Takashi Kimura

List of Publications by Year
in descending order

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140	3,483	236925	144013
papers	citations	25 h-index	57 g-index

142	142	142	3147
all docs	docs citations	times ranked	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.	2.1	2
2	Relaxation Process of Spin-Polarized Quasiparticles in a Superconducting Nb Wire. IEEE Transactions on Magnetics, 2022, 58, 1-4.	2.1	0
3	Effective modulation of spin accumulation using a ferromagnetic/nonmagnetic bilayer spin channel. Journal Physics D: Applied Physics, 2022, 55, 095302.	2.8	0
4	An arrayed-window microfluidic device for observation of mixed nanoparticles with an X-ray free-electron laser. Optical Review, 2022, 29, 7.	2.0	0
5	The positive exchange bias property with hopping switching behavior in van der Waals magnet FeGeTe. 2D Materials, 2022, 9, 015037.	4.4	1
6	Enhanced spin accumulation in nano-pillar-based lateral spin valve using spin reservoir effect. Journal Physics D: Applied Physics, 2022, 55, 165004.	2.8	0
7	Pressure-induced enhancement of spin-charge conversion efficiency in CoFeB/Pt bilayer. Applied Physics Express, 2022, 15, 033003.	2.4	2
8	Influence of heat flow control on dynamical spin injection in CoFeB/Pt/CoFeB trilayer. Scientific Reports, 2022, 12, 3467.	3.3	4
9	Significant Modulation of Vortex Resonance Spectra in a Square-Shape Ferromagnetic Dot. Nanomaterials, 2022, 12, 2295.	4.1	0
10	Significant suppression of galvanomagnetic signal under dynamical spin injection in CoFeB/Pt bilayer. Applied Physics Letters, 2021, 118, .	3.3	4
11	Temperature profile of nanospintronic device analyzed by spin-dependent Seebeck effect. Applied Physics Express, 2021, 14, 073004.	2.4	0
12	Nonlinear power dependence of ferromagnetic resonance in NiFe/Pt/CoFeB trilayer. Journal of Physics Condensed Matter, 2021, 34, .	1.8	0
13	Interfacial exchange coupling-modulated magnetism in the insulating heterostructure of CoO /yttrium iron garnet. Journal of Alloys and Compounds, 2021, 875, 159948.	5.5	4
14	Asymmetric nonlocal signal induced by thermoelectric effects in a lateral spin valve. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 117, 113738.	2.7	0
15	Signature of spin-dependent Seebeck effect in dynamical spin injection of metallic bilayer structures. JPhys Materials, 2020, 3, 014005.	4.2	5
16	A highly efficient nanofocusing system for soft x rays. Applied Physics Letters, 2020, 117, .	3.3	10
17	Superconductivity in Palladium Hydride Systems. Journal of the Physical Society of Japan, 2020, 89, 051004.	1.6	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. Materials Transactions, 2020, 61, 1483-1486.	1.2	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. Journal of Superconductivity and Novel Magnetism, 2019, 32, 3109-3113.	1.8	1
22	Crystal orientation effect on spin injection/detection efficiency in Si lateral spin-valve devices. Journal Physics D: Applied Physics, 2019, 52, 085102.	2.8	1
23	Temperature evolution of the charge and spin transport in Cu/Nb interface. Japanese Journal of Applied Physics, 2018, 57, 060310.	1.5	1
24	Modification of the magnetization dynamics of a NiFe nanodot due to thermal spin injection. Journal Physics D: Applied Physics, 2018, 51, 224004.	2.8	2
25	Substantial enhancement of thermal spin polarization in Py/Cu interface. Physical Review Materials, 2018, 2, .	2.4	4
26	Nonreciprocity of electrically excited thermal spin signals in CoFeAl-Cu-Py lateral spin valves. Physical Review B, 2017, 95, .	3.2	7
27	Effective suppression of thermoelectric voltage in nonlocal spin-valve measurement. Applied Physics Express, 2017, 10, 063004.	2.4	3
28	Efficient thermal spin injection in metallic nanostructures. Journal Physics D: Applied Physics, 2017, 50, 465003.	2.8	6
29	Dynamical Spin Injection Based on Heating Effect due to Ferromagnetic Resonance. Physical Review Applied, 2017, 8, .	3.8	14
30	Laterally configured resistive switching device based on transition-metal nano-gap electrode on Gd oxide. Applied Physics Letters, 2016, 108, 023101.	3.3	1
31	Sensitive detection of vortex-core resonance using amplitude-modulated magnetic field. Scientific Reports, 2016, 5, 17922.	3.3	6
