

Steffen Wiedmann

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6760858/publications.pdf>

Version: 2024-02-01

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	Quantum Spin Hall Insulator State in HgTe Quantum Wells. <i>Science</i> , 2007, 318, 766-770.	6.0	5,070
2	Interaction phenomena in graphene seen through quantum capacitance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 3282-3286.	3.3	239
3	Unconventional mass enhancement around the Dirac nodal loop in ZrSiS. <i>Nature Physics</i> , 2018, 14, 178-183.	6.5	129
4	Evolution of the Fermi surface of a doped topological insulator with carrier concentration. <i>Physical Review B</i> , 2013, 88, .	1.1	92
5	Tuning the valley and chiral quantum state of Dirac electrons in van der Waals heterostructures. <i>Science</i> , 2016, 353, 575-579.	6.0	88
6	Tracking Structural Phase Transitions in Lead-Halide Perovskites by Means of Thermal Expansion. <i>Advanced Materials</i> , 2019, 31, e1900521.	11.1	88
7	Fermi-surface transformation across the pseudogap critical point of the cuprate superconductor $\text{La}_{1-x}\text{Pr}_x\text{CuO}_2$ <i>Physical Review B</i> , 2017, 95, .	1.1	78
8	Interference oscillations of microwave photoresistance in double quantum wells. <i>Physical Review B</i> , 2008, 78, .	1.1	74
9	Tuning the Structural and Optoelectronic Properties of Cs ₂ AgBiBr ₆ Double-Perovskite Single Crystals through Alkali-Metal Substitution. <i>Advanced Materials</i> , 2020, 32, e2001878.	11.1	72
10	Microwave Zero-Resistance States in a Bilayer Electron System. <i>Physical Review Letters</i> , 2010, 105, 026804.	2.9	62
11	Anisotropic and strong negative magnetoresistance in the three-dimensional topological insulator Bi_2Te_3 <i>Physical Review B</i> , 2016, 94, .	1.1	59
12	Observation of an Odd-Integer Quantum Hall Effect from Topological Surface States in Cd_3As_2 <i>Physical Review Letters</i> , 2019, 122, 036602.	2.9	50
13	Magneto-optoelectric properties of Bi_2Se_3 <i>Physical Review B</i> , 2012, 86, .	1.1	49
14	Probing the surface states in Bi_2Se_3 using the Shubnikov-de Haas effect. <i>Physical Review B</i> , 2012, 86, .	1.1	48
15	Linear Magnetoresistance in a Quasifree Two-Dimensional Electron Gas in an Ultrahigh Mobility GaAs Quantum Well. <i>Physical Review Letters</i> , 2016, 117, 256601.	2.9	47
16	Magnetoresistance oscillations in multilayer systems: Triple quantum wells. <i>Physical Review B</i> , 2009, 80, .	1.1	35
17	Electron-Hole Tunneling Revealed by Quantum Oscillations in the Nodal-Line Semimetal HfSiS. <i>Physical Review Letters</i> , 2018, 121, 256602.	2.9	33
18	High field charge order across the phase diagram of YBa ₂ Cu ₃ O _y . <i>Npj Quantum Materials</i> , 2018, 3, .	1.8	32

#	ARTICLE	IF	CITATIONS
19	Crossover between distinct mechanisms of microwave photoresistance in bilayer systems. Physical Review B, 2010, 81, .	1.1	29
20	Temperature-driven transition from a semiconductor to a topological insulator. Physical Review B, 2015, 91, .	1.1	29
21	Coexistence of electron and hole transport in graphene. Physical Review B, 2011, 84, .	1.1	23
22	The world'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
23	Thermopower across the phase diagram of the cuprate $\text{La}_{1.6}\text{Nd}_{0.4}\text{SrxCuO}_4$: Signatures of the pseudogap and charge density wave phases. Physical Review B, 2021, 103, .	1.1	21
24	Nonlinear transport phenomena in a two-subband system. Physical Review B, 2011, 84, .	1.1	20
25	High-temperature quantum Hall effect in finite gapped HgTe quantum wells. Physical Review B, 2016, 93, .	1.1	19
26	Coexistence of bulk and surface states probed by Shubnikov-de Haas oscillations in Bi_2Te_3 with high charge-carrier density. Physical Review B, 2017, 96, .	1.1	19
27	Shubnikov-de Haas oscillations in topological crystalline insulator SnTe(111) epitaxial films. Physical Review B, 2018, 98, .	1.1	19
28	Thermodynamic signatures of the field-induced states of graphite. Nature Communications, 2017, 8, 1337.	5.8	17
29	High-temperature quantum oscillations of the Hall resistance in bulk Bi_2Se_3 . Scientific Reports, 2018, 8, 485.	1.6	17
30	High-order fractional microwave-induced resistance oscillations in two-dimensional systems. Physical Review B, 2009, 80, .	1.1	16
31	Lifting of the Landau level degeneracy in graphene devices in a tilted magnetic field. Physical Review B, 2015, 92, .	1.1	16
32	Electron-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
33	Thermally activated intersubband scattering and oscillating magnetoresistance in quantum wells. Physical Review B, 2010, 82, .	1.1	15
34	Light- and Temperature-Modulated Magneto-Transport in Organic-Inorganic Lead Halide Perovskites. ACS Energy Letters, 2018, 3, 39-45.	8.8	15
35	Transport signatures of the pseudogap critical point in the cuprate superconductor $\text{La}_{1-x}\text{Sr}_x\text{CuO}_4$. Physical Review B, 2021, 104, .	1.1	15
36	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

