

Mikael C Rechtsman

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

11,868
citations

109321

35
h-index

161849

54
g-index

61
all docs

61
docs citations

61
times ranked

5655
citing authors

#	ARTICLE	IF	CITATIONS
1	Photonic Floquet topological insulators. <i>Nature</i> , 2013, 496, 196-200.	27.8	2,446
2	Topological photonics. <i>Reviews of Modern Physics</i> , 2019, 91, .	45.6	2,190
3	Topologically protected bound states in photonic parity-time-symmetric crystals. <i>Nature Materials</i> , 2017, 16, 433-438.	27.5	639
4	Topological insulator laser: Theory. <i>Science</i> , 2018, 359, .	12.6	634
5	Observation of a Topological Transition in the Bulk of a Non-Hermitian System. <i>Physical Review Letters</i> , 2015, 115, 040402.	7.8	551
6	Topological protection of photonic mid-gap defect modes. <i>Nature Photonics</i> , 2018, 12, 408-415.	31.4	418
7	Edge-Mode Lasing in 1D Topological Active Arrays. <i>Physical Review Letters</i> , 2018, 120, 113901.	7.8	406
8	Photonic topological boundary pumping as a probe of 4D quantum Hall physics. <i>Nature</i> , 2018, 553, 59-62.	27.8	335
9	Strain-induced pseudomagnetic field and photonic Landau levels in dielectric structures. <i>Nature Photonics</i> , 2013, 7, 153-158.	31.4	329
10	Observation of unconventional edge states in $\tilde{\text{ph}}\text{otonic graphene}^{\text{TM}}$. <i>Nature Materials</i> , 2014, 13, 57-62.	27.5	274
11	Observation of Photonic Topological Valley Hall Edge States. <i>Physical Review Letters</i> , 2018, 120, 063902.	7.8	274
12	Experimental realization of a Weyl exceptional ring. <i>Nature Photonics</i> , 2019, 13, 623-628.	31.4	234
13	Topological Creation and Destruction of Edge States in Photonic Graphene. <i>Physical Review Letters</i> , 2013, 111, 103901.	7.8	228
14	Experimental observation of optical Weyl points and Fermi arc-like surface states. <i>Nature Physics</i> , 2017, 13, 611-617.	16.7	226
15	Self-Localized States in Photonic Topological Insulators. <i>Physical Review Letters</i> , 2013, 111, 243905.	7.8	221
16	Photonic topological Anderson insulators. <i>Nature</i> , 2018, 560, 461-465.	27.8	205
17	Topological Optical Waveguiding in Silicon and the Transition between Topological and Trivial Defect States. <i>Physical Review Letters</i> , 2016, 116, 163901.	7.8	195
18	Observation of Floquet solitons in a topological bandgap. <i>Science</i> , 2020, 368, 856-859.	12.6	186

#	ARTICLE	IF	CITATIONS
19	Disorder-Induced Floquet Topological Insulators. <i>Physical Review Letters</i> , 2015, 114, 056801.	7.8	182
20	Disorder-Enhanced Transport in Photonic Quasicrystals. <i>Science</i> , 2011, 332, 1541-1544.	12.6	158
21	Topological Photonic Quasicrystals: Fractal Topological Spectrum and Protected Transport. <i>Physical Review X</i> , 2016, 6, .	8.9	151
22	Nonlinearly Induced P - T Transition in Photonic Systems. <i>Physical Review Letters</i> , 2013, 111, 263901.	7.8	135
23	Optimized Interactions for Targeted Self-Assembly: Application to a Honeycomb Lattice. <i>Physical Review Letters</i> , 2005, 95, 228301.	7.8	121
24	Anomalous Topological Phases and Unpaired Dirac Cones in Photonic Floquet Topological Insulators. <i>Physical Review Letters</i> , 2016, 117, 013902.	7.8	121
25	Observation of a Higher-Order Topological Bound State in the Continuum. <i>Physical Review Letters</i> , 2020, 125, 213901.	7.8	114
26	Topological protection of photonic path entanglement. <i>Optica</i> , 2016, 3, 925.	9.3	77
27	Quantized nonlinear Thouless pumping. <i>Nature</i> , 2021, 596, 63-67.	27.8	70
28	Amorphous Photonic Lattices: Band Gaps, Effective Mass, and Suppressed Transport. <i>Physical Review Letters</i> , 2011, 106, 193904.	7.8	69
29	Instability of bosonic topological edge states in the presence of interactions. <i>Physical Review A</i> , 2016, 94, .	2.5	55
30	Broadband Topological Slow Light through Higher Momentum-Space Winding. <i>Physical Review Letters</i> , 2019, 122, 153904.	7.8	55
31	Thouless pumping in disordered photonic systems. <i>Light: Science and Applications</i> , 2020, 9, 178.	16.6	53
32	Braiding photonic topological zero modes. <i>Nature Physics</i> , 2020, 16, 989-993.	16.7	51
33	Self-accelerating Dirac particles and prolonging the lifetime of relativistic fermions. <i>Nature Physics</i> , 2015, 11, 261-267.	16.7	48
34	Bound States in the Continuum through Environmental Design. <i>Physical Review Letters</i> , 2019, 123, 023902.	7.8	48
35	Observation of Unidirectional Solitonlike Edge States in Nonlinear Floquet Topological Insulators. <i>Physical Review X</i> , 2021, 11, .	8.9	36
36	Negative radiation pressure and negative effective refractive index via dielectric birefringence. <i>Optics Express</i> , 2012, 20, 8907.	3.4	32

