

Valentine Novosad

List of Publications by Year in descending order

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246
papers

9,103
citations

41344

49
h-index

49909

87
g-index

251
all docs

251
docs citations

251
times ranked

7852
citing authors

#	ARTICLE	IF	CITATIONS
1	Eigenfrequencies of vortex state excitations in magnetic submicron-size disks. Journal of Applied Physics, 2002, 91, 8037.	2.5	510
2	Biofunctionalized magnetic-vortex microdiscs for targeted cancer-cell destruction. Nature Materials, 2010, 9, 165-171.	27.5	507
3	Magnetization reversal due to vortex nucleation, displacement, and annihilation in submicron ferromagnetic dot arrays. Physical Review B, 2001, 65, .	3.2	306
4	Detection of B -Mode Polarization in the Cosmic Microwave Background with Data from the South Pole Telescope. Physical Review Letters, 2013, 111, 141301.	7.8	280
5	SPT-3G: a next-generation cosmic microwave background polarization experiment on the South Pole telescope. Proceedings of SPIE, 2014, , .	0.8	249
6	Magnetic vortex resonance in patterned ferromagnetic dots. Physical Review B, 2005, 72, .	3.2	239
7	Field evolution of magnetic vortex state in ferromagnetic disks. Applied Physics Letters, 2001, 78, 3848-3850.	3.3	188
8	Advances in Magnetism Roadmap on Spin-Wave Computing. IEEE Transactions on Magnetics, 2022, 58, 1-72.	2.1	179
9	Spin excitations of magnetic vortices in ferromagnetic nanodots. Physical Review B, 2002, 66, .	3.2	158
10	Soliton-pair dynamics in patterned ferromagnetic ellipses. Nature Physics, 2005, 1, 172-176.	16.7	154
11	Measurements of the Temperature and E-mode Polarization of the CMB from 500 Square Degrees of SPTpol Data. Astrophysical Journal, 2018, 852, 97.	4.5	145
12	Hybrid magnonics: Physics, circuits, and applications for coherent information processing. Journal of Applied Physics, 2020, 128, .	2.5	141
13	Effect of interdot magnetostatic interaction on magnetization reversal in circular dot arrays. Physical Review B, 2002, 65, .	3.2	140
14	Magnetic properties and magnetostructural phase transitions in $\text{Ni}_{2+x}\text{Mn}_{1-x}\text{Ga}$ shape memory alloys. Physical Review B, 2004, 70, .	3.2	138
15	Spin-wave spectra of perpendicularly magnetized circular submicron dot arrays. Applied Physics Letters, 2004, 85, 443-445.	3.3	130
16	Vortex-state oscillations in soft magnetic cylindrical dots. Physical Review B, 2005, 71, .	3.2	121
17	Strong Coupling between Magnons and Microwave Photons in On-Chip Ferromagnet-Superconductor Thin-Film Devices. Physical Review Letters, 2019, 123, 107701.	7.8	121
18	Measurements of the E -mode polarization and temperature- E -mode correlation of the CMB from SPT-3G 2018 data. Physical Review D, 2021, 104, .	4.7	119

