

**Electronic Supplementary Information (ESI)**

**Nanoflake Driven Mn<sub>2</sub>O<sub>3</sub> Microcubes Modified with Cooked Rice Derived Carbon for  
Improved Electrochemical Behavior**

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## Supporting information

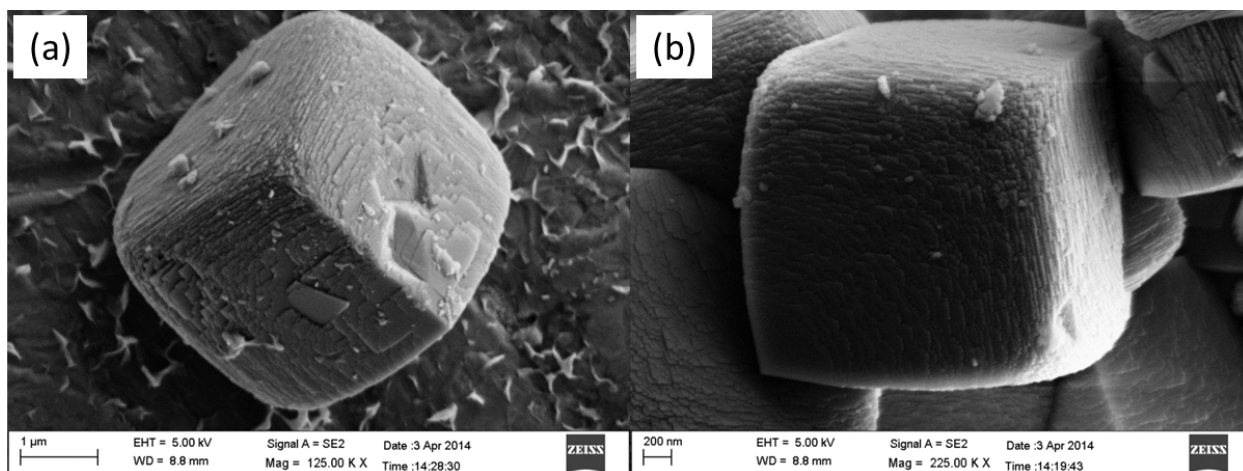


Fig. S1 (a-b) SEM images of MnCO<sub>3</sub> microcubes containing nano flakes

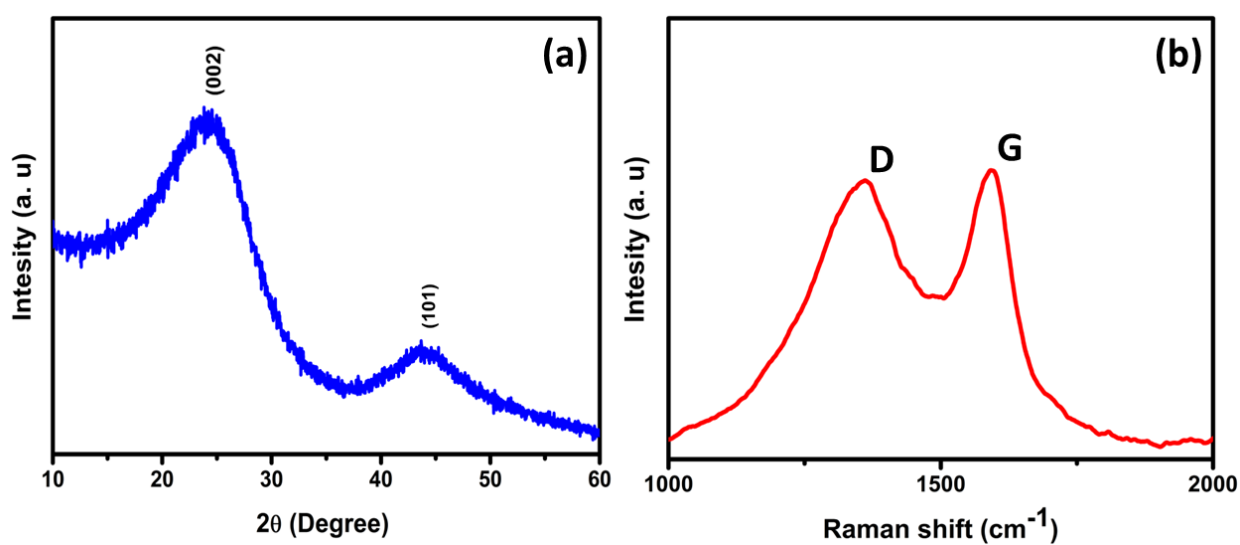
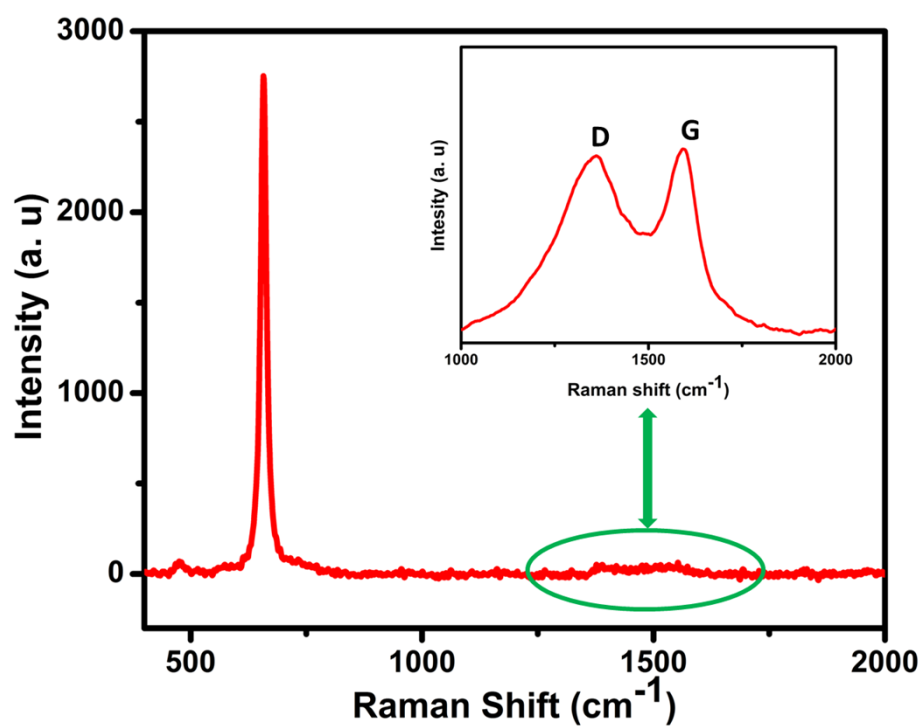
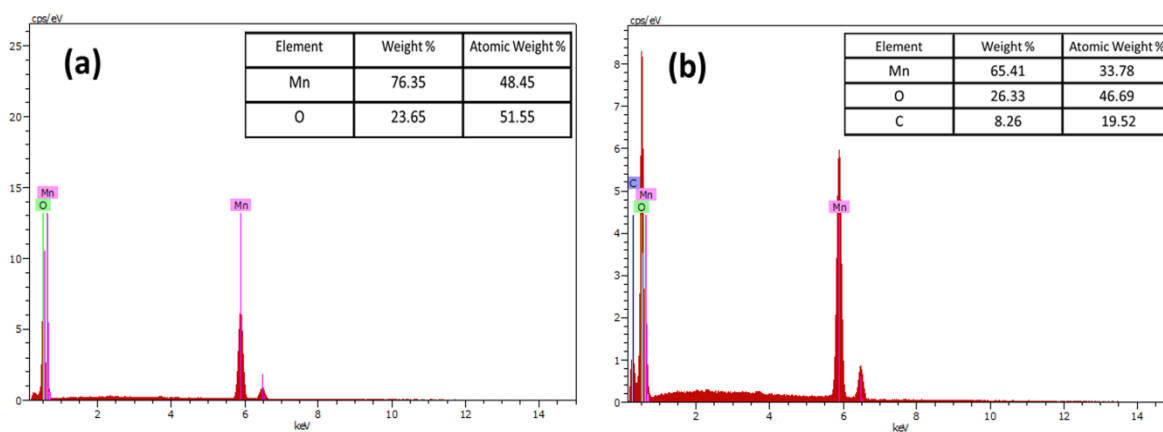


Fig. S2 a) XRD and b) Raman behavior of cooked rice carbon (CRC)

