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	On-chip light detection using integrated microdisk laser and photodetector bonded onto Si board. Laser Physics Letters, 2022, 19, 016201.	0.6	5
2	Dynamic characteristics and noise modelling of directly modulated quantum well-dots microdisk lasers on silicon. Laser Physics Letters, 2022, 19, 025801.	0.6	0
3	Improvement of thermal resistance in InGaAs/GaAs/AlGaAs microdisk lasers bonded onto silicon. Semiconductor Science and Technology, 2022, 37, 075010.	1.0	3
4	Taking Account of the Substrate in Calculation of the Electrical Resistance of Microdisk Lasers. Semiconductors, 2021, 55, 250-255.	0.2	1
5	Quantum-dot microlasers based on whispering gallery mode resonators. Light: Science and Applications, 2021, 10, 80.	7.7	16
6	Monolithic and hybrid integration of InAs/GaAs quantum dot microdisk lasers on silicon. , 2021, , .		2
7	Hybrid integration of InAs/GaAs quantum dot microdisk lasers on silicon. , 2021, , .		0
8	IIIâ€“V microdisk/microring resonators and injection microlasers. Journal Physics D: Applied Physics, 2021, 54, 453001.	1.3	9
9	Improved performance of InGaAs/GaAs microdisk lasers epi-side down bonded onto a silicon board. Optics Letters, 2021, 46, 3853.	1.7	10
10	Red GaPAs/GaP Nanowire-Based Flexible Light-Emitting Diodes. Nanomaterials, 2021, 11, 2549.	1.9	8
11	Influence of dielectric overlayers on self-heating of a microdisk laser. Journal of Physics: Conference Series, 2021, 2086, 012100.	0.3	0
12	Energy Consumption at High-Frequency Modulation of an Uncooled InGaAs/GaAs/AlGaAs Microdisk Laser. Technical Physics Letters, 2021, 47, 685-688.	0.2	0
13	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
14	Output power of multilayered InGaAs/GaAs quantum well-dot microdisk lasers. Journal of Physics: Conference Series, 2021, 2086, 012081.	0.3	1
15	Saturation Power of a Semiconductor Optical Amplifier Based on Self-Organized Quantum Dots. Semiconductors, 2021, 55, S67-S71.	0.2	1
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	Optimization of Optoelectronic Properties of Patterned Single-Walled Carbon Nanotube Films. ACS Applied Materials & Interfaces, 2020, 12, 55141-55147.	4.0	15
18	The Effect of Self-Heating on the Modulation Characteristics of a Microdisk Laser. Technical Physics Letters, 2020, 46, 515-519.	0.2	4

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19	A Study of the Photoresponse in Graphene Produced by Chemical Vapor Deposition. Semiconductors, 2020, 54, 991-998.	0.2	0
20	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
21	Lasing of Injection Microdisks with InAs/InGaAs/GaAs Quantum Dots Transferred to Silicon. Technical Physics Letters, 2020, 46, 783-786.	0.2	3
22	Comparative Analysis of Injection Microdisk Lasers Based on InGaAsN Quantum Wells and InAs/InGaAs Quantum Dots. Semiconductors, 2020, 54, 263-267.	0.2	5
23	Light Emitting Devices Based on Quantum Well-Dots. Applied Sciences (Switzerland), 2020, 10, 1038.	1.3	37
24	Ultimate Lasing Temperature of Microdisk Lasers. Semiconductors, 2020, 54, 677-681.	0.2	2
25	InAs/GaAs Quantum Dot Microlasers Formed on Silicon Using Monolithic and Hybrid Integration Methods. Materials, 2020, 13, 2315.	1.3	14
26	Small-signal modulation and 10 Gb/s data transmission by microdisk lasers based on InGaAs/GaAs quantum well-dots. , 2020, , .		0
27	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
28	Analysis of the lasing characteristics of InGaAs/GaAs WGM microlasers. Journal of Physics: Conference Series, 2020, 1695, 012096.	0.3	0
29	Experimental investigation of the far-field emission pattern of microdisk laser modes. Journal of Physics: Conference Series, 2020, 1695, 012094.	0.3	0
30	Growth and Characterization of GaP/GaPAs Nanowire Heterostructures with Controllable Composition. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900350.	1.2	28
31	Evaluation of the Impact of Surface Recombination in Microdisk Lasers by Means of High-Frequency Modulation. Semiconductors, 2019, 53, 1099-1103.	0.2	2
32	Characteristics of Injection Microdisk Lasers with InGaAs/GaAs Quantum Well-Dots. , 2019, , .		0
33	Energy Consumption for High-Frequency Switching of a Quantum-Dot Microdisk Laser. Technical Physics Letters, 2019, 45, 847-849.	0.2	4
34	Evaluation of energy-to-data ratio of quantum-dot microdisk lasers under direct modulation. Journal of Applied Physics, 2019, 126, 063107.	1.1	11
35	Silicon Nanopillar Microarrays: Formation and Resonance Reflection of Light. Semiconductors, 2019, 53, 205-209.	0.2	1
36	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

