Electronic Supplementary Material (ESI) for Sustainable Energy & Fuels.

Nano-interfaced tungsten oxide inwrought with layer double hydroxides for oxygen evolution reaction

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Electronic Supplementary Information

S.no	Title
S.1	EDAX analysis of as synthesized catalyst WO_3/CoFeLDH@NF along with analysis area and atomic percentage
S.2	EDAX analysis of CoFeLDH@NF along with analysis area and atomic percentage
S.3	FESEM images of CoFeLDH with elemental mapping, suggesting the clean sheet like morphology of LDHs functionality
S.4	FESEM images of WO_3@NF with elemental mapping, the nanospheres like morphology can be observed in images.
S.5	EDAX analysis of WO_3@NF along with analysis area and atomic percentage
S.6	XPS spectrum of O1s
S.7	ATR-FTIR plot indicating the functional groups present in the as synthesized catalyst.
S.8	LSV polarization curve comparison with varying W concentration
S.9	FESEM image of WO_3/CoFeLDH@NF after 120 hr long term stability, at different resolutions
S.10	XPS spectrum of WO_3/CoFeLDH@NF after 120 hr long term stability
S.11	Electrochemical measurement involving cyclic voltammetry polarization curves of CoFeLDH@NF at different scan rates. Along with TOF (s^{-1})

S.1 EDAX analysis of as synthesized catalyst WO_3/CoFeLDH@NF along with analysis area and atomic percentage.

