

## Publications in Refereed Scientific Journals

84. B. Rösner, S. Finizio, F. Koch, F. Döring, V. A. Guzenko, M. Langer, E. Kirk, B. Watts, M. Meyer, J. Loroña Ornelas, A. Späth, S. Stanescu, S. Swaraj, R. Belkhou, T. Ishikawa, T. F. Keller, B. Gross, M. Poggio, R. H. Fink, J. Raabe, **A. Kleibert**, and C. David  
**Soft X-Ray Microscopy with Single-Digit Nanometer Resolution**  
Submitted (2019),
83. M. Saccone, K. Hofhuis, D. Bracher, **A. Kleibert**, S. van Dijken, and A. Farhan  
**Elevated Effective Dimension in Tree-Like Nanomagnetic Cayley Structures**  
Nanoscale **12**, 189 (2020), DOI:10.1039/c9nr07510k
82. M. Wyss, S. Gliga, D. Vasyukov, L. Ceccarelli, G. Romagnoli, J. Cui, **A. Kleibert**, R. L. Stamps, and M. Poggio  
**Stray-Field Imaging of a Chiral Artificial Spin Ice During Magnetization Reversal**  
ACS Nano **13**, 13910 (2019), DOI:10.1021/acsnano.9b05428
81. C. Stamm, C. Murer, Y. Acremann, M. Baumgartner, R. Gort, S. Däster, **A. Kleibert**, K. Garello, 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**  
Phys. Rev. B **100**, 024426 (2019), DOI: 10.1103/PhysRevB.100.024426,  
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. **11**, 054086 (2019), DOI:10.1103/PhysRevApplied.11.054086,  
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. Manfreda, 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 **99**, 144305 (2019), DOI: 10.1103/PhysRevB.99.144305,  
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. Baljovic, 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**  
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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. Helfenstern, 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. Weinl, M. Schreck, J. Osterwalder, A. Radenovic, and T. Greber  
**Transfer of Centimeter-Sized Single-Orientation Monolayer h-BN with or without Nanovoids**  
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**A Surface-Stabilized Ozonide Triggers Bromide Oxidation at the Aqueous Solution-Vapor Interface**  
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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**  
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61. W. Karim, C. Spreafico, **A. Kleibert**, J. Gobrecht, J. VandeVondele, Y. Ekinici, and J. A. van Bokhoven  
**Catalyst Support Effects on Hydrogen Spillover**  
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**Control of the Magnetic Configuration of Ferromagnetic Nanostructures Across the Structural Phase Transition of Vanadium Dioxide**  
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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**  
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**Size-Dependent Redox Behavior of Iron Observed by In Situ Single Nanoparticle Spectro-Microscopy on Well-Defined Model Systems**  
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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  
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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**  
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and M. A. Brown  
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and M. Krisch  
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Macroscopic Surface Tension and Microscopic in Situ X-Ray Photoelectron  
Spectroscopy Measurements**  
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47. J. Girovsky, K. Tarafder, C. Wäckerlin, J. Nowakowski, D. Siewert, T. Hählen, A. Wäckerlin,  
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**Controlling the Dimensionality of On-Surface Coordination Polymers via Endo- or  
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44. A. Farhan, [A. Kleibert](#), P. M. Derlet, L. Anghinolfi, A. Balan, R. V. Chopdekar, M. Wyss,  
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43. [A. Kleibert](#), A. Balan, A. Fraile Rodríguez, and F. Nolting  
**Investigating Individual Fe<sub>50</sub>Co<sub>50</sub> Alloy Nanoparticles Using X-Ray Photo-Emission  
Electron Microscopy**  
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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  
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