Supplementary Materials of

Controllable synthesis of magnetic CoO nanosheets by chemical vapor deposition

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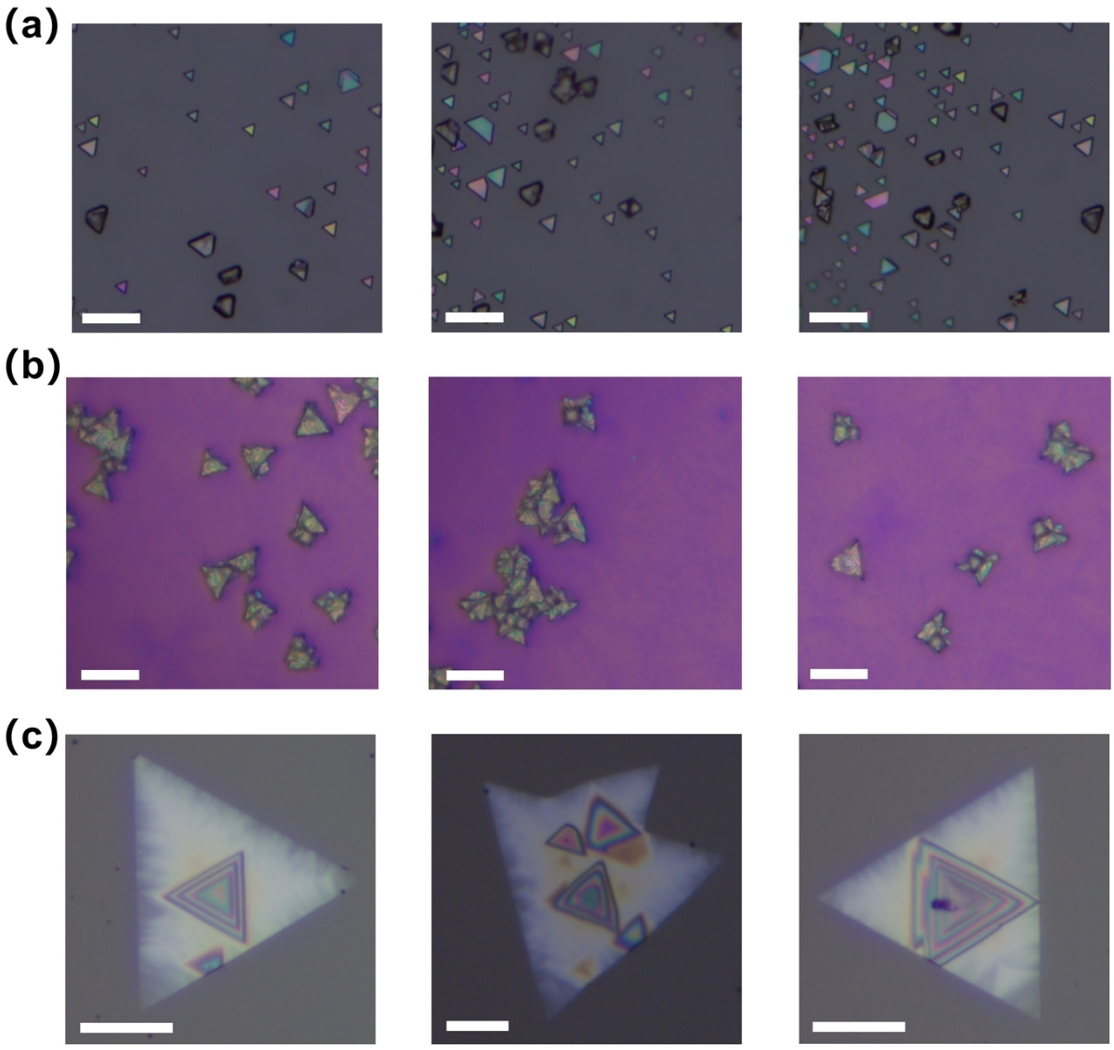

Fig. S1. (Color online) Optical microscopy (OM) images of the products obtained under different growth conditions. (a) OM image of the product synthesized without NH_4Cl addition. (b) OM image of the product grown on a SiO_2/Si substrate. (c) OM image of the product grown on a sapphire substrate. Scale bars: 10 μm.

