

Publications 2021

Yildirim, O., Marioni, M. A., Falub, C. V., Rohrmann, H., Jaeger, D., Rechsteiner, M., Schneider, D. and Hug, H. J., *Tuning the perpendicular magnetic anisotropy in Co/Pt multilayers grown by facing target sputtering and conventional sputtering*. Scripta Materialia, 207 (2022), 114285 (4 pp.). <https://doi.org/10.1016/j.scriptamat.2021.114285>

Yildirim, O., Borzì, A., Falub, C. V., Rohrmann, H., Jaeger, D., Rechsteiner, M., Schneider, D., Neels, A., Hug, H. J., and Marioni, M. A.. *Tuning the microstructure of the Pt layers grown on Al₂O₃ (0001) by different sputtering methods*. Scripta Materialia 194 (2021) 113689. <https://doi.org/10.1016/j.scriptamat.2020.113689>

Gasparotto, P., Fischer, M., Scopece, D., Liedke, M., Butterling, M., Wagner, A., Yildirim, O., Trant, M., Passerone, D., Hug, H. J., and Pignedoli, C.. *Electron Excess Induced Defects in Materials: the Case of Oxygen in Wurtzite Aluminum Nitride*. Chem. Mater. <https://doi.org/10.1021/acsami.0c19270>

Meyer, E., Bennewitz, R., and Hug, H.J., *Scanning Probe Microscopy. The Lab on a Tip*. 2nd Edition. ISSN 1868-4513, ISSN 1868-4521 (electronic), Graduate Texts in Physics, ISBN 978-3-030-37088-6. Published June 2021. <https://doi.org/10.1007/978-3-030-37089-3>

"Magnetic Skyrmions and Their Applications" edited by G. Finocchio and C. Panagopoulos. Chapter 4 "Mapping the magnetic field of skyrmions and spins spirals by scanning probe microscopy" by H.J. Hug. eBook ISBN: 9780128209332, Paperback ISBN: 9780128208151, Imprint: Woodhead Publishing. Published Date: 3rd June 2021. <https://www.elsevier.com/books/magnetic-skyrmions-and-their-applications/finocchio/978-0-12-820815-1>. Preview [here](#).

"Magnetic Skyrmions and Their Applications" edited by G. Finocchio and C. Panagopoulos. Chapter 5 "Scanning probe microscopy methods for imaging skyrmions and spin spirals with atomic resolution" by H.J. Hug. eBook ISBN: 9780128209332, Paperback ISBN: 9780128208151, Imprint: Woodhead Publishing. Published Date: 3rd June 2021. <https://www.elsevier.com/books/magnetic-skyrmions-and-their-applications/finocchio/978-0-12-820815-1>. Preview [here](#).

Baghizadeh, A., Vaghefi, P. M., Huang, X., Borme, J., Almeida, B., Salak, A. N., ... Vieira, J. M. (2021). *Interplay of Magnetic Properties and Doping in Epitaxial Films of h-REFeO₃ Multiferroic Oxides*. Small, 17(11), 2005700 (12 pp.). <https://doi.org/10.1002/smll.202005700>

Dwivedi, N., Ott, A. K., Sasikumar, K., Dou, C., Yeo, R. J., Narayanan, B., ..., Dutta, T., ... Bhatia, C. S. (2021). *Graphene overcoats for ultra-high storage density magnetic media*. Nature Communications, 12(1), 2854 (13 pp.). <https://doi.org/10.1038/s41467-021-22687-y>

Ruvalcaba, R., Corbett, J. P., Mandru, A. O., Takeuchi, N., Smith, A. R., & Guerrero-Sanchez, J. (2021). *Surface structures of magnetostrictive D₀₃-Fe₃Ga(0 0 1)*. Applied Surface Science, 553, 149488 (8 pp.). <https://doi.org/10.1016/j.apsusc.2021.149488>

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Yildirim, O., Yüzüak, E., Tozkoporan, O., Dincer, I., & Duman, E.. *Magnetocaloric effect of ball-milled CoMn_{0.95}V_{0.05}Ge nano-powders*. Journal of Magnetism and Magnetic Materials, 519, 167449 (6 pp.). <https://doi.org/10.1016/j.jmmm.2020.167449>

