

# Ivan G Savenko

## List of Publications by Year in descending order

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Version: 2024-02-01

71  
papers

1,152  
citations

471477

17  
h-index

395678

33  
g-index

71  
all docs

71  
docs citations

71  
times ranked

1142  
citing authors

#	ARTICLE	IF	CITATIONS
1	An electrically pumped polariton laser. <i>Nature</i> , 2013, 497, 348-352.	27.8	420
2	Nonlinear Terahertz Emission in Semiconductor Microcavities. <i>Physical Review Letters</i> , 2011, 107, 027401.	7.8	47
3	Collective state transitions of exciton-polaritons loaded into a periodic potential. <i>Physical Review B</i> , 2016, 93, .	3.2	45
4	Spatial Coherence Properties of One Dimensional Exciton-Polariton Condensates. <i>Physical Review Letters</i> , 2014, 113, 203902.	7.8	39
5	Asymmetric quantum dot in a microcavity as a nonlinear optical element. <i>Physical Review A</i> , 2012, 85, .	2.5	35
6	An exciton-polariton mediated all-optical router. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	35
7	Valley Acoustoelectric Effect. <i>Physical Review Letters</i> , 2019, 122, 256801.	7.8	31
8	Stochastic Gross-Pitaevskii Equation for the Dynamical Thermalization of Bose-Einstein Condensates. <i>Physical Review Letters</i> , 2013, 110, 127402.	7.8	28
9	Coherent Topological Polariton Laser. <i>ACS Photonics</i> , 2021, 8, 1377-1384.	6.6	28
10	Evolution of Temporal Coherence in Confined Exciton-Polariton Condensates. <i>Physical Review Letters</i> , 2018, 120, 017401.	7.8	25
11	Lasing in Bose-Fermi mixtures. <i>Scientific Reports</i> , 2016, 6, 20091.	3.3	21
12	Density-matrix approach for an interacting polariton system. <i>Physical Review B</i> , 2011, 83, .	3.2	20
13	Dissipative soliton protocols in semiconductor microcavities at finite temperatures. <i>Physical Review B</i> , 2015, 92, .	3.2	19
14	Fluctuations of work in nearly adiabatically driven open quantum systems. <i>Physical Review E</i> , 2015, 91, 022126.	2.1	19
15	Magnetoplasmon Fano resonance in Bose-Fermi mixtures. <i>Physical Review B</i> , 2016, 94, .	3.2	19
16	Optical Transistor for Amplification of Radiation in a Broadband Terahertz Domain. <i>Physical Review Letters</i> , 2020, 124, 087701.	7.8	19
17	Spin multistability in dissipative polariton channels. <i>Physical Review B</i> , 2012, 86, .	3.2	18
18	Photon drag of a Bose-Einstein condensate. <i>Physical Review B</i> , 2018, 98, .	3.2	16

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19	Bistability phenomena in one-dimensional polariton wires. <i>Physical Review B</i> , 2011, 84, .	3.2	15
20	Valley Hall transport of photon-dressed quasiparticles in two-dimensional Dirac semiconductors. <i>New Journal of Physics</i> , 2018, 20, 083007.	2.9	15
21	Multivalley engineering in semiconductor microcavities. <i>Scientific Reports</i> , 2017, 7, 45243.	3.3	13
22	Excitation of localized condensates in the flat band of the exciton-polariton Lieb lattice. <i>Physical Review B</i> , 2018, 98, .	3.2	13
23	Shedding light on topological superconductors. <i>Physical Review B</i> , 2018, 98, .	3.2	13
24	Bose-Einstein condensate-mediated superconductivity in graphene. <i>2D Materials</i> , 2021, 8, 031004.	4.4	13
25	Exciton-Polariton Topological Insulator with an Array of Magnetic Dots. <i>Physical Review Applied</i> , 2019, 12, .	3.8	11
26	Unconventional Bloch-Grüneisen Scattering in Hybrid Bose-Fermi Systems. <i>Physical Review Letters</i> , 2019, 123, 095301.	7.8	10
27	Paramagnetic resonance in spin-polarized disordered Bose-Einstein condensates. <i>Scientific Reports</i> , 2017, 7, 2076.	3.3	9
28	Bogolon-mediated electron capture by impurities in hybrid Bose-Fermi systems. <i>Physical Review B</i> , 2018, 97, .	3.2	9
29	Bogolon-mediated electron scattering in graphene in hybrid Bose-Fermi systems. <i>Physical Review B</i> , 2019, 99, .	3.2	9
30	Proposal for Plasmon Spectroscopy of Fluctuations in Low-Dimensional Superconductors. <i>Physical Review Letters</i> , 2020, 124, 207002.	7.8	9
31	Acoustoelectric effect in two-dimensional Dirac materials exposed to Rayleigh surface acoustic waves. <i>Physical Review B</i> , 2020, 102, .	3.2	9
32	Photogalvanic currents in dynamically gapped transition metal dichalcogenide monolayers. <i>Physical Review B</i> , 2019, 99, .	3.2	8
33	Theory of BCS-like bogolon-mediated superconductivity in transition metal dichalcogenides. <i>New Journal of Physics</i> , 2021, 23, 023023.	2.9	8
34	Nonequilibrium theory of the photoinduced valley Hall effect. <i>Physical Review B</i> , 2021, 103, .	3.2	8
35	Nonlinear effects in multi-photon polaritonics. <i>Optics Express</i> , 2013, 21, 15183.	3.4	7
36	Quantum treatment of the Bose-Einstein condensation in nonequilibrium systems. <i>Physical Review B</i> , 2015, 92, .	3.2	7

