Dmitri Mogilevtsev

List of Publications by Year
in descending order

109	2,411	393982	214527
papers	citations	19 h-index	47 g-index

110	110	110	1407
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quantum Radars and Lidars: Concepts, realizations, and perspectives. IEEE Antennas and Propagation Magazine, 2022, 64, 16-26.	1.2	12
2	Visualizing hypochlorous acid production by human neutrophils with fluorescent graphene quantum dots. Nanotechnology, 2022, 33, 095101.	1.3	5
3	Emulation of quantum measurements with mixtures of coherent states. Physical Review A, 2022, 105, .	1.0	1
4	Breaking reciprocity by designed loss. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 1926.	0.9	2
5	Hysteresis and Stochastic Fluorescence by Aggregated Ensembles of Graphene Quantum Dots. Journal of Physical Chemistry C, 2022, 126, 10469-10477.	1.5	3
6	Modeling of Multimodal Scattering by Conducting Bodies in Quantum Optics: The Method of Characteristic Modes. Physical Review Applied, 2022, 18, .	1.5	2
7	Engineered Correlated Loss For an Integrated Source of Photon Pairs with ~100 dB Pump Self-Rejection. , 2021, , .		0
8	Scattering of Quantum Light by a Perfectly Conducting Cylinder. , 2021, , .		0
9	Toward classical emulation of quantum states with coherent mixtures. , 2021, , .		0
10	Multimode Quantum Light Scattering: Method of Characteristic Modes. , 2021, , .		0
11	Integrated Source of Path-Entangled Photon Pairs with Efficient Pump Self-Rejection. Nanomaterials, 2020, 10, 1952.	1.9	3
12	Optimal correlation order in superresolution optical fluctuation microscopy. Physical Review A, 2020, 102, .	1.0	7
13	Gravitational dephasing in spontaneous emission of atomic ensembles in timed Dicke states. Physical Review D, 2020, 101, .	1.6	3
14	Quantum Antennas. Advanced Quantum Technologies, 2020, 3, 1900120.	1.8	19
15	Efficiently reconstructing compound objects by quantum imaging with higher-order correlation functions. Communications Physics, 2019, 2, .	2.0	9
16	Quantum noise radar: superresolution with quantum antennas by accessing spatiotemporal correlations. , 2019, , .		0
17	Quantum Noise Radar: Assessing Quantum Correlations. , 2019, , .		0
18	Validation of Ã‰Chelle-Based Quantum-Classical Discriminator with Novelty Spad Array Sensor. , 2019, , .		0

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19	Coherent Diffusive Photon Gun for Generating Nonclassical States. Physical Review Applied, 2019, 12, .	1.5	6
20	Validation of Ã©chelle-based quantum-classical discriminator with novelty SPAD array sensor. , 2019, , .		1
21	Quantum noise radar: superresolution with quantum antennas by accessing spatiotemporal correlations. Optics Express, 2019, 27, 29217.	1.7	11
22	Exploiting Fisher Information for Constructing an Efficient Nonlinear Optimization Scheme for Quantum Imaging. , 2019, , .		0
23	Avalanche-like behavior of up-conversion luminescence by nonlinear coupling of pumping rates. Optics Letters, 2019, 44, 5880.	1.7	3
24	Synthesis of Quantum Antennas for Shaping Field Correlations. Physical Review Applied, 2018, 9, .	1.5	18
25	Quantum state and mode profile tomography by the overlap. New Journal of Physics, 2018, 20, 033003.	1.2	9
26	Restoring the Heisenberg limit via collective non-Markovian dephasing. Physical Review A, 2018, 98, .	1.0	8
27	Data-pattern tomography of entangled states. Physical Review A, 2017, 95, .	1.0	7
28	Dissipatively coupled waveguide networks for coherent diffusive photonics. Nature Communications, 2017, 8, 1909.	5.8	21
29	Extracting the physical sector of quantum states. New Journal of Physics, 2017, 19, 093008.	1.2	1
30	Shaping field correlation with entangled quantum antennas. , 2017, , .		1
31	Crystallizing highly-likely subspaces that contain an unknown quantum state of light. Scientific Reports, 2016, 6, 38123.	1.6	1
32	Diffusive lossless energy and coherence transfer by noisy coupling. Physical Review A, 2016, 94, .	1.0	3
33	Bayesian recursive data-pattern tomography. Physical Review A, 2015, 92, .	1.0	10
34	Slow light in semiconductor quantum dots: Effects of non-Markovianity and correlation of dephasing reservoirs. Physical Review B, 2015, 92, .	1.1	8
35	Quantum tight-binding chains with dissipative coupling. New Journal of Physics, 2015, 17, 043065.	1.2	12
36	Efficient algorithm for optimizing data-pattern tomography. Physical Review A, 2014, 89, .	1.0	10

