

Masaki Oshikawa

List of Publications by Year in descending order

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119
papers

8,053
citations

81900
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89
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123
all docs

123
docs citations

123
times ranked

4314
citing authors

#	ARTICLE	IF	CITATIONS
1	Entanglement spectrum of a topological phase in one dimension. Physical Review B, 2010, 81, .	3.2	902
2	Magnetization Plateaus in Spin Chains: "Haldane Gap" for Half-Integer Spins. Physical Review Letters, 1997, 78, 1984-1987.	7.8	620
3	Bose-Einstein Condensation of Dilute Magnons in $TlCuCl_3$. Physical Review Letters, 2000, 84, 5868-5871.	7.8	615
4	Symmetry protection of topological phases in one-dimensional quantum spin systems. Physical Review B, 2012, 85, .	3.2	550
5	Field-Induced Gap in $S=1/2$ Antiferromagnetic Chains. Physical Review Letters, 1997, 79, 2883-2886.	7.8	309
6	Field-induced gap in Cu benzoate and other $S=1/2$ antiferromagnetic chains. Physical Review B, 1999, 60, 1038-1056.	3.2	284
7	Absence of Quantum Time Crystals. Physical Review Letters, 2015, 114, 251603.	7.8	284
8	Commensurability, Excitation Gap, and Topology in Quantum Many-Particle Systems on a Periodic Lattice. Physical Review Letters, 2000, 84, 1535-1538.	7.8	282
9	Topological Approach to Luttinger's Theorem and the Fermi Surface of a Kondo Lattice. Physical Review Letters, 2000, 84, 3370-3373.	7.8	270
10	Quasiparticle statistics and braiding from ground-state entanglement. Physical Review B, 2012, 85, .	3.2	260
11	Boundary conformal field theory approach to the critical two-dimensional Ising model with a defect line. Nuclear Physics B, 1997, 495, 533-582.	2.5	188
12	Electron spin resonance in $S=1/2$ antiferromagnetic chains. Physical Review B, 2002, 65, .	3.2	179
13	Signatures of Dirac Cones in a DMRG Study of the Kagome Heisenberg Model. Physical Review X, 2017, 7, .	8.9	163
14	Hidden $Z_2 \times Z_2$ symmetry in quantum spin chains with arbitrary integer spin. Journal of Physics Condensed Matter, 1992, 4, 7469-7488.	1.8	153
15	Characterization of a quasi-one-dimensional spin-1/2 magnet which is gapless and paramagnetic for $\frac{1}{4}B\%>J$ and $k_B T\%>J$. Physical Review B, 1999, 59, 1008-1015.	3.2	151
16	Low-Temperature Electron Spin Resonance Theory for Half-Integer Spin Antiferromagnetic Chains. Physical Review Letters, 1999, 82, 5136-5139.	7.8	147
17	Random matrix theory analysis of cross correlations in financial markets. Physical Review E, 2004, 70, 026110.	2.1	146
18	Nonperturbative Approach to Luttinger's Theorem in One Dimension. Physical Review Letters, 1997, 79, 1110-1113.	7.8	143