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37	Observation of a Charge-2 Photonic Weyl Point in the Infrared. <i>Physical Review Letters</i> , 2020, 125, 253902.	7.8	32
38	Negative Thermal Expansion in Single-Component Systems with Isotropic Interactions. <i>Journal of Physical Chemistry A</i> , 2007, 111, 12816-12821.	2.5	24
39	Edge states in disordered photonic graphene. <i>Optics Letters</i> , 2014, 39, 602.	3.3	23
40	Integrated optical Dirac physics via inversion symmetry breaking. <i>Physical Review A</i> , 2016, 94, .	2.5	23
41	Point-Defect-Localized Bound States in the Continuum in Photonic Crystals and Structured Fibers. <i>Physical Review Letters</i> , 2021, 127, 023605.	7.8	23
42	Observation of bound states in the continuum embedded in symmetry bandgaps. <i>Science Advances</i> , 2021, 7, eabk1117.	10.3	22
43	Analogue of Rashba pseudo-spin-orbit coupling in photonic lattices by gauge field engineering. <i>Physical Review B</i> , 2016, 94, .	3.2	21
44	Chern Number Governs Soliton Motion in Nonlinear Thouless Pumps. <i>Physical Review Letters</i> , 2022, 128, 113901.	7.8	20
45	Higher-order topological pumping and its observation in photonic lattices. <i>Physical Review B</i> , 2022, 105, .	3.2	18
46	Negative coupling between defects in waveguide arrays. <i>Optics Letters</i> , 2012, 37, 533.	3.3	17
47	Optical sensing gets exceptional. <i>Nature</i> , 2017, 548, 161-162.	27.8	14
48	Observation of Quadratic (Charge=2) Weyl Point Splitting in Near-Infrared Photonic Crystals. <i>Laser and Photonics Reviews</i> , 2022, 16, .	8.7	13
49	Photonic realization of a transition to a strongly driven Floquet topological phase. <i>Physical Review A</i> , 2018, 97, .	2.5	12
50	Negative Goos-Hänchen shift in periodic media. <i>Optics Letters</i> , 2011, 36, 4446.	3.3	11
51	Landau levels in strained two-dimensional photonic crystals. <i>Physical Review A</i> , 2021, 103, .	2.5	11
52	Invited Article: Topological crystalline protection in a photonic system. <i>APL Photonics</i> , 2016, 1, .	5.7	6
53	Unidirectional Soliton-like Edge Modes in Nonlinear Floquet Topological Insulators. , 2021, , .		4
54	Enhancement of the ensemble-averaged coupling between defects in random environments. <i>Optics Letters</i> , 2014, 39, 3599.	3.3	1

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55	Enhanced coupling between waveguides through randomness. , 2011, , .		0
56	Magnetic field effects and Landau solitons in strained photonic graphene. , 2011, , .		0
57	Anomalous topological phases, unpaired dirac cones, and weak antilocalization in helical photonic lattices. , 2016, , .		0
58	Experimental observation of optical Weyl points. , 2017, , .		0
59	Using symmetry bandgaps to create a line of bound states in the continuum in 3D photonic crystals. , 2021, , .		0
60	Observation of Quadratic (Charge ϵ^2) Weyl Point Splitting in Near-Infrared Photonic Crystals (Laser) Tj ETQq0 0 0.rgBT /Overlock 10	8.75	0