



Contribution ID: 367

Type: Talk

[117] Exchange Bias Like Effect In Co:ZnO

Thursday 24 August 2017 12:30 (15 minutes)

Due to the absence of a seizable magnetization in antiferromagnetic spintronics their direct control is difficult and alternative means as, e.g., coupling to a ferromagnet via exchange bias [1], are needed. Antiferromagnetic Co:ZnO was presented as a model system in which uncompensated spins lead to a vertical exchange bias like shift [2] connected to the Co-doping level [3]. We studied temperature and cooling field effects on this vertical shift at different doping levels.

[1] Nogues, J. and Schuller, I.K., J. Magn. Magn. Mater. 192, 203 (1999).

[2] Henne, B. et al., Phys. Rev. B 93, 144406 (2016).

[3] Ney, V. et al., Phys. Rev. B 94, 224405 (2016).

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Session Classification: Condensed Matter Physics (incl. NESY)

Track Classification: Condensed Matter Physics (incl. NESY)