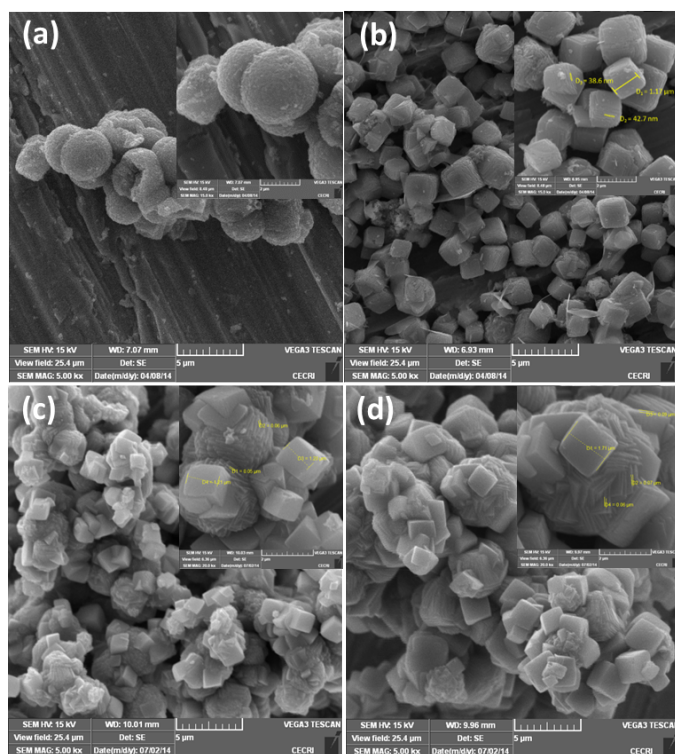


**Fig. S3** Complete Raman spectrum of Mn<sub>2</sub>O<sub>3</sub>/CRC-20 composite

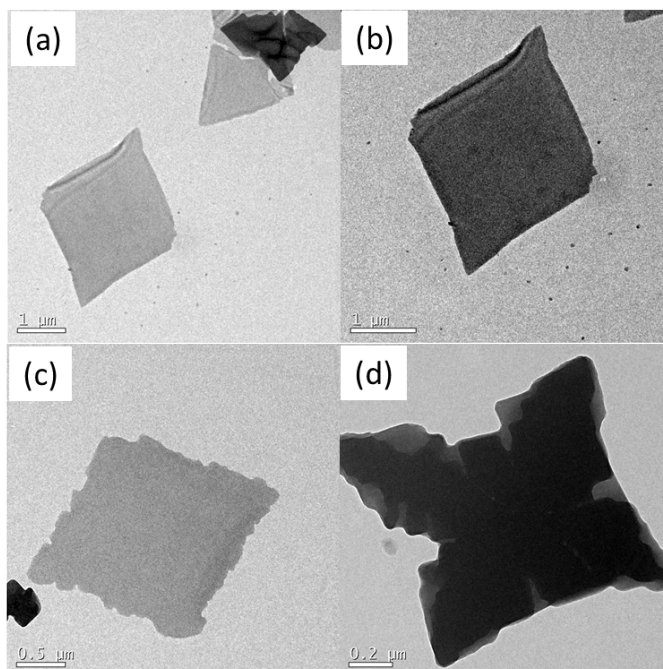


**Fig. S4** EDX results of a) pristine Mn<sub>2</sub>O<sub>3</sub> and b) Mn<sub>2</sub>O<sub>3</sub>/CRC-20 composite

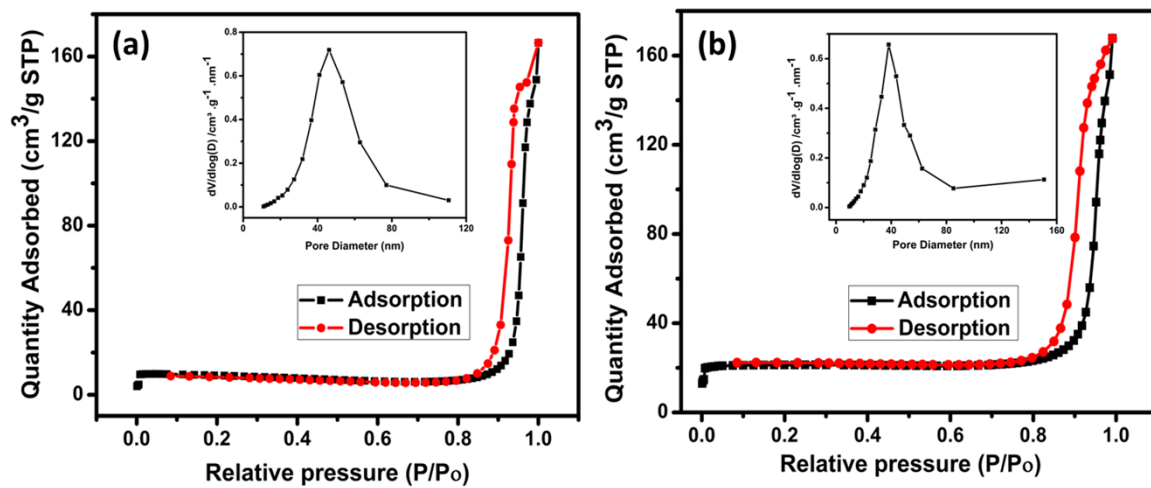
Inset of a and b: Table showing the percentage composition of elements present in Mn<sub>2</sub>O<sub>3</sub> and Mn<sub>2</sub>O<sub>3</sub>/CRC-20 composite respectively



**Fig. S5** SEM images of Mn<sub>2</sub>O<sub>3</sub> obtained by varying the rate of addition of (NH<sub>4</sub>)HCO<sub>3</sub> precursor, (a) spheres obtained in 30 min, (b) cubes obtained in 2 h, (c-d) agglomerated cubes obtained in 3 and 4 h; Insets: Respective closer view



**Fig. S6** (a-d) Closer view of TEM images of Mn<sub>2</sub>O<sub>3</sub> nano flakes (obtained from 2 h addition time)



**Fig. S7** N<sub>2</sub> adsorption-desorption isotherm of (a) Mn<sub>2</sub>O<sub>3</sub> and (b) Mn<sub>2</sub>O<sub>3</sub>/CRC-20 composite