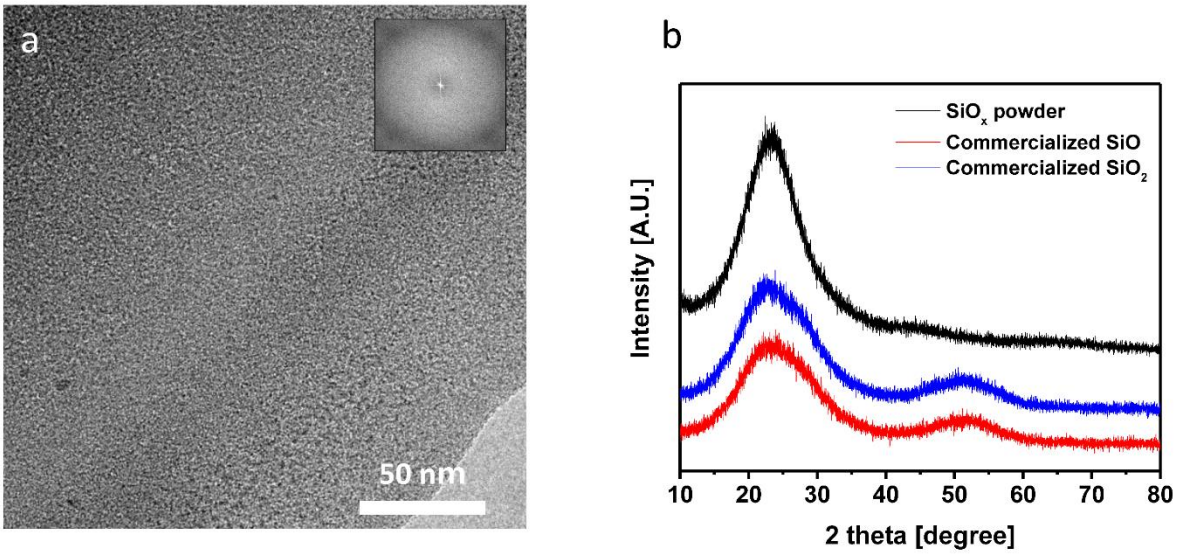

Figure S1. (**a**) Cross-section HR-TEM image and diffraction patterns of SiO_x. (**b**) XRD patterns of SiO_x, commercialized SiO, and SiO_2.

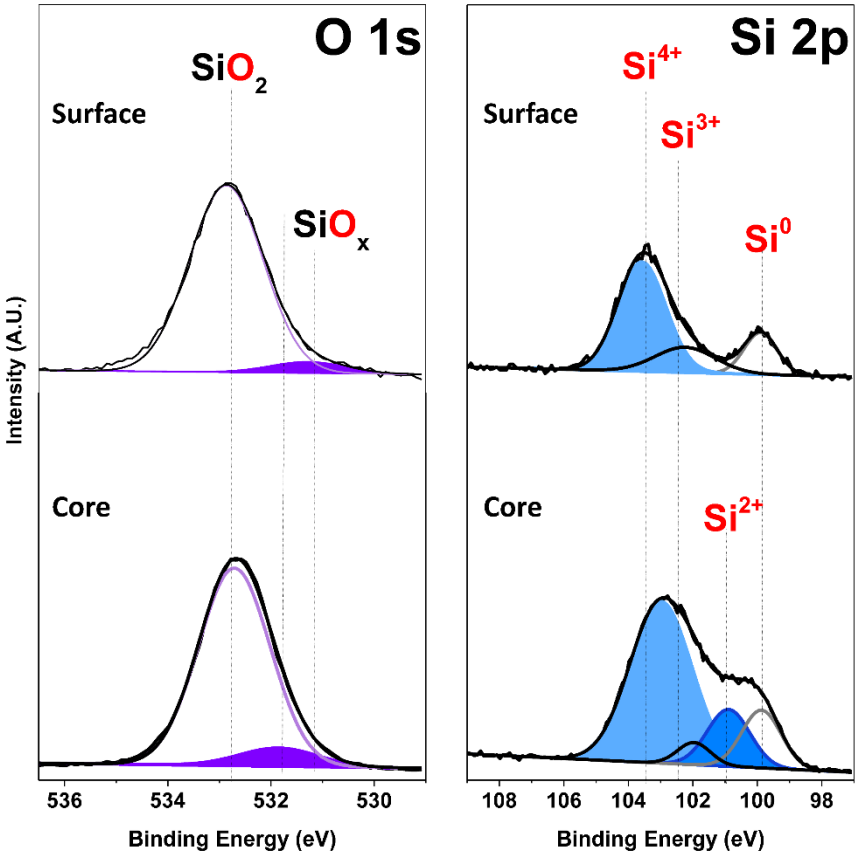

Figure S2. XPS spectra of SiO_x surface and core in O 1s and Si 2p.

