

Masatoshi Sato

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11441432/publications.pdf>

Version: 2024-02-01

110
papers

10,521
citations

53794

45
h-index

30922

102
g-index

110
all docs

110
docs citations

110
times ranked

5052
citing authors

#	ARTICLE	IF	CITATIONS
1	Topological superconductors: a review. Reports on Progress in Physics, 2017, 80, 076501.	20.1	1,011
2	Symmetry and Topology in Non-Hermitian Physics. Physical Review X, 2019, 9, .	8.9	683
3	Non-Abelian Topological Order in s -Wave Superfluids of Ultracold Fermionic Atoms. Physical Review Letters, 2009, 103, 020401.	7.8	640
4	Topological Origin of Non-Hermitian Skin Effects. Physical Review Letters, 2020, 124, 086801.	7.8	597
5	Topological Superconductivity in s -Wave $\text{Cu}_x\text{Bi}_{1-x}\text{Te}_2$. Physical Review Letters, 2011, 107, 217001.	7.8	589
6	Topological phases of noncentrosymmetric superconductors: Edge states, Majorana fermions, and non-Abelian statistics. Physical Review B, 2009, 79, .	3.2	507
7	Symmetry and Topology in Superconductors â€œOdd-Frequency Pairing and Edge Statesâ€œ. Journal of the Physical Society of Japan, 2012, 81, 011013.	1.6	453
8	Edge states and topological phases in non-Hermitian systems. Physical Review B, 2011, 84, .	3.2	381
9	Topology of crystalline insulators and superconductors. Physical Review B, 2014, 90, .	3.2	376
10	Topology of Andreev bound states with flat dispersion. Physical Review B, 2011, 83, .	3.2	268
11	Majorana Fermions and Topology in Superconductors. Journal of the Physical Society of Japan, 2016, 85, 072001.	1.6	266
12	Classification of Exceptional Points and Non-Hermitian Topological Semimetals. Physical Review Letters, 2019, 123, 066405.	7.8	244
13	Non-Abelian topological orders and Majorana fermions in spin-singlet superconductors. Physical Review B, 2010, 82, .	3.2	242
14	Topological odd-parity superconductors. Physical Review B, 2010, 81, .	3.2	230
15	Multiple topological states in iron-based superconductors. Nature Physics, 2019, 15, 41-47.	16.7	170
16	Higher-order non-Hermitian skin effect. Physical Review B, 2020, 102, .	3.2	161
17	Topological properties of spin-triplet superconductors and Fermi surface topology in the normal state. Physical Review B, 2009, 79, .	3.2	145
18	Z_2 Anomalous Topology in nonsymmorphic crystalline insulators: Möbius twist in surface states. Physical Review B, 2015, 91, .	3.2	134

