Eduard I Moiseev

List of Publications by Year
in descending order

99 papers	729 citations	623188 14 h-index	642321 23 g-index
99 all docs	99 docs citations	99 times ranked	438 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	Heat-sink free CW operation of injection microdisk lasers grown on Si substrate with emission wavelength beyond 13â€‰â€‰Î¼m. Optics Letters, 2017, 42, 3319.	1.7	40
4	Light Outcoupling from Quantum Dot-Based Microdisk Laser via Plasmonic Nanoantenna. ACS Photonics, 2017, 4, 275-281.	3.2	39
5	Light Emitting Devices Based on Quantum Well-Dots. Applied Sciences (Switzerland), 2020, 10, 1038.	1.3	37
6	Continuousâ€wave lasing at 100Â°C in 1.3 Âµm quantum dot microdisk diode laser. Electronics Letters, 2015, 51, 1354-1355.	0.5	31
7	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
8	Growth and Characterization of GaP/GaPAs Nanowire Heterostructures with Controllable Composition. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900350.	1.2	28
9	High speed data transmission using directly modulated microdisk lasers based on InGaAs/GaAs quantum well-dots. Optics Letters, 2019, 44, 5442.	1.7	24
10	Direct modulation characteristics of microdisk lasers with InGaAs/GaAs quantum well-dots. Photonics Research, 2019, 7, 664.	3.4	20
11	Mode selection in InAs quantum dot microdisk lasers using focused ion beam technique. Optics Letters, 2015, 40, 4022.	1.7	18
12	Enhanced light outcoupling in microdisk lasers via Si spherical nanoantennas. Journal of Applied Physics, 2018, 124, .	1.1	17
13	Quantum-dot microlasers based on whispering gallery mode resonators. Light: Science and Applications, 2021, 10, 80.	7.7	16
14	Control of emission spectra in quantum dot microdisk/microring lasers. Optics Express, 2014, 22, 25782.	1.7	15
15	Optimization of Optoelectronic Properties of Patterned Single-Walled Carbon Nanotube Films. ACS Applied Materials & Interfaces, 2020, 12, 55141-55147.	4.0	15
16	Observation of zero linewidth enhancement factor at excited state band in quantum dot laser. Electronics Letters, 2015, 51, 1686-1688.	0.5	14
17	Elevated temperature lasing from injection microdisk lasers on silicon. Laser Physics Letters, 2018, 15, 015802.	0.6	14
18	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

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19	InAs/GaAs Quantum Dot Microlasers Formed on Silicon Using Monolithic and Hybrid Integration Methods. Materials, 2020, 13, 2315.	1.3	14
20	Microdisk Injection Lasers for the 1.27-Î¼m Spectral Range. Semiconductors, 2016, 50, 390-393.	0.2	13
21	Electrically pumped InGaAs/GaAs quantum well microdisk lasers directly grown on Si(100) with Ge/GaAs buffer. Optics Express, 2017, 25, 16754.	1.7	13
22	Evaluation of energy-to-data ratio of quantum-dot microdisk lasers under direct modulation. Journal of Applied Physics, 2019, 126, 063107.	1.1	11
23	Record Low Threshold Current Density in Quantum Dot Microdisk Laser. Semiconductors, 2019, 53, 1888-1890.	0.2	10
24	Improved performance of InGaAs/GaAs microdisk lasers epi-side down bonded onto a silicon board. Optics Letters, 2021, 46, 3853.	1.7	10
25	Lasing in microdisks of ultrasmall diameter. Semiconductors, 2014, 48, 1626-1630.	0.2	9
26	Coherent Growth of InP/InAsP/InP Nanowires on a Si (111) Surface by Molecular-Beam Epitaxy. Technical Physics Letters, 2018, 44, 112-114.	0.2	9
27	IIIâ€“V microdisk/microring resonators and injection microlasers. Journal Physics D: Applied Physics, 2021, 54, 453001.	1.3	9
28	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
29	Thermal resistance of ultra-small-diameter disk microlasers. Semiconductors, 2015, 49, 674-678.	0.2	8
30	Room temperature lasing from microdisk laser in aqueous medium. Journal of Physics: Conference Series, 2018, 1124, 051007.	0.3	8
31	Red GaPAs/GaP Nanowire-Based Flexible Light-Emitting Diodes. Nanomaterials, 2021, 11, 2549.	1.9	8
32	Room-temperature lasing in microring cavities with an InAs/InGaAs quantum-dot active region. Semiconductors, 2013, 47, 1387-1390.	0.2	7
33	Microdisk lasers based on GaInNAs(Sb)/GaAs(N) quantum wells. Journal of Applied Physics, 2016, 120, .	1.1	7
34	Specific Features of the Currentâ€“Voltage Characteristic of Microdisk Lasers Based on InGaAs/GaAs Quantum Well-Dots. Technical Physics Letters, 2019, 45, 994-996.	0.2	7
35	3.5-Î¼m radius race-track microlasers operating at room temperature with 1.3-Î¼m quantum dot active region. Journal of Applied Physics, 2017, 121, 043104.	1.1	6
36	Optical and electrical properties of silicon nanopillars. Semiconductors, 2015, 49, 939-943.	0.2	5

