

Shuichi Murakami

List of Publications by Year in descending order

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169
papers

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174
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9266
citing authors

#	ARTICLE	IF	CITATIONS
1	Fractional hinge and corner charges in various crystal shapes with cubic symmetry. Physical Review B, 2022, 105, .	1.1	6
2	Chiral phonons and pseudoangular momentum in nonsymmorphic systems. Physical Review Research, 2022, 4, .	1.3	17
3	Rotoinversion-symmetric bulk-hinge correspondence and its applications to higher-order Weyl semimetals. Physical Review B, 2022, 105, .	1.1	5
4	Non-Hermitian waves in a continuous periodic model and application to photonic crystals. Physical Review Research, 2022, 4, .	1.3	14
5	Landau levels and magneto-optical transport properties of a semi-Dirac system. Physical Review B, 2022, 105, .	1.1	3
6	Chiral-phonon-induced current in helical crystals. Physical Review B, 2022, 105, .	1.1	5
7	Chiral phonons entangled with multiple Hall effects and unified convention for pseudoangular momentum in two-dimensional materials. Physical Review B, 2022, 105, .	1.1	4
8	Non-Bloch band theory in bosonic Bogoliubov-de Gennes systems. Physical Review B, 2021, 103, .	1.1	38
9	General corner charge formula in two-dimensional C_n -symmetric higher-order topological insulators. Physical Review B, 2021, 103, .		
10	Observation of a chiral wave function in the twofold-degenerate quadruple Weyl system BaPtGe. Physical Review B, 2021, 103, .	1.1	10
11	Universal features of canonical phonon angular momentum without time-reversal symmetry. Physical Review B, 2021, 103, .	1.1	9
12	Giant phonon anomalies in the proximate Kitaev quantum spin liquid $\hat{\pm}$ -RuCl ₃ . Nature Communications, 2021, 12, 3513.	5.8	20
13	Anisotropic Penetration Depths of Corner States in a Higher-Order Topological Insulator. Journal of the Physical Society of Japan, 2021, 90, 074711.	0.7	3
14	Predicting topological materials: symmetry-based indicator theories and beyond. Journal Physics D: Applied Physics, 2021, 54, 414002.	1.3	4
15	Observation of Unconventional Charge Density Wave without Acoustic Phonon Anomaly in Kagome Superconductors \mathbf{V}_3		

#	ARTICLE	IF	CITATIONS
19	Kinetic magnetoelectric effect in topological insulators. Communications Physics, 2021, 4, .	2.0	2
20	Scaling rule for the critical non-Hermitian skin effect. Physical Review B, 2021, 104, .	1.1	42
21	Degenerate topological line surface phonons in quasi-1D double helix crystal SnIP. Npj Computational Materials, 2021, 7, .	3.5	19
22	Unique surface-state connection between Weyl and nodal ring fermions in ferromagnetic material <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cs</mml:mi><mml:mn>1</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review Research, 2021, 3, .	1.3	6
23	Non-Bloch band theory and bulk-edge correspondence in non-Hermitian systems. Progress of Theoretical and Experimental Physics, 2020, 2020, .	1.8	28
24	Twofold quadruple Weyl nodes in chiral cubic crystals. Physical Review B, 2020, 102, .	1.1	65
25	Yang-Mills physics in spintronics. Physics Reports, 2020, 882, 1-36.	10.3	11
26	Topologically protected spin diffusion and spin generator using chalcogenide superlattices. Npj 2D Materials and Applications, 2020, 4, .	3.9	8
27	Topological phonons in oxide perovskites controlled by light. Science Advances, 2020, 6, .	4.7	47
28	Quantum Hall studies of a semi-Dirac nanoribbon. Physical Review B, 2020, 102, .	1.1	13
29	Physics of Gauge Fields in Quantum Nanosciences. Spin, 2020, 10, 2050018.	0.6	0
30	Berry curvature for coupled waves of magnons and electromagnetic waves. Physical Review B, 2020, 102, .	1.1	7
31	Current-induced orbital magnetization in systems without inversion symmetry. Physical Review B, 2020, 102, .	1.1	14
32	Appearance of hinge states in second-order topological insulators via the cutting procedure. Physical Review B, 2020, 101, .	1.1	20
33	Radial Spin Texture in Elemental Tellurium with Chiral Crystal Structure. Physical Review Letters, 2020, 124, 136404.	2.9	76
34	Berry curvature for magnetoelastic waves. Physical Review B, 2020, 101, .	1.1	8
35	Phonon rotoelectric effect. Physical Review B, 2020, 101, .	1.1	20
36	Glide-symmetric topological crystalline insulator phase in a nonprimitive lattice. Physical Review B, 2020, 102, .	1.1	9

