

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
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251
all docs

251
docs citations

251
times ranked

7852
citing authors

#	ARTICLE	IF	CITATIONS
1	Coherent Coupling of Two Remote Magnonic Resonators Mediated by Superconducting Circuits. <i>Physical Review Letters</i> , 2022, 128, 047701.	7.8	44
2	Advances in Magnetism Roadmap on Spin-Wave Computing. <i>IEEE Transactions on Magnetism</i> , 2022, 58, 1-72.	2.1	179
3	CMB-S4: Forecasting Constraints on Primordial Gravitational Waves. <i>Astrophysical Journal</i> , 2022, 926, 54.	4.5	79
4	The Design and Integrated Performance of SPT-3G. <i>Astrophysical Journal, Supplement Series</i> , 2022, 258, 42.	7.7	29
5	Tunable Magnetically Induced Transparency Spectra in Magnon-Magnon Coupled $\text{Y}_3\text{Fe}_5\text{O}_{12}$ Permalloy Bilayers. <i>Physical Review Applied</i> , 2022, 17, .	3.8	4
6	Hybrid Magnonics for Short-Wavelength Spin Waves Facilitated by a Magnetic Heterostructure. <i>Physical Review Applied</i> , 2022, 17, .	3.8	6
7	Machine Learning Techniques for Pile-Up Rejection in Cryogenic Calorimeters. <i>Journal of Low Temperature Physics</i> , 2022, 209, 1024-1031.	1.4	2
8	Evidence of Magnon-Mediated Orbital Magnetism in a Quasi-2D Topological Magnon Insulator. <i>Nano Letters</i> , 2022, 22, 5114-5119.	9.1	2
9	Detecting Phase-Resolved Magnetization Dynamics by Magneto-Optic Effects at 1550 nm Wavelength. <i>IEEE Transactions on Magnetism</i> , 2021, 57, 1-7.	2.1	3
10	A demonstration of improved constraints on primordial gravitational waves with delensing. <i>Physical Review D</i> , 2021, 103, .	4.7	21
11	Direct Imaging of Resonant Phonon-Magnon Coupling. <i>Physical Review Applied</i> , 2021, 15, .	3.8	11
12	Quantum Engineering With Hybrid Magnonic Systems and Materials (Invited Paper). <i>IEEE Transactions on Quantum Engineering</i> , 2021, 2, 1-36.	4.9	69
13	Characterization of cubic Li_2MoO_4 crystals for the CUPID experiment. <i>European Physical Journal C</i> , 2021, 81, 1.	3.9	21
14	An Improved Measurement of the Secondary Cosmic Microwave Background Anisotropies from the SPT-SZ + SPTpol Surveys. <i>Astrophysical Journal</i> , 2021, 908, 199.	4.5	52
15	Temperature-dependent collective magnetization reversal in a network of ferromagnetic nanowires. <i>AIP Advances</i> , 2021, 11, .	1.3	4
16	Investigations into Spin- and Unpolarized Secondary Electron-Induced Reactions in Self-Assembled Monolayers of Cysteine. <i>Langmuir</i> , 2021, 37, 2985-2992.	3.5	6
17	A CUPID Li_2MoO_4 scintillating bolometer tested in the CROSS underground facility. <i>Journal of Instrumentation</i> , 2021, 16, P02037-P02037.	1.2	16
18	Phase-resolved electrical detection of coherently coupled magnonic devices. <i>Applied Physics Letters</i> , 2021, 118, 202403.	3.3	3

