

## Selected Publications 2014

Bernard, L.; Heier, J.; Paul, W.; Hug, H. J. The SFM/ToF-SIMS combination for advanced chemically-resolved analysis at the nanoscale. *Nucl. Instrum. Methods Phys. Res. B* 2014, 339, 85-90.

<https://doi.org/10.1016/j.nimb.2014.02.131>

Benassi, A.; Schwenk, J.; Marioni, M. A.; Hug, H. J.; Passerone, D. Microscale motion control through ferromagnetic films. *Adv. Mater. Interfaces* 2014, 1 (4), 1400023 (10 pp.).

<https://doi.org/10.1002/admi.201400023>

Schwenk, J.; Marioni, M.; Romer, S.; Joshi, N. R.; Hug, H. J. Non-contact bimodal magnetic force microscopy. *Appl. Phys. Lett.* 2014, 104 (11), 112412 (4 pp.). <https://doi.org/10.1063/1.4869353>

Hauet, T.; Piraux, L.; Srivastava, S. K.; Antohe, V. A.; Lacour, D.; Hehn, M.; Moutagne, F.; Schwenk, J.; Marioni, M. A.; Hug, H. J.; et al. Reversal mechanism, switching field distribution, and dipolar frustrations in Co/Pt bit pattern media based on auto-assembled anodic alumina hexagonal nanobump arrays. *Phys. Rev. B* 2014, 89, 174421 (13 pp.). <https://doi.org/10.1103/PhysRevB.89.174421>

Benassi, A.; Marioni, M. A.; Passerone, D.; Hug, H. J. Role of interface coupling inhomogeneity in domain evolution in exchange bias. *Sci. Rep.* 2014, 4, 4508 (5 pp.). <https://doi.org/10.1038/srep04508>

Niehuis, E.; Moellers, R.; Kollmer, F.; Arlinghaus, H.; Bernard, L.; Hug, H. J.; Vranjkovic, S.; Dianoux, R.; Scheidemann, A. In-situ TOF-SIMS and SFM measurements providing true 3D chemical characterization of inorganic and organic nanostructures. *Microsc. Microanal.* 2014, 20 (Suppl. 3), 2086-2087.

<https://doi.org/10.1017/S1431927614012161>

Péllisson-Schecker, A.; Hug, H. J.; Patscheider, J. Morphology, microstructure evolution and optical properties of Al-Si-N nanocomposite coatings. *Surf. Coat. Technol.* 2014, 257, 114-120.

<https://doi.org/10.1016/j.surfcoat.2014.08.053>