Supporting Information

Self-Supported Fabrication and Electrochemical Water Splitting Study of Transition-Metal Sulphides Nanostructured Electrodes

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Table S1. Equivalent circuit parameters obtained by fitting of EIS experimental data from **Fig. 7**.

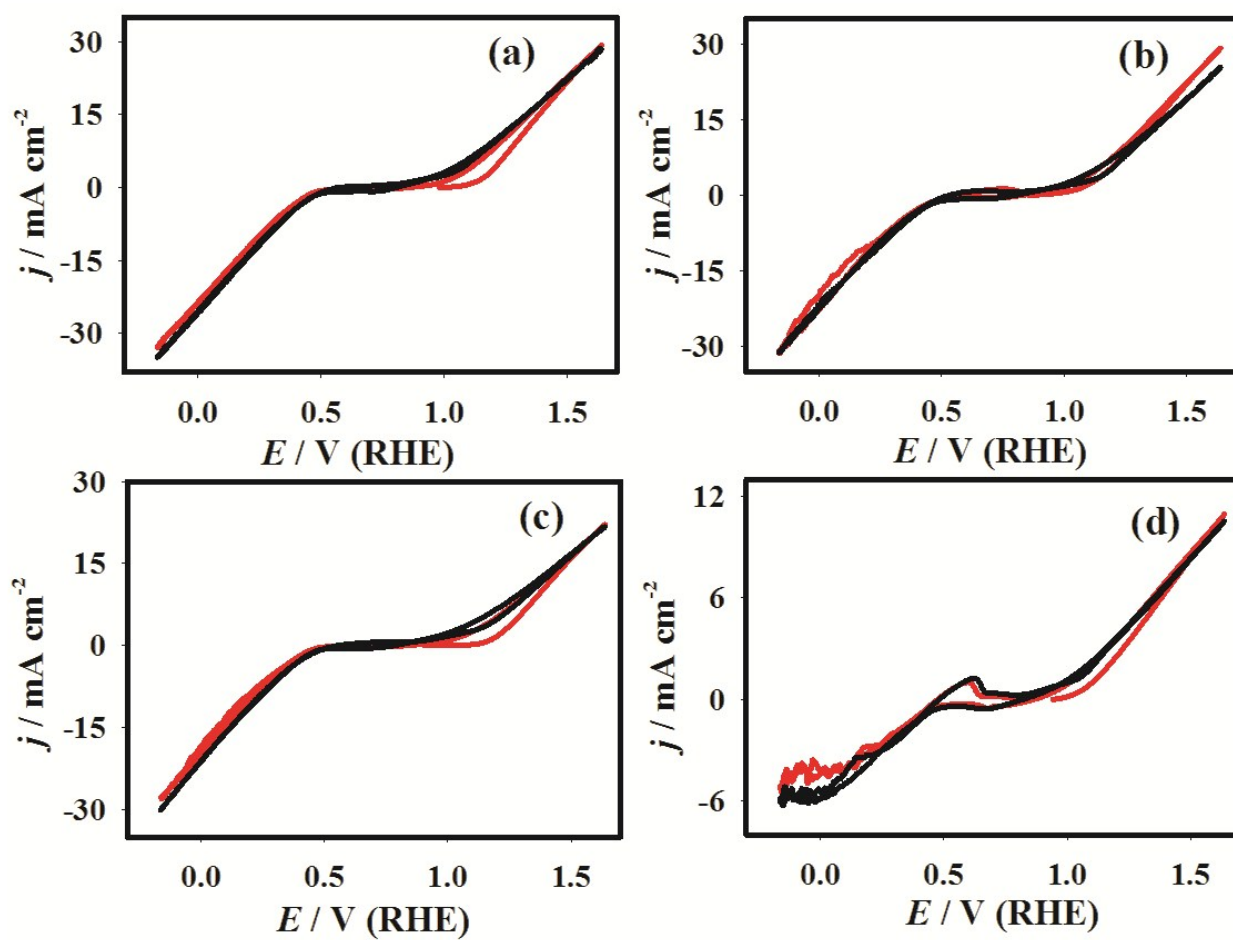| Electrodes	E_{app} / V	R_s [Ω cm^2]	R_p [Ω cm^2]	Q [mF cm^2]
FeS	1.59	6.31	3.53	8.6
	1.65	6.32	2.13	11.9
	1.69	6.38	1.42	9.1
CoS	1.59	5.64	11.63	11.6
	1.65	5.66	4.32	12.5
	1.69	5.65	2.72	15.6
NiS	1.59	5.62	8.49	16.3
	1.65	5.58	4.08	18.2
	1.69	5.59	3.06	23.6
CuS	1.59	5.46	14.3	6.9
	1.65	5.43	6.04	7.9
	1.69	5.42	4.44	10.5

Fig. S1. CV curves of the NiF electrodes recorded for 5.0 mM Fe salt precursor (a), Co salt (b), Ni salt (c) and Cu salt (d) precursors in 0.75 M thiourea + 0.1 M nitric acid at a scan rate of 5 mV s^{-1}.
