Electronic Supporting Information (ESI†)

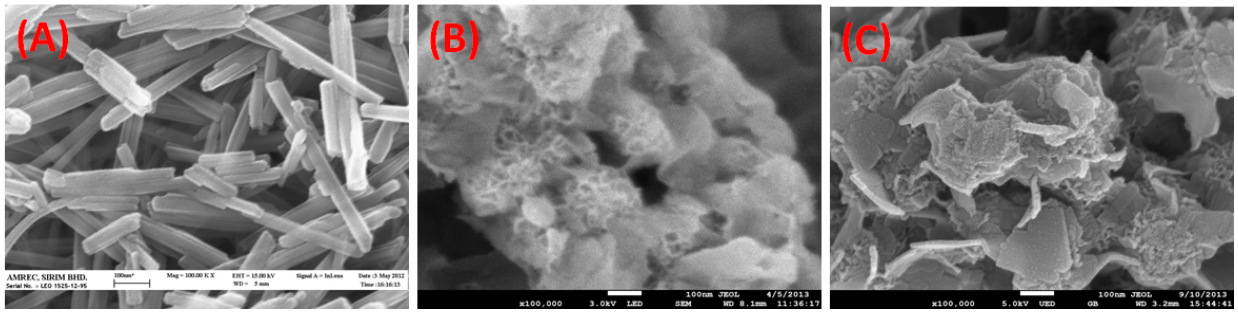

Fig. S1: High magnification of samples; (A) MnO_2, (B) Na-MnO_2(A) and (C) Na-MnO_2(B).

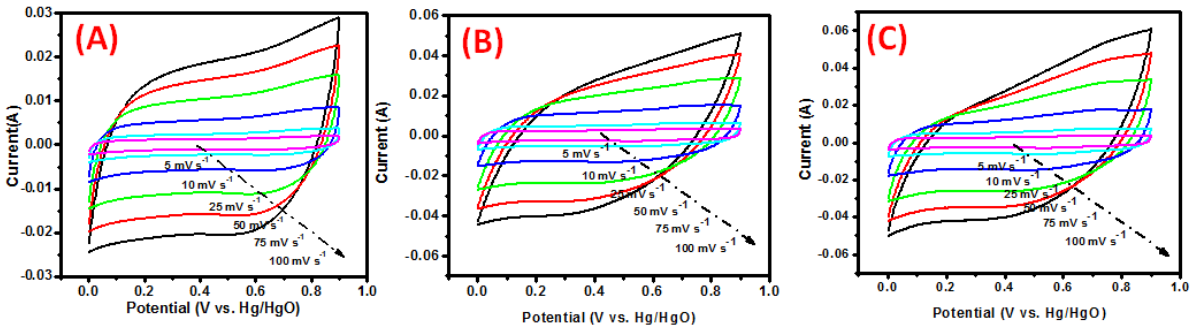

Fig. S2: Cyclic voltammetry of (A) α-MnO_2, (B) Na-MnO_2 (A) and (C) Na-MnO_2(B).

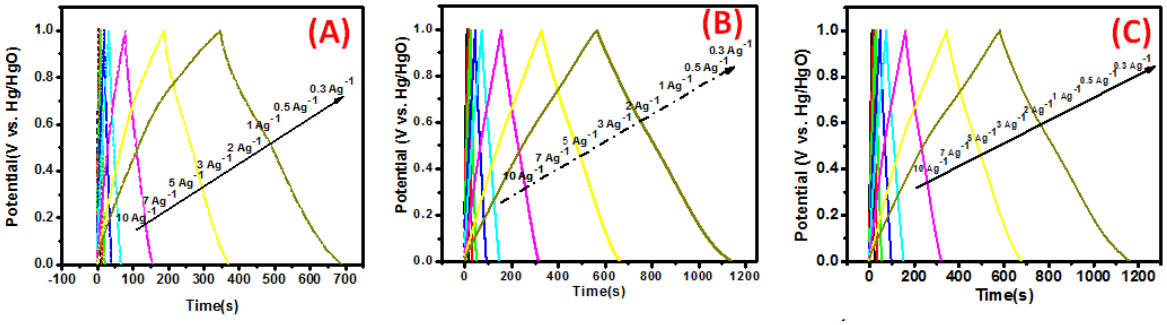

Fig. S3: Galvanostatic charge-discharge profiles of (A) α-MnO_2, (B) Na-MnO_2 (A) and (C) Na-MnO_2(B).