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19	Advances in coherent coupling between magnons and acoustic phonons. <i>APL Materials</i> , 2021, 9, .	5.1	42
20	Novel technique for the study of pileup events in cryogenic bolometers. <i>Physical Review C</i> , 2021, 104, .	2.9	16
21	Measurements of the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mi} \rangle E \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -mode polarization and temperature- $\langle \text{mml:math} \rangle$ -mode correlation of the CMB from SPT-3G 2018 data. <i>Physical Review D</i> , 2021, 104, .	4.7	119
22	Detection of Galactic and Extragalactic Millimeter-wavelength Transient Sources with SPT-3G. <i>Astrophysical Journal</i> , 2021, 916, 98.	4.5	16
23	OMT-Coupled CMB Detector Development at Argonne. <i>IEEE Transactions on Applied Superconductivity</i> , 2021, 31, 1-4.	1.7	4
24	Constraints on $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mi} \rangle \text{mathvariant="normal"} \rangle \hat{\rho} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ extensions from the SPT-3G 2018 $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle E \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle E \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ and $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mi} \rangle T \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle E \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ power spectra. <i>Physical Review Optimal Cosmic Microwave Background Lensing Reconstruction and Parameter Estimation with SPTpol Data. Astrophysical Journal</i> , 2021, 922, 259.	4.7	40
25	Optimization of a single module of CUPID. <i>Journal of Physics: Conference Series</i> , 2021, 2156, 012228.	4.5	21
26	Optimization of a single module of CUPID. <i>Journal of Physics: Conference Series</i> , 2021, 2156, 012228.	0.4	0
27	On-Sky Performance of the SPT-3G Frequency-Domain Multiplexed Readout. <i>Journal of Low Temperature Physics</i> , 2020, 199, 182-191.	1.4	11
28	Synthesis and Characterization of Mo $\hat{\text{e}}$ Nb Films Superconducting at 100 $\hat{\text{e}}$ 200 $\hat{\text{A}}$ mK. <i>Journal of Low Temperature Physics</i> , 2020, 199, 306-311.	1.4	0
29	Performance of Al $\hat{\text{e}}$ Mn Transition-Edge Sensor Bolometers in SPT-3G. <i>Journal of Low Temperature Physics</i> , 2020, 199, 320-329.	1.4	7
30	Searching for anisotropic cosmic birefringence with polarization data from SPTpol. <i>Physical Review D</i> , 2020, 102, .	4.7	43
31	Hybrid magnonics: Physics, circuits, and applications for coherent information processing. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	141
32	Probing magnon $\hat{\text{e}}$ magnon coupling in exchange coupled Y $\hat{\text{e}}$ Fe $\hat{\text{e}}$ Permalloy bilayers with magneto-optical effects. <i>Scientific Reports</i> , 2020, 10, 12548.	3.3	23
33	Controlling $\langle \text{mml:math} \rangle$ of iridium films using the proximity effect. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	7
34	Strain-mediated magneto-electric interactions in hexagonal ferrite and ferroelectric coaxial nanofibers. <i>MRS Communications</i> , 2020, 10, 230-241.	1.8	6
35	Phonon Transport Controlled by Ferromagnetic Resonance. <i>Physical Review Applied</i> , 2020, 13, .	3.8	28
36	Measurements of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mi} \rangle B \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -mode polarization of the cosmic microwave background from 500 square degrees of SPTpol data. <i>Physical Review D</i> , 2020, 101, .	4.7	54

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37	Unconventional Applications of Superconducting Nanowire Single Photon Detectors. <i>Nanomaterials</i> , 2020, 10, 1198.	4.1	22
38	Coherent Spin Pumping in a Strongly Coupled Magnon-Magnon Hybrid System. <i>Physical Review Letters</i> , 2020, 124, 117202.	7.8	75
39	Galaxy Clusters Selected via the Sunyaev-Zeldovich Effect in the SPTpol 100-square-degree Survey. <i>Astronomical Journal</i> , 2020, 159, 110.	4.7	41
40	Temperature-dependent anisotropic magnetoresistance and spin-torque-driven vortex dynamics in a single microdisk. <i>Journal of Applied Physics</i> , 2020, 127, .	2.5	4
41	Magnetic Damping Modulation in IrMn via the Magnetic Spin Hall Effect. <i>Physical Review Letters</i> , 2020, 124, 087204.		
42	Superconducting nanowires as high-rate photon detectors in strong magnetic fields. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 959, 163543.	1.6	16
43	Performance of a Low-Parasitic Frequency-Domain Multiplexing Readout. <i>Journal of Low Temperature Physics</i> , 2020, 199, 192-199.	1.4	1
44	Modeling Low-TC Transition-Edge Sensors Made of NS Bilayers: The Specific Interface Resistance. <i>Journal of Low Temperature Physics</i> , 2020, 200, 220-225.	1.4	0
45	Direct observation of spin accumulation in Cu induced by spin pumping. <i>Physical Review Research</i> , 2020, 2, .	3.6	8
46	Broadband, millimeter-wave antireflection coatings for large-format, cryogenic aluminum oxide optics. <i>Applied Optics</i> , 2020, 59, 3285.	1.8	7
47	Constraints on Cosmological Parameters from the 500 deg ² SPTPOL Lensing Power Spectrum. <i>Astrophysical Journal</i> , 2020, 888, 119.	4.5	52
48	The SPTpol Extended Cluster Survey. <i>Astrophysical Journal, Supplement Series</i> , 2020, 247, 25.	7.7	101
49	Experimental parameters, combined dynamics, and nonlinearity of a magnonic-opto-electronic oscillator (MOEO). <i>Review of Scientific Instruments</i> , 2020, 91, 125105.	1.3	6
50	Fractional polarization of extragalactic sources in the 500 deg ² SPTpol survey. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 5712-5721.	4.4	20
51	Detection of CMB-Cluster Lensing using Polarization Data from SPTpol. <i>Physical Review Letters</i> , 2019, 123, 181301.	7.8	12
52	Magnetization switching using topological surface states. <i>Science Advances</i> , 2019, 5, eaaw3415.	10.3	65
53	Controlled interconversion of quantized spin wave modes via local magnetic fields. <i>Physical Review B</i> , 2019, 100, .	3.2	19
54	Strong Coupling between Magnons and Microwave Photons in On-Chip Ferromagnet-Superconductor Thin-Film Devices. <i>Physical Review Letters</i> , 2019, 123, 107701.	7.8	121