#	ARTICLE	IF	CITATIONS
19	Topological Superconductivity in Dirac Semimetals. <i>Physical Review Letters</i> , 2015, 115, 187001.	7.8	134
20	Topology of nonsymmorphic crystalline insulators and superconductors. <i>Physical Review B</i> , 2016, 93, .	3.2	124
21	Symmetry-Protected Majorana Fermions in Topological Crystalline Superconductors: Theory and Application to SrRuO_2 . <i>Physical Review Letters</i> , 2013, 111, 087002.	7.8	123
22	Surface density of states and topological edge states in noncentrosymmetric superconductors. <i>Physical Review B</i> , 2011, 83, .	3.2	115
23	Symmetry-Protected Topological Superfluids and Superconductors "From the Basics to ^3He ". <i>Journal of the Physical Society of Japan</i> , 2016, 85, 022001.	1.6	110
24	Superconductivity in the antiperovskite Dirac-metal oxide Sr_3SnO . <i>Nature Communications</i> , 2016, 7, 13617.	12.8	107
25	Existence of Majorana Fermions and Topological Order in Nodal Superconductors with Spin-Orbit Interactions in External Magnetic Fields. <i>Physical Review Letters</i> , 2010, 105, 217001.	7.8	105
26	Theory of tunneling conductance and surface-state transition in superconducting topological insulators. <i>Physical Review B</i> , 2012, 85, .	3.2	104
27	n -fold supersymmetry in quantum mechanics: general formalism. <i>Nuclear Physics B</i> , 2001, 619, 105-127.	2.5	100
28	Non-Bloch band theory of non-Hermitian Hamiltonians in the symplectic class. <i>Physical Review B</i> , 2020, 101, .	3.2	100
29	Topological crystalline materials: General formulation, module structure, and wallpaper groups. <i>Physical Review B</i> , 2017, 95, .	3.2	98
30	Topological Phase Transition Driven by Infinitesimal Instability: Majorana Fermions in Non-Hermitian Spintronics. <i>Physical Review Letters</i> , 2019, 123, 097701.	7.8	95
31	Topological Blount's theorem of odd-parity superconductors. <i>Physical Review B</i> , 2014, 90, .	3.2	82
32	Mechanism of Spin-Triplet Superconductivity in Sr_2RuO_4 . <i>Journal of the Physical Society of Japan</i> , 2000, 69, 3505-3508.	1.6	81
33	General forms of a n -fold supersymmetric family. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2001, 503, 423-429.	4.1	76
34	Crossed Surface Flat Bands of Weyl Semimetal Superconductors. <i>Physical Review Letters</i> , 2015, 114, 096804.	7.8	74
35	Symmetry Protected Topological Order and Spin Susceptibility in Superfluid ^3He . <i>Physical Review Letters</i> , 2012, 109, 165301.	7.8	69
36	Study of Spin-Gap Formation in Quasi-Two-Dimensional $S=1/2$ System CaV_4O_9 : Neutron Scattering and NMR. <i>Journal of the Physical Society of Japan</i> , 1997, 66, 793-802.	1.6	61

#	ARTICLE	IF	CITATIONS
37	Non-Abelian statistics of axion strings. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 575, 126-130.	4.1	61
38	Photovoltaic chiral magnetic effect in Weyl semimetals. Physical Review B, 2016, 93, .	3.2	61
39	Superconductivity in doped Dirac semimetals. Physical Review B, 2016, 94, .	3.2	59
40	UPT ₃ as a Topological Crystalline Superconductor. Journal of the Physical Society of Japan, 2013, 82, 113707.	1.6	58
41	Topological zero modes and Dirac points protected by spatial symmetry and chiral symmetry. Physical Review B, 2014, 90, .	3.2	56
42	Non-Hermitian Skin Effects in Hermitian Correlated or Disordered Systems: Quantities Sensitive or Insensitive to Boundary Effects and Pseudo-Quantum-Number. Physical Review Letters, 2021, 126, 176601.	7.8	55
43	Dirac-fermion-induced parity mixing in superconducting topological insulators. Physical Review B, 2014, 90, .	3.2	52
44	Valley views: instantons, large order behaviors, and supersymmetry. Nuclear Physics B, 1999, 553, 644-710.	2.5	50
45	Bulk Electronic State of Superconducting Topological Insulator. Journal of the Physical Society of Japan, 2013, 82, 044704.	1.6	47
46	Topologically stable gapless phases in nonsymmorphic superconductors. Physical Review B, 2016, 94, .	3.2	44
47	Topological phases of quasi-one-dimensional fermionic atoms with a synthetic gauge field. New Journal of Physics, 2013, 15, 075010.	2.9	41
48	Majorana braiding dynamics in nanowires. Physical Review B, 2015, 91, .	3.2	40
49	Topological classification under nonmagnetic and magnetic point group symmetry: Application of real-space Atiyah-Hirzebruch spectral sequence to higher-order topology. Physical Review B, 2019, 99, .	3.2	40
50	Time-reversal invariant superconductivity of $Sr_2Ru_2O_7$ revealed by Josephson effects. Physical Review B, 2019, 100, .	2.2	37
51	Symmetry protected topological superfluid ³ He-B. Journal of Physics Condensed Matter, 2015, 27, 113203.	1.8	36
52	Topological Crystalline Materials of J_3 Electrons: Antiperovskites, Dirac Points, and High Winding Topological Superconductivity. Physical Review X, 2018, 8, .	8.9	36
53	Electronic Structure of the Quasi Two-Dimensional Mott System $BaCo_{1-x}Ni_xS_2$. Journal of the Physical Society of Japan, 1996, 65, 1782-1786.	1.6	33
54	Non-Hermitian higher-order Dirac semimetals. Physical Review B, 2021, 104, .	3.2	32