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37	Bulk-edge and bulk-hinge correspondence in inversion-symmetric insulators. Physical Review Research, 2020, 2, .	1.3	23
38	Diagnosis scheme for topological degeneracies crossing high-symmetry lines. Physical Review Research, 2020, 2, .	1.3	18
39	Conversion between electron spin and microscopic atomic rotation. Physical Review Research, 2020, 2, .	1.3	19
40	Anomalous dielectric response in insulators with the \mathbb{Z}_2 Zak phase. Physical Review Research, 2020, 2, .	1.3	11
41	Topological semimetal phase with exceptional points in one-dimensional non-Hermitian systems. Physical Review Research, 2020, 2, .	1.3	38
42	Higher-order topological crystalline insulating phase and quantized hinge charge in topological electride apatite. Physical Review Research, 2020, 2, .	1.3	17
43	Theory of inversion- \mathbb{Z}_4 protected topological chiral hinge states and its applications to layered antiferromagnets. Physical Review Research, 2020, 2, .	1.3	13
44	Biaxially Anisotropic Magnetic Response of Majorana Fermions. JPSJ News and Comments, 2020, 17, 09.	0.2	2
45	Non-Bloch Band Theory of Non-Hermitian Systems. Physical Review Letters, 2019, 123, 066404.	2.9	533
46	Glide-symmetric magnetic topological crystalline insulators with inversion symmetry. Physical Review B, 2019, 100, .	1.1	17
47	Topological semimetal phases manifested in transition metal dichalcogenides intercalated with \mathbb{Z}_3 metals. Physical Review B, 2019, 100, .	1.1	15
48	Topological band structure of surface acoustic waves on a periodically corrugated surface. Physical Review B, 2019, 99, .	1.1	6
49	Pressure-induced topological phase transition in noncentrosymmetric elemental tellurium. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 25530-25534.	3.3	48
50	Topological linelike bound states in the continuum. Physical Review B, 2019, 99, .	1.1	10
51	Orbital Edelstein Effect as a Condensed-Matter Analog of Solenoids. Nano Letters, 2018, 18, 916-920.	4.5	68
52	Topological Semimetals Studied by Ab Initio Calculations. Journal of the Physical Society of Japan, 2018, 87, 041002.	0.7	39
53	A cascading nonlinear magneto-optical effect in topological insulators. Scientific Reports, 2018, 8, 3908.	1.6	10
54	Nodal-line semimetal superlattices. Journal of Physics Condensed Matter, 2018, 30, 505301.	0.7	0

