

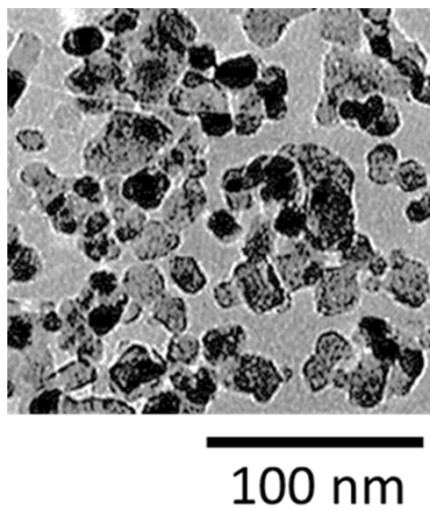
## Supplementary Information

# Brookite TiO<sub>2</sub> as low-temperature solution-processed mesoporous layer for hybrid perovskite solar cell

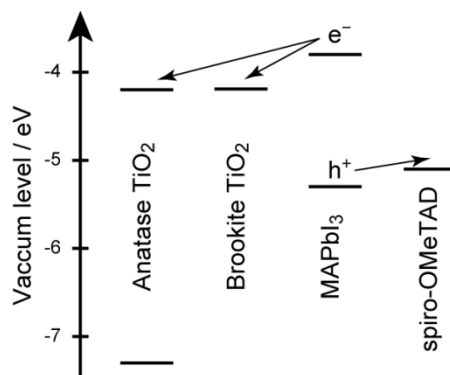
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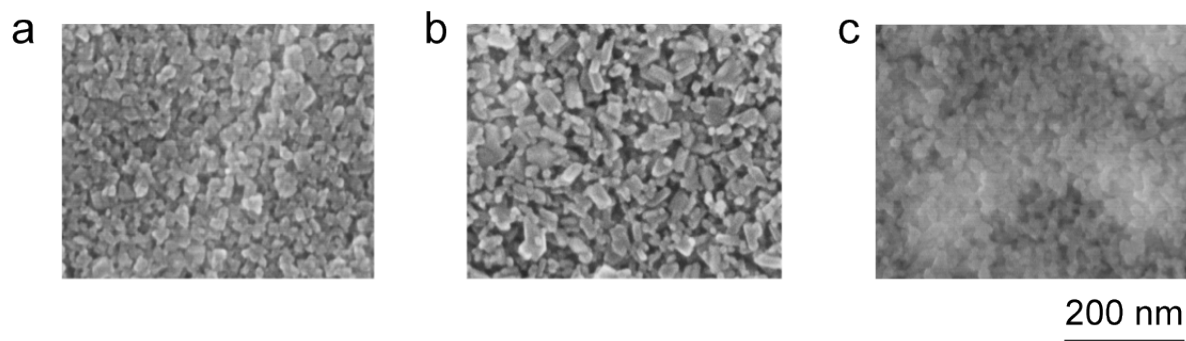
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**Supplementary Figure 1.** SEM images of brookite  $\text{TiO}_2$  particles suspended in the precursor solution.



**Supplementary Figure 2.** Band diagram for brookite, anatase and  $\text{CH}_3\text{NH}_3\text{PbI}_{3-x}\text{Cl}_x$  perovskite materials.<sup>1,2</sup>



**Supplementary Figure 3.** SEM images of (a) brookite TiO<sub>2</sub>, (b) anatase TiO<sub>2</sub>, and (c) Al<sub>2</sub>O<sub>3</sub> mp layers.

#### References

1. J. T.-W. Wang, J. M. Ball, E. M. Barea, A. Abate, J. A. Alexander-Webber, J. Huang, M. Saliba, I. Mora-Sero, J. Bisquert, H. J. Snaith and R. J. Nicholas, *Nano Lett.*, 2014, **14**, 724-730.
2. A. D. Paola, M. Bellardita and L. Palmisano, *Catalysts*, 2013, **3**, 36-73.