

Takashi Kimura

List of Publications by Year in descending order

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142
docs citations

142
times ranked

3147
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantitative Evaluation of Heating Effect on Dynamical Spin Injection Using CoFeB/Pt/CoFeB Trilayered Film. IEEE Transactions on Magnetics, 2022, 58, 1-4.	1.2	2
2	Relaxation Process of Spin-Polarized Quasiparticles in a Superconducting Nb Wire. IEEE Transactions on Magnetics, 2022, 58, 1-4.	1.2	0
3	Effective modulation of spin accumulation using a ferromagnetic/nonmagnetic bilayer spin channel. Journal Physics D: Applied Physics, 2022, 55, 095302.	1.3	0
4	An arrayed-window microfluidic device for observation of mixed nanoparticles with an X-ray free-electron laser. Optical Review, 2022, 29, 7.	1.2	0
5	The positive exchange bias property with hopping switching behavior in van der Waals magnet FeGeTe. 2D Materials, 2022, 9, 015037.	2.0	1
6	Enhanced spin accumulation in nano-pillar-based lateral spin valve using spin reservoir effect. Journal Physics D: Applied Physics, 2022, 55, 165004.	1.3	0
7	Pressure-induced enhancement of spin-charge conversion efficiency in CoFeB/Pt bilayer. Applied Physics Express, 2022, 15, 033003.	1.1	2
8	Influence of heat flow control on dynamical spin injection in CoFeB/Pt/CoFeB trilayer. Scientific Reports, 2022, 12, 3467.	1.6	4
9	Significant Modulation of Vortex Resonance Spectra in a Square-Shape Ferromagnetic Dot. Nanomaterials, 2022, 12, 2295.	1.9	0
10	Significant suppression of galvanomagnetic signal under dynamical spin injection in CoFeB/Pt bilayer. Applied Physics Letters, 2021, 118, .	1.5	4
11	Temperature profile of nanospintronic device analyzed by spin-dependent Seebeck effect. Applied Physics Express, 2021, 14, 073004.	1.1	0
12	Nonlinear power dependence of ferromagnetic resonance in NiFe/Pt/CoFeB trilayer. Journal of Physics Condensed Matter, 2021, 34, .	0.7	0
13	Interfacial exchange coupling-modulated magnetism in the insulating heterostructure of CoO /yttrium iron garnet. Journal of Alloys and Compounds, 2021, 875, 159948.	2.8	4
14	Asymmetric nonlocal signal induced by thermoelectric effects in a lateral spin valve. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 117, 113738.	1.3	0
15	Signature of spin-dependent Seebeck effect in dynamical spin injection of metallic bilayer structures. JPhys Materials, 2020, 3, 014005.	1.8	5
16	A highly efficient nanofocusing system for soft x rays. Applied Physics Letters, 2020, 117, .	1.5	10
17	Superconductivity in Palladium Hydride Systems. Journal of the Physical Society of Japan, 2020, 89, 051004.	0.7	13
18	Development of two-stage soft x-ray nanofocusing system at BL25SU of SPring-8. , 2020, , .		1

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19	Pressure Effects on Magnetic and Transport Properties in CoFe-Based Spin Valve. <i>Materials Transactions</i> , 2020, 61, 1483-1486.	0.4	4
20	Design of ultrashort Kirkpatrick-Baez mirror for soft x-ray nanofocusing. , 2020, , .		2
21	Thermal Spin-Valve Effect in Magnetic Multi-layered Nanowires. <i>Journal of Superconductivity and Novel Magnetism</i> , 2019, 32, 3109-3113.	0.8	1
22	Crystal orientation effect on spin injection/detection efficiency in Si lateral spin-valve devices. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 085102.	1.3	1
23	Temperature evolution of the charge and spin transport in Cu/Nb interface. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 060310.	0.8	1
24	Modification of the magnetization dynamics of a NiFe nanodot due to thermal spin injection. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 224004.	1.3	2
25	Substantial enhancement of thermal spin polarization in Py/Cu interface. <i>Physical Review Materials</i> , 2018, 2, .	0.9	4
26	Nonreciprocity of electrically excited thermal spin signals in CoFeAl-Cu-Py lateral spin valves. <i>Physical Review B</i> , 2017, 95, .	1.1	7
27	Effective suppression of thermoelectric voltage in nonlocal spin-valve measurement. <i>Applied Physics Express</i> , 2017, 10, 063004.	1.1	3
28	Efficient thermal spin injection in metallic nanostructures. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 465003.	1.3	6
29	Dynamical Spin Injection Based on Heating Effect due to Ferromagnetic Resonance. <i>Physical Review Applied</i> , 2017, 8, .	1.5	14
30	Laterally configured resistive switching device based on transition-metal nano-gap electrode on Gd oxide. <i>Applied Physics Letters</i> , 2016, 108, 023101.	1.5	1
31	Sensitive detection of vortex-core resonance using amplitude-modulated magnetic field. <i>Scientific Reports</i> , 2016, 5, 17922.	1.6	6
32	First- and second-harmonic detection of spin accumulation in a multiterminal lateral spin valve under high-bias ac current. <i>Physical Review B</i> , 2016, 94, .	1.1	4
33	Large spin current injection in nano-pillar-based lateral spin valve. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	2
34	Geometrical dependence of spin current absorption into a ferromagnetic nanodot. <i>Journal of Applied Physics</i> , 2016, 120, 142121.	1.1	6
35	Nanoelectronics with Low Power Consumption. , 2016, , 507-518.		0
36	Directional dependence of vortex core resonance in a square-shaped ferromagnetic dot. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2016, 75, 28-32.	1.3	3

