Supplementary Materials

Magnetic properties of a Ni nanonet consisting nanowires and nanoballs, grown in superfluid helium under laser irradiation

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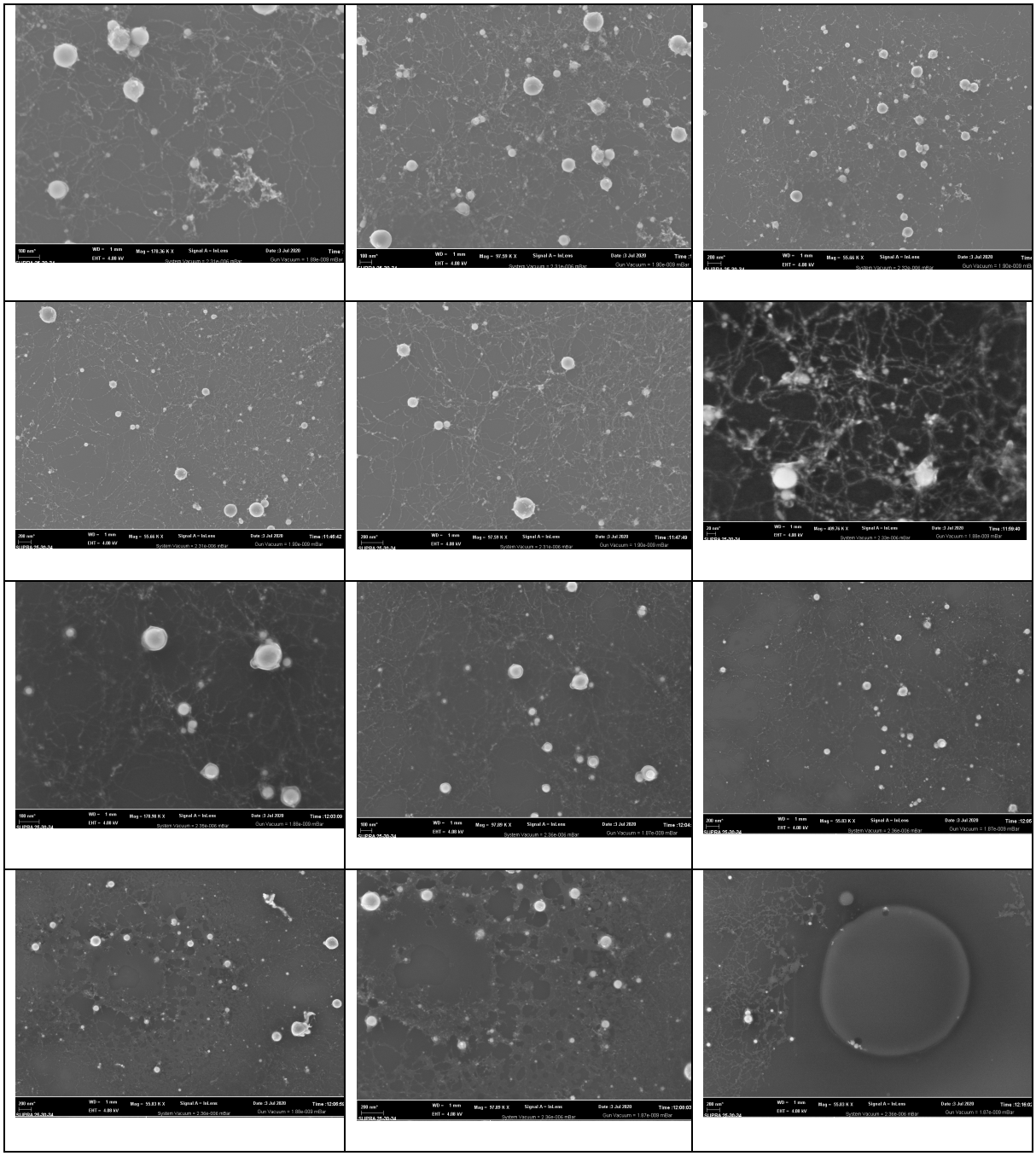

Figure S1. TEM images of the network used to statistical analysis.

