

Electrochemical water splitting exploration of MnCo_2O_4 , NiCo_2O_4 cobaltites

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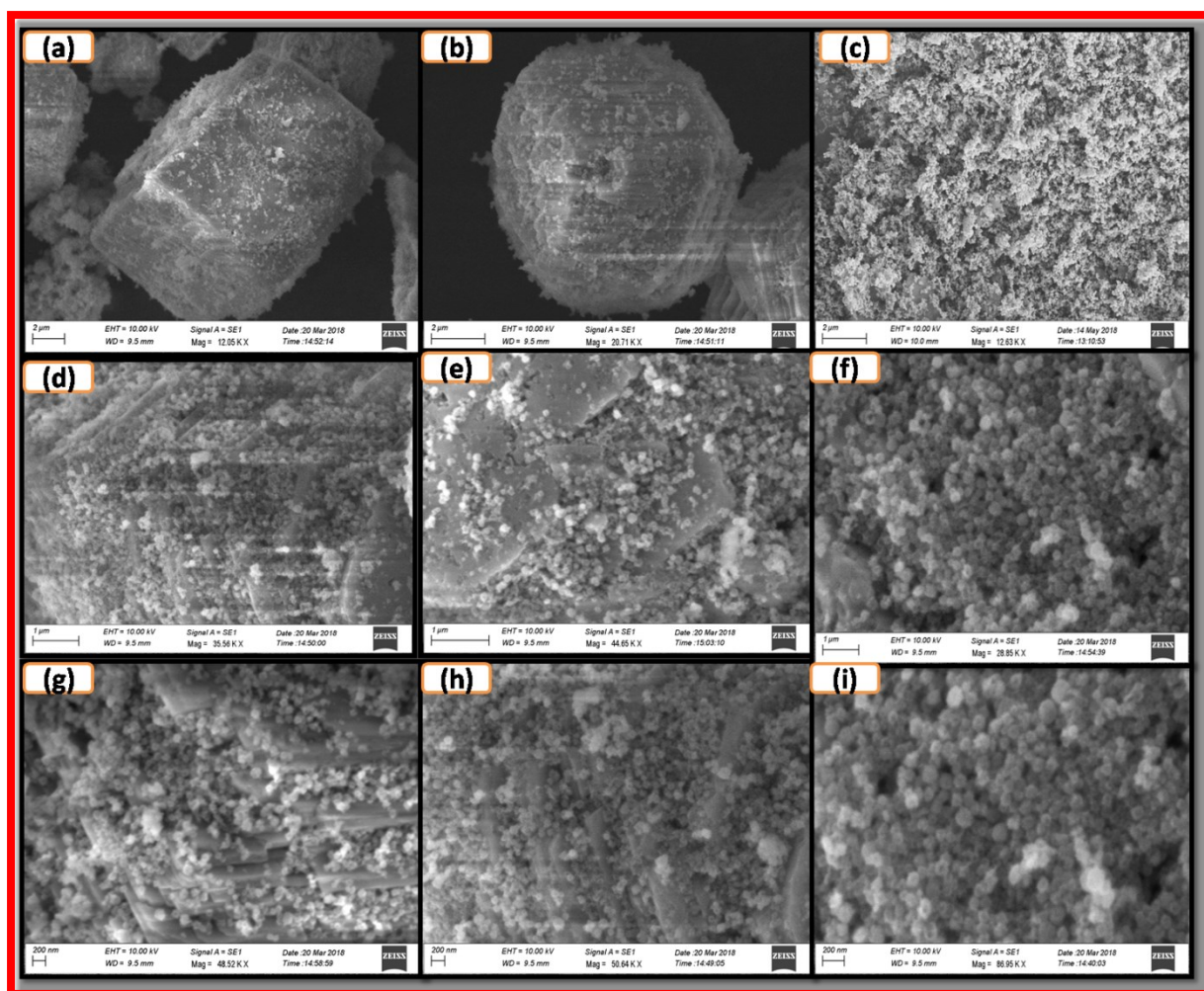


Fig. S1 SEM images of MnCo_2O_4 nanoparticles (a) pH-3 (b) pH-7 (c) pH-10 in 2 μm scale (d) pH-3 (e) pH-7 (f) pH-10 in 1 μm scale (g) pH-3 (h) pH-7 (i) pH-10 in 200 nm scale

