

Tomoki Ozawa

List of Publications by Year in descending order

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63
papers

5,311
citations

172207

29
h-index

149479

56
g-index

66
all docs

66
docs citations

66
times ranked

3705
citing authors

#	ARTICLE	IF	CITATIONS
1	Roadmap on topological photonics. JPhys Photonics, 2022, 4, 032501.	2.2	56
2	Synthetic dimension band structures on a Si CMOS photonic platform. Science Advances, 2022, 8, eabk0468.	4.7	19
3	Quantum Fisher information measurement and verification of the quantum Cram��r�� Rao bound in a solid-state qubit. Npj Quantum Information, 2022, 8, .	2.8	17
4	Synthetic Dimension Photonics on a Si CMOS Platform. , 2021, , .		0
5	Artificial magnetic field for synthetic quantum matter without dynamical modulation. Physical Review A, 2021, 103, .	1.0	5
6	Photonic Topological Materials feature issue: publisher��s note. Optical Materials Express, 2021, 11, 1410.	1.6	0
7	Photonic Topological Materials: feature introduction. Optical Materials Express, 2021, 11, 1592.	1.6	3
8	Spatial and spectral mode-selection effects in topological lasers with frequency-dependent gain. APL Photonics, 2021, 6, .	3.0	8
9	Semi-Dirac transport and localization in polaritonic graphene. , 2021, , .		0
10	Relations between topology and the quantum metric for Chern insulators. Physical Review B, 2021, 104, .	1.1	38
11	K��hler geometry and Chern insulators: Relations between topology and the quantum metric. Physical Review B, 2021, 104, .	1.1	38
12	Engineering geometrically flat Chern bands with Fubini-Study K��hler structure. Physical Review B, 2021, 104, .	1.1	23
13	Experimental measurement of the quantum geometric tensor using coupled qubits in diamond. National Science Review, 2020, 7, 254-260.	4.6	59
14	Semi-Dirac Transport and Anisotropic Localization in Polariton Honeycomb Lattices. Physical Review Letters, 2020, 125, 186601.	2.9	29
15	Direct observation of photonic Landau levels and helical edge states in strained honeycomb lattices. Light: Science and Applications, 2020, 9, 144.	7.7	38
16	Synthetic dimensions and topological chiral currents in mesoscopic rings. Physical Review Research, 2020, 2, .	1.3	6
17	Active topological photonics. Nanophotonics, 2020, 9, 547-567.	2.9	170
18	Type-III and Tilted Dirac Cones Emerging from Flat Bands in Photonic Orbital Graphene. Physical Review X, 2019, 9, .	2.8	72

#	ARTICLE	IF	CITATIONS
19	Observation of Photonic Landau Levels in Strained Honeycomb Lattices. , 2019, , .		1
20	Exploring Topological Photonics in Synthetic Dimensions. , 2019, , .		0
21	Topological photonics. Reviews of Modern Physics, 2019, 91, .	16.4	2,190
22	Topological quantum matter in synthetic dimensions. Nature Reviews Physics, 2019, 1, 349-357.	11.9	216
23	Measuring quantized circular dichroism in ultracold topological matter. Nature Physics, 2019, 15, 449-454.	6.5	106
24	Topological and Geometrical Effects in the Bulk Hall Response of Driven-Dissipative Photonic Lattices. , 2019, , .		0
25	Probing localization and quantum geometry by spectroscopy. Physical Review Research, 2019, 1, .	1.3	25
26	Steady-state Hall response and quantum geometry of driven-dissipative lattices. Physical Review B, 2018, 97, .	1.1	24
27	Extracting the quantum metric tensor through periodic driving. Physical Review B, 2018, 97, .	1.1	70
28	Creation of Semi-Dirac Photons Through Topological Phase Transitions in Photonic Honeycomb Lattices. , 2018, , .		0
29	Orbital Edge States in a Photonic Honeycomb Lattice. Physical Review Letters, 2017, 118, 107403.	2.9	79
30	Spin-orbit coupling in a hexagonal ring of pendula. New Journal of Physics, 2017, 19, 055001.	1.2	17
31	Synthetic Dimensions with Magnetic Fields and Local Interactions in Photonic Lattices. Physical Review Letters, 2017, 118, 013601.	2.9	38
32	Lasing in topological edge states of a one-dimensional lattice. Nature Photonics, 2017, 11, 651-656.	15.6	625
33	Synthetic dimensions for cold atoms from shaking a harmonic trap. Physical Review A, 2017, 95, .	1.0	72
34	Klein tunneling in driven-dissipative photonic graphene. Physical Review A, 2017, 96, .	1.0	21
35	Propagating edge states in strained honeycomb lattices. Physical Review B, 2017, 95, .	1.1	18
36	Optical-lattice-assisted magnetic phase transition in a spin-orbit-coupled Bose-Einstein condensate. Physical Review A, 2016, 94, .	1.0	12

