

Barry L Zink

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1308418/publications.pdf>

Version: 2024-02-01

54
papers

3,117
citations

218381

26
h-index

161609

54
g-index

54
all docs

54
docs citations

54
times ranked

4729
citing authors

#	ARTICLE	IF	CITATIONS
1	Interface-induced phenomena in magnetism. <i>Reviews of Modern Physics</i> , 2017, 89, .	16.4	672
2	Tricritical Point and the Doping Dependence of the Order of the Ferromagnetic Phase Transition of $\text{La}^{1-x}\text{Ca}_x\text{MnO}_3$. <i>Physical Review Letters</i> , 2002, 89, 227202.	2.9	282
3	Tailored semiconducting carbon nanotube networks with enhanced thermoelectric properties. <i>Nature Energy</i> , 2016, 1, .	19.8	270
4	Large n- and p-type thermoelectric power factors from doped semiconducting single-walled carbon nanotube thin films. <i>Energy and Environmental Science</i> , 2017, 10, 2168-2179.	15.6	172
5	Critical behavior of $\text{La}_{0.75}\text{Sr}_{0.25}\text{MnO}_3$. <i>Physical Review B</i> , 2002, 65, .	1.1	148
6	Anomalous spin-orbit torques in magnetic single-layer films. <i>Nature Nanotechnology</i> , 2019, 14, 819-824.	15.6	130
7	Thermal Conductivity and Specific Heat of Thin-Film Amorphous Silicon. <i>Physical Review Letters</i> , 2006, 96, 055902.	2.9	129
8	Observation of the Planar Nernst Effect in Permalloy and Nickel Thin Films with In-Plane Thermal Gradients. <i>Physical Review Letters</i> , 2012, 109, 196602.	2.9	120
9	Specific heat and thermal conductivity of low-stress amorphous Si-N membranes. <i>Solid State Communications</i> , 2004, 129, 199-204.	0.9	101
10	Finite size effects on the moment and ordering temperature in antiferromagnetic CoO layers. <i>Physical Review B</i> , 2003, 67, .	1.1	85
11	Thermal conductivity of micromachined low-stress silicon-nitride beams from 77 to 325 K. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	79
12	Thermal and electrical conductivity of approximately 100-nm permalloy, Ni, Co, Al, and Cu films and examination of the Wiedemann-Franz Law. <i>Physical Review B</i> , 2015, 92, .	1.1	70
13	Long-distance spin transport in a disordered magnetic insulator. <i>Nature Physics</i> , 2017, 13, 987-993.	6.5	69
14	14-pixel, multiplexed array of gamma-ray microcalorimeters with 47eV energy resolution at 103keV. <i>Applied Physics Letters</i> , 2007, 90, 193508.	1.5	58
15	Heat transport by long mean free path vibrations in amorphous silicon nitride near room temperature. <i>Physical Review B</i> , 2013, 87, .	1.1	54
16	Spin-Glass Freezing and RKKY Interactions near the Metal-Insulator Transition in Amorphous Gd-Si Alloys. <i>Physical Review Letters</i> , 2000, 84, 5411-5414.	2.9	48
17	Measurement of thermal conductivity of thin films with a Si-N membrane-based microcalorimeter. <i>Review of Scientific Instruments</i> , 2005, 76, 024901.	0.6	46
18	Determining the planar Nernst effect from magnetic-field-dependent thermopower and resistance in nickel and permalloy thin films. <i>Physical Review B</i> , 2012, 86, .	1.1	44

