Dominik Kriegner

List of Publications by Year
in descending order

93 papers	4,267 citations	117625 34 h-index	110387 64 g-index
94 all docs	94 docs citations	94 times ranked	7879 citing authors

#	Article	IF	Citations
1	Defect-driven antiferromagnetic domain walls in CuMnAs films. Nature Communications, 2022, 13, 724.	12.8	8
2	Atomically sharp domain walls in an antiferromagnet. Science Advances, 2022, 8, eabn3535.	10.3	12
3	The Effect of Annealing Temperature on Antiferroelectric Zirconia. , 2022, , .		0
4	Role of Magnetic Exchange Interactions in Chiral-Type Hall Effects of Epitaxial Mn_xPtSn Films. ACS Applied Electronic Materials, 2021, 3, 1323-1333.	4.3	11
5	Strain-induced switching between noncollinear and collinear spin configuration in magnetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mn>5</mml:mn></m films. Physical Review B, 2021, 104, .	3.2	7
6	Anisotropic magnetothermal transport in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>2</mml:mn></mml: thin films. Physical Review B, 2021, 104, .	3.2	4
7	Twin Domain Structure in Magnetically Doped Bi2Se3 Topological Insulator. Nanomaterials, 2020, 10, 2059.	4.1	2
8	Spin flop and crystalline anisotropic magnetoresistance in CuMnAs. Physical Review B, 2020, 101, .	3.2	27
9	Thickness dependence of the anomalous Nernst effect and the Mott relation of Weyl semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>2</mml:mn></mml thin films. Physical Review B, 2020, 101, .	3.2	40
10	Molecular beam epitaxy of CuMnAs. Physical Review Materials, 2020, 4, .	2.4	14
11	X-ray diffraction reveals the amount of strain and homogeneity of extremely bent single nanowires. Journal of Applied Crystallography, 2020, 53, 1310-1320.	4.5	3
12	Ferroelectric Self-Poling in GeTe Films and Crystals. Crystals, 2019, 9, 335.	2.2	22
13	Thickness dependence of the anomalous Hall effect in thin films of the topological semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>2</mml:mn></mml Physical Review B, 2019, 100, .	3.2	66
14	Spin glass behavior in the disordered half-Heusler compound IrMnGa. Physical Review B, 2019, 99, .	3.2	34
15	Structural instability in CePd2(Al,Ga)2 and LaPd2(Al,Ga)2. Journal of Alloys and Compounds, 2019, 790, 480-492.	5.5	4
16	Investigation of Nanostructures with X-ray Scattering Techniques. Crystals, 2019, 9, 500.	2.2	0
17	Imaging and writing magnetic domains in the non-collinear antiferromagnet Mn3Sn. Nature Communications, 2019, 10, 5459.	12.8	55
18	Giant enhancement of the skyrmion stability in a chemically strained helimagnet. Physical Review B, 2019, 100, .	3.2	8

