

Cobalt metal-organic frameworks microcrystalline particles with strong electrocatalytic activity: Amines controlled morphology and OER activity

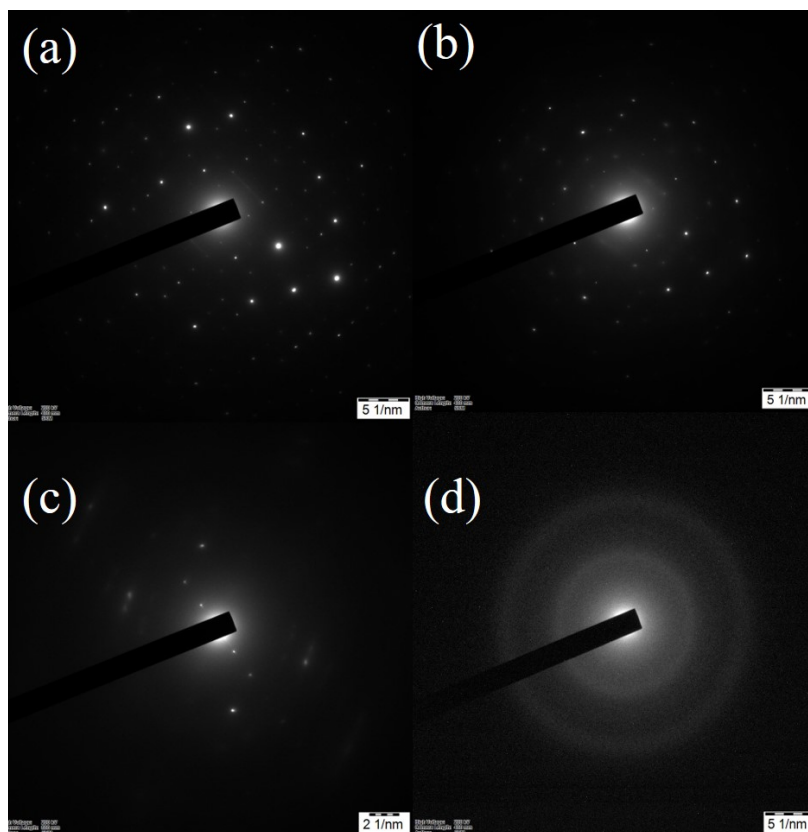


Figure S1. HR-TEM SAED pattern of (a) CoTPA-D, (b) CoTPA-B, (c) CoTPA-H and (d) CoTPA-T.

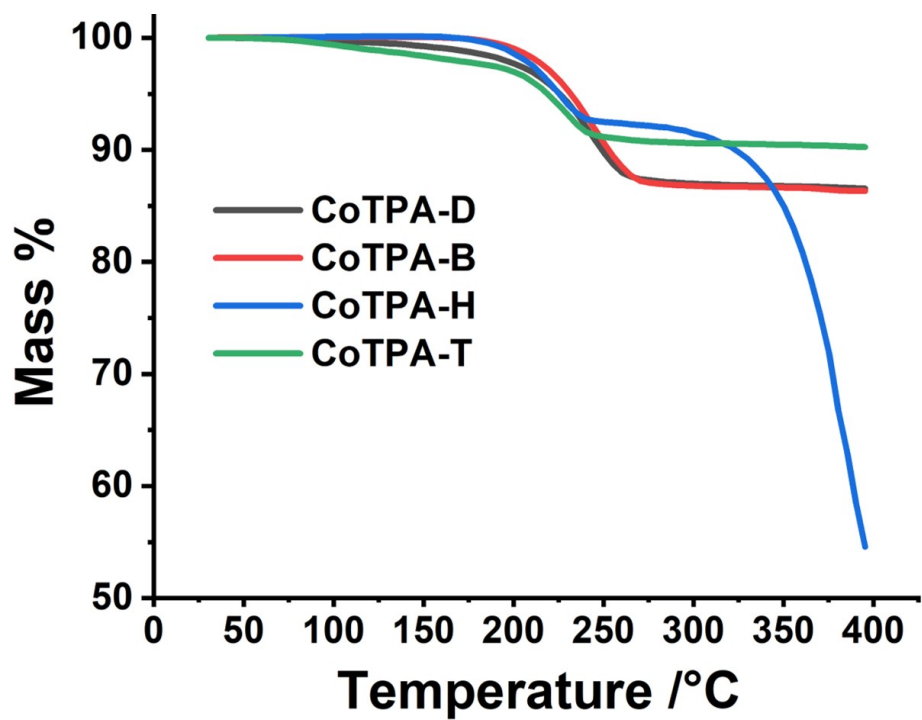


Figure S2. Thermogravimetric analysis of Co MOFs.

