**Supporting information for:**

MuSR revealing sodium ion mobility in hard carbon anodes before and after sodiation

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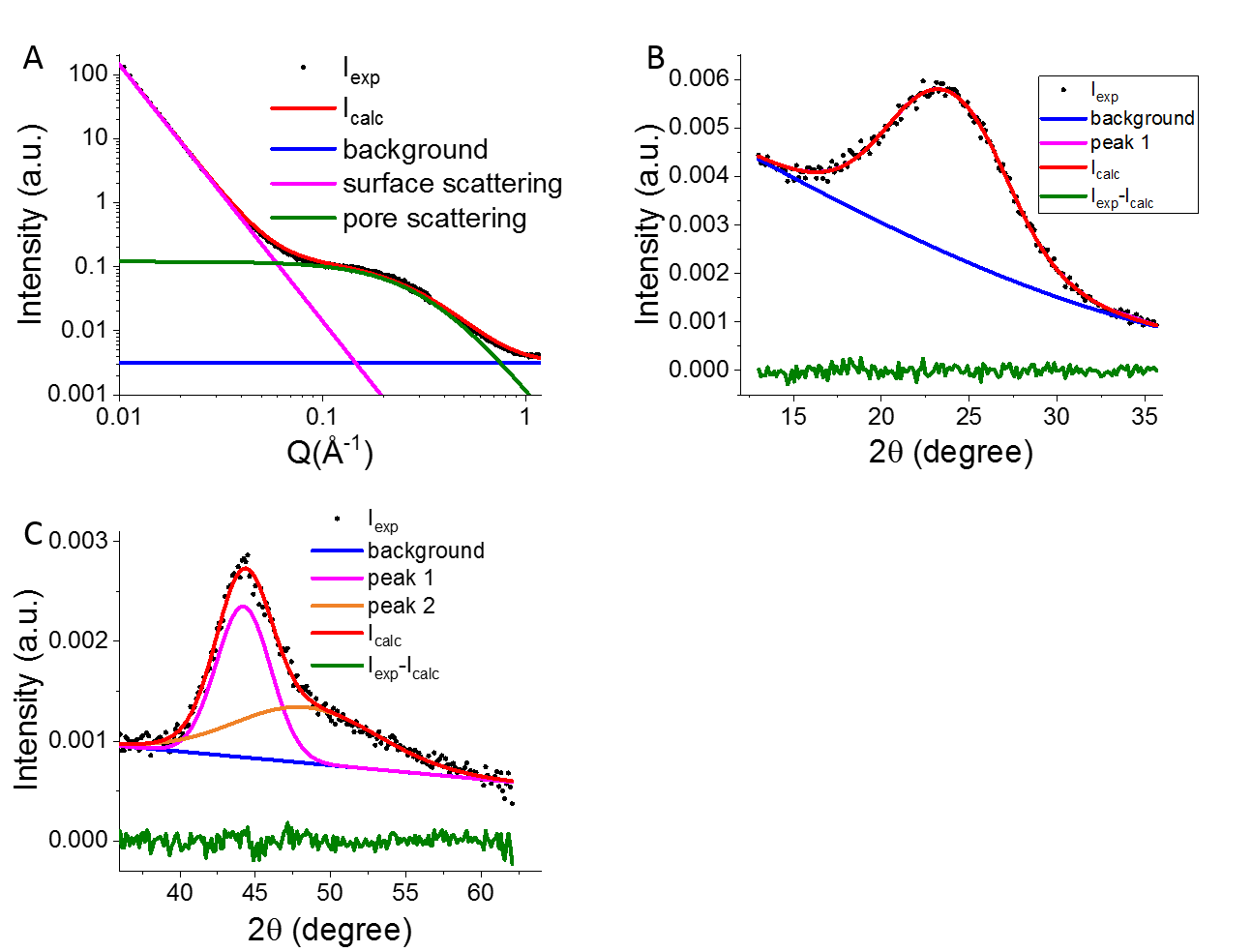


Figure S1: A) SAXS region fitted using a pored equation as described by Stevens and Dahn 20001 fitting the surface scattering (pink) and the scattering from the nano pores(green).

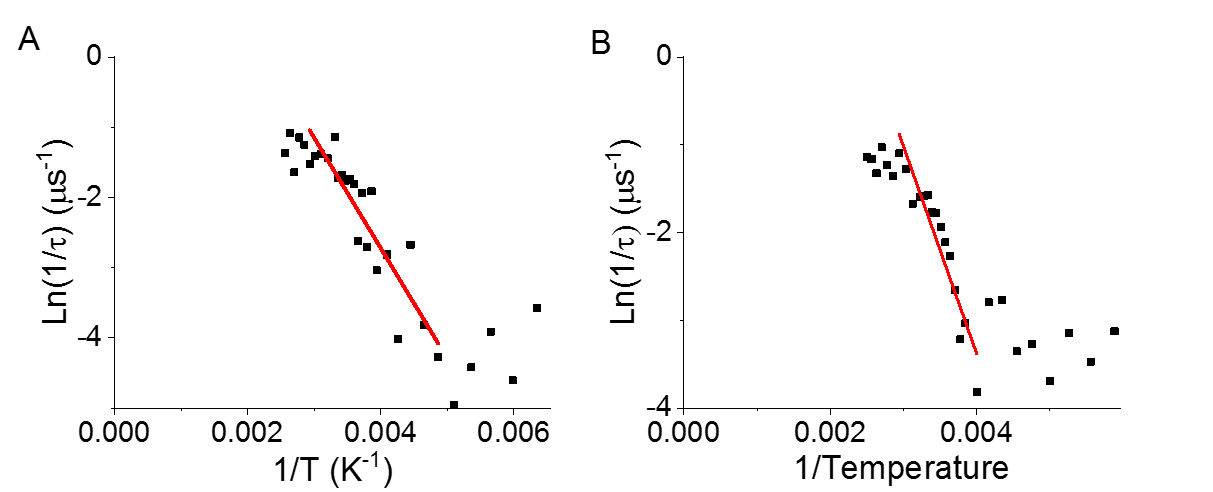


Figure S2: Arrhenius plot of the jump frequency and temperature for the sodiated(A) and desodiated samples(B).

1. Stevens, D. A.; Dahn, J. R., An In Situ Small‐Angle X‐Ray Scattering Study of Sodium Insertion into a Nanoporous Carbon Anode Material within an Operating Electrochemical Cell. *Journal of The Electrochemical Society* **2000,** *147* (12), 4428-4431.