Supplementary Materials

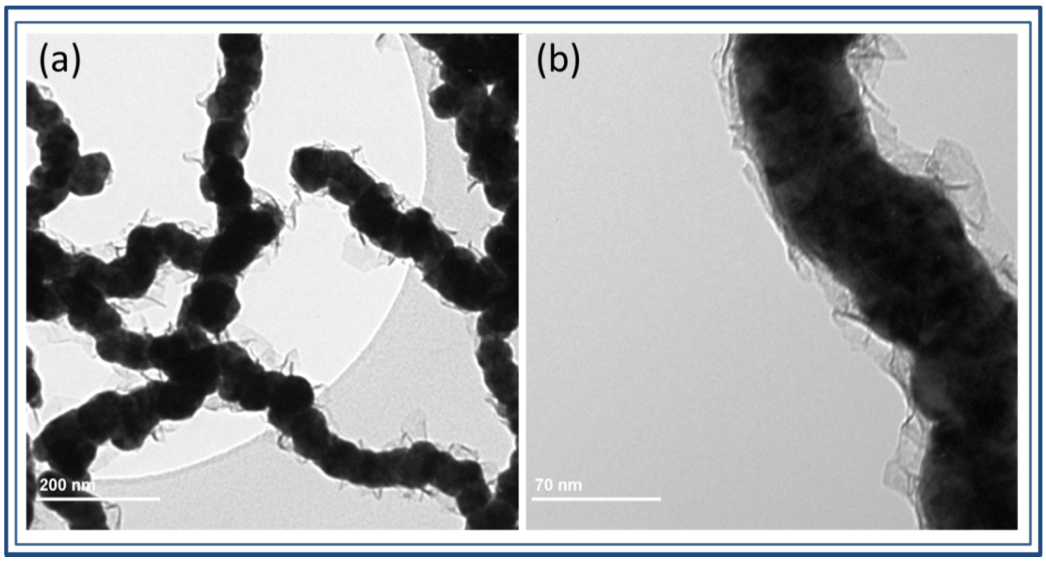


Figure S1. (**a**) The transmission electron microscopy (TEM) images of nickel nanowires (NiNWs) synthesized with 2 *w*/*v* % poly(vinylpyrrolidone) (PVP). (**b**) The higher magnification shows more clearly that there was some PVP remaining on the NiNW surface.

