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	Detection of X-ray photons by solution-processed lead halide perovskites. Nature Photonics, 2015, 9, 444-449.	31.4	916
2	Direct Band Gap Wurtzite Gallium Phosphide Nanowires. Nano Letters, 2013, 13, 1559-1563.	9.1	262
3	Multiple-stable anisotropic magnetoresistance memory in antiferromagnetic MnTe. Nature Communications, 2016, 7, 11623.	12.8	169
4	Hexagonal Silicon Realized. Nano Letters, 2015, 15, 5855-5860.	9.1	142
5	Magnetic properties of the CrMnFeCoNi high-entropy alloy. Physical Review B, 2017, 96, .	3.2	124
6	Tetragonal phase of epitaxial room-temperature antiferromagnet CuMnAs. Nature Communications, 2013, 4, 2322.	12.8	123
7	Unit Cell Structure of Crystal Polytypes in InAs and InSb Nanowires. Nano Letters, 2011, 11, 1483-1489.	9.1	117
8	A light-hole exciton in a quantum dot. Nature Physics, 2014, 10, 46-51.	16.7	111
9	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
10	Large anomalous Nernst effect in thin films of the Weyl semimetal Co2MnGa. Applied Physics Letters, 2018, 113, .	3.3	92
11	Tuning the Magnetic Properties of Metal Oxide Nanocrystal Heterostructures by Cation Exchange. Nano Letters, 2013, 13, 586-593.	9.1	91
12	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
13	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
14	Electrically induced and detected NÃ©el vector reversal in a collinear antiferromagnet. Nature Communications, 2018, 9, 4686.	12.8	79
15	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
16	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
17	Quasi-epitaxial Metal-Halide Perovskite Ligand Shells on PbS Nanocrystals. ACS Nano, 2017, 11, 1246-1256.	14.6	74
18	Strain-induced nonsymmorphic symmetry breaking and removal of Dirac semimetallic nodal line in an orthoperovskite iridate. Physical Review B, 2016, 93, .	3.2	67

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19	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:msub></mml:mrow></mml:math> Physical Review B, 2019, 100, .	3.2	66
20	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></mml:mrow></mml:math> Antiferromagnetic Insulator Unraveled from Interlayer Exchange Coupling in Artificial Perovskite Iridate Superlattices. Physical Review Letters, 2017, 119, 027204.	7.8	55
21	Imaging and writing magnetic domains in the non-collinear antiferromagnet Mn3Sn. Nature Communications, 2019, 10, 5459.	12.8	55
22	Cellular interfaces with hydrogen-bonded organic semiconductor hierarchical nanocrystals. Nature Communications, 2017, 8, 91.	12.8	51
23	Unit cell parameters of wurtzite InP nanowires determined by x-ray diffraction. Nanotechnology, 2011, 22, 425704.	2.6	49
24	Magnetic anisotropy in antiferromagnetic hexagonal MnTe. Physical Review B, 2017, 96, .	3.2	49
25	Particle-assisted Ga_xIn_{1â^'x}P nanowire growth for designed bandgap structures. Nanotechnology, 2012, 23, 245601.	2.6	48
26	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
27	Structural Investigations of Coreâ^'shell Nanowires Using Grazing Incidence X-ray Diffraction. Nano Letters, 2009, 9, 1877-1882.	9.1	47
28	Polytypism of GaAs, InP, InAs, and InSb: Anab initiostudy. Physical Review B, 2011, 84, .	3.2	47
29	Current-induced torques in structures with ultrathin IrMn antiferromagnets. Physical Review B, 2015, 92, .	3.2	46
30	Crystal structure control in Au-free self-seeded InSb wire growth. Nanotechnology, 2011, 22, 145603.	2.6	45
31	Giant magnetic response of a two-dimensional antiferromagnet. Nature Physics, 2018, 14, 806-810.	16.7	44
32	Au-Seeded Growth of Vertical and in-Plane IIIâ€“V Nanowires on Graphite Substrates. Nano Letters, 2014, 14, 1707-1713.	9.1	41
33	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:msub></mml:mrow></mml:math> thin films. Physical Review B, 2020, 101, .	3.2	40
34	Powder diffraction in Braggâ€“Brentano geometry with straight linear detectors. Journal of Applied Crystallography, 2015, 48, 613-618.	4.5	35
35	Spin glass behavior in the disordered half-Heusler compound IrMnGa. Physical Review B, 2019, 99, .	3.2	34
36	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</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Physical Review Materials, 2019, 3, .	2.4	32

