

Luqi Yuan

List of Publications by Year in descending order

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Version: 2024-02-01

102
papers

2,809
citations

159585

30
h-index

189892

50
g-index

105
all docs

105
docs citations

105
times ranked

1743
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthetic dimension in photonics. <i>Optica</i> , 2018, 5, 1396.	9.3	276
2	Photonic gauge potential in a system with a synthetic frequency dimension. <i>Optics Letters</i> , 2016, 41, 741.	3.3	195
3	A single photonic cavity with two independent physical synthetic dimensions. <i>Science</i> , 2020, 367, 59-64.	12.6	175
4	Photonic Weyl point in a two-dimensional resonator lattice with a synthetic frequency dimension. <i>Nature Communications</i> , 2016, 7, 13731.	12.8	170
5	Effects of non-Hermitian perturbations on Weyl Hamiltonians with arbitrary topological charges. <i>Physical Review B</i> , 2018, 97, .	3.2	114
6	Experimental band structure spectroscopy along a synthetic dimension. <i>Nature Communications</i> , 2019, 10, 3122.	12.8	95
7	Bloch oscillation and unidirectional translation of frequency in a dynamically modulated ring resonator. <i>Optica</i> , 2016, 3, 1014.	9.3	79
8	The effect of surface roughness and wettability of nanostructured TiO ₂ film on TCA-8113 epithelial-like cells. <i>Surface and Coatings Technology</i> , 2006, 200, 6155-6160.	4.8	70
9	Coherence brightened laser source for atmospheric remote sensing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 15185-15190.	7.1	65
10	Synthetic space with arbitrary dimensions in a few rings undergoing dynamic modulation. <i>Physical Review B</i> , 2018, 97, .	3.2	59
11	Topological dissipation in a time-multiplexed photonic resonator network. <i>Nature Physics</i> , 2022, 18, 442-449.	16.7	58
12	Roadmap on topological photonics. <i>JPhys Photonics</i> , 2022, 4, 032501.	4.6	56
13	Lasing without population inversion in N ₂ ⁺ . <i>APL Photonics</i> , 2019, 4, .	5.7	55
14	Photonic Gauge Potential in One Cavity with Synthetic Frequency and Orbital Angular Momentum Dimensions. <i>Physical Review Letters</i> , 2019, 122, 083903.	7.8	54
15	Direct Visualizing the Spin Hall Effect of Light via Ultrahigh-Order Modes. <i>Physical Review Letters</i> , 2020, 124, 053902.	7.8	54
16	Achieving nonreciprocal unidirectional single-photon quantum transport using the photonic Aharonov-Bohm effect. <i>Optics Letters</i> , 2015, 40, 5140.	3.3	46
17	Topologically protected quantum entanglement emitters. <i>Nature Photonics</i> , 2022, 16, 248-257.	31.4	45
18	Meron Spin Textures in Momentum Space. <i>Physical Review Letters</i> , 2020, 124, 106103.	7.8	44

