Electronic Supplementary Material (ESI) for Nanoscale.

Supporting Information

Versatile method for template-free synthesis of single crystalline metal and metal alloy nanowires

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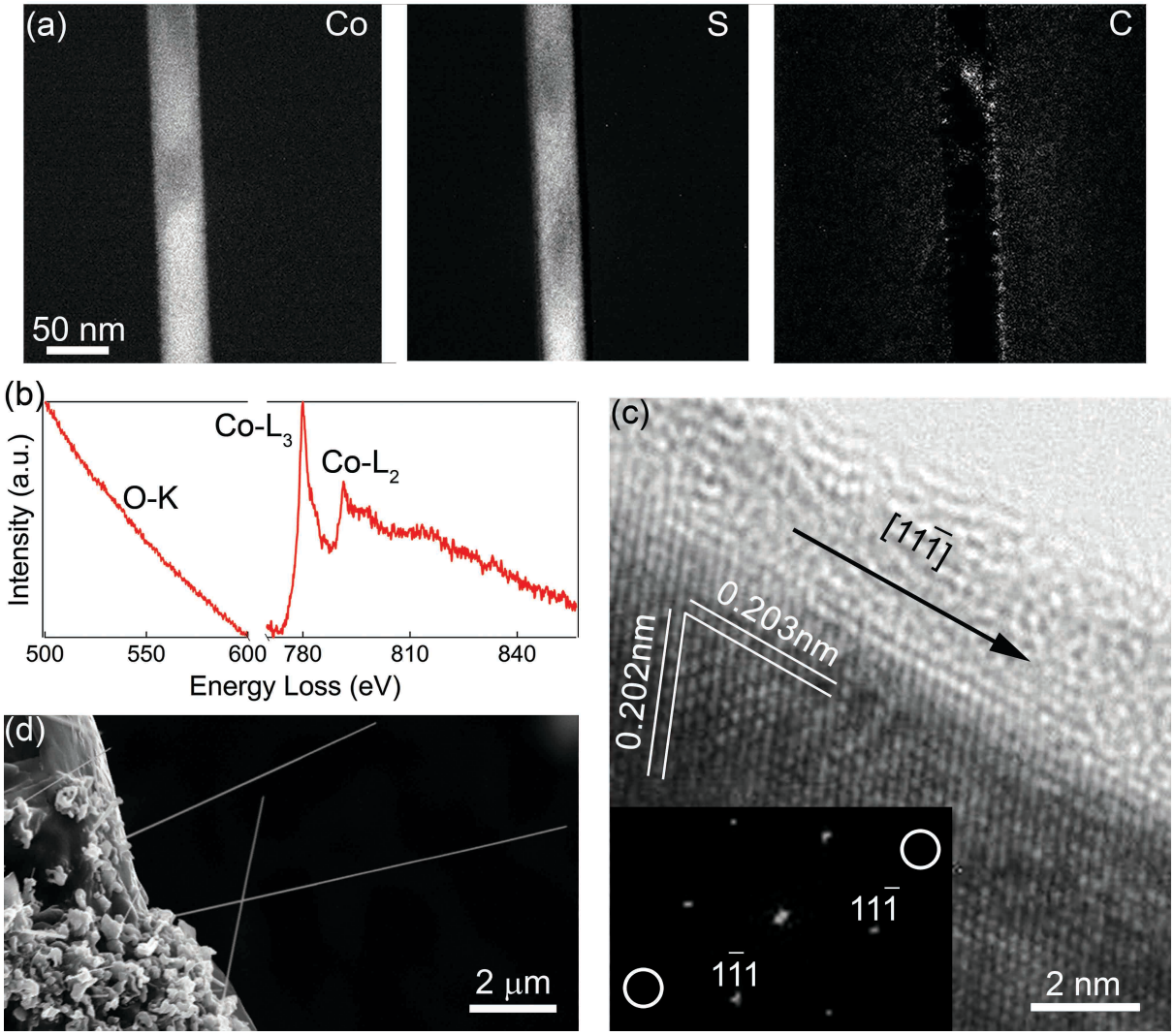

Figure S1. Characterization of a Co nanowire grown by Process 1. (a) Energy-filtered TEM elemental maps of Co, S and C. (b) EELS spectrum from Co NW. (c) High resolution TEM image and corresponding FFT (inset). The circles in (c) indicate the positions of faint diffraction spots. (d) SEM image of Co NWs grown on Au TEM mesh.