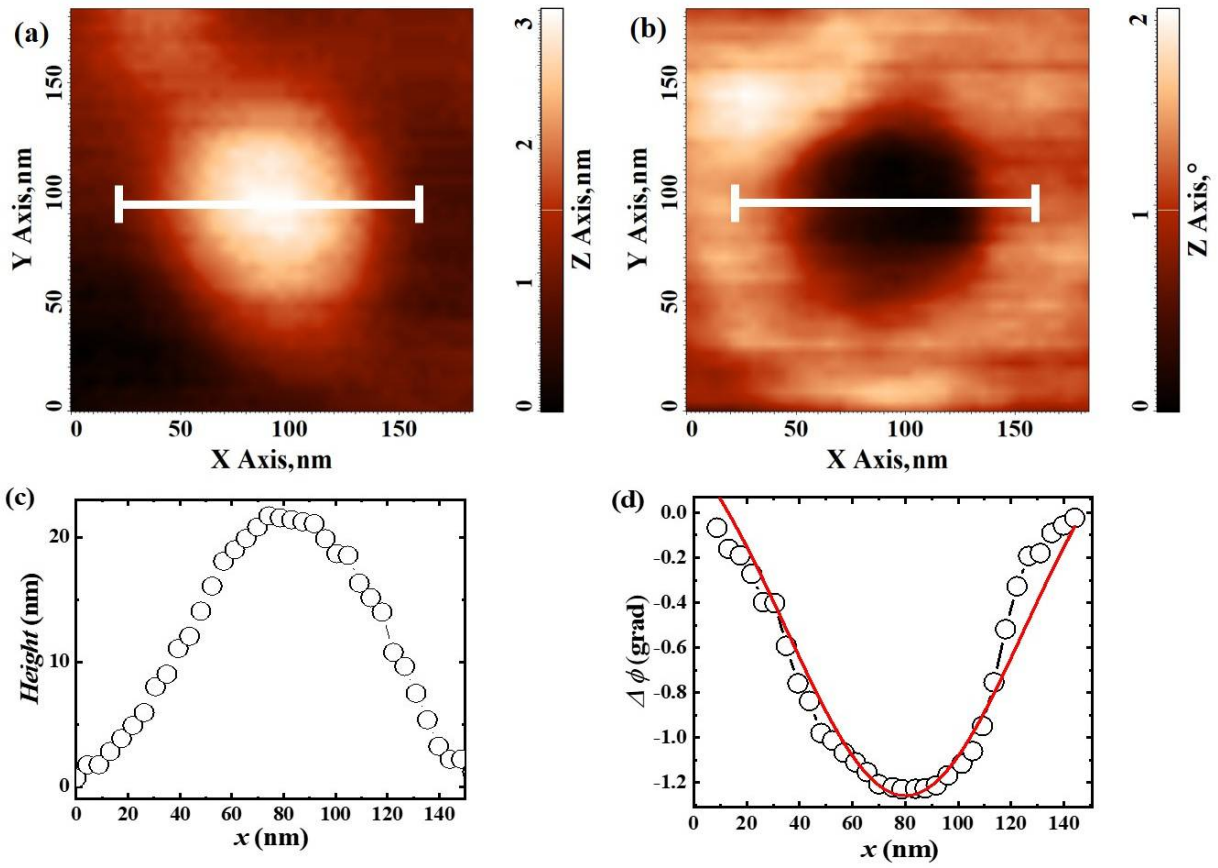

Figure S2. Images of separated Ni nanoball recorded in AFM mode (a) and in MFM mode (b). Profiles of the AFM (c) and MFM phase contrasts (d).

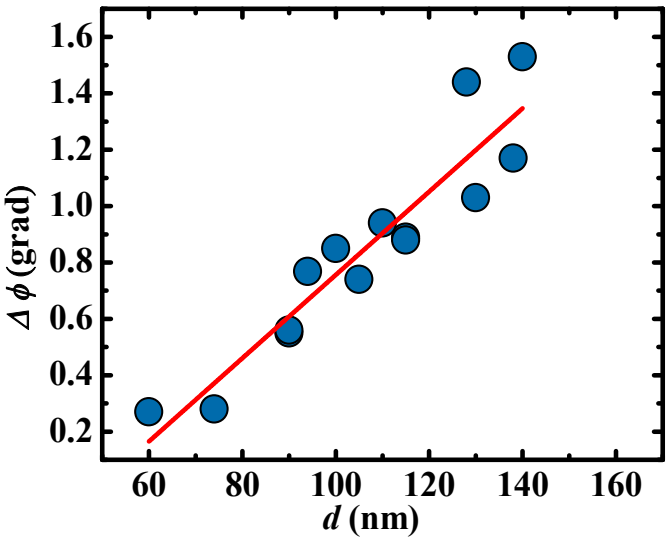

Figure S3. Dependences of the phase shift $\Delta\varphi$ on diameter of nanoballs d with same lift value (h = 50 nm).

