Steffen Wiedmann

List of Publications by Year in descending order

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71 papers	6,870 citations	331259 21 h-index	102304 66 g-index
72 all docs	72 docs citations	72 times ranked	7794 citing authors

#	Article	IF	Citations
1	Fermi surface and nested magnetic breakdown in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>WTe</mml:mi><mml:mn>2</mml:mn></mml:msub></ Physical Review Research, 2022, 4, .	1.3	1
2	Massive Magnetostriction of the Paramagnetic Insulator KEr(MoO₄)₂via a Singleâ€Ion Effect. Advanced Electronic Materials, 2022, 8, .	2.6	4
3	Correlated Insulating Behavior in Infinite-Layer Nickelates. Frontiers in Physics, 2022, 10, .	1.0	2
4	Anomalous vortex liquid in charge-ordered cuprate superconductors. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2016275118.	3.3	3
5	Structural and electronic inhomogeneity of superconducting Nb-doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>Bi</mml:mi></mml:mrow><mml:mn>2</mml:mn></ Physical Review B, 2021, 103, .	1.1	9
6	Thermopower across the phase diagram of the cuprate La1.6âˆ’xNd0.4SrxCuO4 : Signatures of the pseudogap and charge density wave phases. Physical Review B, 2021, 103, .	1.1	21
7	Local structure of Nb in superconducting Nb-doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></ Physical Review B, 2021, 103, .	1.1	8
8	Quantum Hall effect and Shubnikovâ€“de Haas oscillations in a high-mobility <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -type PbTe quantum well. Physical Review B, 2021, 103, .	1.1	7
9	Doping dependence of the pseudogap and [illegible] point in the cuprate superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Bi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Sr</mml:mi><mml:mrow><mml:mn>2</mml:mn><mml:mo>âˆ’</mml:mo><mml:mi>x</mml:mi></mml:mrow><mml:mi mathvariant="normal">La</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:msub><mml:mi mathvariant="normal">	1.1	15
10	Multiple field-induced phases in the frustrated triangular magnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cs</mml:mi><mml:mn>2</mml:mn></ Physical Review B, 2021, 104, .	1.1	2
11	Insulator-to-metal crossover near the edge of the superconducting dome in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Nd</mml:mi><mml:mrow><mml:mn>1</mml:mn></ Physical Review Research, 2021, 3, .	1.3	11
12	Evidence for strong electron correlations in a nonsymmorphic Dirac semimetal. Npj Quantum Materials, 2021, 6, .	1.8	3
13	Tuning the Structural and Optoelectronic Properties of Cs₂AgBiBr₆ Doubleâ€Perovskite Single Crystals through Alkaliâ€Metal Substitution. Advanced Materials, 2020, 32, e2001878.	11.1	72
14	Anomalous Shubnikov-de Haas quantum oscillations in rare-earth tritelluride <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>NdTe</mml:mi><mml:mn>3</mml:mn></ Physical Review B, 2020, 102, .	1.1	10
15	Two- and Three-Dimensional Superconducting Phases in the Weyl Semimetal TaP at Ambient Pressure. Crystals, 2020, 10, 288.	1.0	10
16	Giant Seebeck effect across the field-induced metal-insulator transition of InAs. Npj Quantum Materials, 2020, 5, .	1.8	8
17	Determination of the Fermi surface and field-induced quasiparticle tunneling around the Dirac nodal loop in ZrSiS. Physical Review Research, 2020, 2, .	1.3	15
18	Negative Thermal Expansion in the Plateau State of a Magnetically Frustrated Spinel. Physical Review Letters, 2019, 123, 027205.	2.9	13

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19	Field-induced insulating states in a graphene superlattice. Physical Review B, 2019, 99, .	1.1	2
20	Observation of an Odd-Integer Quantum Hall Effect from Topological Surface States in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Cd</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mr Physical Review Letters, 2019, 122, 036602.	2.9	50
21	Tracking Structural Phase Transitions in Leadâ€Halide Perovskites by Means of Thermal Expansion. Advanced Materials, 2019, 31, e1900521.	11.1	88
22	Magnetoresistance in the in-plane magnetic field induced semimetallic phase of inverted HgTe quantum wells. Physical Review B, 2019, 99, .	1.1	3
23	High-temperature quantum oscillations of the Hall resistance in bulk Bi2Se3. Scientific Reports, 2018, 8, 485.	1.6	17
24	Unconventional mass enhancement around the Dirac nodal loop in ZrSiS. Nature Physics, 2018, 14, 178-183.	6.5	129
25	Light- and Temperature-Modulated Magneto-Transport in Organicâ€“Inorganic Lead Halide Perovskites. ACS Energy Letters, 2018, 3, 39-45.	8.8	15
26	Electron-Hole Tunneling Revealed by Quantum Oscillations in the Nodal-Line Semimetal HfSiS. Physical Review Letters, 2018, 121, 256602.	2.9	33
27	Shubnikovâ€“de Haas oscillations in topological crystalline insulator SnTe(111) epitaxial films. Physical Review B, 2018, 98, .	1.1	19
28	High field charge order across the phase diagram of YBa2Cu3Oy. Npj Quantum Materials, 2018, 3, .	1.8	32
29	Electronâ€“hole asymmetry of the topological surface states in strained HgTe. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3381-3386.	3.3	16
30	Quantum interference in a macroscopic van der Waals conductor. Physical Review B, 2017, 95, .	1.1	4
31	Coexistence of bulk and surface states probed by Shubnikovâ€“de Haas oscillations in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> with high charge-carrier density. Physical Review B, 2017, 96, .	1.1	19
32	The worldâ€™s smallest capacitive dilatometer, for high-resolution thermal expansion and magnetostriction in high magnetic fields. Review of Scientific Instruments, 2017, 88, 083903.	0.6	23
33	Bulk and in-gap states in SmB6 revealed by high-field magnetotransport. Physical Review B, 2017, 96, .	1.1	10
34	Fermi-surface transformation across the pseudogap critical point of the cuprate superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>La</mml:mi><mml:mrow><mml:mn>1.6</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:m Physical Review B, 2017, 95, .	1.1	78
35	Thermodynamic signatures of the field-induced states of graphite. Nature Communications, 2017, 8, 1337.	5.8	17
36	Linear Magnetoresistance in a Quasifree Two-Dimensional Electron Gas in an Ultrahigh Mobility GaAs Quantum Well. Physical Review Letters, 2016, 117, 256601.	2.9	47

