V V Dudelev

List of Publications by Year
in descending order

82 papers	413 citations	840776 11 h-index	888059 17 g-index
82 all docs	82 docs citations	82 times ranked	237 citing authors

#	Article	IF	Citations
1	Observation of Long Turn-On Delay in Pulsed Quantum Cascade Lasers. Journal of Lightwave Technology, 2022, 40, 2104-2110.	4.6	3
2	Quantum-Cascade Laser with Radiation Emission through a Textured Layer. Semiconductors, 2022, 56, 1-4.	0.5	0
3	Observation of the Turn-on Delay in InAs- and InP-based Quantum Cascade Lasers under Pulsed Pumping with Non-zero Rise-time. , 2021, , .		0
4	Spectral Dynamics of Quantum Cascade Lasers Generating Frequency Combs in the Long-Wavelength Infrared Range. Technical Physics, 2020, 65, 1281-1284.	0.7	2
5	Spectral Characteristics of Half-Ring Quantum-Cascade Lasers. Optics and Spectroscopy (English) Tj ETQq1 1 0.784314 rgBT /Overlock	0.6	6
6	10-W 4.6-Î¼m quantum cascade lasers. Quantum Electronics, 2020, 50, 720-721.	1.0	6
7	Observation of the increase in turn-on delay of quantum cascade lasers under pulsed electrical pumping with finite rise time. Journal of Physics: Conference Series, 2020, 1697, 012062.	0.4	0
8	Heterostructures of Quantum-Cascade Laser for the Spectral Range of 4.6 Î¼m for Obtaining a Continuous-Wave Lasing Mode. Technical Physics Letters, 2020, 46, 442-445.	0.7	8
9	High-power (>1 W) room-temperature quantum-cascade lasers for the long-wavelength IR region. Quantum Electronics, 2020, 50, 141-142.	1.0	20
10	High-Power (>13 W) Quantum-Cascade Lasers for Long Wavelength Infrared Range. , 2020, , .		0
11	A Study of the Spatial-Emission Characteristics of Quantum-Cascade Lasers for the 8-Î¼m Spectral Range. Technical Physics Letters, 2020, 46, 1152-1155.	0.7	1
12	Dynamics of Frequency Combs Generation by QCLs in 8 Î¼m Wavelength Range. , 2020, , .		2
13	Turn-on Delay of Quantum Cascade Lasers under Pulsed Pumping with Non-zero Rise-time. , 2020, , .		0
14	Cancellation of side lobes in "droplet" Bessel beams generated with semiconductor laser. , 2020, , .		1
15	Development and study of high-power quantum-cascade lasers emitting at 4.5 â€“ 4.6 Î¼m. Quantum Electronics, 2020, 50, 989-994.	1.0	7
16	High Power Quantum-Cascade Lasers for 8 Î¼m Spectral Region. , 2020, , .		0
17	The Technique for QCLs Heating Dynamics Mesurements. , 2020, , .		1
18	Turn-on Timescale Quenching in two State Quantum Well Lasers. , 2019, , .		2

