

SUPPORTING INFORMATION

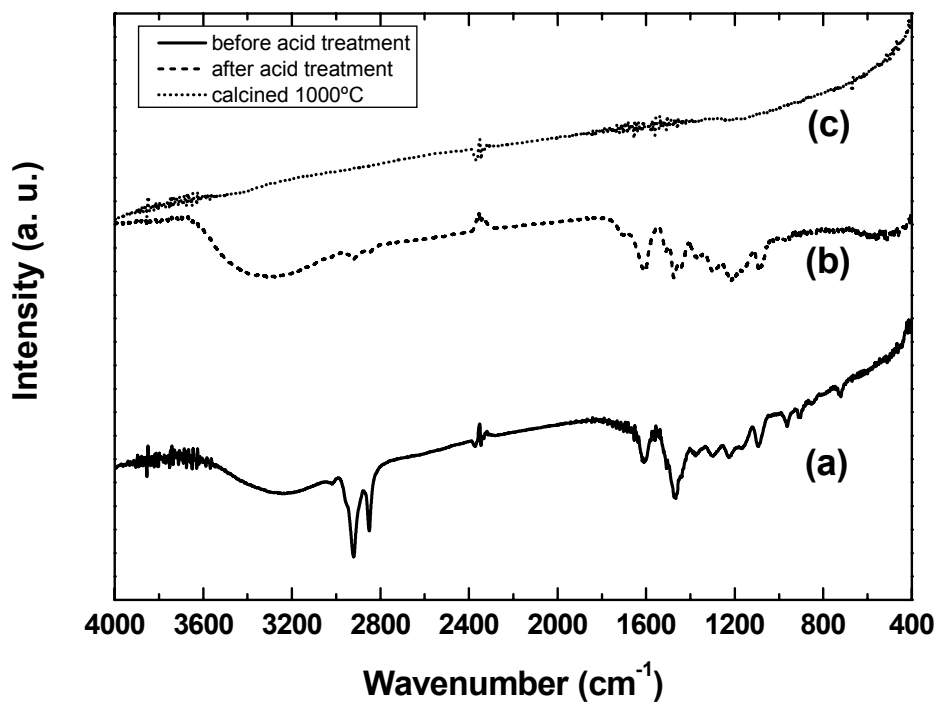


Figure S1: IR spectra for the Si/RF composites (a) before and (b) after acid treatment. (c) IR spectrum for the Si/SiO_x/C composite B.

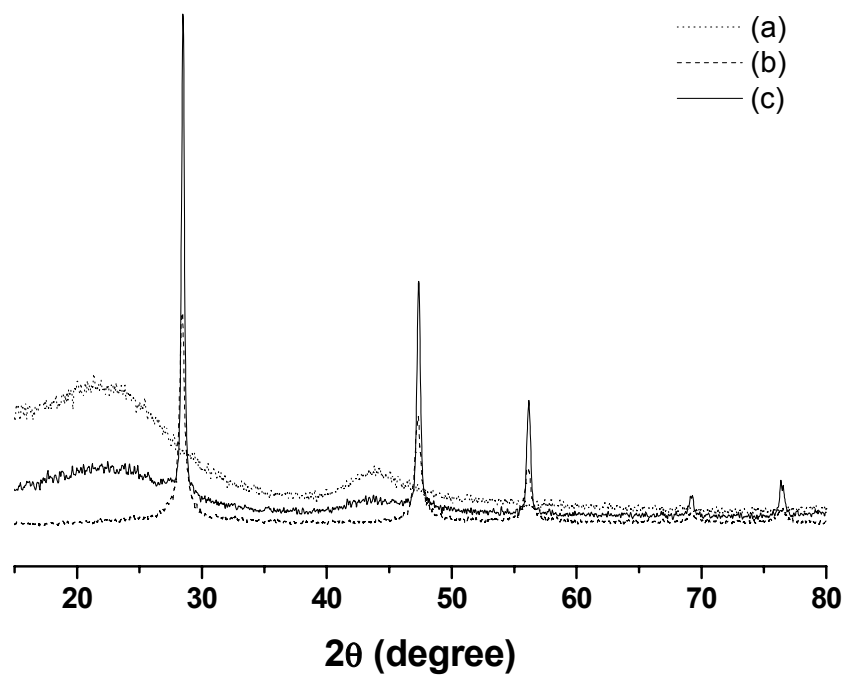


Figure S2: XRD patterns for (a) pristine carbon nanofibers, (b) pure Si and (c) the Si/SiO_x/C composite B.

