Timur A Bagaev

List of Publications by Year
in descending order

46 papers	273 citations	933447 10 h-index	996975 15 g-index
46 all docs	46 docs citations	46 times ranked	68 citing authors

#	Article	IF	Citations
1	Tunnel-Coupled Laser Diode Microarray as a kW-Level 100-ns Pulsed Optical Power Source (Î» = 910 nm). IEEE Photonics Technology Letters, 2022, 34, 35-38.	2.5	11
2	High-Power and Repetion Rate Nanosecond Pulse Generation in â€œDiode Laserâ€"Thyristorâ€•Stacks. IEEE Photonics Technology Letters, 2021, 33, 11-14.	2.5	11
3	Experimental technique for studying optical absorption in waveguide layers of semiconductor laser heterostructures. Quantum Electronics, 2021, 51, 124-128.	1.0	3
4	High-power pulsed semiconductor lasers (905 nm) with an ultra-wide aperture (800 Âµm) based on epitaxially integrated triple heterostructures. , 2021, , .		1
5	Low-Voltage Thyristor Heterostructure for High-Current Pulse Generation at High Repetition Rate. IEEE Transactions on Electron Devices, 2021, 68, 2855-2860.	3.0	4
6	High-power pulsed hybrid semiconductor lasers emitting in the wavelength range 900â€"920 nm. Quantum Electronics, 2021, 51, 912-914.	1.0	3
7	InGaAs/AlGaAs/GaAs semiconductor lasers (Î» = 900â€"920 nm) with broadened asymmetric waveguides and improved currentâ€"voltage characteristics. Quantum Electronics, 2021, 51, 905-908.	1.0	2
8	Integral and hybrid approaches for high-power laser pulse generation (900-1060nm) by semiconductor heterostructures with electrical bistability. , 2021, , .		0
9	Low-Voltage AlGaAs/GaAs Thyristors as High-Peak-Current Pulse Switches for High-Power Semiconductor Laser Pumping. IEEE Transactions on Electron Devices, 2020, 67, 193-197.	3.0	9
10	Triple integrated laser â€" thyristor. Quantum Electronics, 2020, 50, 1001-1003.	1.0	3
11	Hybrid vertically integrated thyristor-semiconductor laser assemblies for generating ns laser pulses. , 2020, , .		0
12	Laser/heterothyristor hybrid assemblies based on AlGaAs/GaAs heterostructures for high-power and ns-laser-pulse-width operation. , 2020, , .		0
13	Visualization and study of the switching processes dynamics in electrically bistable AlGaAs/GaAs/InGaAs thin-base laser-thyristors. , 2020, , .		0
14	Comparative Study of GaAs/GaInP and GaAs/AlGaAs Quantum Wells Grown by Metalorganic Vapor Phase Epitaxy. Inorganic Materials, 2019, 55, 315-319.	0.8	0
15	Temperature Dependence of the Turn-On Delay Time of High-Power Lasersâ€"Thyristors. IEEE Transactions on Electron Devices, 2019, 66, 1827-1830.	3.0	2
16	Investigation of an electron-beam pumped VECSEL based on an InGaAs/AlGaAs heterostructure. Quantum Electronics, 2019, 49, 909-912.	1.0	1
17	Turn-on dynamics and control efficiency of low-voltage AlGaAs/GaAs/InGaAs lasers-thyristors (905) Tj ETQq1 1 0.784314 rgBT /Overlock Technology, 2019, 34, 065025.	2.0	1
18	An Experimental Investigation of the Dynamics of On-State Propagation in Low-Voltage Laser Thyristors Based on AlGaAs/InGaAs/GaAs Heterostructures. Technical Physics Letters, 2019, 45, 374-378.	0.7	3