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19	Transition from single-domain to vortex state in soft magnetic cylindrical nanodots. <i>Journal of Magnetism and Magnetic Materials</i> , 2003, 266, 155-163.	2.3	117
20	MEASUREMENTS OF SUB-DEGREE B_{\parallel} -MODE POLARIZATION IN THE COSMIC MICROWAVE BACKGROUND FROM 100 SQUARE DEGREES OF SPTPOL DATA. <i>Astrophysical Journal</i> , 2015, 807, 151.	4.5	117
21	Stimuli-Responsive Magnetic Nanomicelles as Multifunctional Heat and Cargo Delivery Vehicles. <i>Langmuir</i> , 2013, 29, 7425-7432.	3.5	112
22	The SPTpol Extended Cluster Survey. <i>Astrophysical Journal, Supplement Series</i> , 2020, 247, 25.	7.7	101
23	A MEASUREMENT OF THE COSMIC MICROWAVE BACKGROUND GRAVITATIONAL LENSING POTENTIAL FROM 100 SQUARE DEGREES OF SPTPOL DATA. <i>Astrophysical Journal</i> , 2015, 810, 50.	4.5	99
24	SPTpol: an instrument for CMB polarization measurements with the South Pole Telescope. <i>Proceedings of SPIE</i> , 2012, , .	0.8	98
25	Magnetocaloric effect in "reduced" dimensions: Thin films, ribbons, and microwires of Heusler alloys and related compounds. <i>Physica Status Solidi (B): Basic Research</i> , 2014, 251, 2104-2113.	1.5	94
26	Magnetization reversal via single and double vortex states in submicron Permalloy ellipses. <i>Physical Review B</i> , 2004, 69, .	3.2	87
27	Novel magnetostrictive memory device. <i>Journal of Applied Physics</i> , 2000, 87, 6400-6402.	2.5	84
28	Guiding superconducting vortices with magnetic domain walls. <i>Physical Review B</i> , 2008, 77, .	3.2	81
29	CMB-S4: Forecasting Constraints on Primordial Gravitational Waves. <i>Astrophysical Journal</i> , 2022, 926, 54.	4.5	79
30	Metastable states during magnetization reversal in square permalloy rings. <i>Physical Review B</i> , 2003, 67, .	3.2	76
31	Coherent Spin Pumping in a Strongly Coupled Magnon-Magnon Hybrid System. <i>Physical Review Letters</i> , 2020, 124, 117202.	7.8	75
32	Dynamics of coupled vortices in layered magnetic nanodots. <i>Applied Physics Letters</i> , 2005, 86, 223112.	3.3	71
33	Dynamic response of an artificial square spin ice. <i>Physical Review B</i> , 2016, 93, .	3.2	71
34	A Measurement of the Cosmic Microwave Background Lensing Potential and Power Spectrum from 500 deg^2 of SPTpol Temperature and Polarization Data. <i>Astrophysical Journal</i> , 2019, 884, 70.	4.5	71
35	Quantum Engineering With Hybrid Magnonic Systems and Materials (Invited Paper). <i>IEEE Transactions on Quantum Engineering</i> , 2021, 2, 1-36.	4.9	69
36	Magnetic-field tunability of the vortex translational mode in micron-sized permalloy ellipses: Experiment and micromagnetic modeling. <i>Physical Review B</i> , 2006, 74, .	3.2	66

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37	Large Spin-Wave Bullet in a Ferrimagnetic Insulator Driven by the Spin Hall Effect. Physical Review Letters, 2016, 116, 057601.	7.8	66
38	Magnetization switching using topological surface states. Science Advances, 2019, 5, eaaw3415.	10.3	65
39	Shape effect on magnetization reversal in chains of interacting ferromagnetic elements. Applied Physics Letters, 2003, 82, 3716-3718.	3.3	63
40	Magnetic remanent states and magnetization reversal in patterned trilayer nanodots. Physical Review B, 2005, 72, .	3.2	61
41	Vortex state stability in soft magnetic cylindrical nanodots. Journal of Applied Physics, 2004, 96, 4451-4455.	2.5	59
42	From chaos to selective ordering of vortex cores in interacting mesomagnets. Nature Communications, 2012, 3, 1330.	12.8	58
43	Measurements of B -mode polarization of the cosmic microwave background from 500 square degrees of SPTpol data. Physical Review D, 2020, 101, .	4.7	54
44	Nucleation and annihilation of magnetic vortices in sub-micron permalloy dots. IEEE Transactions on Magnetics, 2001, 37, 2088-2090.	2.1	53
45	Microfabricated magnetic structures for future medicine: from sensors to cell actuators. Nanomedicine, 2012, 7, 1611-1624.	3.3	52
46	An Improved Measurement of the Secondary Cosmic Microwave Background Anisotropies from the SPT-SZ + SPTpol Surveys. Astrophysical Journal, 2021, 908, 199.	4.5	52
47	Constraints on Cosmological Parameters from the 500 deg ² SPTPOL Lensing Power Spectrum. Astrophysical Journal, 2020, 888, 119.	4.5	52
48	Imprinting Vortices into Antiferromagnets. Physical Review Letters, 2006, 97, 067201.	7.8	51
49	Driven Dynamic Mode Splitting of the Magnetic Vortex Translational Resonance. Physical Review Letters, 2007, 99, 267201.	7.8	51
50	Ferromagnetic microdisks as carriers for biomedical applications. Journal of Applied Physics, 2009, 105, .	2.5	49
51	Imaging the spontaneous formation of vortex-antivortex pairs in planar superconductor/ferromagnet hybrid structures. Physical Review B, 2011, 84, .	3.2	49
52	Origin of fourfold anisotropy in square lattices of circular ferromagnetic dots. Physical Review B, 2006, 74, .	3.2	48
53	CMB Polarization B-mode Delensing with SPTpol and Herschel. Astrophysical Journal, 2017, 846, 45.	4.5	48
54	Ultrasensitive detection enabled by nonlinear magnetization of nanomagnetic labels. Nanoscale, 2018, 10, 11642-11650.	5.6	48