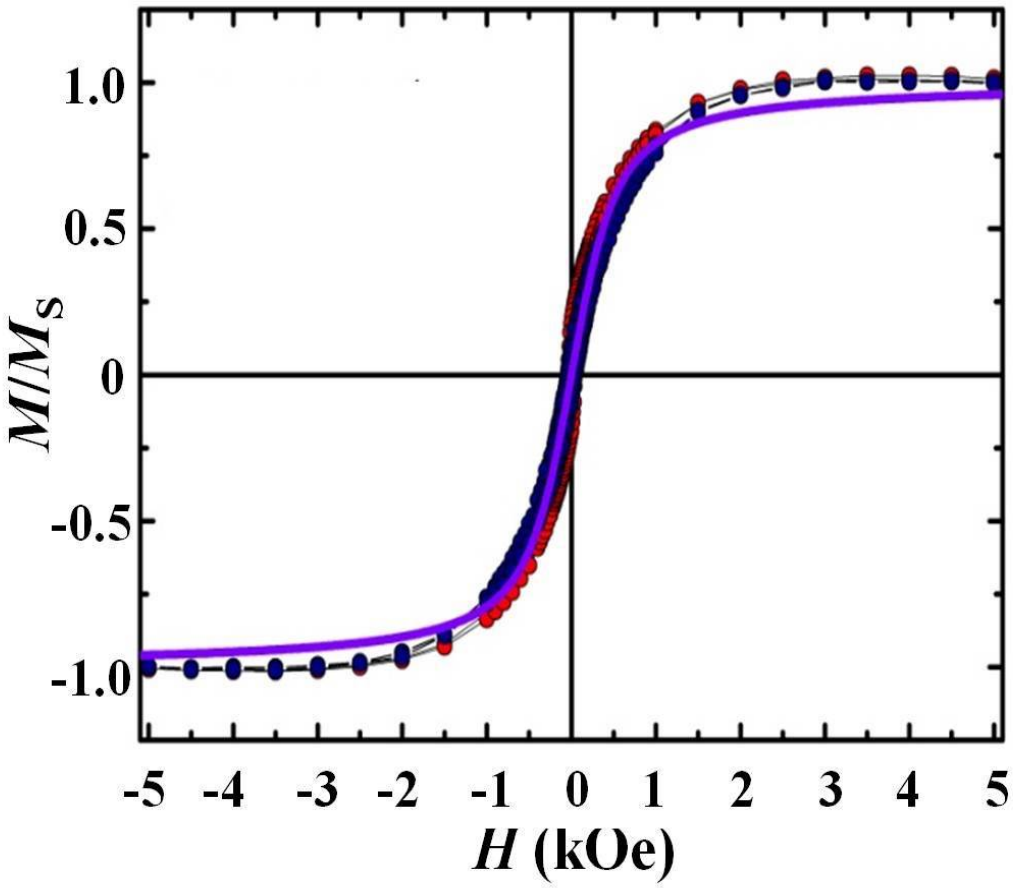

Figure S4. Field dependence of magnetic moment of nanonet at late stage of ablation, when 85% of Ni volume belong to nanoballs. Solid line is approximation by Langevin function.

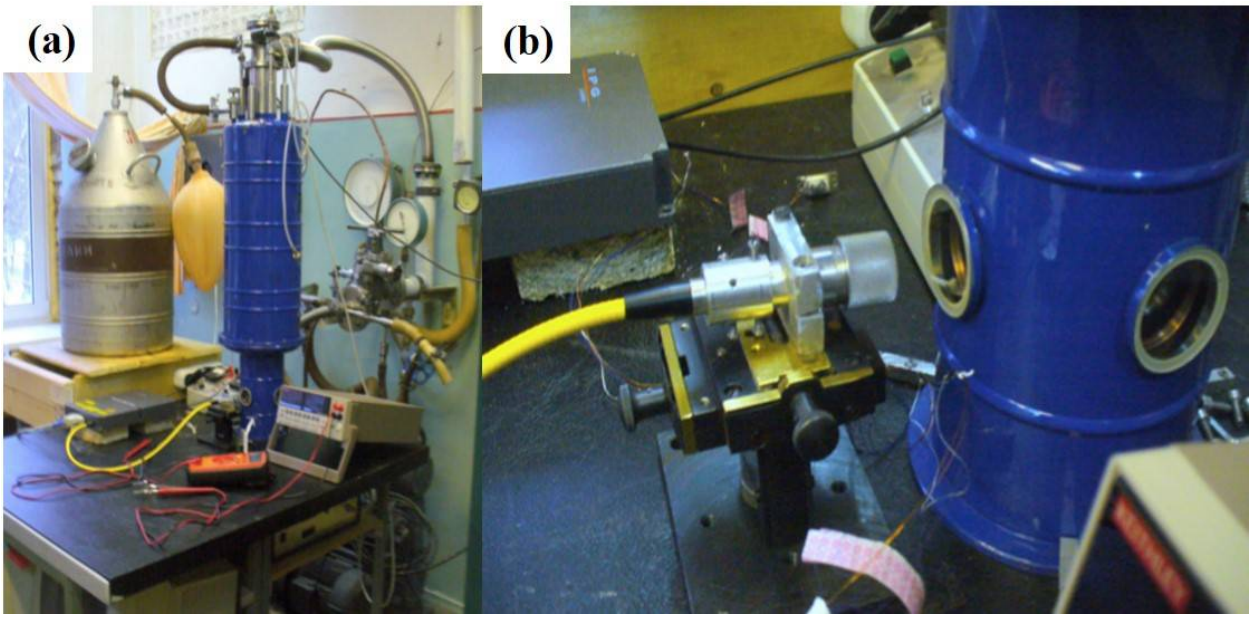

Figure S5. (a) Homemade setup for synthesis nanowire network in superfluid He; (b) Solid state LSB diode-pumped Nd laser with 0.4 ns pulse duration, 4 kHz pulse repetition, pulse energy of 0.1 mJ, and wavelength $\lambda = 1.062$ μm