

Masashi Shiraishi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2105882/publications.pdf>

Version: 2024-02-01

120
papers

4,710
citations

117625

34
h-index

110387

64
g-index

122
all docs

122
docs citations

122
times ranked

5498
citing authors

#	ARTICLE	IF	CITATIONS
1	Stable and controlled amphoteric doping by encapsulation of organic molecules inside carbon nanotubes. <i>Nature Materials</i> , 2003, 2, 683-688.	27.5	520
2	Work function of carbon nanotubes. <i>Carbon</i> , 2001, 39, 1913-1917.	10.3	467
3	Voltage-Assisted Magnetization Switching in Ultrathin Fe ₈₀ Co ₂₀ Alloy Layers. <i>Applied Physics Express</i> , 0, 2, 063001.	2.4	190
4	Spin Injection into a Graphene Thin Film at Room Temperature. <i>Japanese Journal of Applied Physics</i> , 2007, 46, L605-L607.	1.5	182
5	Room-Temperature Electron Spin Transport in a Highly Doped Si Channel. <i>Applied Physics Express</i> , 2011, 4, 023003.	2.4	177
6	Spin-Pump-Induced Spin Transport in p -Type Si at Room Temperature. <i>Physical Review Letters</i> , 2013, 110, 127201.	7.8	162
7	Electrical Detection of the Spin Polarization Due to Charge Flow in the Surface State of the Topological Insulator Bi _{1.5} Sb _{0.5} Te _{1.7} Se _{1.3} . <i>Nano Letters</i> , 2014, 14, 6226-6230.	9.1	144
8	Graphene: Piecing it Together. <i>Advanced Materials</i> , 2011, 23, 4471-4490.	21.0	127
9	Self-induced inverse spin Hall effect in permalloy at room temperature. <i>Physical Review B</i> , 2014, 89, .	3.2	113
10	Gas-solid interactions in the hydrogen/single-walled carbon nanotube system. <i>Chemical Physics Letters</i> , 2003, 367, 633-636.	2.6	102
11	Hydrogen storage in single-walled carbon nanotube bundles and peapods. <i>Chemical Physics Letters</i> , 2002, 358, 213-218.	2.6	97
12	Spin Transport in Nondegenerate Si with a Spin MOSFET Structure at Room Temperature. <i>Physical Review Applied</i> , 2014, 2, .	3.8	86
13	Single-walled carbon nanotube aggregates for solution-processed field effect transistors. <i>Chemical Physics Letters</i> , 2004, 394, 110-113.	2.6	75
14	Ink-Jet Printing of Carbon Nanotube Thin-Film Transistors on Flexible Plastic Substrates. <i>Applied Physics Express</i> , 0, 2, 025005.	2.4	75
15	Spin conversion on the nanoscale. <i>Nature Physics</i> , 2017, 13, 829-832.	16.7	75
16	Electrical Spin Injection into Silicon Using MgO Tunnel Barrier. <i>Applied Physics Express</i> , 0, 2, 053003.	2.4	74
17	Robustness of Spin Polarization in Graphene-Based Spin Valves. <i>Advanced Functional Materials</i> , 2009, 19, 3711-3716.	14.9	70
18	Molecular spintronics. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2011, 43, 1295-1317.	2.7	67