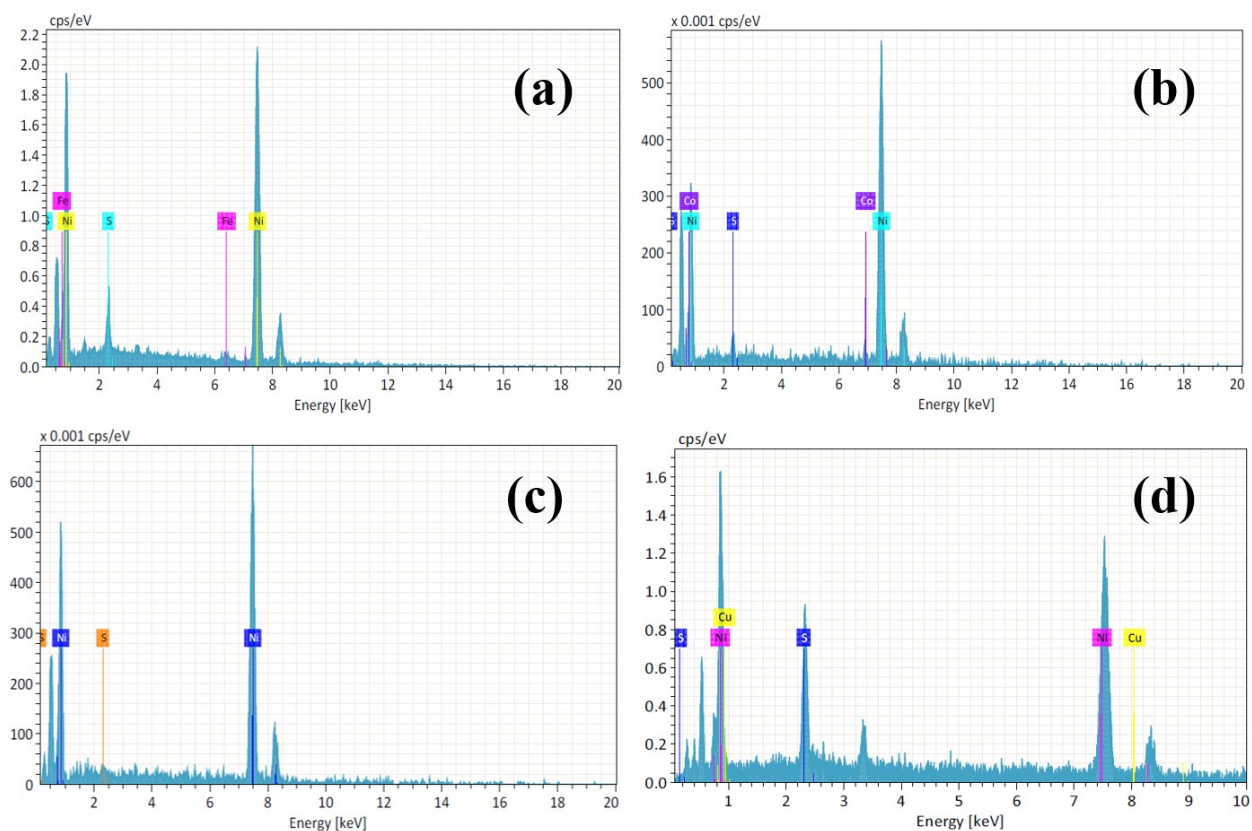
Fig. S2. Obtained EDX spectrum of a) FeS, b) CoS, c) NiS and d) CuS electrodes.