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37	Lateral Spin Transport (Diffusive Spin Current). , 2016, , 1577-1596.		0
38	Detection of Vortex Core Oscillation Using Second-Harmonic Voltage Detection Technique. IEEE Transactions on Magnetics, 2015, 51, 1-3.	1.2	3
39	Heat dissipation due to ferromagnetic resonance in a ferromagnetic metal monitored by electrical resistance measurement. Applied Physics Letters, 2015, 107, .	1.5	14
40	Spin currents injected electrically and thermally from highly spin polarized Co ₂ MnSi. Applied Physics Letters, 2015, 107, .	1.5	16
41	Efficient thermal spin injection using CoFeAl nanowire. NPG Asia Materials, 2014, 6, e127-e127.	3.8	52
42	Geometrical optimization of a local ballistic magnetic sensor. Applied Physics Letters, 2014, 104, 142408.	1.5	1
43	Detection of a vortex nucleation position in a circular ferromagnet using asymmetrically configured electrodes. Applied Physics Letters, 2014, 105, .	1.5	1
44	Significant modulation of electrical spin accumulation by efficient thermal spin injection. Physical Review B, 2014, 90, .	1.1	15
45	Lateral Spin Transport (Diffusive Spin Current). , 2014, , 1-17.		0
46	Significant change of spin transport property in Cu/Nb bilayer due to superconducting transition. Scientific Reports, 2014, 4, 6260.	1.6	17
47	Thermo-electric effect in a nano-sized crossed Permalloy/Cu junction under high bias current. Applied Physics Letters, 2013, 103, 132408.	1.5	13
48	Measurement of the ferromagnetic resonance of a single micron dot by using a vector network analyzer. Journal of the Korean Physical Society, 2013, 63, 800-803.	0.3	0
49	Spin Wave Excitation and Propagation Properties in a Permalloy Film. Japanese Journal of Applied Physics, 2013, 52, 083001.	0.8	24
50	The Reading-Life Log – Technologies to Recognize Texts That We Read. , 2013, , .		7
51	Large pure spin current generation in metallic nanostructures. Applied Physics A: Materials Science and Processing, 2013, 111, 355-360.	1.1	16
52	Detection of edge magnetic state by a ballistic bend resistance measurement. Applied Physics Letters, 2013, 102, 252405.	1.5	3
53	Anomalous Nernst-Ettingshausen effect in nonlocal spin valve measurement under high-bias current injection. Physical Review B, 2013, 87, .	1.1	25
54	Size Dependence of Ferromagnetic Resonance Frequency in Submicron Patterned Magnet. Japanese Journal of Applied Physics, 2013, 52, 053001.	0.8	3

