

## Selected Publications 2019

Fischer, M.; Trant, M.; Thorwarth, K.; Patscheider, J.; Hug, H. J. A setup for arc-free reactive DC sputter deposition of Al-O-N. *Surf. Coat. Technol.* 2019, 362, 220-224. <https://doi.org/10.1016/j.surf-coat.2019.01.082>

Emre, B.; Yıldırım, O.; Duman, E. Investigation of Ti substituting for Ni on magnetic, magnetocaloric and phase transition characteristics of Ni<sub>50</sub>Mn<sub>36</sub>In<sub>14</sub>. *Mater. Res. Express* 2019, 6 (7), 076102 (7 pp.). <https://doi.org/10.1088/2053-1591/ab12a0>

Anthis, A. H. C.; Matter, M. T.; Keevend, K.; Gerken, L. R. H.; Scheibler, S.; Doswald, S.; Gogos, A.; Herrmann, I. K. Tailoring the colloidal stability, magnetic separability and cytocompatibility of high-capacity magnetic anion exchangers. *ACS Appl. Mater. Interfaces* 2019. <https://doi.org/10.1021/acsami.9b16619>

Tozkoparan, O.; Yildirim, O.; Yuzukak, E.; Duman, E.; Dincer, I. Magnetostructural transition in Co-Mn-Ge systems tuned by valence electron concentration. *J. Alloys Compd.* 2019, 791, 208-214. <https://doi.org/10.1016/j.jallcom.2019.03.048>

Zhao, X.; Mandru, A. O.; Vogler, C.; Marioni, M. A.; Suess, D.; Hug, H. J. Magnetization reversal of strongly exchange-coupled double nanolayers for spintronic devices. *ACS Appl. Nano Mater.* 2019. <https://doi.org/10.1021/acsanm.9b01243>

Fischer, M.; Trant, M.; Thorwarth, K.; Crockett, R.; Patscheider, J.; Hug, H. J. Understanding the microstructural evolution and mechanical properties of transparent Al-O-N and Al-Si-O-N films. *Sci. Technol. Adv. Mater.* 2019, 20 (1), 1031-1042. <https://doi.org/10.1080/14686996.2019.1666425>

Baćani, M.; Marioni, M. A.; Schwenk, J.; Hug, H. J. How to measure the local Dzyaloshinskii-Moriya interaction in skyrmion thin-film multilayers. *Sci. Rep.* 2019, 9 (1), 3114 (12 pp.). <https://doi.org/10.1038/s41598-019-39501-x>

Meng, K. Y.; Ahmed, A. S.; Baćani, M.; Mandru, A. O.; Zhao, X.; Bagués, N.; Esser, B. D.; Flores, J.; McComb, D. W.; Hug, H. J.; et al. Observation of nanoscale skyrmions in SrIrO<sub>3</sub>/SrRuO<sub>3</sub> bilayers. *Nano Lett.* 2019, 19 (5), 3169-3175. <https://doi.org/10.1021/acs.nanolett.9b00596>

Falub, C. V.; Pietambaram, S. V.; Yildirim, O.; Meduňa, M.; Caha, O.; Hida, R.; Zhao, X.; Ambrosini, J.; Rohrmann, H.; Hug, H. J. Enhanced permeability dielectric FeCo/Al<sub>2</sub>O<sub>3</sub> multilayer thin films with tailored properties deposited by magnetron sputtering on silicon. *AIP Adv.* 2019, 9 (3), 035243 (6 pp.). <https://doi.org/10.1063/1.5079477>