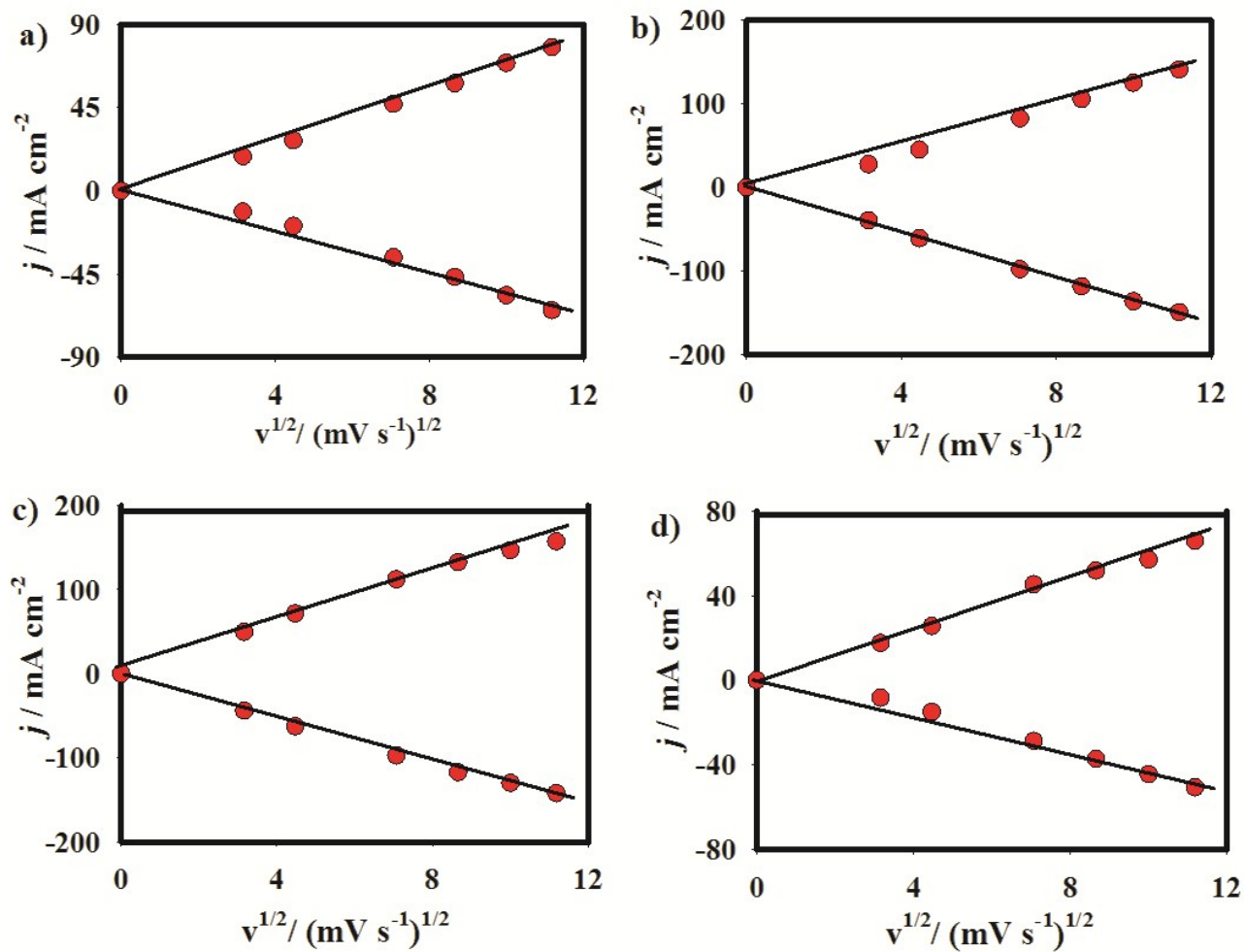
Fig. S3. Anodic and cathodic peak current densities of the a) FeS, b) CoS, c) NiS and d) CuS was obtained from the CV curves and plotted as a function of aquare root of the scan rates.
