

Supporting Information

An Investigation of the Interface between Transition Metal Oxides (MnO_x , FeO_x , CoO_x and NiO_x)/ MoO_3 Composite Electrocatalysts for Oxygen Evolution Reactions

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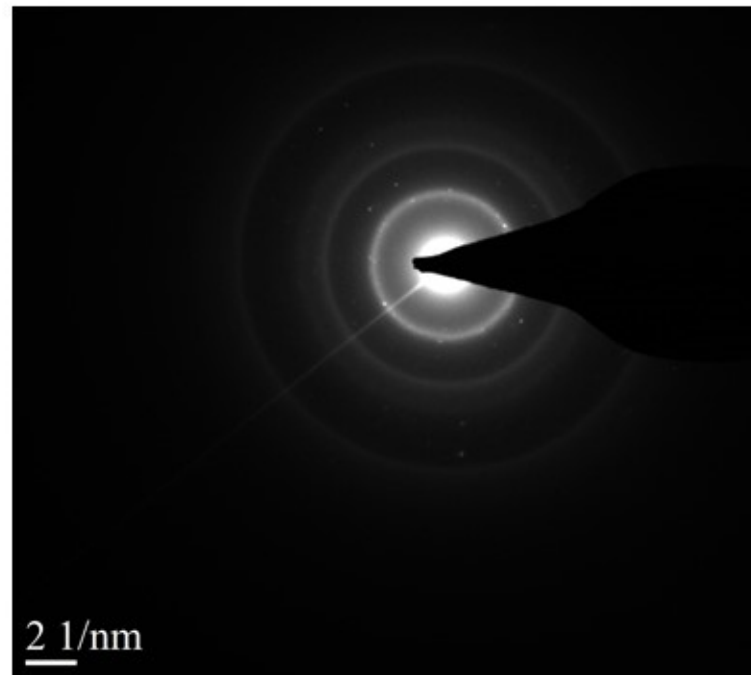
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Table S1: BET surface area, pore volume, and pore diameter of all active catalyst materials.

Samples	Surface area (m^2g^{-1})	Pore Volume (cm^3g^{-1})	Pore diameter (nm)
MnO _x -MoO ₃	37.42	0.1298	14.8
FeO _x -MoO ₃	47.04	0.1261	12.1
CoO _x -MoO ₃	57.05	0.1805	14.9
NiO _x -MoO ₃	45.44	0.1339	13.8

(a)



(b)