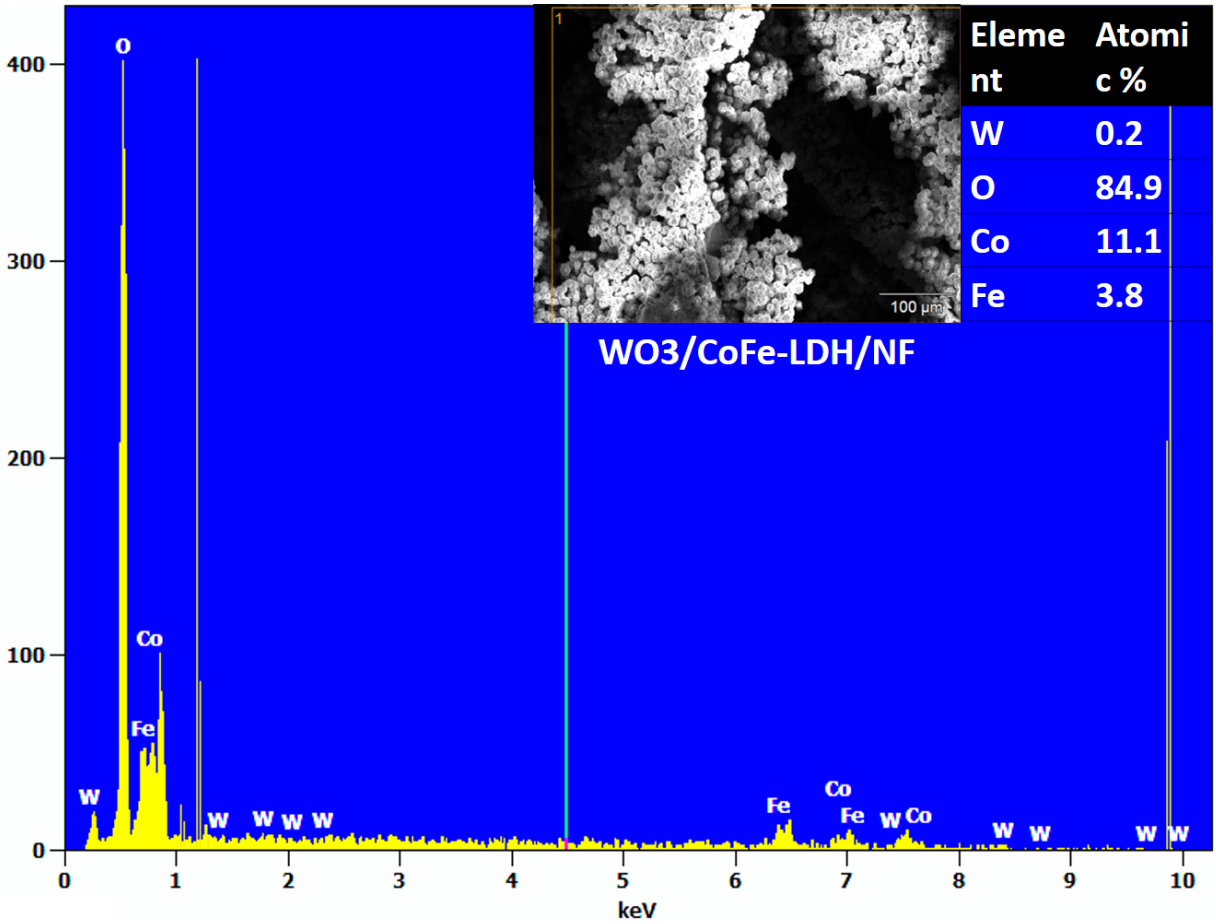


Figure S.1 EDAX spectrum of WO_3/CoFeLDH@NF

S.2 EDAX analysis of CoFeLDH@NF along with analysis area and atomic percentage

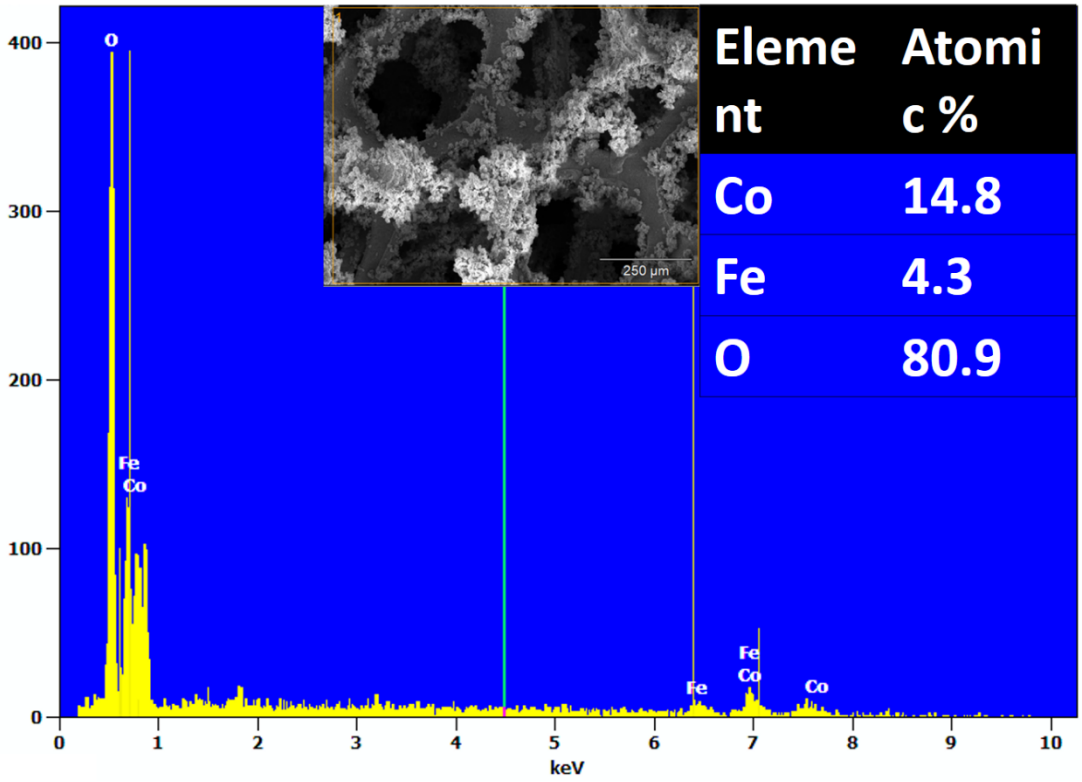


Figure S.2 EDAX spectrum of CoFeLDH@NF

S.3 FESEM images of CoFeLDH with elemental mapping, suggesting the clean sheet like morphology of LDHs functionality.

