

Alberto Amo

List of Publications by Year in descending order

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122
papers

9,567
citations

71102

41
h-index

36028

97
g-index

125
all docs

125
docs citations

125
times ranked

5431
citing authors

#	ARTICLE	IF	CITATIONS
1	Roadmap on topological photonics. JPhys Photonics, 2022, 4, 032501.	4.6	56
2	Experimental observation of edge states in SSH-Stub photonic lattices. Physical Review Research, 2022, 4, .	3.6	19
3	Gap solitons in a one-dimensional driven-dissipative topological lattice. Nature Physics, 2022, 18, 678-684.	16.7	40
4	Few-photon all-optical phase rotation in a quantum-well micropillar cavity. Nature Photonics, 2022, 16, 566-569.	31.4	13
5	Microcavity polaritons for topological photonics [Invited]. Optical Materials Express, 2021, 11, 1119.	3.0	43
6	Measuring Topological Invariants in a Polaritonic Analog of Graphene. Physical Review Letters, 2021, 126, 127403.	7.8	13
7	Photonic Topological Materials feature issue: publisher's note. Optical Materials Express, 2021, 11, 1410.	3.0	0
8	Photonic Topological Materials: feature introduction. Optical Materials Express, 2021, 11, 1592.	3.0	3
9	Semi-Dirac transport and localization in polaritonic graphene. , 2021, , .		0
10	Single-shot measurement of the photonic band structure in a fiber-based Floquet-Bloch lattice. Communications Physics, 2021, 4, .	5.3	5
11	Chiral emission induced by optical Zeeman effect in polariton micropillars. Physical Review Research, 2021, 3, .	3.6	9
12	Semi-Dirac Transport and Anisotropic Localization in Polariton Honeycomb Lattices. Physical Review Letters, 2020, 125, 186601.	7.8	29
13	Topological Swing of Bloch Oscillations in Quantum Walks. Physical Review Letters, 2020, 125, 186804.	7.8	14
14	Polariton fluids for analogue gravity physics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190225.	3.4	21
15	Direct observation of photonic Landau levels and helical edge states in strained honeycomb lattices. Light: Science and Applications, 2020, 9, 144.	16.6	38
16	Microcavity Polaritons for Quantum Simulation. Advanced Quantum Technologies, 2020, 3, 2000052.	3.9	25
17	Parametric instability in coupled nonlinear microcavities. Physical Review A, 2020, 102, .	2.5	15
18	Multi-orbital tight binding model for cavity-polariton lattices. Journal of Physics Condensed Matter, 2020, 32, 315402.	1.8	13

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19	Emergence of criticality through a cascade of delocalization transitions in quasiperiodic chains. Nature Physics, 2020, 16, 832-836.	16.7	64
20	Optical circuits cross dimensions. Nature Photonics, 2020, 14, 68-69.	31.4	0
21	Active topological photonics. Nanophotonics, 2020, 9, 547-567.	6.0	170
22	Polaritonic XY-Ising machine. Nanophotonics, 2020, 9, 4127-4138.	6.0	38
23	Type-III and Tilted Dirac Cones Emerging from Flat Bands in Photonic Orbital Graphene. Physical Review X, 2019, 9, .	8.9	72
24	Dispersion relation of the collective excitations in a resonantly driven polariton fluid. Nature Communications, 2019, 10, 3869.	12.8	36
25	Nonlinear Polariton Fluids in a Flatband Reveal Discrete Gap Solitons. Physical Review Letters, 2019, 123, 113901.	7.8	39
26	Nonreciprocity and zero reflection in nonlinear cavities with tailored loss. Physical Review A, 2019, 99, .	2.5	14
27	Topological photonics. Reviews of Modern Physics, 2019, 91, .	45.6	2,190
28	Optically controlling the emission chirality of microlasers. Nature Photonics, 2019, 13, 283-288.	31.4	109
29	Emergence of quantum correlations from interacting fibre-cavity polaritons. Nature Materials, 2019, 18, 213-218.	27.5	128
30	Orbital angular momentum bistability in a microlaser. Optics Letters, 2019, 44, 4531.	3.3	7
31	When quantum optics meets topology. Science, 2018, 359, 638-639.	12.6	7
32	Nonlinear Polariton Localization in Strongly Coupled Driven-Dissipative Microcavities. ACS Photonics, 2018, 5, 95-99.	6.6	7
33	Unstable and stable regimes of polariton condensation. Optica, 2018, 5, 1163.	9.3	47
34	Lasing in optically induced gap states in photonic graphene. , 2018, 5, .		6
35	Orbital Edge States in a Photonic Honeycomb Lattice. Physical Review Letters, 2017, 118, 107403.	7.8	79
36	Lasing in topological edge states of a one-dimensional lattice. Nature Photonics, 2017, 11, 651-656.	31.4	625