#	ARTICLE	IF	CITATIONS
19	Array-compatible transition-edge sensor microcalorimeter \hat{I}^3 -ray detector with 42eV energy resolution at 103keV. Applied Physics Letters, 2006, 89, 124101.	1.5	43
20	Si-N membrane-based microcalorimetry: Heat capacity and thermal conductivity of thin films. Thermochimica Acta, 2005, 432, 158-168.	1.2	40
21	Low-temperature magnetoresistance in insulating $\hat{G}d_xSi_{1-\hat{x}}$ alloys. Physical Review B, 1999, 59, R3929-R3933.	1.1	37
22	Thermopower and resistivity in ferromagnetic thin films near room temperature. Physical Review B, 2011, 83, .	1.1	36
23	Large Magnetic Entropy in Giant Magnetoresistive Amorphous Gadolinium Silicon. Physical Review Letters, 1999, 83, 2266-2269.	2.9	30
24	Efficient spin transport through native oxides of nickel and permalloy with platinum and gold overlayers. Physical Review B, 2016, 93, .	1.1	29
25	Thin film microcalorimeter for heat capacity measurements in high magnetic fields. Review of Scientific Instruments, 2002, 73, 1841-1844.	0.6	28
26	Numerical simulation of the heat transfer in amorphous silicon nitride membrane-based microcalorimeters. Review of Scientific Instruments, 2003, 74, 4389-4403.	0.6	27
27	Exploring thermoelectric effects and Wiedemann-Franz violation in magnetic nanostructures via micromachined thermal platforms. Solid State Communications, 2010, 150, 514-518.	0.9	24
28	Time-Division SQUID Multiplexers With Reduced Sensitivity to External Magnetic Fields. IEEE Transactions on Applied Superconductivity, 2011, 21, 298-301.	1.1	22
29	Enhancement of the electronic contribution to the low-temperature specific heat of an Fe/Cr magnetic multilayer. Physical Review B, 2002, 65, .	1.1	21
30	Magnetic moments and interactions near the metal-insulator transition in amorphous magnetic semiconductors. Physical Review B, 2002, 66, .	1.1	16
31	Dependence of Excess Noise on the Partial Derivatives of Resistance in Superconducting Transition Edge Sensors. AIP Conference Proceedings, 2009, , .	0.3	16
32	Violation of the Wiedemann-Franz law through reduction of thermal conductivity in gold thin films. Physical Review Materials, 2020, 4, .	0.9	15
33	Peltier Cooling and Onsager Reciprocity in Ferromagnetic Thin Films. Physical Review Letters, 2013, 111, 126602.	2.9	14
34	Size- and Temperature-Dependent Suppression of Phonon Thermal Conductivity in Carbon Nanotube Thermoelectric Films. Advanced Electronic Materials, 2020, 6, 2000746.	2.6	14
35	Thermal spin injection and interface insensitivity in permalloy/aluminum metallic nonlocal spin valves. Physical Review B, 2016, 94, .	1.1	13
36	Determining absolute Seebeck coefficients from relative thermopower measurements of thin films and nanostructures. Journal of Applied Physics, 2020, 127, .	1.1	13

#	ARTICLE	IF	CITATIONS
37	Application of calorimetry on a chip to high-pressure materials. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 9187-9191.	3.3	12
38	Special issue on spin caloritronics. Journal Physics D: Applied Physics, 2019, 52, 230301.	1.3	12
39	Infrared probe of metal-insulator transition in $\text{Si}_{1-x}\text{Gd}_x$ and $\text{Si}_{1-x}\text{Y}_x$ amorphous alloys in magnetic field. Europhysics Letters, 2002, 57, 240-246.	0.7	9
40	Relation of planar Hall and planar Nernst effects in thin film permalloy. Journal Physics D: Applied Physics, 2018, 51, 244005.	1.3	9
41	Erbium-doped gold sensor films for magnetic microcalorimeter x-ray detectors. Journal of Applied Physics, 2006, 99, 08B303.	1.1	7
42	Thermal gradients and anomalous Nernst effects in membrane-supported nonlocal spin valves. Physical Review B, 2019, 100, .	1.1	7
43	Excess modes and enhanced scattering in rare-earth-doped amorphous silicon thin films. Physical Review B, 2006, 74, .	1.1	6
44	Identification and elimination of anomalous thermal decay in gamma-ray microcalorimeters. Applied Physics Letters, 2013, 103, 212602.	1.5	6
45	Temperature dependence of the anomalous Nernst coefficient for $\text{Ni}_{80}\text{Fe}_{20}$ determined with metallic nonlocal spin valves. AIP Advances, 2020, 10, .	0.6	6
46	Toward a 256-Pixel Array of Gamma-Ray Microcalorimeters for Nuclear-Materials Analysis. Journal of Low Temperature Physics, 2008, 151, 754-759.	0.6	5
47	Magnetization and antiferromagnetic coupling of the interface between a 20Ånm $\text{Y}_3\text{Fe}_5\text{O}_{12}$ film and La_2CuO_4 film	0.9	5
48	Thermodynamic properties of excess-oxygen-doped $\text{La}_{2-x}\text{CuO}_{4+x}$ near a simultaneous transition to superconductivity and long-range magnetic order. Physical Review B, 2004, 69, .	1.1	4
49	Negative spin Hall angle and large spin-charge conversion in thermally evaporated chromium thin films. Journal of Applied Physics, 2022, 131, .	1.1	4
50	Lattice Damage in Superconducting Microcalorimeter Detectors. IEEE Transactions on Applied Superconductivity, 2013, 23, 2101104-2101104.	1.1	3
51	The Heat in Antiferromagnetic Switching. Physics Magazine, 2019, 12, .	0.1	3
52	Design, Fabrication, and Multiplexing of Magnetic Calorimeter X-ray Detectors with High-Efficiency SQUID Readout. Journal of Low Temperature Physics, 2008, 151, 363-368.	0.6	2
53	Electronic and vibrational density of states through the metal-insulator transition in amorphous yttrium-silicon alloy thin films. Physical Review B, 2009, 79, .	1.1	1
54	Field-dependent nonelectronic contributions to thermal conductivity in a metallic ferromagnet with low Gilbert damping. Physical Review Materials, 2021, 5, .	0.9	1