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37	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
38	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><mml:mi>Sb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Te</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> by Zr. Physical Review B, 2015, 91, .	3.2	28
39	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
40	Phase Transformation in Radially Merged Wurtzite GaAs Nanowires. Crystal Growth and Design, 2015, 15, 4795-4803.	3.0	27
41	Spin flop and crystalline anisotropic magnetoresistance in CuMnAs. Physical Review B, 2020, 101, .	3.2	27
42	Interplay between Structural and Thermoelectric Properties in Epitaxial Sb₂₊_xTe₃ Alloys. Advanced Functional Materials, 2019, 29, 1805184.	14.9	25
43	Band structure of CuMnAs probed by optical and photoemission spectroscopy. Physical Review B, 2018, 97, .	3.2	22
44	Ferroelectric Self-Poling in GeTe Films and Crystals. Crystals, 2019, 9, 335.	2.2	22
45	Antiferroelectricity in lanthanum doped zirconia without metallic capping layers and post-deposition/-metallization anneals. Applied Physics Letters, 2018, 112, .	3.3	21
46	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
47	UH3-based ferromagnets: New look at an old material. Journal of Magnetism and Magnetic Materials, 2016, 400, 130-136.	2.3	18
48	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
49	Analysis of periodic dislocation networks using x-ray diffraction and extended finite element modeling. Applied Physics Letters, 2010, 96, 131905.	3.3	16
50	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
51	Interfacial sharpness and intermixing in a Ge-SiGe multiple quantum well structure. Journal of Applied Physics, 2018, 123, .	2.5	16
52	Coreâ€“shell nanowires: From the ensemble to single-wire characterization. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 316-319.	1.4	15
53	Structural investigation of GaInP nanowires using X-ray diffraction. Thin Solid Films, 2013, 543, 100-105.	1.8	15
54	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

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55	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
56	Molecular beam epitaxy of CuMnAs. Physical Review Materials, 2020, 4, .	2.4	14
57	Growth kinetics of <mml:math altimg="si18.gif" overflow="scroll" 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" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/	7.9	13
58	Ferroelectric phase transitions in multiferroicGe1â^'xMnxTedriven by local lattice distortions. Physical Review B, 2016, 94, .	3.2	13
59	Strain distribution in single, suspended germanium nanowires studied using nanofocused x-rays. Nanotechnology, 2016, 27, 055705.	2.6	13
60	Atomically sharp domain walls in an antiferromagnet. Science Advances, 2022, 8, eabn3535.	10.3	12
61	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
62	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
63	On the completeness of the Î²â†'Ï‰ transformation in metastable Î² titanium alloys. Journal of Applied Crystallography, 2017, 50, 283-287.	4.5	11
64	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
65	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:msub><mml:mi>Te</mml:mi><mml:mi>3</mml:mi></mml:mrow></mml:math> superlattices grown by molecular beam epitaxy. Physical Review Materials, 2018, 2, .	2.4	10
66	Galvanic Exchange in Colloidal Metal/Metal-Oxide Core/Shell Nanocrystals. Journal of Physical Chemistry C, 2016, 120, 19848-19855.	3.1	9
67	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
68	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
69	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><mml:mi>H</mml:mi></mml:mrow> ceramics. Physical Review B, 2017, 95, .	3.2	8
70	Giant enhancement of the skyrmion stability in a chemically strained helimagnet. Physical Review B, 2019, 100, .	3.2	8
71	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
72	Defect-driven antiferromagnetic domain walls in CuMnAs films. Nature Communications, 2022, 13, 724.	12.8	8

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73	In-plane tunnelling field-effect transistor integrated on Silicon. Scientific Reports, 2015, 5, 14367.	3.3	7
74	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
75	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>0.8</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
76	Coherent X-ray diffraction imaging meets ptychography to study core-shell-shell nanowires. MRS Advances, 2018, 3, 2317-2322.	0.9	7
77	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></mml:m films. Physical Review B, 2021, 104, .	3.2	7
78	Czochralski growth of LaPd2Al2 single crystals. Journal of Crystal Growth, 2017, 475, 10-20.	1.5	6
79	Observation of individual stacking faults in GaN microcrystals by x-ray nanodiffraction. Applied Physics Letters, 2017, 110, .	3.3	6
80	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
81	Structural instability in CePd2(Al,Ga)2 and LaPd2(Al,Ga)2. Journal of Alloys and Compounds, 2019, 790, 480-492.	5.5	4
82	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
83	Algorithms for the calculation of X-ray diffraction patterns from finite element data. Journal of Applied Crystallography, 2010, 43, 1287-1299.	4.5	3
84	Structural investigations of the Î±12Siâ€“Ge superstructure. Journal of Applied Crystallography, 2015, 48, 262-268.	4.5	3
85	Properties of the divalent-Yb compound YbAu2Si2 under extreme conditions. Physica B: Condensed Matter, 2017, 505, 41-44.	2.7	3
86	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
87	Twin Domain Structure in Magnetically Doped Bi2Se3 Topological Insulator. Nanomaterials, 2020, 10, 2059.	4.1	2
88	27Al-NMR studies of the structural phase transition in LaPd2Al2. Physica B: Condensed Matter, 2018, 536, 320-322.	2.7	1
89	Lattice distortion in TmCo2: A poly- and single-crystal study. Journal of Alloys and Compounds, 2019, 775, 969-974.	5.5	1
90	Determination of the wurtzite content and orientation distribution of nanowire ensembles. Materials Research Society Symposia Proceedings, 2009, 1206, 113901.	0.1	0

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91	Direct band gap wurtzite GaP nanowires for LEDs and quantum devices. Proceedings of SPIE, 2014, , .	0.8	0
92	Investigation of Nanostructures with X-ray Scattering Techniques. Crystals, 2019, 9, 500.	2.2	0
93	The Effect of Annealing Temperature on Antiferroelectric Zirconia. , 2022, , .		0