#	ARTICLE	IF	CITATIONS
19	Junctions of Three Quantum Wires and the Dissipative Hofstadter Model. Physical Review Letters, 2003, 91, 206403.	7.8	123
20	Junctions of three quantum wires. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P02008-P02008.	2.3	114
21	Field-Induced Gap Formation in Yb 4As 3. Journal of the Physical Society of Japan, 1999, 68, 3181-3184.	1.6	85
22	Fractionalization, Topological Order, and Quasiparticle Statistics. Physical Review Letters, 2006, 96, 060601.	7.8	83
23	Bose-Einstein Condensation of Magnons in $TlCuCl_3$: Phase Diagram and Specific Heat from a Self-consistent Hartree-Fock Calculation with a Realistic Dispersion Relation. Journal of the Physical Society of Japan, 2004, 73, 3429-3434.	1.6	66
24	Universal Temperature Dependence of the Magnetization of Gapped Spin Chains. Physical Review Letters, 2007, 99, 057205.	7.8	66
25	Magnetic-Field Induced Bose-Einstein Condensation of Magnons and Critical Behavior in Interacting Spin Dimer System $TlCuCl_3$. Journal of the Physical Society of Japan, 2008, 77, 013701. Emergent $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">\langle mml:mrow> \langle mml:mi>SU</mml:mi> \langle mml:mo> \langle mml:mo stretchy="false">(</mml:mo> \langle mml:mn>4</mml:mn> \langle mml:mo> T_j ETQq_0 0 0 rgBT /Overlock 10 Tf 50 462 Td (stretchy="false")</mml:mo>$	1.6	66
26	$\rangle</mml:math>$ $\rangle</mml:math>$ Quantum brownian motion on a triangular lattice and boundary conformal field theory. Nuclear Physics B, 2001, 594, 535-606.	7.8	64
27	2.5	59	
28	Designing Kitaev Spin Liquids in Metal-Organic Frameworks. Physical Review Letters, 2017, 119, 057202.	7.8	59
29	Ordered phase and scaling in Znmodels and the three-state antiferromagnetic Potts model in three dimensions. Physical Review B, 2000, 61, 3430-3434.	3.2	56
30	Symmetry Protection of Critical Phases and a Global Anomaly in $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">\langle mml:mn>1</mml:mn> \langle mml:mo> + </mml:mo> \langle mml:mn>1</mml:mn> \langle mml:math>$ Dimensions. Physical Review Letters, 2017, 118, 021601.	7.8	56
31	Orbital Angular Momentum and Spectral Flow in Two-Dimensional Chiral Superfluids. Physical Review Letters, 2015, 114, 195301.	7.8	54
32	Defect Lines in the Ising Model and Boundary States on Orbifolds. Physical Review Letters, 1996, 77, 2604-2607.	7.8	53
33	Correlation effects in two-dimensional topological insulators. Physical Review B, 2012, 85, .	3.2	53
34	Dynamics of One-Dimensional Bose Liquids: Andreev-Like Reflection at $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">\langle mml:mi>Y</mml:mi> \langle mml:math>$ Junctions and the Absence of the Aharonov-Bohm Effect. Physical Review Letters, 2008, 100, 140402.	7.8	48
35	Impurity in a Luttinger liquid away from half-filling: A numerical study. Physical Review B, 1997, 56, 9766-9774.	3.2	47
36	Instability in Magnetic Materials with a Dynamical Axion Field. Physical Review Letters, 2012, 108, 161803.	7.8	45

