

Supplementary Data

Contains summary of literature of those working on alumina membrane fabrication by anodization (Table S1) and some TEM/SAED results on nickel and cobalt nanowires (Figures S1 and S2).

Table S1. Various AAO membranes synthesized under different anodization conditions.

Author	Electrolyte	Voltage or Current density	Temperature	Structure	Note
C. Shuoshuo et al. ⁴	0.3 M H ₂ C ₂ O ₄	50 to 50√n V	0~5 °C	Round	Voltage decreasing: branched channels
	0.3 M H ₂ C ₂ O ₄	50√n to 50 V	0~5 °C	Round	Voltage increasing: terminated channels
S. Zhao et al. ⁵	0.8 M H ₂ SO ₄ + 0.1 M Al ₂ (SO ₄) ₃	160 mA/cm ²	1 °C	Six-membered rings	Diameter: 15 nm Interpore distance: 50nm
H. Masuda et al. ⁶	0.3M H ₂ C ₂ O ₄	40 V	17 °C	Rectangular	Interpore distance: 100-200 nm Al substrates were oil pressed with SiC molds at 1600 kg/cm ²
	0.5 M H ₃ PO ₄	80 V	17 °C	Triangular	
Y. B. Li et al. ⁷	H ₂ C ₂ O ₄ + C ₂ H ₅ OH+H ₂ O	100~180 V	-10~0 °C	Round	Interpore distance: 225-450 nm
	H ₂ SO ₄ + H ₂ C ₂ O ₄ + C ₂ H ₅ OH+H ₂ O	30~80 V	-5~0 °C	Round	Interpore distance: 70-140 nm
W. Lee et al. ⁸	0.3 M H ₂ C ₂ O ₄	100 ~160 V	1~2 °C	Round	Interpore distance: 200-300 nm

Reference numbers correspond to those in main text.

Figure S1. TEM images of Ni nanowires synthesized in (a) mild side, (b) hard side of Mi-Ha AAO and (c) Mi-AAO. Insets are SAED patterns.

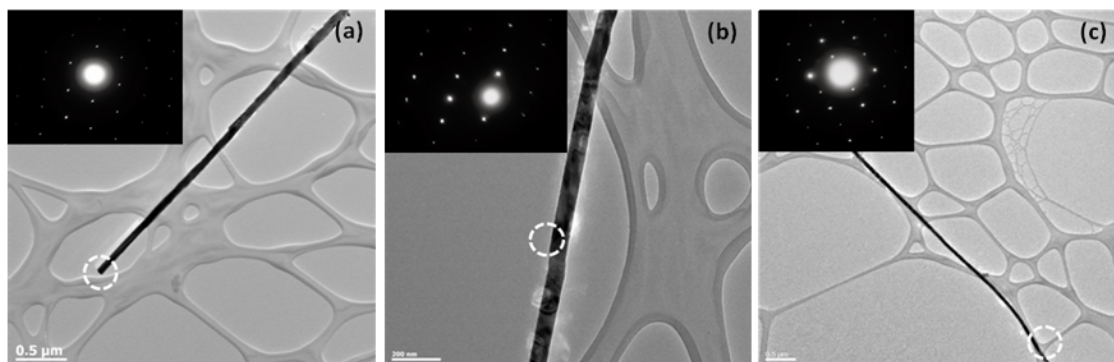


Figure S2. TEM images of Co nanowires synthesized in (a) mild side, (b) hard side of Mi-Ha AAO and (c) Mi-AAO. Insets are SAED patterns.