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19	Advanced AlGaAs/GaAs Heterostructures Grown by MOVPE. Crystals, 2019, 9, 305.	2.2	15
20	Superluminescent diodes of the 770â€“790-nm range based on semiconductor nanostructures with narrow quantum wells. Quantum Electronics, 2019, 49, 810-813.	1.0	1
21	Double integrated laser-thyristor. Quantum Electronics, 2019, 49, 1011-1013.	1.0	6
22	High peak optical power of 1ns pulse duration from laser diodes â€“ low voltage thyristor vertical stack. Optics Express, 2019, 27, 31446.	3.4	15
23	Compact laser diode array based on epitaxially integrated AlGaAs/GaAs heterostructures. Quantum Electronics, 2018, 48, 993-995.	1.0	4
24	Effect of the spatial current dynamics on radiative characteristics of high-power lasers-thyristors based on AlGaAs/GaAs heterostructures. Journal of Applied Physics, 2017, 121, .	2.5	22
25	Laser diode bars based on AlGaAs/GaAs quantum-well heterostructures with an efficiency up to 70%. Quantum Electronics, 2017, 47, 291-293.	1.0	10
26	A model for calculating the composition of GaAs x P1â€“x solid solutions under metalorganic vapor phase epitaxy conditions. Inorganic Materials, 2017, 53, 369-375.	0.8	4
27	Metalorganic vapour phase epitaxy of GaAs/AlGaAs nanoheterostructures for a quantum cascade laser. Inorganic Materials, 2017, 53, 891-895.	0.8	0
28	Spatial dynamics of high current turn-on in low-voltage AlGaAs/GaAs phototransistors. Journal of Applied Physics, 2016, 119, 124513.	2.5	6
29	Generation of nanosecond and subnanosecond laser pulses by AlGaAs/GaAs laser-thyristor with narrow mesa stripe contact. Optics Express, 2016, 24, 16500.	3.4	12
30	Generation of Laser Pulses in the Megahertz Range of Repetition Frequencies by Low-Voltage AlGaAs/GaAs Laser-Thyristors. IEEE Transactions on Electron Devices, 2016, , 1-6.	3.0	8
31	Quantum cascade laser grown by MOCVD and operating at 9,7 Î¼m. , 2016, , .		0
32	Growing InAs/GaAs quantum dots by droplet epitaxy under MOVPE conditions. Technical Physics Letters, 2016, 42, 747-749.	0.7	1
33	High-power 808 nm laser bars (5mm) with wall-plug efficiency more than 67%. , 2016, , .		0
34	Quantum cascade laser based on GaAs/Al0.45Ga0.55As heteropair grown by MOCVD. Quantum Electronics, 2016, 46, 447-450.	1.0	4
35	High-efficiency and compact semiconductor lasers with monolithically integrated switches for generation of high-power nanosecond pulses in time-of-flight (TOF) systems. Proceedings of SPIE, 2016, , .	0.8	1
36	Optical feedback in 905 nm power laser-thyristors based on AlGaAs/GaAs heterostructures. Semiconductor Science and Technology, 2015, 30, 125011.	2.0	14

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37	High-Power Laser Thyristors With High Injection Efficiency ($lambda =890$ â€“910 nm). IEEE Photonics Technology Letters, 2015, 27, 307-310.	2.5	26
38	New approach for high-peak power lasing based on epitaxially integrated AlGaAs/GaAs laser-thyristor heterostructure. , 2015, , .		2
39	Laser-diode arrays based on epitaxial integrated heterostructures with increased power and brightness of the pulse emission. Semiconductors, 2014, 48, 99-103.	0.5	5
40	A study of nonlinear lasing dynamics of an InGaAs/AlGaAs/GaAs heterostructure power laser-thyristor emitting at 905â€‰nm. Journal of Applied Physics, 2014, 116, 084503.	2.5	13
41	On the control efficiency of a high-power laser thyristor emitting in the 890â€“910 nm spectral range. Semiconductors, 2014, 48, 697-699.	0.5	18
42	Epitaxially intergrated power efficient switch for high power laser pulse generation in semiconductor heterostructures of 900 nm wavelength. , 2014, , .		0
43	New type of high power pulse semiconductor laser based on epitaxially-integrated AlGaAs/GaAs thyristor heterostructure. , 2014, , .		0
44	High-Power Pulse Semiconductor Laser-Thyristor Emitting at 900-nm Wavelength. IEEE Photonics Technology Letters, 2013, 25, 1664-1667.	2.5	20
45	High-power 850â€“870-nm pulsed lasers based on heterostructures with narrow and wide waveguides. Quantum Electronics, 2013, 43, 407-409.	1.0	12
46	Pulse low-energy electron beam pumped IR-lasers based on InGaAs/AlGaAs/GaAs nanoheterostructures. , 2013, , .		0