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55	Phonon Angular Momentum Induced by the Temperature Gradient. <i>Physical Review Letters</i> , 2018, 121, 175301.	2.9	53
56	Electrides as a New Platform of Topological Materials. <i>Physical Review X</i> , 2018, 8, .	2.8	47
57	Topological Dirac nodal lines and surface charges in fcc alkaline earth metals. <i>Nature Communications</i> , 2017, 8, 14022.	5.8	139
58	Thermal Hall Effect of Magnons. <i>Journal of the Physical Society of Japan</i> , 2017, 86, 011010.	0.7	67
59	Emergence of topological semimetals in gap closing in semiconductors without inversion symmetry. <i>Science Advances</i> , 2017, 3, e1602680.	4.7	62
60	Spinless hourglass nodal-line semimetals. <i>Physical Review B</i> , 2017, 96, .	1.1	48
61	Universal phase transition and band structures for spinless nodal-line and Weyl semimetals. <i>Physical Review B</i> , 2017, 96, .	1.1	22
62	Berry curvature for magnons in ferromagnetic films with dipole-exchange interactions. <i>Physical Review B</i> , 2017, 96, .	1.1	10
63	Spin conversion on the nanoscale. <i>Nature Physics</i> , 2017, 13, 829-832.	6.5	75
64	Topological phases in a Weyl semimetal multilayer. <i>Physical Review B</i> , 2017, 95, .	1.1	8
65	Quantum spin Hall effect and topological insulators. , 2017, , .		0
66	Theory of intraband plasmons in doped carbon nanotubes: Rolled surface-plasmons of graphene. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	18
67	Determination of intrinsic lifetime of edge magnetoplasmons. <i>Physical Review B</i> , 2016, 93, .	1.1	8
68	Emergent spinless Weyl semimetals between the topological crystalline insulator and normal insulator phases with glide symmetry. <i>Physical Review B</i> , 2016, 93, .	1.1	15
69	Observation of magnon Hall-like effect for sample-edge scattering in unsaturated YIG. <i>Physica Status Solidi (B): Basic Research</i> , 2016, 253, 783-787.	0.7	15
70	Theory of unconventional spin states in surfaces with non-Rashba spin-orbit interaction. <i>Physical Review B</i> , 2015, 91, .	1.1	15
71	Spin current generation and magnetic response in carbon nanotubes by the twisting phonon mode. <i>Physical Review B</i> , 2015, 92, .	1.1	12
72	In-Plane Electric Polarization of Bilayer Graphene Nanoribbons Induced by an Interlayer Bias Voltage. <i>Physical Review Letters</i> , 2015, 115, 156601.	2.9	7

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73	Gauge Physics of Spin Hall Effect. Scientific Reports, 2015, 5, 18409.	1.6	11
74	Micromagnetic simulation of spin wave propagation in a ferromagnetic film with different thicknesses. Journal of the Magnetism Society of Japan, 2015, 39, 151-155.	0.5	8
75	Topological Surface States: Hybridization and Transport from Theoretical Approaches. Hyomen Kagaku, 2015, 36, 135-140.	0.0	0
76	Weyl Node and Spin Texture in Trigonal Tellurium and Selenium. Physical Review Letters, 2015, 114, 206401.	2.9	195
77	Giant multiferroic effects in topological $\text{GeTe-Sb}_2\text{Te}_3$ superlattices. Science and Technology of Advanced Materials, 2015, 16, 014402.	2.8	73
78	Current-induced Orbital and Spin Magnetizations in Crystals with Helical Structure. Scientific Reports, 2015, 5, 12024.	1.6	94
79	Gapless Interface States between Two Topological Insulators with Crystallographic Rotational Symmetry. , 2015, , .		0
80	Hermitian Formulation of a Plasmonic Band Theory for One-dimensional Plasmonic Crystals. IEEJ Transactions on Sensors and Micromachines, 2015, 135, 418-425.	0.0	0
81	Ferroelectric Order Control of the Dirac Semimetal Phase in $\text{GeTe-Sb}_2\text{Te}_3$ Superlattices. Advanced Materials Interfaces, 2014, 1, 1300027.	1.9	155
82	Interfacial Fermi Loops from Interfacial Symmetries. Physical Review Letters, 2014, 113, 256406.	2.9	3
83	Spintronics and spin caloritronics in topological insulators. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 55, 1-8.	1.3	44
84	Real-time observation of Snell's law for spin waves in thin ferromagnetic films. Applied Physics Express, 2014, 7, 053001.	1.1	16
85	Thermal Hall effect of magnons in magnets with dipolar interaction. Physical Review B, 2014, 89, .	1.1	162
86	Dispersion of Fermi arcs in Weyl semimetals and their evolutions to Dirac cones. Physical Review B, 2014, 89, .	1.1	129
87	Mirror-symmetric Magneto-optical Kerr Rotation using Visible Light in $[(\text{GeTe})_2(\text{Sb}_2\text{Te}_3)]_n$ Topological Superlattices. Scientific Reports, 2014, 4, 5727.	1.6	57
88	Chiral spin-wave edge modes in dipolar magnetic thin films. Physical Review B, 2013, 87, .	1.1	158
89	Completely flat bands and fully localized states on surfaces of anisotropic diamond-lattice models. Physical Review B, 2013, 88, .	1.1	27
90	Hermitian two-band model for one-dimensional plasmonic crystals. Physical Review B, 2013, 88, .	1.1	7

