

Article

Direct-anodized sulfur-doped TiO₂ nanotubes as improved anodes for Li-ion batteries

Davood Sabaghi^{1,2}, Mahmoud Madian^{1,3}, Ahmad Omar^{1,*}, Steffen Oswald¹, Margitta Uhlemann¹, Morteza Maghrebi², Majid Baniadam², Daria Mikhailova^{1,*}

¹ Leibniz Institute for Solid State and Materials Research (IFW) e. V., 01069 Dresden, Germany

² Department of Chemical Engineering, Faculty of Engineering, Ferdowsi University of Mashhad, Mashhad, Iran

³ Physical Chemistry Department, National Research Centre, 33 El-Buhouth St., 12622 Dokki, Giza, Egypt.

* Correspondence: d.mikhailova@ifw-dresden.de; a.omar@ifw-dresden.de

Supporting Information

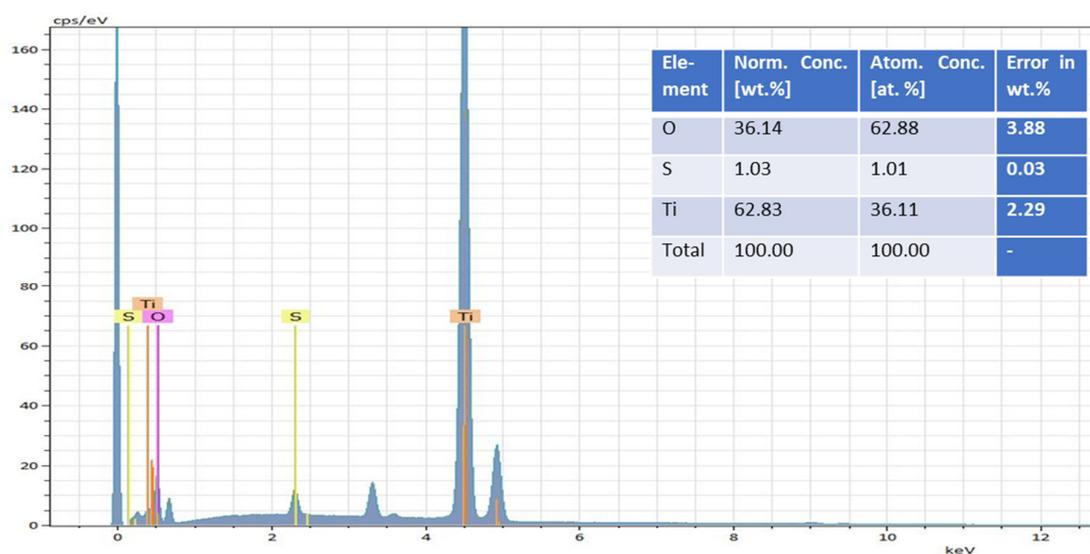


Figure S1. EDXS measurements for the STNT samples showing clear signal for Sulfur. Inset tabulates the elemental analysis average over 5 spot measurements.

