Ling Lu

List of Publications by Year
in descending order

58 papers	12,022 citations	126907 33 h-index	168389 53 g-index
58 all docs	58 docs citations	58 times ranked	6817 citing authors

#	Article	IF	Citations
1	Topological photonics. Nature Photonics, 2014, 8, 821-829.	31.4	2,492
2	Topological photonics. Reviews of Modern Physics, 2019, 91, .	45.6	2,190
3	Experimental observation of Weyl points. Science, 2015, 349, 622-624.	12.6	833
4	Topological Phononic Crystals with One-Way Elastic Edge Waves. Physical Review Letters, 2015, 115, 104302.	7.8	643
5	Spawning rings of exceptional points out of Dirac cones. Nature, 2015, 525, 354-358.	27.8	610
6	Topological Nature of Optical Bound States in the Continuum. Physical Review Letters, 2014, 113, 257401.	7.8	595
7	Weyl points and line nodes in gyroid photonic crystals. Nature Photonics, 2013, 7, 294-299.	31.4	560
8	Topological states in photonic systems. Nature Physics, 2016, 12, 626-629.	16.7	271
9	Ideal Weyl points and helicoid surface states in artificial photonic crystal structures. Science, 2018, 359, 1013-1016.	12.6	250
10	Symmetry-protected topological photonic crystal in three dimensions. Nature Physics, 2016, 12, 337-340.	16.7	245
11	Double-Weyl Phonons in Transition-Metal Monosilicides. Physical Review Letters, 2018, 120, 016401.	7.8	240
12	Nodal-link semimetals. Physical Review B, 2017, 96, .	3.2	232
13	Multimode One-Way Waveguides of Large Chern Numbers. Physical Review Letters, 2014, 113, 113904.	7.8	228
14	Experimental Observation of Large Chern Numbers in Photonic Crystals. Physical Review Letters, 2015, 115, 253901.	7.8	228
15	Probing topological protection using a designer surface plasmon structure. Nature Communications, 2016, 7, 11619.	12.8	210
16	Nano-kirigami with giant optical chirality. Science Advances, 2018, 4, eaat4436.	10.3	203
17	Observation of Polarization Vortices in Momentum Space. Physical Review Letters, 2018, 120, 186103.	7.8	168
18	Nodal-knot semimetals. Physical Review B, 2017, 96, .	3.2	158

#	Article	IF	Citations
19	Topological semimetals with helicoid surfaceÂstates. Nature Physics, 2016, 12, 936-941.	16.7	149
20	Weyl Points in Three-Dimensional Optical Lattices: Synthetic Magnetic Monopoles in Momentum Space. Physical Review Letters, 2015, 114, 225301.	7.8	148
21	Experimental discovery of nodal chains. Nature Physics, 2018, 14, 461-464.	16.7	141
22	Infrared Topological Plasmons in Graphene. Physical Review Letters, 2017, 118, 245301.	7.8	132
23	Topological magnetoplasmon. Nature Communications, 2016, 7, 13486.	12.8	108
24	Revealing the missing dimension at an exceptional point. Nature Physics, 2020, 16, 571-578.	16.7	100
25	Dirac-vortex topological cavities. Nature Nanotechnology, 2020, 15, 1012-1018.	31.5	95
26	Topological one-way fiber of second Chern number. Nature Communications, 2018, 9, 5384.	12.8	82
27	Topological-cavity surface-emitting laser. Nature Photonics, 2022, 16, 279-283.	31.4	68
28	Larger-area single-mode photonic crystal surface-emitting lasers enabled by an accidental Dirac point. Optics Letters, 2014, 39, 2072.	3.3	63
29	Electronic correlations and flattened band in magnetic Weyl semimetal candidate Co3Sn2S2. Nature Communications, 2020, 11, 3985.	12.8	51
30	Space group theory and Fourier space analysis of two-dimensional photonic crystal waveguides. Physical Review B, 2010, 81, .	3.2	48
31	Crystallographic splitting theorem for band representations and fragile topological photonic crystals. Physical Review B, 2020, 102, .	3.2	39
32	Waveguiding at the Edge of a Three-Dimensional Photonic Crystal. Physical Review Letters, 2012, 108, 243901.	7.8	36
33	Discovering Topological Surface States of Dirac Points. Physical Review Letters, 2020, 124, 104301.	7.8	35
34	Electromagnetic scattering laws in Weyl systems. Nature Communications, 2017, 8, 1388.	12.8	34
35	Dirac-vortex topological photonic crystal fibre. Light: Science and Applications, 2020, 9, 202.	16.6	33
36	Space Group Theory of Photonic Bands. Physical Review Letters, 2018, 121, 263903.	7.8	31

#	Article	IF	Citations
37	Observing vortex polarization singularities at optical band degeneracies. Physical Review B, 2019, 99, .	3.2	31
38	Weyl points in a magnetic tetrahedral photonic crystal. Optics Express, 2017, 25, 15772.	3.4	27
39	Experimental characterization of the optical loss of sapphire-bonded photonic crystal laser cavities. IEEE Photonics Technology Letters, 2006, 18, 535-537.	2.5	24
40	Invisible metallic mesh. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2568-2572.	7.1	24
41	Modal Analysis of Photonic Crystal Double-Heterostructure Laser Cavities. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 892-900.	2.9	20
42	Topology on a breadboard. Nature Physics, 2018, 14, 875-877.	16.7	19
43	Spectral properties of photonic crystal double heterostructure resonant cavities. Optics Express, 2008, 16, 9391.	3.4	18
44	Double-heterostructure photonic crystal lasers with lower thresholds and higher slope efficiencies obtained by quantum well intermixing. Optics Express, 2008, 16, 17342.	3.4	18
45	Diagnosis scheme for topological degeneracies crossing high-symmetry lines. Physical Review Research, 2020, 2, .	3.6	18
46	120Î¼W peak output power from edge-emitting photonic crystal double-heterostructure nanocavity lasers. Applied Physics Letters, 2009, 94, 111101.	3.3	17
47	Generalized Gilatâ€“Raubenheimer method for density-of-states calculation in photonic crystals. Journal of Optics (United Kingdom), 2018, 20, 044005.	2.2	14
48	Three-dimensional photonic crystals by large-area membrane stacking. Optics Letters, 2012, 37, 4726.	3.3	10
49	Topological defects in Floquet systems: Anomalous chiral modes and topological invariant. Physical Review B, 2017, 95, .	3.2	10
50	High-peak-power efficient edge-emitting photonic crystal nanocavity lasers. Optics Letters, 2009, 34, 2646.	3.3	8
51	Gain Compression and Thermal Analysis of a Sapphire-Bonded Photonic Crystal Microcavity Laser. IEEE Photonics Technology Letters, 2009, 21, 1166-1168.	2.5	8
52	Theoretical analysis of glide-Z₂ magnetic topological photonic crystals. Optics Express, 2021, 29, 31164.	3.4	4
53	High-throughput search for lossless metals. Physical Review Materials, 2022, 6, .	2.4	2
54	Microdisk laser linewidth and spontaneous emission rate enhancement. , 2008, , .		1

#	Article	IF	Citations
55	Room Temperature InGaSb Quantum Well Microcylinder Lasers at 2 Î¼m Grown Monolithically on a Silicon Substrate. , 2006, , .		0
56	Electromagnetic modes localized at the edges of a three-dimensional photonic crystal. , 2012, , .		0
57	eLighting up the future. Light: Science and Applications, 2021, 10, 118.	16.6	0
58	Surface density of states on semi-infinite topological photonic and acoustic crystals. Physical Review B, 2021, 104, .	3.2	0