

Supporting Information

for

Magnetism and magnetoresistance of single Ni–Cu alloy nanowires

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Additional experimental data

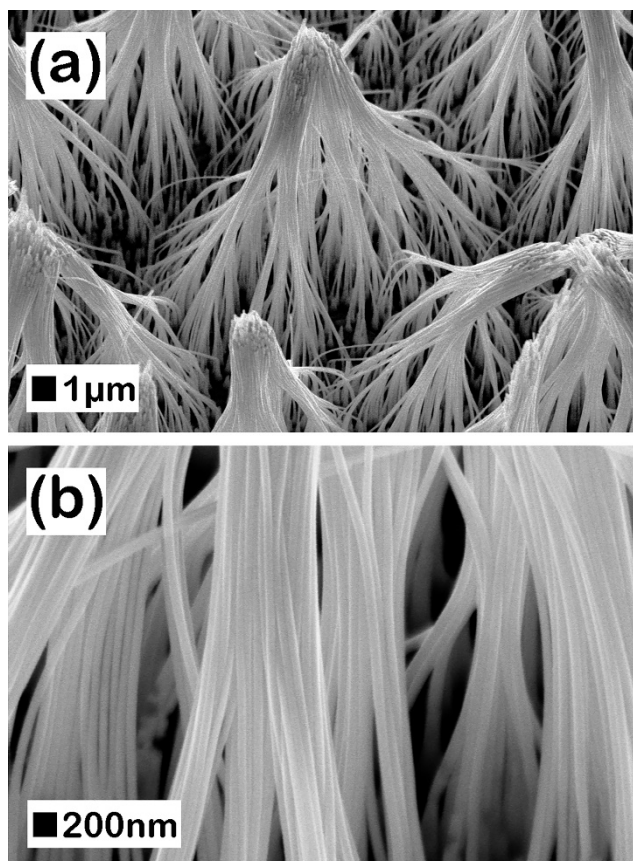


Figure S1: SEM images at different magnifications for arrays of Ni–Cu alloy nanowires grown by electrochemical deposition at -1000 mV in nanoporous polycarbonate membranes.