32	First- and second-harmonic detection of spin accumulation in a multiterminal lateral spin valve under high-bias ac current. Physical Review B, 2016, 94, .	3.2	4
33	Large spin current injection in nano-pillar-based lateral spin valve. AIP Conference Proceedings, 2016, , .	0.4	2
34	Geometrical dependence of spin current absorption into a ferromagnetic nanodot. Journal of Applied Physics, 2016, 120, 142121.	2.5	6
35	Nanoelectronics with Low Power Consumption. , 2016, , 507-518.		0
36	Directional dependence of vortex core resonance in a square-shaped ferromagnetic dot. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 75, 28-32.	2.7	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.	2.1	3
39	Heat dissipation due to ferromagnetic resonance in a ferromagnetic metal monitored by electrical resistance measurement. Applied Physics Letters, 2015, 107, .	3.3	14
40	Spin currents injected electrically and thermally from highly spin polarized Co2MnSi. Applied Physics Letters, 2015, 107, .	3.3	16
41	Efficient thermal spin injection using CoFeAl nanowire. NPG Asia Materials, 2014, 6, e127-e127.	7.9	52
42	Geometrical optimization of a local ballistic magnetic sensor. Applied Physics Letters, 2014, 104, 142408.	3.3	1
43	Detection of a vortex nucleation position in a circular ferromagnet using asymmetrically configured electrodes. Applied Physics Letters, 2014, 105, .	3.3	1
44	Significant modulation of electrical spin accumulation by efficient thermal spin injection. Physical Review B, 2014, 90, .	3.2	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.	3.3	17
47	Thermo-electric effect in a nano-sized crossed Permalloy/Cu junction under high bias current. Applied Physics Letters, 2013, 103, 132408.	3.3	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.	0.7	0
49	Spin Wave Excitation and Propagation Properties in a Permalloy Film. Japanese Journal of Applied Physics, 2013, 52, 083001.	1.5	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.	2.3	16
52	Detection of edge magnetic state by a ballistic bend resistance measurement. Applied Physics Letters, 2013, 102, 252405.	3.3	3
53	Anomalous Nernst-Ettingshausen effect in nonlocal spin valve measurement under high-bias current injection. Physical Review B, 2013, 87, .	3.2	25
54	Size Dependence of Ferromagnetic Resonance Frequency in Submicron Patterned Magnet. Japanese Journal of Applied Physics, 2013, 52, 053001.	1.5	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.	3.3	16
56	Nonlinear motion of magnetic vortex cores during fast magnetic pulses. Physical Review B, 2012, 85, .	3.2	3
57	Room-temperature generation of giant pure spin currents using epitaxial Co2FeSi spin injectors. NPG Asia Materials, 2012, 4, e9-e9.	7.9	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.	2.4	18
59	Ferromagnetic Resonance in Exchange-Coupled NiFe/FeMn Films and Its Control. IEEE Transactions on Magnetics, 2012, 48, 2889-2891.	2.1	4
60	Optimization of Magnetic-Field Response of Bend Resistance in Ballistic Two-Dimensional Electron Gas. Applied Physics Express, 2012, 5, 073001.	2.4	1
61	Dynamics of Coupled Vortices in a Pair of Ferromagnetic Disks. Physical Review Letters, 2011, 106, 197203.	7.8	108
62	Spin Signal in Metallic Lateral Spin Valves Made by a Multiple Angle Evaporation Technique. Applied Physics Express, 2011, 4, 063007.	2.4	18
63	Spin current related phenomena in metallic nano-structures. Physica E: Low-Dimensional Systems and Nanostructures, 2011, 43, 735-740.	2.7	6
64	Dynamics of Magnetostatically Coupled Vortices Observed by Time-Resolved Photoemission Electron Microscopy. Japanese Journal of Applied Physics, 2011, 50, 053001.	1.5	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.	2.8	1
66	Manipulation of spin currents in metallic systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 3136-3149.	3.4	34
67	Dynamics of Magnetostatically Coupled Vortices Observed by Time-Resolved Photoemission Electron Microscopy. Japanese Journal of Applied Physics, 2011, 50, 053001.	1.5	12
68	Breaking the 10â€‰nm barrier in hard-X-ray focusing. Nature Physics, 2010, 6, 122-125.	16.7	484
