Mikhail V Maximov

List of Publications by Year
in descending order

53	615	686830 13	642321 23
papers	citations	h-index	g-index

53	53	53	333
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Highly efficient injection microdisk lasers based on quantum well-dots. Optics Letters, 2018, 43, 4554.	1.7	46
2	Ultrasmall microdisk and microring lasers based on InAs/InGaAs/GaAs quantum dots. Nanoscale Research Letters, 2014, 9, 3266.	3.1	43
3	Transverse single-mode edge-emitting lasers based on coupled waveguides. Optics Letters, 2015, 40, 2150.	1.7	40
4	Heat-sink free CW operation of injection microdisk lasers grown on Si substrate with emission wavelength beyond 13â€‰â€‰Ì¼m. Optics Letters, 2017, 42, 3319.	1.7	40
5	Light Outcoupling from Quantum Dot-Based Microdisk Laser via Plasmonic Nanoantenna. ACS Photonics, 2017, 4, 275-281.	3.2	39
6	Light Emitting Devices Based on Quantum Well-Dots. Applied Sciences (Switzerland), 2020, 10, 1038.	1.3	37
7	Improvement of temperature-stability in a quantum well laser with asymmetric barrier layers. Applied Physics Letters, 2012, 100, .	1.5	29
8	Room Temperature Lasing in 1-Î¼m Microdisk Quantum Dot Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 709-713.	1.9	28
9	High-Power Low-Beam Divergence Edge-Emitting Semiconductor Lasers with 1- and 2-D Photonic Bandgap Crystal Waveguide. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 1113-1122.	1.9	27
10	High speed data transmission using directly modulated microdisk lasers based on InGaAs/GaAs quantum well-dots. Optics Letters, 2019, 44, 5442.	1.7	24
11	Tilted Wave Lasers: A Way to High Brightness Sources of Light. IEEE Journal of Quantum Electronics, 2011, 47, 1014-1027.	1.0	22
12	Bandedge-engineered quantum well laser. Semiconductor Science and Technology, 2011, 26, 055025.	1.0	21
13	QD lasers: physics and applications. , 2005, , .		16
14	High-power high-brightness semiconductor lasers based on novel waveguide concepts. Proceedings of SPIE, 2010, , .	0.8	16
15	Long-wavelength (1.3-1.5 micron) quantum dot lasers based on GaAs. , 2004, , .		15
16	Impact of Self-Heating and Elevated Temperature on Performance of Quantum Dot Microdisk Lasers. IEEE Journal of Quantum Electronics, 2020, 56, 1-8.	1.0	14
17	InAs/GaAs Quantum Dot Microlasers Formed on Silicon Using Monolithic and Hybrid Integration Methods. Materials, 2020, 13, 2315.	1.3	14
18	Material gain of InGaAs/GaAs quantum well-dots. Semiconductor Science and Technology, 2021, 36, 015008.	1.0	14

