

# Juven C Wang

## List of Publications by Year in descending order

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45

papers

1,591

citations

257429

24

h-index

289230

40

g-index

45

all docs

45

docs citations

45

times ranked

491

citing authors

#	ARTICLE	IF	CITATIONS
1	Field-Theory Representation of Gauge-Gravity Symmetry-Protected Topological Invariants, Group Cohomology, and Beyond. <i>Physical Review Letters</i> , 2015, 114, 031601.	7.8	130
2	Gapped Domain Walls, Gapped Boundaries, and Topological Degeneracy. <i>Physical Review Letters</i> , 2015, 114, 076402. <i>Non-Abelian string and particle braiding in topological order: Modular</i> $\langle \text{mml:math} \rangle$ $\langle \text{mml:mi} \rangle S \langle / \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 3 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle$ $\langle \text{mml:mi} \rangle N \langle / \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle$ $\langle \text{mml:mi} \rangle Y \langle / \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 1 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle$ <i>Mills and cobordisms: Interacting topological superconductors/insulators and quantum spin liquids in</i> $\langle \text{mml:math} \rangle$ $\langle \text{mml:mi} \rangle S \langle / \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 3 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle$ <i>Annals of Physics</i> , 2018, 394, 244-293.	7.8	97
3	and $\langle \text{mml:math} \rangle$ $\langle \text{mml:mi} \rangle S \langle / \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 3 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mi} \rangle N \langle / \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle$ <i>twisted gauge theory</i> . <i>Physical Review B</i> , 2015, 91, .	3.2	85
4	Braiding statistics and link invariants of bosonic/fermionic topological quantum matter in 2+1 and 3+1 dimensions. <i>Annals of Physics</i> , 2017, 384, 254-287.	2.8	85
5	Symmetric Gapped Interfaces of SPT and SET States: Systematic Constructions. <i>Physical Review X</i> , 2018, 8, .	8.9	83
6	Time reversal, $\langle \text{mml:math} \rangle$ $\langle \text{mml:mi} \rangle S \langle / \text{mml:mi} \rangle \langle \text{mml:mi} \rangle U \langle / \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle / \text{mml:mo} \rangle \langle \text{mml:mi} \rangle N \langle / \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \langle / \text{mml:mo} \rangle$ <i>Yangang Mills and cobordisms: Interacting topological superconductors/insulators and quantum spin liquids in</i> $\langle \text{mml:math} \rangle$ $\langle \text{mml:mi} \rangle S \langle / \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 3 \langle / \text{mml:mn} \rangle \langle \text{mml:mo} \rangle$ <i>Annals of Physics</i> , 2018, 394, 244-293.	2.8	72
7	Boundary degeneracy of topological order. <i>Physical Review B</i> , 2015, 91, .	3.2	66
8	Higher anomalies, higher symmetries, and cobordisms I: classification of higher-symmetry-protected topological states and their boundary fermionic/bosonic anomalies via a generalized cobordism theory. <i>Annals of Mathematical Sciences and Applications</i> , 2019, 4, 107-311.	0.4	65
9	Twisted gauge theory model of topological phases in three dimensions. <i>Physical Review B</i> , 2015, 92, .	3.2	63
10	Theory of the disordered $\langle \text{mml:math} \rangle$ $\langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \hat{1}_{\frac{1}{2}} \langle / \text{mml:mi} \rangle \langle \text{mml:mo} \rangle = \langle / \text{mml:mo} \rangle \otimes \langle \text{mml:math} \rangle$ <i>quantum thermal Hall state: Emergent symmetry and phase diagram</i> . <i>Physical Review B</i> , 2018, 97, .	5.2	52
11	A new SU(2) anomaly. <i>Journal of Mathematical Physics</i> , 2019, 60, .	1.1	51
12	Adjoint $\langle \text{mml:math} \rangle$ $\langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle QCD \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 4 \langle / \text{mml:mn} \rangle \langle / \text{mml:math} \rangle$ <i>deconfined critical phenomena, symmetry-enriched topological quantum field theory, and higher symmetry extension</i> . <i>Physical Review D</i> , 2019, 99, .	4.7	48
13	Bosonic anomalies, induced fractional quantum numbers, and degenerate zero modes: The anomalous edge physics of symmetry-protected topological states. <i>Physical Review B</i> , 2015, 91, .	3.2	46
14	Fermionic Finite-Group Gauge Theories and Interacting Symmetric/Crystalline Orders via Cobordisms. <i>Communications in Mathematical Physics</i> , 2020, 376, 1073-1154.	2.2	45
15	Bulk viscosity of a gas of massless pions. <i>Physical Review C</i> , 2009, 79, .	2.9	44
16	Tunneling topological vacua via extended operators: (Spin-)TQFT spectra and boundary deconfinement in various dimensions. <i>Progress of Theoretical and Experimental Physics</i> , 2018, 2018, .	6.6	41
17	Symmetry-protected topological phases with charge and spin symmetries: Response theory and dynamical gauge theory in two and three dimensions. <i>Physical Review B</i> , 2013, 88, .	3.2	37
18	Multikink topological terms and charge-binding domain-wall condensation induced symmetry-protected topological states: Beyond Chern-Simons/BF field theories. <i>Physical Review B</i> , 2016, 93, .	3.2	36