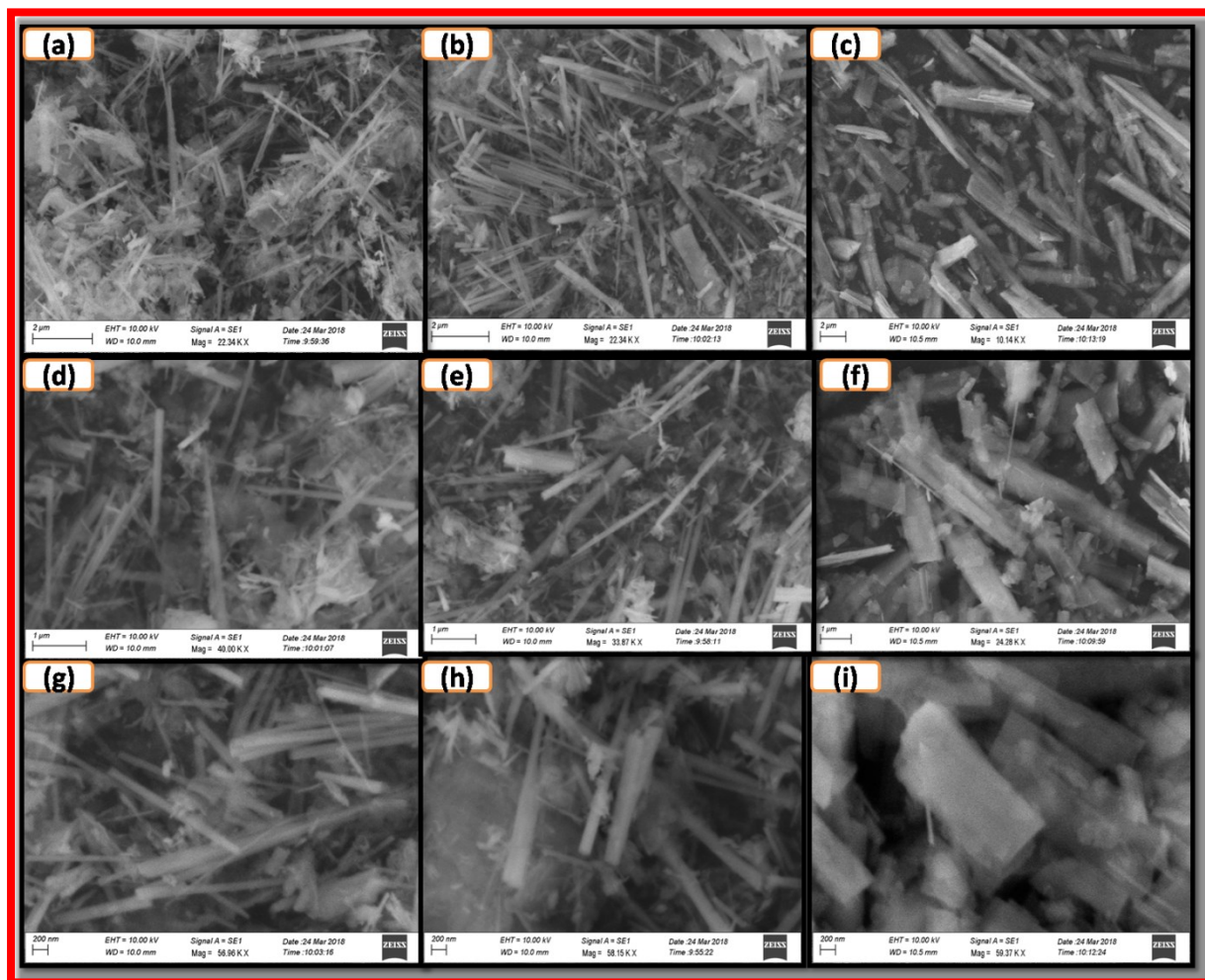


Fig. S2 SEM images of NiCo_2O_4 nanorods (a) pH-3 (b) pH-7 (c) pH-10 in 2 μm scale and (d) pH-3 (e) pH-7 (f) pH-10 in 1 μm scale (g) pH-3 (h) pH-7 (i) pH-10 in 200 nm scale

