Elena A Ostrovskaya

List of Publications by Year
in descending order

126	5,868	66343	76900
papers	citations	42 h-index	74 g-index

131	131	131	3151
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bogoliubov excitations of a polariton condensate in dynamical equilibrium with an incoherent reservoir. Physical Review B, 2022, 105, .	3.2	8
2	Ultrathin Ga₂O₃ Glass: A Largeâ€Scale Passivation and Protection Material for Monolayer WS₂. Advanced Materials, 2021, 33, e2005732.	21.0	49
3	Low-Energy Collective Oscillations and Bogoliubov Sound in an Exciton-Polariton Condensate. Physical Review Letters, 2021, 126, 075301.	7.8	17
4	Micro-mechanical assembly and characterization of high-quality Fabryâ€“PÃ©rot microcavities for the integration of two-dimensional materials. Applied Physics Letters, 2021, 118, .	3.3	18
5	Coherent dynamics of Floquet-Bloch states in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">W</mml:mi><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> reveals fast adiabatic switching. Physical Review B, 2021, 104, .	3.2	9
6	Topological phase transition in an all-optical exciton-polariton lattice. Optica, 2021, 8, 1084.	9.3	25
7	Influence of direct deposition of dielectric materials on the optical response of monolayer WS2. Applied Physics Letters, 2021, 119, .	3.3	9
8	Motional narrowing, ballistic transport, and trapping of room-temperature exciton polaritons in an atomically-thin semiconductor. Nature Communications, 2021, 12, 5366.	12.8	35
9	Collective Excitations of Exciton-Polariton Condensates in a Synthetic Gauge Field. Physical Review Letters, 2021, 127, 185301.	7.8	11
10	Direct measurement of a non-Hermitian topological invariant in a hybrid light-matter system. Science Advances, 2021, 7, eabj8905.	10.3	48
11	Observation of gain-pinned dissipative solitons in a microcavity laser. APL Photonics, 2020, 5, 086103.	5.7	6
12	Nonreciprocal Transport of Exciton Polaritons in a Non-Hermitian Chain. Physical Review Letters, 2020, 125, 123902.	7.8	40
13	Observation of quantum depletion in a non-equilibrium excitonâ€“polariton condensate. Nature Communications, 2020, 11, 429.	12.8	44
14	Effect of optically induced potential on the energy of trapped exciton polaritons below the condensation threshold. Physical Review B, 2019, 100, .	3.2	15
15	Direct measurement of polariton-polariton interaction strength in the Thomas-Fermi regime of exciton-polariton condensation. Physical Review B, 2019, 100, .	3.2	65
16	Nonresonant spin selection methods and polarization control in exciton-polariton condensates. Physical Review B, 2019, 99, .	3.2	19
17	Chiral Modes at Exceptional Points in Exciton-Polariton Quantum Fluids. Physical Review Letters, 2018, 120, 065301.	7.8	59
18	Controlled Ordering of Topological Charges in an Exciton-Polariton Chain. Physical Review Letters, 2018, 121, 225302.	7.8	28

