Scanning Probe Methods Group, Prof. Dr. Roland Wiesendanger

# Publications: Book Contributions and Review Articles

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## Book Contributions

**Magnetic Skyrmions on Discrete Lattices**
*Y. Vedmedenko and R. Wiesendanger*, in:
Handbook of Spin Transport and Magnetism, 2<sup>nd</sup> edition (ed. by E. Y. Tsymbal and I. Zutic), CRC Press, Taylor & Francis (2019)

**Magnetic spectroscopy of individual atoms, chains and nanostructures**
*J. Wiebe, A.A. Khajetoorians, and R. Wiesendanger*, in:
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**Non-collinear magnetism studied by spin-polarized scanning tunneling microscopy**
*K. von Bergmann, A. Kubetzka, O. Pietzsch, and R. Wiesendanger*, in:
Atomic- and Nano-Scale Magnetism (ed. by R. Wiesendanger), Springer Nature Switzerland (2018), p.163

**Magnetization dynamics on the atomic scale**
*S. Krause and R. Wiesendanger*, in:
Atomic- and Nano-Scale Magnetism (ed. by R. Wiesendanger), Springer Nature Switzerland (2018), p.221

**Atomic-Scale Spintronics**
*J. Brede, B. Chilian, A. A. Khajetoorians, J. Wiebe, and R. Wiesendanger*, in:
Handbook of Spintronics (ed. by Y. Xu, D. Awschalom, and J. Nitta), Springer (2016), p.757

**Quasicrystals: Magnetism**
*E. Y. Vedmedenko*, in:
Reference Module in Materials Science and Materials Engineering Update of Encyclopedia of Materials: Science and Technology (Second Edition), 2015 (ed. by S. Hashmi ), Elsevier (2016), p.1-5

**Nanotechnologie in Hamburg: neue Impulse für die Datenspeicherung der Zukunft**
*H. Fuchs and R. Wiesendanger*, in:
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**Magnetic Exchange Force Spectroscopy**
*A. Schwarz and S. Heinze*, in:
Non-Contact Atomic Force Microscopy Vol. 3 (ed. by S. Morita, F. J. Giessibl, E. Meyer, and R. Wiesendanger), Springer (2015), p.111

**Imaging Molecules on Bulk Insulators Using Metallic Tips**
*D. Z. Gao, A. Schwarz and A. L. Shluger*, in:
Non-Contact Atomic Force Microscopy Vol. 3 (ed. by S. Morita, F. J. Giessibl, E. Meyer, and R. Wiesendanger), Springer (2015), p.355

**Revealing Subsurface Vibrational Modes by Atomic-Resolution Damping Force Spectroscopy**
*M. Ashino and R. Wiesendanger*, in:
Non-Contact Atomic Force Microscopy Vol. 3 (ed. by S. Morita, F. J. Giessibl, E. Meyer, and R. Wiesendanger), Springer (2015), p.127

**Atomic Scale Magnetism Studied by Spin-Polarized Scanning Tunneling Microscopy**
*Oswald Pietzsch and Roland Wiesendanger*, in:
Fundamentals of Picoscience (ed. by Klaus D. Sattler), CRC Press (2013), p.413-445

**Spin-Polarized STM and Atomic-Scale Spintronics**
*J. Brede, B. Chilian, A. A. Khajetoorians, J. Wiebe, and R. Wiesendanger*, in:
Handbook of Spintronics (ed. by D. Awschalom, J. Nitta, and Y. Xu), Canopus Academic Publishing and Springer (2012)

**Magnetic Sensitive Scanning Tunneling Microscopy**
*Kirsten von Bergmann, André Kubetzka*, in:
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**Scanning tunneling spectroscopy on III-V materials: Effects of dimensionaltiy, magnetic field, and magnetic impurities**
*M. Morgenstern, J. Wiebe, F. Marczinowski, and R. Wiesendanger*, in:
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**Scanning tunneling spectroscopy of semiconductor quantum dots and nanocrystals**
*G. Maruccio and R. Wiesendanger*, in:
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**Low temperature scanning probe microscopy**
*M. Morgenstern, A. Schwarz, U. D. Schwarz*, in:
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**Low Temperature Scanning Probe Microscopy**
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**Anisotropic Domain Walls in Magnetic Nanostructures with Perpendicular Anisotropy**
*E.Y. Vedmedenko and R. Wiesendanger*, in:
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**Magnetic ordering of the Spin Reorientation Transition in Nanostructures**
*E. Y. Vedmedenko*, in:
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*R. Wiesendanger*, in:
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*W. Allers, A. Schwarz, U. D. Schwarz*, in:
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**Investigation of the mechanics of nanocontacts using a vibrating cantilever technique**
*U. D. Schwarz, H. Hölscher, W. Allers, A. Schwarz, and R. Wiesendanger*, in:
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*A. Born*, in:
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*R. Wiesendanger*, in:
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*A. Born, M. Kleiber, G. Meier, D. Heitmann, and R. Wiesendanger*, in:
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*R. Wiesendanger*, in:
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*R. Wiesendanger*, in:
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*R. Wiesendanger*, in:
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**Surface Electronic Structure of Gd(0001): Studies on the Thickness and Temperature Dependence of the Exchange Splitting**
*M. Bode, M. Getzlaff, R. Pascal, S. Heinze, and R. Wiesendanger*, in:
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*A. Wadas*, in:
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## Review Articles

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*J. Wiebe, L. Zhou, and R. Wiesendanger,* J. Phys. D: Appl. Phys. **44** 464009 (2011)

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*O. Pietzsch and R. Wiesendanger,* Pure and Applied Chemistry **83** 1981 (2011)

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*E.Y. Vedmedenko, N. Mikuszeit,* ChemPhysChem **9** 1222 (2008)

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*E. Y. Vedmedenko,* Modern Physics Letters B **19** 1367 (2005)

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*E. Y. Vedmedenko,* Physik Journal **8/2005** 81 (2005)

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*M. Morgenstern,* Physik Journal **8/2004** 83 (2004)

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*M. Bode,* Rep. Progr. Phys. **66** 523 (2003)

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*R. Wiesendanger and M. Bode,* Sol. State Commun. **119** 341 (2001)

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*M. Getzlaff,* Appl. Phys. A **72** 455 (2001)

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*M. Bode, M. Dreyer, M. Getzlaff, M. Kleiber, A. Wadas, and R. Wiesendanger,* J. Phys.: Condens. Matter **11** 9387 (1999)

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