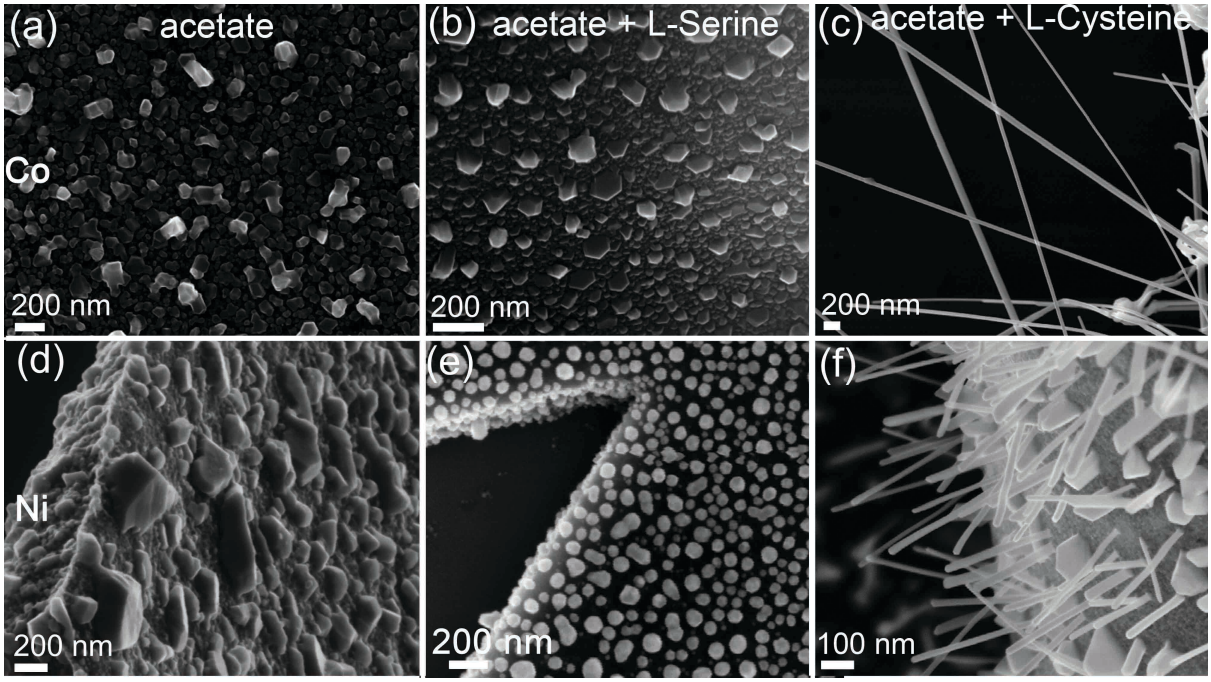

Figure S2. SEM characterization of cobalt and nickel nanostructures grown by Process 1 from (a) dropcast Co(II) acetate solution, (b) Co(II) acetate and L-serine, (c) Co(II) acetate and L-cysteine, (d) dropcast Ni(II) acetate solution, (e) Ni(II) acetate and L-serine (f) Ni(II) acetate and L-cysteine. Growth conditions are provided in Table 1.

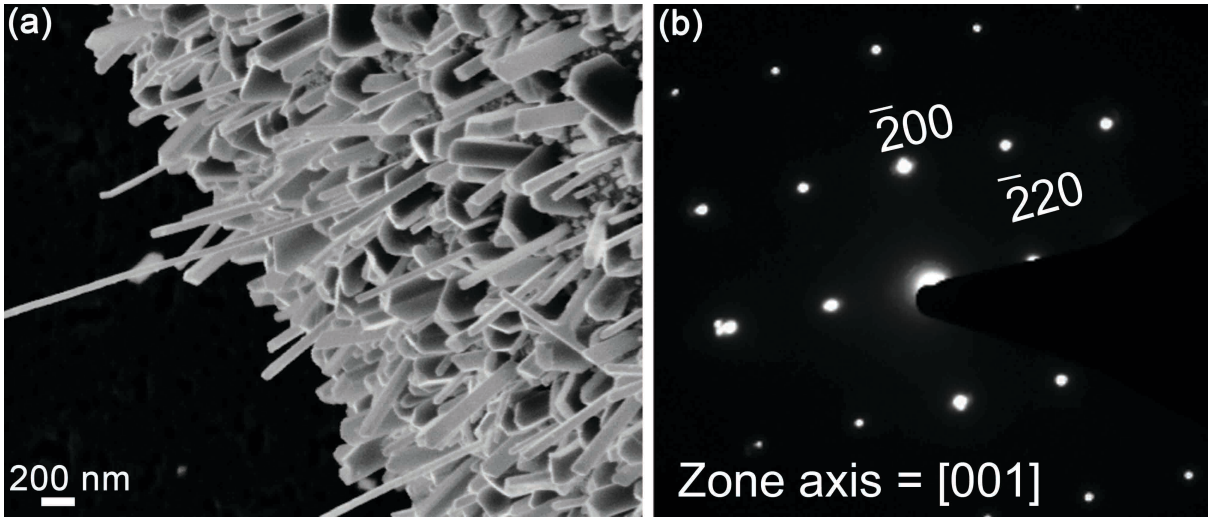

Figure S3. (a) SEM image of nickel nanowires grown by Process 3 and (b) SAED pattern of a single nanowire, which can be indexed to the FCC structure of nickel.