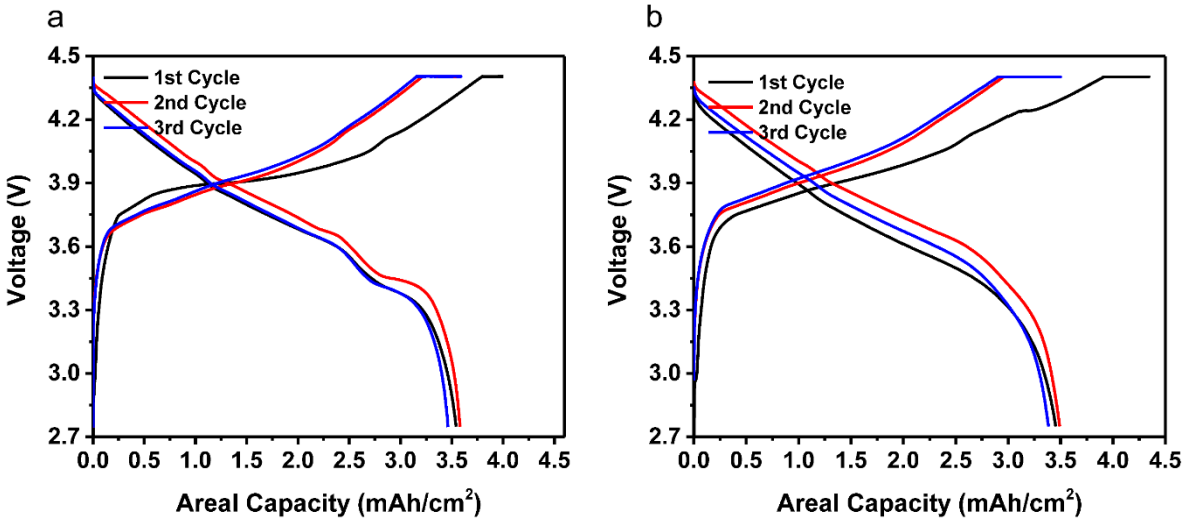

Figure S3. Formation voltage profiles of (**a**) SiMPs blending and (**b**) SiO_x blending in full cells.

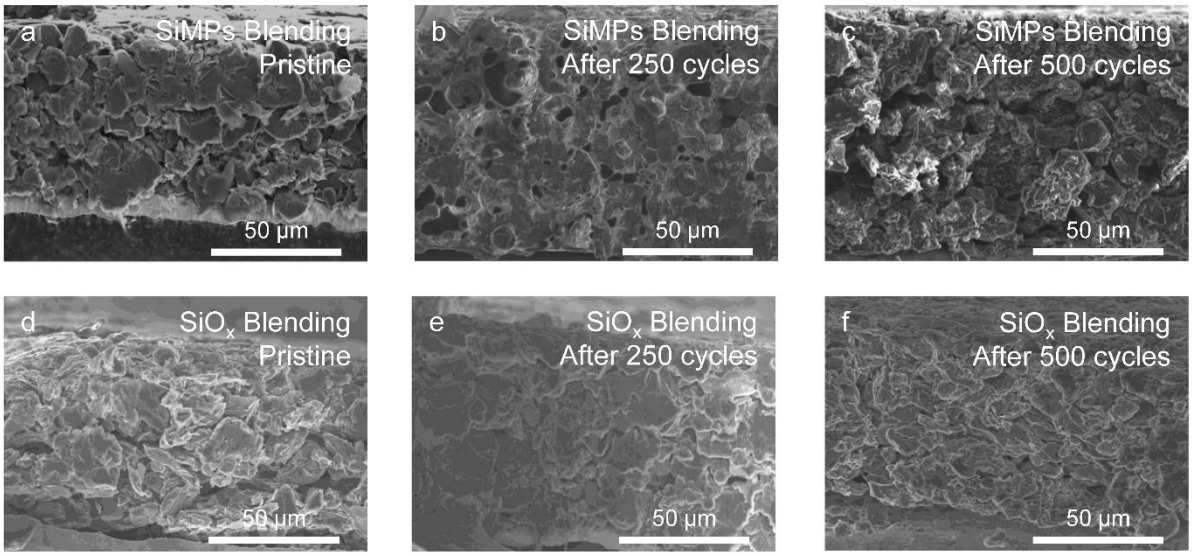

Figure S4. Cross-section SEM images of (**a**–**c**) SiMPs blending and (**d**–**f**) SiOx blending electrodes during 200 cycles in full-cell: (**a**,**d**) pristine, (**b**,**e**) after 250 cycles (**c**,**f**) after 500 cycles, respectively.