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37	Microdisk resonators as high-sensitive devices for biodetection. Journal of Physics: Conference Series, 2019, 1410, 012178.	0.3	0
38	Record Low Threshold Current Density in Quantum Dot Microdisk Laser. Semiconductors, 2019, 53, 1888-1890.	0.2	10
39	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
40	The Use of Microdisk Lasers Based on InAs/InGaAs Quantum Dots in Biodetection. Technical Physics Letters, 2019, 45, 1178-1181.	0.2	3
41	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
42	High speed data transmission using directly modulated microdisk lasers based on InGaAs/GaAs quantum well-dots. Optics Letters, 2019, 44, 5442.	1.7	24
43	Direct modulation characteristics of microdisk lasers with InGaAs/GaAs quantum well-dots. Photonics Research, 2019, 7, 664.	3.4	20
44	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
45	Elevated temperature lasing from injection microdisk lasers on silicon. Laser Physics Letters, 2018, 15, 015802.	0.6	14
46	Injection microdisk lasers based on multilayers of InGaAs/GaAs quantum well-dot structures. Journal of Physics: Conference Series, 2018, 1124, 041002.	0.3	1
47	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
48	Room temperature lasing from microdisk laser in aqueous medium. Journal of Physics: Conference Series, 2018, 1124, 051007.	0.3	8
49	Room temperature lasing in injection microdisks with InGaAsN/GaAs quantum well active region. Journal of Physics: Conference Series, 2018, 1124, 081048.	0.3	2
50	Violation of Local Electroneutrality in the Quantum Well of a Semiconductor Laser with Asymmetric Barrier Layers. Semiconductors, 2018, 52, 1621-1629.	0.2	3
51	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
52	Enhanced light outcoupling in microdisk lasers via Si spherical nanoantennas. Journal of Applied Physics, 2018, 124, .	1.1	17
53	Highly efficient injection microdisk lasers based on quantum well-dots. Optics Letters, 2018, 43, 4554.	1.7	46
54	Edge-emitting and microdisk lasers based on hybrid quantum-well-dot structures. , 2018, , .		1