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55	Vortex chirality in an array of ferromagnetic dots. <i>Physical Review B</i> , 2002, 65, .	3.2	47
56	MEASUREMENTS OF E-MODE POLARIZATION AND TEMPERATURE-E-MODE CORRELATION IN THE COSMIC MICROWAVE BACKGROUND FROM 100 SQUARE DEGREES OF SPTPOL DATA. <i>Astrophysical Journal</i> , 2015, 805, 36.	4.5	47
57	In-plane and out-of-plane uniaxial anisotropies in rectangular arrays of circular dots studied by ferromagnetic resonance. <i>Journal of Applied Physics</i> , 2003, 93, 8418-8420.	2.5	46
58	Commensurability and strong vortex pinning in nanopatterned Nb films. <i>Physical Review B</i> , 2005, 71, .	3.2	46
59	Origin of the matching effect in a superconducting film with a hole array. <i>Physical Review B</i> , 2007, 76, .	3.2	45
60	Magnetic Damping Modulation in IrMn via the Magnetic Spin Hall Effect. <i>Physical Review Letters</i> , 2020, 124, 087204.	7.8	44
61	Coherent Coupling of Two Remote Magnonic Resonators Mediated by Superconducting Circuits. <i>Physical Review Letters</i> , 2022, 128, 047701.	4.7	43
62	Searching for anisotropic cosmic birefringence with polarization data from SPTpol. <i>Physical Review D</i> , 2020, 102, .	5.1	42
63	Advances in coherent coupling between magnons and acoustic phonons. <i>APL Materials</i> , 2021, 9, .	5.6	41
64	Epitaxial patterning of nanometer-thick $\text{Y}_3\text{Fe}_5\text{O}_{12}$ films with low magnetic damping. <i>Nanoscale</i> , 2016, 8, 388-394.	4.7	41
65	Galaxy Clusters Selected via the Sunyaev-Zeldovich Effect in the SPTpol 100-square-degree Survey. <i>Astronomical Journal</i> , 2020, 159, 110.	4.7	40
66	Constraints on Λ CDM extensions from the SPT-3G 2018 E and T power spectra. <i>Physical Review Letters</i> , 2020, 125, 081301.	7.8	39
67	Dynamic Origin of Stripe Domains. <i>Physical Review Letters</i> , 2006, 96, 017201.	3.2	38
68	Transverse instabilities of multiple vortex chains in magnetically coupled NbSe_2 bilayers. <i>Physical Review B</i> , 2009, 80, .	3.2	37
69	Superconductor/ferromagnet bilayers: Influence of magnetic domain structure on vortex dynamics. <i>Physical Review B</i> , 2008, 77, .	3.3	33
70	Tunable transport in magnetically coupled MoGe/Permalloy hybrids. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	33
71	Temperature dependent nucleation and annihilation of individual magnetic vortices. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	32
72	A novel adenoviral vector labeled with superparamagnetic iron oxide nanoparticles for real-time tracking of viral delivery. <i>Journal of Clinical Neuroscience</i> , 2012, 19, 875-880.		

