Electronic Supplementary Material (ESI) for CrystEngComm.

Surface modification with lithium silicate to enhance electrochemical performance for high-valence metal oxide compound $MnTeMoO_6$

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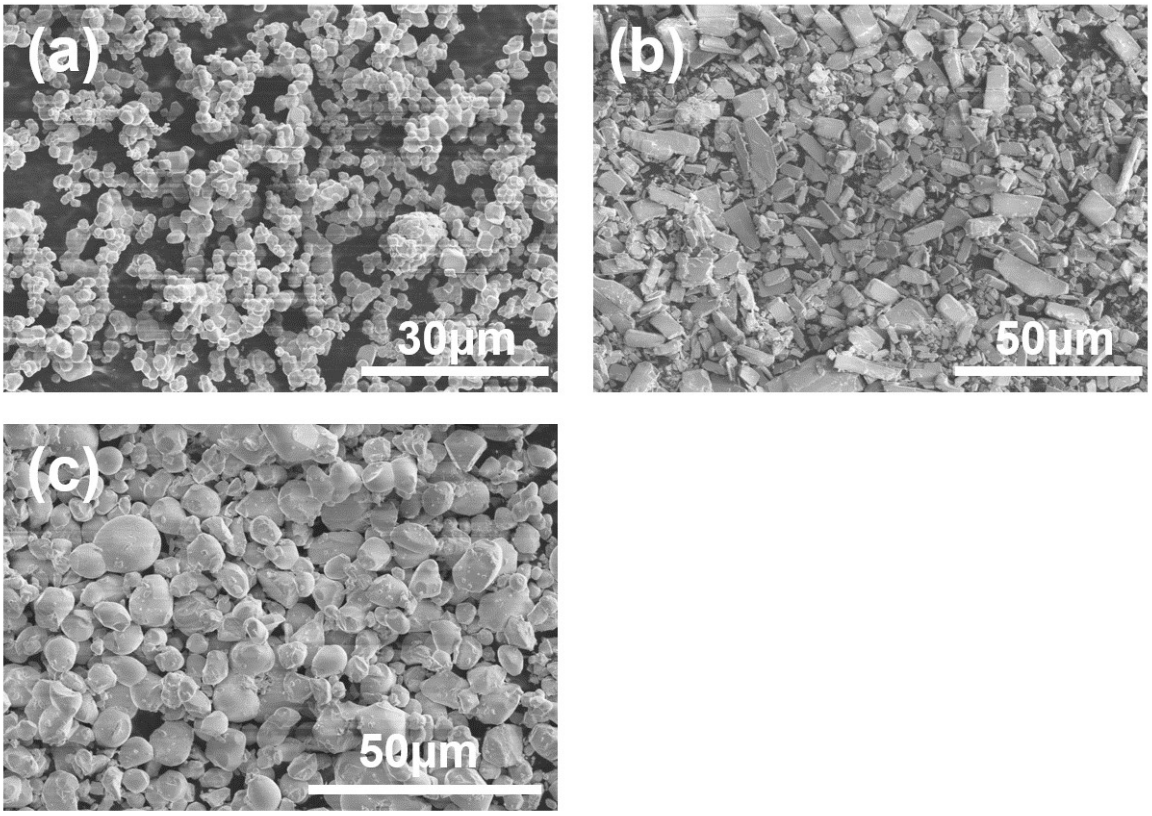

Fig. S1. SEM images of (a) MnO, (b) MoO_3 and (c) TeO_2. All raw materials are bought from Shanghai Macklin Biochemical Co., Ltd. The Purity is 99.5% for MnO, 99.95% for MoO_3 and for 99.99% TeO_2.

