

SUPPLEMENTARY INFORMATION FOR: Microscopic origin of highly enhanced current carrying capabilities of thin NdFeAs(O,F) films

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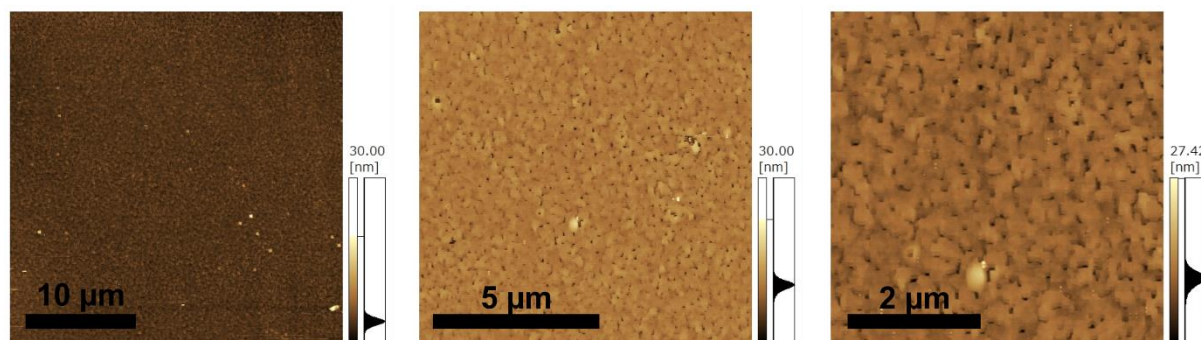


Figure S1: Atom force microscopy images of the MgO/NdFeAs(O,F)/NdOF sample at different magnifications.

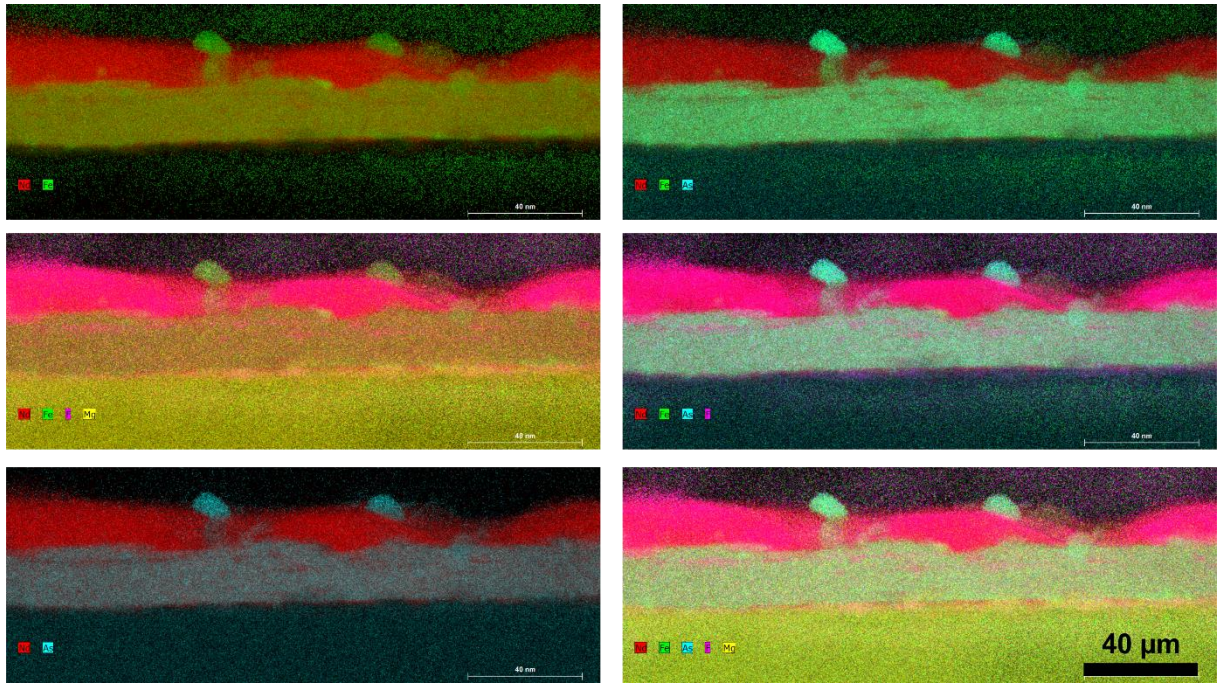


Figure S2: Further element distribution maps of Fe (green), Nd (red), Mg (yellow), As (blue) and F (purple) of the NdFeAs(O,F)/NdOF layers on MgO measured by energy-dispersive X-Ray spectroscopy.

