

Publications in Refereed Scientific Journals

81. C. Stamm, C. Murer, Y. Acremann, M. Baumgartner, R. Gort, S. Däster, **A. Kleibert**, K. Garelo, J. Feng, M. Gabureac, Z. Chen, J. Stöhr, and P. Gambardella
X-Ray Spectroscopy of Current-Induced Spin-Orbit Torques and Spin Accumulation in Pt/3d Transition Metal Bilayers
Submitted (2019), arxiv.org/abs/1904.00877
80. H. Arava, N. R. Leo, D. Schildknecht, J. Cui, J. Vijayakumar, P. M. Derlet, **A. Kleibert**, and L. J. Heyderman
Engineering Relaxation Pathways in Building Blocks of Artificial Spin Ice for Computation
Phys. Rev. Appl., Accepted (2019), arxiv.org/abs/1812.06936
79. E. Jal, M. Makita, B. Rösner, C. David, F. Nolting, J. Raabe, T. Savchenko, **A. Kleibert**, F. Capotondi, E. Pedersoli, L. Raimondi, M. Manfredda, I. Nikolov, X. Liu, N. Jaouen, J. Gorchon, G. Malinowski, M. Hehn, B. Vodungbo, and J. Lüning
Single Shot Time-Resolved Magnetic X-Ray Absorption at a Free Electron Laser
Phys. Rev. B, Accepted (2019), arxiv.org/abs/1811.05917
78. R. Kanak, J. Raabe, P. Schifferle, S. Finizio, **A. Kleibert**, J. A. van Bokhoven, and L. Artiglia
Design and Performance of NanoXPS, a New Setup for Spatially Resolved Transmission X-Ray Photoelectron Spectromicroscopy at the Swiss Light Source
J. Synchrotron Radiat. 26, (2019), DOI: 10.1107/S1600577519002984
77. Z. Luo, T. Phuong Dao, A. Hrabec, J. Vijayakumar, **A. Kleibert**, M. Baumgartner, E. Kirk, J. Cui, T. Savchenko, G. Krishnaswamy, L. J. Heyderman, and P. Gambardella
Chirally Coupled Nanomagnets
Science 363, 1435 (2019), DOI: 10.1126/science.aau7913
76. M. Moradi, N. L. Opara, L. G. Tulli, C. Wäckerlin, S. J. Dalgarno, S. J. Teat, M. Baljozovic, O. Popova, E. van Genderen, **A. Kleibert**, H. Stahlberg, J. P. Abrahams, C. Padeste, P. F. X. Corvini, T. A. Jung, and P. Shahgaldian
Supramolecular Architectures of Molecularly Thin Yet Robust Free-Standing Layers
Sci. Adv. 5, eaav4489 (2019), DOI: 10.1126/sciadv.aav4489
75. K. Zeissler, S. Finizio, K. Shahbazi, J. Massey, F. Al Ma'Mari, M. C. Rosamond, E. H. Linfield, T. A. Moore, D. Bracher, **A. Kleibert**, J. Raabe, G. Burnell, and C. H. Marrows
Discrete Hall Resistivity Contribution From Néel Skyrmions in Multilayer Nanodiscs
Nat. Nanotech. 13, 1161 (2018), DOI: 10.1038/s41565-018-0268-y

