

Subdivision 4, Publications 2018 – 2020

Creation Date: 25/02/2021

Articles in journals

- 1) **Soldatov, I.**, Andrei, P., **Schäfer, R.**, Inverted Hysteresis, Magnetic Domains, and Hysterons, *IEEE Magnetics Letters* 11 (2020), S. 2405805/1-5
<https://ieeexplore.ieee.org/document/9246226>.
- 2) **Kravchuk, V.P.**, **Rößler, U.K.**, **van den Brink, J.**, Garst, M., Solitary wave excitations of skyrmion strings in chiral magnets, *Physical Review B* 22 102 (2020), S. 220408/1-6
<https://journals.aps.org/prb/abstract/10.1103/PhysRevB.102.220408>.
- 3) Pylypovskiy, O.V., **Kononenko, D.Y.**, **Yershov, K.V.**, **Rößler, U.K.**, Tomilo, A.V., Fassbender, J., **van den Brink, J.**, Makarov, D., Sheka, D.D., Curvilinear One-Dimensional Antiferromagnets, *Nano Letters* 11 20 (2020), S. 8157-8162
<https://pubs.acs.org/doi/10.1021/acs.nanolett.0c03246>.
- 4) **Lammel, M.**, **Geishendorf, K.**, Choffel, M.A., Hamann, D.M., Johnson, D.C., **Niensch, K.**, **Thomas, A.**, Fast Fourier transform and multi-Gaussian fitting of XRR data to determine the thickness of ALD grown thin films within the initial growth regime, *Applied Physics Letters* 21 117 (2020), S. 213106/1-5 <https://aip.scitation.org/doi/10.1063/5.0024991>.
- 5) **Leonov, A.O.**, Tambovtcev, I.M., Lobanov, I.S., Uzdin, V.M., Stability of in-plane and out-of-plane chiral skyrmions in epitaxial MnSi(111)/Si(111) thin films: Surface twists versus easy-plane anisotropy, *Physical Review B* 17 102 (2020), S. 174415/1-8
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- 6) **Yershov, K.**, Kravchuk, V.P., Sheka, D., **Rößler, U.**, Curvature effects on phase transitions in chiral magnets, *SciPost Physics* 4 9 (2020), S. 043/1-18
<https://scipost.org/10.21468/SciPostPhys.9.4.043>.
- 7) **Nichterwitz, M.**, **Honnali Sudheendra, S.**, **Zehner, J.**, **Schneider, S.**, Pohl, D., **Schiemenz, S.**, Goennenwein, S.T.B., **Niensch, K.**, **Leistner, K.**, Control of Positive and Negative Magnetoresistance in Iron Oxide–Iron Nanocomposite Thin Films for Tunable Magnetoelectric Nanodevices, *ACS Applied Electronic Materials* 8 2 (2020), S. 2543-2549
<https://pubs.acs.org/doi/10.1021/acsaelm.0c00448>.
- 8) Merkel, M., Huhnstock, R., Reginka, M., Holzinger, D., Vogel, M., Ehresmann, A., **Zehner, J.**, **Leistner, K.**, Interrelation between polycrystalline structure and time-dependent magnetic anisotropies in exchange-biased bilayers, *Physical Review B* 14 102 (2020), S. 144421/1-10 <https://journals.aps.org/prb/abstract/10.1103/PhysRevB.102.144421>.
- 9) He, Y., Fecher, G.H., Fu, C., Pan, Y., Manna, K., Kroder, J., Jha, A., Wang, X., Hu, Z., Agrestini, S., Herrero-Martín, J., Valvidares, M., Skourski, Y., Schnelle, W., Stamenov, P., Borrmann, H., Tjeng, L.H., **Schäfer, R.**, Parkin, S.S.P., Coey, J.M.D., Felser, C., A New Highly Anisotropic Rh-Based Heusler Compound for Magnetic Recording, *Advanced Materials* 45 32 (2020), S. 2004331/1-8 <https://onlinelibrary.wiley.com/doi/full/10.1002/adma.202004331>.
- 10) Puttock, R., Manzin, A., **Neu, V.**, Garcia-Sanchez, F., Fernandez Scarioni, A., Schumacher, H.W., Kazakova, O., Modal Frustration and Periodicity Breaking in Artificial Spin Ice, *Small* 42 16 (2020), S. 2003141/1-8