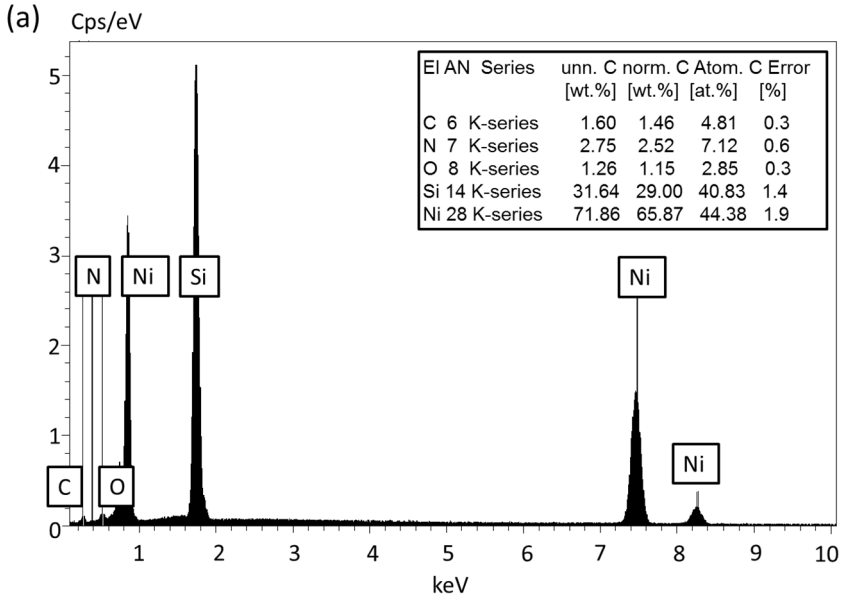


Figure S2. *Cont.*

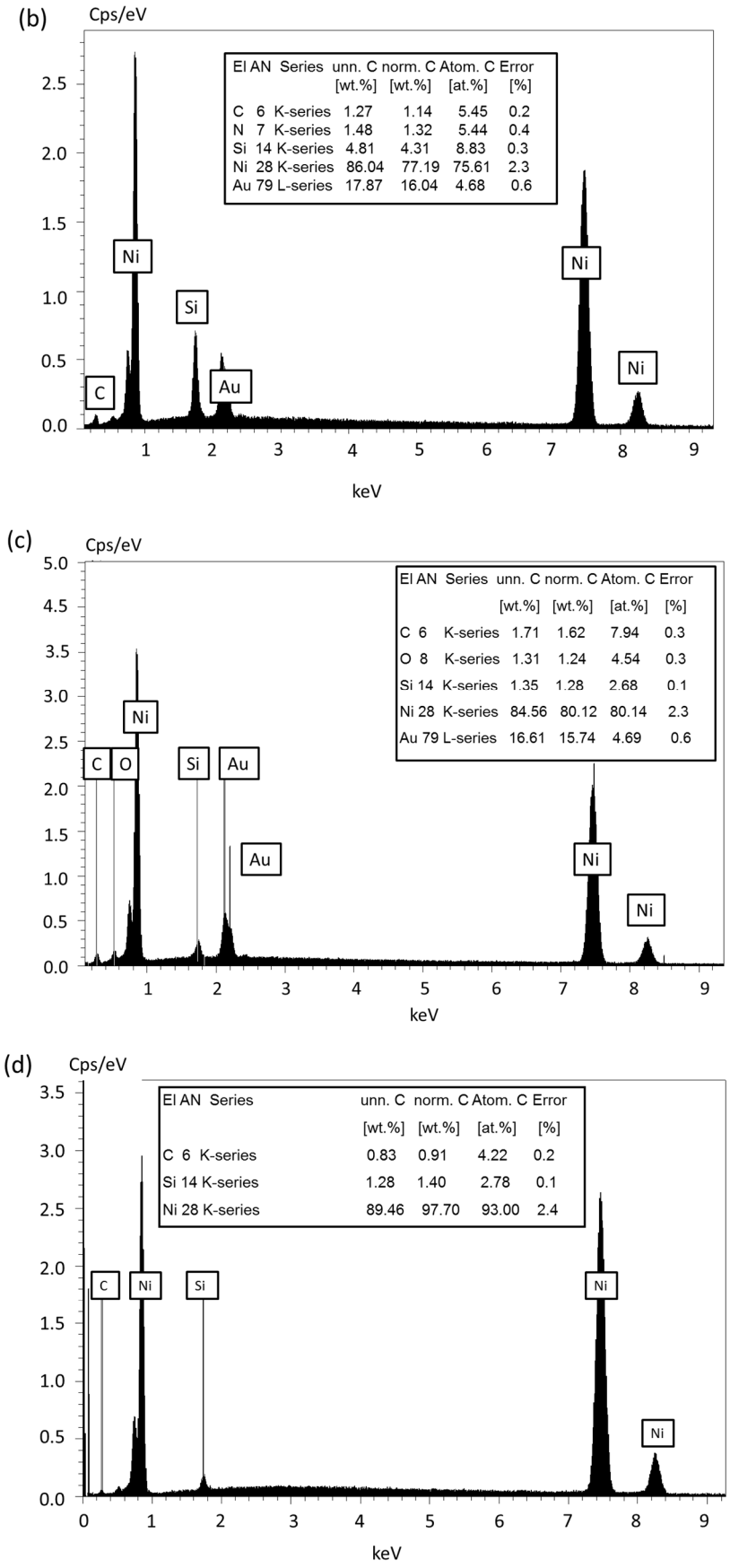
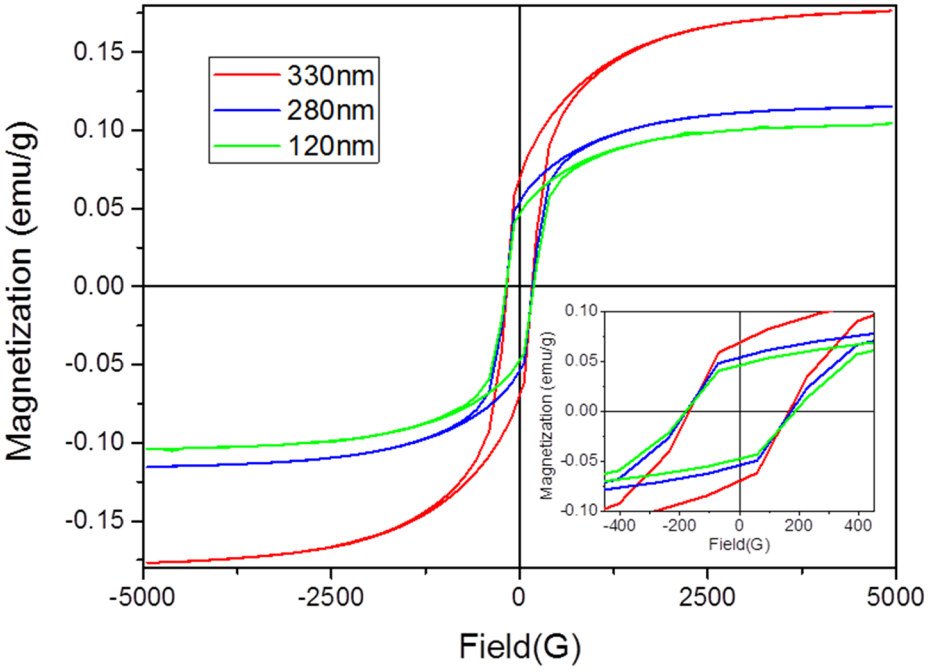