74. S. Finizio, S. Wintz, D. Bracher, E. Kirk, A. S. Semisalova, J. Förster, K. Zeissler, T. Wessels, M. Weigand, K. Lenz, [A. Kleibert](#), and J. Raabe
Thick Permalloy Films for the Imaging of Spin Texture Dynamics in Perpendicularly Magnetized Systems
Phys. Rev. B **98**, 104415 (2018), DOI: 10.1103/PhysRevB.98.104415
73. L. Baldrati, A. Ross, T. Niizeki, C. Schneider, R. Ramos, J. Cramer, O. Gomonay, M. Filianina, T. Savchenko, D. Heinze, [A. Kleibert](#), E. Saitoh, J. Sinova, and M. Kläui
Full Angular Dependence of the Spin Hall and Ordinary Magnetoresistance in Epitaxial Antiferromagnetic NiO(001)/Pt Thin Films
Phys. Rev. B **98**, 024422 (2018), DOI: 10.1103/PhysRevB.98.024422
72. C. A. F. Vaz, C. Piamonteze, and [A. Kleibert](#)
Enhanced Mobility of Iron Nanoparticles Deposited onto a Xenon-Buffered Substrate
J. Magn. Magn. Mat. **459**, 2 (2018), DOI: 10.1016/j.jmmm.2018.02.021
(Corresponding Authors: C. A. F. V. and A. K.)
71. H. Arava, P. M. Derlet, J. Vijayakumar, J. Cui, N. S. Bingham, [A. Kleibert](#), and L. J. Heyderman
Computational Logic with Square Rings of Nanomagnets
Nanotechnology **29**, 265205 (2018), DOI: 10.1063/1.5010166
70. P. Helfenstein, R. Rajeev, I. Mochi, [A. Kleibert](#), C. A. F. Vaz, and Y. Ekinci
Beam Drift and Partial Probe Coherence Effects in EUV Reflective-Mode Coherent Diffractive Imaging
Opt. Express **26**, 12242 (2018), DOI: 10.1364/OE.26.012242
69. H. Cun, A. Hemmi, E. Miniussi, C. Bernard, B. Probst, K. Liu, D. Alexander, [A. Kleibert](#), G. Mette, M. Weigl, M. Schreck, J. Osterwalder, A. Radenovic, and T. Greber
Transfer of Centimeter-Sized Single-Orientation Monolayer h-BN with or without Nanovoids
Nano Lett. **18**, 1205 (2018), DOI: 10.1021/acs.nanolett.7b04752
68. S. Gliga, G. Hrkac, C. Donnelly, J. Büchi, [A. Kleibert](#), J. Cui, A. Farhan, E. Kirk, R. Chopdekar, Y. Masaki, N. S. Bingham, A. Scholl, R. L. Stamps, and L. J. Heyderman,
Emergent Dynamic Chirality in a Thermally Driven Artificial Spin Ratchet
Nat. Mater. **16**, 1106 (2017), DOI: 10.1107/ 10.1038/nmat5007
67. L. Artiglia, J. Edebeli, F. Orlando, S. Chen, M.-T. Lee, P. Corral-Arroyo, A. Gilgen, T. Bartels-Rausch, [A. Kleibert](#), M. Vazdar, M. Carignano, J. Francisco, P. Shepson, I. Gladich, and M. Ammann
A Surface-Stabilized Ozonide Triggers Bromide Oxidation at the Aqueous Solution-Vapor Interface
Nat. Commun. **8**, 700 (2017), DOI: 10.1038/s41467-017-00823-x