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37	Parity measurement of remote qubits using dispersive coupling and photodetection. <i>Physical Review A</i> , 2015, 92, .	2.5	7
38	Proposal for frequency-selective photodetector based on the resonant photon drag effect in a condensate of indirect excitons. <i>Physical Review B</i> , 2018, 98, .	3.2	7
39	Coulomb drag of excitons in Bose-Fermi systems. <i>Physical Review B</i> , 2019, 99, .	3.2	7
40	Acoustomagnetolectric effect in two-dimensional materials: Geometric resonances and Weiss oscillations. <i>Physical Review B</i> , 2020, 102, .	3.2	7
41	Resonant Photon Drag of Dipolar Excitons. <i>JETP Letters</i> , 2018, 107, 737-741.	1.4	6
42	Quantum anomalous valley Hall effect for bosons. <i>Physical Review B</i> , 2019, 100, .	3.2	6
43	Coherent photogalvanic effect in fluctuating superconductors. <i>Physical Review B</i> , 2021, 103, .	3.2	6
44	Ultrafast excitonâ€“polariton scattering towards the Dirac points. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 105301.	1.8	5
45	Kinetic Monte Carlo approach to nonequilibrium bosonic systems. <i>Physical Review B</i> , 2017, 96, .	3.2	4
46	Interplay between collective modes in hybrid electron-gasâ€“superconductor structures. <i>Physical Review B</i> , 2020, 101, .	3.2	3
47	Optical valleytronics of impurity states in two-dimensional Dirac materials. <i>Physical Review B</i> , 2021, 103, .	3.2	3
48	Strong-coupling theory of condensate-mediated superconductivity in two-dimensional materials. <i>Physical Review Research</i> , 2021, 3, .	3.6	3
49	Spatial coherence of polaritons in a 1D channel. <i>Journal of Experimental and Theoretical Physics</i> , 2013, 116, 32-38.	0.9	2
50	Refractive index of laser active region based on InAs/InGaAs quantum dots. <i>Journal of Nanophotonics</i> , 2013, 7, 073087.	1.0	2
51	Exciton-polariton lasers in Magnetic Fields. , 2013, , .		2
52	Exciton-polariton laser diodes. , 2014, , .		2
53	Operation of a semiconductor microcavity under electric excitation. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	2
54	Phase selection and intermittency of exciton-polariton condensates in one-dimensional periodic structures. <i>Physical Review A</i> , 2019, 100, .	2.5	2

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55	Giant Rabi splitting in a metallic clusterâ€‘cavity system. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 045101.	1.5	1
56	Spectral selection of spatial modes in edgeâ€‘emitting lasers. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 1292-1295.	0.8	1
57	An electrically pumped polariton laser. , 2015, , .		1
58	Photoinduced electric currents in Bose-Einstein condensates. Physical Review B, 2018, 98, .	3.2	1
59	Polariton condensation in photonic crystals with high molecular orientation. New Journal of Physics, 2018, 20, 013037.	2.9	1
60	An electrically driven polariton laser. , 2013, , .		1
61	FULL DENSITY MATRIX FORMALISM APPLIED TO 1D EXCITON-POLARITON TRANSPORT. , 2011, , .		0
62	Spin transport in an Aharonov-Bohm ring with exchange interaction. Physical Review B, 2013, 88, .	3.2	0
63	Electrically driven exciton-polariton lasers. , 2013, , .		0
64	Rashba plasmon polaritons in semiconductor heterostructures. Applied Physics Letters, 2013, 102, 101105.	3.3	0
65	Semiconductor Exciton-Polariton Lasers. , 2014, , .		0
66	Two-dimensional vortex dissipative optical solitons in polariton laser with saturable absorber. , 2016, , .		0
67	Impurity-band optical transitions in two-dimensional Dirac materials under strain-induced synthetic magnetic field. Physical Review B, 2021, 103, .	3.2	0
68	Magnetoplasmon resonance in two-dimensional fluctuating superconductors. New Journal of Physics, 2021, 23, 093009.	2.9	0
69	OPTICAL PROPERTIES OF QUANTUM DOTS IN A TILTED WAVE LASER. , 2011, , .		0
70	An Electrically Driven Polariton Laser. , 2013, , .		0
71	Partial quantum revivals of localized condensates in distorted lattices. Optics Letters, 2020, 45, 1571.	3.3	0