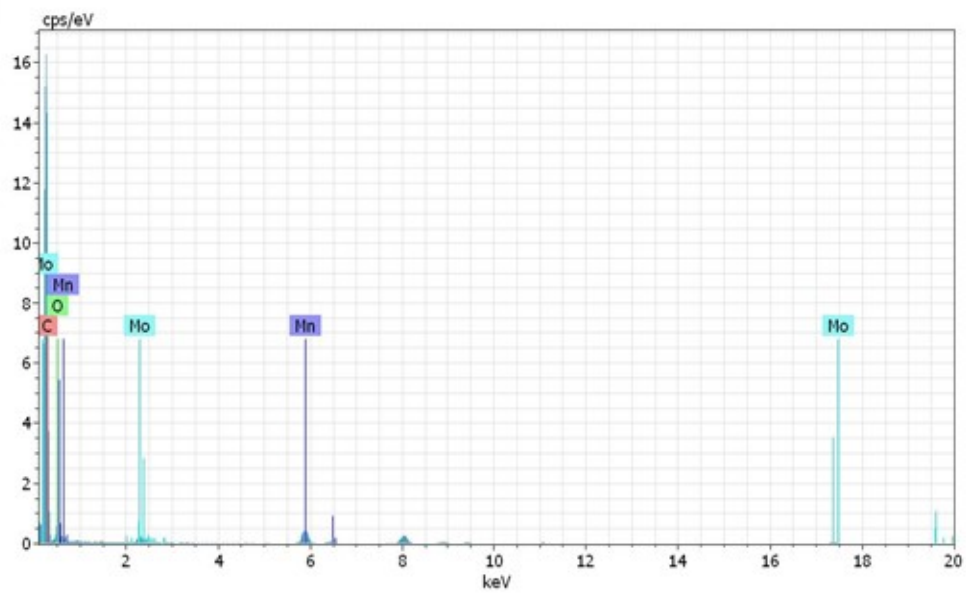


Figure S1: (a) SAED image of MnO_x-MoO₃ and (b) EDS pattern of MnO_x-MoO₃

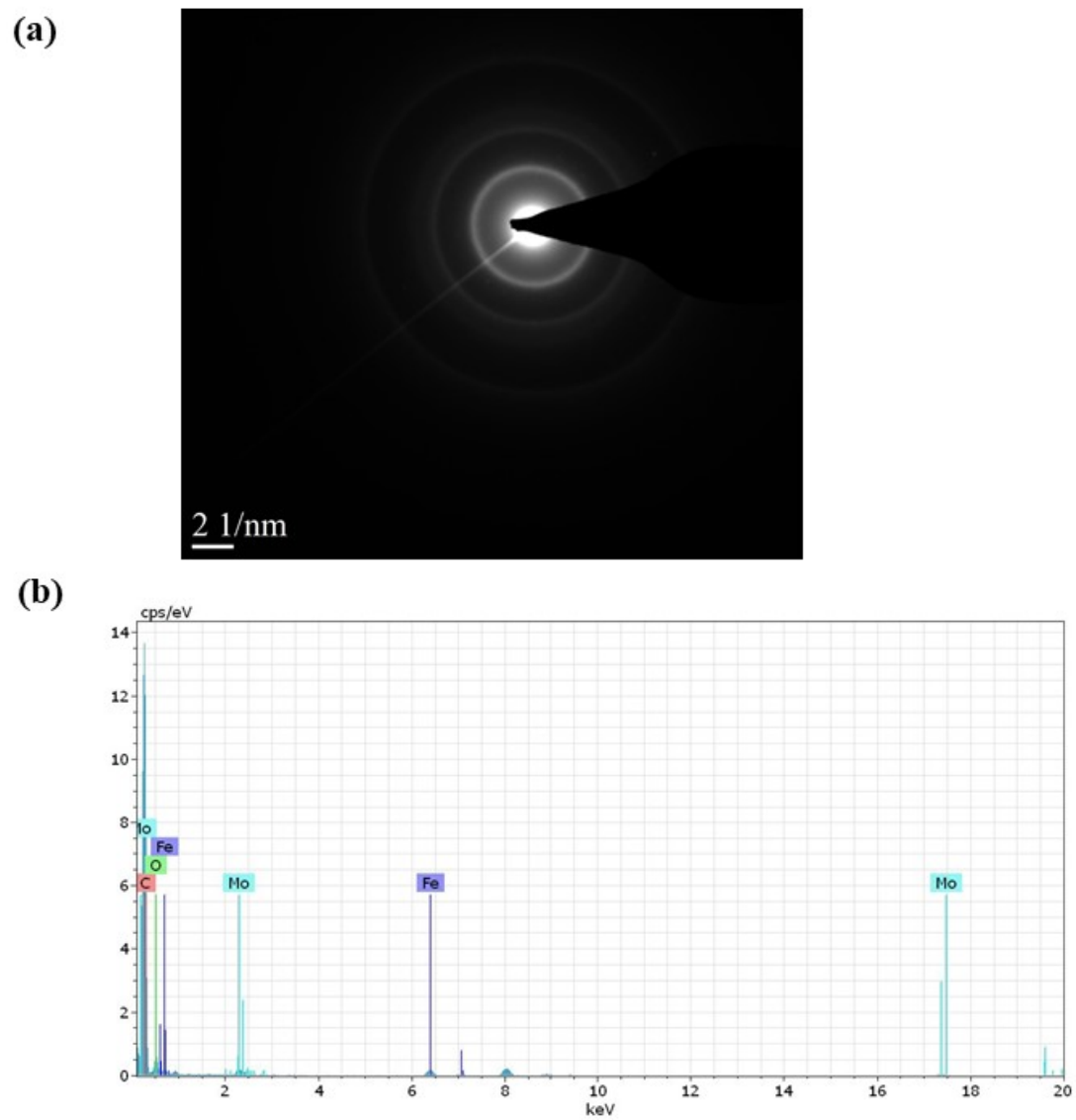


Figure S2: (a) SAED image of