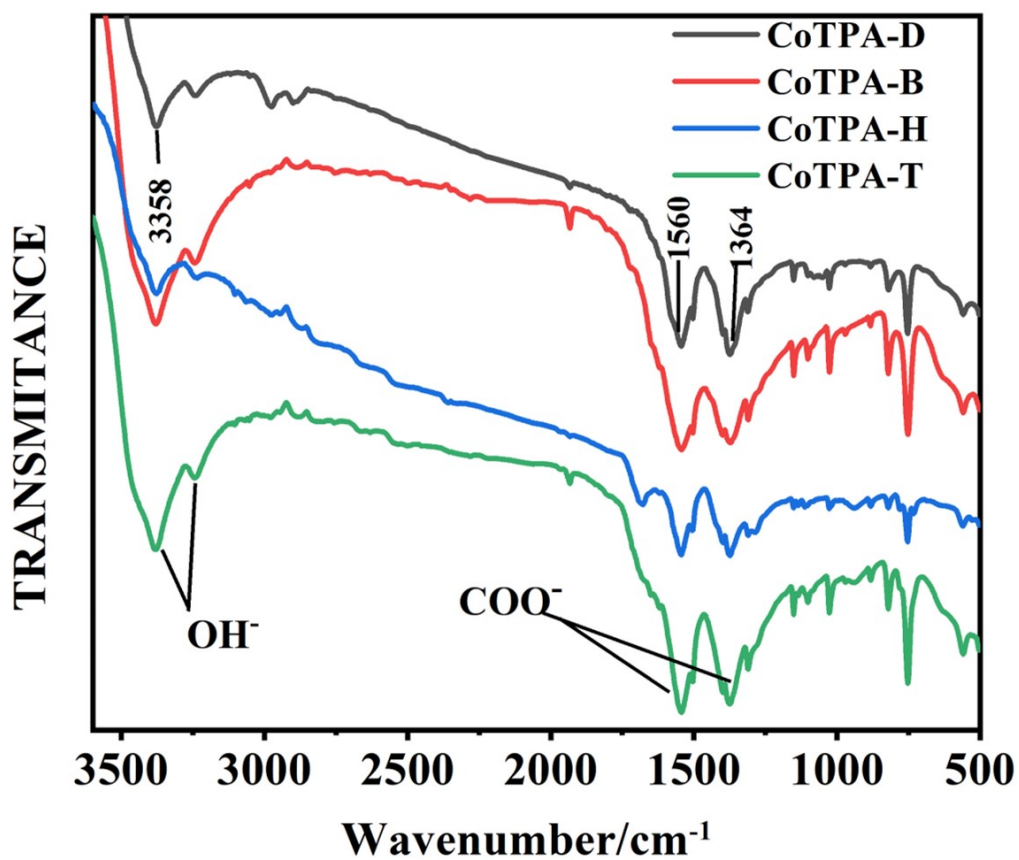


Figure S3. FTIR spectra of Co MOFs.

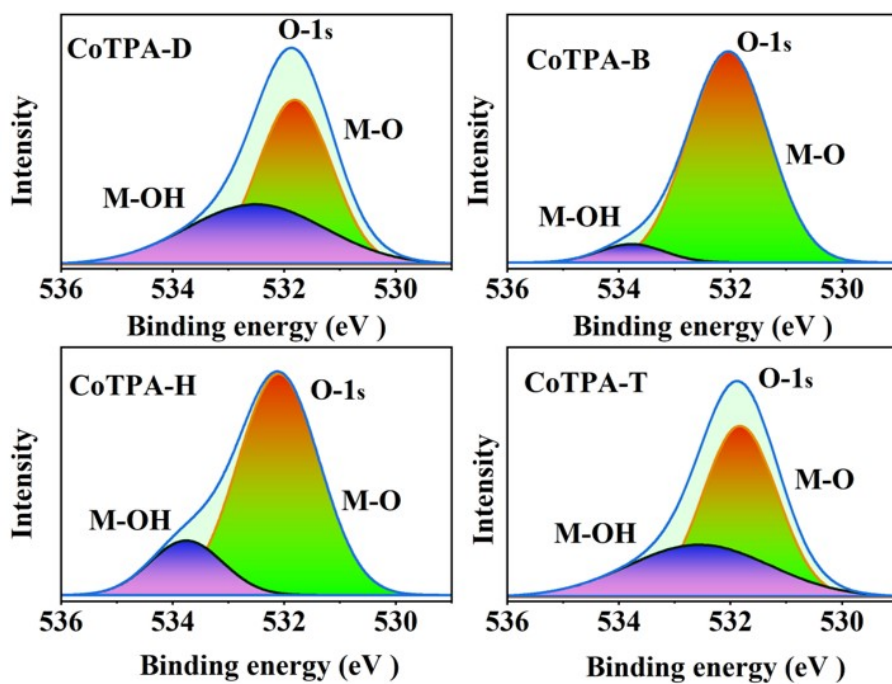


Figure S4. High-resolution O 1s XPS spectra of CoTPA-D, CoTPA-B, CoTPA-H and CoTPA-T.

