

# Daniel Leykam

## List of Publications by Year in descending order

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47  
papers

3,307  
citations

257450

24  
h-index

223800

46  
g-index

47  
all docs

47  
docs citations

47  
times ranked

2210  
citing authors

#	ARTICLE	IF	CITATIONS
1	Edge Modes, Degeneracies, and Topological Numbers in Non-Hermitian Systems. Physical Review Letters, 2017, 118, 040401.	7.8	565
2	Nonlinear topological photonics. Applied Physics Reviews, 2020, 7, .	11.3	344
3	Artificial flat band systems: from lattice models to experiments. Advances in Physics: X, 2018, 3, 1473052.	4.1	315
4	Edge Solitons in Nonlinear-Photonic Topological Insulators. Physical Review Letters, 2016, 117, 143901.	7.8	234
5	Detangling flat bands into Fano lattices. Europhysics Letters, 2014, 105, 30001.	2.0	165
6	Third-Harmonic Generation in Photonic Topological Metasurfaces. Physical Review Letters, 2019, 123, 103901.	7.8	144
7	Anomalous Topological Phases and Unpaired Dirac Cones in Photonic Floquet Topological Insulators. Physical Review Letters, 2016, 117, 013902.	7.8	121
8	Perspective: Photonic flatbands. APL Photonics, 2018, 3, 070901.	5.7	116
9	Topological non-Hermitian origin of surface Maxwell waves. Nature Communications, 2019, 10, 580.	12.8	98
10	Unconventional Flatband Line States in Photonic Lieb Lattices. Physical Review Letters, 2018, 121, 263902.	7.8	96
11	Localization of weakly disordered flat band states. European Physical Journal B, 2017, 90, 1.	1.5	93
12	Optical isolation with nonlinear topological photonics. New Journal of Physics, 2017, 19, 095002.	2.9	93
13	$\langle \text{mml:math xmlns:mml= "http://www.w3.org/1998/Math/MathML" } \rangle \langle \text{mml:mi mathvariant="script" } \rangle \text{PT} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ phase transitions of edge states at $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" } \rangle \langle \text{mml:mi mathvariant="script" } \rangle \text{PT} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ symmetric interfaces in non-Hermitian topological insulators. Physical Review B, 2018, 98, .	3.2	83
14	Nontrivial coupling of light into a defect: the interplay of nonlinearity and topology. Light: Science and Applications, 2020, 9, 147.	16.6	74
15	Reconfigurable Topological Phases in Next-Nearest-Neighbor Coupled Resonator Lattices. Physical Review Letters, 2018, 121, 023901.	7.8	73
16	Flat bands in lattices with non-Hermitian coupling. Physical Review B, 2017, 96, .	3.2	69
17	Photonic Anomalous Quantum Hall Effect. Physical Review Letters, 2019, 123, 043201.	7.8	61
18	Topological Edge States and Gap Solitons in the Nonlinear Dirac Model. Laser and Photonics Reviews, 2019, 13, 1900223.	8.7	56

#	ARTICLE	IF	CITATIONS
19	Photonic flat-band lattices and unconventional light localization. <i>Nanophotonics</i> , 2020, 9, 1161-1176.	6.0	56
20	Direct Observation of Flatband Loop States Arising from Nontrivial Real-Space Topology. <i>Physical Review Letters</i> , 2020, 124, 183901.	7.8	45
21	Topological phases in ring resonators: recent progress and future prospects. <i>Nanophotonics</i> , 2020, 9, 4473-4487.	6.0	41
22	Anomalous Single-Mode Lasing Induced by Nonlinearity and the Non-Hermitian Skin Effect. <i>Physical Review Letters</i> , 2022, 129, .	7.8	35
23	Observation of Valley Landau-Zener-Bloch Oscillations and Pseudospin Imbalance in Photonic Graphene. <i>Physical Review Letters</i> , 2018, 121, 033904.	7.8	26
24	Nonlinear symmetry breaking of Aharonov-Bohm cages. <i>Physical Review A</i> , 2019, 99, .	2.5	25
25	Probing bulk topological invariants using leaky photonic lattices. <i>Nature Physics</i> , 2021, 17, 632-638.	16.7	25
26	Valley Vortex States and Degeneracy Lifting via Photonic Higher-Band Excitation. <i>Physical Review Letters</i> , 2019, 122, 123903.	7.8	24
27	Flatband Line States in Photonic Superlattice Honeycomb Lattices. <i>Advanced Optical Materials</i> , 2020, 8, 1902174.	7.3	24
28	Topological photonic crystal fibers and ring resonators. <i>Optics Letters</i> , 2020, 45, 1415.	3.3	23
29	Universal momentum-to-real-space mapping of topological singularities. <i>Nature Communications</i> , 2020, 11, 1586.	12.8	20
30	Nonreciprocity in synthetic photonic materials with nonlinearity. <i>MRS Bulletin</i> , 2018, 43, 443-451.	3.5	19
31	Conical intersections for light and matter waves. <i>Advances in Physics: X</i> , 2016, 1, 101-113.	4.1	17
32	Probing Band Topology Using Modulational Instability. <i>Physical Review Letters</i> , 2021, 126, 073901.	7.8	17
33	Disorder-Robust Entanglement Transport. <i>Physical Review Letters</i> , 2019, 122, 066601.	7.8	13
34	Edge modes in two-dimensional electromagnetic slab waveguides: Analogs of acoustic plasmons. <i>Physical Review B</i> , 2020, 102, .	3.2	13
35	Influence of different disorder types on Aharonov-Bohm caging in the diamond chain. <i>Physical Review A</i> , 2020, 101, .	2.5	12
36	Gradient catastrophe of nonlinear photonic valley-Hall edge pulses. <i>Physical Review Research</i> , 2021, 3, .	3.6	12

#	ARTICLE	IF	CITATIONS
37	Acoustic vortex beams in synthetic magnetic fields. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 104001.	1.8	11
38	Photonic band structure design using persistent homology. <i>APL Photonics</i> , 2021, 6, 030802.	5.7	11
39	Parity anomaly laser. <i>Optics Letters</i> , 2019, 44, 1120.	3.3	7
40	Special Issue on "Topological photonics and beyond: novel concepts and recent advances". <i>Light: Science and Applications</i> , 2020, 9, 203.	16.6	6
41	Helical transport in coupled resonator waveguides. <i>Physical Review B</i> , 2019, 99, .	3.2	5
42	Edge mode bifurcations of two-dimensional topological lasers. <i>Optics Letters</i> , 2020, 45, 3673.	3.3	5
43	Disorder-protected quantum state transmission through helical coupled-resonator waveguides. <i>Photonics Research</i> , 2020, 8, B15.	7.0	5
44	Nonlinear Bloch wave dynamics in photonic Aharonov-Bohm cages. <i>APL Photonics</i> , 2021, 6, .	5.7	4
45	Nonlinear signatures of Floquet band topology. <i>Physical Review B</i> , 2022, 105, .	3.2	4
46	Quantum transient heat transport in the hyperparametric oscillator. <i>Physical Review A</i> , 2021, 104, .	2.5	1
47	Nonlinear compact localized modes in flux-dressed octagonal-diamond lattice. <i>Physica Scripta</i> , 2022, 97, 030006.	2.5	1