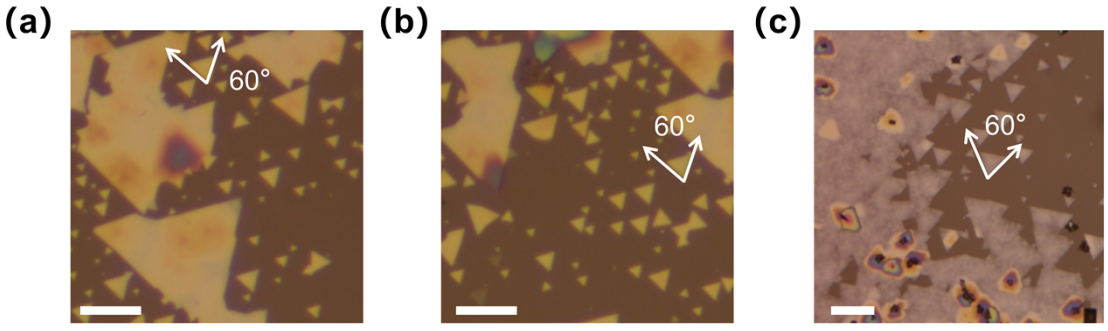

Fig. S2. (Color online) OM images of CoO nanosheets grown at 630 °C with an argon flow rate of 70 sccm. (a)–(c) show representative optical images taken from different regions. Scale bars: 10, 10, and 15 μm, respectively.

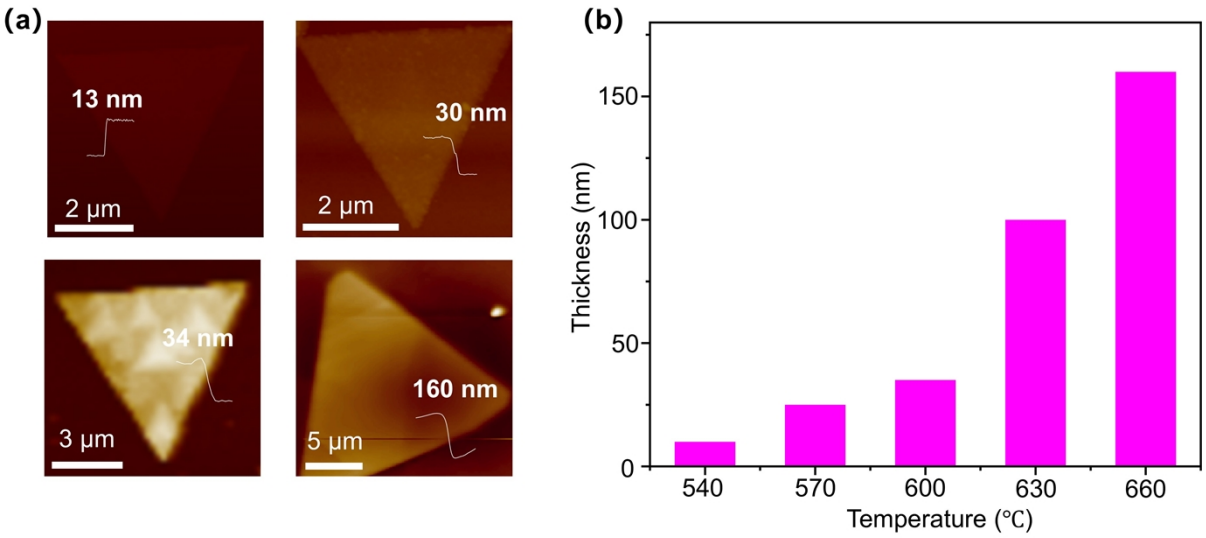

Fig. S3. (Color online) **A**tomic force microscopy (AFM) characterization of CoO nanosheets. (a) AFM image showing CoO nanosheets with different thicknesses. (b) Statistical thickness distribution of CoO nanosheets grown at different temperatures.

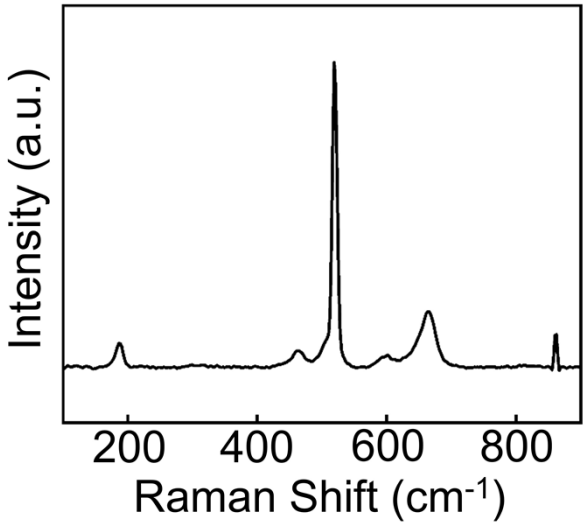

Fig. S4. Raman spectrum of the CoO nanosheets acquired under 632 nm laser excitation.