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91	Topological chiral magnonic edge mode in a magnonic crystal. <i>Physical Review B</i> , 2013, 87, .	1.1	312
92	Thermoelectric transport in topological insulators. <i>Semiconductor Science and Technology</i> , 2012, 27, 124005.	1.0	71
93	Spin-torque efficiency enhanced by Rashba spin splitting in three dimensions. <i>Physical Review B</i> , 2012, 86, .	1.1	22
94	Monopoles in Spintronics. <i>JPSJ News and Comments</i> , 2012, 9, 05.	0.2	0
95	Spin Hall Effect. , 2011, , 222-278.		11
96	Spin Currents Induced by Nonuniform Rashba-Type Spin-Orbit Field. <i>Journal of the Physical Society of Japan</i> , 2011, 80, 084701.	0.7	2
97	Gauge fields in spintronics. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	92
98	Theoretical Prediction of a Rotating Magnon Wave Packet in Ferromagnets. <i>Physical Review Letters</i> , 2011, 106, 197202.	2.9	292
99	Electromagnetic spin polarization on the surface of topological insulator. <i>Physical Review B</i> , 2011, 84, .	1.1	29
100	Quantum spin Hall systems and topological insulators. <i>New Journal of Physics</i> , 2011, 13, 105007.	1.2	12
101	Two-dimensional topological insulators and their edge states. <i>Journal of Physics: Conference Series</i> , 2011, 302, 012019.	0.3	20
102	Localized edge states in two-dimensional topological insulators: Ultrathin Bi films. <i>Physical Review B</i> , 2011, 83, .	1.1	305
103	Thermoelectric figure of merit in topological insulators. <i>Journal of Physics: Conference Series</i> , 2011, 302, 012026.	0.3	0
104	Berry phase and thermal transport coefficients in magnon systems. <i>Journal of Physics: Conference Series</i> , 2011, 302, 012025.	0.3	2
105	Rotational motion of magnons and the thermal Hall effect. <i>Physical Review B</i> , 2011, 84, .	1.1	188
106	Gap closing and universal phase diagrams in topological insulators. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2011, 43, 748-754.	1.3	23
107	Thermoelectric transport of perfectly conducting channels in two- and three-dimensional topological insulators. <i>Journal of Physics: Conference Series</i> , 2011, 334, 012013.	0.3	22
108	Gapless Interface States between Topological Insulators with Opposite Dirac Velocities. <i>Physical Review Letters</i> , 2011, 107, 166805.	2.9	97