66. G. Tinti, H. Marchetto, C. A. F. Vaz, **A. Kleibert**, M. Andrä, R. Barten, A. Bergamaschi, M. Brückner, S. Cartier, R. Dinapoli, T. Franz, E. Fröjdh, D. Greiffenberg, C. Lopez-Cuenca, C. Mezza, A. Mozzanica, F. Nolting, M. Ramilli, S. Redford, M. Ruat, Ch. Ruder, L. Schädler, Th. Schmidt, B. Schmitt, F. Schütz, X. Shi, D. Thattil, S. Vetter, and J. Zhang, **The EIGER Detector for Low Energy Electron Microscopy and Photo-Emission Electron Microscopy** *J. Synchrotron Radiat.* **24**, 936 (2017), DOI: 10.1107/S1600577517009109
65. A. Farhan, P. M. Derlet, L. Anghinolfi, **A. Kleibert**, A. Scholl, and L. J. Heyderman, **Magnetic Charge and Moment Dynamics in Artificial Kagome Spin Ice** *Phys. Rev. B* **96**, 064409 (2017), DOI: 10.1103/PhysRevB.96.064409
64. M. Buzzi, M. Makita, L. Howald, **A. Kleibert**, B. Vodungbo, P. Maldonado, J. Raabe, N. Jaouen, H. Redlin, K. Tiedtke, P. M. Oppeneer, C. David, F. Nolting, and J. Lüning, **Single-Shot Monitoring of Ultrafast Processes via X-Ray Streaking at a Free Electron Laser** *Sci. Rep.* **7**, 7253 (2017), DOI: 10.1038/s41598-017-07069-z
63. M. Wyss, A. Mehlin, B. Gross, A. Buchter, A. Farhan, M. Buzzi, **A. Kleibert**, G. Tütüncüoğlu, F. Heimbach, A. Fontcuberta i Morral, D. Grundler, and M. Poggio, **Imaging Magnetic Vortex Configurations in Ferromagnetic Nanotubes** *Phys. Rev. B* **96**, 024423 (2017), DOI: 10.1103/PhysRevB.96.024423
62. **A. Kleibert**, A. Balan, R. Yanes, P. M. Derlet, C. A. F. Vaz, M. Timm, A. Fraile Rodríguez, A. Béché, J. Verbeeck, R. S. Dhaka, M. Radovic, U. Nowak, and F. Nolting **Direct Observation of Enhanced Magnetism in Individual Size- and Shape-Selected 3d Transition Metal Nanoparticles** *Phys. Rev. B* **95**, 195404 (2017), DOI: 10.1103/PhysRevB.95.195404 (Corresponding Author: A. K.)
61. W. Karim, C. Spreafico, **A. Kleibert**, J. Gobrecht, J. VandeVondele, Y. Ekinici, and J. A. van Bokhoven **Catalyst Support Effects on Hydrogen Spillover** *Nature (London)* **541**, 68 (2017), DOI:10.1038/nature20782
60. G. Olivieri, A. Goel, **A. Kleibert**, D. Cvetko and M. A. Brown **Quantitative Ionization Potentials and Work Functions of Aqueous Solutions** *Phys. Chem. Chem. Phys.* **18**, 29506 (2016), DOI: 10.1039/C6CP05682B
59. S. Finizio, M. Vafae, I. Valmianski, R. M. Reeve, R. Lo Conte, **A. Kleibert**, I. K. Schuller, and M. Kläui **Control of the Magnetic Configuration of Ferromagnetic Nanostructures Across the Structural Phase Transition of Vanadium Dioxide** *IEEE Magn. Lett.* **7**, 6106604 (2016), DOI 10.1109/LMAG.2016.2605625
58. T. Hajiri, S. Finizio, M. Vafae, Y. Kuroki, H. Ando, H. Sakakibara, **A. Kleibert**, L. Howald, F. Kronast, K. Ueda, H. Asano, and M. Kläui **Magnetization Reversal of the Domain Structure in the Anti-Perovskite Nitride Co₃FeN Investigated by High-Resolution X-Ray Microscopy** *J. Appl. Phys.* **119**, 183901 (2016)

57. M. A. Brown, Z. Abbas, **A. Kleibert**, R. G. Green, A. Goel, S. May, and T. M. Squires
Determination of Surface Potential and Electrical Double-Layer Structure at the Aqueous Electrolyte-Nanoparticle Interface
Phys. Rev. X **6**, 011007 (2016)
56. F. Orlando, A. Waldner, T. Bartels-Rausch, M. Birrer, M.-T. Lee, C. Proff, T. Huthwelker, **A. Kleibert**, J. A. van Bokhoven, and M. Ammann
The Environmental Photochemistry of Oxide Surfaces and the Nature of Frozen Salt Solutions: A New In Situ XPS Approach
Top. Catal. **59**, 591 (2016), DOI:10.1007/s11244-015-0515-5
55. W. Karim, **A. Kleibert**, U. Hartfelder, A. Balan, J. Gobrecht, J. A. van Bokhoven, and Y. Ekinici
Size-Dependent Redox Behavior of Iron Observed by In Situ Single Nanoparticle Spectro-Microscopy on Well-Defined Model Systems
Sci. Rep. **6**, 18818 (2016), DOI:10.1038/srep18818
54. A. Buchter, R. Wölbing, M. Wyss, O. F. Kieler, T. Weimann, J. Kohlmann, A. B. Zorin, D. Ruffer, F. Matteini, G. Tütüncüoğlu, F. Heimbach, **A. Kleibert**, A. Fontcuberta i Morral, D. Grundler, R. Kleiner, D. Koelle, and M. Poggio
Magnetization Reversal of an Individual Exchange Biased Permalloy Nanotube
Phys. Rev. B **92**, 214432 (2015)
53. G. Olivieri, A. Goel, **A. Kleibert**, and M. A. Brown
Effect of X-Ray Spot Size on Liquid Jet Photoelectron Spectroscopy
J. Synchrotron Radiat. **22**, 1528 (2015), DOI:10.1107/S1600577515016306
(Corresponding Authors: A. K. and M. A. B.)
52. A. Balan, A. Fraile Rodríguez, C. A. F. Vaz, **A. Kleibert**, and F. Nolting
Effect of Substrate Interface on the Magnetism of Supported Iron Nanoparticles
Ultramicroscopy **159**, 513 (2015), DOI:10.1016/j.ultramic.2015.05.008.
(Corresponding Author: A. K.)
51. M.-T. Lee, M. A. Brown, S. Kato, **A. Kleibert**, A. Tuerler, and M. Ammann
Competition between Organics and Bromide at the Aqueous Solution–Air Interface as Seen from Ozone Uptake Kinetics and X-Ray Photoelectron Spectroscopy
J. Phys. Chem. A **119**, 4600 (2015)
50. M. A. Brown, M.-T. Lee, **A. Kleibert**, M. Ammann, and J. B. Giorgi
Ion Spatial Distributions at the Air- and Vacuum-Aqueous K₂CO₃ Interfaces
J. Phys. Chem. C **119**, 4976 (2015)
49. A. B. Redondo, I. Jordan, I. Ziazadeh, **A. Kleibert**, J. B. Giorgi, S. May, Z. Abbas, and M. A. Brown
Nanoparticle-Induced Charge Redistribution of the Air-Water Interface
J. Phys. Chem. C **119**, 2661 (2015)

