Electronic Supplementary Information (EIS)

Modified annealing approach for preparing multi-layered hematite thin films for photoelectrochemical water splitting

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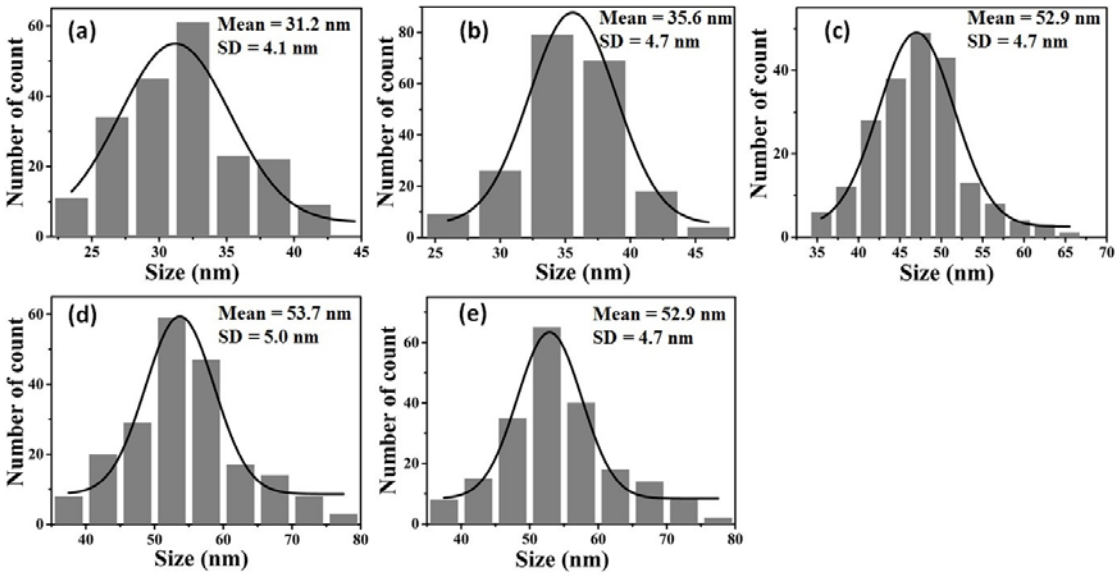

Fig. S1. The histogram of particle diameter distributions estimated from the FE-SEM images for films annealed at (a) 500°C, (b) 600°C, (c) 700°C, (d)750°C and 800°C respectively.

