

# Oded Zilberberg

## List of Publications by Year in descending order

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Version: 2024-02-01

79  
papers

7,106  
citations

147801  
31  
h-index

91884  
69  
g-index

81  
all docs

81  
docs citations

81  
times ranked

4879  
citing authors

#	ARTICLE	IF	CITATIONS
1	Roadmap on topological photonics. JPhys Photonics, 2022, 4, 032501.	4.6	56
2	Ising machines with strong bilinear coupling. Physical Review Research, 2022, 4, .	3.6	9
3	Strong Parametric Coupling between Two Ultracoherent Membrane Modes. Physical Review Letters, 2022, 128, 094301.	7.8	10
4	Spontaneous Valley Spirals in Magnetically Encapsulated Twisted Bilayer Graphene. Physical Review Letters, 2021, 126, 056803.	7.8	13
5	Topology in quasicrystals [Invited]. Optical Materials Express, 2021, 11, 1143.	3.0	28
6	Open quantum systems beyond Fermi's golden rule: Diagrammatic expansion of the steady-state time-convolutionless master equations. Physical Review Research, 2021, 3, .	3.6	12
7	Distinctive class of dissipation-induced phase transitions and their universal characteristics. Physical Review Research, 2021, 3, .	3.6	25
8	Second-order topological modes in all-dielectric systems. , 2021, , .		0
9	Luttinger liquid coupled to Ohmic-class environments. Physical Review Research, 2021, 3, .	3.6	6
10	Second-order topological modes in two-dimensional continuous media. Physical Review Research, 2021, 3, .	3.6	11
11	Many-body localization in the interpolating Aubry-Andr�-Fibonacci model. Physical Review Research, 2021, 3, .	3.6	15
12	Emerging Dissipative Phases in a Superradiant Quantum Gas with Tunable Decay. Physical Review X, 2021, 11, .	8.9	28
13	Spin Detection via Parametric Frequency Conversion in a Membrane Resonator. Physical Review Applied, 2020, 14, .	3.8	14
14	Emergence of criticality through a cascade of delocalization transitions in quasiperiodic chains. Nature Physics, 2020, 16, 832-836.	16.7	64
15	Detection of Fermi arcs in Weyl semimetals through surface negative refraction. Physical Review B, 2020, 101, .	3.2	7
16	Field-effect transistor based on surface negative refraction in Weyl nanowire. APL Materials, 2020, 8, .	5.1	6
17	Electron-Hole Interference in an Inverted-Band Semiconductor Bilayer. Physical Review X, 2020, 10, .	8.9	10
18	A square-root topological insulator with non-quantized indices realized with photonic Aharonov-Bohm cages. Nature Communications, 2020, 11, 907.	12.8	115

#	ARTICLE	IF	CITATIONS
19	Distinguishing phases using the dynamical response of driven-dissipative light-matter systems. Physical Review A, 2020, 101, .	2.5	14
20	Optical circuits cross dimensions. Nature Photonics, 2020, 14, 68-69.	31.4	0
21	On the effect of linear feedback and parametric pumping on a resonator's frequency stability. New Journal of Physics, 2020, 22, 093049.	2.9	6
22	Higher-order topological insulators, topological pumps and the quantum Hall effect in high dimensions. Physical Review Research, 2020, 2, .	3.6	28
23	Antichiral states in twisted graphene multilayers. Physical Review Research, 2020, 2, .	3.6	14
24	Quantum Transducer Using a Parametric Driven-Dissipative Phase Transition. Physical Review Letters, 2019, 123, 173601.	7.8	40
25	Exploring Topological Photonics in Synthetic Dimensions. , 2019, , .		0
26	Electrically Tunable Flat Bands and Magnetism in Twisted Bilayer Graphene. Physical Review Letters, 2019, 123, 096802.	7.8	69
27	Classical Many-Body Time Crystals. Physical Review Letters, 2019, 123, 124301.	7.8	46
28	Weak Localization and Antilocalization in Nodal-Line Semimetals: Dimensionality and Topological Effects. Physical Review Letters, 2019, 122, 196603.	7.8	48
29	Sensing electrons during an adiabatic coherent transport passage. Physical Review B, 2019, 99, .	3.2	2
30	Topological photonics. Reviews of Modern Physics, 2019, 91, .	45.6	2,190
31	Tunneling into a Finite Luttinger Liquid Coupled to Noisy Capacitive Leads. Physical Review Letters, 2019, 122, 126802.	7.8	6
32	Quantum Interference of Topologically Protected Photonic States in a Laser-Written Waveguide Array. , 2019, , .		0
33	Rapid Flipping of Parametric Phase States. Physical Review Letters, 2019, 123, 254102.	7.8	10
34	Topological spin excitations in Harper-Heisenberg spin chains. Physical Review Research, 2019, 1, .	3.6	25
35	Realization of a Non-Quantized Square-Root Topological Insulator Based on Photonic Aharonov-Bohm Cages. , 2019, , .		1
36	Exploring 4D quantum Hall physics with a 2D topological charge pump. Nature, 2018, 553, 55-58.	27.8	292

