Supplementary Material for

Bimetallic FeNi-MIL-88-derived $NiFe_2O_4$@NiMn-LDH composite electrode material for high performance asymmetric supercapacitor

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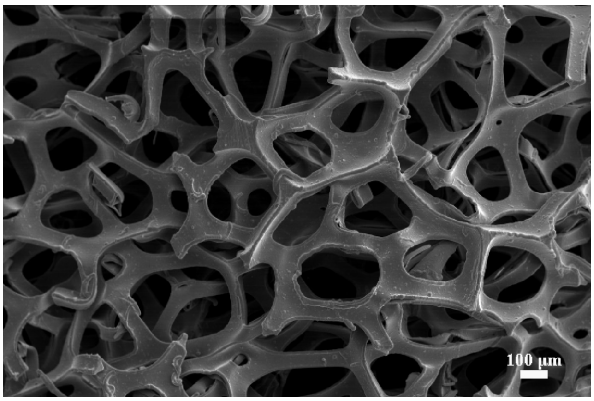

Fig. S1. SEM image of bare Ni foam.

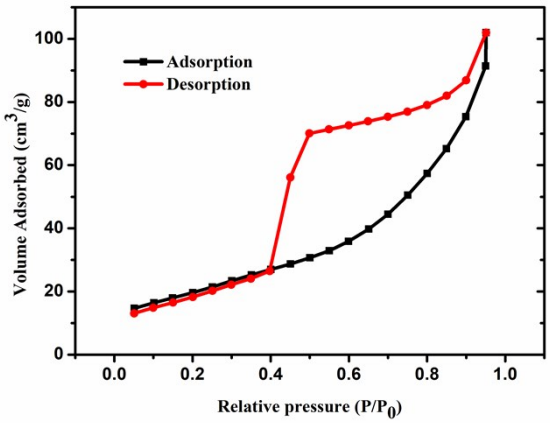

Fig. S2 N_2 adsorption-desorption isotherms of the for $NiFe_2O_4$@Ni-Mn LDH/NF the calculation of specific surface area with the BET method.

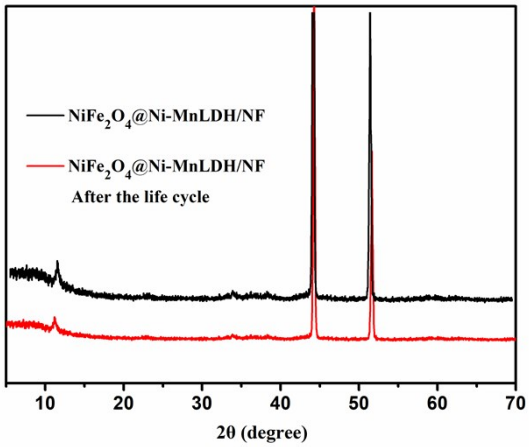

Fig. S3. XRD images of $NiFe_2O_4$@Ni-Mn LDH/NF after the life cycle.

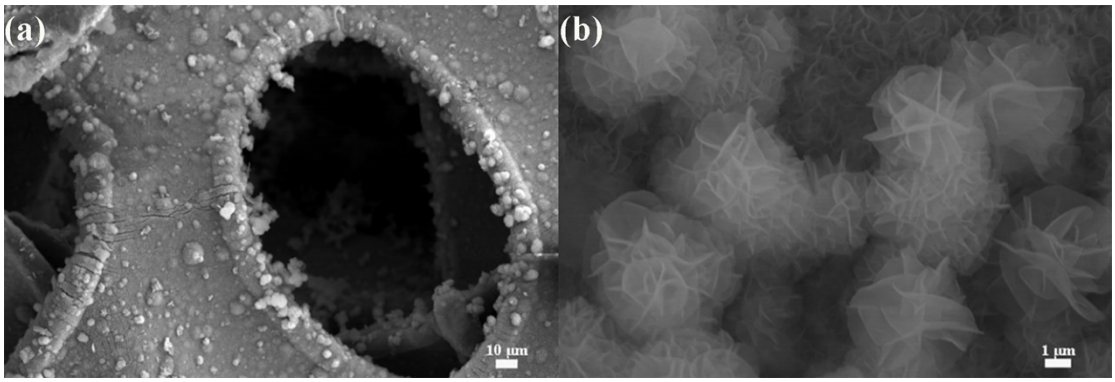

Fig. S4. SEM images of $NiFe_2O_4$@Ni-Mn LDH/NF after the life cycle.