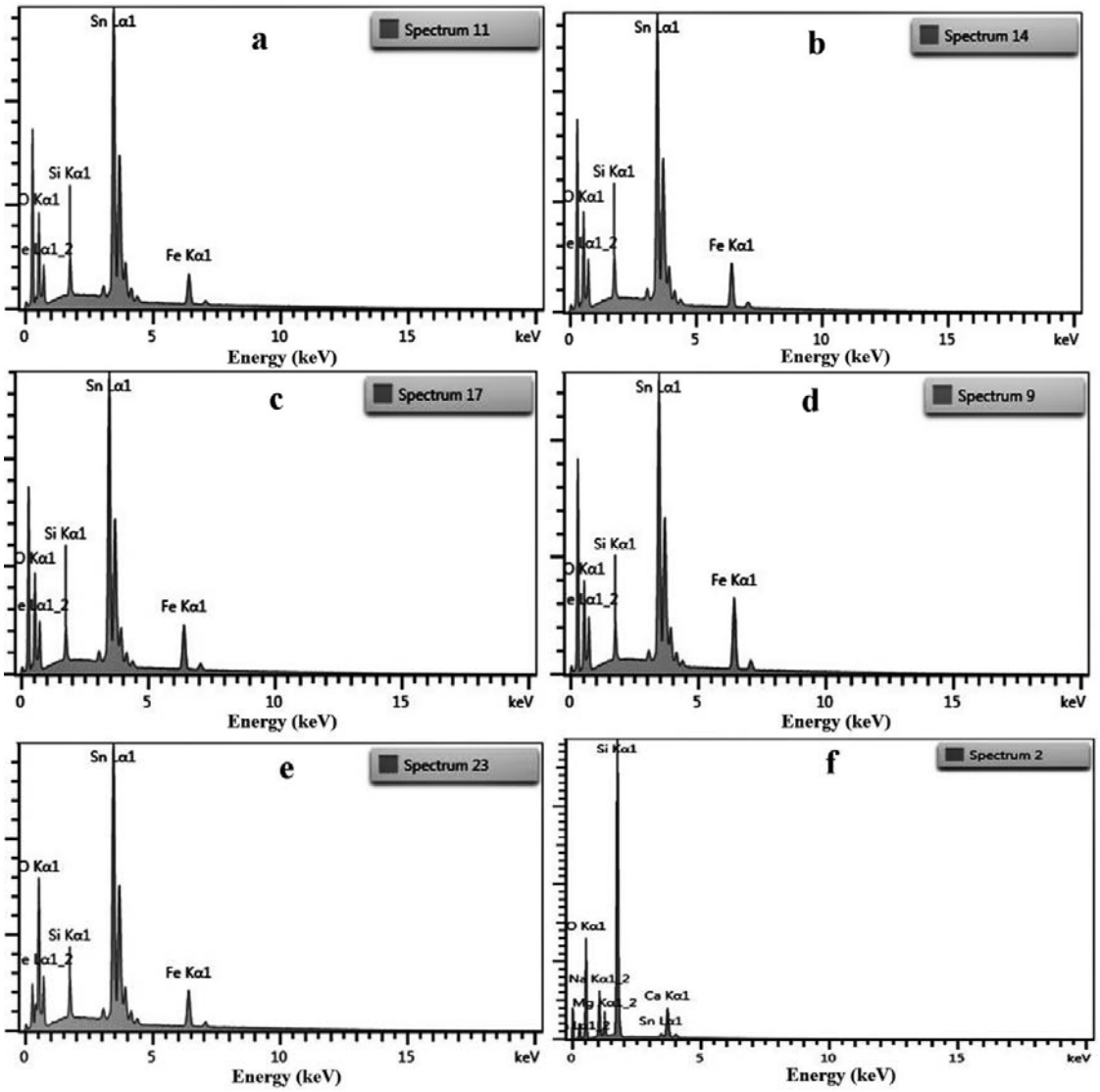

Fig. S2. EDS analysis of films annealed at (a) 500°C, (b) 600°C, (c) 700°C (d) 750°C, (e) 800°C and (f) fluorine-doped tin oxide (FTO).