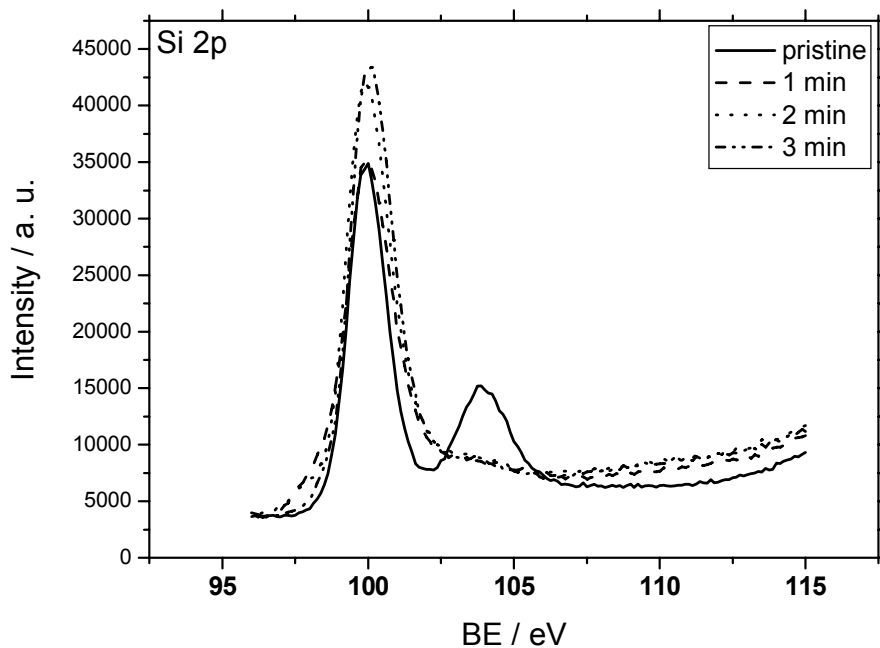
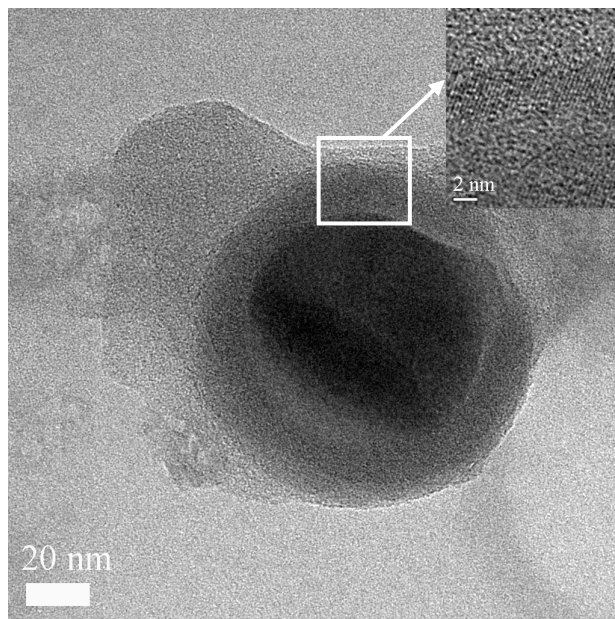


Figure S3: XPS 2p Si spectra obtained after a variable sputtering time. Sample: pure Si.

The peak at 104.2 eV, was assigned to the existence of SiO₂, only was observed on surface, disappearing after 1 min of Ar⁺ sputtering. This means that the silicon oxide film is very thin, < 3 nm.



S4. TEM image of particle attached onto fibers in composite A after the 50th charge.