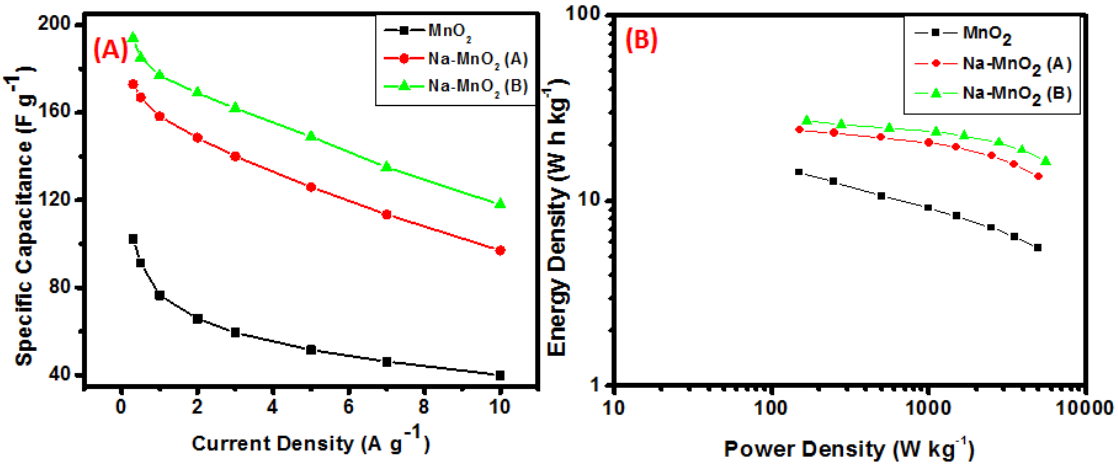

Fig S4: (A) Variation of Cs and (B) Ragone plot for each materials at different current density (10 A g^{-1} to 0.3 A g^{-1}) in three-electrode system of 1M Na_2SO_4 electrolyte.

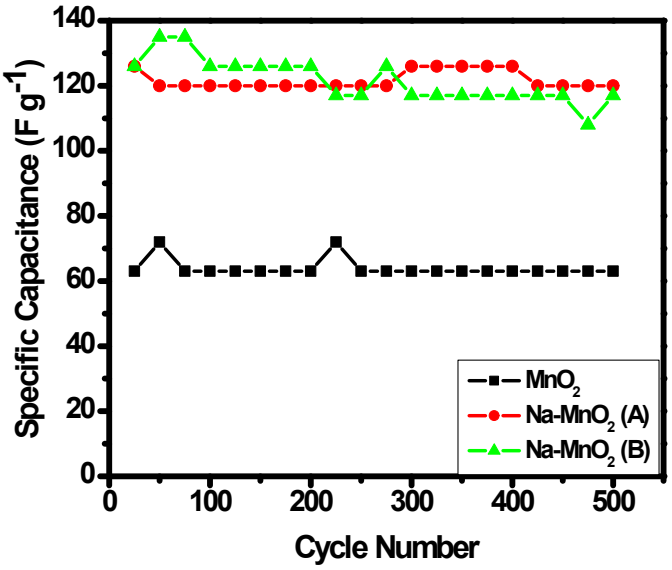

Fig S5: Galvanostatic charge-discharge curve for samples at 5A g^{-1} in 1M Na_2SO_4