#	Article	IF	Citations
19	Quantum-Cascade Lasers with U-Shaped Resonator: Single Frequency Generation at Room Temperature. , 2019, , .		2
20	Generation of Frequency Combs by Quantum Cascade Lasers Emitting in the 8-Î¼m Wavelength Range. Technical Physics Letters, 2019, 45, 1027-1030.	0.7	2
21	High-Power Quantum-Cascade Lasers Emitting in the 8-Î¼m Wavelength Range. Technical Physics Letters, 2019, 45, 735-738.	0.7	16
22	The Effect of Active Region Heating on Dynamic and Power Characteristics of Quantum Cascade Lasers Emitting at a Wavelength of 4.8 Âµm at Room Temperature. Optics and Spectroscopy (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 61	0.6	0
23	Room Temperature Lasing of Single-Mode Arched-Cavity Quantum-Cascade Lasers. Technical Physics Letters, 2019, 45, 398-400.	0.7	17
24	High-power Î» = 8 Âµm quantum-cascade lasers at room temperature. Journal of Physics: Conference Series, 2019, 1400, 066048.	0.4	1
25	Tunable single-frequency source based on a DFB laser array for the spectral region of 1.55 Î¼m. Quantum Electronics, 2019, 49, 1158-1162.	1.0	2
26	Generation of Droplet Quasi-Bessel Beams Using a Semiconductor Laser. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2019, 127, 848-853.	0.6	5
27	High-coupling distributed feedback lasers for the 1.55 Î¼m spectral region. Quantum Electronics, 2019, 49, 801-803.	1.0	1
28	Dual-band generation around 8 Î¼m by quantum cascade lasers in wide temperature range. Journal of Physics: Conference Series, 2018, 1135, 012073.	0.4	1
29	Generation of Droplet Bessel Beams Using a Semiconductor Laser. Technical Physics Letters, 2018, 44, 887-889.	0.7	3
30	Second Harmonic Generation with a Fractional Order of Periodical Poling. , 2018, , .		2
31	Growth and optical characterization of 7.5 Î¼m quantum-cascade laser heterostructures grown by MBE. Journal of Physics: Conference Series, 2018, 1124, 041029.	0.4	4
32	Turn-on Dynamics of Quantum Cascade Lasers with a Wavelength of 8100 nm at Room Temperature. Technical Physics, 2018, 63, 1656-1658.	0.7	11
33	A Material for Difference-Frequency Generation of Terahertz Radiation. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2018, 125, 582-585.	0.6	4
34	High Temperature Laser Generation of Quantum-Cascade Lasers in the Spectral Region of 8 Î¼m. Physics of the Solid State, 2018, 60, 2291-2294.	0.6	6
35	Dual-Frequency Generation in Quantum Cascade Lasers of the 8-Î¼m Spectral Range. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2018, 125, 402-404.	0.6	24
36	Generation of the second harmonic in ridge waveguides formed in periodically poled lithium niobate. Quantum Electronics, 2018, 48, 717-719.	1.0	1

#	Article	IF	Citations
37	Second Harmonic Generation in a PPLN High-Contrast Ridge Waveguide. , 2018, , .		0
38	Half-disk laser: insight into the internal mode structure of laser resonators. Optics Express, 2018, 26, 14433.	3.4	5
39	Temperature effects on optical properties and efficiency of red AlGaInP-based light emitting diodes under high current pulse pumping. Journal of Applied Physics, 2018, 124, .	2.5	11
40	Two State Pulsed QW Laser: Turn-on Dynamics. , 2018, , .		0
41	Photonic-crystal waveguide for the second-harmonic generation. Physics of the Solid State, 2017, 59, 1702-1705.	0.6	5
42	Generation of High-Power Ultrashort Optical Pulses Using a Semiconductor Laser with Controlled Current Pumping. Technical Physics, 2017, 62, 1885-1888.	0.7	1
43	Peaking of Optical Pulses in Vertical-Cavity Surface-Emitting Lasers with an Active Region Based on Submonolayer InGaAs Quantum Dots. Technical Physics Letters, 2017, 43, 1099-1101.	0.7	1
44	Drag coefficient of solid micro-sphere between parallel plates. Journal of Physics: Conference Series, 2016, 769, 012084.	0.4	2
45	Metamaterial for the second harmonic generation. , 2016, , .		0
46	A novel type of quasi-phasematching for the second harmonic generation. Journal of Physics: Conference Series, 2016, 769, 012050.	0.4	4
47	Generation of high-power ultrashort optical pulses by semiconductor lasers. Technical Physics Letters, 2016, 42, 1159-1162.	0.7	3
48	AFM visualization of half-disk WGM laser modes. , 2016, , .		1
49	Metamaterial for efficient second harmonic generation. Technical Physics Letters, 2016, 42, 1041-1044.	0.7	7
50	Slow passage through thresholds in quantum dot lasers. Physical Review E, 2016, 94, 052208.	2.1	6
51	AlGaInP red-emitting light emitting diode under extremely high pulsed pumping. Proceedings of SPIE, 2016, , .	0.8	6
52	Dropout dynamics in pulsed quantum dot lasers due to mode jumping. Applied Physics Letters, 2015, 106, 261103.	3.3	5
53	Optical trapping with superfocused high-M²laser diode beam. Proceedings of SPIE, 2015, , .	0.8	1
54	Impact of the carrier relaxation paths on two-state operation in quantum dot lasers. , 2015, , .		0