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37	Entanglement spectra between coupled Tomonaga-Luttinger liquids: Applications to ladder systems and topological phases. Physical Review B, 2013, 88, .	3.2	45
38	Boundary critical phenomena in the three-state Potts model. Journal of Physics A, 1998, 31, 5827-5842.	1.6	43
39	Analytic Thermodynamics and Thermometry of Gaudin-Yang Fermi Gases. Physical Review Letters, 2009, 103, 140404.	7.8	43
40	Coupled S=12 Heisenberg antiferromagnetic chains in an effective staggered field. Physical Review B, 2004, 69, .	3.2	39
41	Topological degeneracy of non-Abelian states for dummies. Annals of Physics, 2007, 322, 1477-1498.	2.8	38
42	Quantized Hall conductivity of Bloch electrons: Topology and the Dirac fermion. Physical Review B, 1994, 50, 17357-17363.	3.2	37
43	Dynamical Theory of Superfluidity in One Dimension. Physical Review Letters, 2011, 107, 275302.	7.8	37
44	Systematic Derivation of Order Parameters through Reduced Density Matrices. Physical Review Letters, 2006, 96, 047211.	7.8	35
45	Inequivalent Berry Phases for the Bulk Polarization. Physical Review X, 2018, 8, .	8.9	35
46	Chiral Anomaly and Spin Gap in One-Dimensional Interacting Fermions. Journal of the Physical Society of Japan, 1996, 65, 2241-2248.	1.6	34
47	Distinct Trivial Phases Protected by a Point-Group Symmetry in Quantum Spin Chains. Physical Review Letters, 2015, 114, 177204.	7.8	32
48	Anomaly Matching and Symmetry-Preserved Critical Phases in $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="block">\langle \text{mml:mi} \rangle S \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle U \langle \text{mml:mi} \rangle \langle \text{mml:mo stretchy="false"} \rangle (\langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle N \langle \text{mml:mi} \rangle \langle \text{mml:mo stretchy="false"} \rangle) \langle \text{mml:mo} \rangle \langle \text{mml:math}$	7.8	32
49	Spin Systems in $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="block">\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="block">\langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle Z \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle p \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \text{ symmetry: } \text{ The two-dimensional } \langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="block">\langle \text{mml:mi} \rangle p \langle \text{mml:mi} \rangle \langle \text{mml:math} \text{ -state clock model. Physical Review B, 2013, 88, .}$	3.2	31
50	General method for calculating the universal conductance of strongly correlated junctions of multiple quantum wires. Physical Review B, 2012, 85, .	3.2	30
51	Insulator, Conductor, and Commensurability: A Topological Approach. Physical Review Letters, 2003, 90, 236401.	7.8	27
52	Filling-enforced constraint on the quantized Hall conductivity on a periodic lattice. Annals of Physics, 2020, 413, 168060.	2.8	27
53	Exact Analysis of ESR Shift in the Spin-1/2 Heisenberg Antiferromagnetic Chain. Physical Review Letters, 2005, 95, 037602.	7.8	25
54	Stable Flatbands, Topology, and Superconductivity of Magic Honeycomb Networks. Physical Review Letters, 2020, 124, 137002.	7.8	25

#	ARTICLE	IF	CITATIONS
55	Stable Skyrmions in Spinor Condensates. Physical Review Letters, 2006, 97, 080403.	7.8	24
56	Construction of Hamiltonians by supervised learning of energy and entanglement spectra. Physical Review B, 2018, 97, .	3.2	24
57	Quantum phase transitions in three-leg spin tubes. Physical Review B, 2010, 82, .	3.2	21
58	Generalized Boundary Condition Applied to Lieb-Schultz-Mattis-Type Ingappabilities and Many-Body Chern Numbers. Physical Review X, 2020, 10, .	8.9	21
59	Generalized $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle f \langle / \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \wedge \langle / \text{mml:mo} \rangle \text{ mml:mi} \rangle \otimes \text{ mml:mi} \rangle \text{ mml:math}$ rules and Kohn formulas on nonlinear conductivities. Physical Review B, 2020, 102, .	3.2	20
60	Proof of the Absence of Long-Range Temporal Orders in Gibbs States. Journal of Statistical Physics, 2020, 178, 926-935.	1.2	20
61	Friction Coefficient between Rubber and Solid Substrate – Effect of Rubber Thickness. Journal of the Physical Society of Japan, 2007, 76, 043601.	1.6	18
62	Boundary Resonances in $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \text{ display="inline"} \langle \text{mml:mi} \rangle S \langle / \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \text{ mathvariant="bold"} \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 1 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle / \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle / \text{mml:math} \rangle$ Antiferromagnetic Chains Under a Staggered Field. Physical Review Letters, 2012, 109, 247603.	7.8	18
63	Scaling of the polarization amplitude in quantum many-body systems in one dimension. Physical Review B, 2018, 97, .	3.2	17
64	Hidden Order and Dimerization Transition in $S=2$ Chains. Journal of the Physical Society of Japan, 1996, 65, 1562-1565.	1.6	16
65	Incommensurate State and Spin-Induced Peierls Instability. Physical Review Letters, 1999, 82, 2119-2122.	7.8	16
66	Ground-State Energies of Spinless Free Fermions and Hard-Core Bosons. Physical Review Letters, 2013, 111, 100402.	7.8	15
67	Twisted Boundary Condition and Lieb-Schultz-Mattis Ingappability for Discrete Symmetries. Physical Review Letters, 2021, 126, 217201.	7.8	15
68	Electron Spin Resonance Shift in Spin Ladder Compounds. Physical Review Letters, 2012, 108, 037204.	7.8	14
69	On the General Properties of Non-linear Optical Conductivities. Journal of Statistical Physics, 2020, 181, 2050-2070.	1.2	14
70	Magnon bands of N-leg integer-spin antiferromagnetic systems in the weak-interchain-coupling regime. Physical Review B, 2007, 75, .	3.2	13
71	Resolving the Berezinskii-Kosterlitz-Thouless transition in the two-dimensional XY model with tensor-network-based level spectroscopy. Physical Review B, 2021, 104, .	3.2	13
72	Skyrmion in spinor condensates and its stability in trap potentials. Physical Review A, 2009, 79, .	2.5	12