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19	Synthetic frequency dimensions in dynamically modulated ring resonators. <i>APL Photonics</i> , 2021, 6, .	5.7	44
20	Plasma-controlled nanocrystallinity and phase composition of TiO ₂ : A smart way to enhance biomimetic response. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 81A, 453-464.	4.0	42
21	Quantum Amplification by Superradiant Emission of Radiation. <i>Physical Review X</i> , 2013, 3, .	8.9	42
22	Topological phases in ring resonators: recent progress and future prospects. <i>Nanophotonics</i> , 2020, 9, 4473-4487.	6.0	41
23	Topological phase transitions in superradiance lattices. <i>Optica</i> , 2015, 2, 712.	9.3	38
24	Flat-Band Localization in Creutz Superradiance Lattices. <i>Physical Review Letters</i> , 2021, 126, 103601.	7.8	38
25	Three-Dimensional Dynamic Localization of Light from a Time-Dependent Effective Gauge Field for Photons. <i>Physical Review Letters</i> , 2015, 114, 243901.	7.8	36
26	Theoretical analysis of the coherence-brightened laser in air. <i>Physical Review A</i> , 2013, 87, .	2.5	35
27	Effective electric-field force for a photon in a synthetic frequency lattice created in a waveguide modulator. <i>Physical Review A</i> , 2018, 97, .	2.5	34
28	Coherent modulation of superradiance from nitrogen ions pumped with femtosecond pulses. <i>Optics Express</i> , 2019, 27, 12638.	3.4	33
29	Low temperature deposition of nanocrystalline TiO ₂ films: enhancement of nanocrystal formation by energetic particle bombardment. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 219-226.	2.8	31
30	Dynamic band structure measurement in the synthetic space. <i>Science Advances</i> , 2021, 7, .	10.3	31
31	Transient lasing without inversion. <i>New Journal of Physics</i> , 2013, 15, 053044.	2.9	29
32	Topologically nontrivial Floquet band structure in a system undergoing photonic transitions in the ultrastrong-coupling regime. <i>Physical Review A</i> , 2015, 92, .	2.5	26
33	Recent Advances in Air Lasing: A Perspective from Quantum Coherence. <i>Advanced Quantum Technologies</i> , 2019, 2, 1900080.	3.9	26
34	Two-Photon Infrared Resonance Can Enhance Coherent Raman Scattering. <i>Physical Review Letters</i> , 2018, 120, 063602.	7.8	25
35	Coherent Raman Umklappscattering. <i>Laser Physics Letters</i> , 2011, 8, 736-741.	1.4	24
36	Observing Superradiant Decay of Excited-State Helium Atoms Inside Helium Plasma. <i>Physical Review Letters</i> , 2012, 109, 093604.	7.8	21

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37	Transient lasing without inversion via forbidden and virtual transitions. <i>Physical Review A</i> , 2014, 89, .	2.5	21
38	Creating boundaries along a synthetic frequency dimension. <i>Nature Communications</i> , 2022, 13, .	12.8	21
39	Pulse shortening in an actively mode-locked laser with parity-time symmetry. <i>APL Photonics</i> , 2018, 3, 086103.	5.7	20
40	Creating locally interacting Hamiltonians in the synthetic frequency dimension for photons. <i>Photonics Research</i> , 2020, 8, B8.	7.0	20
41	Topological holographic quench dynamics in a synthetic frequency dimension. <i>Light: Science and Applications</i> , 2021, 10, 209.	16.6	20
42	Multiuser Time-Energy Entanglement Swapping Based on Dense Wavelength Division Multiplexed and Sum-Frequency Generation. <i>Physical Review Letters</i> , 2019, 123, 250505.	7.8	18
43	Bound state in a giant atom-modulated resonators system. <i>Npj Quantum Information</i> , 2022, 8, .	6.7	18
44	Time reversal of a wave packet with temporal modulation of gauge potential. <i>Physical Review B</i> , 2016, 94, .	3.2	17
45	Isolated Photonic Flatband with the Effective Magnetic Flux in a Synthetic Space Including the Frequency Dimension. <i>Laser and Photonics Reviews</i> , 2020, 14, 2000041.	8.7	17
46	Coherent control of the multiple wavelength lasing of $\{m N\}_2^+$: coherence transfer and beyond. <i>Optica</i> , 2021, 8, 668.	9.3	17
47	Asymmetric Topological Valley Edge States on Siliconâ€œOnâ€œInsulator Platform. <i>Laser and Photonics Reviews</i> , 2022, 16, .	8.7	17
48	Nanosphere monolayer-templated, ion-assisted nanofeature etching in dielectric materials: a numerical simulation of nanoscale ion flux topography. <i>Nanotechnology</i> , 2008, 19, 155304.	2.6	16
49	Ultraviolet supercontinuum generation driven by ionic coherence in a strong laser field. <i>Nature Communications</i> , 2022, 13, .	12.8	14
50	Tunable super- and subradiant boundary states in one-dimensional atomic arrays. <i>Communications Physics</i> , 2019, 2, .	5.3	13
51	Experimental Demonstration of Dynamical Input Isolation in Nonadiabatically Modulated Photonic Cavities. <i>ACS Photonics</i> , 2019, 6, 162-169.	6.6	13
52	ONE-WAY TOPOLOGICAL STATES ALONG VAGUE BOUNDARIES IN SYNTHETIC FREQUENCY DIMENSIONS INCLUDING GROUP VELOCITY DISPERSION (INVITED). <i>Progress in Electromagnetics Research</i> , 2020, 169, 33-43.	4.4	13
53	Background-free single-beam coherent Raman spectroscopy assisted by air lasing. <i>Optics Letters</i> , 2022, 47, 481.	3.3	13
54	Templated iâ€œPVD of Metallic Nanodot Arrays. <i>Plasma Processes and Polymers</i> , 2007, 4, 612-620.	3.0	12

