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MDPI

Supplementary Material

Investigating the Impact of the Washing Steps of Layered Double Hydroxides (LDH) on the Electrochemical Performance

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S.1. Williamson Hall Plots

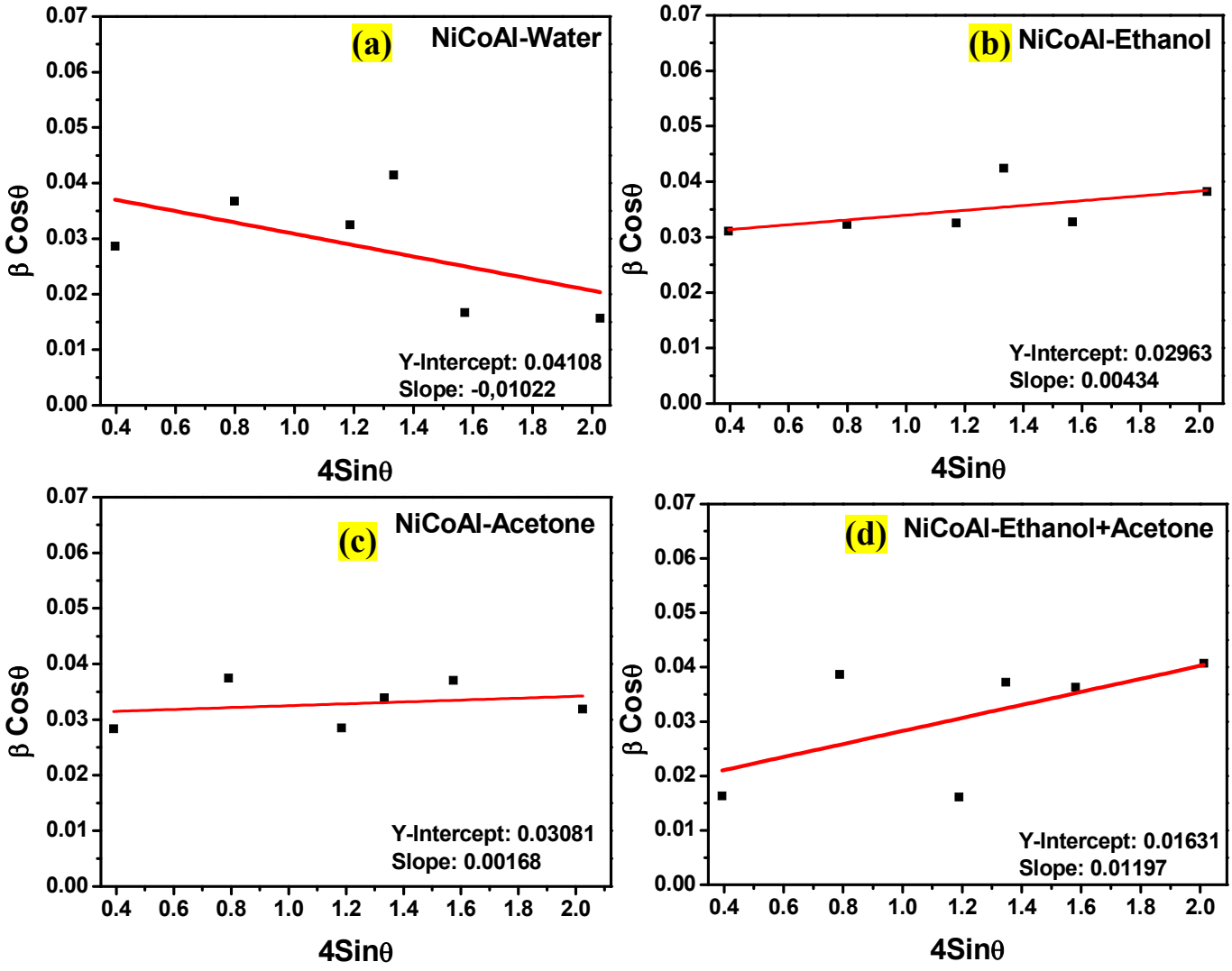

Figure S1. (**a**–**d**) W-H plots for NiCoAl-Water, NiCoAl-Ethanol, NiCoAl-Acetone, NiCoAl-Ethanol+Acetone ($\beta_T \cos\theta$ as a function of $4\sin\theta$)