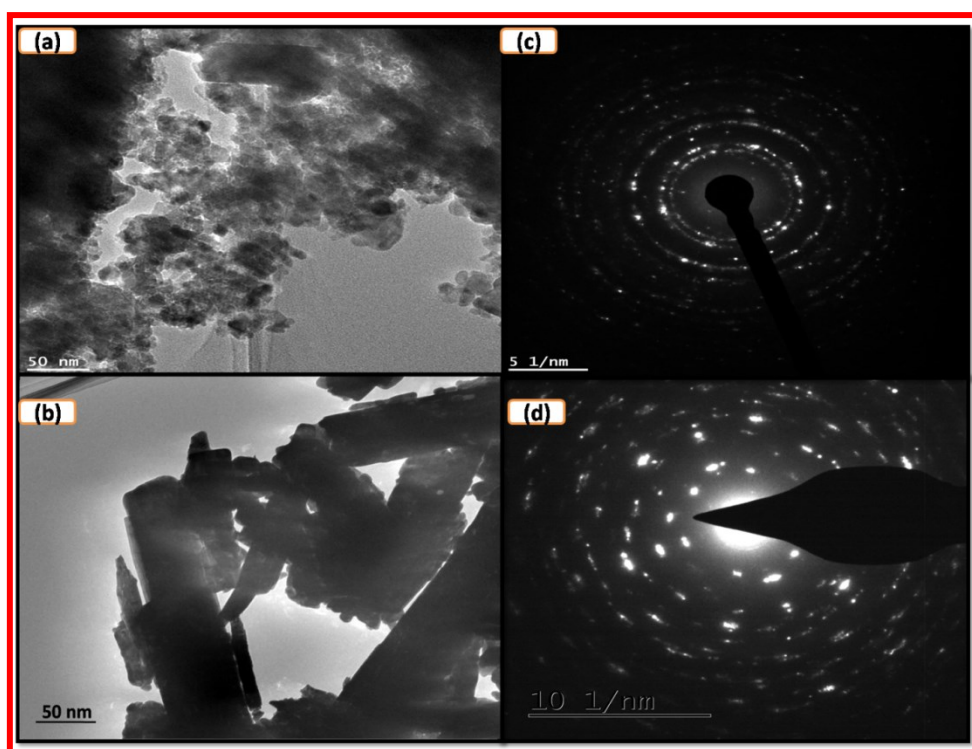


Fig. S3 TEM images of MnCo₂O₄ nanoparticles and NiCo₂O₄ nanorods at alkaline pH-10

(a,b) 50 nm scale range (c,d) SAED pattern

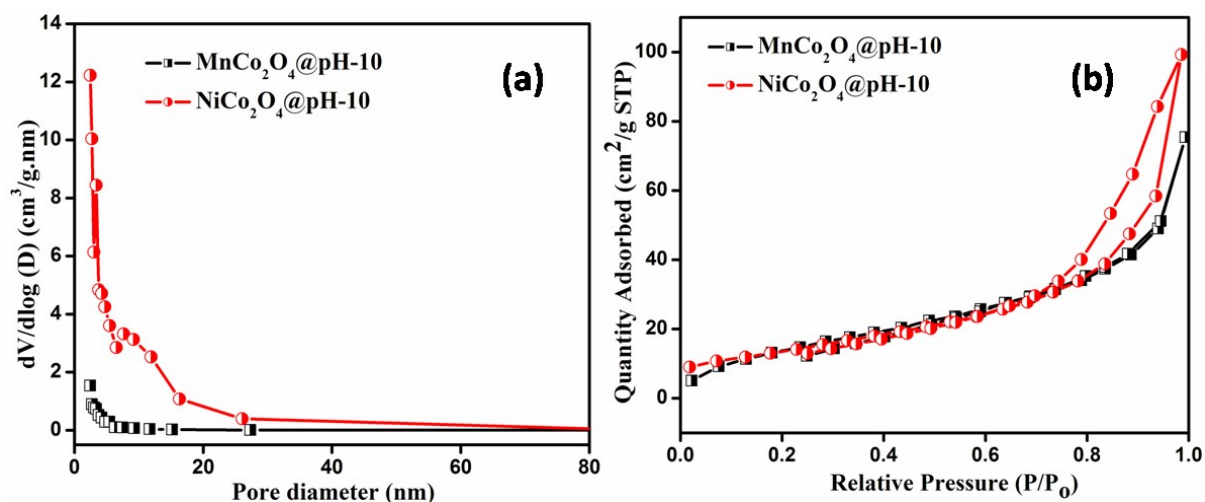


Fig. S4 (a) BJH pore size distribution curve (b) Full nitrogen sorption isotherms of MnCo_2O_4 and NiCo_2O_4 nanostructures synthesized from pH-10 condition respectively

Table S1 Specific surface area and pore volume of MnCo_2O_4 and NiCo_2O_4 nanostructures synthesized from pH-10

Sample name and code	Surface area (m^2/g)	Pore Volume (cc/g)	Pore size (nm)
MnCo_2O_4 (M3)	38.46	0.068	2.45
NiCo_2O_4 (N3)	55.72	0.158	11.90