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73	Thermodynamic properties of quantum sine-Gordon spin chain system $KCuGaF_{6}$. Physical Review B, 2012, 85, .	3.2	12
74	Flux quench in a system of interacting spinless fermions in one dimension. Physical Review B, 2016, 93, .	3.2	12
75	Theory of electron spin resonance in one-dimensional topological insulators with spin-orbit couplings: Detection of edge states. Physical Review B, 2017, 96, .	3.2	12
76	Photon Echo from Lensing of Fractional Excitations in Tomonaga-Luttinger Spin Liquid. Physical Review X, 2021, 11, .	8.9	12
77	Numerical analysis of electron-spin resonance in the spin-12XYmodel. Physical Review B, 2003, 67, .	3.2	11
78	Hole statistics and superfluid phases in quantum dimer models. Physical Review B, 2013, 87, .	3.2	11
79	SU(4)-symmetric quantum spin-orbital liquids on various lattices. Physical Review B, 2021, 104, .	3.2	11
80	Saturated Ferromagnetism from Statistical Transmutation in Two Dimensions. Physical Review Letters, 2006, 96, 036406.	7.8	10
81	THE EFFECT OF DYNAMICAL GAUGE FIELD ON THE CHIRAL FERMION ON A BOUNDARY. Modern Physics Letters A, 1994, 09, 1755-1765.	1.2	9
82	Fractal structure in two-dimensional quantum Regge calculus. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 338, 187-196.	4.1	9
83	Magnetic anisotropy in Yb4As3 with one-dimensional Yb3+ chains. Physica B: Condensed Matter, 2000, 281-282, 465-467.	2.7	9
84	Direct Perturbation Theory on the Electron Spin Resonance Shift and Its Applications. Journal of the Physical Society of Japan, 2005, 74, 283-286.	1.6	9
85	Semiclassical approach to electron spin resonance in quantum spin systems. Physical Review B, 2011, 83, .	3.2	9
86	Finite-size scaling of the Shannon-RĂ©nyi entropy in two-dimensional systems with spontaneously broken continuous symmetry. Physical Review B, 2017, 95, .	3.2	8
87	Single-ion anisotropy in Haldane chains and the form factor of the sigma model. Physical Review B, 2011, 84, .	3.2	7
88	Dimensional crossover in layered electron superlattices. Physical Review B, 2013, 88, .	3.2	7
89	Crossover of correlation functions near a quantum impurity in a Tomonaga-Luttinger liquid. Physical Review B, 2019, 99, .	3.2	7
90	Spontaneous magnetic flux and quantum noise in an annular mesoscopic SND junction. Journal of Physics Condensed Matter, 1998, 10, L105-L111.	1.8	6