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37	Measuring topological invariants from generalized edge states in polaritonic quasicrystals. Physical Review B, 2017, 95, .	3.2	70
38	Klein tunneling in driven-dissipative photonic graphene. Physical Review A, 2017, 96, .	2.5	21
39	Probing a Dissipative Phase Transition via Dynamical Optical Hysteresis. Physical Review Letters, 2017, 118, 247402.	7.8	142
40	Surface-enhanced gallium arsenide photonic resonator with quality factor of 6×10^6 . Optica, 2017, 4, 218.	9.3	78
41	Polariton lasing in the edge states of an orbital SSH chain. , 2017, , .		0
42	Femtosecond terahertz dynamics of cooperative transitions: from charge density waves to polariton condensates. Proceedings of SPIE, 2016, , .	0.8	0
43	Exciton-polaritons in lattices: A non-linear photonic simulator. Comptes Rendus Physique, 2016, 17, 934-945.	0.9	85
44	Foreword “Strong light-matter coupling in solid-state systems: A historical perspective. Comptes Rendus Physique, 2016, 17, 805-807.	0.9	1
45	Stochastic precession of the polarization in a polariton laser. Physical Review B, 2016, 93, .	3.2	13
46	Bosonic Condensation and Disorder-Induced Localization in a Flat Band. Physical Review Letters, 2016, 116, 066402.	7.8	246
47	Phase-Controlled Bistability of a Dark Soliton Train in a Polariton Fluid. Physical Review Letters, 2016, 117, 217401.	7.8	39
48	Theoretical study of stimulated and spontaneous Hawking effects from an acoustic black hole in a hydrodynamically flowing fluid of light. Physical Review B, 2016, 94, .	3.2	9
49	Interaction-induced hopping phase in driven-dissipative coupled photonic microcavities. Nature Communications, 2016, 7, 11887.	12.8	74
50	Fluides quantiques de lumière dans les microcavités à semi-conducteurs. , 2016, , 4-9.	0.1	1
51	Nonequilibrium polariton condensate in a magnetic field. Physical Review B, 2015, 91, .	3.2	29
52	Comment on “Linear Wave Dynamics Explains Observations Attributed to Dark Solitons in a Polariton Quantum Fluid” Physical Review Letters, 2015, 115, 089401.	7.8	8
53	Realization of an all optical exciton-polariton router. Applied Physics Letters, 2015, 107, .	3.3	66
54	Acoustic Black Hole in a Stationary Hydrodynamic Flow of Microcavity Polaritons. Physical Review Letters, 2015, 114, 036402.	7.8	114

