Dmitry Krizhanovskii

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5476136/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Condensation of 2D exciton-polaritons in an open-access microcavity. Journal of Applied Physics, 2022, 131, 093101.	2.5	3
2	Optical analogue of Dresselhaus spin–orbit interaction in photonic graphene. Nature Photonics, 2021, 15, 193-196.	31.4	35
3	Ultrafast-nonlinear ultraviolet pulse modulation in an AlInGaN polariton waveguide operating up to room temperature. Nature Communications, 2021, 12, 3504.	12.8	15
4	Experimental observation of topological Z2 exciton-polaritons in transition metal dichalcogenide monolayers. Nature Communications, 2021, 12, 4425.	12.8	42
5	Exciton–polaritons in GaAs-based slab waveguide photonic crystals. Applied Physics Letters, 2021, 119, 181101.	3.3	3
6	Probing guided monolayer semiconductor polaritons below the light line. Journal of Physics: Conference Series, 2021, 2015, 012069.	0.4	0
7	Optical and magnetic control of orbital flat bands in a polariton Lieb lattice. Physical Review A, 2021, 104, .	2.5	1
8	Highly nonlinear trion-polaritons in a monolayer semiconductor. Nature Communications, 2020, 11, 3589.	12.8	83
9	Nonlinear Quantum Optics with Trion Polaritons in 2D Monolayers: Conventional and Unconventional Photon Blockade. Physical Review Letters, 2020, 125, 197402.	7.8	47
10	Electrically tunable trion-polaritons in MoSe2/hBN heterostructure integrated with a photonic crystal slab. AIP Conference Proceedings, 2020, , .	0.4	0
11	Measurement of local optomechanical properties of a direct bandgap 2D semiconductor. APL Materials, 2019, 7, .	5.1	18
12	Effect of photonic spin-orbit coupling on the topological edge modes of a Su-Schrieffer-Heeger chain. Physical Review B, 2019, 99, .	3.2	34
13	Exciton Polaritons in a Two-Dimensional Lieb Lattice with Spin-Orbit Coupling. Physical Review Letters, 2018, 120, 097401.	7.8	120
14	Transition from Propagating Polariton Solitons to a Standing Wave Condensate Induced by Interactions. Physical Review Letters, 2018, 120, 167402.	7.8	12
15	Quantum fluids of light in acoustic lattices. Journal Physics D: Applied Physics, 2018, 51, 033001.	2.8	4
16	Valley coherent exciton-polaritons in a monolayer semiconductor. Nature Communications, 2018, 9, 4797.	12.8	66
17	Formation of a macroscopically occupied polariton state in a tunable open-access microcavity under resonant excitation. Journal of Applied Physics, 2018, 124, .	2.5	3
18	Dark Solitons in High Velocity Waveguide Polariton Fluids. Physical Review Letters, 2017, 119, 097403.	7.8	61

DMITRY KRIZHANOVSKII

#	Article	IF	CITATIONS
19	Valley-addressable polaritons in atomically thin semiconductors. Nature Photonics, 2017, 11, 497-501.	31.4	169
20	Backward Cherenkov radiation emitted by polariton solitons in a microcavity wire. Nature Communications, 2017, 8, 1554.	12.8	23
21	Ultra-low-power polariton solitons in semiconductor waveguides and microcavities. , 2016, , .		0
22	Full Stark control of polariton states on a spin-orbit hypersphere. Physical Review B, 2016, 94, .	3.2	7
23	Spin Textures of Exciton-Polaritons in a Tunable Microcavity with Large TE-TM Splitting. Physical Review Letters, 2015, 115, 246401.	7.8	82
24	Tunable polaritonic molecules in an open microcavity system. Applied Physics Letters, 2015, 107, .	3.3	19
25	Spatial Patterns of Dissipative Polariton Solitons in Semiconductor Microcavities. Physical Review Letters, 2015, 115, 256401.	7.8	21
26	Design and characterization of high optical quality InGaAs/GaAs/AlGaAs-based polariton microcavities. Applied Physics Letters, 2015, 106, .	3.3	8
27	Effect of the modulation of the polariton potential on the polarization instability of stimulated polariton-polariton scattering in planar gaas microcavities. JETP Letters, 2015, 101, 334-340.	1.4	0
28	Ultra-low-power hybrid light–matter solitons. Nature Communications, 2015, 6, 8317.	12.8	74
29	Exciton–polaritons in van der Waals heterostructures embedded in tunable microcavities. Nature Communications, 2015, 6, 8579.	12.8	377
30	Strong exciton-photon coupling in open semiconductor microcavities. Applied Physics Letters, 2014, 104, .	3.3	48
31	Effects of Spin-Dependent Interactions on Polarization of Bright Polariton Solitons. Physical Review Letters, 2014, 112, 046403.	7.8	47
32	Exciton-Polariton Gap Solitons in Two-Dimensional Lattices. Physical Review Letters, 2013, 111, 146401.	7.8	124
33	Spontaneous vortices in optically shaped potential profiles in semiconductor microcavities. Physical Review B, 2013, 87, .	3.2	10
34	Exciton polaritons in semiconductor waveguides. Applied Physics Letters, 2013, 102, .	3.3	54
35	Effect of polariton-polariton interactions on the excitation spectrum of a nonequilibrium condensate in a periodic potential. Physical Review B, 2013, 87, .	3.2	29
36	Solitons in semiconductor microcavities. Nature Photonics, 2012, 6, 204-204.	31.4	3