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73	SPTpol: an instrument for CMB polarization. , 2009, , .		30
74	Mechanoresponsive system based on sub-micron chitosan-functionalized ferromagnetic disks. Journal of Materials Chemistry, 2011, 21, 8422.	6.7	29
75	Fabrication of large dual-polarized multichroic TES bolometer arrays for CMB measurements with the SPT-3G camera. Superconductor Science and Technology, 2015, 28, 094002.	3.5	29
76	Insulating Nanomagnets Driven by Spin Torque. Nano Letters, 2017, 17, 8-14.	9.1	29
77	High-Frequency Dynamics Modulated by Collective Magnetization Reversal in Artificial Spin Ice. Physical Review Applied, 2017, 8, .	3.8	29
78	Year two instrument status of the SPT-3G cosmic microwave background receiver. , 2018, , .		29
79	The Design and Integrated Performance of SPT-3G. Astrophysical Journal, Supplement Series, 2022, 258, 42.	7.7	29
80	Visualizing domain wall and reverse domain superconductivity. Nature Communications, 2014, 5, 4766.	12.8	28
81	Mass Calibration of Optically Selected DES Clusters Using a Measurement of CMB-cluster Lensing with SPTpol Data. Astrophysical Journal, 2019, 872, 170.	4.5	28
82	Phonon Transport Controlled by Ferromagnetic Resonance. Physical Review Applied, 2020, 13, .	3.8	28
83	Multifunctional Ferromagnetic Disks for Modulating Cell Function. IEEE Transactions on Magnetics, 2012, 48, 3269-3274.	2.1	27
84	Nano-structured magnetic metamaterial with enhanced nonlinear properties. Scientific Reports, 2012, 2, 478.	3.3	27
85	SPT-3G: A Multichroic Receiver for the South Pole Telescope. Journal of Low Temperature Physics, 2018, 193, 1057-1065.	1.4	27
86	Surface Functionalized Biocompatible Magnetic Nanospheres for Cancer Hyperthermia. IEEE Transactions on Magnetics, 2007, 43, 2462-2464.	2.1	26
87	Synthesis of Hybrid Gold/Iron Oxide Nanoparticles in Block Copolymer Micelles for Imaging, Drug Delivery, and Magnetic Hyperthermia. IEEE Transactions on Magnetics, 2009, 45, 4821-4824.	2.1	26
88	Room temperature deposition of superconducting niobium nitride films by ion beam assisted sputtering. APL Materials, 2018, 6, 076107.	5.1	26
89	Pinning of magnetic vortices in microfabricated permalloy dot arrays. Journal of Applied Physics, 2002, 92, 1473-1476.	2.5	24
90	An Overview of the SPTpol Experiment. Journal of Low Temperature Physics, 2012, 167, 859-864.	1.4	24

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91	Vortex-antivortex coexistence in Nb-based superconductor/ferromagnet heterostructures. <i>Physical Review B</i> , 2014, 89, .	3.2	23
92	Low-loss single-photon NbN microwave resonators on Si. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	23
93	Probing magnonâ€“magnon coupling in exchange coupled Y ₃ Fe ₅ O ₁₂ /Permalloy bilayers with magneto-optical effects. <i>Scientific Reports</i> , 2020, 10, 12548.	3.3	23
94	Controlling magnetic vortices through exchange bias. <i>Applied Physics Letters</i> , 2006, 88, 042502.	3.3	22
95	Efficient Cisplatin Proâ€Drug Delivery Visualized with Subâ€100 nm Resolution: Interfacing Engineered Thermosensitive Magnetomicelles with a Living System. <i>Advanced Materials Interfaces</i> , 2014, 1, 1400182.	3.7	22
96	Unconventional Applications of Superconducting Nanowire Single Photon Detectors. <i>Nanomaterials</i> , 2020, 10, 1198.	4.1	22
97	Oscillatory thickness dependence of the coercive field in magnetic three-dimensional antidot arrays. <i>Applied Physics Letters</i> , 2006, 88, 062511.	3.3	21
98	Cell-Free Synthetic Biology Chassis for Nanocatalytic Photon-to-Hydrogen Conversion. <i>ACS Nano</i> , 2017, 11, 6739-6745.	14.6	21
99	A demonstration of improved constraints on primordial gravitational waves with delensing. <i>Physical Review D</i> , 2021, 103, .	4.7	21
100	Characterization of cubic Li ₂ MoO ₄ crystals for the CUPID experiment. <i>European Physical Journal C</i> , 2021, 81, 1.	3.9	21
101	Optimal Cosmic Microwave Background Lensing Reconstruction and Parameter Estimation with SPTpol Data. <i>Astrophysical Journal</i> , 2021, 922, 259.	4.5	21
102	Fractional polarization of extragalactic sources in the 500â€deg ² SPTpol survey. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 5712-5721.	4.4	20
103	Coupled vortex oscillations in mesoscale ferromagnetic double-disk structures. <i>Physical Review B</i> , 2012, 86, .	3.2	19
104	MILLIMETER TRANSIENT POINT SOURCES IN THE SPTpol 100 SQUARE DEGREE SURVEY. <i>Astrophysical Journal</i> , 2016, 830, 143.	4.5	19
105	Observation of superconducting vortex clusters in S/F hybrids. <i>Scientific Reports</i> , 2016, 6, 38557.	3.3	19
106	Controlled interconversion of quantized spin wave modes via local magnetic fields. <i>Physical Review B</i> , 2019, 100, .	3.2	19
107	Influence of cobalt on phase transitions in Ni ₅₀ Mn ₃₇ Sn ₁₃ . <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 481-482, 322-325.	5.6	18
108	Evidence of vortex jamming in Abrikosov vortex flux flow regime. <i>Physical Review B</i> , 2012, 86, .	3.2	18

