



## Supplementary Materials FeS<sub>2</sub>/C Nanowires as an Effective Catalyst for Oxygen Evolution Reaction by Electrolytic Water Splitting

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Received: 10 September 2019; Accepted: 14 October 2019; Published: date



Figure S1. (a) SEM and (b) TEM images of precursor without the addition of PVP.



**Figure S2.** (a) FTIR spectrum curves of the precursor and FeS<sub>2</sub>/C nanowires, (b) enlarged FTIR spectrum curves of FeS<sub>2</sub>/C nanowires.



Figure S3. (a) N2 adsorption-desorption isotherm and (b) pore diameter distribution of FeS2/C nanowires.



Figure S4. CV curves of FeS2/C nanowires in 1 M KOH at different scan rate of 10, 50 and 100 mV/s.



Figure S5. Nyquist plots of the FeS<sub>2</sub>/C nanowires before and after OER test in 1.0M KOH.

**Table S1.** The comparison of catalytic performances for OER in 1 M KOH between the as-prepared FeS<sub>2</sub>/C nanowires and other materials reported in the literature.

	Overpotential@10mA/cm2 (mV)	Tafel Slope (mV/dec)	Reference
FeS <sub>2</sub> /C nanowires	291	65.6	This work
Ni/MoxC	328	74	[39]
Fe <sub>3</sub> C@NCNT/NPC	339	62	[40]
γ-MoC/Ni@NC	310	62.7	[41]
Fe3C@NG-800	361	62	[42]
FeNiS <sub>2</sub> NSs	310	46	[43]
CP/CTs/Co-S	306	72	[44]



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