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55	Wide range tuning of resonant frequency for a vortex core in a regular triangle magnet. Scientific Reports, 2013, 3, 3567.	1.6	16
56	Nonlinear motion of magnetic vortex cores during fast magnetic pulses. Physical Review B, 2012, 85, .	1.1	3
57	Room-temperature generation of giant pure spin currents using epitaxial Co ₂ FeSi spin injectors. NPC Asia Materials, 2012, 4, e9-e9.	3.8	86
58	Effect of Addition of Al to Single-Crystalline CoFe Electrodes on Nonlocal Spin Signals in Lateral Spin-Valve Devices. Applied Physics Express, 2012, 5, 063004.	1.1	18
59	Ferromagnetic Resonance in Exchange-Coupled NiFe/FeMn Films and Its Control. IEEE Transactions on Magnetics, 2012, 48, 2889-2891.	1.2	4
60	Optimization of Magnetic-Field Response of Bend Resistance in Ballistic Two-Dimensional Electron Gas. Applied Physics Express, 2012, 5, 073001.	1.1	1
61	Dynamics of Coupled Vortices in a Pair of Ferromagnetic Disks. Physical Review Letters, 2011, 106, 197203.	2.9	108
62	Spin Signal in Metallic Lateral Spin Valves Made by a Multiple Angle Evaporation Technique. Applied Physics Express, 2011, 4, 063007.	1.1	18
63	Spin current related phenomena in metallic nano-structures. Physica E: Low-Dimensional Systems and Nanostructures, 2011, 43, 735-740.	1.3	6
64	Dynamics of Magnetostatically Coupled Vortices Observed by Time-Resolved Photoemission Electron Microscopy. Japanese Journal of Applied Physics, 2011, 50, 053001.	0.8	9
65	Control of magnetic domain wall displacement using spin current in small in-plane magnetic field in Permalloy nanowires. Journal Physics D: Applied Physics, 2011, 44, 064015.	1.3	1
66	Manipulation of spin currents in metallic systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 3136-3149.	1.6	34
67	Dynamics of Magnetostatically Coupled Vortices Observed by Time-Resolved Photoemission Electron Microscopy. Japanese Journal of Applied Physics, 2011, 50, 053001.	0.8	12
68	Breaking the 10 ⁴ nm barrier in hard-X-ray focusing. Nature Physics, 2010, 6, 122-125.	6.5	484
69	Nonlocal injection of spin current into a superconducting Nb wire. Applied Physics Letters, 2010, 96, 192509.	1.5	12
70	Comparison of Nonlocal and Local Magnetoresistance Signals in Laterally Fabricated Fe ₃ Si/Si Spin-Valve Devices. Applied Physics Express, 2010, 3, 093001.	1.1	42
71	Crystalline analysis of permalloy narrow wires subject to current pulses. Journal of Applied Physics, 2010, 107, 09A326.	1.1	1
72	Gyration mode splitting in magnetostatically coupled magnetic vortices in an array. Journal Physics D: Applied Physics, 2010, 43, 422001.	1.3	44

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73	Stochastic nature of current-excited magnetic domain and domain wall dynamics microscopically investigated by Lorentz microscopy. , 2010, , .		0
74	Wavefield characterization of nearly diffraction-limited focused hard x-ray beam with size less than 10 nm. Review of Scientific Instruments, 2010, 81, 123704.	0.6	19
75	Coherent Suppression of Magnetization Precession in Presence of Spin Waves in a $\text{Ni}_{81}\text{Fe}_{19}$ Microwire. IEEE Transactions on Magnetics, 2009, 45, 4104-4107.	1.2	3
76	Spin-dependent transport in a nanopillar non-local spin valve. Journal of Magnetism and Magnetic Materials, 2009, 321, 3829-3832.	1.0	0
77	Stitching interferometric metrology for steeply curved x-ray mirrors. Surface and Interface Analysis, 2008, 40, 1023-1027.	0.8	13
78	Highly accurate differential deposition for X-ray reflective optics. Surface and Interface Analysis, 2008, 40, 1019-1022.	0.8	29
79	Detection of paired domain walls in a ferromagnetic ring by a bend resistance measurement. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1108-1110.	1.3	2
80	Giant spin-accumulation signal and pure spin-current-induced reversible magnetization switching. Nature Physics, 2008, 4, 851-854.	6.5	236
81	Benchtop time-resolved magneto-optical Kerr magnetometer. Review of Scientific Instruments, 2008, 79, 123905.	0.6	31
82	Current-excited magnetization reversal under in-plane magnetic field in a nanoscaled ferromagnetic wire. Applied Physics Letters, 2008, 92, .	1.5	32
83	Magneto-Optical and Spin-Transfer Switching Properties of Current-Perpendicular-to Plane Spin Valves With Perpendicular Magnetic Anisotropy. IEEE Transactions on Magnetics, 2008, 44, 2491-2495.	1.2	26
84	Spin Current and Spin Hall Effect in Metallic Nano-Structures. IEEE Transactions on Magnetics, 2008, 44, 1911-1915.	1.2	3
85	Construction and development of a time-resolved x-ray magnetic circular dichroism photoelectron emission microscopy system using femtosecond laser pulses at BL25SU SPring-8. Review of Scientific Instruments, 2008, 79, 063903.	0.6	23
86	Direct determination of the wave field of an x-ray nanobeam. Physical Review A, 2008, 77, .	1.0	38
87	Lorentz microscopy and electron holography studies of current-excited magnetization dynamics in Permalloy nanowires. , 2008, , .		1
88	Spin transport in lateral ferromagnetic/nonmagnetic hybrid structures. Journal of Physics Condensed Matter, 2007, 19, 165216.	0.7	63
89	Observation of coupled magnetic vortex structure dynamics by time-resolved magneto-optical Kerr effect microscopy. , 2007, , .		1
90	Spin transfer switching in current-perpendicular-to-plane spin valve observed by magneto-optical Kerr effect using visible light. Applied Physics Letters, 2007, 91, .	1.5	28