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109	Magnetization reversal in Py/Gd heterostructures. Physical Review B, 2017, 96, .	3.2	18
110	Feedhorn-coupled TES polarimeter camera modules at 150 GHz for CMB polarization measurements with SPTpol. Proceedings of SPIE, 2012, , .	0.8	17
111	Vortex dynamics and frequency splitting in vertically coupled nanomagnets. Scientific Reports, 2017, 7, 1127.	3.3	17
112	Nontrivial Nature and Penetration Depth of Topological Surface States in SmB_6 Thin Films. Physical Review Letters, 2018, 120, 207206.	7.8	17
113	Autonomous Magnetic Microrobots by Navigating Gates for Multiple Biomolecules Delivery. Small, 2018, 14, e1800504.	10.0	17
114	Asymmetrically shaped hysteresis loop in exchange-biased FeNi/FeMn film. Journal of Magnetism and Magnetic Materials, 2006, 307, 263-267.	2.3	16
115	Performance and on-sky optical characterization of the SPTpol instrument. Proceedings of SPIE, 2012, , .	0.8	16
116	Study of functional infrared imaging for early detection of mucositis in locally advanced head and neck cancer treated with chemoradiotherapy. Oral Oncology, 2013, 49, 1025-1031.	1.5	16
117	Optimization of Transition Edge Sensor Arrays for Cosmic Microwave Background Observations With the South Pole Telescope. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-4.	1.7	16
118	Optical Characterization of the SPT-3G Camera. Journal of Low Temperature Physics, 2018, 193, 305-313.	1.4	16
119	Fabrication of Detector Arrays for the SPT-3G Receiver. Journal of Low Temperature Physics, 2018, 193, 703-711.	1.4	16
120	Spin-wave frequency division multiplexing in an yttrium iron garnet microstripe magnetized by inhomogeneous field. Applied Physics Letters, 2019, 115, .	3.3	16
121	Superconducting nanowires as high-rate photon detectors in strong magnetic fields. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 959, 163543.	1.6	16
122	A CUPID $\text{Li}_2^{100}\text{MoO}_4$ scintillating bolometer tested in the CROSS underground facility. Journal of Instrumentation, 2021, 16, P02037-P02037.	1.2	16
123	Novel technique for the study of pileup events in cryogenic bolometers. Physical Review C, 2021, 104, .	2.9	16
124	Detection of Galactic and Extragalactic Millimeter-wavelength Transient Sources with SPT-3G. Astrophysical Journal, 2021, 916, 98.	4.5	16
125	Magnetic elements for switching magnetization magnetic force microscopy tips. Journal of Magnetism and Magnetic Materials, 2010, 322, 2715-2721.	2.3	15
126	Microwave absorption properties of permalloy nanodots in the vortex and quasi-uniform magnetization states. New Journal of Physics, 2014, 16, 063044.	2.9	15