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37	Synthetic dimensions in integrated photonics: From optical isolation to four-dimensional quantum Hall physics. <i>Physical Review A</i> , 2016, 93, .	1.0	245
38	Floquet topological system based on frequency-modulated classical coupled harmonic oscillators. <i>Physical Review B</i> , 2016, 93, .	1.1	47
39	Quantum Hall effect in momentum space. <i>Physical Review B</i> , 2016, 93, .	1.1	8
40	Measurement of Chern numbers through center-of-mass responses. <i>Physical Review B</i> , 2016, 93, .	1.1	64
41	Momentum-space Landau levels in driven-dissipative cavity arrays. <i>Physical Review A</i> , 2016, 93, .	1.0	7
42	Towards four-dimensional photonics. <i>Proceedings of SPIE</i> , 2016, , .	0.8	1
43	Momentum-space Landau levels in arrays of coupled ring resonators. <i>Proceedings of SPIE</i> , 2016, , .	0.8	0
44	How to directly observe Landau levels in driven-dissipative strained honeycomb lattices. <i>2D Materials</i> , 2015, 2, 034015.	2.0	21
45	Momentum-space Harper-Hofstadter model. <i>Physical Review A</i> , 2015, 92, .	1.0	14
46	Four-Dimensional Quantum Hall Effect with Ultracold Atoms. <i>Physical Review Letters</i> , 2015, 115, 195303.	2.9	168
47	Artificial magnetic fields in momentum space in spin-orbit-coupled systems. <i>Physical Review A</i> , 2015, 91, .	1.0	5
48	Feel the gauge. <i>Nature Physics</i> , 2015, 11, 801-802.	6.5	1
49	Edge states in polariton honeycomb lattices. <i>2D Materials</i> , 2015, 2, 034012.	2.0	58
50	Chandrasekhar-Clogston limit and critical polarization in a Fermi-Bose superfluid mixture. <i>Physical Review A</i> , 2014, 90, .	1.0	26
51	Anomalous and Quantum Hall Effects in Lossy Photonic Lattices. <i>Physical Review Letters</i> , 2014, 112, 133902.	2.9	75
52	Discontinuities in the First and Second Sound Velocities at the Berezinskii-Kosterlitz-Thouless Transition. <i>Physical Review Letters</i> , 2014, 112, 025302.	2.9	26
53	Quantum Mechanics with a Momentum-Space Artificial Magnetic Field. <i>Physical Review Letters</i> , 2014, 113, 190403.	2.9	38
54	Condensation of bosons with Rashba-Dresselhaus spin-orbit coupling. <i>Journal of Physics: Conference Series</i> , 2014, 529, 012006.	0.3	4

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55	Condensation Transition of Ultracold Bose Gases with Rashba Spin-Orbit Coupling. Physical Review Letters, 2013, 110, 085304.	2.9	27
56	Supercurrent and dynamical instability of spin-orbit-coupled ultracold Bose gases. Physical Review A, 2013, 87, .	1.0	54
57	Striped states in weakly trapped ultracold Bose gases with Rashba spin-orbit coupling. Physical Review A, 2012, 85, .	1.0	32
58	Ground-state phases of ultracold bosons with Rashba-Dresselhaus spin-orbit coupling. Physical Review A, 2012, 85, .	1.0	68
59	Stability of Ultracold Atomic Bose Condensates with Rashba Spin-Orbit Coupling against Quantum and Thermal Fluctuations. Physical Review Letters, 2012, 109, 025301.	2.9	88
60	Plastid-to-Nucleus Retrograde Signals Are Essential for the Expression of Nuclear Starch Biosynthesis Genes during Amyloplast Differentiation in Tobacco BY-2 Cultured Cells. Plant Physiology, 2011, 157, 518-530.	2.3	37
61	Renormalization of interactions of ultracold atoms in simulated Rashba gauge fields. Physical Review A, 2011, 84, .	1.0	37
62	Population imbalance and pairing in the BCS-BEC crossover of three-component ultracold fermions. Physical Review A, 2010, 82, .	1.0	34
63	Two-slit diffraction with highly charged particles: Niels Bohr's consistency argument that the electromagnetic field must be quantized. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 3035-3040.	3.3	30