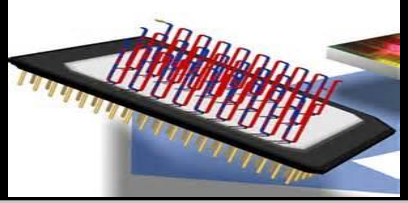
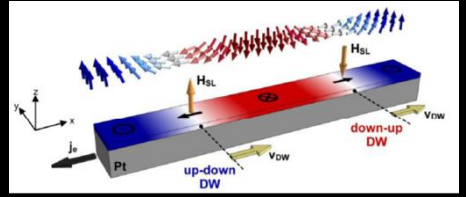
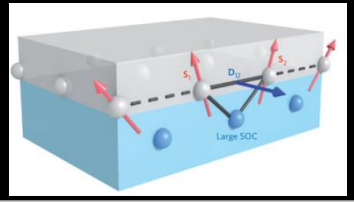
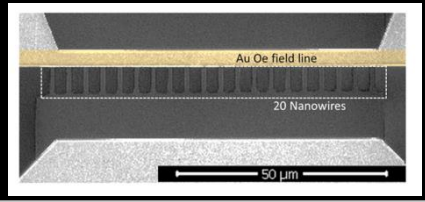
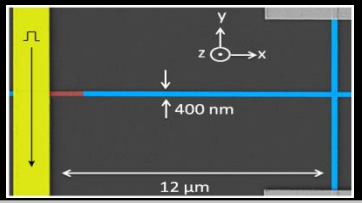



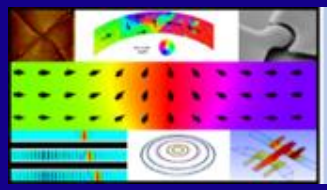






Spin orbit torques and Dzyaloshinskii-Moriya interaction induced chiral spin structures

- **Motivation:** Current storage and logic devices are reaching their intrinsic limits. Magnetic memory devices are a promising technology to overcome these limits. However, the manipulation of magnetization is a key to development of these new technologies. The spin orbit torque and Dzyaloshinskii-Moriya interaction induced chiral spin structures are potential keys in efficient magnetization switching.



KLÄUI - LAB

JG|U

Bachelor and Master Thesis in the group of Prof Kläui

- **System:** Magnetic multilayer nanodevices with perpendicular magnetic anisotropy and spin orbit coupling.
- **Experiments:** Growth and characterization of magnetic multilayer thin films; Nanofabrication of spintronic devices; investigation of current-induced domain wall dynamics and magnetotransport.
- **Techniques:** magneto-sputtering system; Superconducting Quantum Interference Device (SQUID); Electron-beam lithography; Magneto-optical Kerr effect (MOKE); Kerr microscopy; Transport measurements in magnetic vector-coil cryostat; Micromagnetic simulations.

MATERIALS IN MAINZ SCIENCE

DFG Deutsche Forschungsgemeinschaft

SINGULUS SPINNET

Horizon 2020 Programme

SPIN+X SFB/TRR 173 Kaiserslautern • Mainz

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