69	Nonlocal injection of spin current into a superconducting Nb wire. Applied Physics Letters, 2010, 96, 192509.	3.3	12
70	Comparison of Nonlocal and Local Magnetoresistance Signals in Laterally Fabricated Fe₃Si/Si Spin-Valve Devices. Applied Physics Express, 2010, 3, 093001.	2.4	42
71	Crystalline analysis of permalloy narrow wires subject to current pulses. Journal of Applied Physics, 2010, 107, 09A326.	2.5	1
72	Gyration mode splitting in magnetostatically coupled magnetic vortices in an array. Journal Physics D: Applied Physics, 2010, 43, 422001.	2.8	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.	1.3	19
75	Coherent Suppression of Magnetization Precession in Presence of Spin Waves in a ${hbox {Ni}}_{81}{hbox {Fe}}_{19}$ Microwire. IEEE Transactions on Magnetics, 2009, 45, 4104-4107.	2.1	3
76	Spin-dependent transport in a nanopillar non-local spin valve. Journal of Magnetism and Magnetic Materials, 2009, 321, 3829-3832.	2.3	0
77	Stitching interferometric metrology for steeply curved xâ€ray mirrors. Surface and Interface Analysis, 2008, 40, 1023-1027.	1.8	13
78	Highly accurate differential deposition for Xâ€ray reflective optics. Surface and Interface Analysis, 2008, 40, 1019-1022.	1.8	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.	2.7	2
80	Giant spin-accumulation signal and pure spin-current-induced reversible magnetization switching. Nature Physics, 2008, 4, 851-854.	16.7	236
81	Benchtop time-resolved magneto-optical Kerr magnetometer. Review of Scientific Instruments, 2008, 79, 123905.	1.3	31
82	Current-excited magnetization reversal under in-plane magnetic field in a nanoscaled ferromagnetic wire. Applied Physics Letters, 2008, 92, .	3.3	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.	2.1	26
84	Spin Current and Spin Hall Effect in Metallic Nano-Structures. IEEE Transactions on Magnetics, 2008, 44, 1911-1915.	2.1	3
85	Construction and development of a time-resolved x-ray magnetic circular dichroismâ€“photoelectron emission microscopy system using femtosecond laser pulses at BL25SU SPring-8. Review of Scientific Instruments, 2008, 79, 063903.	1.3	23
86	Direct determination of the wave field of an x-ray nanobeam. Physical Review A, 2008, 77, .	2.5	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.	1.8	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, .	3.3	28

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91	Evolution of the Spin Hall Effect in Pt Nanowires: Size and Temperature Effects. Physical Review Letters, 2007, 99, 226604.	7.8	199
92	Electrical Control of the Direction of Spin Accumulation. Physical Review Letters, 2007, 99, 166601.	7.8	25
93	Controlled depinning of domain walls in a ferromagnetic ring circuit. Applied Physics Letters, 2007, 90, 242504.	3.3	11
94	Magnetization process of a single magnetic ring detected by nonlocal spin valve measurement. Journal of Applied Physics, 2007, 101, 126102.	2.5	5
95	Vortex motion in chilarity-controlled pair of magnetic disks. Applied Physics Letters, 2007, 90, 132501.	3.3	57
96	Room-Temperature Reversible Spin Hall Effect. Physical Review Letters, 2007, 98, 156601.	7.8	908
97	Domain wall nucleation assisted by nonlocal spin injection. Journal Physics D: Applied Physics, 2007, 40, 1285-1288.	2.8	4
98	Spin-current induced vortex displacement and annihilation in micro-scale Permalloy disk. Journal of Magnetism and Magnetic Materials, 2007, 310, 2431-2432.	2.3	2
99	Rotational dynamics of paired nano-domain walls confined in an elliptical ring. Journal of Magnetism and Magnetic Materials, 2007, 310, 2451-2452.	2.3	3
100	Domain formation induced by perpendicular spin injection. Journal of Magnetism and Magnetic Materials, 2007, 310, e690-e692.	2.3	0
101	Observation of Current-Excited Magnetization Dynamics using Field-Emission Transmission Electron Microscope. Nihon Kessho Gakkaishi, 2007, 49, 307-312.	0.0	0
102	Current-Excited Magnetization Dynamics in Narrow Ferromagnetic Wires. Japanese Journal of Applied Physics, 2006, 45, L683-L685.	1.5	55
103	Roles of spin-polarized current and spin accumulation in the current-induced magnetization switching. Journal of Magnetism and Magnetic Materials, 2006, 301, 389-397.	2.3	2