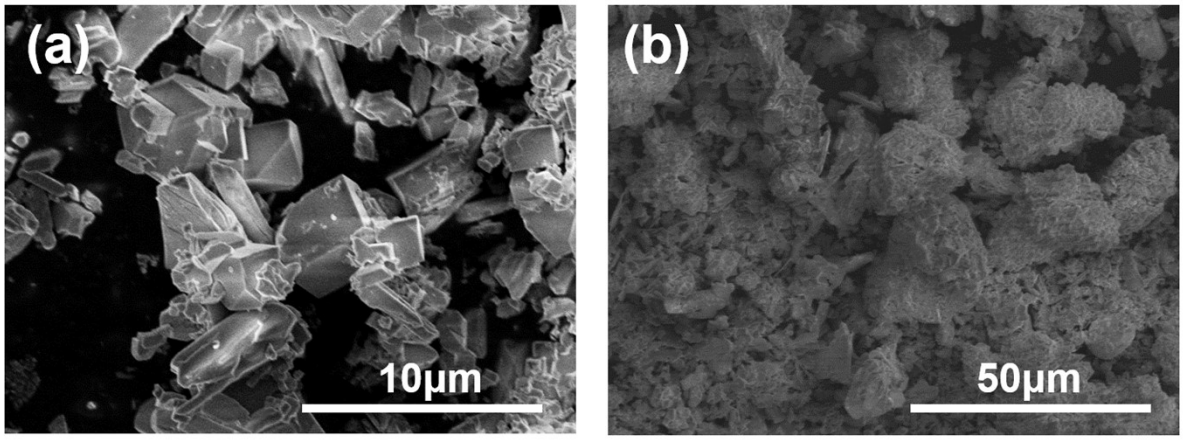

Fig. S2. SEM images of $MnTeMoO_6$ compound synthesized (a) in supercritical water system, and (b) by commonly-used solid state method.

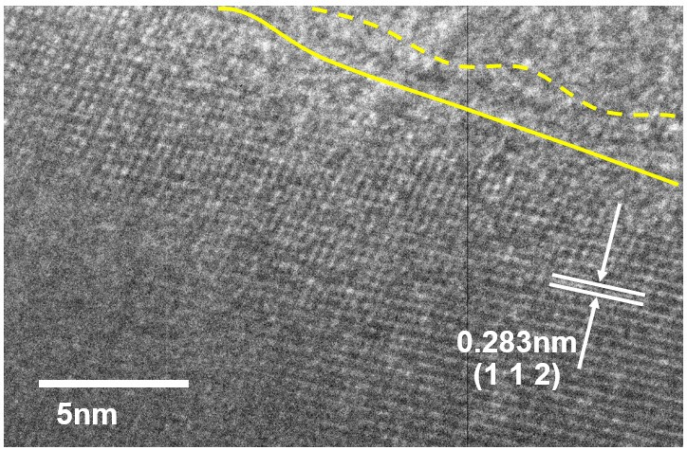

Fig. S3. HRTEM image of S-MnTM@LSO

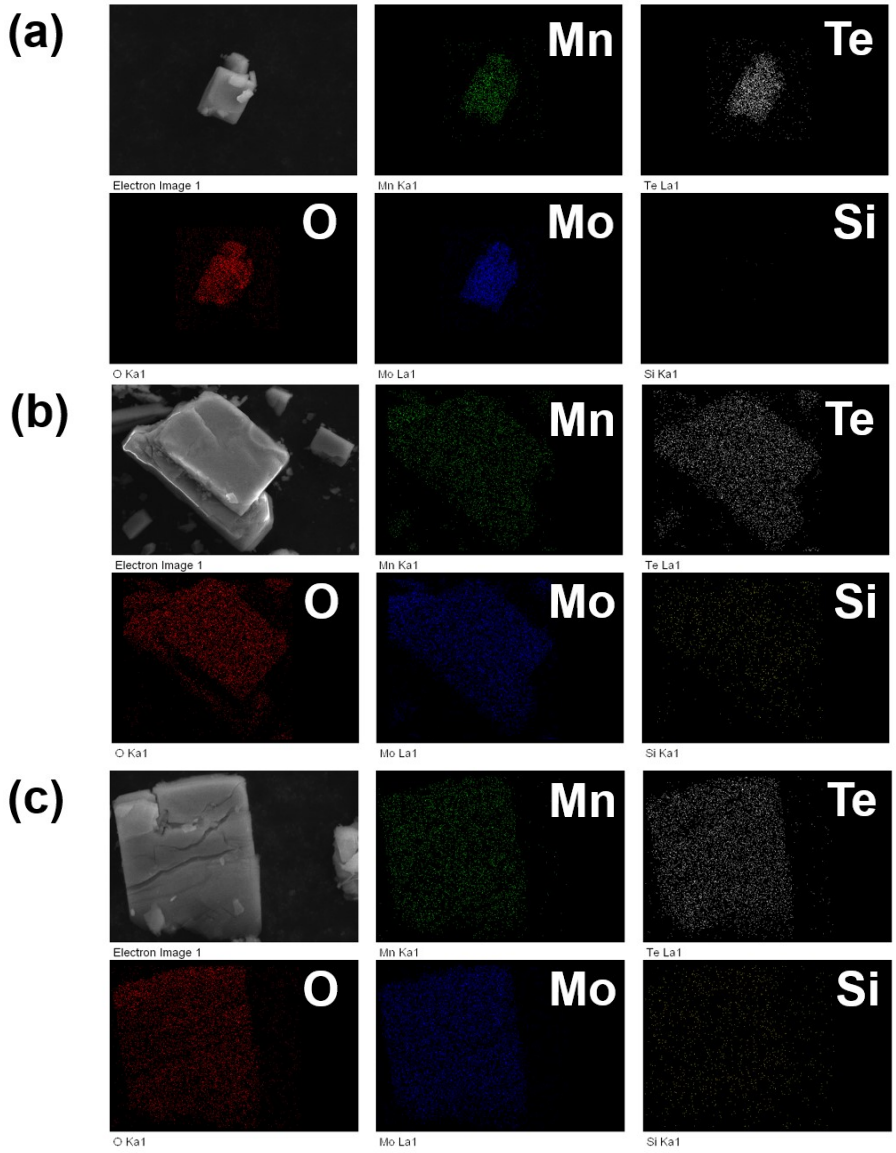

Fig. S4. SEM mapping images of (a) bare MnTM, (b) MnTM@LSO-1 and (c) MnTM@LSO-3.