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55	Spin-Orbit Coupling for Photons and Polaritons in Microstructures. Physical Review X, 2015, 5, .	8.9	131
56	Microcavity design for low threshold polariton condensation with ultrashort optical pulse excitation. Journal of Applied Physics, 2015, 117, 205702.	2.5	1
57	Edge states in polariton honeycomb lattices. 2D Materials, 2015, 2, 034012.	4.4	58
58	Cavity Polaritons: Crossroad Between Non-Linear Optics and Atomic Condensates. , 2014, , 207-239.		0
59	Two-photon injection of polaritons in semiconductor microstructures. Optics Letters, 2014, 39, 307.	3.3	10
60	Quantum confinement of zero-dimensional hybrid organic-inorganic polaritons at room temperature. Applied Physics Letters, 2014, 104, .	3.3	15
61	All-optical phase modulation in a cavity-polariton Mach-Zehnder interferometer. Nature Communications, 2014, 5, 3278.	12.8	123
62	Polariton-generated intensity squeezing in semiconductor micropillars. Nature Communications, 2014, 5, 3260.	12.8	71
63	Direct Observation of Dirac Cones and a Flatband in a Honeycomb Lattice for Polaritons. Physical Review Letters, 2014, 112, 116402.	7.8	352
64	Revealing the dark side of a bright exciton-polariton condensate. Nature Communications, 2014, 5, 4648.	12.8	51
65	Fractal Energy Spectrum of a Polariton Gas in a Fibonacci Quasiperiodic Potential. Physical Review Letters, 2014, 112, 146404.	7.8	104
66	Polariton condensation in solitonic gap states in a one-dimensional periodic potential. Nature Communications, 2013, 4, 1749.	12.8	155
67	Macroscopic quantum self-trapping and Josephson oscillations of exciton polaritons. Nature Physics, 2013, 9, 275-279.	16.7	244
68	Realization of a Double-Barrier Resonant Tunneling Diode for Cavity Polaritons. Physical Review Letters, 2013, 110, 236601.	7.8	118
69	Quantum coherence in polariton fluids. , 2013, , .		0
70	Time-resolved Terahertz Mapping of a Cold Exciton-Polariton Gas. , 2013, , .		0
71	Polariton Quantum Fluids and Devices. Springer Series in Solid-state Sciences, 2013, , 127-155.	0.3	0
72	Quantum coherence in polariton fluids. , 2013, , .		0

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73	Observation of Oblique Half-Solitons in polariton Superfluids. , 2012, , .		0
74	COHERENT INJECTION OF MICROCAVITIES POLARITON THROUGH TWO PHOTON EXCITATION. , 2012, , .		0
75	Propagation and Amplification Dynamics of 1D Polariton Condensates. Physical Review Letters, 2012, 109, 216404.	7.8	106
76	Half-solitons in a polariton quantum fluid behave like magnetic monopoles. Nature Physics, 2012, 8, 724-728.	16.7	131
77	Backscattering Suppression in Supersonic 1D Polariton Condensates. Physical Review Letters, 2012, 108, 036405.	7.8	18
78	Polariton Condensation in Photonic Molecules. Physical Review Letters, 2012, 108, 126403.	7.8	124
79	Macroscopic Self-trapping and Non-linear Oscillations in Coupled Polariton Condensates. , 2012, , .		0
80	Superfluidity and Hydrodynamic Topological Excitations of Microcavity Polaritons. Springer Series in Solid-state Sciences, 2012, , 215-232.	0.3	0
81	Polariton Superfluids Reveal Quantum Hydrodynamic Solitons. Science, 2011, 332, 1167-1170.	12.6	379
82	All-optical control of the quantum flow of a polariton condensate. Nature Photonics, 2011, 5, 610-614.	31.4	143
83	Quantum information with semiconductor nanostructures. , 2011, , .		0
84	Buildup and decay of the coherence in a polariton condensate. , 2011, , .		0
85	Motion of Spin Polariton Bullets in Semiconductor Microcavities. Physical Review Letters, 2011, 107, 146402.	7.8	51
86	Superfluidity in polariton condensates. Journal of Physics: Conference Series, 2010, 210, 012060.	0.4	2
87	Exciton-formation time obtained from the spin splitting dynamics. Journal of Physics: Conference Series, 2010, 210, 012002.	0.4	1
88	Effects of disorder on the polariton condensates in CdTe microcavities. , 2010, , .		0
89	Evaluation of oscillator strength in colloidal CdSe/CdS dotsâ€inâ€rods. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2688-2691.	0.8	8
90	Excitonâ€polariton spin switches. Nature Photonics, 2010, 4, 361-366.	31.4	337