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37	Tuning the valley and chiral quantum state of Dirac electrons in van der Waals heterostructures. Science, 2016, 353, 575-579.	6.0	88
38	Magnetotransport in single-layer graphene in a large parallel magnetic field. Physical Review B, 2016, 94, .	1.1	11
39	Anisotropic and strong negative magnetoresistance in the three-dimensional topological insulator<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mm Physical Review B, 2016, 94, .	1.1	59
40	High-temperature quantum Hall effect in finite gapped HgTe quantum wells. Physical Review B, 2016, 93, .	1.1	19
41	Quantum oscillations of the topological surface states in low-carrier-concentration crystals of <mml:math altimg="si0019.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.elsevie. Solid State	0.9	6
42	Lifting of the Landau level degeneracy in graphene devices in a tilted magnetic field. Physical Review B, 2015, 92, .	1.1	16
43	Temperature-driven transition from a semiconductor to a topological insulator. Physical Review B, 2015, 91, .	1.1	29
44	Transport and thermoelectric properties of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>LaAlO</mml:mi><mml:mn>3</mml:mn></m Physical Review B, 2015, 91, .	1.1	8
45	Systematic study of doping dependence on linear magnetoresistance in p-PbTe. Applied Physics Letters, 2014, 105, .	1.5	5
46	Magnetothermoelectric properties of Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Se<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review B, 2013, 87, .	1.1	49
47	Interaction phenomena in graphene seen through quantum capacitance. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3282-3286.	3.3	239
48	Quantized coexisting electrons and holes in graphene measured using temperature-dependent magnetotransport. Physical Review B, 2013, 87, .	1.1	6
49	Evolution of the Fermi surface of a doped topological insulator with carrier concentration. Physical Review B, 2013, 88, .	1.1	92
50	Shubnikov-de Haas effect in tilted magnetic fields in wide quantum well. Journal of Physics: Conference Series, 2013, 456, 012025.	0.3	0
51	Probing the surface states in Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Se<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>using the Shubnikovâ€“de Haas effect. Physical Review B, 2012, 86, .	1.1	48
52	Fractional quantum Hall effect in second subband of a 2DES. Europhysics Letters, 2011, 94, 37010.	0.7	2
53	Coexistence of electron and hole transport in graphene. Physical Review B, 2011, 84, .	1.1	23
54	Zero-resistance states in bilayer electron systems induced by microwave irradiation. Journal of Physics: Conference Series, 2011, 334, 012014.	0.3	0

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55	Emergent fractional quantum Hall effect at even denominatorÎ½= 3/2 in a triple quantum well in tilted magnetic fields. Journal of Physics: Conference Series, 2011, 334, 012026.	0.3	1
56	Microwave-induced Hall resistance in bilayer electron systems. Physical Review B, 2011, 83, .	1.1	5
57	Evidence for zero-differential resistance states in electronic bilayers. Physical Review B, 2011, 83, .	1.1	14
58	Nonlinear transport phenomena in a two-subband system. Physical Review B, 2011, 84, .	1.1	20
59	Magnetoresistance oscillations in triple quantum wells under microwave irradiation. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 2614-2617.	1.3	0
60	Integer and fractional microwave induced resistance oscillations in a 2D system with moderate mobility. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 1078-1080.	1.3	0
61	Magneto-intersubband oscillations in triple quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 1088-1090.	1.3	3
62	Microwave induced magnetoresistance oscillations and inelastic scattering time in double quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 1075-1077.	1.3	1
63	Crossover between distinct mechanisms of microwave photoresistance in bilayer systems. Physical Review B, 2010, 81, .	1.1	29
64	Microwave Zero-Resistance States in a Bilayer Electron System. Physical Review Letters, 2010, 105, 026804.	2.9	62
65	Thermally activated intersubband scattering and oscillating magnetoresistance in quantum wells. Physical Review B, 2010, 82, .	1.1	15
66	High-order fractional microwave-induced resistance oscillations in two-dimensional systems. Physical Review B, 2009, 80, .	1.1	16
67	Emergent and reentrant fractional quantum Hall effect in trilayer systems in a tilted magnetic field. Physical Review B, 2009, 80, .	1.1	7
68	Magnetoresistance oscillations in multilayer systems: Triple quantum wells. Physical Review B, 2009, 80, .	1.1	35
69	MAGNETORESISTANCE OSCILLATIONS IN DOUBLE QUANTUM WELLS UNDER MICROWAVE IRRADIATION. International Journal of Modern Physics B, 2009, 23, 2943-2947.	1.0	0
70	Interference oscillations of microwave photoresistance in double quantum wells. Physical Review B, 2008, 78, .	1.1	74
71	Quantum Spin Hall Insulator State in HgTe Quantum Wells. Science, 2007, 318, 766-770.	6.0	5,070