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91	Reduced density matrices and topological order in a quantum dimer model. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 145212.	1.8	6
92	Particle statistics, frustration, and ground-state energy. <i>Physical Review B</i> , 2018, 97, .	3.2	6
93	Non-Fermi Liquids in Conducting Two-Dimensional Networks. <i>Physical Review Letters</i> , 2021, 126, 186601.	7.8	6
94	ESR in Antiferromagnetic Chains: a Field-Theory Approach. <i>Journal of the Physical Society of Japan</i> , 2003, 72, 36-43.	1.6	5
95	Four-dimensional XY quantum critical behavior of ^4He in nanoporous media. <i>Physical Review B</i> , 2011, 84, .	3.2	5
96	Quantum criticality in an asymmetric three-leg spin tube: A strong rung-coupling perspective. <i>Physical Review B</i> , 2014, 89, .	3.2	5
97	Comment on "Confinement of Slave Particles in U(1) Gauge Theories of Strongly Interacting Electrons". <i>Physical Review Letters</i> , 2003, 91, 199701; discussion 199702.	7.8	4
98	Boundary critical phenomena in $\text{SU}(3)$ 'spin' chains. <i>Journal of Physics A</i> , 2001, 34, 1073-1088.	1.6	3
99	New Approach to Electron Spin Resonance in Quantum Spin Chains. <i>Progress of Theoretical Physics Supplement</i> , 2002, 145, 243-252.	0.1	3
100	Field theory analysis of antiferro-bond-alternating chains in the dimer phase. <i>Physical Review B</i> , 2012, 85, .	3.2	3
101	Two-wire junction of inequivalent Tomonaga-Luttinger liquids. <i>Physical Review B</i> , 2021, 104, .	3.2	3
102	Tensor network renormalization study on the crossover in classical Heisenberg and models in two dimensions. <i>Physical Review E</i> , 2022, 106, .	3.2	3
103	Voltage fluctuations on a superconductor grain attached to a quantum wire. <i>Superlattices and Microstructures</i> , 1999, 25, 1177-1183.	3.1	2
104	Coexistence of $\hat{x}^2 - \hat{y}^2$ -wave superconductivity and antiferromagnetism induced by a staggered field. <i>Physical Review B</i> , 2003, 68, .	3.2	2
105	Elementary excitations and specific heat in quantum sine-Gordon spin chain KCuGaF_6 . <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2011, 43, 741-747.	2.7	2
106	Mass ratio of elementary excitations in frustrated antiferromagnetic chains with dimerization. <i>Physical Review B</i> , 2012, 86, .	3.2	2
107	Valence bond distribution and correlation in bipartite Heisenberg antiferromagnets. <i>Physical Review B</i> , 2014, 89, .	3.2	2
108	In-situ Observation of Lubrication Dynamics between Soft Elastomer and Glass Substrate. <i>Journal of the Physical Society of Japan</i> , 2008, 77, 014602.	1.6	1

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109	Electron spin resonance shifts in $S=1$ antiferromagnetic chains. Physical Review B, 2013, 87, .	3.2	1	
110	Topology and Edge State Meet an Exact Solution for Nonlinear Electric Circuits. JPSJ News and Comments, 2022, 19, .	0.1	1	
111	Gappability Index for Quantum Many-Body Systems. Physical Review Letters, 2022, 129, .	7.8	1	
112	ESR in Haldane Gap Systems Revisited. Progress of Theoretical Physics Supplement, 2002, 145, 253-258.	0.1	0	
113	Two-Dimensional t-J Model in a Staggered Field. AIP Conference Proceedings, 2003, , .	0.4	0	
114	Junction of Tomonaga-Luttinger liquids. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 29, 483-489.	2.7	0	
115	Detection of Exotic Order Parameters of Quantum Antiferromagnets through Reduced Density Matrices. Progress of Theoretical Physics Supplement, 2005, 159, 143-147.	0.1	0	
116	Fluctuating fringes. Nature Physics, 2006, 2, 663-664.	16.7	0	
117	Saturated ferromagnetism from statistical transmutation. Journal of Magnetism and Magnetic Materials, 2007, 310, 1076-1078.	2.3	0	
118	Commensurability, Topology and Luttinger's Theorem in Quantum Many-Body Systems. , 2001, , 117-137.		0	
119	Recent developments in low-temperature ESR in quantum antiferromagnetic chains. , 2002, , 15-26.		0	