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19	Single-shot condensation of exciton polaritons and the hole burning effect. Nature Communications, 2018, 9, 2944.	12.8	40
20	Observation of bosonic condensation in a hybrid monolayer MoSe2-GaAs microcavity. Nature Communications, 2018, 9, 3286.	12.8	49
21	Bogoliubov-Cherenkov radiation in an atom laser. Physical Review A, 2018, 97, .	2.5	9
22	Exciton-polariton trapping and potential landscape engineering. Reports on Progress in Physics, 2017, 80, 016503.	20.1	157
23	Talbot Effect for Exciton Polaritons. Physical Review Letters, 2016, 117, 097403.	7.8	29
24	Visualising Berry phase and diabolical points in a quantum exciton-polariton billiard. Scientific Reports, 2016, 6, 37653.	3.3	9
25	Spontaneous formation and synchronization of vortex modes in optically induced traps for exciton-polariton condensates. Physical Review B, 2016, 94, .	3.2	18
26	Collective state transitions of exciton-polaritons loaded into a periodic potential. Physical Review B, 2016, 93, .	3.2	45
27	Probing quantum chaos. Nature Materials, 2016, 15, 702-703.	27.5	8
28	Talbot effect for exciton-polaritons. , 2016, , .		0
29	Incoherent excitation and switching of spin states in exciton-polariton condensates. Physical Review B, 2015, 92, .	3.2	17
30	Instability-induced formation and nonequilibrium dynamics of phase defects in polariton condensates. Physical Review B, 2015, 91, .	3.2	51
31	Vortex excitation in a stirred toroidal Bose-Einstein condensate. Physical Review A, 2015, 91, .	2.5	20
32	A polariton condensate in a photonic crystal potential landscape. New Journal of Physics, 2015, 17, 023001.	2.9	58
33	Stability of persistent currents in open dissipative quantum fluids. Physical Review B, 2015, 91, .	3.2	12
34	Observation of non-Hermitian degeneracies in a chaotic exciton-polariton billiard. Nature, 2015, 526, 554-558.	27.8	422
35	Polariton Condensates in Complex Potential Landscapes. , 2015, , .		0
36	Stability of vortices and spiraling waves in non-equilibrium polariton condensates. , 2015, , .		0

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37	Stability and spatial coherence of nonresonantly pumped exciton-polariton condensates. Physical Review B, 2014, 90, .	3.2	44
38	Creation of Orbital Angular Momentum States with Chiral Polaritonic Lenses. Physical Review Letters, 2014, 113, 200404.	7.8	89
39	Dynamics and stability of dark solitons in exciton-polariton condensates. Physical Review B, 2014, 89, .	3.2	102
40	Bistability in microcavities with incoherent optical or electrical excitation. Physical Review B, 2014, 90, .	3.2	21
41	Motion of patterns in polariton quantum fluids with spin-orbit interaction. Physical Review B, 2014, 89, .	3.2	15
42	Optical tweezers for vortex rings in Bose-Einstein condensates. Physical Review A, 2013, 88, .	2.5	21
43	Self-Localization of Polariton Condensates in Periodic Potentials. Physical Review Letters, 2013, 110, 170407.	7.8	63
44	Dynamics of matter-wave solitons in harmonic traps with flashing optical lattices. Physical Review A, 2012, 85, .	2.5	11
45	Azimuthal vortex clusters in Bose-Einstein condensates. Physical Review A, 2012, 85, .	2.5	11
46	Dissipative solitons and vortices in polariton Bose-Einstein condensates. Physical Review A, 2012, 86, .	2.5	70
47	Matter waves with orbital angular momentum: Collapse suppression and bistability. , 2011, , .		0
48	Spin-to-orbital angular momentum conversion in focusing, scattering, and imaging systems. Optics Express, 2011, 19, 26132.	3.4	210
49	A three-site Boseâ€“Fermi ring with a few atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 135301.	1.5	1
50	Suppression of collapse for matter waves with orbital angular momentum. Journal of Optics (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.2	22
51	Angular momentum of light revisited: spin-orbit interactions in free space. , 2011, , .		0
52	Collapse suppression in Bose-Einstein condensate clouds with orbital angular momentum. , 2011, , .		0
53	Angular momenta and spin-orbit interaction of nonparaxial light in free space. Physical Review A, 2010, 82, .	2.5	232
54	Controlled Transport of Matter Waves in Two-Dimensional Optical Lattices. Physical Review Letters, 2010, 105, 090401.	7.8	13