#	Article	IF	CITATIONS
37	Observation of bright polariton solitons in a semiconductor microcavity. Nature Photonics, 2012, 6, 50-55.	31.4	237
38	Polariton Condensation In One- And Two- Dimensional Acoustic Lattices. AIP Conference Proceedings, 2011, , .	0.4	0
39	Suppression of Zeeman Splitting of the Energy Levels of Exciton-Polariton Condensates in Semiconductor Microcavities in an External Magnetic Field. Physical Review Letters, 2011, 106, 257401.	7.8	57
40	Persistent currents and quantized vortices in a polariton superfluid. Nature Physics, 2010, 6, 527-533.	16.7	282
41	Polariton Condensation in Dynamic Acoustic Lattices. Physical Review Letters, 2010, 105, 116402.	7.8	173
42	Polarization Bistability and Resultant Spin Rings in Semiconductor Microcavities. Physical Review Letters, 2010, 105, 216402.	7.8	77
43	Effect of Interactions on Vortices in a Nonequilibrium Polariton Condensate. Physical Review Letters, 2010, 104, 126402.	7.8	58
44	Coexisting nonequilibrium condensates with long-range spatial coherence in semiconductor microcavities. Physical Review B, 2009, 80, .	3.2	67
45	Collective fluid dynamics of a polariton condensate in a semiconductor microcavity. Nature, 2009, 457, 291-295.	27.8	494
46	Electroluminescence emission from polariton states in GaAs-based semiconductor microcavities. Applied Physics Letters, 2008, 92, .	3.3	66
47	Self-organization of multiple polariton-polariton scattering in semiconductor microcavities. Physical Review B, 2008, 77, .	3.2	55
48	Intrinsic Decoherence Mechanisms in the Microcavity Polariton Condensate. Physical Review Letters, 2008, 101, 067404.	7.8	146
49	Interaction between a high-density polariton phase and the exciton environment in semiconductor microcavities. Physical Review B, 2007, 75, .	3.2	11
50	Spatial structure and stability of the macroscopically occupied polariton state in the microcavity optical parametric oscillator. Physical Review B, 2006, 73, .	3.2	36
51	Rotation of the plane of polarization of light in a semiconductor microcavity. Physical Review B, 2006, 73, .	3.2	79
52	Spatial properties and coherence of the high density phase in the microcavity optical parametric oscillator. Physica Status Solidi (B): Basic Research, 2006, 243, 3741-3753.	1.5	1
53	Dominant Effect of Polariton-Polariton Interactions on the Coherence of the Microcavity Optical Parametric Oscillator. Physical Review Letters, 2006, 97, 097402.	7.8	46
54	Polarisation properties of optical parametric oscillator emission in a semiconductor microcavity. Physica Status Solidi A, 2005, 202, 2621-2625.	1.7	2

#	Article	IF	CITATIONS
55	Optical orientation and control of spin memory in individual InGaAs quantum dots. Physical Review B, 2005, 72, .	3.2	43
56	Individual neutral and chargedInxGa1â^'xAsâ^'GaAsquantum dots with strong in-plane optical anisotropy. Physical Review B, 2005, 72, .	3.2	61
57	Giant enhancement of polariton relaxation in semiconductor microcavities by polariton-free carrier interaction: Experimental evidence and theory. Physical Review B, 2003, 67, .	3.2	36
58	Polariton-polariton scattering in semiconductor microcavities: Distinctive features and similarities to the three-dimensional case. Physical Review B, 2000, 62, R13298-R13301.	3.2	80
59	Nonlinearities in emission from the lower polariton branch of semiconductor microcavities. Physical Review B, 1999, 60, R11293-R11296.	3.2	38