48. J. Pruyne, M.-T. Lee, C. Fábri, A. Redondo, [A. Kleibert](#), M. Ammann, M. A. Brown, and M. Krisch
Liquid–Vapor Interface of Formic Acid Solutions in Salt Water: A Comparison of Macroscopic Surface Tension and Microscopic in Situ X-Ray Photoelectron Spectroscopy Measurements
J. Phys. Chem. C **118**, 29350 (2014)
47. J. Girovsky, K. Tarafder, C. Wäckerlin, J. Nowakowski, D. Siewert, T. Hählen, A. Wäckerlin, [A. Kleibert](#), N. Ballav, T. A. Jung, and P. M. Oppeneer
Antiferromagnetic Coupling of Cr-Porphyrin to a Bare Co Substrate
Phys. Rev. B **90**, 220404(R) (2014)
46. C. A. F. Vaz, A. Balan, F. Nolting, and [A. Kleibert](#)
In Situ Magnetic and Electronic Investigation of the Early Stage Oxidation of Fe Nanoparticles Using X-Ray Photo-Emission Electron Microscopy
Phys. Chem. Chem. Phys. **16**, 26624 (2014)
(Corresponding Author: A. K.)
45. A. Shchyrba, C. Wäckerlin, J. Nowakowski, S. Nowakowska, J. Björk, S. Fatayer, J. Girovsky, T. Nijs, S. Martens, [A. Kleibert](#), M. Stöhr, N. Ballav, T. A. Jung, and L. Gade
Controlling the Dimensionality of On-Surface Coordination Polymers via Endo- or Exoligation
J. Am. Chem. Soc. **136**, 9355 (2014)
44. A. Farhan, [A. Kleibert](#), P. M. Derlet, L. Anghinolfi, A. Balan, R. V. Chopdekar, M. Wyss, S. Gliga, F. Nolting, and L. J. Heyderman
Thermally Induced Magnetic Relaxation in Building Blocks of Artificial Kagome Spin Ice
Phys. Rev. B **89**, 214405 (2014)
(Corresponding Authors: A. K. and L. J. H.)
43. [A. Kleibert](#), A. Balan, A. Fraile Rodríguez, and F. Nolting
Investigating Individual Fe₅₀Co₅₀ Alloy Nanoparticles Using X-Ray Photo-Emission Electron Microscopy
J. Phys. Conf. Series **521**, 012003 (2014)
42. J. Girovsky, M. Buzzi, C. Wäckerlin, D. Siewert, J. Nowakowski, P. M. Oppeneer, F. Nolting, T. A. Jung, [A. Kleibert](#), and N. Ballav
Investigating Magneto-Chemical Interactions at Molecule-Substrate Interfaces by X-Ray Photo-Emission Electron Microscopy
Chem. Commun. **50**, 5190 (2014)
(Invited Article, Corresponding Authors: A. K. and N. B.)
41. I. Jordan, A. B. Redondo, M. A. Brown, D. Fodor, M. Staniuk, [A. Kleibert](#), H. J. Wörner, J. B. Giorgi, and J. A. van Bokhoven
Non-Uniform Spatial Distribution of Tin Oxide (SnO₂) Nanoparticles at the Air-Water Interface
Chem. Commun. **50**, 4242 (2014)