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55	Optical Nanoprobing via Spin-Orbit Interaction of Light. Physical Review Letters, 2010, 104, 253601.	7.8	204
56	Optical nanoprobing via spin-orbit interaction of light. , 2010, , .		0
57	Vector azimuthons in two-component Bose-Einstein condensates. Physical Review A, 2009, 80, .	2.5	16
58	Macroscopic quantum self-trapping of an ultracold Boseâ€“Fermi mixture in a double-well potential. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 215308.	1.5	12
59	Ratchet-induced matterâ€“wave transport and soliton collisions in Boseâ€“Einstein condensates. Physica D: Nonlinear Phenomena, 2009, 238, 1338-1344.	2.8	18
60	Matter waves in anharmonic periodic potentials. Physical Review A, 2008, 77, .	2.5	13
61	Dynamics of Matter-Wave Solitons in a Ratchet Potential. Physical Review Letters, 2008, 101, 150403.	7.8	55
62	Nonlinear Localization of BECs in Optical Lattices. , 2008, , 99-130.		0
63	Nonlinearity-assisted quantum tunnelling in a matter-wave interferometer. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 4235-4244.	1.5	20
64	Multicomponent gap solitons in spinor Bose-Einstein condensates. Physical Review A, 2007, 75, .	2.5	77
65	Phase sensitivity of a nonlinear matter-wave interferometer. , 2007, , .		0
66	Self-Trapped Nonlinear Matter Waves in Periodic Potentials. Physical Review Letters, 2006, 96, 040401.	7.8	107
67	Matter-Wave Solitons In Optical Superlattices. AIP Conference Proceedings, 2006, , .	0.4	1
68	Instability-induced localization of matter waves in moving optical lattices. Physical Review A, 2006, 73, .	2.5	8
69	Generation and detection of matter-wave gap vortices in optical lattices. Physical Review A, 2006, 74, .	2.5	20
70	Three-dimensional matter-wave vortices in optical lattices. Physical Review A, 2005, 72, .	2.5	17
71	Coupled-mode theory for spatial gap solitons in optically induced lattices. Physical Review E, 2005, 71, 056616.	2.1	24
72	Quantum-noise properties of matter-wave gap solitons. Physical Review A, 2005, 72, .	2.5	14

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73	Quantum computation with diatomic bits in optical lattices. Physical Review A, 2005, 72, .	2.5	37
74	Optically-induced lattices as tunable nonlinear photonic crystals. , 2005, , .		0
75	Dispersion control for matter waves and gap solitons in optical superlattices. Physical Review A, 2005, 71, .	2.5	51
76	Interaction of matter-wave gap solitons in optical lattices. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, 423-427.	1.4	21
77	Localization of Two-Component Bose-Einstein Condensates in Optical Lattices. Physical Review Letters, 2004, 92, 180405.	7.8	33
78	Matter-wave dark solitons in optical lattices. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, S309-S317.	1.4	31
79	Matter-Wave Gap Vortices in Optical Lattices. Physical Review Letters, 2004, 93, 160405.	7.8	95
80	Observation of Discrete Vortex Solitons in Optically Induced Photonic Lattices. Physical Review Letters, 2004, 92, 123903.	7.8	418
81	Photonic crystals for matter waves: Bose-Einstein condensates in optical lattices. Optics Express, 2004, 12, 19.	3.4	81
82	Second-harmonic generation in vortex-induced waveguides. Optics Letters, 2004, 29, 593.	3.3	15
83	Dynamic band-gap solitons in nonlinear optically-induced lattices. , 2004, , .		1
84	Observation of discrete vortex solitons. , 2004, , .		0
85	Second-harmonic generation in waveguides induced by optical vortices. , 2004, , .		0
86	Matter-Wave Gap Solitons in Atomic Band-Gap Structures. Physical Review Letters, 2003, 90, 160407.	7.8	173
87	Spatial solitons in optically induced gratings. Optics Letters, 2003, 28, 710.	3.3	352
88	Composite Band-Gap Solitons in Nonlinear Optically Induced Lattices. Physical Review Letters, 2003, 91, 153902.	7.8	48
89	Bose-Einstein condensates in optical lattices: Band-gap structure and solitons. Physical Review A, 2003, 67, .	2.5	235
90	Vortices in atomic-molecular Bose-Einstein condensates. Journal of Optics B: Quantum and Semiclassical Optics, 2002, 4, S33-S38.	1.4	15