104	Domain Nucleation and Annihilation in Uniformly Magnetized State under Current Pulses in Narrow Ferromagnetic Wires. Japanese Journal of Applied Physics, 2006, 45, L1322-L1324.	1.5	26
105	Temperature dependence of intrinsic switching current of a Co nanomagnet. Applied Physics Letters, 2006, 89, 252505.	3.3	2
106	Control of domain wall pinning by a switchable magnetic gate. Applied Physics Letters, 2006, 89, 192504.	3.3	11
107	Detection of magnetic state in a nanoscale ferromagnetic ring by using ballistic semiconductor two-dimensional electron gas. Applied Physics Letters, 2006, 88, 082501.	3.3	30
108	Magneto-optical spectroscopic scatterometry for analyzing patterned magnetic nanostructures. Journal of the Magnetics Society of Japan, 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 Magnetics, 2005, 41, 2600-2602.	2.1	4
111	Effect of probe configuration on spin accumulation in lateral spin-valve structure. Journal of Magnetism and Magnetic Materials, 2005, 286, 88-90.	2.3	16
112	Influence of top electrode on the current-induced magnetic switching in magnetic nanopillars. Applied Physics Letters, 2005, 87, 162502.	3.3	2
113	Determination of magnetic vortex chirality using lateral spin-valve geometry. Applied Physics Letters, 2005, 87, 172506.	3.3	27
114	Enhancement of nonlocal spin-valve signal using spin accumulation in local spin-valve configuration. Applied Physics Letters, 2004, 85, 5382-5384.	3.3	8
115	Spin-dependent boundary resistance in the lateral spin-valve structure. Applied Physics Letters, 2004, 85, 3501-3503.	3.3	82
116	Suppression of spin accumulation in nonmagnet due to ferromagnetic ohmic contact. Applied Physics Letters, 2004, 85, 3795-3796.	3.3	35
117	Suppressed pinning field of a trapped domain wall due to direct current injection. Journal of Applied Physics, 2003, 94, 7266-7269.	2.5	25
118	Spin-current-assisted domain-wall depinning in a submicron magnetic wire. Journal of Applied Physics, 2003, 94, 7947.	2.5	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.	1.5	2
121	Control of domain structures in magnetic multilayer using submicron-patterned antiferromagnetic structure. Microelectronic Engineering, 2002, 61-62, 585-591.	2.4	2
122	Control of magnetization rotation using submicron-wide cross geometry. Journal of Magnetism and Magnetic Materials, 2002, 248, 286-291.	2.3	2
123	Study of Magnetostatic Interaction in Magnetic Multilayer Wires Using Exchange Anisotropy. Transactions of the Magnetics 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.	3.3	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.	2.3	2
126	Galvanomagnetic Effect and Magnetization Process in CoO/Co/NiFe Film with Antidot Array. Japanese Journal of Applied Physics, 2001, 40, 4524-4527.	1.5	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.	1.5	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.	1.5	4
129	Magnetization Processes in Narrow and Wide Cross-shaped Co/Cu/NiFe Wires. Japanese Journal of Applied Physics, 2001, 40, 1246-1249.	1.5	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.	2.3	9
131	Galvanomagnetic Effect of Submicron Exchange-Coupled Co/Ni Wire. Japanese Journal of Applied Physics, 2000, 39, 6526-6529.	1.5	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.	1.5	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.	1.5	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.	1.6	17
135	Feasibility experiments on the laser-diode pumped solid-state laser for ICF Driver. AIP Conference Proceedings, 1996, , .	0.4	0
136	Bandwidth Narrowing of an All-Solid-State Optical Parametric Oscillator Amplifier System. Japanese Journal of Applied Physics, 1996, 35, 3457-3458.	1.5	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.	1.5	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.	1.5	41
139	Improvement of Superconductive Properties of Mesoscopic Nb Wires by Ti Passivation Layers. Applied Physics Express, 0, 1, 021701.	2.4	9
140	Experimental evaluation of threeâ€dimensional heat flow using magnetoâ€thermo electric effects in a ferromagnetic nanowire. Physica Status Solidi - Rapid Research Letters, 0, , .	2.4	0