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19	Interplay between Structural and Thermoelectric Properties in Epitaxial Sb₂₊_xTe₃ Alloys. Advanced Functional Materials, 2019, 29, 1805184.	14.9	25
20	X-ray Diffraction Analysis of the Angular Stability of Self-Catalyzed GaAs Nanowires for Future Applications in Solar-Light-Harvesting and Light-Emitting Devices. ACS Applied Nano Materials, 2019, 2, 689-699.	5.0	8
21	Lattice distortion in TmCo2: A poly- and single-crystal study. Journal of Alloys and Compounds, 2019, 775, 969-974.	5.5	1
22	Topological Hall effect in thin films of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mrow><mml:mn>1.5</r Physical Review Materials, 2019, 3, .	2.4	32
23	27Al-NMR studies of the structural phase transition in LaPd2Al2. Physica B: Condensed Matter, 2018, 536, 320-322.	2.7	1
24	Self-Seeded Axio-Radial InAsâ€“InAs_{1â€“x}P_x Nanowire Heterostructures beyond â€œCommonâ€•VLS Growth. Nano Letters, 2018, 18, 144-151.	9.1	15
25	Band structure of CuMnAs probed by optical and photoemission spectroscopy. Physical Review B, 2018, 97, .	3.2	22
26	Interfacial sharpness and intermixing in a Ge-SiGe multiple quantum well structure. Journal of Applied Physics, 2018, 123, .	2.5	16
27	Electrically induced and detected NÃ©el vector reversal in a collinear antiferromagnet. Nature Communications, 2018, 9, 4686.	12.8	79
28	Large anomalous Nernst effect in thin films of the Weyl semimetal Co2MnGa. Applied Physics Letters, 2018, 113, .	3.3	92
29	Coherent X-ray diffraction imaging meets ptychography to study core-shell-shell nanowires. MRS Advances, 2018, 3, 2317-2322.	0.9	7
30	Antiferroelectricity in lanthanum doped zirconia without metallic capping layers and post-deposition/-metallization anneals. Applied Physics Letters, 2018, 112, .	3.3	21
31	Giant magnetic response of a two-dimensional antiferromagnet. Nature Physics, 2018, 14, 806-810.	16.7	44
32	Structural disorder of natural <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mi>2</mml:mi></mml:m superlattices grown by molecular beam epitaxy. Physical Review Materials, 2018, 2, .	2.4	10
33	Quasi-epitaxial Metal-Halide Perovskite Ligand Shells on PbS Nanocrystals. ACS Nano, 2017, 11, 1246-1256.	14.6	74
34	High-resolution x-ray diffraction of epitaxial bismuth chalcogenide topological insulator layers. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2017, 8, 015006.	1.5	7
35	Structure of epitaxial SrIrO₃ perovskite studied by interference between X-ray waves diffracted by the substrate and the thin film. Journal of Applied Crystallography, 2017, 50, 385-398.	4.5	11
36	Czochralski growth of LaPd2Al2 single crystals. Journal of Crystal Growth, 2017, 475, 10-20.	1.5	6

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37	Twin domain imaging in topological insulator Bi₂Te₃ and Bi₂Se₃ epitaxial thin films by scanning X-ray nanobeam microscopy and electron backscatter diffraction. Journal of Applied Crystallography, 2017, 50, 369-377.	4.5	28
38	Observation of individual stacking faults in GaN microcrystals by x-ray nanodiffraction. Applied Physics Letters, 2017, 110, .	3.3	6
39	Magnetic properties of the CrMnFeCoNi high-entropy alloy. Physical Review B, 2017, 96, .	3.2	124
40	Unusual ferroelectric and magnetic phases in multiferroic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:msub><mml:mrow> ceramics. Physical Review B, 2017, 95, .	3.2	8
41	Cellular interfaces with hydrogen-bonded organic semiconductor hierarchical nanocrystals. Nature Communications, 2017, 8, 91.	12.8	51
42	Magnetic anisotropy in antiferromagnetic hexagonal MnTe. Physical Review B, 2017, 96, .	3.2	49
43	Magnetic structure of the mixed antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>NdMn</mml:mi><mml:mrow><mml:mn> mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2017, 96, .	3.2	7
44	Two-Dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi>J</mml:mi><mml:mrow><mml:mtext>eff</mml:mtext></mml:mrow></mml:msub> Antiferromagnetic Insulator Unraveled from Interlayer Exchange Coupling in Artificial Perovskite Iridate Superlattices. Physical Review Letters, 2017, 119, 027204.	7.8	55
45	Properties of the divalent-Yb compound YbAu2Si2 under extreme conditions. Physica B: Condensed Matter, 2017, 505, 41-44.	2.7	3
46	Characterization of individual stacking faults in aÂwurtzite GaAs nanowire by nanobeam X-ray diffraction. Journal of Synchrotron Radiation, 2017, 24, 981-990.	2.4	9
47	Threefold rotational symmetry in hexagonally shaped coreâ€“shell (In,Ga)As/GaAs nanowires revealed by coherent X-ray diffraction imaging. Journal of Applied Crystallography, 2017, 50, 673-680.	4.5	11
48	On the completeness of the Î²â†’Ï‰ transformation in metastable Î² titanium alloys. Journal of Applied Crystallography, 2017, 50, 283-287.	4.5	11
49	Crystallization of Tyrian purple (6,6â€²-dibromoindigo) thin films: The impact of substrate surface modifications. Journal of Crystal Growth, 2016, 447, 73-79.	1.5	4
50	Surface-Induced Phase of Tyrian Purple (6,6â€²-Dibromoindigo): Thin Film Formation and Stability. Crystal Growth and Design, 2016, 16, 3647-3655.	3.0	15
51	Ferroelectric phase transitions in multiferroicGe1â^'xMnxTedriven by local lattice distortions. Physical Review B, 2016, 94, .	3.2	13
52	Galvanic Exchange in Colloidal Metal/Metal-Oxide Core/Shell Nanocrystals. Journal of Physical Chemistry C, 2016, 120, 19848-19855.	3.1	9
53	Strain-induced nonsymmorphic symmetry breaking and removal of Dirac semimetallic nodal line in an orthoperovskite iridate. Physical Review B, 2016, 93, .	3.2	67
54	Disentangling bulk and surface Rashba effects in ferroelectric<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math>-GeTe. Physical Review B, 2016, 94, .	3.2	74