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109	Transverse magnetic heat transport on the surface of a topological insulator. Physical Review B, 2011, 83, .	1.1	39
110	Topological Insulators: Introduction. Hyomen Kagaku, 2011, 32, 174-181.	0.0	0
111	Thermoelectric transport in perfectly conducting channels in quantum spin Hall systems. Physical Review B, 2010, 81, .	1.1	71
112	Disordered topological quantum critical points in three-dimensional systems. New Journal of Physics, 2010, 12, 065008.	1.2	10
113	Large thermoelectric figure of merit for three-dimensional topological Anderson insulators via line dislocation engineering. Applied Physics Letters, 2010, 97, 073108.	1.5	54
114	Topological metal at the surface of an ultrathin Bi film. Physical Review B, 2010, 81, .	1.1	57
115	Kohn anomalies in graphene nanoribbons. Physical Review B, 2009, 80, .	1.1	44
116	Effects of disorder in three-dimensional Z_2 quantum spin Hall systems. Physical Review B, 2009, 79, .	1.1	75
117	QUANTUM SPIN HALL PHASE IN BISMUTH ULTRATHIN FILM. , 2009, , .		0
118	Intrinsic Spin Hall Effect in Platinum: First-Principles Calculations. Physical Review Letters, 2008, 100, 096401.	2.9	331
119	Quantum Spin Hall Phases. Progress of Theoretical Physics Supplement, 2008, 176, 279-301.	0.2	18
120	Phase transition between the quantum spin Hall and insulator phases in 3D: emergence of a topological gapless phase. New Journal of Physics, 2008, 10, 029802.	1.2	23
121	Universal phase diagrams for the quantum spin Hall systems. Physical Review B, 2008, 78, .	1.1	113
122	Spin Hall effect of excitons. Physical Review B, 2008, 78, .	1.1	16
123	Quantum charge pumping and electric polarization in Anderson insulators. Physical Review B, 2007, 76, .	1.1	9
124	Tuning phase transition between quantum spin Hall and ordinary insulating phases. Physical Review B, 2007, 76, .	1.1	133
125	Phase transition between the quantum spin Hall and insulator phases in 3D: emergence of a topological gapless phase. New Journal of Physics, 2007, 9, 356-356.	1.2	1,016
126	Quantum Spin Hall Effect and Enhanced Magnetic Response by Spin-Orbit Coupling. Physical Review Letters, 2006, 97, 236805.	2.9	548

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127	Geometrical aspects in optical wave-packet dynamics. Physical Review E, 2006, 74, 066610.	0.8	82
128	INTRINSIC SPIN HALL EFFECT IN SEMICONDUCTORS. , 2006, , .		0
129	Spin-Hall effect: Back to the beginning at a higher level. Solid State Communications, 2006, 138, 214-217.	0.9	60
130	Gauge Field for Edge State in Graphene. Journal of the Physical Society of Japan, 2006, 75, 074713.	0.7	118
131	Dynamical Diffraction Theory for Wave Packet Propagation in Deformed Crystals. Physical Review Letters, 2006, 96, 154802.	2.9	25
132	Disorder-Enhanced Dielectric Response of Nanoscale and Mesoscopic Insulators. Physical Review Letters, 2006, 97, 266807.	2.9	6
133	Stabilization mechanism of edge states in graphene. Applied Physics Letters, 2006, 88, 113110.	1.5	148
134	Spin Hall effect of a conserved current: Conditions for a nonzero spin Hall current. Physical Review B, 2006, 73, .	1.1	68
135	Controlling edge states of zigzag carbon nanotubes by the Aharonov-Bohm flux. Physical Review B, 2005, 71, .	1.1	29
136	SPIN HALL EFFECT IN P-TYPE SEMICONDUCTORS. , 2005, , .		0
137	Fractional flux periodicity in doped carbon nanotubes. Physical Review B, 2004, 70, .	1.1	4
138	Hall Effect of Light. Physical Review Letters, 2004, 93, 083901.	2.9	871
139	Topological Nature of Polarization and Charge Pumping in Ferroelectrics. Physical Review Letters, 2004, 93, 167602.	2.9	37
140	Absence of vertex correction for the spin Hall effect in p-type semiconductors. Physical Review B, 2004, 69, .	1.1	129
141	SU(2) non-Abelian holonomy and dissipationless spin current in semiconductors. Physical Review B, 2004, 69, .	1.1	299
142	Spin-Hall Insulator. Physical Review Letters, 2004, 93, 156804.	2.9	281
143	Re-parameterization Invariance in Fractional Flux Periodicity. Journal of the Physical Society of Japan, 2004, 73, 3231-3234.	0.7	1
144	Superconductivity with nonzero Chern numbers. Physica C: Superconductivity and Its Applications, 2003, 388-389, 53-54.	0.6	1