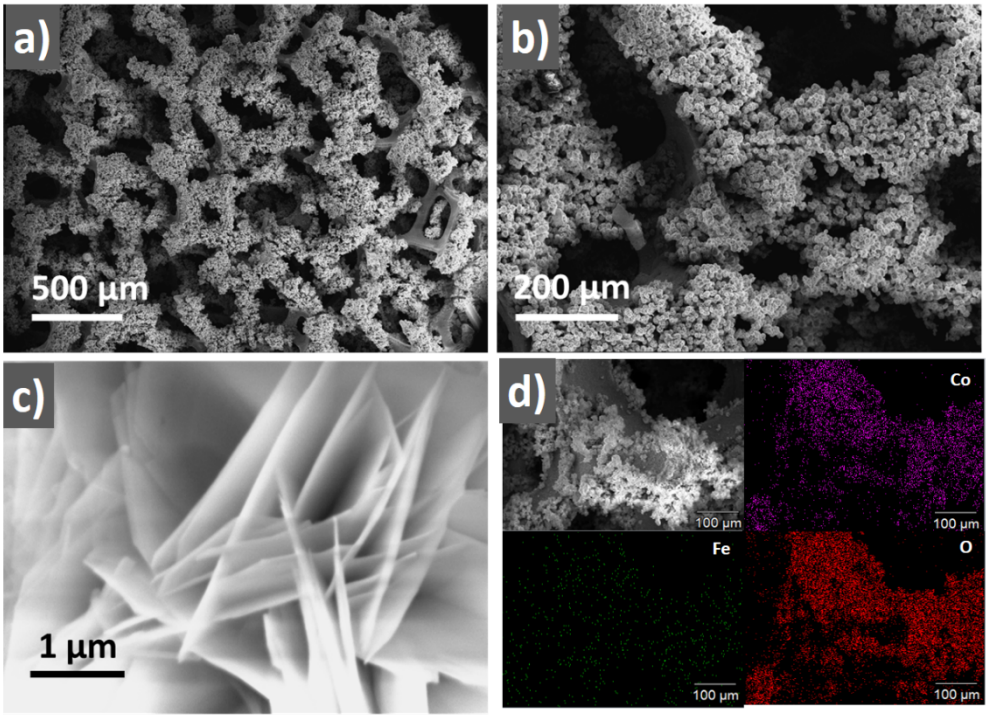


Figure S.3 FESEM image of CoFeLDH (a-c) at high and low resolutions d) elemental mapping of corresponding elements Co, Fe and O.

S.4 FESEM images of WO_3@NF with elemental mapping, the nanospheres like morphology can be observed in images.