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91	Evolution of the Spin Hall Effect in Pt Nanowires: Size and Temperature Effects. <i>Physical Review Letters</i> , 2007, 99, 226604.	2.9	199
92	Electrical Control of the Direction of Spin Accumulation. <i>Physical Review Letters</i> , 2007, 99, 166601.	2.9	25
93	Controlled depinning of domain walls in a ferromagnetic ring circuit. <i>Applied Physics Letters</i> , 2007, 90, 242504.	1.5	11
94	Magnetization process of a single magnetic ring detected by nonlocal spin valve measurement. <i>Journal of Applied Physics</i> , 2007, 101, 126102.	1.1	5
95	Vortex motion in chirality-controlled pair of magnetic disks. <i>Applied Physics Letters</i> , 2007, 90, 132501.	1.5	57
96	Room-Temperature Reversible Spin Hall Effect. <i>Physical Review Letters</i> , 2007, 98, 156601.	2.9	908
97	Domain wall nucleation assisted by nonlocal spin injection. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 1285-1288.	1.3	4
98	Spin-current induced vortex displacement and annihilation in micro-scale Permalloy disk. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 310, 2431-2432.	1.0	2
99	Rotational dynamics of paired nano-domain walls confined in an elliptical ring. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 310, 2451-2452.	1.0	3
100	Domain formation induced by perpendicular spin injection. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 310, e690-e692.	1.0	0
101	Observation of Current-Excited Magnetization Dynamics using Field-Emission Transmission Electron Microscope. <i>Nihon Kessho Gakkaishi</i> , 2007, 49, 307-312.	0.0	0
102	Current-Excited Magnetization Dynamics in Narrow Ferromagnetic Wires. <i>Japanese Journal of Applied Physics</i> , 2006, 45, L683-L685.	0.8	55
103	Roles of spin-polarized current and spin accumulation in the current-induced magnetization switching. <i>Journal of Magnetism and Magnetic Materials</i> , 2006, 301, 389-397.	1.0	2
104	Domain Nucleation and Annihilation in Uniformly Magnetized State under Current Pulses in Narrow Ferromagnetic Wires. <i>Japanese Journal of Applied Physics</i> , 2006, 45, L1322-L1324.	0.8	26
105	Temperature dependence of intrinsic switching current of a Co nanomagnet. <i>Applied Physics Letters</i> , 2006, 89, 252505.	1.5	2
106	Control of domain wall pinning by a switchable magnetic gate. <i>Applied Physics Letters</i> , 2006, 89, 192504.	1.5	11
107	Detection of magnetic state in a nanoscale ferromagnetic ring by using ballistic semiconductor two-dimensional electron gas. <i>Applied Physics Letters</i> , 2006, 88, 082501.	1.5	30
108	Magneto-optical spectroscopic scatterometry for analyzing patterned magnetic nanostructures. <i>Journal of the Magnetism Society of Japan</i> , 2006, 30, 630-636.	0.4	4

