

Field-free control of magnetization in nanostructured materials

Motivation: searching for new concepts of manipulation the magnetization of a material without the use of power-consumptive magnetic fields



Bachelor and Master Thesis in the group of Prof Kläui

System: nanostructured magnetistrictive materials: Ni, Galfenol; materials with perpendicular magnetic anisotropy.

Experiments: fabrication and characterization of magnetic nanostructures; investigation of strain-induced changes of magnetic properties.

Techniques: Photoemission electron microscopy (PEEM) at Synchrotrons; Magneto-optical Kerr effect (MOKE); Electron-beam lithography.







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