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145	Dissipationless Quantum Spin Current at Room Temperature. <i>Science</i> , 2003, 301, 1348-1351.	6.0	1,754
146	Berry Phase in Magnetic Superconductors. <i>Physical Review Letters</i> , 2003, 90, 057002.	2.9	47
147	Colossal Magnetoresistance in Manganites as a Multicritical Phenomenon. <i>Physical Review Letters</i> , 2003, 90, 197201.	2.9	70
148	Theory of Ferromagnetism in $\text{Ca}_{1-x}\text{La}_x\text{B}_6$. <i>Physical Review Letters</i> , 2002, 88, 126404.	2.9	15
149	Theory of excitonic states in CaB_6 . <i>Physical Review B</i> , 2002, 66, .	1.1	9
150	Lattice Distortion and Ferromagnetism in $\text{Ca}_{1-x}\text{La}_x\text{B}_6$. <i>Journal of the Physical Society of Japan</i> , 2002, 71, 309-310.	0.7	1
151	Lattice distortion and ferromagnetism in CaB_6 . <i>Journal of Physics and Chemistry of Solids</i> , 2002, 63, 1285-1287.	1.9	4
152	Multicritical Phenomena of Superconductivity and Antiferromagnetism in Organic Conductor $\text{Rb}^+(\text{BEDT-TTF})_2\text{X}$. <i>Journal of the Physical Society of Japan</i> , 2000, 69, 2395-2398.	0.7	39
153	Spin anisotropy and quantum Hall effect in the kagomé lattice: Chiral spin state based on a ferromagnet. <i>Physical Review B</i> , 2000, 62, R6065-R6068.	1.1	477
154	$\text{SO}(5)$ Model of p-wave Superconductivity and Ferromagnetism. <i>Physical Review Letters</i> , 1999, 82, 2939-2942.	2.9	57
155	Role of orbitals in manganese oxides' ordering and fluctuation. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1999, 63, 171-176.	1.7	0
156	Algebraic solution of the Hubbard model on the infinite interval. <i>Nuclear Physics B</i> , 1998, 512, 637-677.	0.9	11
157	New integrable extension of the Hubbard chain with variable range hopping. <i>Journal of Physics A</i> , 1998, 31, 6367-6384.	1.6	4
158	Fermionic representations of integrable lattice systems. <i>Journal of Physics A</i> , 1998, 31, 7729-7749.	1.6	31
159	Electron correlation and Jahn-Teller interaction in manganese oxides. <i>Physical Review B</i> , 1998, 57, R6767-R6770.	1.1	15
160	Lattice Instability in the Spin Ladder System under Magnetic Field. <i>Journal of the Physical Society of Japan</i> , 1998, 67, 1876-1878.	0.7	12
161	Algebraic and analytic properties of the one-dimensional Hubbard model. <i>Journal of Physics A</i> , 1997, 30, 5269-5287.	1.6	14
162	Yangian symmetry and quantum inverse scattering method for the one-dimensional Hubbard model. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1997, 227, 216-226.	0.9	21

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163	Two-component \hat{T} -function fermions and bethe ansatz eigenstates. Chaos, Solitons and Fractals, 1996, 7, 93-107.	2.5	1
164	Integrability of a Hubbard-like model: lattice analogue of the \hat{T} -function interacting gas. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 221, 109-114.	0.9	8
165	Yangian Symmetry of the \hat{T} -Function Fermi Gas. Journal of the Physical Society of Japan, 1996, 65, 1227-1232.	0.7	12
166	YANGIAN SYMMETRY OF THE TWO-COMPONENT FERMIONIC NONLINEAR SCHRÖDINGER MODEL. International Journal of Modern Physics B, 1996, 10, 1707-1716.	1.0	0
167	Connection between Yangian symmetry and the quantum inverse scattering method. Journal of Physics A, 1996, 29, 7903-7915.	1.6	22
168	Completeness of Bethe Ansatz States in One-Dimensional \hat{T} -Function Fermions. Journal of the Physical Society of Japan, 1995, 64, 4571-4582.	0.7	1
169	Intrinsic Spin Hall Effect. , 0, , 197-209.		35