

# Dmitri Mogilevtsev

## List of Publications by Year in descending order

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109  
papers

2,411  
citations

393982

19  
h-index

214527

47  
g-index

110  
all docs

110  
docs citations

110  
times ranked

1407  
citing authors

#	ARTICLE	IF	CITATIONS
1	Photonic Crystal Fibers: A New Class of Optical Waveguides. <i>Optical Fiber Technology</i> , 1999, 5, 305-330.	1.4	510
2	Group-velocity dispersion in photonic crystal fibers. <i>Optics Letters</i> , 1998, 23, 1662.	1.7	325
3	Dispersion compensation using single-material fibers. <i>IEEE Photonics Technology Letters</i> , 1999, 11, 674-676.	1.3	283
4	Experimental measurement of group velocity dispersion in photonic crystal fibre. <i>Electronics Letters</i> , 1999, 35, 63.	0.5	122
5	Localized function method for modeling defect modes in 2-D photonic crystals. <i>Journal of Lightwave Technology</i> , 1999, 17, 2078-2081.	2.7	112
6	Biased Tomography Schemes: An Objective Approach. <i>Physical Review Letters</i> , 2006, 96, 230401.	2.9	81
7	Driving-Dependent Damping of Rabi Oscillations in Two-Level Semiconductor Systems. <i>Physical Review Letters</i> , 2008, 100, 017401.	2.9	51
8	Operational Tomography: Fitting of Data Patterns. <i>Physical Review Letters</i> , 2010, 105, 010402.	2.9	49
9	Diagonal element inference by direct detection. <i>Optics Communications</i> , 1998, 156, 307-310.	1.0	48
10	Tomography for quantum diagnostics. <i>New Journal of Physics</i> , 2008, 10, 043022.	1.2	45
11	Plasmon polaritons in photonic superlattices containing a left-handed material. <i>Europhysics Letters</i> , 2009, 88, 24002.	0.7	44
12	Suppression of Anderson localization of light and Brewster anomalies in disordered superlattices containing a dispersive metamaterial. <i>Physical Review B</i> , 2010, 82, .	1.1	39
13	Effective method to estimate multidimensional Gaussian states. <i>Physical Review A</i> , 2009, 79, .	1.0	34
14	Design of polarization-preserving photonic crystal fibres with elliptical pores. <i>Journal of Optics</i> , 2001, 3, S141-S143.	1.5	31
15	Self-calibration for self-consistent tomography. <i>New Journal of Physics</i> , 2012, 14, 095001.	1.2	31
16	Light propagation and Anderson localization in disordered superlattices containing dispersive metamaterials: Effects of correlated disorder. <i>Physical Review B</i> , 2011, 84, .	1.1	30
17	Data pattern tomography: reconstruction with an unknown apparatus. <i>New Journal of Physics</i> , 2013, 15, 025038.	1.2	29
18	Relative tomography of an unknown quantum state. <i>Physical Review A</i> , 2009, 79, .	1.0	22

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19	Calibration of single-photon detectors using quantum statistics. <i>Physical Review A</i> , 2010, 82, .	1.0	21
20	Dissipatively coupled waveguide networks for coherent diffusive photonics. <i>Nature Communications</i> , 2017, 8, 1909.	5.8	21
21	Quantum Antennas. <i>Advanced Quantum Technologies</i> , 2020, 3, 1900120.	1.8	19
22	Synthesis of Quantum Antennas for Shaping Field Correlations. <i>Physical Review Applied</i> , 2018, 9, .	1.5	18
23	Objective approach to biased tomography schemes. <i>Physical Review A</i> , 2007, 75, .	1.0	17
24	Single-photon generation by correlated loss in a three-core optical fiber. <i>Optics Letters</i> , 2010, 35, 3375.	1.7	16
25	Tomography by Noise. <i>Physical Review Letters</i> , 2014, 113, 070403.	2.9	16
26	Plasmon polaritons in photonic metamaterial superlattices: Absorption effects. <i>Physical Review E</i> , 2010, 81, 047601.	0.8	15
27	The method of atomic-field collective operators in problems of interaction of atoms with a complex-structure field reservoir. <i>Optics and Spectroscopy (English Translation of Optika i Tj ETQq1 1 0.784314 rgBT /Overlook 10 T</i>		
28	In-reservoir coherent control of an atom-photon bound state. <i>Physical Review A</i> , 2005, 72, .	1.0	13
29	Cross-Validated Tomography. <i>Physical Review Letters</i> , 2013, 111, 120403.	2.9	13
30	Quantum tight-binding chains with dissipative coupling. <i>New Journal of Physics</i> , 2015, 17, 043065.	1.2	12
31	Quantum Radars and Lidars: Concepts, realizations, and perspectives. <i>IEEE Antennas and Propagation Magazine</i> , 2022, 64, 16-26.	1.2	12
32	The generation of multiple Schrödinger-cat states via a four-wave interaction. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1995, 198, 85-88.	0.9	11
33	Self-calibrating tomography for angular Schmidt modes in spontaneous parametric down-conversion. <i>Physical Review A</i> , 2013, 87, .	1.0	11
34	Quantum noise radar: superresolution with quantum antennas by accessing spatiotemporal correlations. <i>Optics Express</i> , 2019, 27, 29217.	1.7	11
35	The analogy between photonic crystal fibres and step index fibres. , 0, , .		10
36	Probing the atom-field bound state. <i>Physical Review A</i> , 2004, 69, .	1.0	10