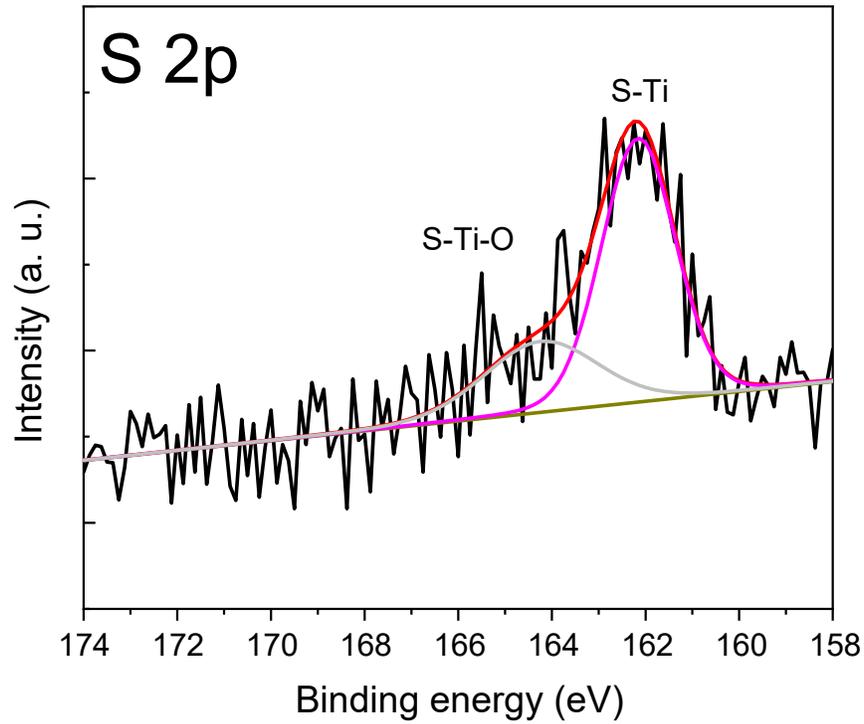


Figure S2. S 2p spectrum for STNT sample after sputtering for 30 min.

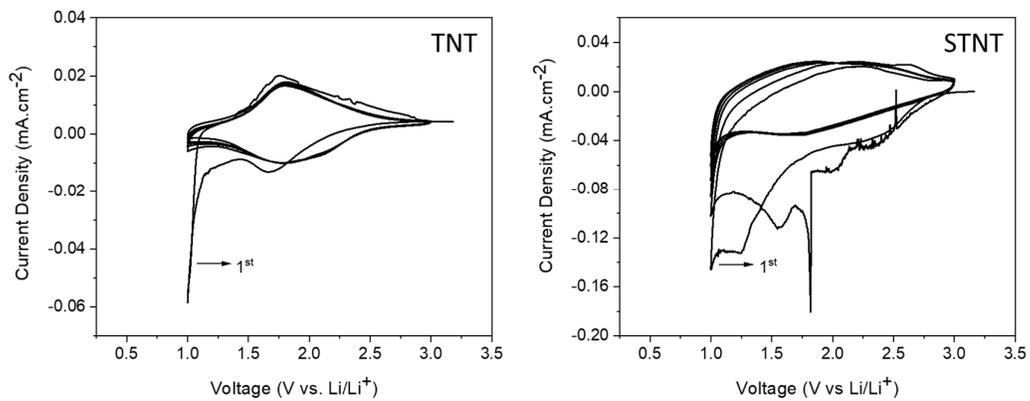


Figure S3. Cyclic voltammograms of TNT and STNT samples.

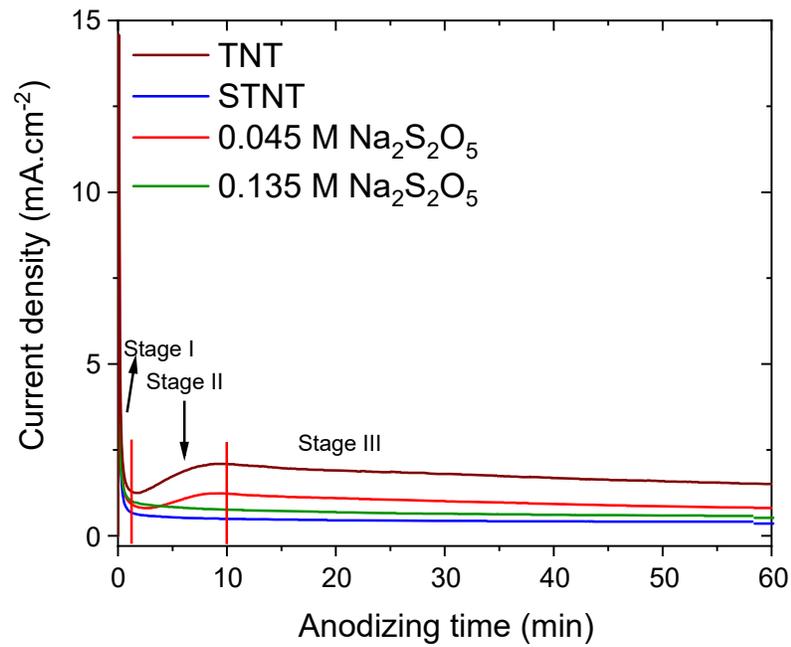


Figure S4. Time-current density plots during anodization for samples prepared with different concentration of Na₂S₂O₅ along with that of TNT and STNT samples.