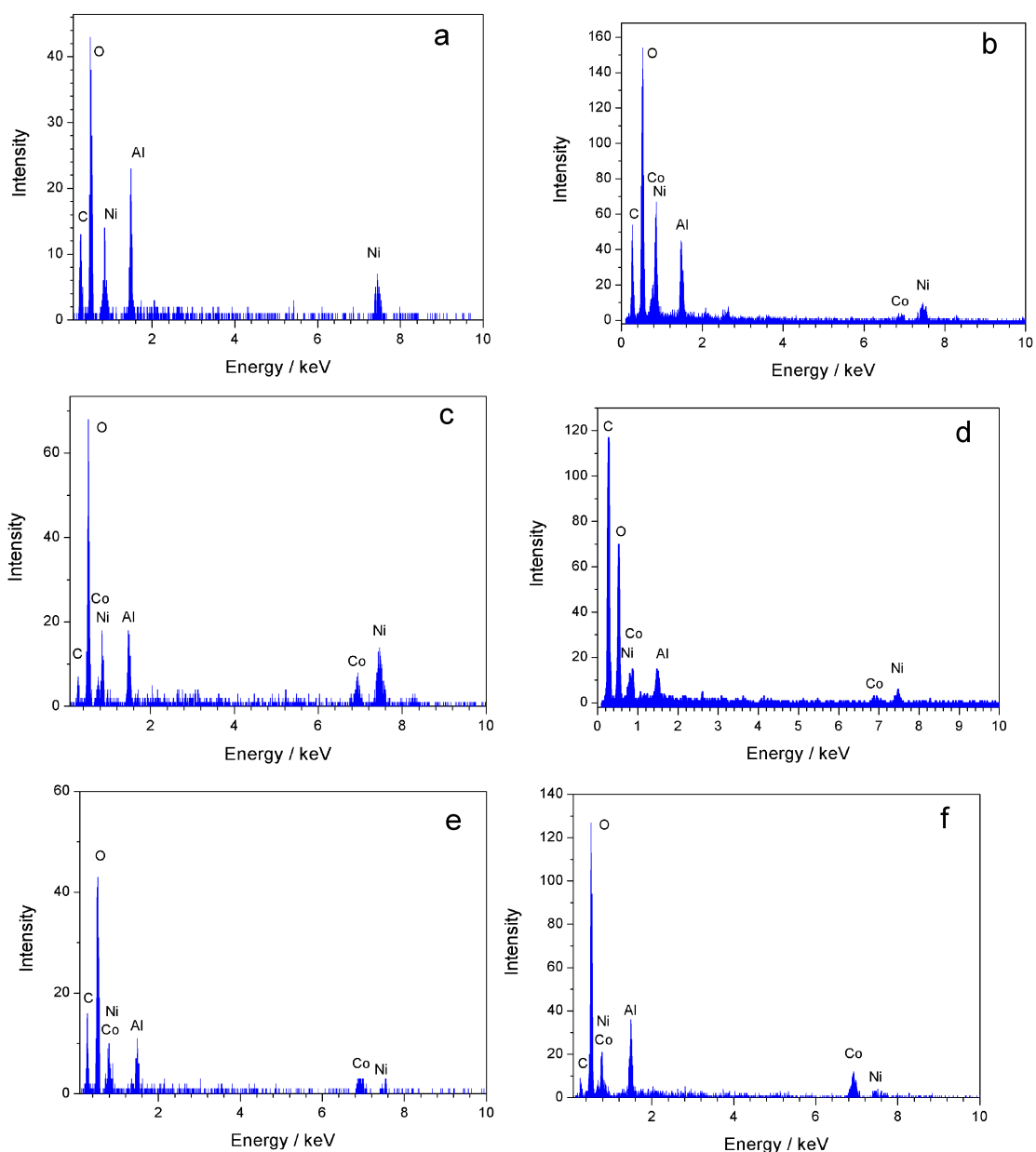
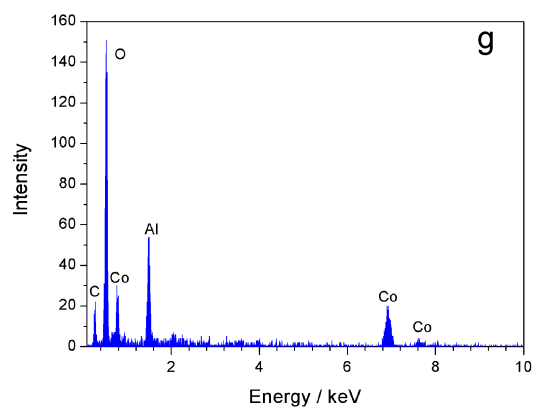


## Supporting materials

### The electron dispersion X-ray spectra (EDS) of CoNiAl LDHs





**Fig. S1** The electron dispersion X-ray spectra of CoNiAl LDHs with different molar ratio of Co/Ni: (a) 0:1; (b) 1:5; (c) 1:3; (d) 1:1; (e) 3:1; (f) 5:1; (g) 1:0.