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## ACCEPTED MANUSCRIPT

# Electrodeposition of cobalt-sulfide nanosheets film as an efficient electrocatalyst for oxygen evolution reaction

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#### **Abstract**

In this communication, we report the development of cobalt-sulfide nanosheets film on Ti mesh (Co-S/Ti mesh) via electrodeposition as a novel oxygen evolution anode in basic media. Electrochemical experiments suggest that this Co-S/Ti mesh electrode exhibits high catalytic activity and good stability. It needs overpotential of 361 mV to drive current density of 10 mA cm<sup>-2</sup> and its catalytic activity is maintained for at least 20 h.

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