40. A. Balan, P. M. Derlet, A. Fraile Rodríguez, J. Bansmann, R. Yanes, U. Nowak, **A. Kleibert**, and F. Nolting
Direct Observation of Magnetic Metastability in Individual Iron Nanoparticles
 Phys. Rev. Lett. **112**, 107201 (2014)
 (Corresponding Author: A. K.)
39. C. Wäckerlin, P. Maldonado, L. Arnold, A. Shchyrba, J. Girovsky, J. Nowakowski, Md. Ehesan Ali, T. Hählen, M. Baljovic, D. Siewert, **A. Kleibert**, K. Müllen, P. M. Oppeneer, T. A. Jung, and N. Ballav
Magnetic Exchange Coupling of a Synthetic Co(II)-Complex to a Ferromagnetic Ni Substrate
 Chem. Commun. **49**, 10736 (2013)
 (Invited Article)
38. A. Farhan, P. M. Derlet, **A. Kleibert**, A. Balan, R. V. Chopdekar, M. Wyss, J. Perron, A. Scholl, F. Nolting, and L. J. Heyderman
Direct Observation of Thermal Relaxation in Artificial Spin Ice
 Phys. Rev. Lett. **111**, 057204 (2013)
37. M. A. Brown, A. B. Redondo, I. Jordan, N. Duyckaerts, M.-T. Lee, M. Ammann, F. Nolting, **A. Kleibert**, T. Huthwelker, J.-P. Mächler, M. Birrer, J. Honegger, R. Wetter, H. J. Wörner, and J. A. van Bokhoven
A New Endstation at the Swiss Light Source for Ultraviolet Photoelectron Spectroscopy, X-Ray Photoelectron Spectroscopy, and X-Ray Absorption Spectroscopy Measurements of Liquid Solutions
 Rev. Sci. Instr. **84**, 073904 (2013)
36. A. Farhan, P. M. Derlet, **A. Kleibert**, A. Balan, R. V. Chopdekar, M. Wyss, L. Anghinolfi, F. Nolting and L. J. Heyderman
Exploring Hyper-Cubic Energy Landscapes in Thermally Active Finite Artificial Spin-Ice Systems
 Nat. Phys. **9**, 375 (2013)
35. M. A. Brown, N. Duyckaerts, A. B. Redondo, I. Jordan, F. Nolting, **A. Kleibert**, M. Ammann, H. J. Woerner, J. A. van Bokhoven, and Z. Abbas
Effect of Surface Charge Density on the Affinity of Oxide Nanoparticles for the Vapor–Water Interface
 Langmuir **29**, 5023 (2013)
34. C. Wäckerlin, K. Tarafder, J. Girovsky, J. Nowakowski, T. Hählen, A. Shchyrba, D. Siewert, **A. Kleibert**, F. Nolting, P. M. Oppeneer, N. Ballav, and T. A. Jung
Ammonia Coordination Introducing a Magnetic Moment in an On-Surface Low-Spin Porphyrin
 Angew. Chem. Int. Ed. **52**, 4568 (2013)
33. M. A. Brown, I. Jordan, A. B. Redondo, **A. Kleibert**, H. J. Woerner, and J. A. van Bokhoven
In Situ Photoelectron Spectroscopy at the Liquid/Nanoparticle Interface
 Surf. Sci. **610**, 1 (2013)
 (Invited Article)