S.2. Energy-Dispersive X-Ray Spectroscopy (EDS)

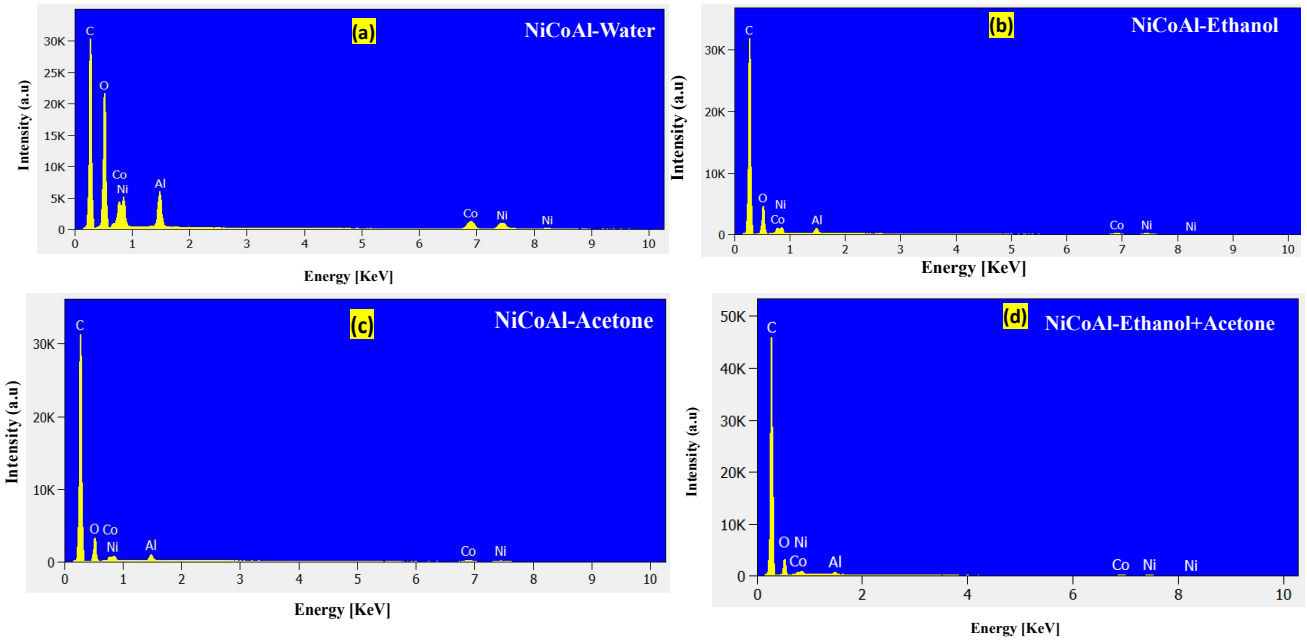

Figure S2. EDS spectra of (**a**) NiCoAl-water, (**b**) NiCoAl-Ethanol, (**c**) NiCoAl-Acetone, and (**d**) NiCoAl-Ethanol+Acetone.

