

Supplementary Information

Distinctive Stability of Free-standing Monolayer Clay Mineral Nanosheet Under Transmission Electron Microscopy

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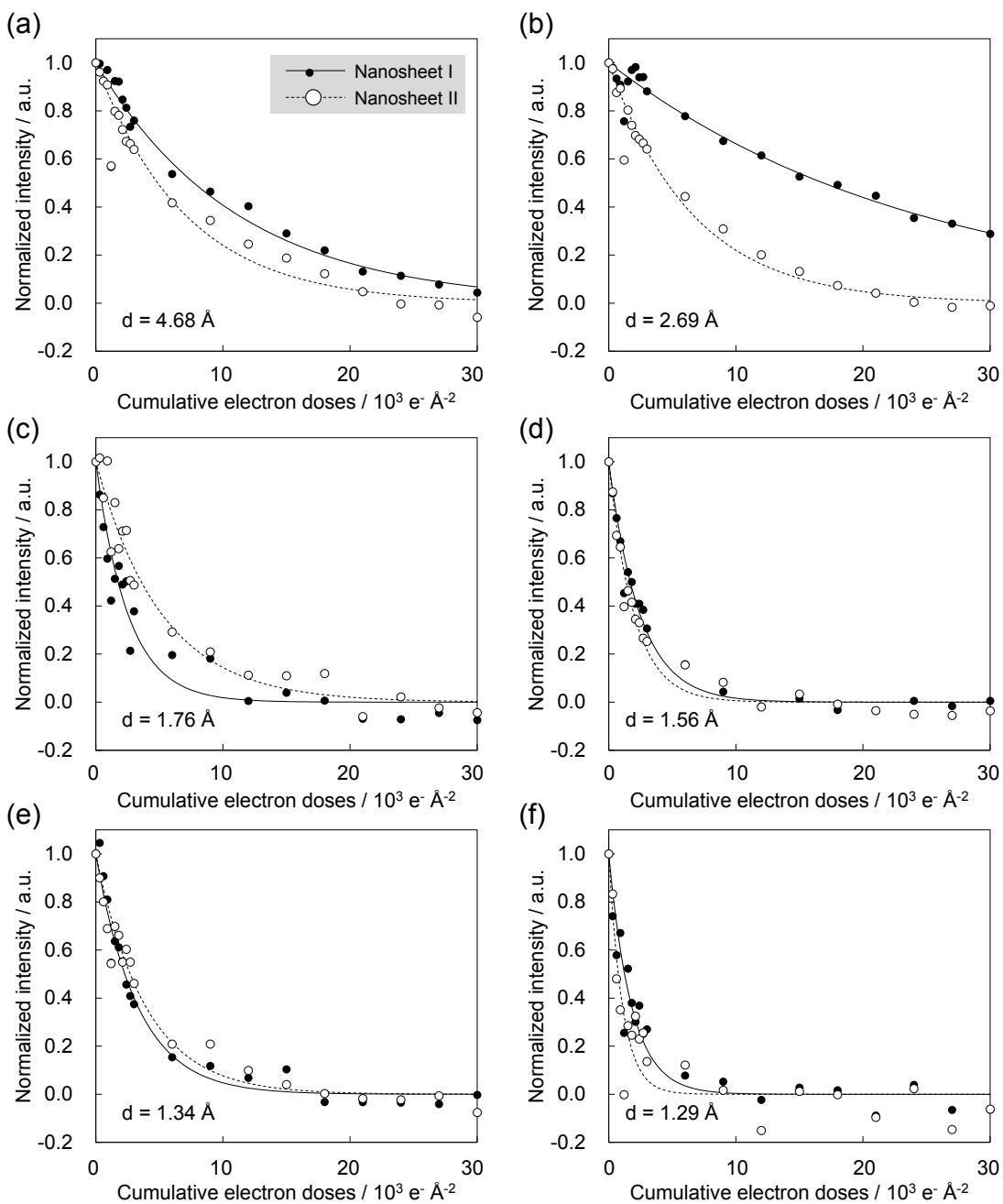


Figure S1. Relative intensity decay for the d-spacing of (a) 4.68, (b) 2.69, (c) 1.76, (d) 1.56, (e) 1.34, (f) 1.29 Å as a function of the cumulative electron doses for the two component nanosheets (noted as nanosheet I and II) in 2L Mt as indicated by red and blue circles in Figure 2b. Note that the value plotted in Figure 3 as 2L Mt is the average of the normalized intensity for nanosheet I and nanosheet II.

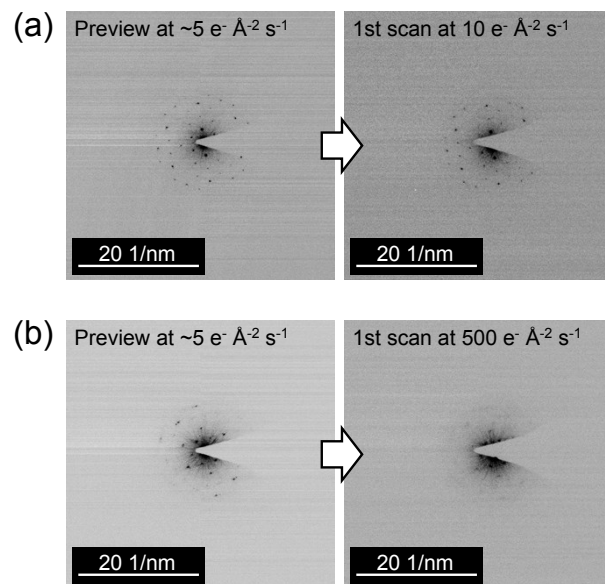


Figure S2. SAED patterns taken by 1st scanning at the dose rate of (a) $10 \text{ e}^- \text{ \AA}^{-2} \text{ s}^{-1}$ and (b) $500 \text{ e}^- \text{ \AA}^{-2} \text{ s}^{-1}$. Preview SAED images shown together were taken at the low dose rate of $\sim 5 \text{ e}^- \text{ \AA}^{-2} \text{ s}^{-1}$ to ensure that the target area are initially crystalline. The exposure time for all the patterns were 3s.