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37	Laser characteristics of an injection microdisk with quantum dots and its free-space outcoupling efficiency. Semiconductors, 2016, 50, 1408-1411.	0.2	5
38	Improved emission outcoupling from microdisk laser by Si nanospheres. Journal of Physics: Conference Series, 2016, 741, 012158.	0.3	5
39	Resonance reflection of light by ordered silicon nanopillar arrays with the vertical p-n junction. Thin Solid Films, 2019, 672, 109-113.	0.8	5
40	Comparative Analysis of Injection Microdisk Lasers Based on InGaAsN Quantum Wells and InAs/InGaAs Quantum Dots. Semiconductors, 2020, 54, 263-267.	0.2	5
41	On-chip light detection using integrated microdisk laser and photodetector bonded onto Si board. Laser Physics Letters, 2022, 19, 016201.	0.6	5
42	Laser generation in microdisc resonators with InAs/GaAs quantum dots transferred on a silicon substrate. Technical Physics Letters, 2013, 39, 830-833.	0.2	4
43	Lasing in microdisk resonators with InAs/InGaAs quantum dots transferred on a silicon substrate. Journal of Physics: Conference Series, 2014, 541, 012049.	0.3	4
44	Study of the structural and optical properties of GaP(N) layers synthesized by molecular-beam epitaxy on Si(100) 4Â° substrates. Semiconductors, 2017, 51, 267-271.	0.2	4
45	Energy Consumption for High-Frequency Switching of a Quantum-Dot Microdisk Laser. Technical Physics Letters, 2019, 45, 847-849.	0.2	4
46	The Effect of Self-Heating on the Modulation Characteristics of a Microdisk Laser. Technical Physics Letters, 2020, 46, 515-519.	0.2	4
47	The effect of the sulfide passivation on the luminescence of microdisk mesas with quantum wells and quantum dots. Journal of Physics: Conference Series, 2015, 643, 012043.	0.3	3
48	The effect of sulfide passivation on luminescence from microdisks with quantum wells and quantum dots. Technical Physics Letters, 2015, 41, 654-657.	0.2	3
49	Laser generation at 1.3 Î¼m in vertical microcavities containing InAs/InGaAs quantum dot arrays under optical pumping. Technical Physics Letters, 2016, 42, 1009-1012.	0.2	3
50	Investigation of the effect of surface passivation on microdisk lasers based on InGaAsN/GaAs quantum well active region. Journal of Physics: Conference Series, 2017, 917, 052002.	0.3	3
51	Study of p-type contact topography influence on characteristics of microdisk and microring lasers. Journal of Physics: Conference Series, 2018, 1124, 041012.	0.3	3
52	Violation of Local Electroneutrality in the Quantum Well of a Semiconductor Laser with Asymmetric Barrier Layers. Semiconductors, 2018, 52, 1621-1629.	0.2	3
53	The Use of Microdisk Lasers Based on InAs/InGaAs Quantum Dots in Biodetection. Technical Physics Letters, 2019, 45, 1178-1181.	0.2	3
54	Lasing of Injection Microdisks with InAs/InGaAs/GaAs Quantum Dots Transferred to Silicon. Technical Physics Letters, 2020, 46, 783-786.	0.2	3