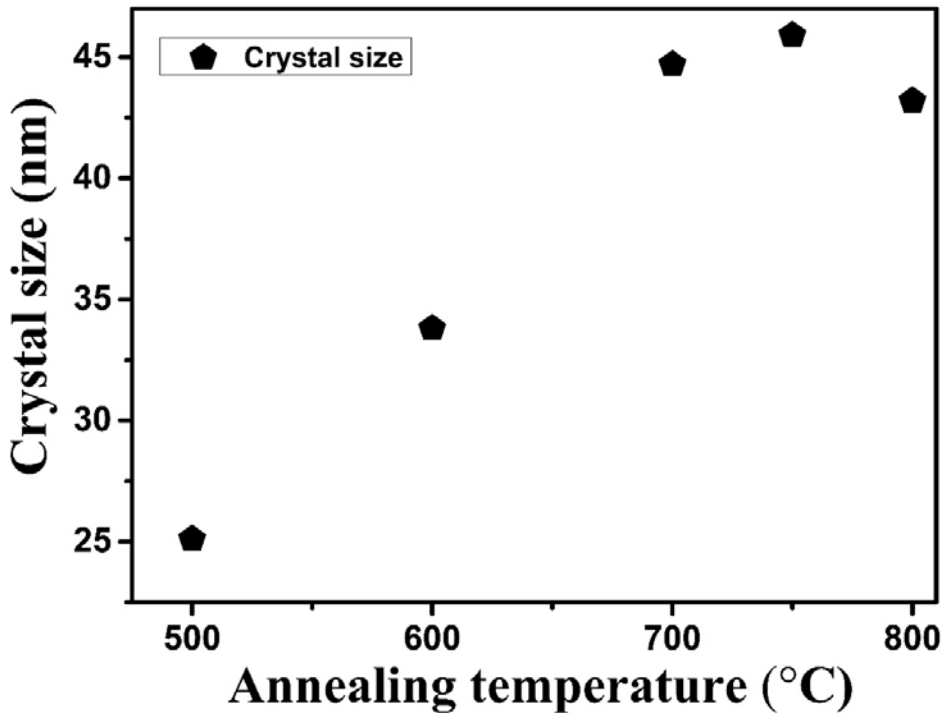

Fig. S3. Crystal size of hematite films prepared at different annealing conditions estimated using the Debye-Scherrer's equation.

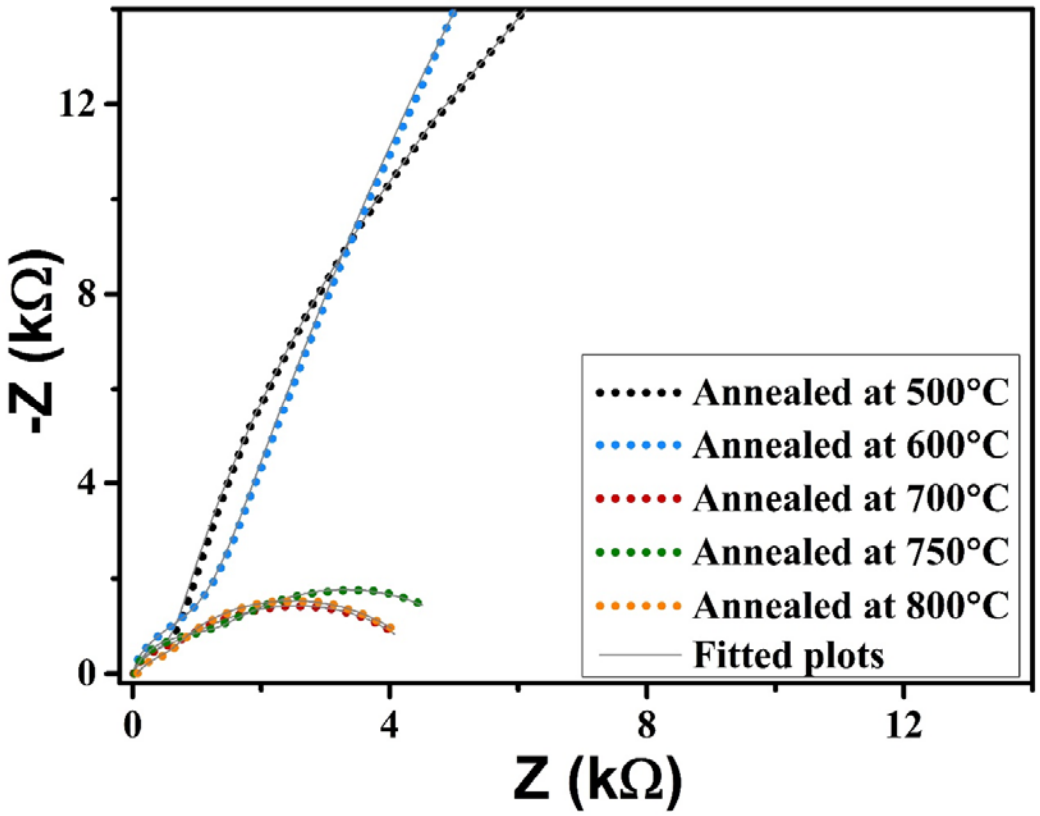

Fig. S4. EIS Nyquist plots of hematite thin film prepared under different annealing conditions with the dotted coloured lines showing the experimental data while the grey solid lines represent their corresponding fitted curves obtained with Zview software from Scribner Associates.