Electronic Supplementary Material (ESI) for CrystEngComm

Supporting Information

A Ti^{4+} doped hematite photoanode protectively grown by a facile hydrothermal method

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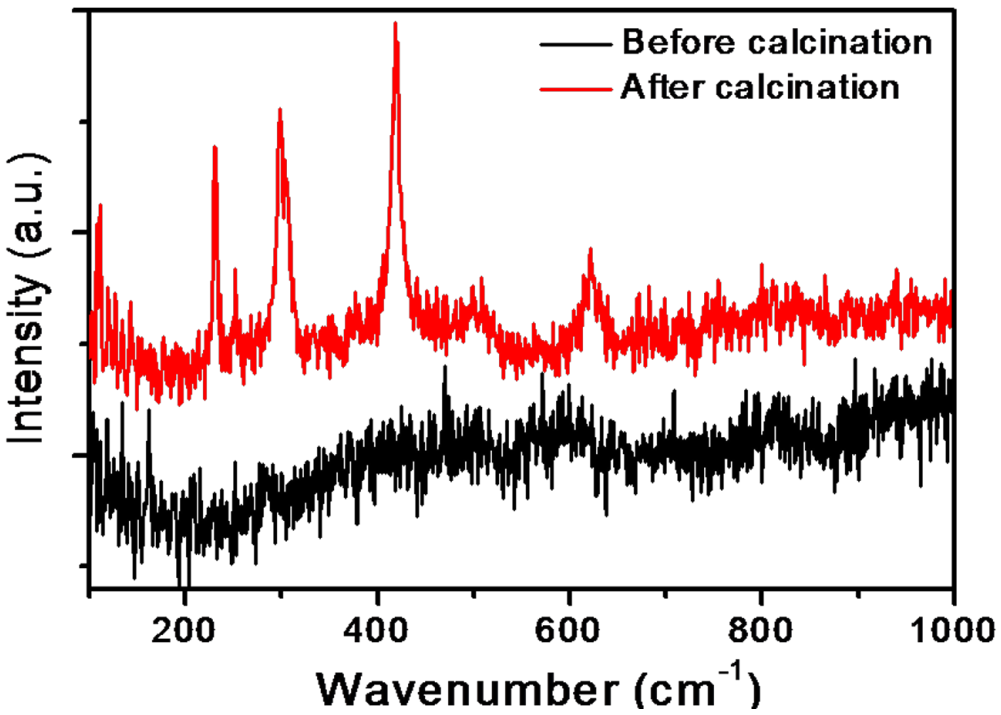

Fig. S1 Raman spectra of the Fe_2O_3 electrodes before and after calcination.

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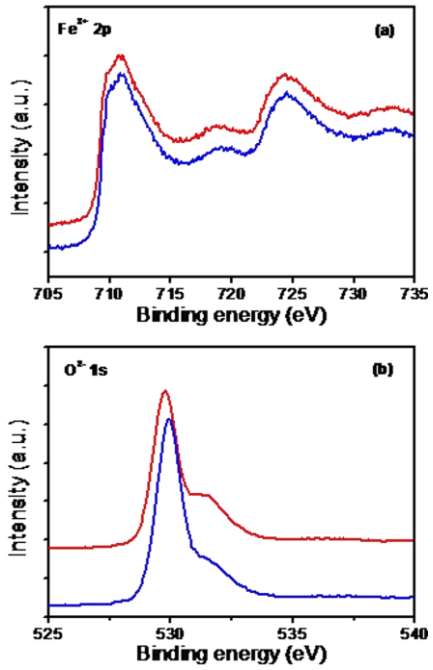

Fig. S2 Binding energy of Fe^{3+} 2p and O^{2-} 1s on the samples prepared at 70 min after calcination in the two different solutions with (blue line) and without(red line) Ti^{4+}.

