

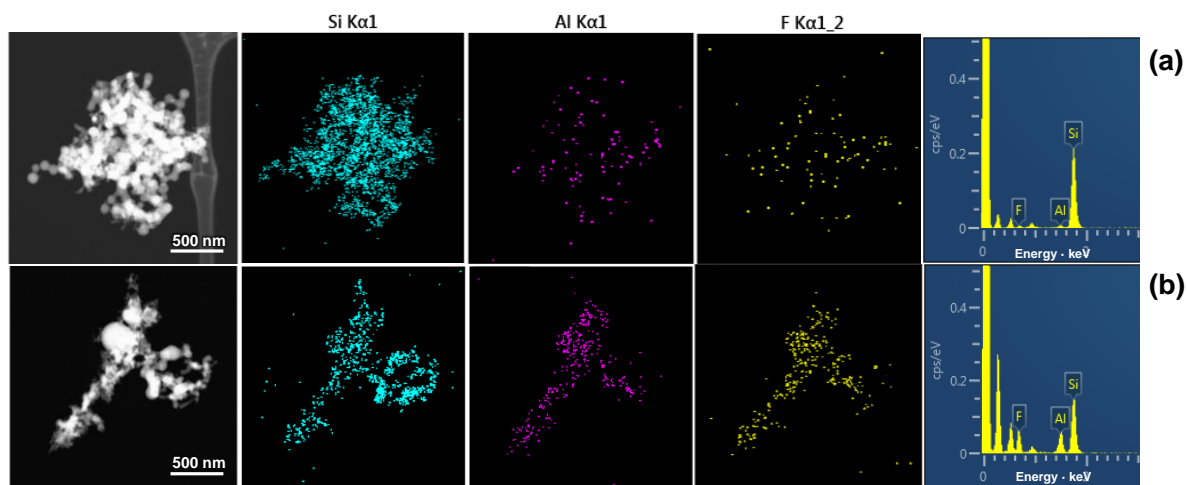
**Supplementary Information**

**Novel Design of Silicon-Based Lithium-Ion Battery Anodes for  
Highly Stable Cycling at Elevated Temperature**

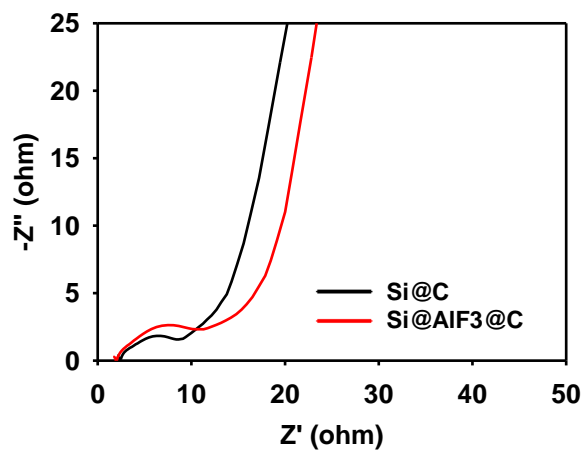
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**Figure S1.** EDS measurement of (a) 1.5 wt%  $\text{AlF}_3$  coated Si nanoparticles (b) 7 wt%  $\text{AlF}_3$  coated Si nanoparticles.



**Figure S2.** EIS measurements of Si@C and Si@ $\text{AlF}_3$ @C electrodes after first cycle.