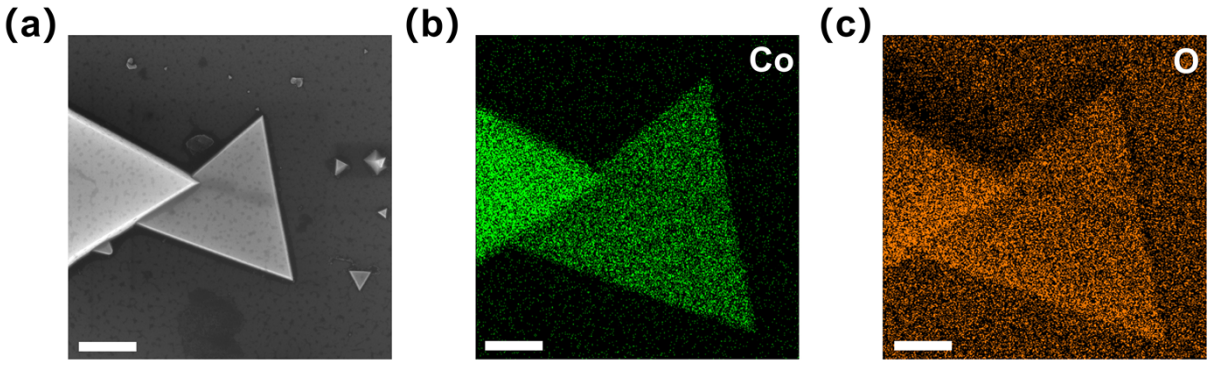

Fig. S5. (Color online) (a) Scanning electron microscopy (SEM) image of CoO nanosheets. (b,c) Energy-dispersive X-ray spectroscopy (EDS) elemental maps for Co and O. Scale bars: 1 μm.

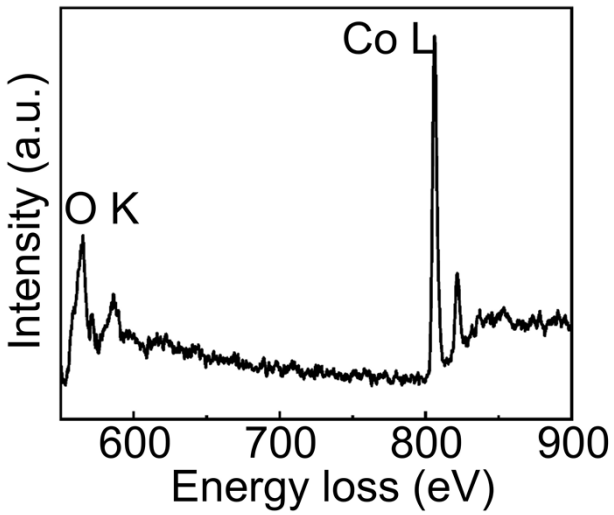

Fig. S6. Electron energy-loss spectroscopy (EELS) spectra of Co and O from a CoO nanosheet.

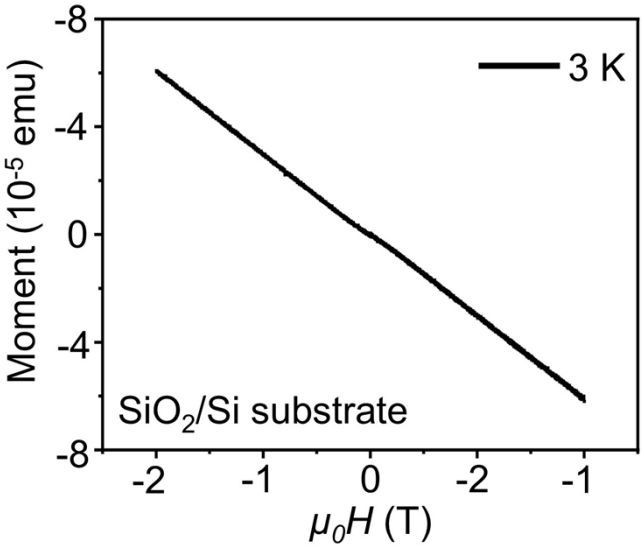

Fig. S7. Magnetic signal measured from a bare SiO_2/Si substrate.