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## **Supporting Information**

Activating hierarchically hortensia-like CoAl layered double hydroxide by alkaline etching and anion modulation strategy for efficient oxygen evolution reaction

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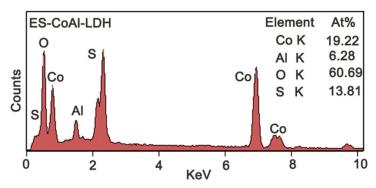


Figure S1 EDX spectrum of ES-CoAl-LDH.

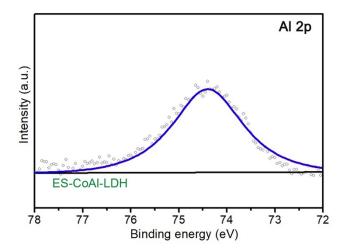


Figure S2 High resolution XPS spectra of Al 2p peak of ES-CoAl-LDH.

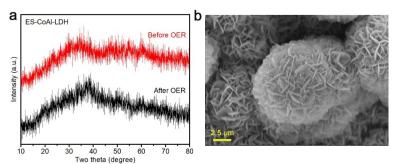


Figure S3 (a) XRD pattern (b) SEM image of ES-CoAl-LDH after Chronopotentiometric measurements test over 26 h.

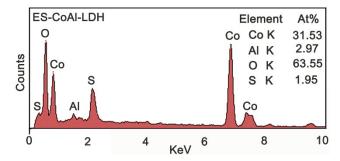


Figure S4 EDX spectrum of ES-CoAl-LDH after Chronopotentiometric measurements test over 26 h.

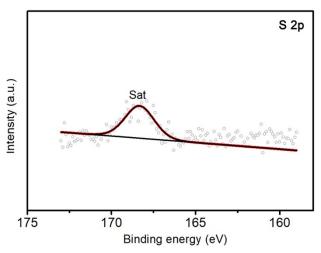


Figure S5 XPS spectrum of S 2p of ES-CoAl-LDH after Chronopotentiometric measurements test over 26 h.

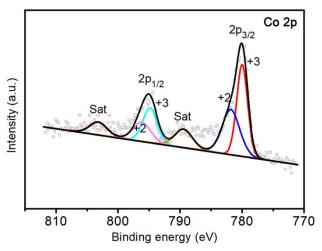


Figure S6 XPS spectrum of Co 2p of ES-CoAl-LDH after Chronopotentiometric measurements test over 26 h.

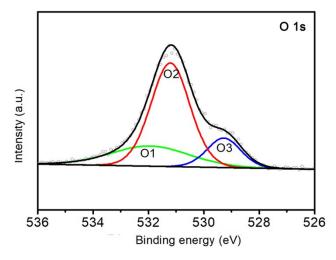


Figure S7 XPS spectrum of O 1s of ES-CoAl-LDH after Chronopotentiometric measurements test

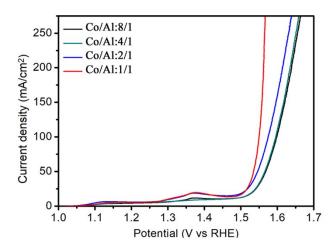


Figure S8 Polarization curves of ES-CoAl-LDH prepared with different Co/Al ratio.

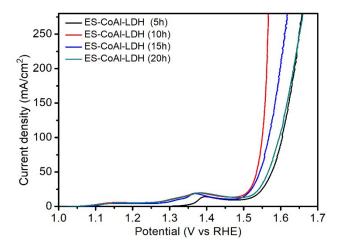


Figure S9 Polarization curves of ES-CoAl-LDH after KOH etching for different time.