Supporting information

Promoting Electrocatalytic Water Oxidation via crafting Co-O-W bridge bonds on Amorphous core/shell NiCo-ZIF@POM catalyst

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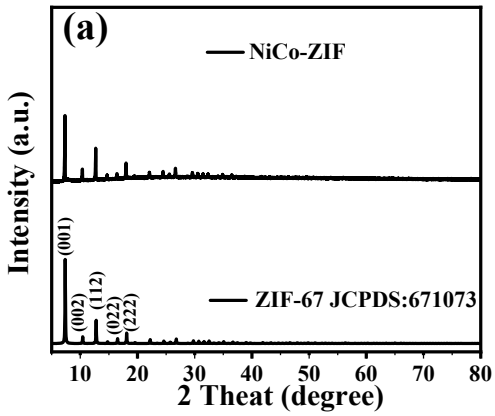


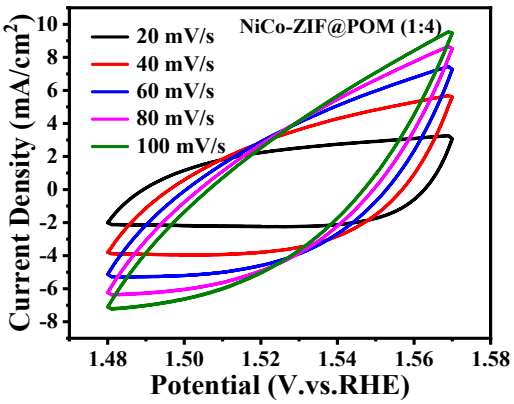
Fig. S1 (a) XRD pattern of catalyst NiCo-ZIF and stimulate ZIF-67.

Fig. S2 N_2 sorption isotherms of (a) NiCo-ZIF and (b) NiCo-ZIF@POM (1:3).

Fig. S3. (a) N 1s, (b) Ni 2p of NiCo-ZIF@POM (1:3).

Table S1 Catalyst based ZIF-67, reaction condition, and OER performances.

Catalysts	Electrolyte	Substrate	η_{10} (mV)	Ref.
F-N/FeCoNC900	1.0 M KOH	GC	273	1
BSCF/ZIF(67)-650	1.0 M KOH	CP	285	2
Co-Zn-CNTs-20	1.0 M KOH	GC	308	3
Co_3O_4@CoP/NS-RGO	1.0 M KOH	GC	288	4
NiFeCo-LDH/CF	1.0 M KOH	CF	249	5
CoOOH@Co–FeOOH DSAs	1.0 M KOH	NF	224	6
FeeCoS_2/CNT CPs	1.0 M KOH	CP	293	7
CoMoOS	1.0 M KOH	GC	281	8



IrOx@Ni/Co-ZIF-67	1.0 M KOH	GC	251	9
$NiMoO_4$-ZIF	1.0 M KOH	CC	235	10

Fig. S4 (a) LSV (b) Tafel slopes (c) EIS and (d) ECSA of NiCo-ZIF@POM (1:1), NiCo-ZIF@POM (1:2), NiCo-ZIF@POM (1:3), and NiCo-ZIF@POM (1:4).

Fig. S5 (a)-(e) are ECSA of NiCo-ZIF, NiCo-ZIF@POM (1:1), NiCo-ZIF@POM (1:2), NiCo-ZIF@POM (1:3), and NiCo-ZIF@POM (1:4).

(e)

Fig. S6 (a) XRD, (b) XPS, and (c) TEM of NiCo-ZIF@POM (1:3) before and after the OER measurement.

Fig. S7 (a) The geometric configuration of NiCo-ZIF; (b) The mechanism cycle diagram of OER on NiCo-ZIF in the alkaline media.

Refrences

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