#	Article	IF	Citations
55	Quantum dot semiconductor disk laser at 13â€‰â€‰Î¼m. Optics Letters, 2015, 40, 3400.	3.3	8
56	Study of a novel type of the optical modes in VCSELs. Journal of Physics: Conference Series, 2014, 572, 012044.	0.4	0
57	Superfocusing of high-M2semiconductor laser beams: experimental demonstration. , 2014, , .		2
58	The effect of slow passage in the pulse-pumped quantum dot laser. , 2014, , .		1
59	Dynamical interplay between ground and excited states in quantum dot laser. , 2014, , .		0
60	Manipulation of microparticles using Bessel beams from semiconductor lasers. Technical Physics Letters, 2014, 40, 475-478.	0.7	7
61	Bessel beams from semiconductor light sources. Progress in Quantum Electronics, 2014, 38, 157-188.	7.0	18
62	Optical trapping with Bessel beams generated from semiconductor lasers. Journal of Physics: Conference Series, 2014, 572, 012039.	0.4	15
63	Optical trapping with Bessel beams generated from semiconductor lasers. , 2014, , .		0
64	Influence of the axicon characteristics and beam propagation parameter M2 on the formation of Bessel beams from semiconductor lasers. Quantum Electronics, 2013, 43, 423-427.	1.0	22
65	Turn-on delay of QD and QW laser diodes: What is the difference?. Journal of Physics: Conference Series, 2013, 461, 012030.	0.4	2
66	High-speed photodiodes for the mid-infrared spectral region 1.2â€“2.4 Î¼m based on GaSb/GaInAsSb/GaAlAsSb heterostructures with a transmission band of 2â€“5 GHz. Semiconductors, 2013, 47, 1103-1109.	0.5	13
67	Non-diffracting beams from surface-emitting lasers. Proceedings of SPIE, 2012, , .	0.8	3
68	Effect of gain saturation on the current-power characteristic of semiconductor laser. Technical Physics Letters, 2012, 38, 613-615.	0.7	2
69	Nonvanishing turn-on delay in quantum dot lasers. Applied Physics Letters, 2012, 100, 081109.	3.3	15
70	Superfocusing of mutimode semiconductor lasers and light-emitting diodes. Technical Physics Letters, 2012, 38, 402-404.	0.7	11
71	Observation of a novel type of optical modes in VCSELs. , 2011, , .		0
72	High power Bessel beams from EP-VECSELs. Proceedings of SPIE, 2011, , .	0.8	6

#	Article	IF	Citations
73	Study of non-diffracting light beams from broad-stripe edge-emitting semiconductor lasers. Technical Physics Letters, 2010, 36, 9-12.	0.7	18
74	Fast-response p-i-n photodiodes for 0.9â€“2.4 Î¼m wavelength range. Technical Physics Letters, 2010, 36, 412-414.	0.7	3
75	Generation of Ï€ modes in semiconductor vertical-cavity surface-emitting lasers. Technical Physics Letters, 2009, 35, 1133-1136.	0.7	2
76	Limitation of the output power of the quantum-well laser diodes under short-pulsed electrical pumping. , 2009, , .		0
77	Generation of propagation-invariant light beams from semiconductor light sources. Technical Physics Letters, 2008, 34, 1075-1078.	0.7	24
78	Novel materials GaInAsPSb/GaSb and GaInAsPSb/InAs for room-temperature optoelectronic devices for a 3â€“5 Âµm wavelength range (GaInAsPSb/GaSb and GaInAsPSb/InAs for 3â€“5 Âµm). Semiconductor Science and Technology, 2008, 23, 125026.	2.0	5
79	Phase effects in broad-stripe curved-grating distributed feedback heterolasers. Technical Physics Letters, 2007, 33, 292-294.	0.7	1
80	VCSELs based on arrays of sub-monolayer InGaAs quantum dots. Semiconductors, 2006, 40, 615-619.	0.5	9
81	Output Radiation Focusing in Curved-Grating Distributed Bragg Reflector Laser. Technical Physics Letters, 2005, 31, 824.	0.7	7
82	Self-Focused Broad Area Distributed Bragg Reflector Laser Diodes. , 2005, , .		0