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Supporting information for article:

Clarification of the ordering of intercalated Fe atoms in Fe*x*TiS2 and its effect on the magnetic properties

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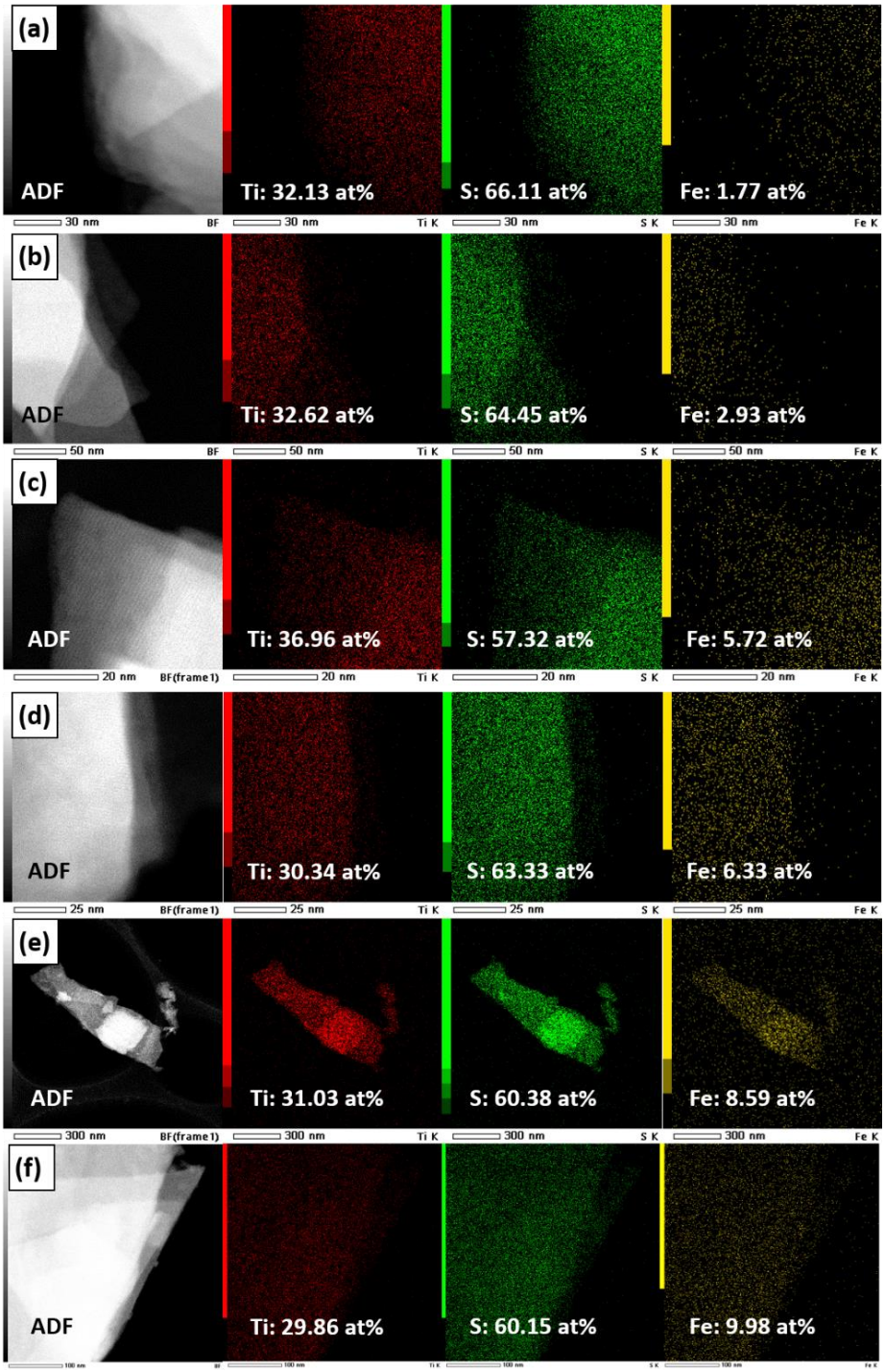

Figure S1 EDS results of the Fe_xTiS_2 crystal fragments used for STEM observation for x = (a) 0.05, (b) 0.10, (c) 0.15, (d) 0.20, (e) 0.25 and (f) 0.33. The ratio of Fe in each fragment was calculated using Ti as reference and the crystals grown all matched the intended Fe concentrations.