S.3. Energy-Dispersive X-Ray Spectroscopy-Mapping

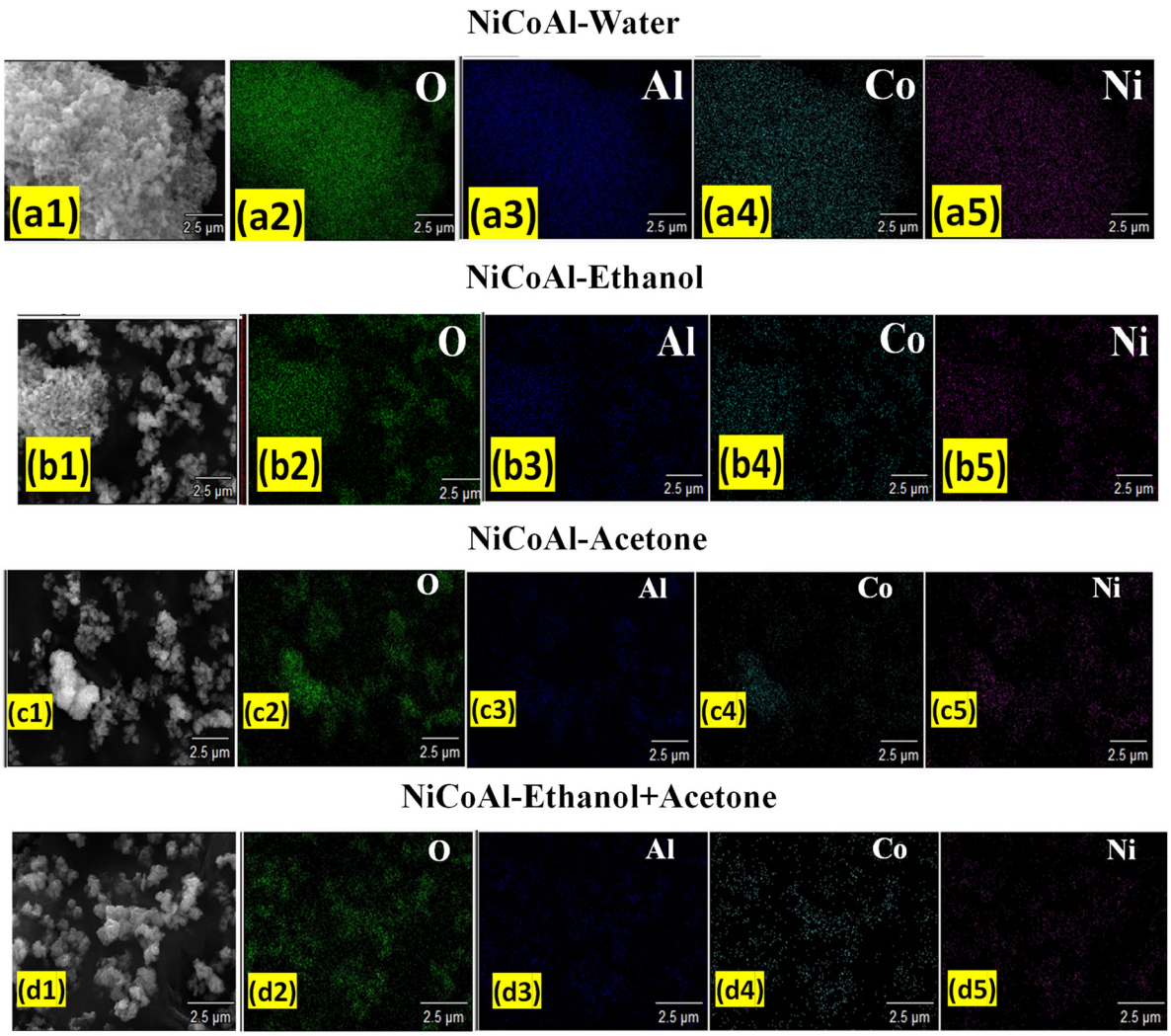

Figure S3. (**a1, b1, c1, d1**) SEM images of areas used to conduct EDS mappings; (**a2–a5**), (**b2–b5**), (**c2–c5**) and (**d2–d5**) corresponding elemental mappings of O, Al, Co and Ni.