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55	Multiple-stable anisotropic magnetoresistance memory in antiferromagnetic MnTe. Nature Communications, 2016, 7, 11623.	12.8	169
56	The instrumental resolution of a moire extensometer in light of its recent automatisation. Measurement: Journal of the International Measurement Confederation, 2016, 91, 258-265.	5.0	16
57	Magneto-elastic coupling across the first-order transition in the distorted kagome lattice antiferromagnet Dy3Ru4Al12. Journal of Magnetism and Magnetic Materials, 2016, 400, 125-129.	2.3	17
58	Strain distribution in single, suspended germanium nanowires studied using nanofocused x-rays. Nanotechnology, 2016, 27, 055705.	2.6	13
59	UH3-based ferromagnets: New look at an old material. Journal of Magnetism and Magnetic Materials, 2016, 400, 130-136.	2.3	18
60	Current-induced torques in structures with ultrathin IrMn antiferromagnets. Physical Review B, 2015, 92, .	3.2	46
61	In-plane tunnelling field-effect transistor integrated on Silicon. Scientific Reports, 2015, 5, 14367.	3.3	7
62	Phase Transformation in Radially Merged Wurtzite GaAs Nanowires. Crystal Growth and Design, 2015, 15, 4795-4803.	3.0	27
63	Electronic properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î±</mml:mi><mml:mtext>â^'</mml:mtext><mml:msub by Zr. Physical Review B, 2015, 91, .	3.2	28
64	Detection of X-ray photons by solution-processed lead halide perovskites. Nature Photonics, 2015, 9, 444-449.	31.4	916
65	Structural investigations of the Î±12Siâ€“Ge superstructure. Journal of Applied Crystallography, 2015, 48, 262-268.	4.5	3
66	Hexagonal Silicon Realized. Nano Letters, 2015, 15, 5855-5860.	9.1	142
67	X-ray diffraction strain analysis of a single axial InAs_{1â€“x}P_xnanowire segment. Journal of Synchrotron Radiation, 2015, 22, 59-66.	2.4	8
68	Powder diffraction in Braggâ€“Brentano geometry with straight linear detectors. Journal of Applied Crystallography, 2015, 48, 613-618.	4.5	35
69	xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd"	7.9	13
70	Direct band gap wurtzite GaP nanowires for LEDs and quantum devices. Proceedings of SPIE, 2014, , .	0.8	0
71	A light-hole exciton in a quantum dot. Nature Physics, 2014, 10, 46-51.	16.7	111
72	Unraveling the Coreâ€“Shell Structure of Ligand-Capped Sn/SnOxNanoparticles by Surface-Enhanced Nuclear Magnetic Resonance, MÃ¶ssbauer, and X-ray Absorption Spectroscopies. ACS Nano, 2014, 8, 2639-2648.	14.6	87