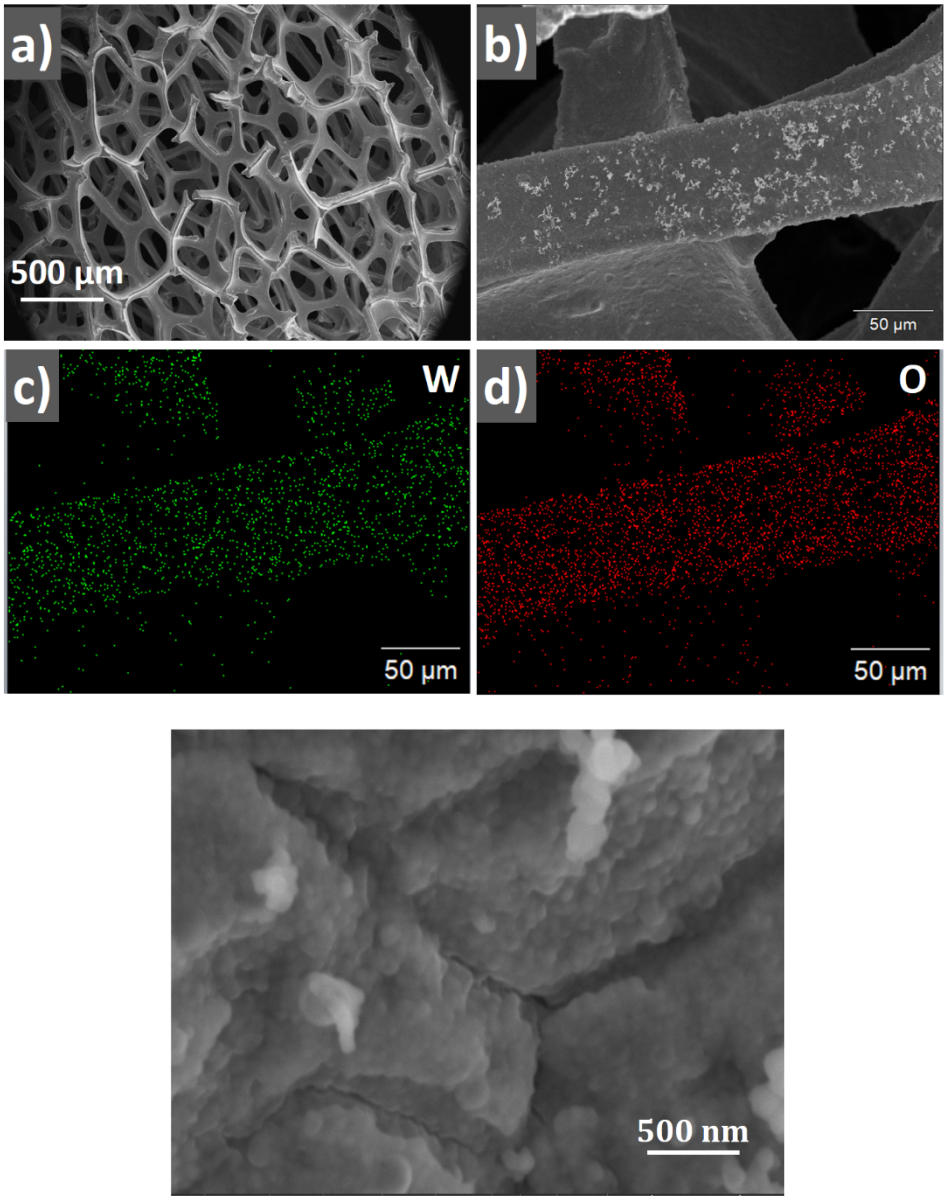


Figure S.4 FESEM image of WO_3@NF (a-b) at high and low resolutions c-d) elemental mapping of corresponding elements W and O. Bottom image suggesting the uniform distribution of nanospheres of WO_3.