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55	Low-loss single-photon NbN microwave resonators on Si. Applied Physics Letters, 2019, 115, .	3.3	23
56	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
57	Quantitative magnetic force microscopy using calibration on superconducting flux quanta. Nanotechnology, 2019, 30, 314004.	2.6	6
58	Simultaneous Optical and Electrical Spin-Torque Magnetometry with Phase-Sensitive Detection of Spin Precession. Physical Review Applied, 2019, 11, .	3.8	14
59	Tuning edge-localized spin waves in magnetic microstrips by proximate magnetic structures. Physical Review B, 2019, 100, .	3.2	11
60	A Measurement of the Cosmic Microwave Background Lensing Potential and Power Spectrum from 500 deg ² of SPTpol Temperature and Polarization Data. Astrophysical Journal, 2019, 884, 70.	4.5	71
61	Spin-wave frequency division multiplexing in an yttrium iron garnet microstripe magnetized by inhomogeneous field. Applied Physics Letters, 2019, 115, .	3.3	16
62	Magnetic and transport properties of as-prepared Mn ₂ CoGa. Journal of Magnetism and Magnetic Materials, 2019, 470, 55-58.	2.3	10
63	Tuning SPT-3G Transition-Edge-Sensor Electrical Properties with a Four-Layer TiAuTiAu Thin-Film Stack. Journal of Low Temperature Physics, 2018, 193, 695-702.	1.4	13
64	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
65	Design of Conductive Microwire Systems for Manipulation of Biological Cells. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	9
66	Microstructures: Autonomous Magnetic Microrobots by Navigating Gates for Multiple Biomolecules Delivery (Small 25/2018). Small, 2018, 14, 1870116.	10.0	0
67	Design and Assembly of SPT-3G Cold Readout Hardware. Journal of Low Temperature Physics, 2018, 193, 547-555.	1.4	13
68	Optical Characterization of the SPT-3G Camera. Journal of Low Temperature Physics, 2018, 193, 305-313.	1.4	16
69	Design and Bolometer Characterization of the SPT-3G First-Year Focal Plane. Journal of Low Temperature Physics, 2018, 193, 1085-1093.	1.4	6
70	A Kinetic Inductance Ammeter with Coplanar Waveguide Input Structure for Magnetic Flux Focusing. Journal of Low Temperature Physics, 2018, 193, 134-140.	1.4	2
71	Impact of Electrical Contacts Design and Materials on the Stability of Ti Superconducting Transition Shape. Journal of Low Temperature Physics, 2018, 193, 732-738.	1.4	4
72	SPT-3G: A Multichroic Receiver for the South Pole Telescope. Journal of Low Temperature Physics, 2018, 193, 1057-1065.	1.4	27