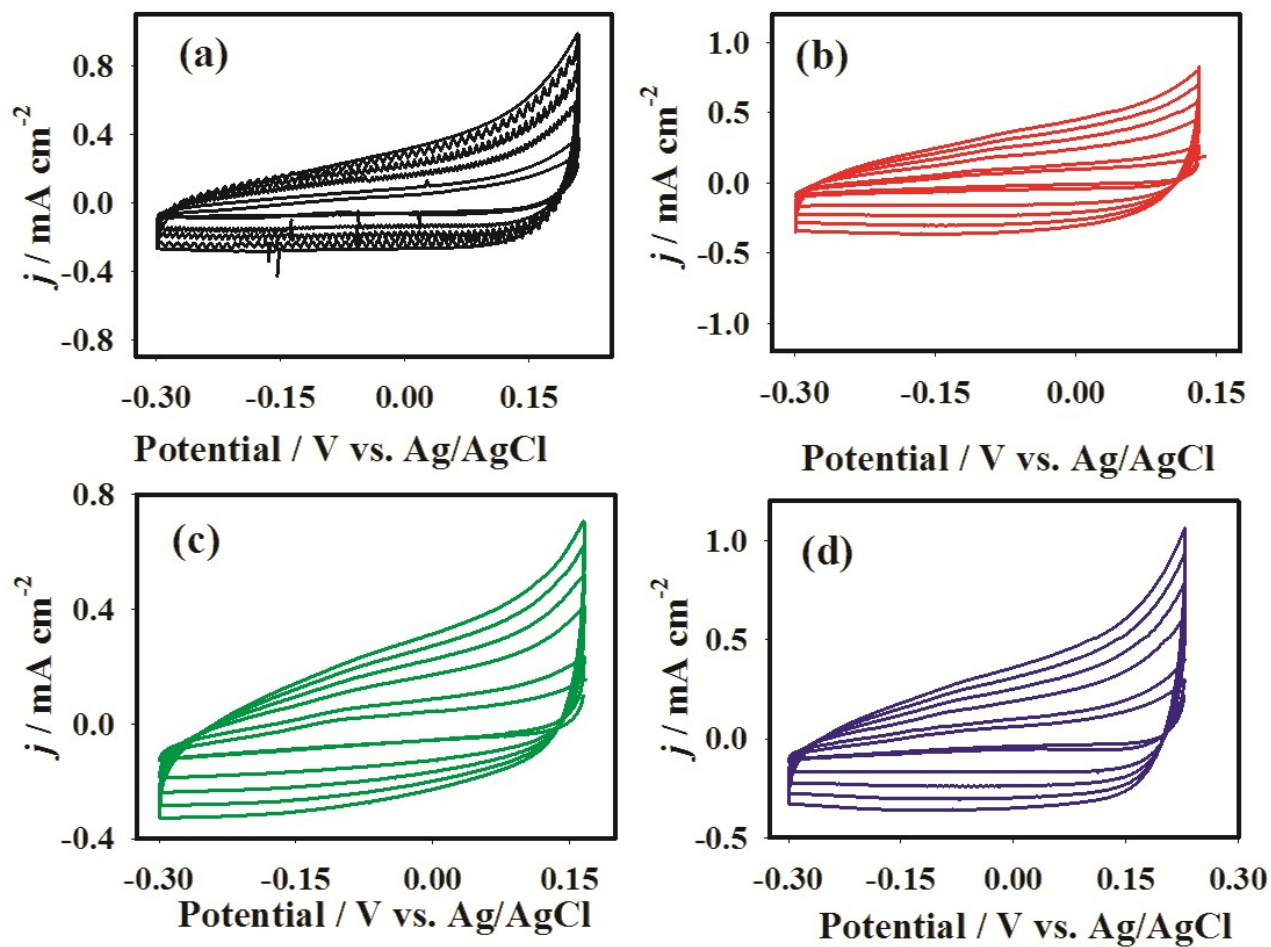
Fig. S4. ECSA for the a) FeS, b) CoS, c) NiS and d) CuS was measured by performing cyclic voltammograms in 1.0 M KOH solution at different scan rates from 10 to 125 mV s^{-1}.
