

## Supplementary Information

# Monitoring Water Absorption and Desorption in Untreated and Consolidated Tuff by a Non-Invasive Graphene-Based Humidity Sensor

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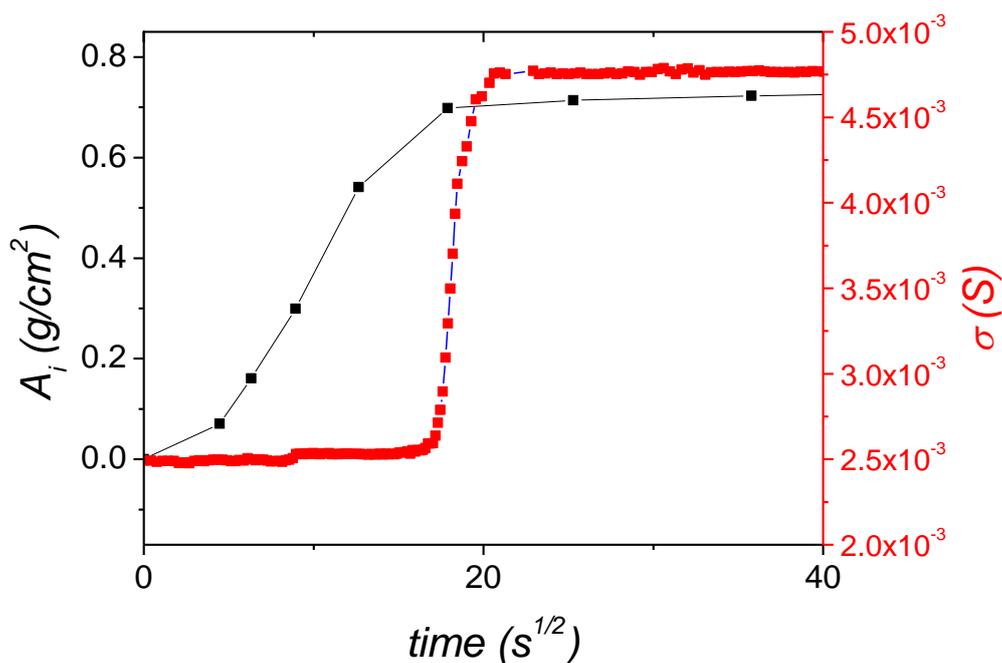


Figure S1. Overlapped plot of the amount of absorbed water  $A_i$  and the surface conductivity in the first part of the experiment.

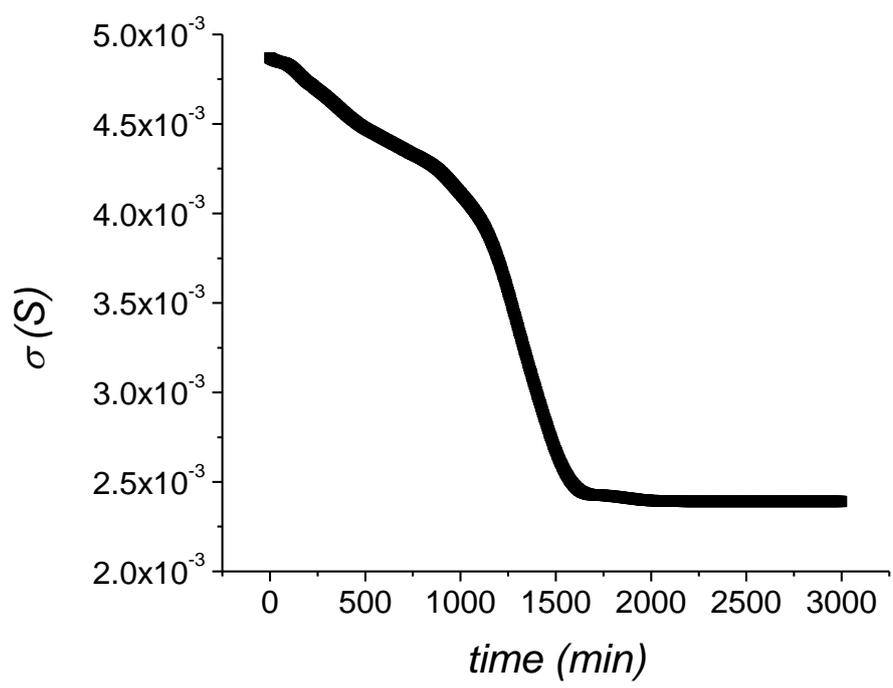


Figure S2. Surface conductivity of the sensor, applied with a thicker HAVOH adhesive layer on the untreated TUFF sample, during the drying test.