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73	Thermal Links and Microstrip Transmission Lines in SPT-3G Bolometers. Journal of Low Temperature Physics, 2018, 193, 712-719.	1.4	5
74	Nontrivial Nature and Penetration Depth of Topological Surface States in S_{mB} Thin Films. Physical Review Letters, 2018, 120, 207206.	7.8	17
75	Fabrication of Detector Arrays for the SPT-3G Receiver. Journal of Low Temperature Physics, 2018, 193, 703-711.	1.4	16
76	Autonomous Magnetic Microrobots by Navigating Gates for Multiple Biomolecules Delivery. Small, 2018, 14, e1800504.	10.0	17
77	Room temperature deposition of superconducting niobium nitride films by ion beam assisted sputtering. APL Materials, 2018, 6, 076107.	5.1	26
78	Ultrasensitive detection enabled by nonlinear magnetization of nanomagnetic labels. Nanoscale, 2018, 10, 11642-11650.	5.6	48
79	Year two instrument status of the SPT-3G cosmic microwave background receiver. , 2018, , .		29
80	Characterization and performance of the second-year SPT-3G focal plane. , 2018, , .		5
81	Design and characterization of the SPT-3G receiver. , 2018, , .		9
82	Broadband anti-reflective coatings for cosmic microwave background experiments. , 2018, , .		8
83	Investigation of magnetic shielding for superconducting readout. , 2018, , .		0
84	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
85	Cell-Free Synthetic Biology Chassis for Nanocatalytic Photon-to-Hydrogen Conversion. ACS Nano, 2017, 11, 6739-6745.	14.6	21
86	Modeling Iridium-Based Trilayer and Bilayer Transition-Edge Sensors. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	7
87	Insulating Nanomagnets Driven by Spin Torque. Nano Letters, 2017, 17, 8-14.	9.1	29
88	Magnetic vortex nucleation/annihilation in artificial-ferrimagnet microdisks. Journal of Applied Physics, 2017, 122, 083903.	2.5	5
89	CMB Polarization B-mode Delensing with SPTpol and Herschel. Astrophysical Journal, 2017, 846, 45.	4.5	48
90	Vortex dynamics and frequency splitting in vertically coupled nanomagnets. Scientific Reports, 2017, 7, 1127.	3.3	17

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91	Magnetization reversal in Py/Gd heterostructures. Physical Review B, 2017, 96, .	3.2	18
92	Magneto-resistive detection of strongly pinned uncompensated magnetization in antiferromagnetic FeMn. Physical Review B, 2017, 95, .	3.2	8
93	scrap: 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
94	High-Frequency Dynamics Modulated by Collective Magnetization Reversal in Artificial Spin Ice. Physical Review Applied, 2017, 8, .	3.8	29
95	MILLIMETER TRANSIENT POINT SOURCES IN THE SPTpol 100 SQUARE DEGREE SURVEY. Astrophysical Journal, 2016, 830, 143.	4.5	19
96	Spin Vortex Resonance in Non-planar Ferromagnetic Dots. Scientific Reports, 2016, 6, 25196.	3.3	6
97	Gyrotropic frequency control in ferromagnetic dots using a nanoscale vortex barrier. AIP Advances, 2016, 6, .	1.3	3
98	Doppler-scanning tunneling microscopy current imaging in superconductor-ferromagnet hybrids. Applied Physics Letters, 2016, 108, .	3.3	5
99	Large arrays of dual-polarized multichroic TES detectors for CMB measurements with the SPT-3G receiver. , 2016, , .		9
100	Observation of superconducting vortex clusters in S/F hybrids. Scientific Reports, 2016, 6, 38557.	3.3	19
101	Spin valve with non-collinear magnetization configuration imprinted by a static magnetic field. AIP Advances, 2016, 6, 056107.	1.3	2
102	Dynamic response of an artificial square spin ice. Physical Review B, 2016, 93, .	3.2	71
103	Large Spin-Wave Bullet in a Ferrimagnetic Insulator Driven by the Spin Hall Effect. Physical Review Letters, 2016, 116, 057601.	7.8	66
104	Integrated performance of a frequency domain multiplexing readout in the SPT-3G receiver. Proceedings of SPIE, 2016, , .	0.8	15
105	Epitaxial patterning of nanometer-thick $\text{Y}_{3}\text{Fe}_{5}\text{O}_{12}$ films with low magnetic damping. Nanoscale, 2016, 8, 388-394.	5.6	41
106	Nonlinear Dynamic Properties of Two-Dimensional Arrays of Magnetic Nanodots. , 2015, , 97-116.		2
107	MEASUREMENTS OF E-MODE POLARIZATION AND TEMPERATURE-E-MODE CORRELATION IN THE COSMIC MICROWAVE BACKGROUND FROM 100 SQUARE DEGREES OF SPTPOL DATA. Astrophysical Journal, 2015, 805, 36.	4.5	47
108	Low Loss Superconducting Microstrip Development at Argonne National Lab. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.7	8

