

Mikael C Rechtsman

List of Publications by Year in descending order

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60
papers

11,868
citations

109321

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docs citations

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times ranked

5655
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of Quadratic (Charge-2) Weyl Point Splitting in Near-Infrared Photonic Crystals (Laser) Tj ETQq1 1 0.784314 JgBT /Over	8.7	14
2	Chern Number Governs Soliton Motion in Nonlinear Thouless Pumps. Physical Review Letters, 2022, 128, 113901.	7.8	20
3	Observation of Quadratic (Charge-2) Weyl Point Splitting in Near-Infrared Photonic Crystals. Laser and Photonics Reviews, 2022, 16, .	8.7	13
4	Higher-order topological pumping and its observation in photonic lattices. Physical Review B, 2022, 105, .	3.2	18
5	Unidirectional Soliton-like Edge Modes in Nonlinear Floquet Topological Insulators. , 2021, , .		4
6	Using symmetry bandgaps to create a line of bound states in the continuum in 3D photonic crystals. , 2021, , .		0
7	Point-Defect-Localized Bound States in the Continuum in Photonic Crystals and Structured Fibers. Physical Review Letters, 2021, 127, 023605.	7.8	23
8	Quantized nonlinear Thouless pumping. Nature, 2021, 596, 63-67.	27.8	70
9	Landau levels in strained two-dimensional photonic crystals. Physical Review A, 2021, 103, .	2.5	11
10	Observation of bound states in the continuum embedded in symmetry bandgaps. Science Advances, 2021, 7, eabk1117.	10.3	22
11	Observation of Unidirectional Solitonlike Edge States in Nonlinear Floquet Topological Insulators. Physical Review X, 2021, 11, .	8.9	36
12	Thouless pumping in disordered photonic systems. Light: Science and Applications, 2020, 9, 178.	16.6	53
13	Observation of a Higher-Order Topological Bound State in the Continuum. Physical Review Letters, 2020, 125, 213901.	7.8	114
14	Braiding photonic topological zero modes. Nature Physics, 2020, 16, 989-993.	16.7	51
15	Observation of a Charge-2 Photonic Weyl Point in the Infrared. Physical Review Letters, 2020, 125, 253902.	7.8	32
16	Observation of Floquet solitons in a topological bandgap. Science, 2020, 368, 856-859.	12.6	186
17	Bound States in the Continuum through Environmental Design. Physical Review Letters, 2019, 123, 023902.	7.8	48
18	Experimental realization of a Weyl exceptional ring. Nature Photonics, 2019, 13, 623-628.	31.4	234

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19	Broadband Topological Slow Light through Higher Momentum-Space Winding. Physical Review Letters, 2019, 122, 153904.	7.8	55
20	Topological photonics. Reviews of Modern Physics, 2019, 91, .	45.6	2,190
21	Observation of Photonic Topological Valley Hall Edge States. Physical Review Letters, 2018, 120, 063902.	7.8	274
22	Topological insulator laser: Theory. Science, 2018, 359, .	12.6	634
23	Photonic topological boundary pumping as a probe of 4D quantum Hall physics. Nature, 2018, 553, 59-62.	27.8	335
24	Photonic realization of a transition to a strongly driven Floquet topological phase. Physical Review A, 2018, 97, .	2.5	12
25	Edge-Mode Lasing in 1D Topological Active Arrays. Physical Review Letters, 2018, 120, 113901.	7.8	406
26	Photonic topological Anderson insulators. Nature, 2018, 560, 461-465.	27.8	205
27	Topological protection of photonic mid-gap defect modes. Nature Photonics, 2018, 12, 408-415.	31.4	418
28	Topologically protected bound states in photonic parity-time-symmetric crystals. Nature Materials, 2017, 16, 433-438.	27.5	639
29	Experimental observation of optical Weyl points and Fermi arc-like surface states. Nature Physics, 2017, 13, 611-617.	16.7	226
30	Optical sensing gets exceptional. Nature, 2017, 548, 161-162.	27.8	14
31	Experimental observation of optical Weyl points. , 2017, , .		0
32	Topological protection of photonic path entanglement. Optica, 2016, 3, 925.	9.3	77
33	Integrated optical Dirac physics via inversion symmetry breaking. Physical Review A, 2016, 94, .	2.5	23
34	Instability of bosonic topological edge states in the presence of interactions. Physical Review A, 2016, 94, .	2.5	55
35	Analogue of Rashba pseudo-spin-orbit coupling in photonic lattices by gauge field engineering. Physical Review B, 2016, 94, .	3.2	21
36	Anomalous Topological Phases and Unpaired Dirac Cones in Photonic Floquet Topological Insulators. Physical Review Letters, 2016, 117, 013902.	7.8	121

