

ESI:

**Fabrication and characterization of magnetic nanoporous
Cu/(Fe,Cu)₃O₄ composites with excellent electrical conductivity by
one-step dealloying†**

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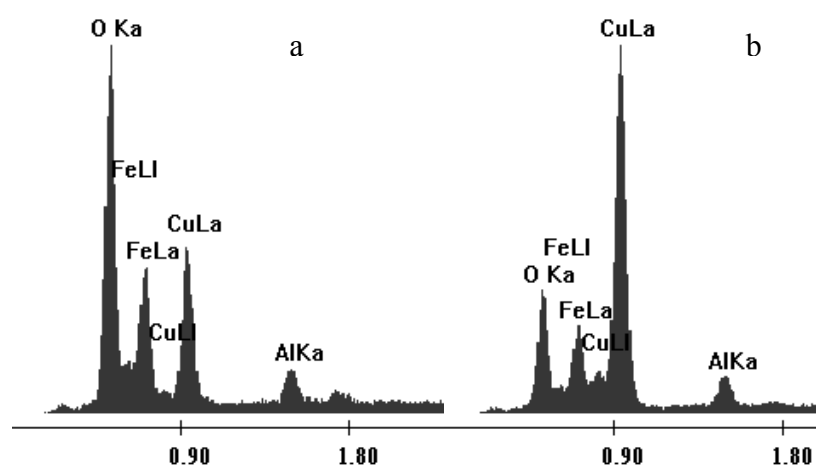


Fig. S1. EDX spectra corresponding to (a) the particle embedding and (b) nanoporous matrix in the as-dealloyed $\text{Al}_{62.5}\text{Cu}_{30}\text{Fe}_{7.5}$ sample.

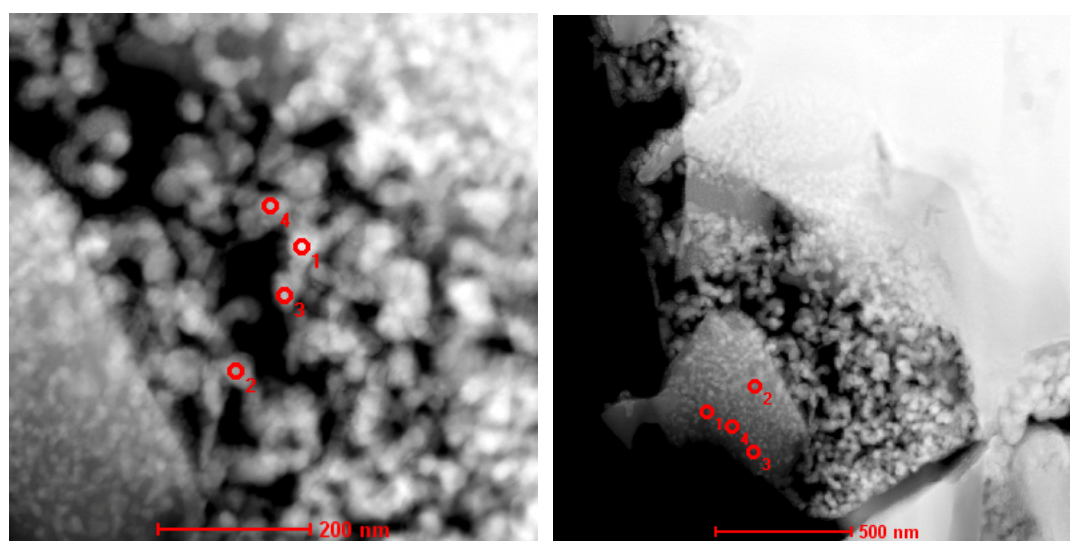


Fig. S2. HAADF-STEM images showing the microstructure of the as-dealloyed $\text{Al}_{62.5}\text{Cu}_{20}\text{Fe}_{17.5}$ sample. The positions for NB-EDX analysis are highlighted by small circles with the numbers 1-4 beside.

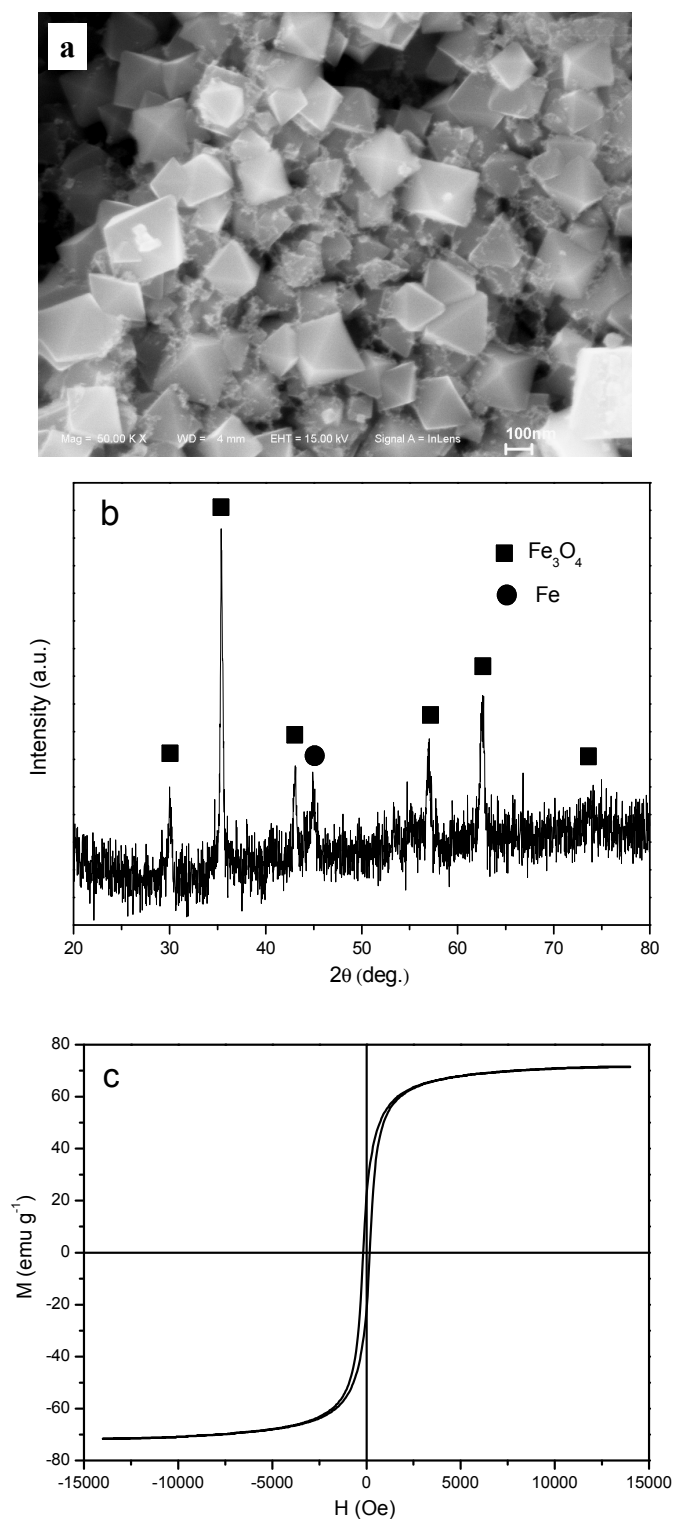


Fig. S3. (a) SEM image showing the microstructure of the as-dealloyed $\text{Al}_{80}\text{Fe}_{20}$ alloy, (b) corresponding XRD pattern and (c) magnetic hysteresis ($M-H$) curve.