

Research data for

Detection of sub-atomic movement in nanostructures

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The corresponding manuscript contains all information required to reproduce the experimental results that it contains. Here, the experimental results are given by **ReaserchData.zip**.

File folder Fig2b: Frequency dispersion of the 6 nanowires' thermal (Brownian) motion transduced to secondary electron signal as labelled in the main text, which corresponds to experimental datasets *Beam1.txt* to *Beam6.txt*.

File folder Fig3bcd: Hyperspectral imaging of driven oscillations of flea setae. Dataset files *Fig3b_DC.txt*, *Fig3b_Phi.txt* and *Fig3b_R.txt*, respectively, represents the mapping of the measured secondary electron in its 0 frequency (in the unit of volt), its demodulated amplitude (in the unit of volt) mapping at the driven frequency and its locked phase mapping. Each file contains a matrix of 8790 lines and 1000 columns corresponding to mapping area of 256 micrometres by 256 micrometres. This annotation applies to the other remained text files within this folder for Fig. 3c and Fig. 3d.