#	ARTICLE	IF	CITATIONS
55	Study of Anomalous Surface Magnetization of Ni by Polarized Neutrons. Journal of the Physical Society of Japan, 1975, 39, 1467-1472.	1.6	31
56	Hermitian zero modes protected by nonnormality: Application of pseudospectra. Physical Review B, 2020, 102, .	3.2	31
57	Temperature Dependence of the Magnetic Excitation Spectra of YBa ₂ Cu _{2.9} Zn _{0.1} O _{6.75} . Journal of the Physical Society of Japan, 1993, 62, 4009-4015.	1.6	30
58	Relationship between the Structural Transitions and the Low Temperature Electronic State of (La _x Tl _{1-x}) ₂ ETeO ₇ . Physical Review B, 2010, 81, 040401.	1.6	29
59	Non-Hermitian higher-order Weyl semimetals. Physical Review B, 2021, 104, .	3.2	29
60	Fragile surface zero-energy flat bands in three-dimensional chiral superconductors. Physical Review B, 2015, 92, .	3.2	28
61	Transport Properties of the Charge-Density-Wave State in K _{0.30} MoO ₃ . Journal of the Physical Society of Japan, 1984, 53, 3946-3951.	1.6	26
62	Surface electronic state of superconducting topological crystalline insulator. Physical Review B, 2015, 92, .	3.2	25
63	Symmetry-protected line nodes and Majorana flat bands in nodal crystalline superconductors. Physical Review B, 2018, 97, .	3.2	25
64	Real spectra in non-Hermitian topological insulators. Physical Review Research, 2020, 2, .	3.6	24
65	Edge states of hydrogen terminated monolayer materials: silicene, germanene and stanene ribbons. Journal of Physics Condensed Matter, 2017, 29, 115302.	1.8	22
66	Pulse Response of the Charge-Density Wave in K _{0.30} MoO ₃ . Journal of the Physical Society of Japan, 1985, 54, 3004-3011.	1.6	21
67	N-fold supersymmetry for a periodic potential. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 498, 117-122.	4.1	21
68	sl(2) construction of type A N-fold supersymmetry. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 519, 260-268.	4.1	21
69	N-fold supersymmetry in quantum mechanics—analyses of particular models. Journal of Mathematical Physics, 2002, 43, 3484-3510.	1.1	21
70	Zero modes, energy gap, and edge states of anisotropic honeycomb lattice in a magnetic field. Physical Review B, 2009, 80, .	3.2	21
71	Mirror Majorana zero modes in spinful superconductors/superfluids Non-Abelian anyons in integer quantum vortices. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 55, 20-24.	2.7	21
72	Quasi-Classical Theory of Tunneling Spectroscopy in Superconducting Topological Insulator. Journal of the Physical Society of Japan, 2014, 83, 064705.	1.6	21

#	ARTICLE	IF	CITATIONS
73	Nielsen-Ninomiya Theorem with Bulk Topology: Duality in Floquet and Non-Hermitian Systems. Physical Review Letters, 2021, 127, 196404.	7.8	20
74	Theory of tunneling spectroscopy for chiral topological superconductors. Physical Review B, 2012, 86, .	3.2	19
75	Anomalous Josephson current in superconducting topological insulator. Physical Review B, 2013, 87, .	3.2	18
76	Anisotropic Magnetic Responses of Topological Crystalline Superconductors. Crystals, 2017, 7, 58.	2.2	18
77	Majorana Multipole Response of Topological Superconductors. Physical Review Letters, 2019, 123, 097002.	7.8	18
78	Recent Developments of the Theory of Tunneling. Progress of Theoretical Physics Supplement, 1997, 127, 1-92.	0.1	18
79	Interference of Majorana fermions in NS junctions. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 55, 13-19.	2.7	17
80	Theory of edge states in a quantum anomalous Hall insulator/spin-singlets-wave superconductor hybrid system. Physical Review B, 2011, 83, .	3.2	16
81	Effect of Fermi surface evolution on superconducting gap in superconducting topological insulator. Superconductor Science and Technology, 2014, 27, 104002.	3.5	16
82	Symmetry-protected vortex bound state in superfluid ^3He . Physical Review B, 2015, 91, .	3.2	16
83	Evolution of Spin Gap in the Excitation Spectra of Quasi-Two-Dimensional $S=1/2$ System CaV_4O_9 . Journal of the Physical Society of Japan, 1996, 65, 1941-1944.	1.6	15
84	Classification of type A N -fold supersymmetry. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 521, 400-408.	4.1	15
85	Valleys in quantum mechanics. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 424, 93-100.	4.1	14
86	Superconductivity in the nonsymmorphic line-nodal compound CaSb_2 . Physical Review Materials, 2020, 4, .	2.4	14
87	Topological crystalline superconductivity in Dirac semimetal phase of iron-based superconductors. Physical Review B, 2019, 100, .	3.2	13
88	Fake Instability in the Euclidean Formalism of Quantum Tunneling. Physical Review Letters, 1997, 79, 4052-4055.	7.8	12
89	Surface superconductivity on Weyl semimetal induced by nonmagnetic and ferromagnetic tips. Physical Review Materials, 2019, 3, .	2.4	12
90	Theoretical band structure of the superconducting antiperovskite oxide Sr_3S_2 . Physica B: Condensed Matter, 2018, 536, 752-756.	2.7	11

