

# Mohammad Hafezi

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

82

papers

6,509

citations

32

h-index

80

g-index

97

ext. papers

8,565

ext. citations

9.4

avg, IF

6.35

L-index

#	Paper	IF	Citations
82	Topological photonics. <i>Reviews of Modern Physics</i> , <b>2019</b> , 91,	40.5	1070
81	Imaging topological edge states in silicon photonics. <i>Nature Photonics</i> , <b>2013</b> , 7, 1001-1005	33.9	922
80	Robust optical delay lines with topological protection. <i>Nature Physics</i> , <b>2011</b> , 7, 907-912	16.2	830
79	Efficient all-optical switching using slow light within a hollow fiber. <i>Physical Review Letters</i> , <b>2009</b> , 102, 203902	7.4	355
78	A topological quantum optics interface. <i>Science</i> , <b>2018</b> , 359, 666-668	33.3	293
77	Slowing and stopping light using an optomechanical crystal array. <i>New Journal of Physics</i> , <b>2011</b> , 13, 023003	3.3	212
76	Fractional quantum Hall effect in optical lattices. <i>Physical Review A</i> , <b>2007</b> , 76,	2.6	183
75	Photonic quadrupole topological phases. <i>Nature Photonics</i> , <b>2019</b> , 13, 692-696	33.9	180
74	Optomechanically induced non-reciprocity in microring resonators. <i>Optics Express</i> , <b>2012</b> , 20, 7672-84	3.3	177
73	Topologically robust transport of photons in a synthetic gauge field. <i>Physical Review Letters</i> , <b>2014</b> , 113, 087403	7.4	168
72	Two-dimensionally confined topological edge states in photonic crystals. <i>New Journal of Physics</i> , <b>2016</b> , 18, 113013	2.9	143
71	Measurement of topological invariants in a 2D photonic system. <i>Nature Photonics</i> , <b>2016</b> , 10, 180-183	33.9	110
70	A topological source of quantum light. <i>Nature</i> , <b>2018</b> , 561, 502-506	50.4	106
69	Constrained dynamics via the Zeno effect in quantum simulation: implementing non-Abelian lattice gauge theories with cold atoms. <i>Physical Review Letters</i> , <b>2014</b> , 112, 120406	7.4	101
68	Maximal violation of Bell inequalities using continuous-variable measurements. <i>Physical Review A</i> , <b>2003</b> , 67,	2.6	101
67	Measurement of many-body chaos using a quantum clock. <i>Physical Review A</i> , <b>2016</b> , 94,	2.6	92
66	Anyonic interferometry and protected memories in atomic spin lattices. <i>Nature Physics</i> , <b>2008</b> , 4, 482-488	16.2	89

65	Ultra-sensitive chip-based photonic temperature sensor using ring resonator structures. <i>Optics Express</i> , <b>2014</b> , 22, 3098-104	3.3	83
64	Measuring Topological Invariants in Photonic Systems. <i>Physical Review Letters</i> , <b>2014</b> , 112,	7.4	73
63	Non-equilibrium fractional quantum Hall state of light. <i>New Journal of Physics</i> , <b>2013</b> , 15, 063001	2.9	73
62	Atomic interface between microwave and optical photons. <i>Physical Review A</i> , <b>2012</b> , 85,	2.6	71
61	Emergent equilibrium in many-body optical bistability. <i>Physical Review A</i> , <b>2017</b> , 95,	2.6	68
60	Two-dimensional lattice gauge theories with superconducting quantum circuits. <i>Annals of Physics</i> , <b>2014</b> , 351, 634-654	2.5	68
59	Induced Self-Stabilization in Fractional Quantum Hall States of Light. <i>Physical Review X</i> , <b>2014</b> , 4,	9.1	65
58	Measurement Protocol for the Entanglement Spectrum of Cold Atoms. <i>Physical Review X</i> , <b>2016</b> , 6,	9.1	54
57	Cavity Quantum Eliashberg Enhancement of Superconductivity. <i>Physical Review Letters</i> , <b>2019</b> , 122, 167002	9.4	50
56	Chemical potential for light by parametric coupling. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	46
55	Chiral quantum optics using a topological resonator. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	38
54	Quantum transport of strongly interacting photons in a one-dimensional nonlinear waveguide. <i>Physical Review A</i> , <b>2012</b> , 85,	2.6	38
53	Collective phases of strongly interacting cavity photons. <i>Physical Review A</i> , <b>2016</b> , 94,	2.6	36
52	Fractional quantum Hall states of Rydberg polaritons. <i>Physical Review A</i> , <b>2015</b> , 91,	2.6	35
51	Towards analog quantum simulations of lattice gauge theories with trapped ions. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	33
50	Engineering three-body interaction and Pfaffian states in circuit QED systems. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	32
49	Phase spectroscopy of topological invariants in photonic crystals. <i>Physical Review A</i> , <b>2015</b> , 91,	2.6	32
48	Thermal management and non-reciprocal control of phonon flow via optomechanics. <i>Nature Communications</i> , <b>2018</b> , 9, 1207	17.4	31