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37	Efficient algorithm for optimizing data-pattern tomography. <i>Physical Review A</i> , 2014, 89, .	1.0	10
38	Bayesian recursive data-pattern tomography. <i>Physical Review A</i> , 2015, 92, .	1.0	10
39	The generation of multicomponent entangled Schrödinger cat states via a fully quantized nondegenerate four-wave mixing process. <i>Optics Communications</i> , 1996, 132, 452-456.	1.0	9
40	Master equation for structured reservoirs. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2005, 3, 38-57.	1.0	9
41	Quantum state and mode profile tomography by the overlap. <i>New Journal of Physics</i> , 2018, 20, 033003.	1.2	9
42	Efficiently reconstructing compound objects by quantum imaging with higher-order correlation functions. <i>Communications Physics</i> , 2019, 2, .	2.0	9
43	Quantum state inference from photocount statistics: one-probe reconstruction and reconstruction checking the presence or absence of photons. <i>Quantum and Semiclassical Optics: Journal of the European Optical Society Part B</i> , 1998, 10, 345-353.	1.0	8
44	Method of collective operators for resonance fluorescence near a photonic band edge. <i>Physical Review A</i> , 2003, 67, .	1.0	8
45	The collective operator method for realistic photonic crystals. <i>Laser Physics Letters</i> , 2006, 3, 327-344.	0.6	8
46	Influence of modal loss on quantum state generation via cross-Kerr nonlinearity. <i>Physical Review A</i> , 2009, 79, .	1.0	8
47	Non-Markovian damping of Rabi oscillations in semiconductor quantum dots. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 055801.	0.7	8
48	Nonlinear dissipation can combat linear loss. <i>Physical Review A</i> , 2013, 87, .	1.0	8
49	Slow light in semiconductor quantum dots: Effects of non-Markovianity and correlation of dephasing reservoirs. <i>Physical Review B</i> , 2015, 92, .	1.1	8
50	Restoring the Heisenberg limit via collective non-Markovian dephasing. <i>Physical Review A</i> , 2018, 98, .	1.0	8
51	Entangled superpositions of distinguishable states via nonlinear wave mixing. <i>Quantum and Semiclassical Optics: Journal of the European Optical Society Part B</i> , 1996, 8, 1169-1178.	1.0	7
52	Homodyne reconstruction of density matrix in fock-state basis: Deterministic versus maximum likelihood approach. <i>Journal of Modern Optics</i> , 1997, 44, 2261-2269.	0.6	7
53	Single material fibres for dispersion compensation. , 0, , .		7
54	Master equation for structured reservoirs. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2004, 2, 161-174.	1.0	7

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55	Field-emitter bound states in structured thermal reservoirs. <i>Physical Review A</i> , 2007, 75, .	1.0	7
56	Spontaneous emission and qubit transfer in spin-1/2 chains. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010, 43, 095506.	0.6	7
57	Data-pattern tomography of entangled states. <i>Physical Review A</i> , 2017, 95, .	1.0	7
58	Optimal correlation order in superresolution optical fluctuation microscopy. <i>Physical Review A</i> , 2020, 102, .	1.0	7
59	Bandgap quantum coupler. <i>Journal of Modern Optics</i> , 1997, 44, 1293-1307.	0.6	6
60	Robustness of the photon-atom bound state in bandgap reservoirs. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 2005, 7, 274-282.	1.4	6
61	Coherent Diffusive Photon Gun for Generating Nonclassical States. <i>Physical Review Applied</i> , 2019, 12, .	1.5	6
62	Nonlinear coherent loss for generating non-classical states. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2011, 44, 325307.	0.7	5
63	Verification of state and entanglement with incomplete tomography. <i>New Journal of Physics</i> , 2012, 14, 105020.	1.2	5
64	Visualizing hypochlorous acid production by human neutrophils with fluorescent graphene quantum dots. <i>Nanotechnology</i> , 2022, 33, 095101.	1.3	5
65	Why the 'coarse-graining' of Wigner function is always coarse. <i>Optics Communications</i> , 2000, 178, 147-150.	1.0	3
66	Markovian and non-Markovian decay in pseudo-gaps. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2007, 5, 1-13.	1.0	3
67	Rabi oscillation damping of two-level states in quantum dots. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 1487-1489.	1.3	3
68	Generators of nonclassical states by a combination of linear coupling of boson modes, Kerr nonlinearity, and strong linear losses. <i>Physical Review A</i> , 2011, 84, .	1.0	3
69	Spontaneous Emission of Singlet Oxygen Near Dielectric Nano-objects and Radiative Diagnostics of Bio-Objects. <i>Journal of Fluorescence</i> , 2012, 22, 1415-1419.	1.3	3
70	Diffusive lossless energy and coherence transfer by noisy coupling. <i>Physical Review A</i> , 2016, 94, .	1.0	3
71	Integrated Source of Path-Entangled Photon Pairs with Efficient Pump Self-Rejection. <i>Nanomaterials</i> , 2020, 10, 1952.	1.9	3
72	Gravitational dephasing in spontaneous emission of atomic ensembles in timed Dicke states. <i>Physical Review D</i> , 2020, 101, .	1.6	3