S.5 EDAX analysis of WO_3@NF along with analysis area and atomic percentage

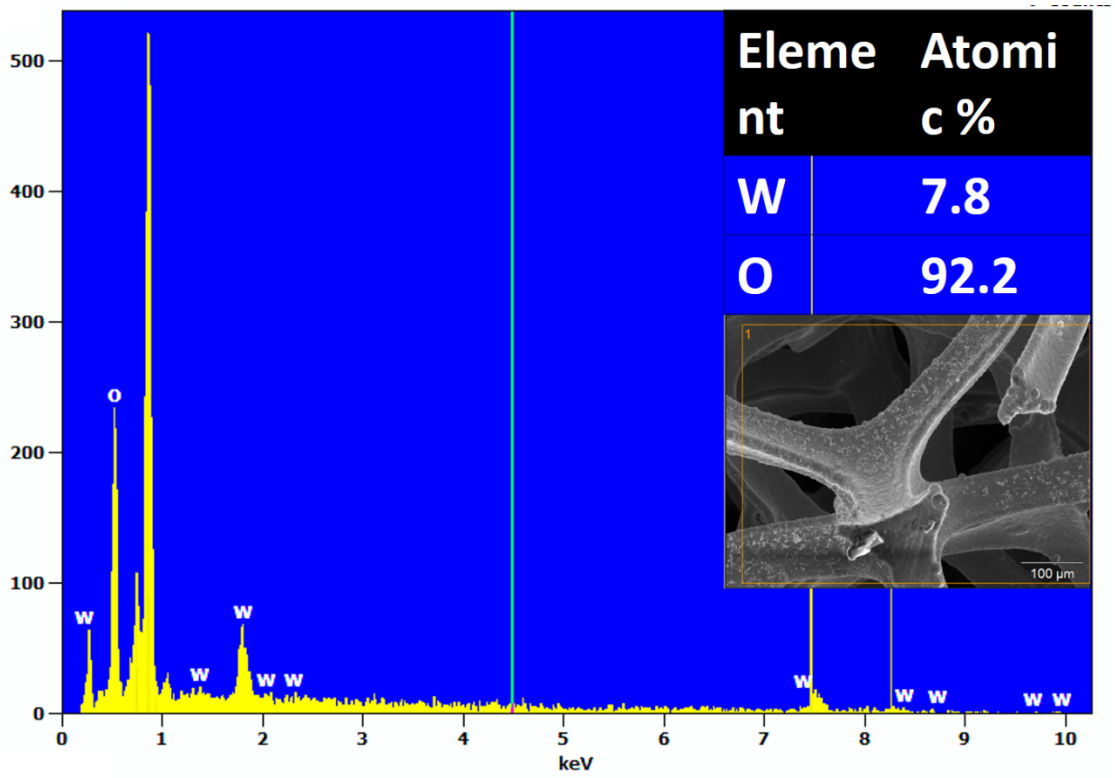


Figure S.5 EDAX spectrum of WO_3@NF

S.6 XPS spectrum of O1s: Suggesting the presence of M-O and M-OH entities are present in the catalyst.

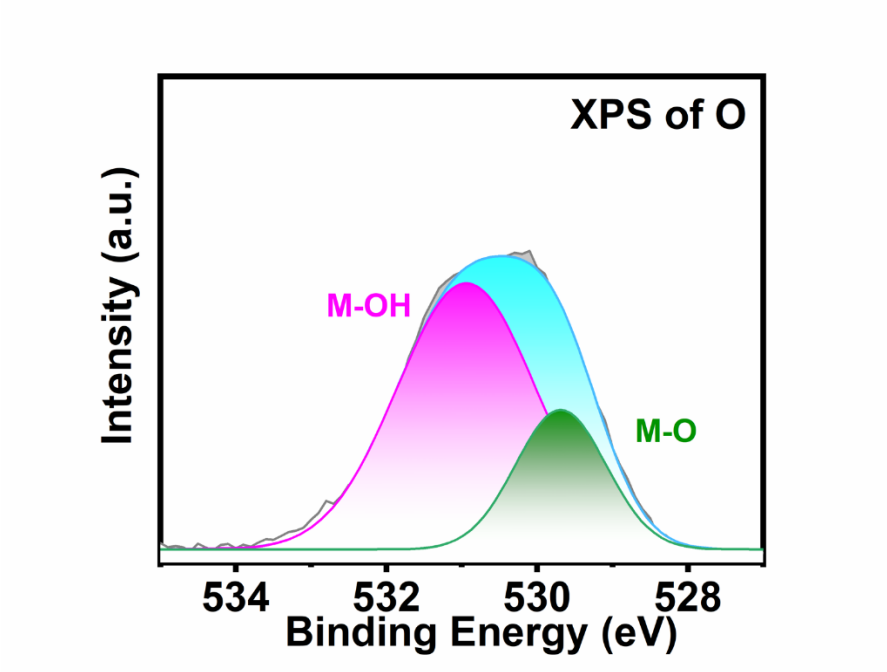


Figure S.6 XPS spectrum of O1s

S.7 ATR-FTIR plot indicating the functional groups present in the as synthesized catalyst.