#	ARTICLE	IF	CITATIONS
19	Quantum 4d Yang-Mills theory and time-reversal symmetric 5d higher-gauge topological field theory. Physical Review D, 2019, 100, .	4.7	36
20	Strong planar subsystem symmetry-protected topological phases and their dual fracton orders. Physical Review Research, 2020, 2, .	3.6	35
21	Beyond Standard Models and Grand Unifications: anomalies, topological terms, and dynamical constraints via cobordisms. Journal of High Energy Physics, 2020, 2020, 1. New higher anomalies, SU(N) Yang-Mills gauge theory and $\text{CP}^N$ sigma model. Annals of Physics, 2020, 414, 168074.	4.7	33
22	$\text{CP}^N \rightarrow \text{CP}^N + \text{CP}^N \rightarrow \text{CP}^N + \text{CP}^N$	2.8	30
23	Nonperturbative definition of the standard models. Physical Review Research, 2020, 2, .	3.6	30
24	Symmetry-protected many-body Aharonov-Bohm effect. Physical Review B, 2014, 89, .	3.2	29
25	Solution to the dimensional gauged chiral Fermion problem. Physical Review D, 2019, 99, .		
26	Higher anomalies, higher symmetries, and cobordisms II: Lorentz symmetry extension and enriched bosonic / fermionic quantum gauge theory. Annals of Mathematical Sciences and Applications, 2020, 5, 171-257.	0.4	22
27	Higher-rank tensor non-Abelian field theory: Higher-moment or subdimensional polynomial global symmetry, algebraic variety, Noether's theorem, and gauging. Physical Review Research, 2021, 3, .	3.6	20
28	Symmetric Mass Generation in the Dimensional Chiral Fermion 3-4-5-0 Model. Physical Review Letters, 2022, 128, 185301.		
29	Higher anomalies, higher symmetries, and cobordisms III: QCD matter phases anew. Nuclear Physics B, 2020, 957, 115016.	2.5	18
30	Unwinding short-range entanglement. Physical Review B, 2018, 98, .	3.2	16
31	Quantum statistics and spacetime surgery. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 807, 135516.	4.1	15
32	Higher-rank tensor field theory of non-abelian fracton and embeddon. Annals of Physics, 2021, 424, 168370.	2.8	15
33	Gauge enhanced quantum criticality and time reversal deconfined domain wall: SU(2) Yang-Mills dynamics with topological terms. Physical Review Research, 2020, 2, .	3.6	15
34	Quantum statistics and spacetime topology: Quantum surgery formulas. Annals of Physics, 2019, 409, 167904.	2.8	14
35	Non-Abelian gauged fracton matter field theory: Sigma models, superfluids, and vortices. Physical Review Research, 2020, 2, .	3.6	12
36	Unwinding fermionic symmetry-protected topological phases: Supersymmetry extension. Physical Review B, 2021, 103, .	3.2	11

## # ARTICLE

## IF

## CITATIONS

37	Unified model beyond grand unification. Physical Review D, 2021, 103, .	4.7	9
38	Effective field theory for fractional quantum Hall systems near $\sqrt{5}$ . Physical Review Research, 2020, 2, .		
39	Nonliquid cellular states: Gluing gauge-higher-symmetry-breaking versus gauge-higher-symmetry-extension interfacial defects. Physical Review Research, 2022, 4, .	3.6	8
40	Towards a non-relativistic holographic superfluid. New Journal of Physics, 2011, 13, 115008.	2.9	7
41	Boundary Supersymmetry of Fermionic Symmetry Protected Topological Phases. Physical Review Letters, 2021, 126, 236802.		
42	Schrödinger Fermi liquids. Physical Review D, 2014, 89, .	4.7	6
43	Dynamics of growing surfaces by linear equations in 2+1 dimensions. Physical Review E, 2007, 75, 011603.	2.1	4
44	Gene-mating dynamic evolution theory II: global stability of N-gender-mating polyploid systems. Theory in Biosciences, 2020, 139, 135-144.	1.4	1
45	Gene-mating dynamic evolution theory: fundamental assumptions, exactly solvable models and analytic solutions. Theory in Biosciences, 2020, 139, 105-134.	1.4	1