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73	Avalanche-like behavior of up-conversion luminescence by nonlinear coupling of pumping rates. Optics Letters, 2019, 44, 5880.	1.7	3
74	Hysteresis and Stochastic Fluorescence by Aggregated Ensembles of Graphene Quantum Dots. Journal of Physical Chemistry C, 2022, 126, 10469-10477.	1.5	3
75	Down-conversion processes and the parametric approximation. Optics Communications, 1995, 118, 565-568.	1.0	2
76	One-probe reconstruction of a quantum state. Physical Review A, 1998, 57, 2146-2149.	1.0	2
77	Balancing the dynamic Stark shift in a driven Jaynes-Cummings system. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, 196-200.	1.4	2
78	Comment on "Decoherence and dissipation of a quantum harmonic oscillator coupled to two-level systems". Physical Review A, 2008, 78, .	1.0	2
79	Localization in shuffled-lattice random-fill structures. Physical Review B, 2011, 84, .	1.1	2
80	Breaking reciprocity by designed loss. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 1926.	0.9	2
81	Modeling of Multimodal Scattering by Conducting Bodies in Quantum Optics: The Method of Characteristic Modes. Physical Review Applied, 2022, 18, .	1.5	2
82	Dispersion of Modes Guided in Photonic Crystal Fibres. , 0, , .		1
83	Theoretical Tools for Quantum Optics in Structured Media. Progress in Optics, 2010, 54, 89-148.	0.4	1
84	Crystallizing highly-likely subspaces that contain an unknown quantum state of light. Scientific Reports, 2016, 6, 38123.	1.6	1
85	Extracting the physical sector of quantum states. New Journal of Physics, 2017, 19, 093008.	1.2	1
86	Shaping field correlation with entangled quantum antennas. , 2017, , .		1
87	Homodyne reconstruction of density matrix in fock-state basis: Deterministic versus maximum likelihood approach. , 0, .		1
88	Validation of Åchelle-based quantum-classical discriminator with novelty SPAD array sensor. , 2019, , .		1
89	Emulation of quantum measurements with mixtures of coherent states. Physical Review A, 2022, 105, .	1.0	1
90	Collective operator method for the resonance fluorescence in photonic band gap. , 2003, , .		0

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91	Robustness and coherent control of the atom-photon bound state. , 0, , .		0
92	In-reservoir coherent control of the atom-photon bound state. , 0, , .		0
93	All Optical Control. Optics and Photonics News, 2005, 16, 15.	0.4	0
94	Photonic band-gap cavity with a field-emitter bound state. , 2006, , .		0
95	Entanglement induced by noise: Emitters in thermal bandgap reservoirs. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2141-2143.	1.3	0
96	Effective single-photon generator via entanglement between emitter and field of a photonic-crystal reservoir near the band edge. Physical Review A, 2008, 78, .	1.0	0
97	An analogy between state transfer in spin chains and spontaneous emission. , 2010, , .		0
98	Localization in shuffled lattice random-fill structures. , 2011, , .		0
99	Metamaterials can suppress Anderson localization of light in one dimension. Proceedings of SPIE, 2012, , .	0.8	0
100	Quantum correlations and nonclassicality in a system of two coupled vertical external cavity surface emitting lasers. Physical Review A, 2014, 90, .	1.0	0
101	Quantum noise radar: superresolution with quantum antennas by accessing spatiotemporal correlations. , 2019, , .		0
102	Quantum Noise Radar: Assessing Quantum Correlations. , 2019, , .		0
103	Validation of Å%Chelle-Based Quantum-Classical Discriminator with Novelty Spad Array Sensor. , 2019, , .		0
104	Engineered Correlated Loss For an Integrated Source of Photon Pairs with ~100 dB Pump Self-Rejection. , 2021, , .		0
105	Scattering of Quantum Light by a Perfectly Conducting Cylinder. , 2021, , .		0
106	Tomography for quantum diagnostics. , 2008, , .		0
107	Exploiting Fisher Information for Constructing an Efficient Nonlinear Optimization Scheme for Quantum Imaging. , 2019, , .		0
108	Toward classical emulation of quantum states with coherent mixtures. , 2021, , .		0

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109	Multimode Quantum Light Scattering: Method of Characteristic Modes. , 2021, , .		0