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55	Femtosecond wave-packet dynamics in cesium dimers studied through controlled stimulated emission. <i>Physical Review A</i> , 2010, 81, .	2.5	12
56	Observing the transition from yoked superfluorescence to superradiance. <i>Optics Communications</i> , 2015, 351, 45-49.	2.1	12
57	Photon retention in coherently excited nitrogen ions. <i>Science Bulletin</i> , 2021, 66, 1511-1517.	9.0	12
58	Plasma-assisted coherent backscattering for standoff spectroscopy. <i>Optics Letters</i> , 2012, 37, 987.	3.3	11
59	Gain without population inversion in a yoked superfluorescence scheme. <i>Physical Review A</i> , 2012, 85, .	2.5	10
60	Synthetic gauge potential and effective magnetic field in a Raman medium undergoing molecular modulation. <i>Physical Review A</i> , 2017, 95, .	2.5	10
61	Directional coherent light via intensity-induced sideband emission. <i>Light: Science and Applications</i> , 2017, 6, e16262-e16262.	16.6	10
62	Frequency Manipulations in Single-Photon Quantum Transport under Ultrastrong Driving. <i>ACS Photonics</i> , 2020, 7, 2010-2017.	6.6	10
63	Phonon-induced anomalous gauge potential for photonic isolation in frequency space. <i>Optica</i> , 2021, 8, 1448.	9.3	10
64	Temporal modulation brings metamaterials into new era. <i>Light: Science and Applications</i> , 2022, 11, .	16.6	10
65	Eigenstates Transition without Undergoing an Adiabatic Process. <i>Physical Review Letters</i> , 2019, 122, 050404.	7.8	9
66	Arbitrary synthetic dimensions via multiboson dynamics on a one-dimensional lattice. <i>Physical Review Research</i> , 2021, 3, .	3.6	9
67	Observation of flat-band and band transition in the synthetic space. <i>Advanced Photonics</i> , 2022, 4, .	11.8	9
68	Single-Photon Transport in a Topological Waveguide from a Dynamically Modulated Photonic System. <i>Physical Review Applied</i> , 2020, 14, .	3.8	8
69	Single Pulse Manipulations in Synthetic Time-Frequency Space. <i>Laser and Photonics Reviews</i> , 2022, 16, 2100340.	8.7	8
70	Creating anyons from photons using a nonlinear resonator lattice subject to dynamic modulation. <i>Physical Review A</i> , 2017, 96, .	2.5	7
71	Truncation-dependent $\langle \text{PT} \rangle$ phase transition for the edge states of a two-dimensional non-Hermitian system. <i>Physical Review B</i> , 2022, 105, .	3.2	6
72	Sideband generation of transient lasing without population inversion. <i>Physical Review A</i> , 2014, 90, .	2.5	5