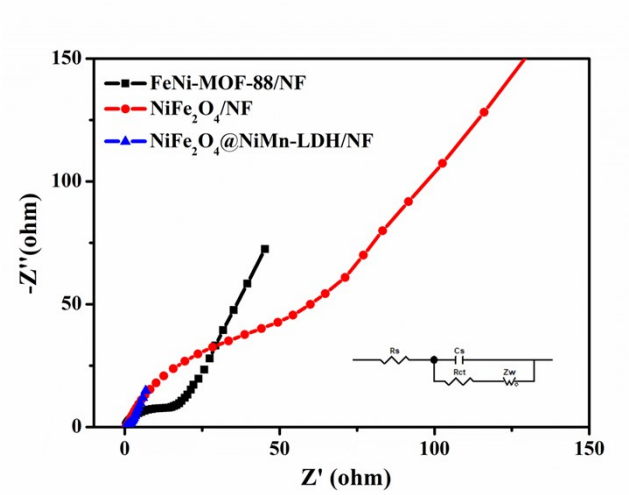

Fig. S5. EIS curves of different materials, and equivalent circuit of impedance data.

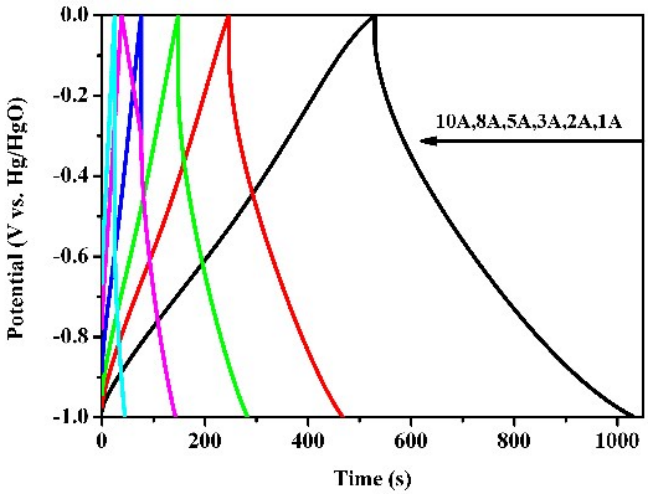

Fig. S6. GCD curves of AC at different current densities 1-10 A g^{-1}.

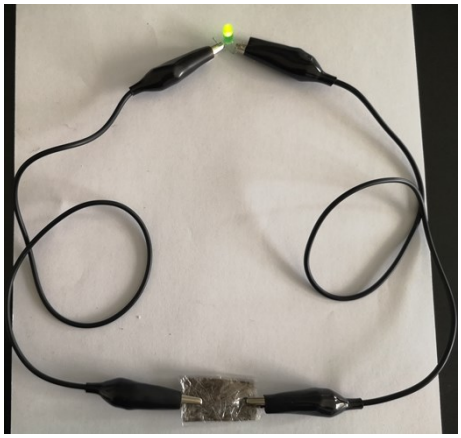

Fig. S7. Demonstration of a green LED powered up by $NiFe_2O_4$@Ni-Mn LDH/NF//AC ASC.

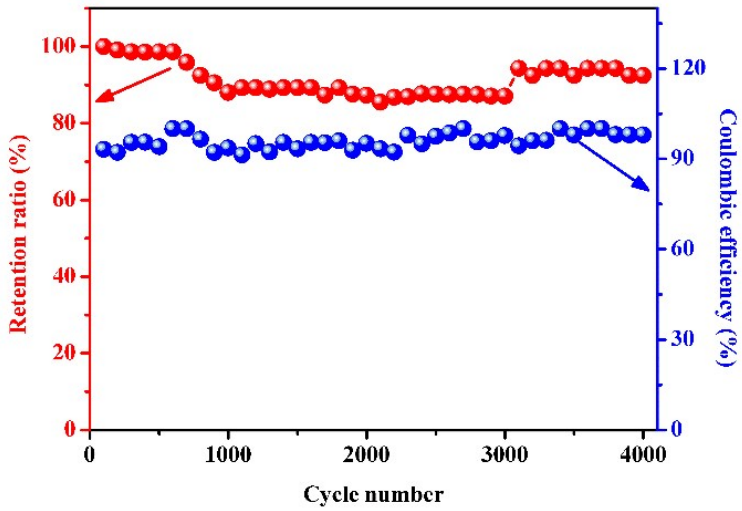

Fig. S8. Cycling performances for $NiFe_2O_4$@Ni-Mn LDH/NF//AC over 4000 cycles.