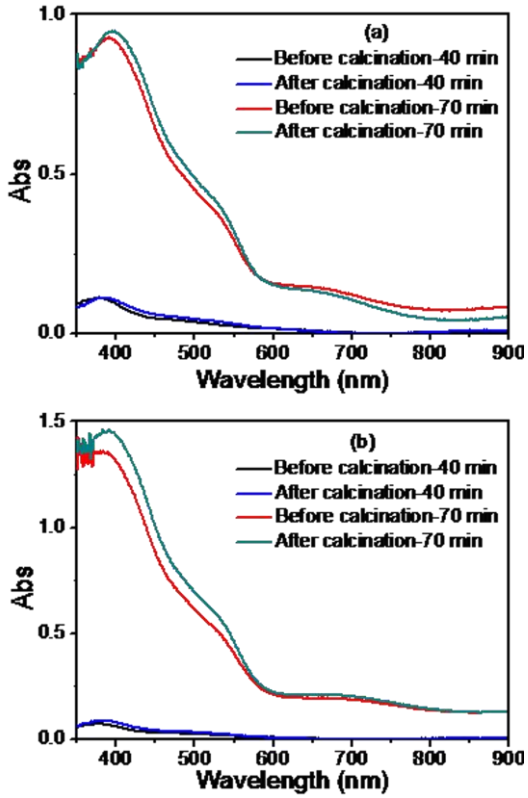

Fig. S3 UV-vis absorption spectra of films: (a) pure samples and (b) doped samples before and after calcination.

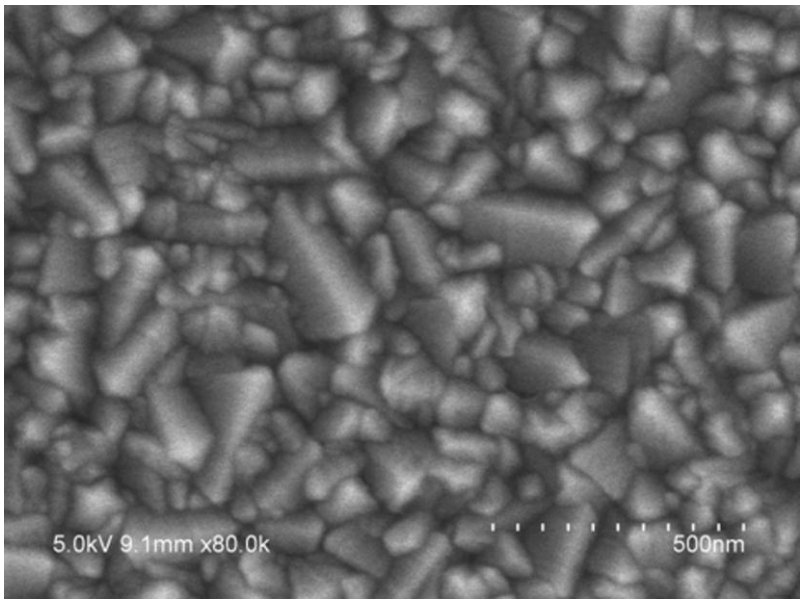

Fig. S4 SEM image of bare FTO

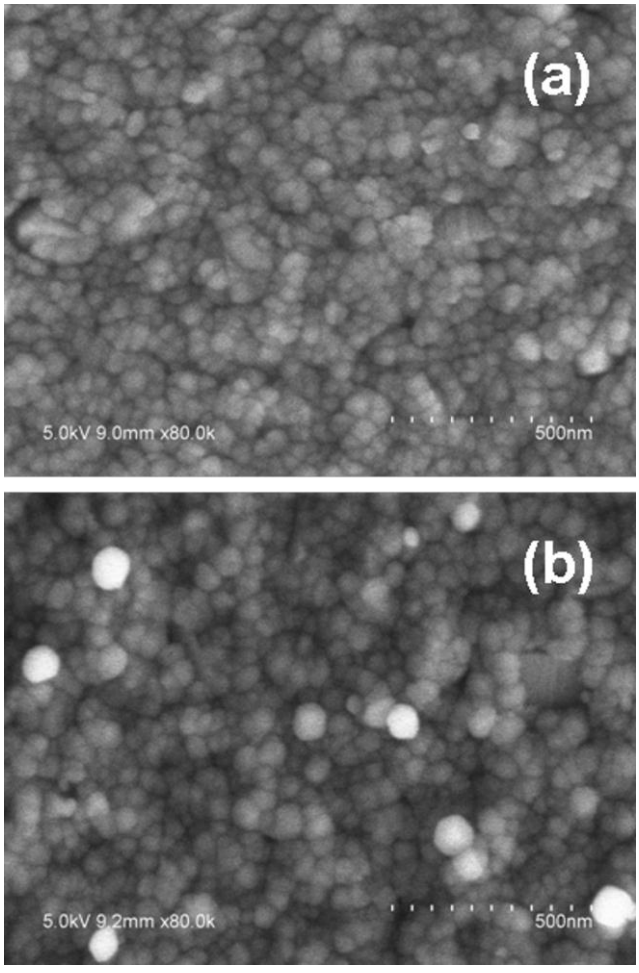

Fig. S5 SEM images of the samples after calcination at 70 min in (a) the solution without Ti^{4+} and (b) the solution with $Ti4^{+}$.