#	ARTICLE	IF	CITATIONS
19	Room-temperature operation of Si spin MOSFET with high on/off spin signal ratio. Applied Physics Express, 2015, 8, 113004.	2.4	63
20	Dynamically generated pure spin current in single-layer graphene. Physical Review B, 2013, 87, .	3.2	62
21	Comparison of spin signals in silicon between nonlocal four-terminal and three-terminal methods. Applied Physics Letters, 2011, 98, .	3.3	61
22	Investigation of the inverted Hanle effect in highly doped Si. Physical Review B, 2012, 86, .	3.2	57
23	Switching of charge-current-induced spin polarization in the topological insulator BiSbTeSe . Physical Review B, 2016, 94, .	3.2	56
24	Strong evidence for d-electron spin transport at room temperature at a $\text{LaAlO}_3/\text{SrTiO}_3$ interface. Nature Materials, 2017, 16, 609-614.	27.5	55
25	Conduction mechanisms in single-walled carbon nanotubes. Synthetic Metals, 2002, 128, 235-239.	3.9	52
26	Tunable inverse spin Hall effect in nanometer-thick platinum films by ionic gating. Nature Communications, 2018, 9, 3118.	12.8	52
27	Tunnel magnetoresistance of C_{60} nanocomposites and spin-dependent transport in organic semiconductors. Physical Review B, 2007, 76, .	3.2	49
28	Interaction patches for multi-character animation. ACM Transactions on Graphics, 2008, 27, 1-8.	7.2	49
29	Local magnetoresistance in Fe/MgO/Si lateral spin valve at room temperature. Applied Physics Letters, 2014, 104, .	3.3	49
30	Transfer characteristics in graphene field-effect transistors with Co contacts. Applied Physics Letters, 2008, 93, 152104.	3.3	47
31	Evidence of Electrical Spin Injection Into Silicon Using MgO Tunnel Barrier. IEEE Transactions on Magnetics, 2010, 46, 1436-1439.	2.1	47
32	Spin to Charge Interconversion Phenomena in the Interface and Surface States. Journal of the Physical Society of Japan, 2017, 86, 011001.	1.6	43
33	Transport and spin conversion of multicarriers in semimetal bismuth. Physical Review B, 2016, 93, .	3.2	41
34	Microwave-Assisted Magnetization Reversal in a Perpendicularly Magnetized Film. Applied Physics Express, 2010, 3, 013002.	2.4	39
35	Dynamical Spin Injection into p-Type Germanium at Room Temperature. Applied Physics Express, 2013, 6, 023001.	2.4	39
36	Spontaneous R-parity breaking in a supersymmetric majoron model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 313, 89-95.	4.1	37

#	ARTICLE	IF	CITATIONS
37	Tunneling spectra of sputter-deposited CoFeB/MgO/CoFeB magnetic tunnel junctions showing giant tunneling magnetoresistance effect. <i>Solid State Communications</i> , 2005, 136, 611-615.	1.9	36
38	Spectroscopic characterization of single-walled carbon nanotubes carrier-doped by encapsulation of TCNQ. <i>Physical Review B</i> , 2005, 71, .	3.2	34
39	Spin-Dependent Transport in C60-Co Nano-Composites. <i>Japanese Journal of Applied Physics</i> , 2006, 45, L717-L719.	1.5	33
40	Effect of spin drift on spin accumulation voltages in highly doped silicon. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	32
41	Spin transport properties in silicon in a nonlocal geometry. <i>Physical Review B</i> , 2011, 83, .	3.2	31
42	Single-Shot Measurements of Spin-Transfer Switching in CoFeB/MgO/CoFeB Magnetic Tunnel Junctions. <i>Applied Physics Express</i> , 0, 1, 061303.	2.4	29
43	Observation of large spin accumulation voltages in nondegenerate Si spin devices due to spin drift effect: Experiments and theory. <i>Physical Review B</i> , 2016, 93, .	3.2	29
44	Electronic structures of fullerenes and metallofullerenes studied by surface potential analysis. <i>Physical Review B</i> , 2003, 68, .	3.2	28
45	Solution-Processed Single-Walled Carbon Nanotube Transistors with High Mobility and Large On/Off Ratio. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 6524-6527.	1.5	28
46	Quantitative investigation of the inverse Rashba-Edelstein effect in Bi/Ag and Ag/Bi on YIG. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	28
47	Bipolar-driven large linear magnetoresistance in silicon at low magnetic fields. <i>Physical Review B</i> , 2013, 87, .	3.2	27
48	Spin-dependent transport in nanocomposites of Alq3 molecules and cobalt nanoparticles. <i>Applied Physics Letters</i> , 2007, 91, 063123.	3.3	26
49	Spin drift in highly doped n-type Si. <i>Applied Physics Letters</i> , 2014, 104, 092409.	3.3	26
50	Logic circuits using solution-processed single-walled carbon nanotube transistors. <i>Applied Physics Letters</i> , 2008, 92, 253507.	3.3	25
51	Large magnetoresistance in rubrene-Co nano-composites. <i>Chemical Physics Letters</i> , 2007, 448, 106-110.	2.6	24
52	Tomonagaâ€Luttinger-liquid behavior in single-walled carbon nanotube networks. <i>Solid State Communications</i> , 2003, 127, 215-218.	1.9	23
53	Dependence on annealing temperatures of tunneling spectra in high-resistance CoFeB/MgO/CoFeB magnetic tunnel junctions. <i>Solid State Communications</i> , 2007, 143, 574-578.	1.9	23
54	Observation of spin-charge conversion in chemical-vapor-deposition-grown single-layer graphene. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	23