S.4. Cyclic voltammetry (CV)

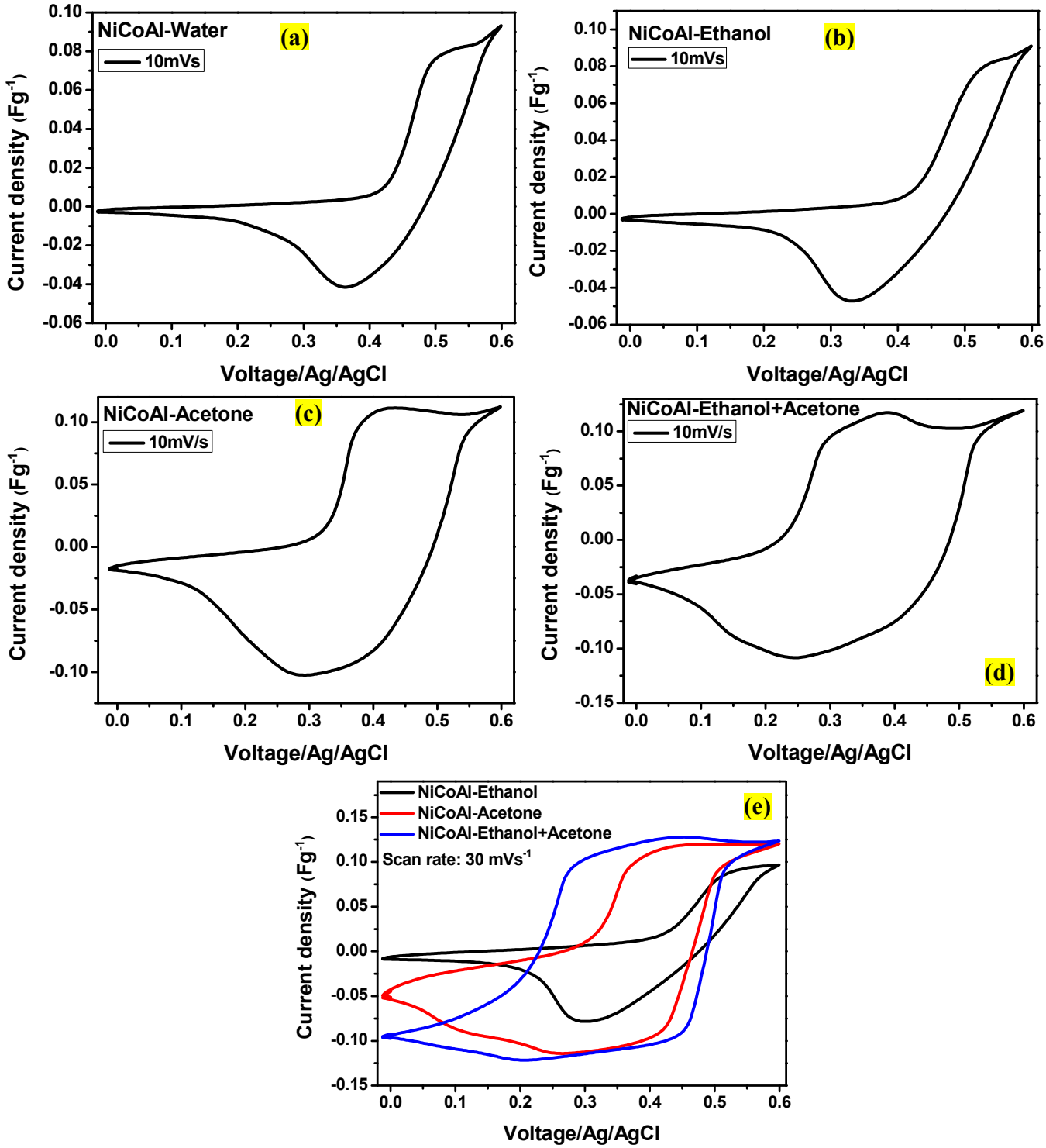

Figure S4. CV curves of (**a**) NiCoAl-Water, (**b**) NiCoAl-Ethanol, (**c**) NiCoAl-Acetone, (**d**) NiCoAl-Ethanol+Acetone at a scan rate of 10 mVs^{-1}, and comparative CV curves of NiCoAl-Ethanol, NiCoAl-Acetone, and NiCoAl-Ethanol+Acetone at the scan rate of 30 mVs^{-1}.