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109	Optical metrology of patterned magnetic structures: deep versus shallow gratings. , 2005, , .		1
110	Influence of Au capping Layer on spin accumulation in a lateral spin-valve structure. IEEE Transactions on Magnetism, 2005, 41, 2600-2602.	1.2	4
111	Effect of probe configuration on spin accumulation in lateral spin-valve structure. Journal of Magnetism and Magnetic Materials, 2005, 286, 88-90.	1.0	16
112	Influence of top electrode on the current-induced magnetic switching in magnetic nanopillars. Applied Physics Letters, 2005, 87, 162502.	1.5	2
113	Determination of magnetic vortex chirality using lateral spin-valve geometry. Applied Physics Letters, 2005, 87, 172506.	1.5	27
114	Enhancement of nonlocal spin-valve signal using spin accumulation in local spin-valve configuration. Applied Physics Letters, 2004, 85, 5382-5384.	1.5	8
115	Spin-dependent boundary resistance in the lateral spin-valve structure. Applied Physics Letters, 2004, 85, 3501-3503.	1.5	82
116	Suppression of spin accumulation in nonmagnet due to ferromagnetic ohmic contact. Applied Physics Letters, 2004, 85, 3795-3796.	1.5	35
117	Suppressed pinning field of a trapped domain wall due to direct current injection. Journal of Applied Physics, 2003, 94, 7266-7269.	1.1	25
118	Spin-current-assisted domain-wall depinning in a submicron magnetic wire. Journal of Applied Physics, 2003, 94, 7947.	1.1	26
119	Fabrication of spin-current-induced domain-wall-nucleation device in planar configuration. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 2814.	1.6	2
120	Fabrication of Planar-Type Ferromagnet/Nonmagnet/Ferromagnet Structures Using Multiangle Deposition. Japanese Journal of Applied Physics, 2002, 41, 4385-4389.	0.8	2
121	Control of domain structures in magnetic multilayer using submicron-patterned antiferromagnetic structure. Microelectronic Engineering, 2002, 61-62, 585-591.	1.1	2
122	Control of magnetization rotation using submicron-wide cross geometry. Journal of Magnetism and Magnetic Materials, 2002, 248, 286-291.	1.0	2
123	Study of Magnetostatic Interaction in Magnetic Multilayer Wires Using Exchange Anisotropy. Transactions of the Magnetism Society of Japan, 2002, 2, 49-52.	0.5	0
124	Study of dipole interaction in micron-width NiFe/Cu/NiFe/NiO wire using exchange anisotropy. Applied Physics Letters, 2001, 78, 4007-4009.	1.5	6
125	Effect of stray field induced by cross shape in a 200-nm-wide Co wire. Journal of Magnetism and Magnetic Materials, 2001, 236, 262-266.	1.0	2
126	Galvanomagnetic Effect and Magnetization Process in CoO/Co/NiFe Film with Antidot Array. Japanese Journal of Applied Physics, 2001, 40, 4524-4527.	0.8	3

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127	Effects of Shape Anisotropy in CoO/Co/Cu/NiFe/Cu/Co Wires. Japanese Journal of Applied Physics, 2001, 40, 2241-2244.	0.8	7
128	Effects of Stray Fields in Flat-End and Pointed-End NiFe/Cu/NiFe/NiO Wires. Japanese Journal of Applied Physics, 2001, 40, 6357-6359.	0.8	4
129	Magnetization Processes in Narrow and Wide Cross-shaped Co/Cu/NiFe Wires. Japanese Journal of Applied Physics, 2001, 40, 1246-1249.	0.8	0
130	Magnetization process and resistance jumps in a submicron-scale cross-shaped Co wire. Journal of Magnetism and Magnetic Materials, 2000, 222, 79-85.	1.0	9
131	Galvanomagnetic Effect of Submicron Exchange-Coupled Co/Ni Wire. Japanese Journal of Applied Physics, 2000, 39, 6526-6529.	0.8	0
132	Metastable Domain Structures of Ferromagnetic Microstructures Observed by Soft X-Ray Magnetic Circular Dichroism Microscopy. Japanese Journal of Applied Physics, 2000, 39, L585-L587.	0.8	12
133	Exchange Interaction from Current and Voltage Probes in Galvanomagnetic Effect in Polycrystal Co Thin Film. Japanese Journal of Applied Physics, 1999, 38, 4737-4740.	0.8	5
134	A Variational Sum-Rule Approach to Collective Excitations of a Trapped Bose-Einstein Condensate. Journal of the Physical Society of Japan, 1999, 68, 1477-1480.	0.7	17
135	Feasibility experiments on the laser-diode pumped solid-state laser for ICF Driver. AIP Conference Proceedings, 1996, , .	0.3	0
136	Bandwidth Narrowing of an All-Solid-State Optical Parametric Oscillator Amplifier System. Japanese Journal of Applied Physics, 1996, 35, 3457-3458.	0.8	6
137	Tunable Near-Infrared and Visible All-Solid-State Optical Parametric Oscillator Amplifier System Based on Potassium Titanyl Phosphate Crystal. Japanese Journal of Applied Physics, 1996, 35, 4639-4644.	0.8	2
138	Analysis of Current-Voltage Characteristics of Organic Electroluminescent Devices on the Basis of Schottky Emission Mechanism. Japanese Journal of Applied Physics, 1996, 35, 5735-5739.	0.8	41
139	Improvement of Superconductive Properties of Mesoscopic Nb Wires by Ti Passivation Layers. Applied Physics Express, 0, 1, 021701.	1.1	9
140	Experimental evaluation of three-dimensional heat flow using magneto-thermo electric effects in a ferromagnetic nanowire. Physica Status Solidi - Rapid Research Letters, 0, , .	1.2	0