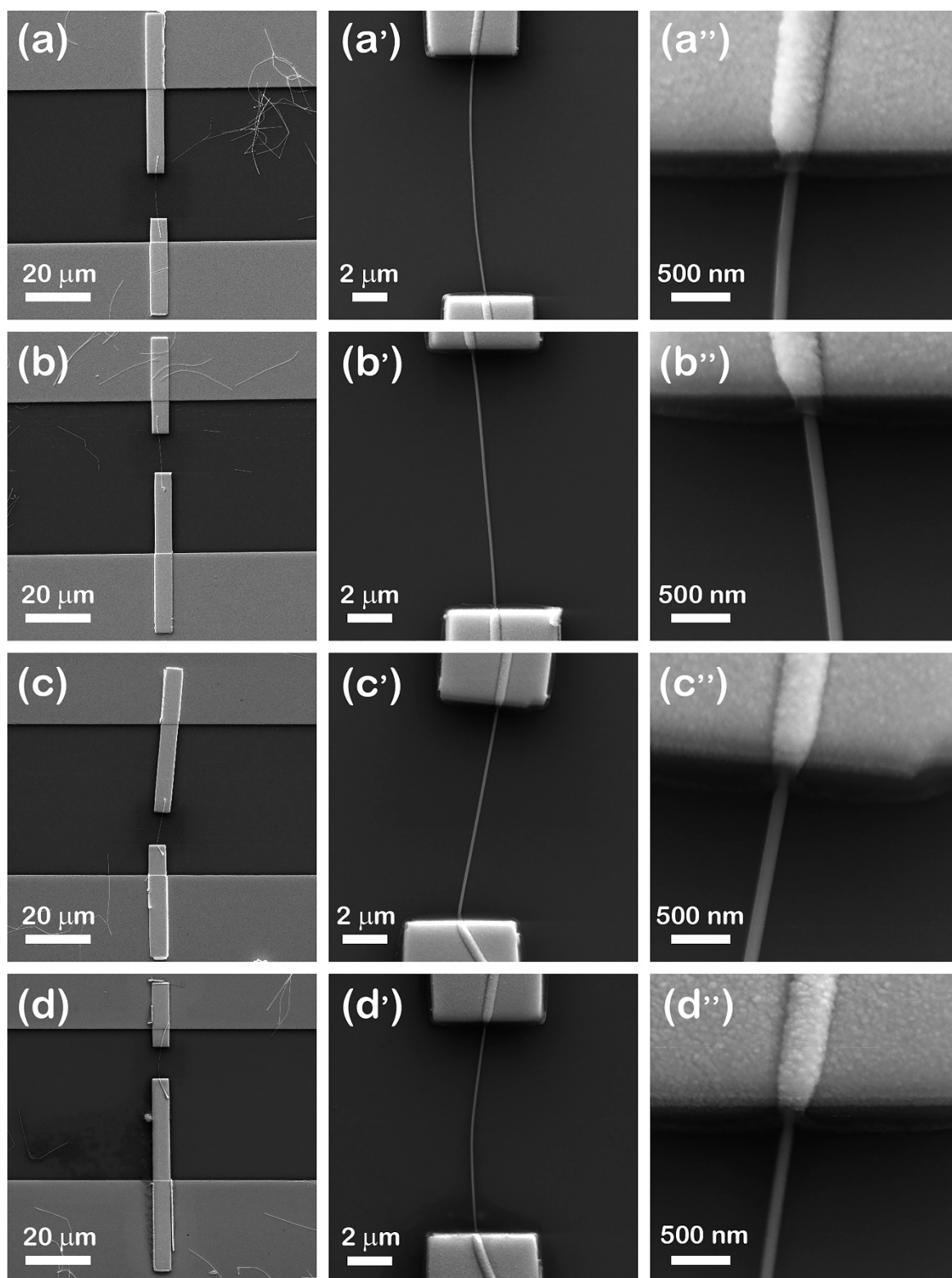


Figure S2: SEM images of Ni-Cu alloy nanowires contacted using EBL, grown by electrochemical deposition at different electrodeposition potentials: (a, a', a'') -800 mV; (b, b', b'') -900 mV; (c, c', c'') -1000 mV and (d, d', d'') -1050 mV.

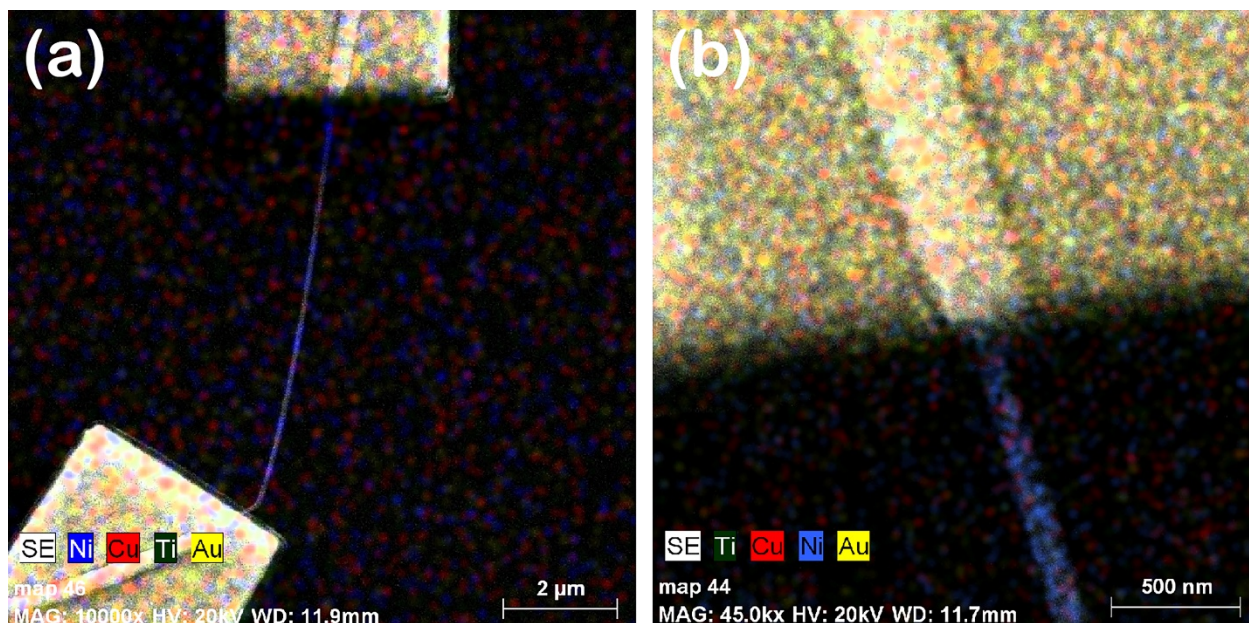


Figure S3: EDX analysis of the distribution of elements in two Ni–Cu alloy nanowires obtained at: (a) –1000 mV and (b) –1050 mV, contacted by EBL with Ti/Au (10 nm/90 nm) metallic contacts at the end of the nanowires.