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73	Femtosecond laser-induced quantum-beat superfluorescence of atomic oxygen in a flame. <i>Physical Review A</i> , 2021, 104, .	2.5	5
74	Ion current distribution during deposition of dielectric material using an insulating porous alumina template. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 7766-7770.	2.8	4
75	Evidence of Anderson localization effects in random Raman lasing. , 2016, , .		4
76	Simulating graphene dynamics in synthetic space with photonic rings. <i>Communications Physics</i> , 2021, 4, .	5.3	4
77	Ultralow-power local laser control of the dimer density in alkali-metal vapors through photodesorption. <i>Applied Physics Letters</i> , 2012, 101, 091107.	3.3	3
78	Quantum correlations and violation of the Bell inequality induced by an external field in a two-photon radiative cascade. <i>Physical Review A</i> , 2011, 83, .	2.5	2
79	Tracking molecular wave packets in cesium dimers by coherent Raman scattering. <i>Physical Review A</i> , 2012, 86, .	2.5	2
80	Understanding the Seeding Pulse-Induced Optical Amplification in $N_2 +$ Pumped by 800 NM Femtosecond Laser Pulses. <i>Photonics</i> , 2020, 7, 99.	2.0	2
81	Technologically feasible quasi-edge states and topological Bloch oscillation in the synthetic space. <i>Optics Express</i> , 2022, 30, 24924.	3.4	2
82	All-Optical Control of the Photonic Hall Lattice in a Pumped Waveguide Array. <i>Physical Review Applied</i> , 2022, 17, .	3.8	2
83	Analytical study of the spiky feature in a two-photon driven lossy ladder system. <i>Laser Physics</i> , 2019, 29, 105203.	1.2	1
84	Achieving the gauge potential for the photon in a synthetic space. , 2016, , .		1
85	Effects of non-Hermitian perturbations on Weyl Hamiltonians with arbitrary topological charges. , 2018, , .		1
86	Laser without population inversion of nitrogen ions pumped by femtosecond pulses. , 2019, , .		1
87	Recent advances on non-reciprocal light manipulation from dynamic modulation. , 2015, , .		0
88	Using time-dependent effective gauge field for photons to achieve dynamic localization of light. , 2015, , .		0
89	Frequency-axis light transport and topological effects in dynamic photonic structures. <i>Proceedings of SPIE</i> , 2017, , .	0.8	0
90	Quantum superradiant amplification in rubidium vapors: gain assessment. <i>Proceedings of SPIE</i> , 2017, , .	0.8	0

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91	Hidden equivalence in the collective emission from a dilute atomic cloud. <i>Physical Review A</i> , 2019, 99, .	2.5	0
92	Photonic Meron Spin Texture in Momentum Space. , 2021, , .		0
93	Experimental Demonstration of Dynamic Band Structure Measurement along a Synthetic Dimension. , 2021, , .		0
94	Control of photons with the effective magnetic flux in synthetic dimensions with rings including GVD. , 2021, , .		0
95	Photonic Weyl Point in a 2D Resonator Array with a Synthetic Frequency Dimension. , 2017, , .		0
96	Achieving the gauge potential in a synthetic space using coherent Raman sideband generation. , 2017, , .		0
97	Achieving Topological Photonics in a Synthetic Space with Dynamically Modulated Ring Resonators. , 2018, , .		0
98	Experimental Band Structure Spectroscopy along the Synthetic Dimension. , 2019, , .		0
99	Pulse shortening in two coupled rings under amplitude modulations with parity-time symmetry. , 2019, , .		0
100	Effective magnetic flux induced localization effect on the Lieb-type lattice in synthetic space. , 2020, , .		0
101	Topological Behaviors in Networks of Time-Multiplexed Optical Resonators. , 2020, , .		0
102	Constructing an effective Hamiltonian with local interaction in the synthetic space for photons. , 2020, , .		0