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37	Photonic topological boundary pumping as a probe of 4D quantum Hall physics. Nature, 2018, 553, 59-62.	27.8	335
38	Dissipation-Induced Anomalous Multicritical Phenomena. Physical Review Letters, 2018, 120, 183603.	7.8	49
39	Six-dimensional quantum Hall effect and three-dimensional topological pumps. Physical Review B, 2018, 98, .	3.2	54
40	Proposal for Detecting Nodal-Line Semimetal Surface States with Resonant Spin-Flipped Reflection. Physical Review Letters, 2018, 121, 166802.	7.8	37
41	Substrate-induced topological minibands in graphene. Physical Review B, 2018, 98, .	3.2	9
42	Quantum interference of topological states of light. Science Advances, 2018, 4, eaat3187.	10.3	93
43	Entanglement spectrum of mixed states. Physical Review A, 2018, 98, .	2.5	8
44	A parametric symmetry breaking transducer. Applied Physics Letters, 2018, 112, .	3.3	16
45	Cavity-Mediated Coherent Coupling between Distant Quantum Dots. Physical Review Letters, 2018, 120, 236801.	7.8	10
46	Long-range spin coherence in a strongly coupled all-electronic dot-cavity system. Physical Review B, 2017, 96, .	3.2	7
47	Topology in a synthetic dimension as a tool for non-reciprocal photonic transport. , 2017, , .		0
48	Ultrasensitive hysteretic force sensing with parametric nonlinear oscillators. Physical Review E, 2016, 94, 022201.	2.1	33
49	Synthetic dimensions in integrated photonics: From optical isolation to four-dimensional quantum Hall physics. Physical Review A, 2016, 93, .	2.5	245
50	Many-body manifestation of interaction-free measurement: The Elitzur-Vaidman bomb. Physical Review B, 2016, 93, .	3.2	4
51	Measurement of Chern numbers through center-of-mass responses. Physical Review B, 2016, 93, .	3.2	64
52	Parametric Symmetry Breaking in a Nonlinear Resonator. Physical Review Letters, 2016, 117, 214101.	7.8	33
53	Towards four-dimensional photonics. Proceedings of SPIE, 2016, , .	0.8	1
54	Quasiperiodicity and topology transcend dimensions. Nature Physics, 2016, 12, 624-626.	16.7	56

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55	A Thouless quantum pump with ultracold bosonic atoms in an optical superlattice. Nature Physics, 2016, 12, 350-354.	16.7	449
56	Dynamical many-body phases of the parametrically driven, dissipative Dicke model. Physical Review A, 2015, 92, .	2.5	31
57	Transport Spectroscopy of a Spin-Coherent Dot-Cavity System. Physical Review Letters, 2015, 115, 166603.	7.8	26
58	Four-Dimensional Quantum Hall Effect with Ultracold Atoms. Physical Review Letters, 2015, 115, 195303.	7.8	168
59	Measurement Back-Action in Stacked Graphene Quantum Dots. Nano Letters, 2015, 15, 6003-6008.	9.1	42
60	Topological pumping over a photonic Fibonacci quasicrystal. Physical Review B, 2015, 91, .	3.2	151
61	Measuring topological invariants in small photonic lattices. New Journal of Physics, 2014, 16, 123013.	2.9	22
62	Enhanced compressibility due to repulsive interaction in the Harper model. Physical Review B, 2014, 89, .	3.2	11
63	Measuring cotunneling in its wake. Physical Review B, 2014, 90, .	3.2	15
64	Standard and Null Weak Values. , 2014, , 377-387.		1
65	Four-Dimensional Quantum Hall Effect in a Two-Dimensional Quasicrystal. Physical Review Letters, 2013, 111, 226401.	7.8	181
66	Observation of Topological Phase Transitions in Photonic Quasicrystals. Physical Review Letters, 2013, 110, 076403.	7.8	266
67	Null Values and Quantum State Discrimination. Physical Review Letters, 2013, 110, 170405.	7.8	21
68	Hanbury Brown and Twiss correlations in quantum Hall systems. Physical Review B, 2013, 88, .	3.2	13
69	Topological Phase Transitions in Photonic Quasicrystals. , 2013, , .		0
70	Topological Equivalence between the Fibonacci Quasicrystal and the Harper Model. Physical Review Letters, 2012, 109, 116404.	7.8	209
71	Null weak values in multi-level systems. Physica Scripta, 2012, T151, 014014.	2.5	6
72	Hanbury Brown&Twiss Interference of Anyons. Physical Review Letters, 2012, 109, 106802.	7.8	41

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73	Topological States and Adiabatic Pumping in Quasicrystals. Physical Review Letters, 2012, 109, 106402.	7.8	784
74	Charge Sensing Amplification via Weak Values Measurement. Physical Review Letters, 2011, 106, 080405.	7.8	63
75	Experimental Observation of Topological States and Adiabatic Pumping in 1D Photonic Quasicrystals. , 2011, , .		0
76	Daubechies wavelets as a basis set for density functional pseudopotential calculations. Journal of Chemical Physics, 2008, 129, 014109.	3.0	289
77	Controlled-NOT gate for multiparticle qubits and topological quantum computation based on parity measurements. Physical Review A, 2008, 77, .	2.5	39
78	Four-dimensional integrated photonic devices. SPIE Newsroom, 0, , .	0.1	0
79	<b>Guest Editorial for APL Special Topic on Synthetic Gauge Field Photonics</b>. APL Photonics, 0, , .	5.7	1