32. C. Wäckerlin, J. Nowakowski, M. Jaggi, D. Siewert, J. Girovsky, T. Hählen, S.-X. Liu, **A. Kleibert**, P. M. Oppeneer, F. Nolting, S. Decurtins, T. A. Jung, and N. Ballav
Two-Dimensional Supramolecular Electron Spin-Arrays
Adv. Mater. **25**, 2404 (2013)
31. L. Le Guyader, **A. Kleibert**, F. Nolting, L. Joly, P. M. Derlet, R. Pisarev, A. Kirilyuk, Th. Rasing, and A. V. Kimel
Dynamics of Laser-Induced Spin Reorientation in Co/SmFeO₃ Heterostructure
Phys. Rev. B **87**, 054437 (2013)
30. C. Wäckerlin, K. Tarafder, D. Chylarecka, J. Girovsky, T. Hählen, C. Iacovita, **A. Kleibert**, F. Nolting, T. A. Jung, P. M. Oppeneer, and N. Ballav
On-Surface Coordination Chemistry of Planar Molecular Spin Systems: Novel Magnetochemical Effects Induced by Axial Ligands
Chem. Sci. **3**, 3154 (2012)
29. L. Le Guyader, **A. Kleibert**, A. Fraile Rodríguez, S. El Moussaoui, A. Balan, M. Buzzi, J. Raabe, and F. Nolting
Studying Nanomagnets and Magnetic Heterostructures with X-Ray PEEM at the Swiss Light Source
J. Elec. Spectr. Rel. Phen. **185**, 371 (2012)
28. **A. Kleibert**, W. Rosellen, M. Getzlaff, and J. Bansmann
Structure, Morphology, and Magnetic Properties of Fe Nanoparticles Deposited onto Single-Crystalline Surfaces
Beilstein J. Nanotech. **2**, 47 (2011)
27. L. Molina, S. Lee, K. Sell, G. Barcaro, A. Fortunelli, B. Lee, S. Seifert, R. E. Winans, J. Elam, M. J. Pellin, I. Barke, V. von Oyenhausen, Yu Lei, R. J. Meyer, J. A. Alonso, A. Fraile Rodríguez, **A. Kleibert**, S. Giorgio, C. R. Henry, K.-H. Meiwes-Broer, and S. Vajda
Size-Dependent Selectivity and Activity of Silver Nanoclusters in the Partial Oxydation of Propylene Oxide and Acrolein: A Joint Experimental and Theoretical Study
Catal. Today **160**, 116 (2011)
26. C. Wäckerlin, D. Chylarecka, **A. Kleibert**, K. Müller, C. Iacovita, F. Nolting, T. A. Jung, and N. Ballav
Controlling Spins in Adsorbed Molecules by a Chemical Switch
Nat. Commun. **1**, 61 (2010)
25. A. Fraile Rodríguez, **A. Kleibert**, J. Bansmann, and F. Nolting
Probing Single Magnetic Nanoparticles by Polarization Dependent Soft X-Ray Absorption Spectromicroscopy
J. Phys. D: Appl. Phys. **43**, 474006 (2010)
24. **A. Kleibert**, F. Bulut, W. Rosellen, K.-H. Meiwes-Broer, J. Bansmann, and M. Getzlaff
Supported and Embedded Fe Nanoparticles: Influence of the Environment on Shape and Interface Contributions to the Magnetic Anisotropy
J. Phys. Conf. Series **211**, 012017 (2010)

23. K. Fauth, G. A. Ballentine, C. Praetorius, **A. Kleibert**, N. Wilken, A. Voitkans, and K.-H. Meiwes-Broer
Magnetic Properties of Fe Nanoclusters on Cu(111) Studied with X-Ray Magnetic Circular Dichroism
Phys. Status Solidi B **247**, 1170 (2010)
22. J. Bansmann, **A. Kleibert**, M. Getzlaff, A. Fraile Rodríguez, F. Nolting, C. Boeglin, and K.-H. Meiwes-Broer
Magnetism of 3d Transition Metal Nanoparticles on Surfaces Probed with Synchrotron Radiation – From Ensembles Towards Individual Objects
Phys. Status Solidi B **247**, 1152 (2010)
21. **A. Kleibert**, A. Voitkans, and K.-H. Meiwes-Broer
Reflection High Energy Electron Diffraction as a Tool in Cluster Deposition Experiments
Phys. Status Solidi B **247**, 1048 (2010)
(Corresponding Author: A. K.)
20. W. Rosellen, C. Kleinhans, V. Huckelkamp, F. Bulut, **A. Kleibert**, J. Bansmann, and M. Getzlaff
Influence of Substrate and Temperature on the Shape of Deposited Fe, Co, and FeCo Nanoparticles
Phys. Status Solidi B **247**, 1032 (2010)
19. S. Valencia, **A. Kleibert**, A. Gaupp, J. Ruzs, D. Legut, J. Bansmann, W. Gudat, and P. M. Oppeneer
Quadratic X-Ray Magneto-Optical Effect upon Reflection in a Near-Normal-Incidence Configuration at the M-Edges of 3d-Transition Metals
Phys. Rev. Lett. **104**, 187401 (2010)
(Equal Contributions by S. V. and A. K.)
18. D. Chylarecka, C. Wäckerlin, T. K. Kim, K. Müller, F. Nolting, **A. Kleibert**, N. Ballav, and T. A. Jung
Self-Assembly and Superexchange Coupling of Magnetic Molecules on Oxygen Reconstructed Ferromagnetic Thin Film
J. Phys. Chem. Lett. **1**, 1408 (2010)
17. A. Fraile Rodríguez, **A. Kleibert**, J. Bansmann, A. Voitkans, L. J. Heyderman, and F. Nolting
Size-Dependent Spin Structures in Iron Nanoparticles
Phys. Rev. Lett. **104**, 127201 (2010)
(Equal Contributions by A. F. R. and A. K.)
16. **A. Kleibert**, A. Voitkans, and K.-H. Meiwes-Broer
Size-Dependent Alignment of Fe Nanoparticles Deposited onto W(110)
Phys. Rev. B **81**, 073412 (2010)
(Corresponding Author: A. K.)