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37	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
38	Anomalous topological phases, unpaired dirac cones, and weak antilocalization in helical photonic lattices. , 2016, , .		0
39	Invited Article: Topological crystalline protection in a photonic system. <i>APL Photonics</i> , 2016, 1, .	5.7	6
40	Topological Photonic Quasicrystals: Fractal Topological Spectrum and Protected Transport. <i>Physical Review X</i> , 2016, 6, .	8.9	151
41	Self-accelerating Dirac particles and prolonging the lifetime of relativistic fermions. <i>Nature Physics</i> , 2015, 11, 261-267.	16.7	48
42	Disorder-Induced Floquet Topological Insulators. <i>Physical Review Letters</i> , 2015, 114, 056801.	7.8	182
43	Observation of a Topological Transition in the Bulk of a Non-Hermitian System. <i>Physical Review Letters</i> , 2015, 115, 040402.	7.8	551
44	Enhancement of the ensemble-averaged coupling between defects in random environments. <i>Optics Letters</i> , 2014, 39, 3599.	3.3	1
45	Observation of unconventional edge states in $\tilde{\epsilon}$ -photonic graphene TM . <i>Nature Materials</i> , 2014, 13, 57-62.	27.5	274
46	Edge states in disordered photonic graphene. <i>Optics Letters</i> , 2014, 39, 602.	3.3	23
47	Topological Creation and Destruction of Edge States in Photonic Graphene. <i>Physical Review Letters</i> , 2013, 111, 103901.	7.8	228
48	Self-Localized States in Photonic Topological Insulators. <i>Physical Review Letters</i> , 2013, 111, 243905.	7.8	221
49	Strain-induced pseudomagnetic field and photonic Landau levels in dielectric structures. <i>Nature Photonics</i> , 2013, 7, 153-158.	31.4	329
50	Photonic Floquet topological insulators. <i>Nature</i> , 2013, 496, 196-200.	27.8	2,446
51	Nonlinearly Induced $\langle P \rangle_T$ Transition in Photonic Systems. <i>Physical Review Letters</i> , 2013, 111, 263901.	7.8	135
52	Negative coupling between defects in waveguide arrays. <i>Optics Letters</i> , 2012, 37, 533.	3.3	17
53	Negative radiation pressure and negative effective refractive index via dielectric birefringence. <i>Optics Express</i> , 2012, 20, 8907.	3.4	32
54	Negative Goos-Hänchen shift in periodic media. <i>Optics Letters</i> , 2011, 36, 4446.	3.3	11

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55	Disorder-Enhanced Transport in Photonic Quasicrystals. <i>Science</i> , 2011, 332, 1541-1544.	12.6	158
56	Amorphous Photonic Lattices: Band Gaps, Effective Mass, and Suppressed Transport. <i>Physical Review Letters</i> , 2011, 106, 193904.	7.8	69
57	Enhanced coupling between waveguides through randomness. , 2011, , .		0
58	Magnetic field effects and Landau solitons in strained photonic graphene. , 2011, , .		0
59	Negative Thermal Expansion in Single-Component Systems with Isotropic Interactions. <i>Journal of Physical Chemistry A</i> , 2007, 111, 12816-12821.	2.5	24
60	Optimized Interactions for Targeted Self-Assembly: Application to a Honeycomb Lattice. <i>Physical Review Letters</i> , 2005, 95, 228301.	7.8	121