#	ARTICLE	IF	CITATIONS
55	Temperature Dependence of Spin Hall Angle of Palladium. Applied Physics Express, 2013, 6, 083001.	2.4	21
56	Vertical spin transport in Al with Pd/Al/Ni80Fe20 trilayer films at room temperature by spin pumping. Scientific Reports, 2013, 3, .	3.3	21
57	Spin transport and spin conversion in compound semiconductor with non-negligible spin-orbit interaction. Physical Review B, 2015, 91, .	3.2	20
58	Tunable spin current due to bulk insulating property in the topological insulator $Tl_{1-x}Bi_xSe_2$. Physical Review B, 2015, 91, .	3.2	20
59	Control of injected carriers in tetracyano-p-quinodimethane encapsulated carbon nanotube transistors. Applied Physics Letters, 2005, 87, 093107.	3.3	19
60	Enhanced magnetoresistance due to charging effects in a molecular nanocomposite spin device. Physical Review B, 2009, 79, .	3.2	17
61	Coupled-Mode Excitations Induced in an Antiferromagnetically Coupled Multilayer by Spin-Transfer Torque. Applied Physics Express, 2010, 3, 033001.	2.4	17
62	Significant reduction in spin pumping efficiency in a platinum/yttrium iron garnet bilayer at low temperature. Applied Physics Express, 2016, 9, 053002.	2.4	17
63	Note: Derivative divide, a method for the analysis of broadband ferromagnetic resonance in the frequency domain. Review of Scientific Instruments, 2018, 89, 076101.	1.3	16
64	Gigantic Optical Stark Effect and Ultrafast Relaxation of Excitons in Single-Walled Carbon Nanotubes. Journal of the Physical Society of Japan, 2006, 75, 043709.	1.6	15
65	Spin-transfer-torque-induced ferromagnetic resonance for Fe/Cr/Fe layers with an antiferromagnetic coupling field. Applied Physics Letters, 2009, 94, .	3.3	15
66	Quantitative and systematic analysis of bias dependence of spin accumulation voltage in a nondegenerate Si-based spin valve. Physical Review B, 2019, 99, .	3.2	14
67	Ambipolar single electron transistors using side-contacted single-walled carbon nanotubes. Chemical Physics Letters, 2006, 417, 540-544.	2.6	13
68	Improvements in the device characteristics of random-network single-walled carbon nanotube transistors by using high- κ gate insulators. Applied Physics Letters, 2006, 89, 203505.	3.3	13
69	Nuclear Magnetic Resonance of Molecular Hydrogen Trapped in Single-Walled Carbon Nanotube Bundles. Journal of Nanoscience and Nanotechnology, 2002, 2, 463-465.	0.9	12
70	Band structure modulation by carrier doping in random-network carbon nanotube transistors. Applied Physics Letters, 2006, 89, 013112.	3.3	11
71	Interaction patches for multi-character animation. , 2008, , .		11
72	Spin-wave-induced lateral temperature gradient in a YIG thin film/GGG system excited in an ESR cavity. Applied Physics Letters, 2018, 112, .	3.3	11