FeO_x-MoO₃ and (b) EDS pattern of FeO_x-MoO₃

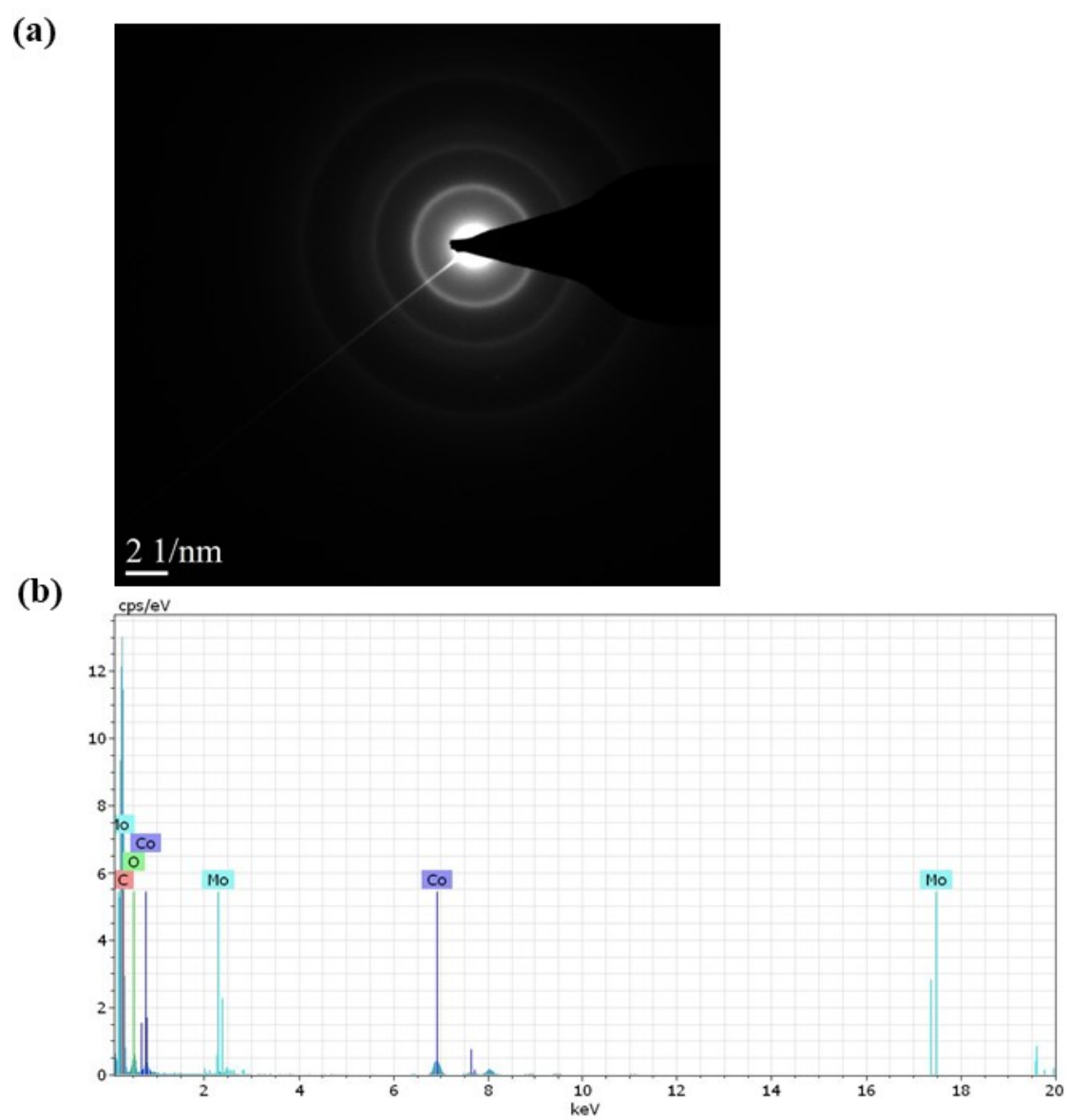


Figure S3: (a) SAED image of $\text{CoO}_x\text{-MoO}_3$ and (b) EDS pattern of $\text{CoO}_x\text{-MoO}_3$