<https://onlinelibrary.wiley.com/doi/full/10.1002/sml.202003141>.
- 11) Hu, X., Dai, G., Sievers, S., Scarioni, A.F., **Neu, V.**, Bieler, M., Schumacher, H.W., Uncertainty Analysis of Stray Field Measurements by Quantitative Magnetic Force Microscopy, *IEEE Transactions on Instrumentation and Measurement (T-IM)* 10 69 (2020), S. 8187-8195
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- 12) **Zehner, J., Soldatov, I., Schneider, S.,** Heller, R., Khojasteh, N.B., **Schiemenz, S., Fähler, S., Nielsch, K., Schäfer, R., Leistner, K.,** Voltage-Controlled Deblocking of Magnetization Reversal in Thin Films by Tunable Domain Wall Interactions and Pinning Sites, *Advanced Electronic Materials* 11 6 (2020), S. 2000406/1-13
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- 17) Hu, X., Dai, G., Sievers, S., Fernández-Scarioni, A., Corte-León, H., Puttock, R., Barton, C., Kazakova, O., Ulvr, M., Klapetek, P., Havlíček, M., Nečas, D., **Tang, Y., Neu, V.,** Schumacher, H., Round robin comparison on quantitative nanometer scale magnetic field measurements by magnetic force microscopy, *Journal of Magnetism and Magnetic Materials* 511 (2020), S. 166947/1-11 <https://doi.org/10.1016/j.jmmm.2020.166947>.
- 18) **Nichterwitz, M., Neitsch, S., Röher, S., Wolf, D., Nielsch, K., Leistner, K.,** Voltage-controlled ON switching and manipulation of magnetization via the redox transformation of β -FeOOH nanoplatelets, *Journal of Physics D: Applied Physics* 8 53 (2020), S. 084001/1-9 <https://iopscience.iop.org/article/10.1088/1361-6463/ab5bca>.
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- 22) **Bogdanov, A.,** Panagopoulos, C., The emergence of magnetic skyrmions, *Physics Today* 3 73 (2020), S. 45-49 <https://doi.org/10.1063/PT.3.4431>.
- 23) Díaz-García, Á., Law, J., Cota, A., Bellido-Correa, A., Ramírez-Rico, J., **Schäfer, R.,** Franco, V., Novel procedure for laboratory scale production of composite functional filaments for additive manufacturing, *Materials Today Communications* 24 (2020), S. 101049/
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- 25) **Börrnert, F., Kern, F., Harder, F.,** Riedel, T., Müller, H., **Büchner, B., Lubk, A.,** The Dresden in-situ (S)TEM special with a continuous-flow liquid-helium cryostat, *Ultramicroscopy* 203 (2019), S. 12-20
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Individual contributions to edited volumes

- 1) Schwotzer, D., Meyer-Plath, A., Rittinghausen, S., Creutzenberg, O., **Leonhardt, A.**, Schaudien, D., Approaches on MWCNT diameters and its relation to tumor development; in: *Naunyn-Schmiedeberg's Archives of Pharmacology, Naunyn-Schmiedeberg's Archives of Pharmacology Supplement 1 Abstracts of the 84th Annual Meeting of the German Society for Experimental and Clinical Pharmacology and Toxicology (DGPT) and the 20th Annual Meeting of the Association of the Clinical Pharmacology Germany (VKliPha) With contribution of the Arbeitsgemeinschaft für Angewandte Humanpharmakologie e. V. (AGAH)*, 391 (2018), S. 1-93 <https://doi.org/10.1007/s00210-018-1477-5>.