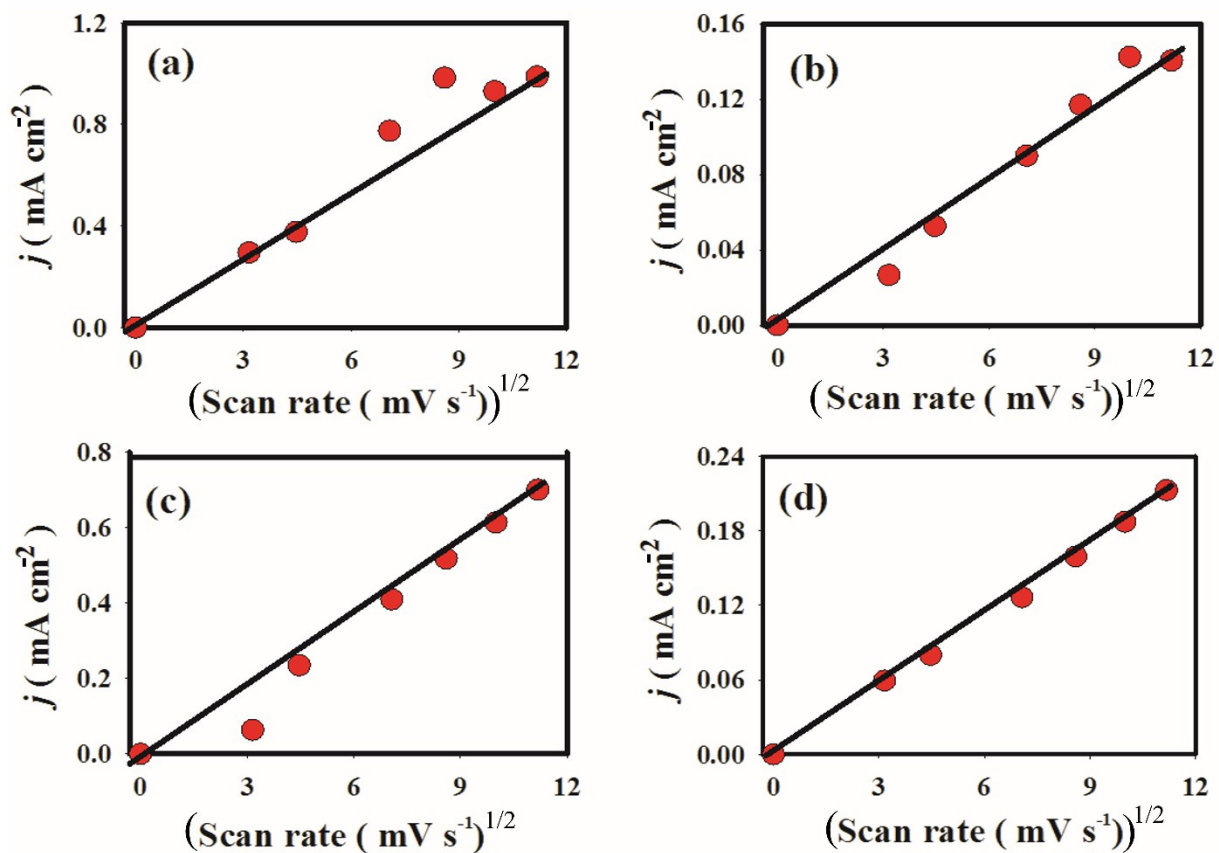
Fig. S5. CV curves measured in a non-faradaic region of the voltammogram and corresponding capacitive current at the specific potential as a function of scan rate of (a) FeS, (b) CoS, (c) NiS and (d) CuS electrodes.