Ivan G Savenko

List of Publications by Citations

59 papers	855 citations	14 h-index	28 g-index
71 ext. papers	1,041 ext. citations	4.5 avg, IF	4.37 L-index

#	Paper	IF	Citations
59	An electrically pumped polariton laser. *Nature*, **2013**, 497, 348-52	50.4	325
58	Nonlinear terahertz emission in semiconductor microcavities. *Physical Review Letters*, **2011**, 107, 027401	7.4	41
57	Collective state transitions of exciton-polaritons loaded into a periodic potential. *Physical Review B*, **2016**, 93,	3.3	39
56	Spatial coherence properties of one dimensional exciton-polariton condensates. *Physical Review Letters*, **2014**, 113, 203902	7.4	34
55	An exciton-polariton mediated all-optical router. *Applied Physics Letters*, **2013**, 103, 201105	3.4	32
54	Stochastic Gross-Pitaevskii equation for the dynamical thermalization of Bose-Einstein condensates. *Physical Review Letters*, **2013**, 110, 127402	7.4	25
53	Asymmetric quantum dot in a microcavity as a nonlinear optical element. *Physical Review A*, **2012**, 85,	2.6	24
52	Lasing in Bose-Fermi mixtures. *Scientific Reports*, **2016**, 6, 20091	4.9	20
51	Spin multistability in dissipative polariton channels. *Physical Review B*, **2012**, 86,	3.3	18
50	Magnetoplasmon Fano resonance in Bose-Fermi mixtures. *Physical Review B*, **2016**, 94,	3.3	18
49	Evolution of Temporal Coherence in Confined Exciton-Polariton Condensates. *Physical Review Letters*, **2018**, 120, 017401	7.4	17
48	Dissipative soliton protocols in semiconductor microcavities at finite temperatures. *Physical Review B*, **2015**, 92,	3.3	17
47	Fluctuations of work in nearly adiabatically driven open quantum systems. *Physical Review E*, **2015**, 91, 022126	2.4	17
46	Density-matrix approach for an interacting polariton system. *Physical Review B*, **2011**, 83,	3.3	17
45	Valley Acoustoelectric Effect. *Physical Review Letters*, **2019**, 122, 256801	7.4	14
44	Bistability phenomena in one-dimensional polariton wires. *Physical Review B*, **2011**, 84,	3.3	13
43	Photon drag of a Bose-Einstein condensate. *Physical Review B*, **2018**, 98,	3.3	12

42	Shedding light on topological superconductors. *Physical Review B*, **2018**, 98,	3.3	11
41	Multivalley engineering in semiconductor microcavities. *Scientific Reports*, **2017**, 7, 45243	4.9	10
40	Optical Transistor for Amplification of Radiation in a Broadband Terahertz Domain. *Physical Review Letters*, **2020**, 124, 087701	7.4	10
39	Coherent Topological Polariton Laser. *ACS Photonics*, **2021**, 8, 1377-1384	6.3	9
38	Paramagnetic resonance in spin-polarized disordered Bose-Einstein condensates. *Scientific Reports*, **2017**, 7, 2076	4.9	8
37	Excitation of localized condensates in the flat band of the exciton-polariton Lieb lattice. *Physical Review B*, **2018**, 98,	3.3	8
36	Bogolon-mediated electron capture by impurities in hybrid Bose-Fermi systems. *Physical Review B*, **2018**, 97,	3.3	7
35	Parity measurement of remote qubits using dispersive coupling and photodetection. *Physical Review A*, **2015**, 92,	2.6	7
34	Exciton-Polariton Topological Insulator with an Array of Magnetic Dots. *Physical Review Applied*, **2019**, 12,	4.3	7
33	Valley Hall transport of photon-dressed quasiparticles in two-dimensional Dirac semiconductors. *New Journal of Physics*, **2018**, 20, 083007	2.9	7
32	Unconventional Bloch-Grüneisen Scattering in Hybrid Bose-Fermi Systems. *Physical Review Letters*, **2019**, 123, 095301	7.4	6
31	Bogolon-mediated electron scattering in graphene in hybrid Bose-Fermi systems. *Physical Review B*, **2019**, 99,	3.3	6
30	Proposal for frequency-selective photodetector based on the resonant photon drag effect in a condensate of indirect excitons. *Physical Review B*, **2018**, 98,	3.3	6
29	Nonlinear effects in multi-photon polaritonics. *Optics Express*, **2013**, 21, 15183-94	3.3	6
28	Ultrafast exciton-polariton scattering towards the Dirac points. *Journal of Physics Condensed Matter* , **2016**, 28, 105301	1.8	5
27	Quantum treatment of the Bose-Einstein condensation in nonequilibrium systems. *Physical Review B*, **2015**, 92,	3.3	5
26	Resonant Photon Drag of Dipolar Excitons. *JETP Letters*, **2018**, 107, 737-741	1.2	5
25	Photogalvanic currents in dynamically gapped transition metal dichalcogenide monolayers. *Physical Review B*, **2019**, 99,	3.3	4