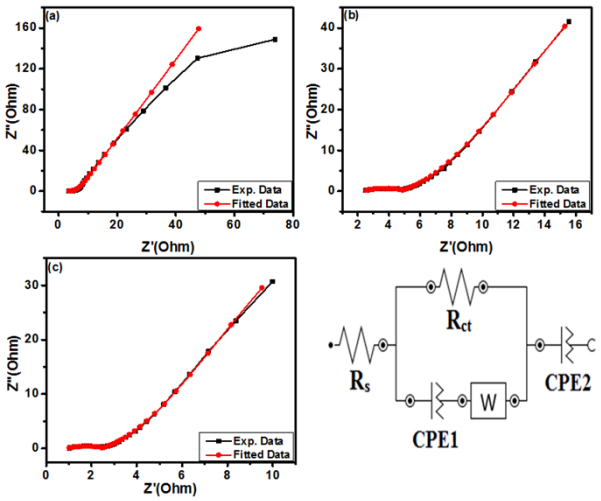

Fig. S6: Fitted data of equivalent circuit for samples; (a) MnO_2, (b) Na-MnO_2(A) and (c) Na-MnO_2(B) with the schematic diagram of equivalent circuit employed for fitting.

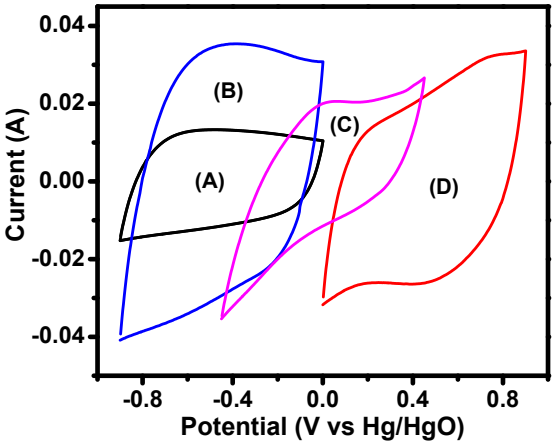

Fig. 7: Cyclic voltammetry curve for material in three-electrode configuration (A) AC commercial in 1 M Na_2SO_4, (B) AC commercial in 1M KOH (C) Na-MnO_2(B) in 1M KOH and (D) Na-MnO_2 (B) in 1M Na_2SO_4, at scan rate of 50 mV s^{-1}

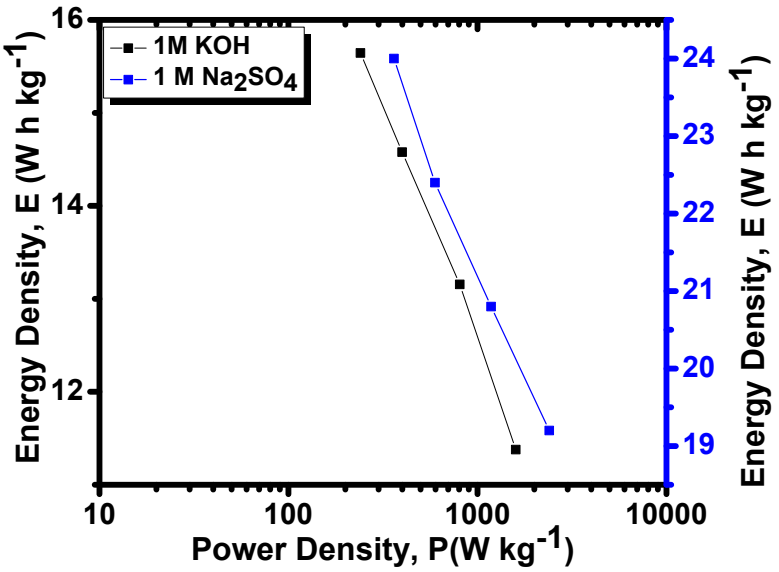

Fig. S8: Ragone plot for Na-MnO_2(B) in two electrode system with different electrolyte at different current densities (2 A g^{-1} to 0.3 A g^{-1}).