15. S. Vajda, S. Lee, K. Sell, I. Barke, **A. Kleibert**, V. von Oyenhausen, K.-H. Meiwes-Broer, A. Fraile Rodríguez, J. W. Elam, M. M. Pellin, B. Lee, S. Seifert, and R. E. Winans
Combined Temperature-Programmed Reaction and in situ X-Ray Scattering Studies of Size-Selected Silver Clusters under Realistic Conditions in the Epoxidation of Propene
J. Chem. Phys. **131**, 121104 (2009)
14. **A. Kleibert**, J. Bansmann, and K.-H. Meiwes-Broer
Size-Dependent Magnetic Spin and Orbital Moments of Fe Nanoparticles Deposited onto Co/W(110)
Phys. Rev. B **79**, 125423 (2009)
13. **A. Kleibert**, F. Bulut, R. K. Gebhardt, W. Rosellen, D. Sudfeld, J. Passig, J. Bansmann, K.-H. Meiwes-Broer, and M. Getzlaff
Correlation of Shape and Magnetic Anisotropy of Supported Mass-Filtered Fe and FeCo Alloy Nanoparticles on W(110)
J. Phys: Cond. Matter **20**, 445005 (2008)
(Cover Feature of Issue 44)
12. J. Bansmann, **A. Kleibert**, F. Bulut, M. Getzlaff, P. Imperia, C. Boeglin, K.-H. Meiwes-Broer
Temperature Dependent Magnetic Spin and Orbital Moments of Mass-Filtered Cobalt Clusters on Au(111)
Eur. Phys. J. D **45**, 521 (2007)
11. K. Sell, **A. Kleibert**, V. von Oyenhausen, and K.-H. Meiwes-Broer
The Structure of Cobalt Nanoparticles on Ge(001)
Eur. Phys. J. D **45**, 433 (2007)
10. **A. Kleibert**, J. Passig, K.-H. Meiwes-Broer, M. Getzlaff, and J. Bansmann
Structure and Magnetic Moments of Mass-Filtered Deposited Nanoparticles
J. Appl. Phys. **101**, 114318 (2007)
(Corresponding Author: A. K.)
9. A. Fraile Rodríguez, F. Nolting, J. Bansmann, **A. Kleibert**, and L. J. Heyderman
X-Ray Imaging and Spectroscopy of Individual Cobalt Nanoparticles Using Photoemission Electron Microscopy
J. Magn. Magn. Mat. **316**, 426 (2007)
8. M. Getzlaff, J. Bansmann, F. Bulut, R. K. Gebhardt, **A. Kleibert**, and K.-H. Meiwes-Broer
Structure, Composition and Magnetic Properties of Size-Selected FeCo Alloy Clusters on Surfaces
Appl. Phys. A **82**, 95 (2006)
7. J. Bansmann, M. Getzlaff, **A. Kleibert**, F. Bulut, R. K. Gebhardt, and K.-H. Meiwes-Broer
Mass-Filtered Cobalt Clusters in Contact with Epitaxially Ordered Metal Surfaces
Appl. Phys. A **82**, 73 (2006)