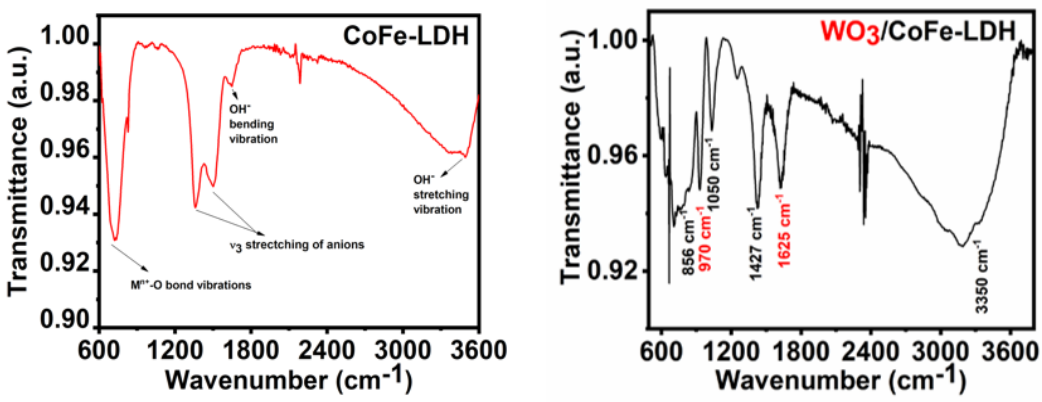


Figure S.7 ATR-FTIR functional group analysis of as synthesized catalyst

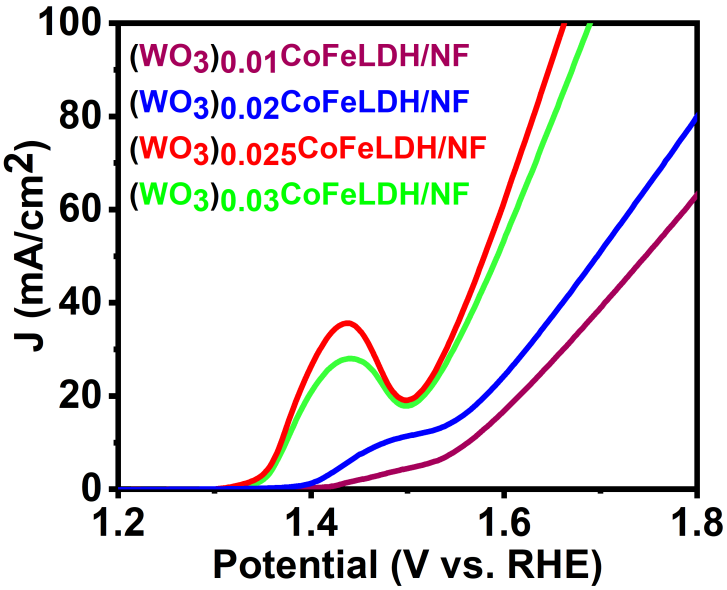


Figure S.8 LSV polarization curve comparison with varying W concentration.

S.9 FESEM image of WO_3/CoFeLDH@NF after 120 hr long term stability, at different resolutions