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55	Lasing in compact injection microdisks with InAs/InGaAs quantum dots. , 2018, , .		0
56	Reflection Spectra of Microarrays of Silicon Nanopillars. Optics and Spectroscopy (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td	0.2	2
57	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
58	Specific features of waveguide recombination in laser structures with asymmetric barrier layers. Semiconductors, 2017, 51, 254-259.	0.2	2
59	Light Outcoupling from Quantum Dot-Based Microdisk Laser via Plasmonic Nanoantenna. ACS Photonics, 2017, 4, 275-281.	3.2	39
60	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
61	Lasing of metamorphic hybrid 1300nm spectral band VCSEL under optical pumping up to 120 Â°C. , 2017, , .		2
62	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
63	Plasmonic nanoantenna for enhancement of vertical emission from whispering gallery mode laser. , 2017, , .		0
64	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
65	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
66	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
67	Investigation of lasers based on coupled waveguides by near-field scanning optical microscopy. Journal of Physics: Conference Series, 2017, 929, 012070.	0.3	0
68	High-temperature lasing in diode microdisk lasers with InAs/InGaAs quantum dots. Journal of Physics: Conference Series, 2016, 769, 012056.	0.3	2
69	Study of electrical properties of single GaN nanowires grown by molecular beam epitaxy. Journal of Physics: Conference Series, 2016, 741, 012002.	0.3	1
70	Compact microdisk cavity laser with GaInNAs/GaAs quantum well. Journal of Physics: Conference Series, 2016, 741, 012110.	0.3	0
71	Microdisk lasers based on GaInNAs(Sb)/GaAs(N) quantum wells. Journal of Applied Physics, 2016, 120, .	1.1	7
72	Microdisk Injection Lasers for the 1.27-Î¼m Spectral Range. Semiconductors, 2016, 50, 390-393.	0.2	13

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73	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
74	Laser characteristics of an injection microdisk with quantum dots and its free-space outcoupling efficiency. Semiconductors, 2016, 50, 1408-1411.	0.2	5
75	Electrically pumped microdisk lasers with semitransparent conducting pyrolytic carbon film. Journal of Physics: Conference Series, 2016, 741, 012076.	0.3	0
76	Improved emission outcoupling from microdisk laser by Si nanospheres. Journal of Physics: Conference Series, 2016, 741, 012158.	0.3	5
77	High-temperature continuous wave operation (up to 100Â°C) of InAs/InGaAs quantum dot electrically injected microdisk lasers. , 2016, , .		0
78	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
79	Room temperature continuous wave operation of injection quantum dot microdisk lasers. Journal of Physics: Conference Series, 2015, 643, 012002.	0.3	1
80	Microdisk lasers based on GaInNAsSb/GaAsN quantum well active region. Journal of Physics: Conference Series, 2015, 643, 012040.	0.3	1
81	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
82	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
83	Optical and electrical properties of silicon nanopillars. Semiconductors, 2015, 49, 939-943.	0.2	5
84	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
85	Thermal resistance of ultra-small-diameter disk microlasers. Semiconductors, 2015, 49, 674-678.	0.2	8
86	Observation of zero linewidth enhancement factor at excited state band in quantum dot laser. Electronics Letters, 2015, 51, 1686-1688.	0.5	14
87	Continuousâ€wave lasing at 100Â°C in 1.3 Âµm quantum dot microdisk diode laser. Electronics Letters, 2015, 51, 1354-1355.	0.5	31
88	Mode selection in InAs quantum dot microdisk lasers using focused ion beam technique. Optics Letters, 2015, 40, 4022.	1.7	18
89	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
90	Ultrasmall microdisk and microring lasers based on InAs/InGaAs/GaAs quantum dots. Nanoscale Research Letters, 2014, 9, 3266.	3.1	43

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91	Control of emission spectra in quantum dot microdisk/microring lasers. Optics Express, 2014, 22, 25782.	1.7	15
92	Lasing in microdisks of ultrasmall diameter. Semiconductors, 2014, 48, 1626-1630.	0.2	9
93	High-Temperature Lasing and Control of Emission Spectra in Microdisk and Microring Lasers with Quantum Dots. , 2014, , .		0
94	Influece of active region and resonator design on characteristics of microdisk lasers. , 2014, , .		1
95	Room-temperature lasing in microring cavities with an InAs/InGaAs quantum-dot active region. Semiconductors, 2013, 47, 1387-1390.	0.2	7
96	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
97	Frequency response and carrier escape time of InGaAs quantum well-dots photodiode. Optics Express, 0, , .	1.7	3
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