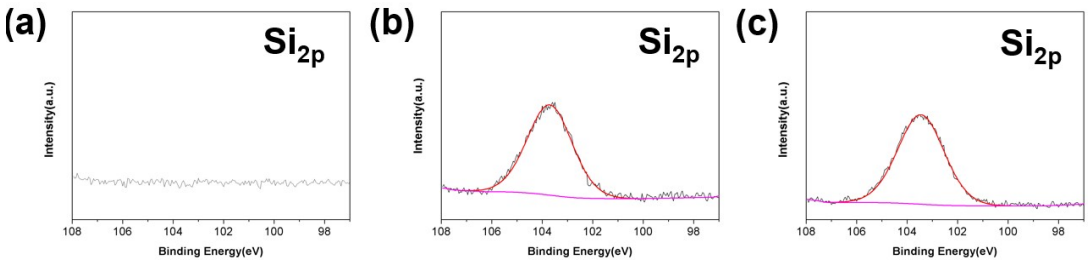

Fig. S5. XPS spectra of Si element of (a) bare MnTM, (b) MnTM@LSO-1 and (c) MnTM@LSO-3.

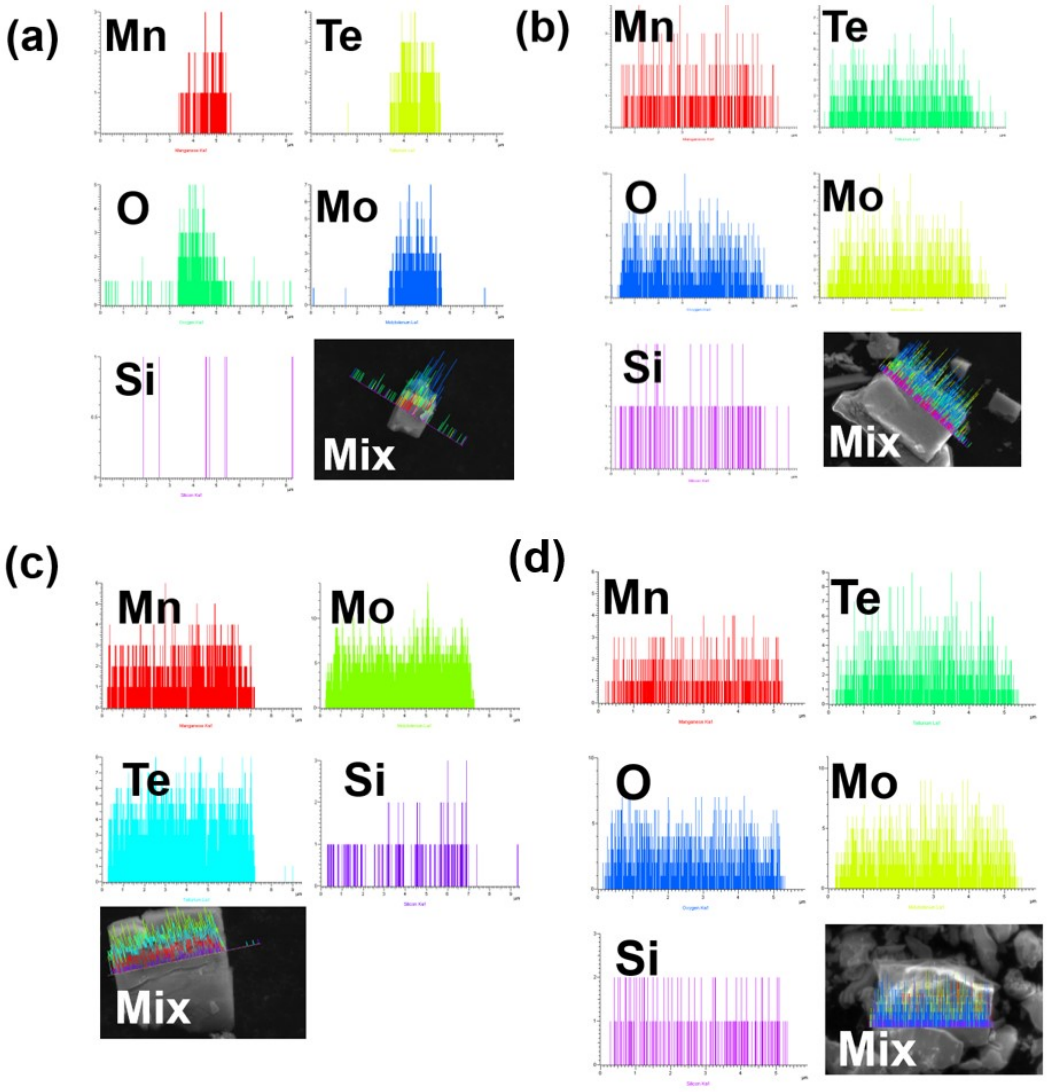

Fig. S6. SEM linear scanning mapping results of (a) bare MnTM, (b) MnTM@LSO-1, (c) MnTM@LSO-3 and (d) S-MnTM@LSO.