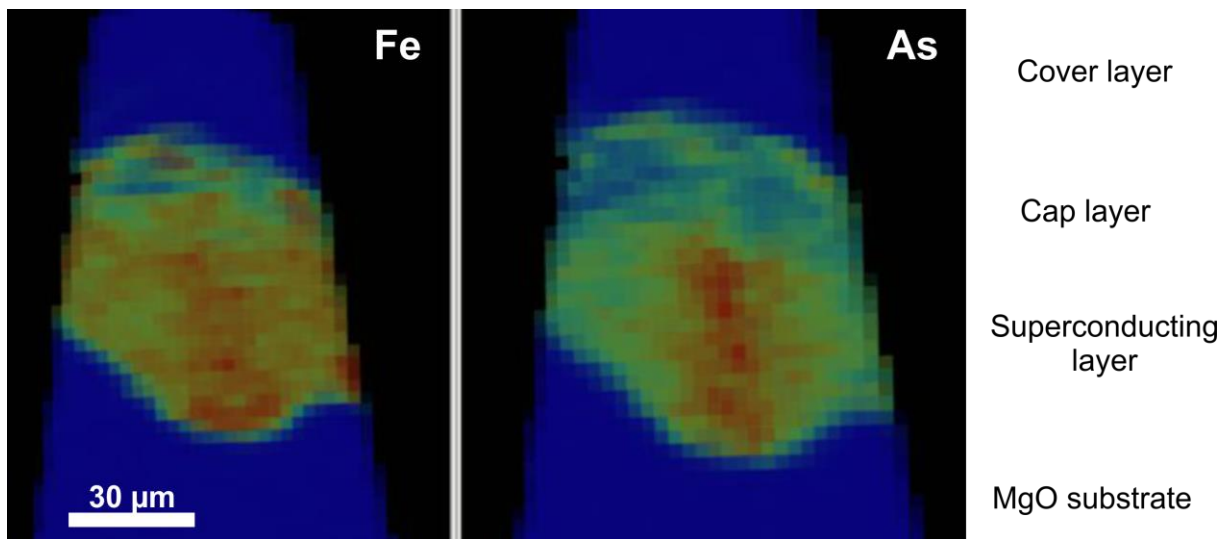


Figure S3: Further color-coded atomic element distribution of Fe and As of a NdFeAs(O,F)/NdOF layers on MgO measured by APT as vertical cross section. Blue means 0 at. % and red the corresponding maximum concentration. Small, elongated As particle is visible.

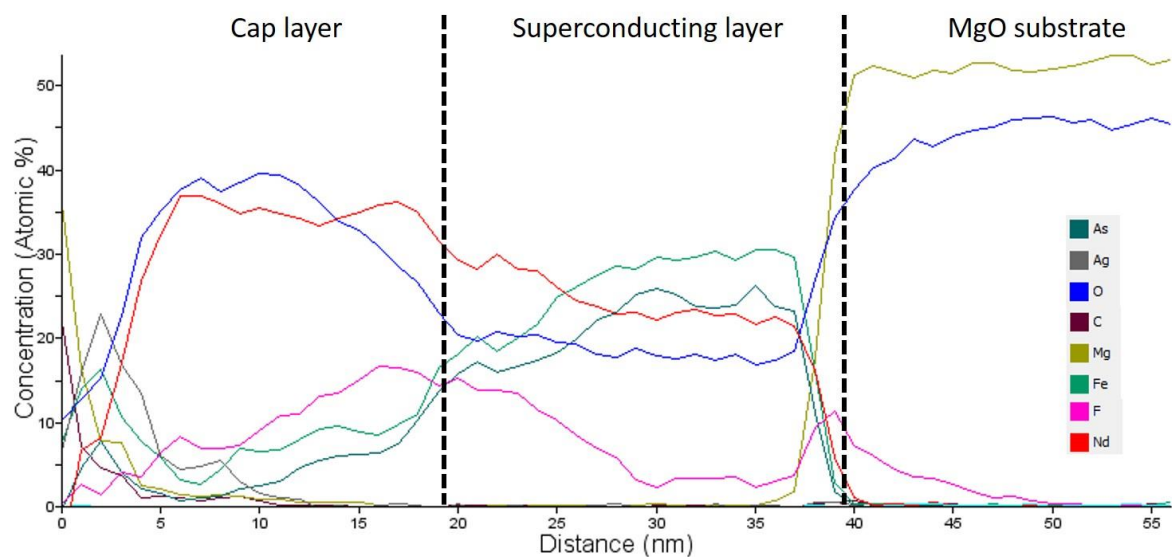


Figure S4: Concentration profile NdFeAs(O,F)/NdOF layers on MgO measured by APT along z-direction of the layer architecture. At the interface to the MgO substrate a Mg-F rich layer is observed. The F-content shows huge changes along the z-direction.