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37	Quantum correlations and nonclassicality in a system of two coupled vertical external cavity surface emitting lasers. Physical Review A, 2014, 90, .	1.0	0
38	Tomography by Noise. Physical Review Letters, 2014, 113, 070403.	2.9	16
39	Cross-Validated Tomography. Physical Review Letters, 2013, 111, 120403.	2.9	13
40	Nonlinear dissipation can combat linear loss. Physical Review A, 2013, 87, .	1.0	8
41	Data pattern tomography: reconstruction with an unknown apparatus. New Journal of Physics, 2013, 15, 025038.	1.2	29
42	Self-calibrating tomography for angular Schmidt modes in spontaneous parametric down-conversion. Physical Review A, 2013, 87, .	1.0	11
43	Self-calibration for self-consistent tomography. New Journal of Physics, 2012, 14, 095001.	1.2	31
44	Metamaterials can suppress Anderson localization of light in one dimension. Proceedings of SPIE, 2012, , .	0.8	0
45	Verification of state and entanglement with incomplete tomography. New Journal of Physics, 2012, 14, 105020.	1.2	5
46	Spontaneous Emission of Singlet Oxygen Near Dielectric Nano-objects and Radiative Diagnostics of Bio-Objects. Journal of Fluorescence, 2012, 22, 1415-1419.	1.3	3
47	Localization in shuffled-lattice random-fill structures. Physical Review B, 2011, 84, .	1.1	2
48	Generators of nonclassical states by a combination of linear coupling of boson modes, Kerr nonlinearity, and strong linear losses. Physical Review A, 2011, 84, .	1.0	3
49	Nonlinear coherent loss for generating non-classical states. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 325307.	0.7	5
50	Light propagation and Anderson localization in disordered superlattices containing dispersive metamaterials: Effects of correlated disorder. Physical Review B, 2011, 84, .	1.1	30
51	Localization in shuffled lattice random-fill structures. , 2011, , .		0
52	An analogy between state transfer in spin chains and spontaneous emission. , 2010, , .		0
53	Plasmon polaritons in photonic metamaterial superlattices: Absorption effects. Physical Review E, 2010, 81, 047601.	0.8	15
54	Suppression of Anderson localization of light and Brewster anomalies in disordered superlattices containing a dispersive metamaterial. Physical Review B, 2010, 82, .	1.1	39

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55	Calibration of single-photon detectors using quantum statistics. Physical Review A, 2010, 82, .	1.0	21
56	Operational Tomography: Fitting of Data Patterns. Physical Review Letters, 2010, 105, 010402.	2.9	49
57	Spontaneous emission and qubit transfer in spin-1/2 chains. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 095506.	0.6	7
58	Theoretical Tools for Quantum Optics in Structured Media. Progress in Optics, 2010, 54, 89-148.	0.4	1
59	Single-photon generation by correlated loss in a three-core optical fiber. Optics Letters, 2010, 35, 3375.	1.7	16
60	Influence of modal loss on quantum state generation via cross-Kerr nonlinearity. Physical Review A, 2009, 79, .	1.0	8
61	Relative tomography of an unknown quantum state. Physical Review A, 2009, 79, .	1.0	22
62	Effective method to estimate multidimensional Gaussian states. Physical Review A, 2009, 79, .	1.0	34
63	Plasmon polaritons in photonic superlattices containing a left-handed material. Europhysics Letters, 2009, 88, 24002.	0.7	44
64	Non-Markovian damping of Rabi oscillations in semiconductor quantum dots. Journal of Physics Condensed Matter, 2009, 21, 055801.	0.7	8
65	Rabi oscillation damping of two-level states in quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1487-1489.	1.3	3
66	Entanglement induced by noise: Emitters in thermal bandgap reservoirs. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2141-2143.	1.3	0
67	Tomography for quantum diagnostics. New Journal of Physics, 2008, 10, 043022.	1.2	45
68	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
69	Driving-Dependent Damping of Rabi Oscillations in Two-Level Semiconductor Systems. Physical Review Letters, 2008, 100, 017401.	2.9	51
70	Comment on â€œDecoherence and dissipation of a quantum harmonic oscillator coupled to two-level systemsâ€• Physical Review A, 2008, 78, .	1.0	2
71	Tomography for quantum diagnostics. , 2008, , .		0
72	Objective approach to biased tomography schemes. Physical Review A, 2007, 75, .	1.0	17