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109	MEASUREMENTS OF SUB-DEGREE B_{\perp} -MODE POLARIZATION IN THE COSMIC MICROWAVE BACKGROUND FROM 100 SQUARE DEGREES OF SPTPOL DATA. <i>Astrophysical Journal</i> , 2015, 807, 151.	4.5	117
110	Mo/Au Bilayer TES Resistive Transition Engineering. <i>IEEE Transactions on Applied Superconductivity</i> , 2015, 25, 1-5.	1.7	4
111	Influence of Domain Width on Vortex Nucleation in Superconductor/Ferromagnet Hybrid Structures. <i>Journal of Superconductivity and Novel Magnetism</i> , 2015, 28, 1107-1110.	1.8	6
112	Dynamic control of metastable remanent states in mesoscale magnetic elements. <i>Journal of Applied Physics</i> , 2015, 117, 17A707.	2.5	2
113	Fabrication of large dual-polarized multichroic TES bolometer arrays for CMB measurements with the SPT-3G camera. <i>Superconductor Science and Technology</i> , 2015, 28, 094002.	3.5	29
114	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
115	Nonlinear Spin Waves in Two-Dimensional Arrays of Magnetic Nanodots. <i>Springer Proceedings in Physics</i> , 2015, , 206-209.	0.2	1
116	Microwave absorption properties of permalloy nanodots in the vortex and quasi-uniform magnetization states. <i>New Journal of Physics</i> , 2014, 16, 063044.	2.9	15
117	SPT-3G: a next-generation cosmic microwave background polarization experiment on the South Pole telescope. <i>Proceedings of SPIE</i> , 2014, , .	0.8	249
118	The Effect of Ligands on FePt Fe_3O_4 Core-Shell Magnetic Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2014, 14, 2648-2652.	0.9	13
119	Vortex-antivortex coexistence in Nb-based superconductor/ferromagnet heterostructures. <i>Physical Review B</i> , 2014, 89, .	3.2	23
120	Efficient Cisplatin Prodrug Delivery Visualized with Sub-100 nm Resolution: Interfacing Engineered Thermosensitive Magnetomicelles with a Living System. <i>Advanced Materials Interfaces</i> , 2014, 1, 1400182.	3.7	22
121	Magnetomicelles: Efficient Cisplatin Prodrug Delivery Visualized with Sub-100 nm Resolution: Interfacing Engineered Thermosensitive Magnetomicelles With a Living System (<i>Adv. Mater. Interfaces</i>) Tj ETQq1 1 0784314rgBT /O		
122	A Study of Al Mn Transition Edge Sensor Engineering for Stability. <i>Journal of Low Temperature Physics</i> , 2014, 176, 383-391.	1.4	10
123	A Mo/Au Bilayer Transition Edge Sensor Modified with Normal Metal Structures. <i>Journal of Low Temperature Physics</i> , 2014, 176, 337-343.	1.4	1
124	Dynamics of coupled vortices in perpendicular field. <i>Applied Physics Letters</i> , 2014, 104, 082409.	3.3	8
125	Magnetic pinning in a superconducting film by a ferromagnetic layer with stripe domains. <i>Superconductor Science and Technology</i> , 2014, 27, 125002.	3.5	4
126	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