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127	Integrated performance of a frequency domain multiplexing readout in the SPT-3G receiver. Proceedings of SPIE, 2016, , .	0.8	15
128	Magnetization reversal in patterned double-vortex structures. Journal of Applied Physics, 2005, 97, 10H503.	2.5	14
129	Simultaneous Optical and Electrical Spin-Torque Magnetometry with Phase-Sensitive Detection of Spin Precession. Physical Review Applied, 2019, 11, .	3.8	14
130	Shape effect on the magnetic anisotropy of an array of epitaxial (10 \hat{A} -0) Co dots. IEEE Transactions on Magnetics, 1999, 35, 3472-3474.	2.1	13
131	Quantum depinning of the magnetic vortex core in micron-size permalloy disks. Physical Review B, 2012, 85, .	3.2	13
132	Design and characterization of 90 GHz feedhorn-coupled TES polarimeter pixels in the SPTPol camera. Proceedings of SPIE, 2012, , .	0.8	13
133	The Effect of Ligands on FePt \hat{A} Fe ₃ O ₄ Core \hat{A} Shell Magnetic Nanoparticles. Journal of Nanoscience and Nanotechnology, 2014, 14, 2648-2652.	0.9	13
134	Tuning SPT-3G Transition-Edge-Sensor Electrical Properties with a Four-Layer Ti \hat{A} Au \hat{A} Ti \hat{A} Au Thin-Film Stack. Journal of Low Temperature Physics, 2018, 193, 695-702.	1.4	13
135	Design and Assembly of SPT-3G Cold Readout Hardware. Journal of Low Temperature Physics, 2018, 193, 547-555.	1.4	13
136	Detection of CMB-Cluster Lensing using Polarization Data from SPTpol. Physical Review Letters, 2019, 123, 181301.	7.8	12
137	Quantized spin excitation modes in patterned ferromagnetic stripe arrays. Journal of Applied Physics, 2005, 97, 10A709.	2.5	11
138	Tuning edge-localized spin waves in magnetic microstrips by proximate magnetic structures. Physical Review B, 2019, 100, .	3.2	11
139	On-Sky Performance of the SPT-3G Frequency-Domain Multiplexed Readout. Journal of Low Temperature Physics, 2020, 199, 182-191.	1.4	11
140	Direct Imaging of Resonant Phonon-Magnon Coupling. Physical Review Applied, 2021, 15, .	3.8	11
141	A broadband imaging system for research applications. Review of Scientific Instruments, 2009, 80, 056104.	1.3	10
142	South Pole Telescope software systems: control, monitoring, and data acquisition. Proceedings of SPIE, 2012, , .	0.8	10
143	Optical and Thermal Properties of ANL/KICP Polarization Sensitive Bolometers for SPTpol. Journal of Low Temperature Physics, 2012, 167, 865-871.	1.4	10
144	A Study of Al \hat{A} Mn Transition Edge Sensor Engineering for Stability. Journal of Low Temperature Physics, 2014, 176, 383-391.	1.4	10

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145	Magnetic and transport properties of as-prepared Mn ₂ CoGa. Journal of Magnetism and Magnetic Materials, 2019, 470, 55-58.	2.3	10
146	Frustrated magnetic vortices in a triad of permalloy rings: Magneto-optical Kerr effect, magnetic force microscopy, and micromagnetic simulations. Physical Review B, 2006, 73, .	3.2	9
147	Issues in nanomagnetism. Superlattices and Microstructures, 2007, 41, 72-80.	3.1	9
148	Thermal Properties of Silicon Nitride Beams Below One Kelvin. IEEE Transactions on Applied Superconductivity, 2011, 21, 232-235.	1.7	9
149	MULTIFUNCTIONAL NANO“BIO MATERIALS WITHIN CELLULAR MACHINERY. International Journal of Nanoscience, 2011, 10, 899-908.	0.7	9
150	Design and Fabrication of 90 GHz TES Polarimeter Detectors for the South Pole Telescope. IEEE Transactions on Applied Superconductivity, 2013, 23, 2100605-2100605.	1.7	9
151	Probing the energy barriers in nonuniform magnetization states of circular dots by broadband ferromagnetic resonance. Physical Review B, 2013, 88, .	3.2	9
152	Large arrays of dual-polarized multichroic TES detectors for CMB measurements with the SPT-3G receiver. , 2016, , .		9
153	Design of Conductive Microwire Systems for Manipulation of Biological Cells. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	9
154	Design and characterization of the SPT-3G receiver. , 2018, , .		9
155	Optical transmission modulation by disk-shaped ferromagnetic particles. Journal of Applied Physics, 2012, 111, 07A945.	2.5	8
156	Dynamics of coupled vortices in perpendicular field. Applied Physics Letters, 2014, 104, 082409.	3.3	8
157	Low Loss Superconducting Microstrip Development at Argonne National Lab. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.7	8
158	Magneto-resistive detection of strongly pinned uncompensated magnetization in antiferromagnetic FeMn. Physical Review B, 2017, 95, .	3.2	8
159	scraps: An Open-Source Python-Based Analysis Package for Analyzing and Plotting Superconducting Resonator Data. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	8
160	Direct observation of spin accumulation in Cu induced by spin pumping. Physical Review Research, 2020, 2, .	3.6	8
161	Broadband anti-reflective coatings for cosmic microwave background experiments. , 2018, , .		8
162	Novel Magnetic Tips Developed for the Switching Magnetization Magnetic Force Microscopy. Journal of Nanoscience and Nanotechnology, 2010, 10, 4477-4481.	0.9	7