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55	Frequency response and carrier escape time of InGaAs quantum well-dots photodiode. Optics Express, 0, , .	1.7	3
56	Improvement of thermal resistance in InGaAs/GaAs/AlGaAs microdisk lasers bonded onto silicon. Semiconductor Science and Technology, 2022, 37, 075010.	1.0	3
57	High-temperature lasing in diode microdisk lasers with InAs/InGaAs quantum dots. Journal of Physics: Conference Series, 2016, 769, 012056.	0.3	2
58	Specific features of waveguide recombination in laser structures with asymmetric barrier layers. Semiconductors, 2017, 51, 254-259.	0.2	2
59	Lasing of metamorphic hybrid 1300nm spectral band VCSEL under optical pumping up to 120 Â°C. , 2017, , .		2
60	Optical properties of metamorphic hybrid heterostuctures for vertical-cavity surface-emitting lasers operating in the 1300-nm spectral range. Semiconductors, 2017, 51, 1127-1132.	0.2	2
61	Room temperature lasing in injection microdisks with InGaAsN/GaAs quantum well active region. Journal of Physics: Conference Series, 2018, 1124, 081048.	0.3	2
62	Reflection Spectra of Microarrays of Silicon Nanopillars. Optics and Spectroscopy (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td	0.2	2
63	Evaluation of the Impact of Surface Recombination in Microdisk Lasers by Means of High-Frequency Modulation. Semiconductors, 2019, 53, 1099-1103.	0.2	2
64	Investigation of optical properties of In(Ga)As/GaAs mesa structures with active region based on quantum wells, quantum dots, and quantum well-dots. Journal of Physics: Conference Series, 2019, 1410, 012157.	0.3	2
65	A Micro Optocoupler Based on a Microdisk Laser and a Photodetector with an Active Region Based on Quantum Well-Dots. Technical Physics Letters, 2020, 46, 629-632.	0.2	2
66	Ultimate Lasing Temperature of Microdisk Lasers. Semiconductors, 2020, 54, 677-681.	0.2	2
67	Monolithic and hybrid integration of InAs/GaAs quantum dot microdisk lasers on silicon. , 2021, , .		2
68	Influece of active region and resonator design on characteristics of microdisk lasers. , 2014, , .		1
69	Room temperature continuous wave operation of injection quantum dot microdisk lasers. Journal of Physics: Conference Series, 2015, 643, 012002.	0.3	1
70	Microdisk lasers based on GaInNAsSb/GaAsN quantum well active region. Journal of Physics: Conference Series, 2015, 643, 012040.	0.3	1
71	Study of electrical properties of single GaN nanowires grown by molecular beam epitaxy. Journal of Physics: Conference Series, 2016, 741, 012002.	0.3	1
72	Injection microdisk lasers based on multilayers of InGaAs/GaAs quantum well-dot structures. Journal of Physics: Conference Series, 2018, 1124, 041002.	0.3	1