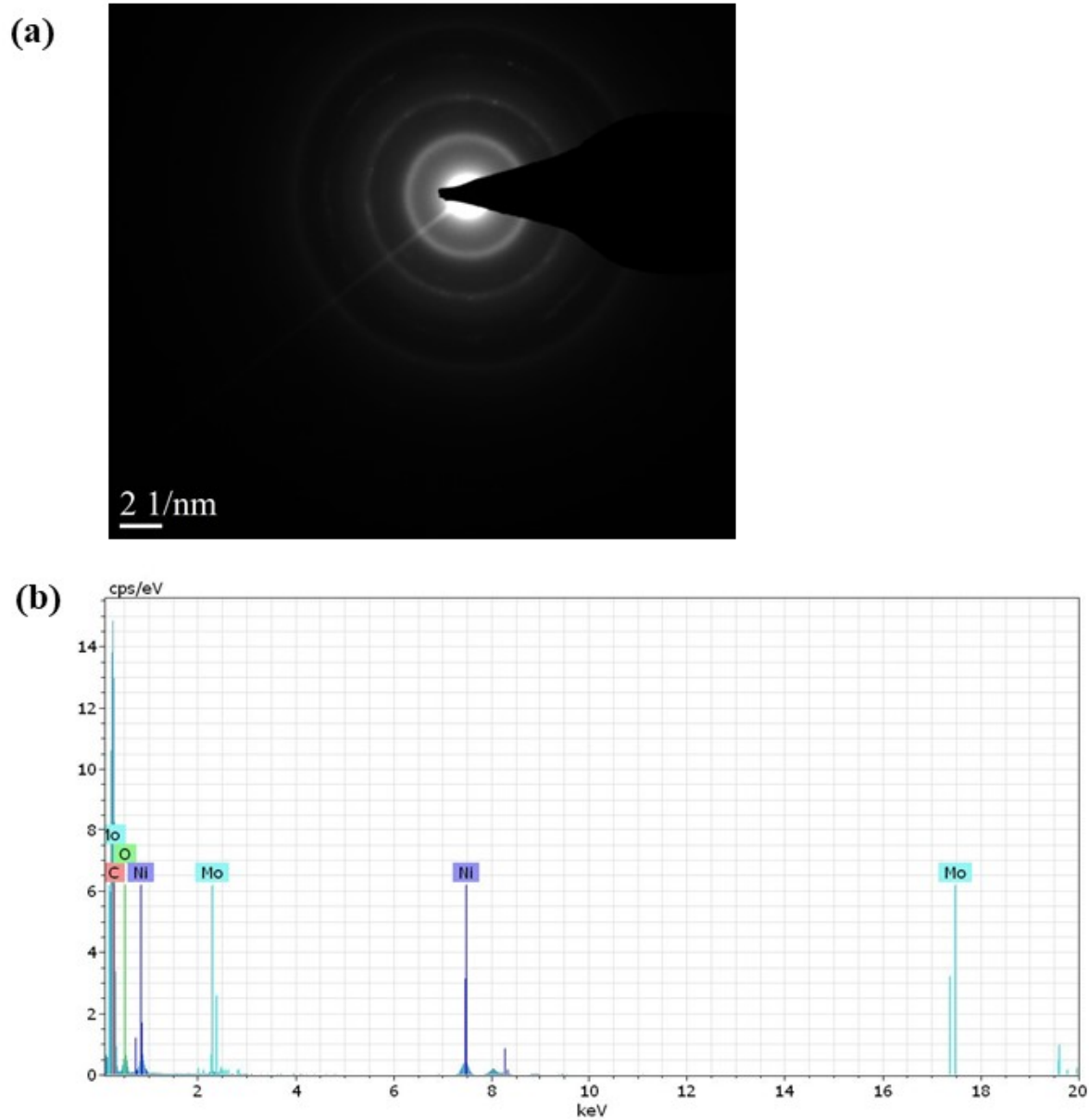


Figure S4: (a) SAED image of NiO_x-MoO₃ and (b) EDS pattern of NiO_x-MoO₃

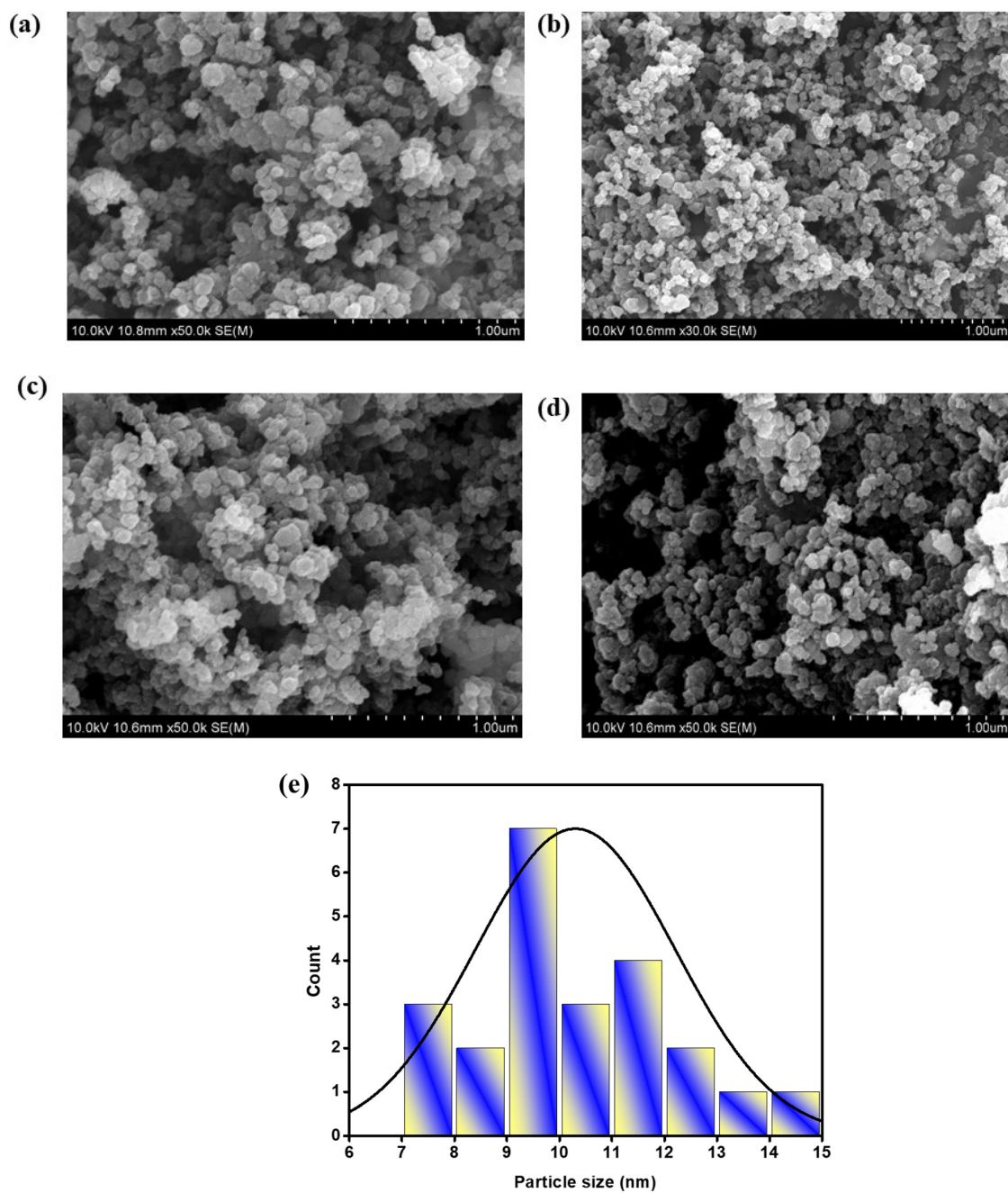


Figure S5: FE-SEM image of (a) MnO_x-MoO₃, (b) FeO_x-MoO₃, (c) CoO_x-MoO₃, (d) NiO_x-MoO₃ of active catalysts, (e) Particle size distribution histogram.

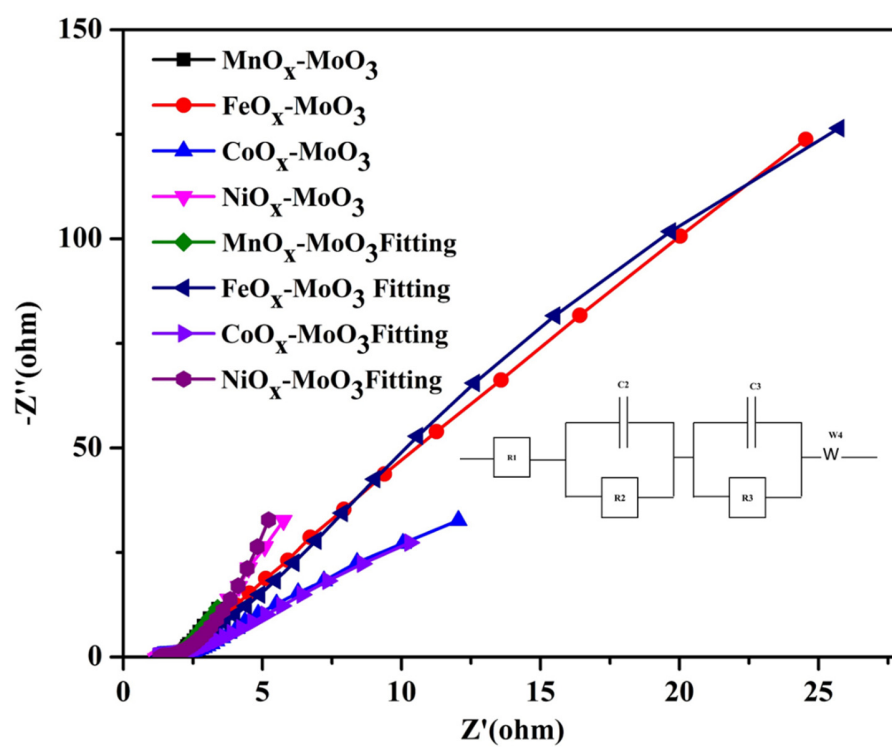


Figure S6 : Electrochemical impedance spectra with fitting of all active catalysts.