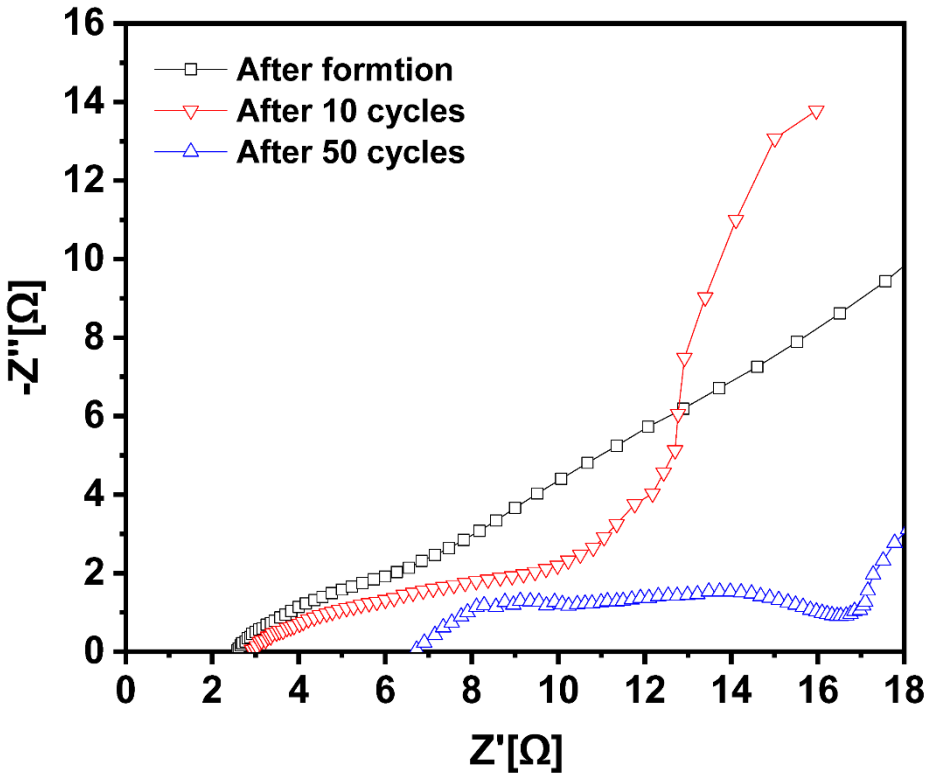

Figure S5. EIS analysis of SiO_x blending electrode in the full cell. Data were collected after formation, 10, and 50 cycles.

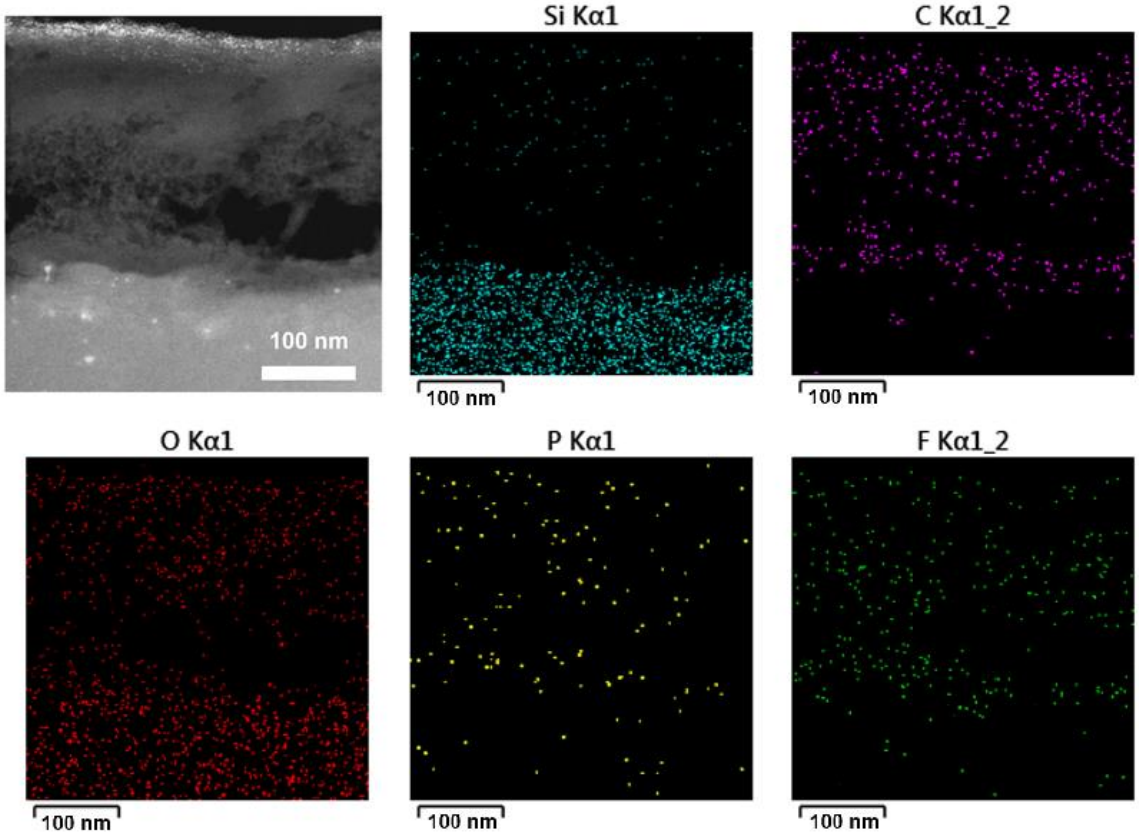

Figure S6. Scanning transmission electron microscope (STEM)-bright field (BF) image and STEM-the energy dispersive X-ray spectroscopy (EDS) mapping of SiO_x blending electrode after full cell 250 cycles.