24	Proposal for Plasmon Spectroscopy of Fluctuations in Low-Dimensional Superconductors. *Physical Review Letters*, **2020**, 124, 207002	7.4	4
23	Quantum anomalous valley Hall effect for bosons. *Physical Review B*, **2019**, 100,	3.3	4
22	Bose–Einstein condensate-mediated superconductivity in graphene. *2D Materials*, **2021**, 8, 031004	5.9	4
21	Kinetic Monte Carlo approach to nonequilibrium bosonic systems. *Physical Review B*, **2017**, 96,	3.3	3
20	Theory of BCS-like bogolon-mediated superconductivity in transition metal dichalcogenides. *New Journal of Physics*, **2021**, 23, 023023	2.9	3
19	Interplay between collective modes in hybrid electron-gas–superconductor structures. *Physical Review B*, **2020**, 101,	3.3	2
18	Phase selection and intermittency of exciton-polariton condensates in one-dimensional periodic structures. *Physical Review A*, **2019**, 100,	2.6	2
17	Spatial coherence of polaritons in a 1D channel. *Journal of Experimental and Theoretical Physics*, **2013**, 116, 32-38	1	2
16	Refractive index of laser active region based on InAs/InGaAs quantum dots. *Journal of Nanophotonics*, **2013**, 7, 073087	1.1	2
15	Exciton-polariton laser diodes **2014**,		2
14	Exciton-polariton lasers in Magnetic Fields **2013**,		2
13	Acoustomagnetoelectric effect in two-dimensional materials: Geometric resonances and Weiss oscillations. *Physical Review B*, **2020**, 102,	3.3	2
12	Acoustoelectric effect in two-dimensional Dirac materials exposed to Rayleigh surface acoustic waves. *Physical Review B*, **2020**, 102,	3.3	2
11	Operation of a semiconductor microcavity under electric excitation. *Applied Physics Letters*, **2016**, 109, 061110	3.4	2
10	Coulomb drag of excitons in Bose-Fermi systems. *Physical Review B*, **2019**, 99,	3.3	1
9	An electrically pumped polariton laser **2015**,		1
8	Spectral selection of spatial modes in edge-emitting lasers. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 1292-1295		1
7	An electrically driven polariton laser **2013**,		1

6	Coherent photogalvanic effect in fluctuating superconductors. *Physical Review B*, **2021**, 103,	3.3	1
5	Polariton condensation in photonic crystals with high molecular orientation. *New Journal of Physics*, **2018**, 20, 013037	2.9	1
4	Strong-coupling theory of condensate-mediated superconductivity in two-dimensional materials. *Physical Review Research*, **2021**, 3,	3.9	1
3	Rashba plasmon polaritons in semiconductor heterostructures. *Applied Physics Letters*, **2013**, 102, 101105	3.4	
2	Partial quantum revivals of localized condensates in distorted lattices. *Optics Letters*, **2020**, 45, 1571-1574	3	
1	Magnetoplasmon resonance in two-dimensional fluctuating superconductors. *New Journal of Physics*, **2021**, 23, 093009	2.9	