#	ARTICLE	IF	CITATIONS
37	Evidence for zero-differential resistance states in electronic bilayers. Physical Review B, 2011, 83, .	1.1	14
38	Negative Thermal Expansion in the Plateau State of a Magnetically Frustrated Spinel. Physical Review Letters, 2019, 123, 027205.	2.9	13
39	Magnetotransport in single-layer graphene in a large parallel magnetic field. Physical Review B, 2016, 94, .	1.1	11
40	Insulator-to-metal crossover near the edge of the superconducting dome in $\text{Nd}_{1-x}\text{Ce}_x\text{Bi}_2$. Physical Review Research, 2021, 3, .	1.1	11
41	Bulk and in-gap states in SmB6 revealed by high-field magnetotransport. Physical Review B, 2017, 96, .	1.1	10
42	Anomalous Shubnikov-de Haas quantum oscillations in rare-earth tritelluride NdTe_3 . Physical Review B, 2020, 102, .	1.1	10
43	Two- and Three-Dimensional Superconducting Phases in the Weyl Semimetal TaP at Ambient Pressure. Crystals, 2020, 10, 288.	1.0	10
44	Structural and electronic inhomogeneity of superconducting Nb-doped Bi_2Te_3 . Physical Review B, 2021, 103, .	1.1	10
45	Transport and thermoelectric properties of the LaAlO_3 . Physical Review B, 2015, 91, .	1.1	10
46	Local structure of Nb in superconducting Nb-doped Bi_2Te_3 . Physical Review B, 2021, 103, .	1.1	10
47	Giant Seebeck effect across the field-induced metal-insulator transition of InAs. Npj Quantum Materials, 2020, 5, .	1.8	8
48	Emergent and reentrant fractional quantum Hall effect in trilayer systems in a tilted magnetic field. Physical Review B, 2009, 80, .	1.1	7
49	Quantum Hall effect and Shubnikov-de Haas oscillations in a high-mobility p -type PbTe quantum well. Physical Review B, 2021, 103, .	1.1	7
50	Quantized coexisting electrons and holes in graphene measured using temperature-dependent magnetotransport. Physical Review B, 2013, 87, .	1.1	6
51	Quantum oscillations of the topological surface states in low carrier concentration crystals of Bi_2Te_3 . Physical Review B, 2013, 87, .	0.9	6
52	Microwave-induced Hall resistance in bilayer electron systems. Physical Review B, 2011, 83, .	1.1	5
53	Systematic study of doping dependence on linear magnetoresistance in p -PbTe. Applied Physics Letters, 2014, 105, .	1.5	5
54	Quantum interference in a macroscopic van der Waals conductor. Physical Review B, 2017, 95, .	1.1	4

#	ARTICLE	IF	CITATIONS
55	Massive Magnetostriction of the Paramagnetic Insulator $\text{KEr}(\text{MoO}_4)_2$ via a Single-Ion Effect. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	4
56	Magneto-intersubband oscillations in triple quantum wells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 1088-1090.	1.3	3
57	Magnetoconductance in the in-plane magnetic field induced semimetallic phase of inverted HgTe quantum wells. <i>Physical Review B</i> , 2019, 99, .	1.1	3
58	Anomalous vortex liquid in charge-ordered cuprate superconductors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, e2016275118.	3.3	3
59	Evidence for strong electron correlations in a nonsymmorphic Dirac semimetal. <i>Npj Quantum Materials</i> , 2021, 6, .	1.8	3
60	Fractional quantum Hall effect in second subband of a 2DES. <i>Europhysics Letters</i> , 2011, 94, 37010.	0.7	2
61	Field-induced insulating states in a graphene superlattice. <i>Physical Review B</i> , 2019, 99, .	1.1	2
62	Multiple field-induced phases in the frustrated triangular magnet CsMnCl_3 . <i>Physical Review B</i> , 2021, 104, .		
63	Correlated Insulating Behavior in Infinite-Layer Nickelates. <i>Frontiers in Physics</i> , 2022, 10, .	1.0	2
64	Microwave induced magnetoconductance oscillations and inelastic scattering time in double quantum wells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 1075-1077.	1.3	1
65	Emergent fractional quantum Hall effect at even denominator $\nu = 3/2$ in a triple quantum well in tilted magnetic fields. <i>Journal of Physics: Conference Series</i> , 2011, 334, 012026.	0.3	1
66	Fermi surface and nested magnetic breakdown in WTe_2 . <i>Physical Review Research</i> , 2022, 4, .		
67	MAGNETORESISTANCE OSCILLATIONS IN DOUBLE QUANTUM WELLS UNDER MICROWAVE IRRADIATION. <i>International Journal of Modern Physics B</i> , 2009, 23, 2943-2947.	1.0	0
68	Magnetoconductance oscillations in triple quantum wells under microwave irradiation. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 2614-2617.	1.3	0
69	Integer and fractional microwave induced resistance oscillations in a 2D system with moderate mobility. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 1078-1080.	1.3	0
70	Zero-resistance states in bilayer electron systems induced by microwave irradiation. <i>Journal of Physics: Conference Series</i> , 2011, 334, 012014.	0.3	0
71	Shubnikov-de Haas effect in tilted magnetic fields in wide quantum well. <i>Journal of Physics: Conference Series</i> , 2013, 456, 012025.	0.3	0