#	ARTICLE	IF	CITATIONS
91	Spin Hall conductivity in topological Dirac semimetals. Physical Review B, 2020, 101, .	3.2	10
92	Influence of edge magnetization and electric fields on zigzag silicene, germanene and stanene nanoribbons. Journal of Physics Condensed Matter, 2019, 31, 105302.	1.8	9
93	Topological quantum walk with discrete time-glide symmetry. Physical Review B, 2020, 102, .	3.2	9
94	Identifying possible pairing states in SrRuO_2 by tunneling spectroscopy. Physical Review B, 2020, 101, .	3.2	9
95	Axion Instability and Nonlinear Electromagnetic Effect. Journal of the Physical Society of Japan, 2019, 88, 024402.	1.6	8
96	Observation of Linear and Nonlinear Relaxations of Fluid Dynamical Motion in Liquid Crystal. Journal of the Physical Society of Japan, 1977, 42, 433-436.	1.6	7
97	Spin-orbit coupling and topological states in an SrRuO_2 cold Fermi gas. Physical Review B, 2018, 98, .	3.2	7
98	Geometric criterion for solvability of lattice spin systems. Physical Review B, 2020, 102, .	3.2	6
99	Topological Number from Entanglement. JPSJ News and Comments, 2016, 13, 04.	0.1	5
100	Topological Classification of Non-Hermitian Gapless Phases: Exceptional Points and Bulk Fermi Arcs. , 2020, , .		5
101	Spin susceptibility for orbital-singlet Cooper pair in the three-dimensional SrRuO_2 superconductor. Physical Review Research, 2022, 4, .		5
102	VALLEY INSTANTON IN THE GAUGE-HIGGS SYSTEM. Modern Physics Letters A, 1996, 11, 43-54.	1.2	4
103	Majorana multipole response: General theory and application to wallpaper groups. Physical Review B, 2021, 103, .	3.2	4
104	Universal distribution of spectral-flow gaps in the Rashba model with disorder. Physical Review B, 2007, 75, .	3.2	3
105	Majorana fermions in topological superconductors with spin-orbit interaction. Journal of Physics: Conference Series, 2012, 391, 012150.	0.4	3
106	Electromagnetic response of topological superconductors. Physical Review B, 2021, 103, .	3.2	2
107	Extrinsic topology of Floquet anomalous boundary states in quantum walks. Physical Review B, 2022, 105, .	3.2	2
108	Electrical Response Of K_3MoO_3 Around Incommensurate-Nearly Commensurate Change At 100k. Molecular Crystals and Liquid Crystals, 1985, 121, 129-132.	0.8	1

#	ARTICLE	IF	CITATIONS
109	ON DISAGREEMENT ABOUT NONPERTURBATIVE CORRECTIONS IN TRIPLE-WELL POTENTIAL. Modern Physics Letters A, 2005, 20, 881-896.	1.2	1
110	Theory of tunneling spectroscopy in a superconducting topological insulator. Physica C: Superconductivity and Its Applications, 2013, 494, 20-23.	1.2	0