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73	Field-emitter bound states in structured thermal reservoirs. Physical Review A, 2007, 75, .	1.0	7
74	Markovian and non-Markovian decay in pseudo-gaps. Photonics and Nanostructures - Fundamentals and Applications, 2007, 5, 1-13.	1.0	3
75	Biased Tomography Schemes: An Objective Approach. Physical Review Letters, 2006, 96, 230401.	2.9	81
76	The collective operator method for realistic photonic crystals. Laser Physics Letters, 2006, 3, 327-344.	0.6	8
77	Photonic band-gap cavity with a field-emitter bound state. , 2006, , .		0
78	Master equation for structured reservoirs. Photonics and Nanostructures - Fundamentals and Applications, 2005, 3, 38-57.	1.0	9
79	Robustness of the photonâ€“atom bound state in bandgap reservoirs. Journal of Optics B: Quantum and Semiclassical Optics, 2005, 7, 274-282.	1.4	6
80	In-reservoir coherent control of an atom-photon bound state. Physical Review A, 2005, 72, .	1.0	13
81	All Optical Control. Optics and Photonics News, 2005, 16, 15.	0.4	0
82	Probing the atom-field bound state. Physical Review A, 2004, 69, .	1.0	10
83	Master equation for structured reservoirs. Photonics and Nanostructures - Fundamentals and Applications, 2004, 2, 161-174.	1.0	7
84	Balancing the dynamic Stark shift in a driven Jaynesâ€“Cummings system. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, 196-200.	1.4	2
85	Method of collective operators for resonance fluorescence near a photonic band edge. Physical Review A, 2003, 67, .	1.0	8
86	Collective operator method for the resonance fluorescence in photonic band gap. , 2003, , .		0
87	The method of atomic-field collective operators in problems of interaction of atoms with a complex-structure field reservoir. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T		
88	Design of polarization-preserving photonic crystal fibres with elliptical pores. Journal of Optics, 2001, 3, S141-S143.	1.5	31
89	Why the `coarse-graining' of Wigner function is always coarse. Optics Communications, 2000, 178, 147-150.	1.0	3
90	Experimental measurement of group velocity dispersion in photonic crystal fibre. Electronics Letters, 1999, 35, 63.	0.5	122

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91	Photonic Crystal Fibers: A New Class of Optical Waveguides. Optical Fiber Technology, 1999, 5, 305-330.	1.4	510
92	Dispersion compensation using single-material fibers. IEEE Photonics Technology Letters, 1999, 11, 674-676.	1.3	283
93	Localized function method for modeling defect modes in 2-D photonic crystals. Journal of Lightwave Technology, 1999, 17, 2078-2081.	2.7	112
94	Diagonal element inference by direct detection. Optics Communications, 1998, 156, 307-310.	1.0	48
95	Group-velocity dispersion in photonic crystal fibers. Optics Letters, 1998, 23, 1662.	1.7	325
96	Quantum state inference from photocount statistics: one-probe reconstruction and reconstruction checking the presence or absence of photons. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1998, 10, 345-353.	1.0	8
97	One-probe reconstruction of a quantum state. Physical Review A, 1998, 57, 2146-2149.	1.0	2
98	Bandgap quantum coupler. Journal of Modern Optics, 1997, 44, 1293-1307.	0.6	6
99	Homodyne reconstruction of density matrix in fock-state basis: Deterministic versus maximum likelihood approach. Journal of Modern Optics, 1997, 44, 2261-2269.	0.6	7
100	The generation of multicomponent entangled SchrÃ¶dinger cat states via a fully quantized nondegenerate four-wave mixing process. Optics Communications, 1996, 132, 452-456.	1.0	9
101	Entangled superpositions of distinguishable states via nonlinear wave mixing. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1996, 8, 1169-1178.	1.0	7
102	The generation of multiple SchrÃ¶dinger-cat states via a four-wave interaction. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 198, 85-88.	0.9	11
103	Down-conversion processes and the parametric approximation. Optics Communications, 1995, 118, 565-568.	1.0	2
104	Dispersion of Modes Guided in Photonic Crystal Fibres. , 0, , .		1
105	Single material fibres for dispersion compensation. , 0, , .		7
106	The analogy between photonic crystal fibres and step index fibres. , 0, , .		10
107	Robustness and coherent control of the atom-photon bound state. , 0, , .		0
108	In-reservoir coherent control of the atom-photon bound state. , 0, , .		0

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109	Homodyne reconstruction of density matrix in fock-state basis: Deterministic versus maximum likelihood approach. , 0, .		1