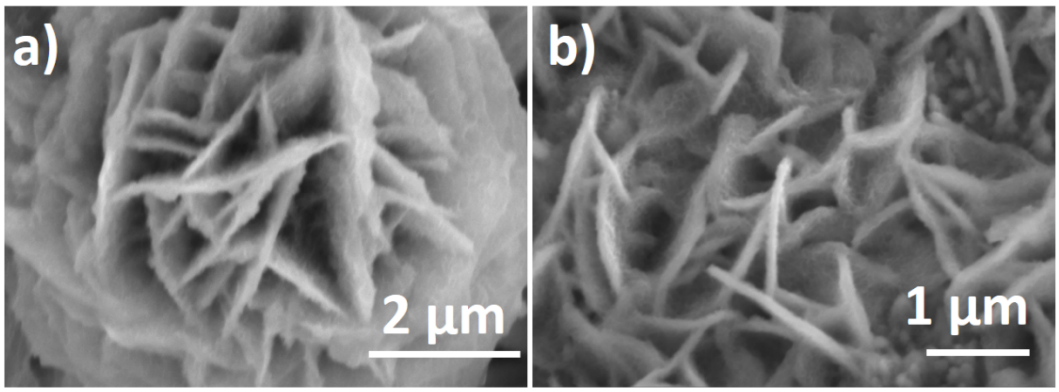
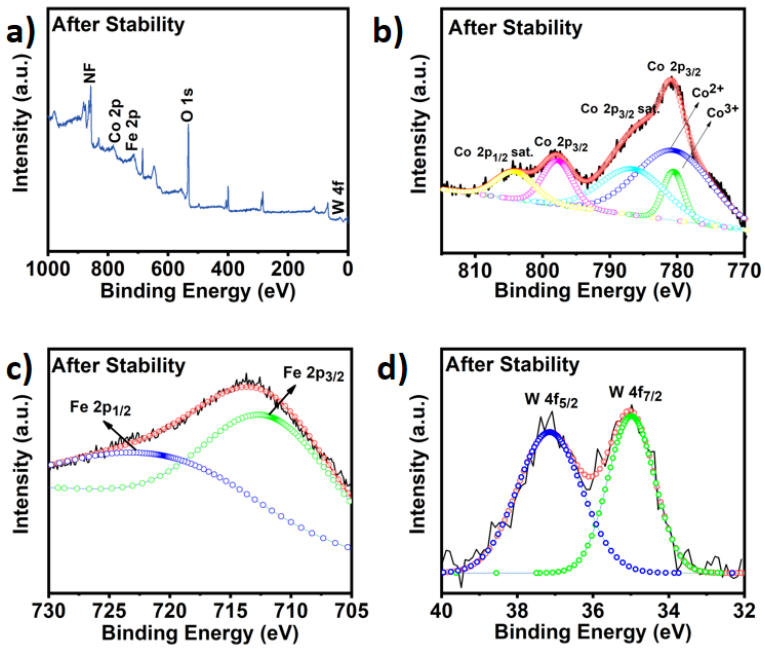


Figure S.9 (a-b) FESEM image of WO_3/CoFeLDH@NF after prolonged stability of 120 hr

S.10 XPS spectrum of WO_3/CoFeLDH@NF after 120 hr long term stability.



S.11 Electrochemical measurement involving cyclic voltammetry polarization curves of CoFeLDH@NF at different scan rates. Along with TOF (s^{-1})

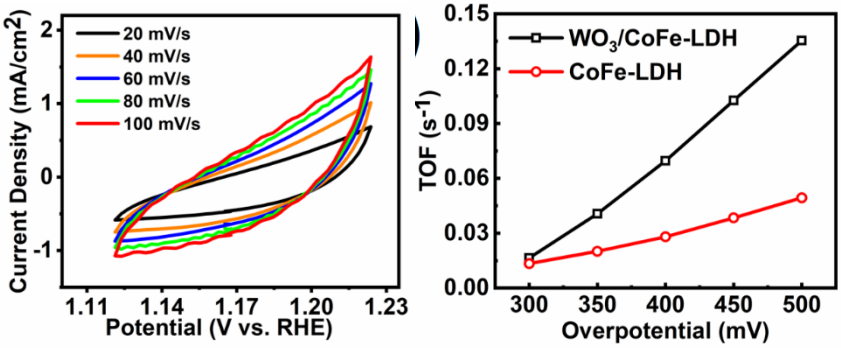


Figure S.11 CV polarization curve of CoFeLDH and TOF plot suggesting the TOF of WO_3/CoFeLDH@NF is better than CoFeLDH@NF.