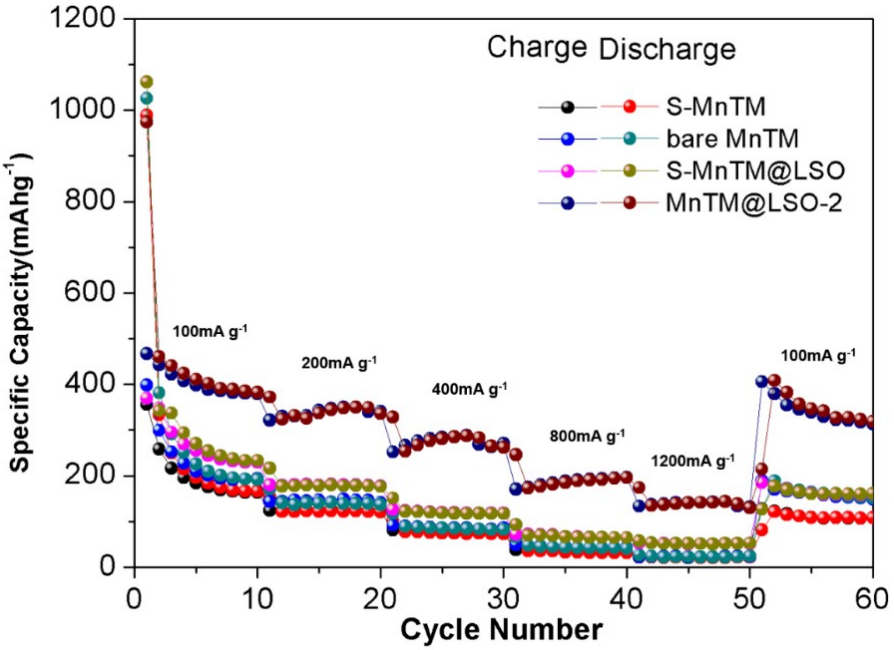

Fig. S7. Rate performance of MnTM composites and S-MnTM composites.

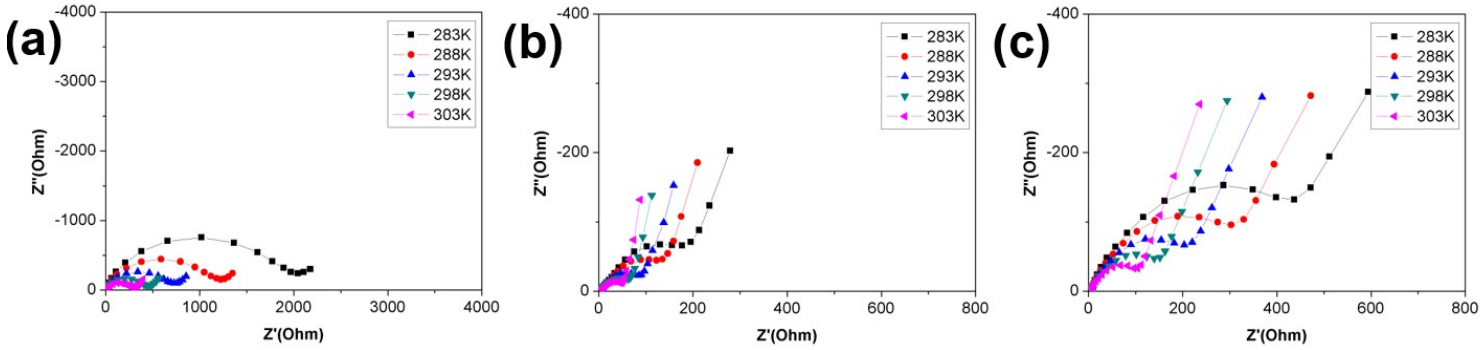

Fig. S8. The results of A.C. impedance test under differing temperatures. (a) Bare MnTM, (b) MnTM@LSO-1 and (c) MnTM@LSO-3.