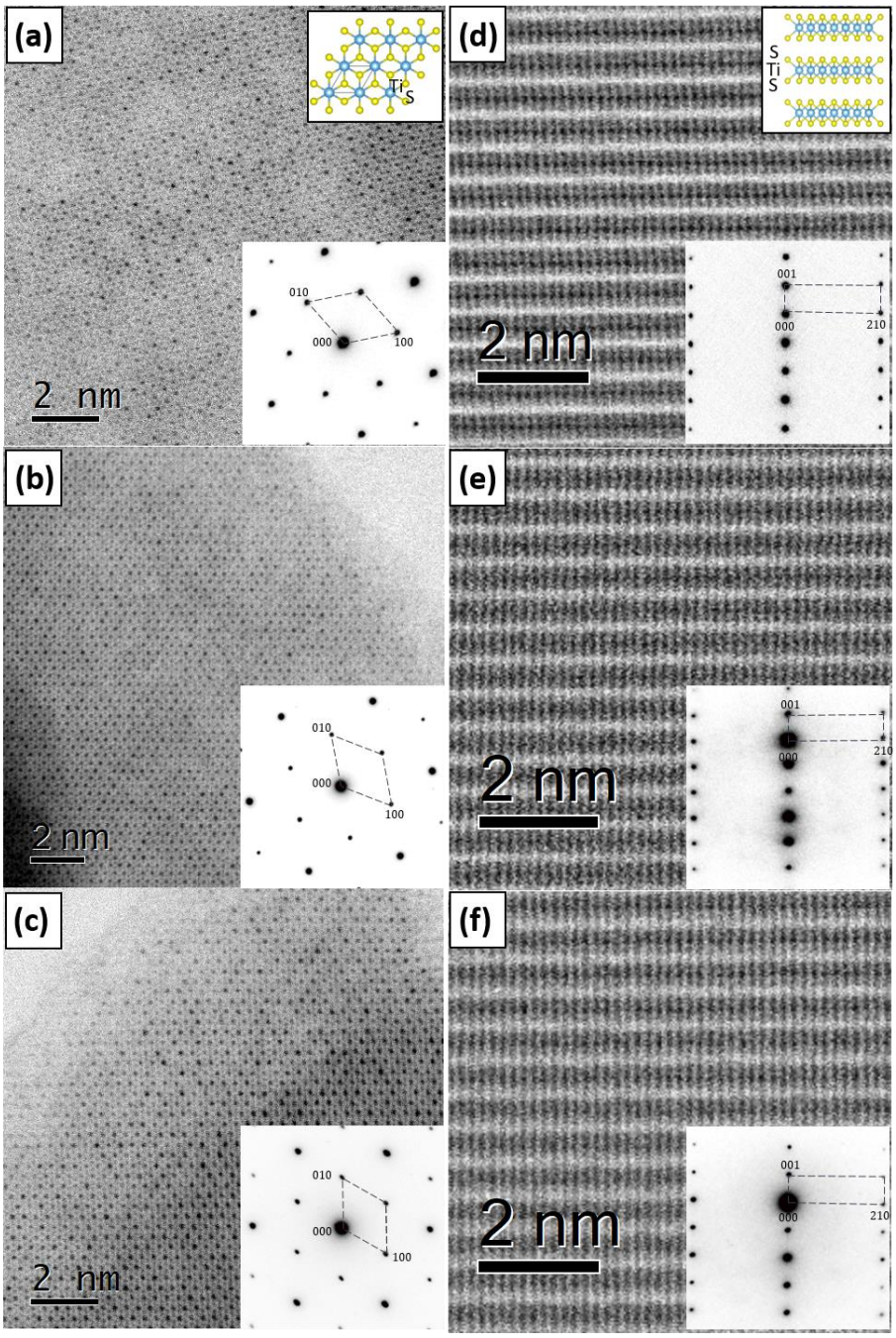

Figure S2 (a) - (c) ABF and TED images of Fe_xTiS_2 in the direction of [001] at x = 0.05, 0.10 and 0.20, respectively. (d) – (f) ABF and TED images of Fe_xTiS_2 in the direction of $[\bar{1}20]$ at x = 0.05, 0.10 and 0.20, respectively. The red arrows show the intercalated Fe atoms. No specific ordering of Fe atoms can be observed in the ABF images, which is supported by the TED patterns which show only the fundamental reflections of TiS_2.