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91	Multipole composite spatial solitons: theory and experiment. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 586.	2.1	54
92	Multichannel soliton transmission and pulse shepherding in bit-parallel-wavelength optical fiber links. IEEE Journal of Selected Topics in Quantum Electronics, 2002, 8, 591-596.	2.9	11
93	Multipole spatial vector solitons. Optics Letters, 2001, 26, 435.	3.3	43
94	Dipole-mode vector solitons in anisotropic nonlocal self-focusing media. Optics Letters, 2001, 26, 1185.	3.3	36
95	Optical Vortices Folding and Twisting Waves of Light. Optics and Photonics News, 2001, 12, 24.	0.5	53
96	Vector incoherent solitions. , 2001, 4271, 89.		0
97	Multi-soliton energy transport in anharmonic lattices. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 282, 157-162.	2.1	18
98	Atom-laser dynamics. Physical Review A, 2001, 64, .	2.5	18
99	Modulational instability of spinor condensates. Physical Review A, 2001, 64, .	2.5	75
100	Existence and stability of coupled atomic-molecular Bose-Einstein condensates. Physical Review A, 2001, 65, .	2.5	42
101	Observation of Dipole-Mode Vector Solitons. , 2001, , 229-234.		0
102	Multipole optical vector solitons. , 2001, , .		0
103	A Model of a Pumped Continuous Atom Laser. , 2001, , 50-59.		0
104	Multihump vector optical spatial solitons. , 2000, 3928, 299.		0
105	<title>Multihump vector optical spatial solitons</title>. , 2000, 3927, 117.		0
106	<title>Multiwavelength and multicolor temporal and spatial optical solitons</title>. , 2000, 3927, 9.		0
107	Multi-component optical solitary waves. Physica A: Statistical Mechanics and Its Applications, 2000, 288, 152-173.	2.6	10
108	Dipole-Mode Vector Solitons. Physical Review Letters, 2000, 85, 82-85.	7.8	120

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109	Observation of bound states of interacting vector solitons. Optics Letters, 2000, 25, 417.	3.3	34
110	Vector solitons in (2 + 1) dimensions. Optics Letters, 2000, 25, 643.	3.3	44
111	Linear and nonlinear waveguides induced by optical vortex solitons. Optics Letters, 2000, 25, 660.	3.3	47
112	Light Molecules: Dipole-Mode Vector Solitons. Optics and Photonics News, 2000, 11, 36.	0.5	3
113	Coupled-mode theory for Bose-Einstein condensates. Physical Review A, 2000, 61, .	2.5	160
114	Observation of Dipole-Mode Vector Solitons. Physical Review Letters, 2000, 85, 1424-1427.	7.8	125
115	Generation of Spin-Wave Envelope Dark Solitons. Physical Review Letters, 1999, 82, 2583-2586.	7.8	37
116	Stability of Multihump Optical Solitons. Physical Review Letters, 1999, 83, 296-299.	7.8	124
117	Multi-hump optical solitons in a saturable medium. Journal of Optics B: Quantum and Semiclassical Optics, 1999, 1, 77-83.	1.4	24
118	Interaction between vector solitons and solitonic gluons. Optics Letters, 1999, 24, 327.	3.3	69
119	Do stable multi-hump solitons exist?. , 1999, , .		0
120	Nonlinear theory of soliton-induced waveguides. Optics Letters, 1998, 23, 1268.	3.3	31
121	Mixed-mode spatial solitons in semiconductor waveguides. Journal of the Optical Society of America B: Optical Physics, 1997, 14, 880.	2.1	30
122	Size effects in optical second-harmonic generation by metallic nanocrystals and semiconductor quantum dots: The role of quantum chaotic dynamics. Physical Review B, 1995, 51, 17591-17599.	3.2	52
123	Localization of light in optically-induced gratings. , 0, , .		0
124	Three-dimensional matter-wave vortices in optical lattices. , 0, , .		0
125	Bose-Einstein condensates in optical lattices: band-gap structure, solitons, and vortices. , 0, , .		0
126	New gap states of matter waves in optical lattices. , 0, , .		0