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73	Edge-emitting and microdisk lasers based on hybrid quantum-well-dot structures. , 2018, , .		1
74	Silicon Nanopillar Microarrays: Formation and Resonance Reflection of Light. Semiconductors, 2019, 53, 205-209.	0.2	1
75	Taking Account of the Substrate in Calculation of the Electrical Resistance of Microdisk Lasers. Semiconductors, 2021, 55, 250-255.	0.2	1
76	Investigation of microdisk and microring lasers based on InGaAs/GaAs QWDs by the interferometry method. Journal of Physics: Conference Series, 2020, 1695, 012093.	0.3	1
77	Output power of multilayered InGaAs/GaAs quantum well-dot microdisk lasers. Journal of Physics: Conference Series, 2021, 2086, 012081.	0.3	1
78	Saturation Power of a Semiconductor Optical Amplifier Based on Self-Organized Quantum Dots. Semiconductors, 2021, 55, S67-S71.	0.2	1
79	High-Temperature Lasing and Control of Emission Spectra in Microdisk and Microring Lasers with Quantum Dots. , 2014, , .		0
80	Compact microdisk cavity laser with GaInNAs/GaAs quantum well. Journal of Physics: Conference Series, 2016, 741, 012110.	0.3	0
81	Electrically pumped microdisk lasers with semitransparent conducting pyrolytic carbon film. Journal of Physics: Conference Series, 2016, 741, 012076.	0.3	0
82	High-temperature continuous wave operation (up to 100Â°C) of InAs/InGaAs quantum dot electrically injected microdisk lasers. , 2016, , .		0
83	Plasmonic nanoantenna for enhancement of vertical emission from whispering gallery mode laser. , 2017, , .		0
84	Investigation of lasers based on coupled waveguides by near-field scanning optical microscopy. Journal of Physics: Conference Series, 2017, 929, 012070.	0.3	0
85	Influence of coating layers on characteristics of microdisk lasers with InAs/InGaAs quantum dots active region. Journal of Physics: Conference Series, 2018, 1124, 041020.	0.3	0
86	Lasing in compact injection microdisks with InAs/InGaAs quantum dots. , 2018, , .		0
87	Characteristics of Injection Microdisk Lasers with InGaAs/GaAs Quantum Well-Dots. , 2019, , .		0
88	Microdisk resonators as high-sensitive devices for biodetection. Journal of Physics: Conference Series, 2019, 1410, 012178.	0.3	0
89	A Study of the Photoresponse in Graphene Produced by Chemical Vapor Deposition. Semiconductors, 2020, 54, 991-998.	0.2	0
90	Hybrid integration of InAs/GaAs quantum dot microdisk lasers on silicon. , 2021, , .		0

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91	Small-signal modulation and 10 Gb/s data transmission by microdisk lasers based on InGaAs/GaAs quantum well-dots. , 2020, , .		0
92	Analysis of the lasing characteristics of InGaAs/GaAs WGM microlasers. Journal of Physics: Conference Series, 2020, 1695, 012096.	0.3	0
93	Experimental investigation of the far-field emission pattern of microdisk laser modes. Journal of Physics: Conference Series, 2020, 1695, 012094.	0.3	0
94	Influence of dielectric overlayers on self-heating of a microdisk laser. Journal of Physics: Conference Series, 2021, 2086, 012100.	0.3	0
95	Energy Consumption at High-Frequency Modulation of an Uncooled InGaAs/GaAs/AlGaAs Microdisk Laser. Technical Physics Letters, 2021, 47, 685-688.	0.2	0
96	Temperature stability of small-signal modulation response of WGM microlasers with InGaAs/GaAs quantum well-dots in the active region. Journal of Physics: Conference Series, 2021, 2086, 012082.	0.3	0
97	Dynamic characteristics and noise modelling of directly modulated quantum well-dots microdisk lasers on silicon. Laser Physics Letters, 2022, 19, 025801.	0.6	0
98	Increase in the Efficiency of a Tandem Semiconductor Laserâ€“Optical Amplifier Based on Self-Organizing Quantum Dots. Semiconductors, 0, , .	0.2	0
99	Increasing the Optical Power of InGaAs/GaAs Microdisk Lasers Transferred to a Silicon Substrate by Thermal Compression. Technical Physics Letters, 0, , .	0.2	0