47	Topological growing of Laughlin states in synthetic gauge fields. <i>Physical Review Letters</i> , <b>2014</b> , 113, 155301	3.4	29
46	Topologically robust transport of entangled photons in a 2D photonic system. <i>Optics Express</i> , <b>2016</b> , 24, 15631-41	3.3	29
45	Photonic Anomalous Quantum Hall Effect. <i>Physical Review Letters</i> , <b>2019</b> , 123, 043201	7.4	26
44	SYNTHETIC GAUGE FIELDS WITH PHOTONS. <i>International Journal of Modern Physics B</i> , <b>2014</b> , 28, 1441002	2.1	23
43	Two coupled nonlinear cavities in a driven-dissipative environment. <i>Physical Review A</i> , <b>2016</b> , 94,	2.6	22
42	Many-body topological invariants from randomized measurements in synthetic quantum matter. <i>Science Advances</i> , <b>2020</b> , 6, eaaz3666	14.3	20
41	Characterization of topological states on a lattice with Chern number. <i>Europhysics Letters</i> , <b>2008</b> , 81, 100056	0.5	20
40	Photonic quantum transport in a nonlinear optical fiber. <i>Europhysics Letters</i> , <b>2011</b> , 94, 54006	1.6	19
39	Synthetic Gauge Field for Two-Dimensional Time-Multiplexed Quantum Random Walks. <i>Physical Review Letters</i> , <b>2019</b> , 123, 150503	7.4	18
38	Hardware-efficient fermionic simulation with a cavity QED system. <i>Npj Quantum Information</i> , <b>2018</b> , 4,	8.6	16
37	Machine learning the thermodynamic arrow of time. <i>Nature Physics</i> , <b>2021</b> , 17, 105-113	16.2	16
36	Thin-film superconducting resonator tunable to the ground-state hyperfine splitting of 87Rb. <i>AIP Advances</i> , <b>2011</b> , 1, 042107	1.5	15
35	Optical bistability at low light level due to collective atomic recoil. <i>Physical Review Letters</i> , <b>2008</b> , 101, 063901	7.4	15
34	Temporal and spectral manipulations of correlated photons using a time lens. <i>Physical Review A</i> , <b>2017</b> , 96,	2.6	13
33	Nonlinear optics quantum computing with circuit QED. <i>Physical Review Letters</i> , <b>2013</b> , 110, 060503	7.4	13
32	Many-Body Chern Number from Statistical Correlations of Randomized Measurements. <i>Physical Review Letters</i> , <b>2021</b> , 126, 050501	7.4	12
31	Topological physics with light. <i>Physics Today</i> , <b>2014</b> , 67, 68-69	0.9	11
30	Optical Lattice with Torus Topology. <i>Physical Review Letters</i> , <b>2018</b> , 121, 133002	7.4	11

29	Light-Induced Fractional Quantum Hall Phases in Graphene. <i>Physical Review Letters</i> , <b>2017</b> , 119, 247403	7.4	10
28	Quantum origami: Transversal gates for quantum computation and measurement of topological order. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	10
27	Cavity Higgs polaritons. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	9
26	Tunable quantum interference using a topological source of indistinguishable photon pairs. <i>Nature Photonics</i> , <b>2021</b> , 15, 542-548	33.9	8
25	Optical enhancement of superconductivity via targeted destruction of charge density waves. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	7
24	Switching and Counting With Atomic Vapors in Photonic-Crystal Fibers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2012</b> , 18, 1747-1753	3.8	7
23	High-order multipole radiation from quantum Hall states in Dirac materials. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	6
22	Guiding and confining of light in a two-dimensional synthetic space using electric fields. <i>Optica</i> , <b>2020</b> , 7, 506	8.6	6
21	Entanglement Entropy Scaling Transition under Competing Monitoring Protocols. <i>Physical Review Letters</i> , <b>2021</b> , 126, 123604	7.4	6
20	Optical control over bulk excitations in fractional quantum Hall systems. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	6
19	Interference of Temporally Distinguishable Photons Using Frequency-Resolved Detection. <i>Physical Review Letters</i> , <b>2019</b> , 123, 123603	7.4	5
18	Photon Pair Condensation by Engineered Dissipation. <i>Physical Review Letters</i> , <b>2019</b> , 123, 063602	7.4	5
17	Optical imprinting of superlattices in two-dimensional materials. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	5
16	Light-Matter Interactions in Synthetic Magnetic Fields: Landau-Photon Polaritons. <i>Physical Review Letters</i> , <b>2021</b> , 126, 103603	7.4	5
15	Robust and compact waveguides. <i>Nature Nanotechnology</i> , <b>2019</b> , 14, 8-9	28.7	5
14	Engineering quantum Hall phases in a synthetic bilayer graphene system. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	4
13	Topological frequency combs and nested temporal solitons. <i>Nature Physics</i> ,	16.2	4
12	Enhancement of superconductivity with external phonon squeezing. <i>Physical Review B</i> , <b>2021</b> , 104,	3.3	3

11	Extraction of the many-body Chern number from a single wave function. <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	3
10	Optical excitations in compressible and incompressible two-dimensional electron liquids. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	1
9	Few photon switching with slow light in hollow fiber <b>2009</b> ,		1
8	Light-induced topological superconductivity via Floquet interaction engineering. <i>Physical Review Research</i> , <b>2021</b> , 3,	3.9	1
7	Optical flux pump in the quantum Hall regime. <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	1
6	Mode delocalization in disordered photonic Chern insulator. <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	1
5	Engineering an effective three-spin Hamiltonian in trapped-ion systems for applications in quantum simulation. <i>Quantum Science and Technology</i> , <b>2022</b> , 7, 034001	5.5	0
4	Strongly correlated electron-photon systems. <i>Nature</i> , <b>2022</b> , 606, 41-48	50.4	0
3	Topological Physics with Photons. <i>Quantum Science and Technology</i> , <b>2017</b> , 71-89	1.2	
2	Stability of fractional quantum Hall states in disordered photonic systems. <i>New Journal of Physics</i> , <b>2017</b> , 19, 115004	2.9	
1	Materials science: Round the bend with microwaves. <i>Nature</i> , <b>2015</b> , 522, 292-3	50.4	