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91	Observation of a Long-Lived Polariton State in Semiconductor Microcavities. , 2010, , .		0
92	Light engineering of the polariton landscape in semiconductor microcavities. Physical Review B, 2010, 82, .	3.2	92
93	Spin Rings in Bistable Planar Semiconductor Microcavities. Physical Review Letters, 2010, 105, 216403.	7.8	54
94	Picosecond optical spectroscopy of a single negatively charged self-assembled InAs quantum dot. Applied Physics Letters, 2010, 97, 113110.	3.3	13
95	Quantum fluid properties of polaritons in semiconductor microcavities. Journal of Modern Optics, 2010, 57, 1900-1907.	1.3	2
96	Collective dynamics of excitons and polaritons in semiconductor nanostructures. Semiconductor Science and Technology, 2010, 25, 043001.	2.0	16
97	Polariton condensates put in motion. Nanotechnology, 2010, 21, 134025.	2.6	6
98	Exciton-polariton condensation in a natural two-dimensional trap. Physical Review B, 2009, 80, .	3.2	36
99	Interplay between weak localization of exciton-polaritons and the optical spin Hall effect. Physical Review B, 2009, 79, .	3.2	12
100	Anisotropic optical spin Hall effect in semiconductor microcavities. Physical Review B, 2009, 80, .	3.2	37
101	Dynamics of the Formation and Decay of Coherence in a Polariton Condensate. Physical Review Letters, 2009, 103, 096404.	7.8	25
102	Collective fluid dynamics of a polariton condensate in a semiconductor microcavity. Nature, 2009, 457, 291-295.	27.8	494
103	Superfluidity of polaritons in semiconductor microcavities. Nature Physics, 2009, 5, 805-810.	16.7	795
104	Observation of the zero-magnetic-field exciton spin splitting in high quality bulk GaAs and AlGaAs. Applied Physics Letters, 2009, 95, 182107.	3.3	7
105	Reversal of spin polarization direction in excitonic photoluminescence of AlGaAs. Europhysics Letters, 2009, 88, 17001.	2.0	3
106	Observation of Long-Lived Polariton States in Semiconductor Microcavities across the Parametric Threshold. Physical Review Letters, 2009, 102, 056402.	7.8	32
107	Polariton relaxation after resonant pumping at the upper polariton branch under doublyâ€resonant Raman scattering conditions. Physica Status Solidi (B): Basic Research, 2008, 245, 1081-1084.	1.5	0
108	Ultrafast tailoring of the exciton distribution in quantum wells. Physica Status Solidi (B): Basic Research, 2008, 245, 1064-1066.	1.5	1

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109	Spatial distribution of strong and weak coupled exciton-polaritons in semiconductor microcavities. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2049-2052.	2.7	1
110	Optically induced ultrafast quenching of the semiconductor quantum well luminescence. Applied Physics Letters, 2008, 92, 061912.	3.3	3
111	Polariton and spin dynamics in semiconductor microcavities under non-resonant excitation. Journal of Physics Condensed Matter, 2007, 19, 295204.	1.8	12
112	Transition from the strong- to the weak-coupling regime in semiconductor microcavities: Polarization dependence. Applied Physics Letters, 2007, 90, 201905.	3.3	20
113	Photoluminescence dynamics in GaAs along an optically induced Mott transition. Journal of Applied Physics, 2007, 101, 081717.	2.5	20
114	Pauli blockade of the electron spin flip in bulk GaAs. Physical Review B, 2007, 75, .	3.2	12
115	Dynamics of polaritons resonantly created at the upper polariton branch. Superlattices and Microstructures, 2007, 41, 328-332.	3.1	7
116	Optical anisotropy and pinning of the linear polarization of light in semiconductor microcavities. Solid State Communications, 2006, 139, 511-515.	1.9	77
117	Interplay of exciton and electron-hole plasma recombination on the photoluminescence dynamics in bulk GaAs. Physical Review B, 2006, 73, .	3.2	40
118	Angular switching of the linear polarization of the emission in InGaAs microcavities. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 3868-3871.	0.8	5
119	Striking dynamics of II-VI microcavity polaritons after linearly polarized excitation. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 3880-3883.	0.8	6
120	Polarization dynamics of microcavity polaritons: Three excitation regimes. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 357-361.	1.8	3
121	Influence of trapping on the exciton dynamics of Al _x Ga _{1-x} As films. Applied Physics Letters, 2005, 86, 111906.	3.3	5
122	Dynamics of Polariton Emission in the Linear Regime. Acta Physica Polonica A, 2004, 106, 443-450.	0.5	2