S.5. Electrochemical Impedance Spectroscopy (EIS)

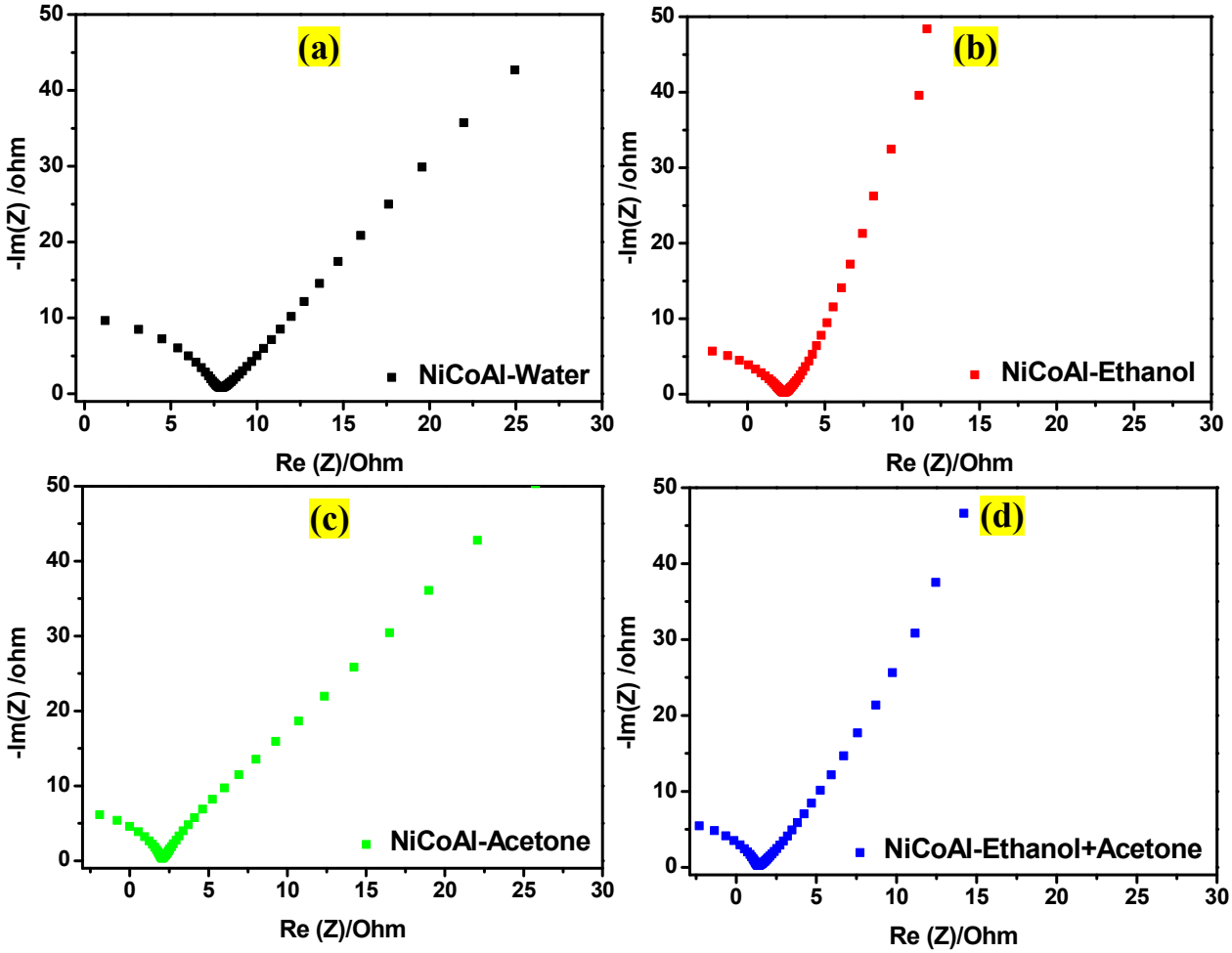

Figure S5. Nyquist plots for (**a**) NiCoAl-Water, (**b**) NiCoAl-Ethanol, (**c**) NiCoAl-Acetone, and (**d**) NiCoAl-Ethanol+Acetone.