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73	Hydrogen-Bonded Organic Semiconductor Micro- And Nanocrystals: From Colloidal Syntheses to (Opto-)Electronic Devices. Journal of the American Chemical Society, 2014, 136, 16522-16532.	13.7	75
74	Gold-Free Ternary IIIâ€“V Antimonide Nanowire Arrays on Silicon: Twin-Free down to the First Bilayer. Nano Letters, 2014, 14, 326-332.	9.1	88
75	Au-Seeded Growth of Vertical and in-Plane IIIâ€“V Nanowires on Graphite Substrates. Nano Letters, 2014, 14, 1707-1713.	9.1	41
76	Tetragonal phase of epitaxial room-temperature antiferromagnet CuMnAs. Nature Communications, 2013, 4, 2322.	12.8	123
77	Structural investigation of GaInP nanowires using X-ray diffraction. Thin Solid Films, 2013, 543, 100-105.	1.8	15
78	Tuning the Magnetic Properties of Metal Oxide Nanocrystal Heterostructures by Cation Exchange. Nano Letters, 2013, 13, 586-593.	9.1	91
79	Direct Band Gap Wurtzite Gallium Phosphide Nanowires. Nano Letters, 2013, 13, 1559-1563.	9.1	262
80	Unit cell structure of the wurtzite phase of GaP nanowires: X-ray diffraction studies and density functional theory calculations. Physical Review B, 2013, 88, .	3.2	28
81	xrayutilities: a versatile tool for reciprocal space conversion of scattering data recorded with linear and area detectors. Journal of Applied Crystallography, 2013, 46, 1162-1170.	4.5	100
82	Particle-assisted Ga_xIn_{1â^'x}P nanowire growth for designed bandgap structures. Nanotechnology, 2012, 23, 245601.	2.6	48
83	From Highly Monodisperse Indium and Indium Tin Colloidal Nanocrystals to Self-Assembled Indium Tin Oxide Nanoelectrodes. ACS Nano, 2012, 6, 4113-4121.	14.6	48
84	Crystal structure control in Au-free self-seeded InSb wire growth. Nanotechnology, 2011, 22, 145603.	2.6	45
85	Unit cell parameters of wurtzite InP nanowires determined by x-ray diffraction. Nanotechnology, 2011, 22, 425704.	2.6	49
86	Diffuse x-ray scattering from stacking faults in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>a</mml:mi></mml:math>-plane GaN epitaxial layers. Physical Review B, 2011, 84, .	3.2	20
87	Polytypism of GaAs, InP, InAs, and InSb: Anab initiostudy. Physical Review B, 2011, 84, .	3.2	47
88	Unit Cell Structure of Crystal Polytypes in InAs and InSb Nanowires. Nano Letters, 2011, 11, 1483-1489.	9.1	117
89	Coreâ€“shell nanowires: From the ensemble to single-wire characterization. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 316-319.	1.4	15
90	Algorithms for the calculation of X-ray diffraction patterns from finite element data. Journal of Applied Crystallography, 2010, 43, 1287-1299.	4.5	3

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91	Analysis of periodic dislocation networks using x-ray diffraction and extended finite element modeling. Applied Physics Letters, 2010, 96, 131905.	3.3	16
92	Determination of the wurtzite content and orientation distribution of nanowire ensembles. Materials Research Society Symposia Proceedings, 2009, 1206, 113901.	0.1	0
93	Structural Investigations of Coreâ^'shell Nanowires Using Grazing Incidence X-ray Diffraction. Nano Letters, 2009, 9, 1877-1882.	9.1	47