#	ARTICLE	IF	CITATIONS
73	Synthetic Rashba spin-orbit system using a silicon metal-oxide semiconductor. Nature Materials, 2021, 20, 1228-1232.	27.5	11
74	Current-Field Driven Spin Transistor. Applied Physics Express, 0, 2, 063004.	2.4	10
75	Ferromagnetic resonance and spin pumping efficiency for inverse spin-Hall effect normalization in yttrium-iron-garnet-based systems. Applied Physics Express, 2015, 8, 103002.	2.4	10
76	Investigation of spin scattering mechanism in silicon channels of Fe/MgO/Si lateral spin valves. Applied Physics Letters, 2017, 110, 192401.	3.3	10
77	Over 1% magnetoresistance ratio at room temperature in non-degenerate silicon-based lateral spin valves. Applied Physics Express, 2020, 13, 083002.	2.4	10
78	Analysis of Degradation in Graphene-Based Spin Valves. Applied Physics Express, 2009, 2, 123004.	2.4	9
79	Spin injection into silicon detected by broadband ferromagnetic resonance spectroscopy. Applied Physics Letters, 2017, 110, 182402.	3.3	9
80	In-plane spin-orbit torque magnetization switching and its detection using the spin rectification effect at subgigahertz frequencies. Physical Review B, 2020, 102, .	3.2	9
81	Optical Observation of Carrier Accumulation in Single-Walled Carbon Nanotube Transistors. Japanese Journal of Applied Physics, 2006, 45, L1190-L1192.	1.5	8
82	Structural Study of Single-Walled Carbon Nanotube Films Doped by a Solution Method. Journal of Nanoscience and Nanotechnology, 2007, 7, 3533-3536.	0.9	8
83	Collective Patterns of Swarm Dynamics and the Lyapunov Analysis of Individual Behaviors. Journal of the Physical Society of Japan, 2015, 84, 054002.	1.6	8
84	Investigation of gating effect in Si spin MOSFET. Applied Physics Letters, 2020, 116, .	3.3	8
85	Investigation of Spin-Dependent Transport Properties and Spin-Spin Interactions in a Copper-Phthalocyanine-Cobalt Nanocomposite System. Japanese Journal of Applied Physics, 2010, 49, 033002.	1.5	7
86	Verification of mathematical models of response threshold through statistical characterisation of the foraging activity in ant societies. Scientific Reports, 2019, 9, 8845.	3.3	7
87	Gate-Tunable Spin xor Operation in a Silicon-Based Device at Room Temperature. Physical Review Applied, 2020, 13, .	3.8	7
88	Surface potential analyses of single-walled carbon nanotube/metal interfaces. Journal of Applied Physics, 2007, 101, 014311.	2.5	6
89	A nuclear magnetic resonance study on rubrene-cobalt nanocomposites. Applied Physics Letters, 2008, 93, 053103.	3.3	6
90	Spin transport in single- and multi-layer graphene. , 2009, , .		6