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163	Giant conductance anisotropy in magnetically coupled Ferromagnet-Superconductor-Ferromagnet structures. Applied Physics Letters, 2010, 96, 092513.	3.3	7
164	Vortex Confinement in Planar Superconductor/Ferromagnet Hybrid Structures. IEEE Transactions on Magnetics, 2012, 48, 3275-3279.	2.1	7
165	Modeling Iridium-Based Trilayer and Bilayer Transition-Edge Sensors. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	7
166	Performance of Al ¹⁰⁰ Mn Transition-Edge Sensor Bolometers in SPT-3G. Journal of Low Temperature Physics, 2020, 199, 320-329.	1.4	7
167	Controlling T_c of iridium films using the proximity effect. Journal of Applied Physics, 2020, 128, .	2.5	7
168	Broadband, millimeter-wave antireflection coatings for large-format, cryogenic aluminum oxide optics. Applied Optics, 2020, 59, 3285.	1.8	7
169	Oscillatory thickness dependence of the coercive field in three-dimensional anti-dot arrays from self-assembly. Journal of Applied Physics, 2005, 97, 10J701.	2.5	6
170	Exchange anisotropy in polycrystalline FeNi ¹⁰⁰ •FeMn films with hysteresis loop asymmetry. Low Temperature Physics, 2007, 33, 957-964.	0.6	6
171	Progress on ANL/KICP Bolometers for SPTpol. IEEE Transactions on Applied Superconductivity, 2011, 21, 184-187.	1.7	6
172	Mo/Au Bilayer Superconducting Transition Edge Sensor Tuning With Surface Modification Structures. IEEE Transactions on Applied Superconductivity, 2013, 23, 2101605-2101605.	1.7	6
173	Influence of Domain Width on Vortex Nucleation in Superconductor/Ferromagnet Hybrid Structures. Journal of Superconductivity and Novel Magnetism, 2015, 28, 1107-1110.	1.8	6
174	Spin Vortex Resonance in Non-planar Ferromagnetic Dots. Scientific Reports, 2016, 6, 25196.	3.3	6
175	Design and Bolometer Characterization of the SPT-3G First-Year Focal Plane. Journal of Low Temperature Physics, 2018, 193, 1085-1093.	1.4	6
176	Quantitative magnetic force microscopy using calibration on superconducting flux quanta. Nanotechnology, 2019, 30, 314004.	2.6	6
177	Strain-mediated magneto-electric interactions in hexagonal ferrite and ferroelectric coaxial nanofibers. MRS Communications, 2020, 10, 230-241.	1.8	6
178	Investigations into Spin- and Unpolarized Secondary Electron-Induced Reactions in Self-Assembled Monolayers of Cysteine. Langmuir, 2021, 37, 2985-2992.	3.5	6
179	Experimental parameters, combined dynamics, and nonlinearity of a magnonic-opto-electronic oscillator (MOEO). Review of Scientific Instruments, 2020, 91, 125105.	1.3	6
180	Hybrid Magnonics for Short-Wavelength Spin Waves Facilitated by a Magnetic Heterostructure. Physical Review Applied, 2022, 17, .	3.8	6

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181	Translational-mode dynamics of exchange-biased vortices. Journal of Applied Physics, 2008, 103, 07B102.	2.5	5
182	Adjustable Superconducting Anisotropy in Superconductor-Ferromagnet Bilayers. IEEE Transactions on Applied Superconductivity, 2009, 19, 3471-3474.	1.7	5
183	Visualizing Vortex Dynamics in Py/Nb Thin Film Hybrids by Low Temperature Magnetic Force Microscopy. Journal of Superconductivity and Novel Magnetism, 2012, 25, 2167-2171.	1.8	5
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