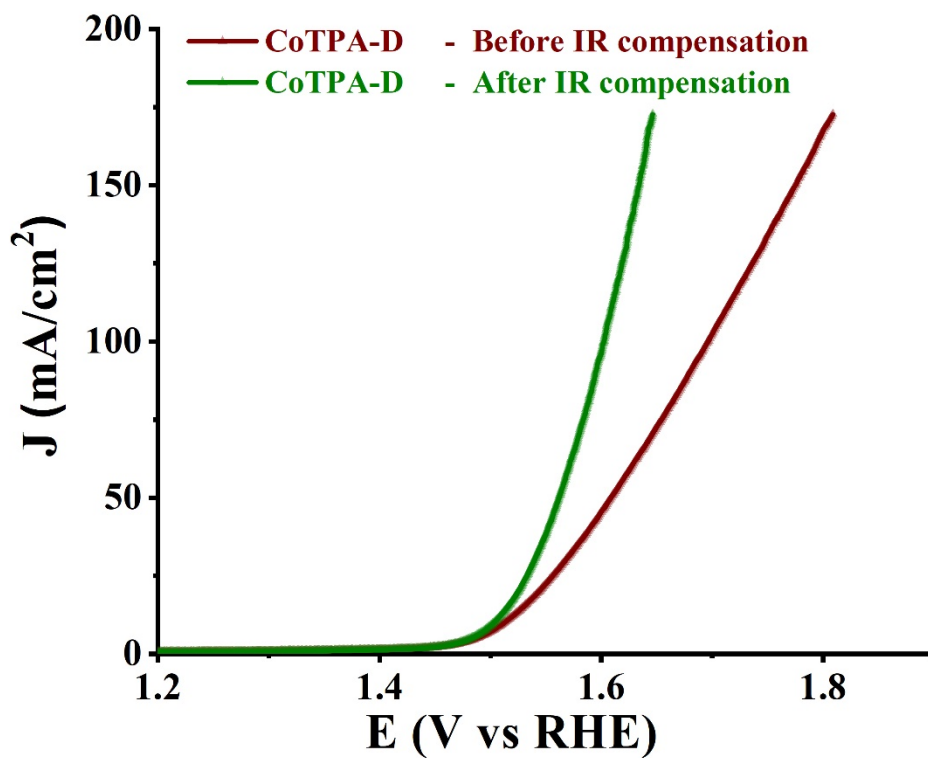


Figure S5. OER polarization curves of CoTPA-D before and after iR correction (100%).

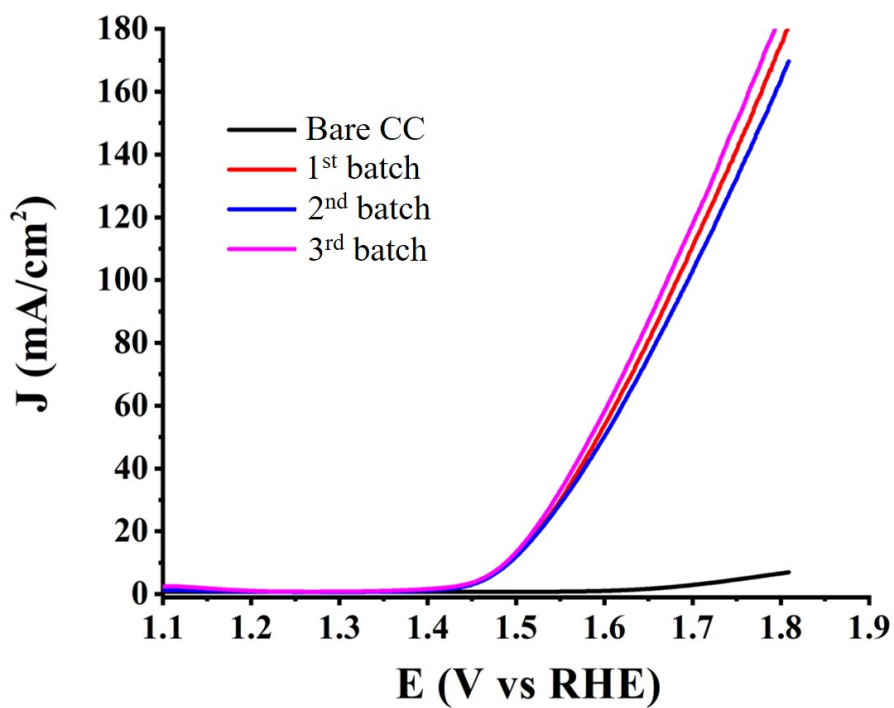


Figure S6. OER reproducibility studies of CoTPA-D.