Figure S2. The energy-dispersive X-ray spectroscopy (EDS) spectrum of NiNWs (**a**) synthesized with PVP addition (**b**) under ambient condition for one month; (**c**) five months; and (**d**) with heating treatment at 70 °C for 30 h. The gold peak can be attributed to the gold layer coated to increase the resolution of the scanning electron microscopy (SEM) image.

Table S1. The vibrating sample magnetometer (VSM) comparison of magnetic properties from 3 different products with the bulk material.

Width (nm)	*Ms* (emu/g)	*Hc* (Oe)
Bulk [1]	55	100
330	50.8	167.7
280	49.7	179.9
120	39.9	185.4



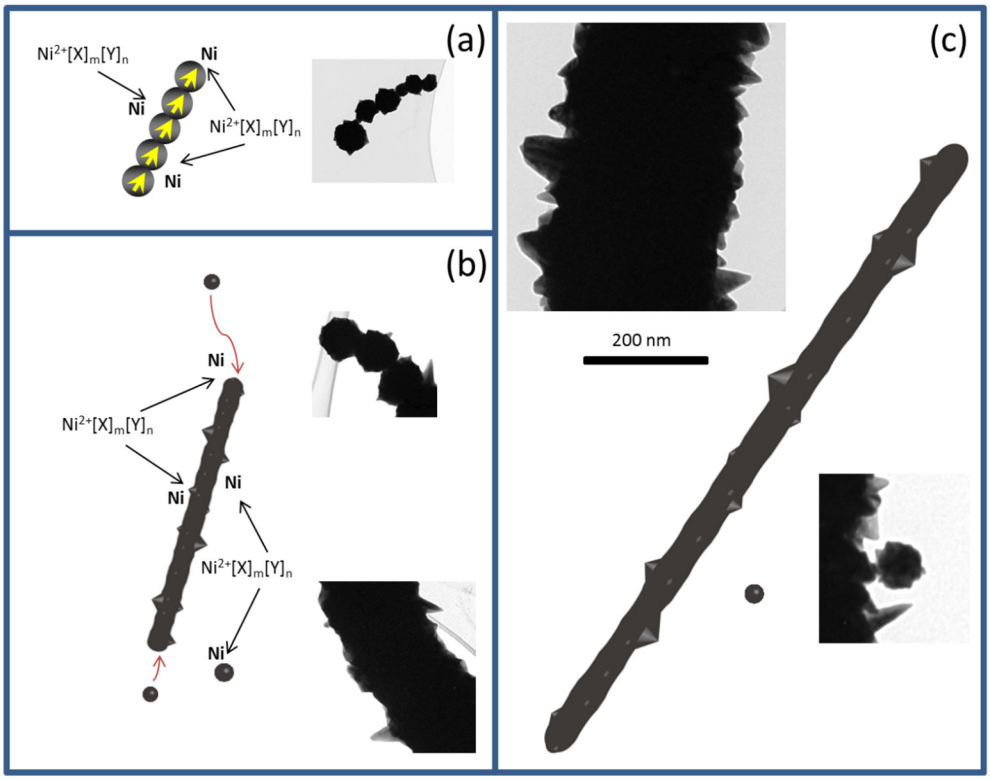


Figure S3. Corresponding TEM images to (**a**) Step 3; (**b**) Step 4; and (**c**) Step 5.

References

1. Hwang, J.H.; Dravid, V.P.; Teng, M.H.; Host, J.J.; Elliott, B.R.; Johnson, D.L.; Mason, T.O. Magnetic properties of graphitically encapsulated nickel nanocrystals. *J. Mater. Res.* **1997**, *12*, 1076–1082.