6. C. Binns, K. N. Trohidou, J. Bansmann, S. H. Baker, J. A. Blackman, J.-P. Bucher, D. Kechrakos, **A. Kleibert**, S. Louch, K.-H. Meiwes-Broer, G. M. Pastor, A. Perez, and Y. Xie
The Behaviour of Nanostructured Magnetic Materials Produced by Depositing Gas-Phase Nanoparticles
J. Phys. D: Appl. Phys. **38**, R357 (2005)
5. **A. Kleibert**, V. Senz, J. Bansmann, and P. M. Oppeneer
Thickness Dependence and Magnetocrystalline Anisotropy of the X-Ray Transverse Magneto-Optical Kerr Effect at the 2p Edges of Ultrathin Co Films on W(110)
Phys. Rev. B **72**, 144404 (2005)
(Corresponding Author: A. K.)
4. J. Bansmann and **A. Kleibert**
Magnetism of Mass-Filtered Nanoparticles on Ferromagnetic Supports
Appl. Phys. A **80**, 957 (2005)
3. J. Bansmann, S. H. Baker, C. Binns, J. A. Blackman, J.-P. Bucher, J. Dorantes-Davila, V. Dupuis, L. Favre, D. Kechrakos, **A. Kleibert**, K.-H. Meiwes-Broer, G. M. Pastor, A. Perez, O. Toulemonde, K. N. Trohidou, J. Tuaille, and Y. Xie
Magnetic and Structural Properties of Isolated and Assembled Clusters
Surf. Sci. Rep. **56**, 189 (2005)
2. M. Getzlaff, **A. Kleibert**, R. Methling, J. Bansmann, and K.-H. Meiwes-Broer
Mass-Filtered Ferromagnetic Alloy Clusters on Surfaces
Surf. Sci. **566-568**, 332 (2004)
1. V. Senz, **A. Kleibert**, and J. Bansmann
Transverse Magneto-Optical Kerr-Effect in the Soft X-Ray Regime of Ultrathin Iron Films and Islands on W(110)
Surf. Rev. Lett. **9**, 913 (2002)

Book Contributions

2. C. A. F. Vaz, **A. Kleibert**, and M. El Kazzi
Nanoscale XPEEM Spectromicroscopy
21st Century Nanoscience - Handbook - 10 Volumes, Edited by Klaus D. Sattler (CRC Press, Taylor&Francis Group, Boca Raton – London – New York, 2020), p. -.
1. J. Bansmann, **A. Kleibert**, H. Bettermann, and M. Getzlaff
In-Flight and Post-Deposition Manipulation of Mass-Filtered Nanoparticles Under Soft-Landing Conditions
Gas Aggregation Synthesis of Nanoparticles, Edited by Yves Huttel (Wiley-VCH Verlag GmbH & Co. KGaA., Weinheim, 2017), p. 323.

Other Publications

4. A. Bergamaschi, M. Andrä, R. Barten, C. Borca, M. Brückner, S. Chiriotti, R. Dinapoli, E. Fröjdh, D. Greiffenberg, T. Huthwelker, **A. Kleibert**, M. Langer, M. Lebugle, C. Lopez-Cuenca, D. Mezza, A. Mozzanica, J. Raabe, S. Redford, Ch. Ruder, V. Scagnoli, B. Schmitt, X. Shi, D. Thattil, G. Tinti, C.A.F. Vaz, S. Vetter, J. Vila-Comamala, and J. Zhang
The MÖNCH Detector for Soft X-ray, High-Resolution, and Energy Resolved Applications
Synchrotron Radiation News **31**, 11 (2018)
3. M. Langer, C.A.F. Vaz, S. Chiriotti, A. Bergamaschi, M. Guizar-Sicairos, **A. Kleibert**, and J. Raabe
Development of a New Soft X-ray Ptychography Spectro-Microscope at the Swiss Light Source (SLS),
Microscopy and Microanalysis **24** (S2), 56 (2018)
2. **A. Kleibert** and F. Nolting
Magnetische Nanowelt
Physik Journal, June 2013, p. 27 - 32
1. **A. Kleibert**, A. Fraile Rodríguez, A. Voitkans, J. Bansmann, L. J. Heyderman, and F. Nolting
Discovering Size-Dependent Spin Structures in Iron Nanoparticles using Soft X-Ray Microscopy
PSI Report 2010, Research Focus and Highlights – Synchrotron Light