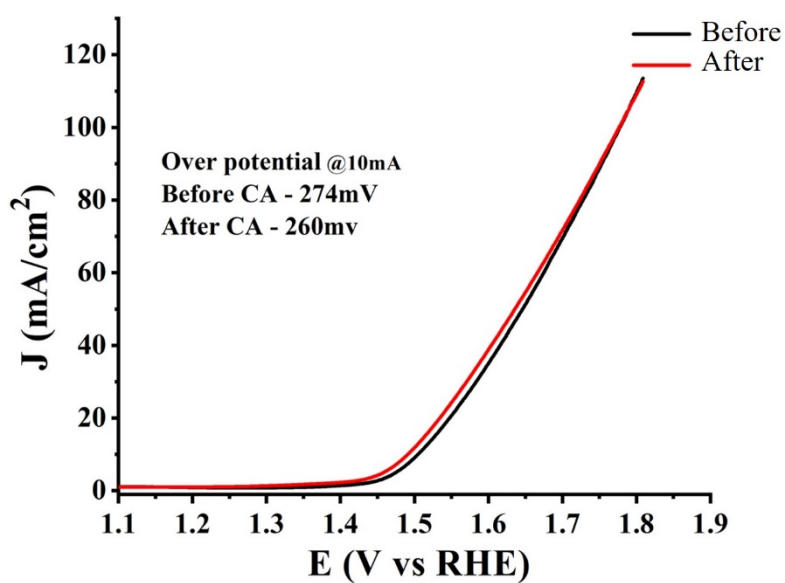


Figure S7. LSV curve of CoTPA-D before and after chronoamperometry studies for 62 h.

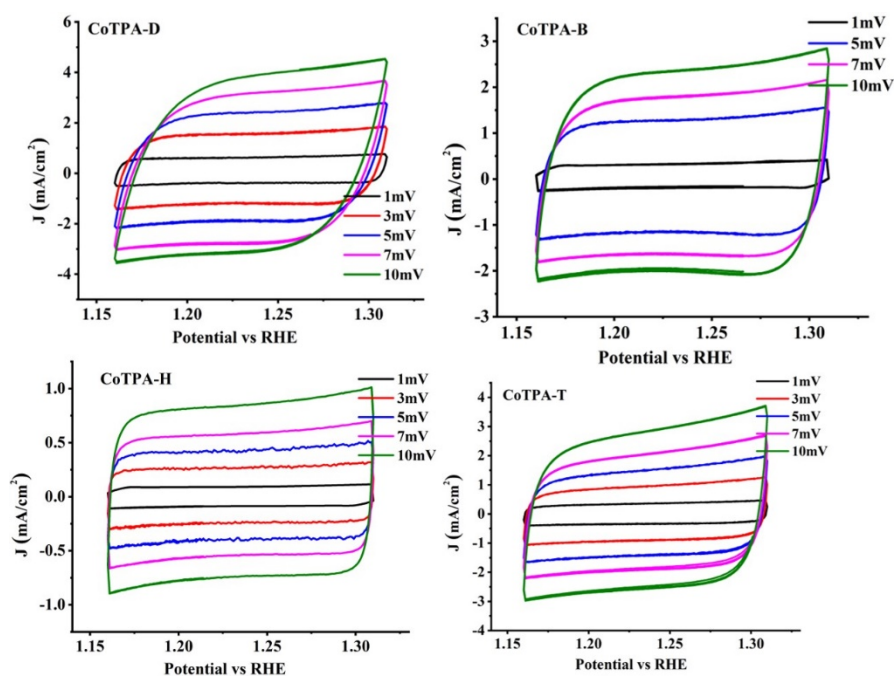


Figure S8. Double layer capacitance of Co MOFs.

Table S1. Co MOFs double layer capacitance, ECSA and roughness factor.

Sample code	Double layer capacitance (mF/cm ²)	ECSA (cm ²)	Roughness factor
CoTPA-D	0.3624	9.06	90.6
CoTPA-B	0.2233	5.58	55.8
CoTPA-H	0.082	2.05	20.5
CoTPA-T	0.271	6.77	67.7