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127	Dynamic decay of a single vortex into vortex-antivortex pairs. Journal of Applied Physics, 2014, 115, 17D121.	2.5	5
128	Visualizing domain wall and reverse domain superconductivity. Nature Communications, 2014, 5, 4766.	12.8	28
129	Control and Manipulation of the Dynamic Response of Interacting Spin Vortices. IEEE Transactions on Magnetics, 2013, 49, 3081-3088.	2.1	0
130	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
131	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
132	Mo/Au Bilayer Superconducting Transition Edge Sensor Tuning With Surface Modification Structures. IEEE Transactions on Applied Superconductivity, 2013, 23, 2101605-2101605.	1.7	6
133	Probing the energy barriers in nonuniform magnetization states of circular dots by broadband ferromagnetic resonance. Physical Review B, 2013, 88, .	3.2	9
134	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
135	Reconfigurable ground states in connected double-dot system. Applied Physics Letters, 2013, 102, 052401.	3.3	3
136	Stimuli-Responsive Magnetic Nanomicelles as Multifunctional Heat and Cargo Delivery Vehicles. Langmuir, 2013, 29, 7425-7432.	3.5	112
137	Vortex Confinement in Planar Superconductor/Ferromagnet Hybrid Structures. IEEE Transactions on Magnetics, 2012, 48, 3275-3279.	2.1	7
138	Quantum depinning of the magnetic vortex core in micron-size permalloy disks. Physical Review B, 2012, 85, .	3.2	13
139	Feedhorn-coupled TES polarimeter camera modules at 150 GHz for CMB polarization measurements with SPTpol. Proceedings of SPIE, 2012, , .	0.8	17
140	Performance and on-sky optical characterization of the SPTpol instrument. Proceedings of SPIE, 2012, , .	0.8	16
141	Design and characterization of 90 GHz feedhorn-coupled TES polarimeter pixels in the SPTPol camera. Proceedings of SPIE, 2012, , .	0.8	13
142	South Pole Telescope software systems: control, monitoring, and data acquisition. Proceedings of SPIE, 2012, , .	0.8	10
143	Microfabricated magnetic structures for future medicine: from sensors to cell actuators. Nanomedicine, 2012, 7, 1611-1624.	3.3	52
144	From chaos to selective ordering of vortex cores in interacting mesomagnets. Nature Communications, 2012, 3, 1330.	12.8	58

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145	Multifunctional Ferromagnetic Disks for Modulating Cell Function. IEEE Transactions on Magnetics, 2012, 48, 3269-3274.	2.1	27
146	Coupled vortex oscillations in mesoscale ferromagnetic double-disk structures. Physical Review B, 2012, 86, .	3.2	19
147	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
148	Kinetic Inductance Detectors for X-Ray Spectroscopy. Physics Procedia, 2012, 37, 697-702.	1.2	4
149	Optical transmission modulation by disk-shaped ferromagnetic particles. Journal of Applied Physics, 2012, 111, 07A945.	2.5	8
150	A novel adenoviral vector labeled with superparamagnetic iron oxide nanoparticles for real-time tracking of viral delivery. Journal of Clinical Neuroscience, 2012, 19, 875-880.	1.5	32
151	Nano-structured magnetic metamaterial with enhanced nonlinear properties. Scientific Reports, 2012, 2, 478.	3.3	27
152	An Absorber-coupled TES Bolometer for Measuring CMB Polarization. Physics Procedia, 2012, 37, 1349-1354.	1.2	2
153	Detectors for the South Pole Telescope. Physics Procedia, 2012, 37, 1381-1388.	1.2	1
154	Evidence of vortex jamming in Abrikosov vortex flux flow regime. Physical Review B, 2012, 86, .	3.2	18
155	SPTpol: an instrument for CMB polarization measurements with the South Pole Telescope. Proceedings of SPIE, 2012, , .	0.8	98
156	Optical and Thermal Properties of ANL/KICP Polarization Sensitive Bolometers for SPTpol. Journal of Low Temperature Physics, 2012, 167, 865-871.	1.4	10
157	An Overview of the SPTpol Experiment. Journal of Low Temperature Physics, 2012, 167, 859-864.	1.4	24
158	Mechanoresponsive system based on sub-micron chitosan-functionalized ferromagnetic disks. Journal of Materials Chemistry, 2011, 21, 8422.	6.7	29
159	Thermal Properties of Silicon Nitride Beams Below One Kelvin. IEEE Transactions on Applied Superconductivity, 2011, 21, 232-235.	1.7	9
160	Anisotropic Superconductivity and Vortex Dynamics in Magnetically Coupled F/S and F/S/F Hybrids. Journal of Superconductivity and Novel Magnetism, 2011, 24, 905-910.	1.8	2
161	Progress on ANL/KICP Bolometers for SPTpol. IEEE Transactions on Applied Superconductivity, 2011, 21, 184-187.	1.7	6
162	Imaging the spontaneous formation of vortex-antivortex pairs in planar superconductor/ferromagnet hybrid structures. Physical Review B, 2011, 84, .	3.2	49

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163	Dimensionality crossover in vortex dynamics of magnetically coupled F ² /F hybrids. Superconductor Science and Technology, 2011, 24, 024012.	3.5	0
164	MULTIFUNCTIONAL NANO-BIO MATERIALS WITHIN CELLULAR MACHINERY. International Journal of Nanoscience, 2011, 10, 899-908.	0.7	9
165	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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