#	ARTICLE	IF	CITATIONS
91	Observation of Magnetic Switching and Multiferroic-Like Behavior of Co Nanoparticles in a 60×60 Matrix. <i>Advanced Functional Materials</i> , 2012, 22, 3845-3852.	14.9	6
92	Temperature evolution of electromotive force from Pt on yttrium-iron-garnet under ferromagnetic resonance. <i>Journal of Applied Physics</i> , 2015, 117, 17D136.	2.5	6
93	Thermally Generated Spin Signals in a Nondegenerate Silicon Spin Valve. <i>Physical Review Applied</i> , 2018, 9, .	3.8	6
94	Electrical investigation of the interface band structure in rubrene single-crystal/nickel junction. <i>Applied Physics Letters</i> , 2011, 99, 043505.	3.3	5
95	Realization of ohmic-like contact between ferromagnet and rubrene single crystal. <i>Applied Physics Letters</i> , 2012, 101, 073501.	3.3	5
96	Sizable spin-transfer torque in the Bi/Ni80Fe20 bilayer film. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	4
97	Modulation of spin conversion in a 1.5-nm-thick Pd film by ionic gating. <i>Applied Physics Letters</i> , 2020, 117, 092406.	3.3	4
98	Current-induced out-of-plane torques in a single permalloy layer with lateral structural asymmetry. <i>Physical Review B</i> , 2022, 105, .	3.2	4
99	Diverse stochasticity leads a colony of ants to optimal foraging. <i>Journal of Theoretical Biology</i> , 2019, 465, 7-16.	1.7	3
100	Stability of spin XOR gate operation in silicon based lateral spin device with large variations in spin transport parameters. <i>AIP Advances</i> , 2019, 9, 125326.	1.3	3
101	Spin transport in n-type 3C-SiC observed in a lateral spin-pumping device. <i>Solid State Communications</i> , 2020, 305, 113754.	1.9	3
102	Spin transport in a lateral spin valve with a suspended Cu channel. <i>Scientific Reports</i> , 2020, 10, 10699.	3.3	3
103	Detection of ferromagnetic resonance from 1-nm-thick Co. <i>Scientific Reports</i> , 2020, 10, 15764.	3.3	3
104	Coexistence of low-frequency spin-torque ferromagnetic resonance and unidirectional spin Hall magnetoresistance. <i>Physical Review B</i> , 2021, 104, .	3.2	3
105	Modulation of spin-torque ferromagnetic resonance with a nanometer-thick platinum by ionic gating. <i>Scientific Reports</i> , 2021, 11, 21779.	3.3	3
106	Influence of adjacent metal films on magnon propagation in $Y_3Fe_5O_{12}$. <i>Physical Review B</i> , 2022, 105, .	3.2	3
107	Lyapunov analysis of collective behaviors in self-propelled particle systems. , 2014, , .		2
108	Spin to charge conversion in Si/Cu/ferromagnet systems investigated by ac inductive measurements. <i>Physical Review B</i> , 2021, 103, .	3.2	2

#	ARTICLE	IF	CITATIONS
109	Electrically-Generated Pure Spin Current in Graphene. Japanese Journal of Applied Physics, 2012, 51, 08KA01.	1.5	1
110	Characterization of MgO Thin Films Grown on Carbon Materials by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2013, 52, 070208.	1.5	1
111	Enhancement of low-frequency spin-orbit-torque ferromagnetic resonance signals by frequency tuning observed in Pt/Py, Pt/Co, and Pt/Fe bilayers. AIP Advances, 2021, 11, 025206.	1.3	1
112	Observation of a superconducting state of a topological superconductor candidate, FeTe _{0.6} Se _{0.4} , equipping ferromagnetic electrodes with perpendicular magnetic anisotropy. Applied Physics Express, 2021, 14, 093002.	2.4	1
113	Full calculation of inter-conversion between charge, spin, and heat current using a common partial differential equation platform. Journal of Applied Physics, 2022, 131, 243903.	2.5	1
114	Characterization of SWNT-Thin-Film Transistors. AIP Conference Proceedings, 2005, , .	0.4	0
115	Graphene spintronics. , 2010, , .		0
116	Observation of a tunneling magnetoresistance effect in magnetic tunneling junctions with a high resistance ferromagnetic oxide Fe ₂ MnO ₄ electrode. Solid State Communications, 2011, 151, 1296-1299.	1.9	0
117	Ferromagnetic resonance imbalance at high microwave power: Effect on the Gilbert damping parameter. Journal of Applied Physics, 2019, 126, .	2.5	0
118	Influence of Labor Conditions and Interaction Among Individuals on Circadian Activity Rhythms in the Ant <i>Camponotus Japonicus</i> . Journal of Robotics and Mechatronics, 2021, 33, 582-589.	1.0	0
119	Characteristic gait animation synthesis from single view silhouette. , 2009, , .		0
120	Accurate skin deformation model of forearm using MRI. , 2009, , .		0