#	Article	IF	Citations
19	Light-current characteristic of a quantum well laser with asymmetric barrier layers. Journal of Applied Physics, 2013, 114, 143103.	1.1	13
20	Low divergence edge-emitting laser with asymmetric waveguide based on one-dimensional photonic crystal. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 919-922.	0.8	12
21	Improved performance of InGaAs/GaAs microdisk lasers epi-side down bonded onto a silicon board. Optics Letters, 2021, 46, 3853.	1.7	10
22	IIIâ€“V microdisk/microring resonators and injection microlasers. Journal Physics D: Applied Physics, 2021, 54, 453001.	1.3	9
23	Single-Mode Emission From 4â€“9-Î¼m Microdisk Lasers With Dense Array of InGaAs Quantum Dots. Journal of Lightwave Technology, 2015, 33, 171-175.	2.7	8
24	Gradual Evolution From Quantumâ€Wellâ€Like to Quantumâ€Dotâ€Like Characteristics in InGaAs/GaAs Nanostructures. Physica Status Solidi (B): Basic Research, 2018, 255, 1800123.	0.7	8
25	Tilted cavity laser (Critical Review Lecture). , 2004, 5509, 61.		7
26	Quantum dot lasers and relevant nanoheterostructures. , 2012, , .		7
27	High-speed single-mode quantum dot and quantum well VCSELs. Proceedings of SPIE, 2011, , .	0.8	5
28	On-chip light detection using integrated microdisk laser and photodetector bonded onto Si board. Laser Physics Letters, 2022, 19, 016201.	0.6	5
29	Waveguide and active region structure optimization for low-divergence InAs/InGaAs quantum dot comb lasers. , 2015, , .		4
30	Lasing in IIIâ€“V microdisk coreâ€“TiO2 shell lasers. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 2285.	0.9	4
31	‹title›Epitaxial growth of quantum-dot heterostructures on metamorphic buffers‹/title›. , 2005, , .		3
32	Bipolar charging in quantum dots array. AIP Conference Proceedings, 2007, , .	0.3	3
33	Modeling of photonic-crystal-based high-power high-brightness semiconductor lasers. , 2010, , .		3
34	Lasers with asymmetric barrier layers: A promising type of injection lasers. Journal of Physics: Conference Series, 2016, 741, 012111.	0.3	3
35	Electronic states in GaAs photoconverters with InGaAs quantum well-dots. Applied Physics Express, 2020, 13, 015009.	1.1	3
36	Strip-loaded horizontal slot waveguide for routing microdisk laser emission. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 1878.	0.9	3

#	Article	IF	Citations
37	Thermally stable surface-emitting tilted wave laser. , 2018, , .		3
38	Frequency response and carrier escape time of InGaAs quantum well-dots photodiode. Optics Express, 0, , .	1.7	3
39	Improvement of thermal resistance in InGaAs/GaAs/AlGaAs microdisk lasers bonded onto silicon. Semiconductor Science and Technology, 2022, 37, 075010.	1.0	3
40	Single-Lobe Single-Wavelength Lasing in Ultrabroad-Area Vertical-Cavity Surface-Emitting Lasers Based on the Integrated Filter Concept. IEEE Journal of Quantum Electronics, 2008, 44, 724-731.	1.0	2
41	Refractive index of laser active region based on InAs/InGaAs quantum dots. Journal of Nanophotonics, 2013, 7, 073087.	0.4	2
42	The analytical approach to the multi-state lasing phenomenon in undoped and p-doped InAs/InGaAs semiconductor quantum dot lasers. , 2014, , .		2
43	Light-emitting and photovoltaic devices based on quantum well-dots hybrid nanostructures. , 2017, , .		2
44	1.3-Î¼m edge- and surface-emitting quantum dot lasers grown on GaAs substrates. , 2002, , .		1
45	<title>Semiconductor quantum dot lasers</title>. , 2005, , .		1
46	Low-threshold 1.3 Î¼m ring lasers with InAs/InGaAs/GaAs quantum dot active region. Laser Physics Letters, 2022, 19, 066201.	0.6	1
47	<title>MBE growth of low-threshold long-wavelength QD lasers on GaAs substrates</title>. , 2002, 5023, 357.		0
48	<title>High power lasers based on submonolayer InAs-GaAs quantum dots and InGaAs quantum wells</title>. , 2002, , .		0
49	Recent advances in long-wavelength GaAs-based quantum dot lasers. , 2003, , .		0
50	Analytical model of ground-state lasing phenomenon in broadband semiconductor quantum dot lasers. , 2013, , .		0
51	Temperature characteristics of tilted wave lasers. Optical Engineering, 2016, 55, 116102.	0.5	0
52	Quantum dot laser optimization: selectively doped layers. Journal of Physics: Conference Series, 2016, 741, 012075.	0.3	0
53	Dynamic characteristics and noise modelling of directly modulated quantum well-dots microdisk lasers on silicon. Laser Physics Letters, 2022, 19, 025801.	0.6	0