Peter P Vasil'ev

List of Publications by Year
in descending order

55	636	567281 15	642732 23
papers	citations	h-index	g-index

56	56	56	387
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fast phenomena in semiconductor lasers. Reports on Progress in Physics, 2000, 63, 1997-2042.	20.1	64
2	Ultrashort pulse generation in diode lasers. Optical and Quantum Electronics, 1992, 24, 801-824.	3.3	41
3	Femtosecond superradiant emission in inorganic semiconductors. Reports on Progress in Physics, 2009, 72, 076501.	20.1	39
4	Generation of bandwidth-limited 2 ps pulses with 100 GHz repetition rate from multisegmented injection laser. Electronics Letters, 1989, 25, 1049.	1.0	38
5	High-Bandwidth and Large Coupling Tolerance Graded-Index Multimode Polymer Waveguides for On-Board High-Speed Optical Interconnects. Journal of Lightwave Technology, 2016, 34, 2934-2940.	4.6	33
6	Subpicosecond pulse generation by a tandem-type AlGaAs DH laser with colliding pulse mode locking. IEEE Journal of Quantum Electronics, 1986, 22, 149-152.	1.9	26
7	Flexible Multimode Polymer Waveguide Arrays for Versatile High-Speed Short-Reach Communication Links. Journal of Lightwave Technology, 2018, 36, 2685-2693.	4.6	25
8	Superradiance dynamics in semiconductor laser diode structures. Optics Express, 2012, 20, 9501.	3.4	22
9	Conditions and possible mechanism of condensation of eâ€“h pairs in bulk GaAs at room temperature. Physica Status Solidi (B): Basic Research, 2004, 241, 1251-1260.	1.5	20
10	Gain Switching of Monolithic 1.3 Î¼m InAs/GaAs Quantum Dot Lasers on Silicon. Journal of Lightwave Technology, 2018, 36, 3837-3842.	4.6	20
11	Role of a high gain of the medium in superradiance generation and in observation of coherent effects in semiconductor lasers. Quantum Electronics, 1999, 29, 842-846.	1.0	19
12	Experimental evidence of condensation of electron-hole pairs at room temperature during femtosecond cooperative emission. Physical Review B, 2001, 64, .	3.2	19
13	Picosecond injection laser: a new technique for ultrafast Q-switching. IEEE Journal of Quantum Electronics, 1988, 24, 2386-2391.	1.9	18
14	Ultrashort superradiant pulse generation from a GaN/InGaN heterostructure. Optics Express, 2012, 20, 7035.	3.4	17
15	High-power high-frequency picosecond pulse generation by passively Q-switched 1.55 mu m diode lasers. IEEE Journal of Quantum Electronics, 1993, 29, 1687-1692.	1.9	16
16	Pulse generation with ultra-superluminal pulse propagation in semiconductor heterostructures by superradiant-phase transition enhanced by transient coherent population gratings. Light: Science and Applications, 2016, 5, e16086-e16086.	16.6	15
17	Understanding the Bandwidth Limitations in Monolithic 1.3 Î¼m InAs/GaAs Quantum Dot Lasers on Silicon. Journal of Lightwave Technology, 2019, 37, 949-955.	4.6	14
18	Phase-conjugation broad area twin-contact semiconductor laser. Applied Physics Letters, 1997, 71, 40-42.	3.3	13

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19	Theory of the ultrafast mode-locked GaN lasers in a large-signal regime. Optics Express, 2011, 19, 17114.	3.4	13
20	Mode locking in monolithic two-section InGaN blue-violet semiconductor lasers. Applied Physics Letters, 2013, 102, .	3.3	13
21	Narrow line high power picosecond pulse generation in a multicontact distributed feedback laser using modified Q switching. Electronics Letters, 1993, 29, 561.	1.0	12
22	Superfluorescence in semiconductor lasers. Quantum Electronics, 1997, 27, 860-865.	1.0	12
23	Condensation of electron-hole pairs in a degenerate semiconductor at room temperature. Physical Review B, 2006, 74, .	3.2	12
24	Enhanced longitudinal mode spacing in blue-violet InGaN semiconductor lasers. Applied Physics Letters, 2012, 100, 041113.	3.3	12
25	Long-range order in a high-density electron-hole system at room temperature during superradiant phase transition. Europhysics Letters, 2013, 104, 40003.	2.0	10
26	Bandwidth-limited picosecond pulses from an injection GaAlAs DH laser with an external dispersive cavity. IEEE Journal of Quantum Electronics, 1985, 21, 576-581.	1.9	9
27	Superradiant Emission in Semiconductor Diode Laser Structures. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 1500210-1500210.	2.9	9
28	Hybrid and Passive Mode-Locking of a Monolithic Two-Section MQW InGaN/GaN Laser Diode. IEEE Photonics Technology Letters, 2013, 25, 1514-1516.	2.5	8
29	Femtosecond superradiant emission in AlGaInAs quantum-well semiconductor laser structures. Optics Express, 2012, 20, 8755.	3.4	7
30	First demonstration of two photon absorption in a semiconductor waveguide pumped by a diode laser. Electronics Letters, 1993, 29, 1660.	1.0	6
31	Condensation of electron-hole pairs in bulk GaAs at room temperature under conditions of femtosecond cooperative radiation. Journal of Experimental and Theoretical Physics, 2001, 93, 1288-1295.	0.9	6
32	Coherent electron-hole BCS state: Study of dynamics. Journal of Experimental and Theoretical Physics, 2003, 96, 310-314.	0.9	6
33	Properties of electrons and holes during femtosecond cooperative emission. Quantum Electronics, 2001, 31, 870-876.	1.0	5
34	Experimental observation of the nonequilibrium condensation of electron-hole pairs in GaAs at room temperature. JETP Letters, 2005, 82, 115-119.	1.4	5
35	Nonlinear optical effects during femtosecond superradiant emission generation in semiconductor laser structures. Optics Express, 2018, 26, 26156.	3.4	5
36	Coherent electron â€" hole state and femtosecond cooperative emission in bulk GaAs. Quantum Electronics, 2002, 32, 1105-1112.	1.0	4

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37	High power, low-jitter encoded picosecond pulse generation using an RF-locked self-Q-switched multicontact GaAs/GaAlAs diode laser. Electronics Letters, 1993, 29, 1593.	1.0	4
38	Mode locking of an external cavity asymmetric quantum-well GaAs/AlGaAs semiconductor laser. Quantum Electronics, 2006, 36, 1065-1071.	1.0	3
39	Experimental study of delay-time statistics of superradiant pulses generated from semiconductor structures. Applied Physics Letters, 2013, 103, 241108.	3.3	3
40	Graded-index polymer multimode waveguides for 100 Gb/s board-level data transmission. , 2015, , .		3
41	Influence of superradiance on near- and far-field emission patterns in GaAs/AlGaAs heterostructures. Quantum Electronics, 2008, 38, 424-428.	1.0	2
42	Gain-enhanced optical coherence in a high optical gain semiconductor. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 2270-2273.	2.1	2
43	Quantum degeneracy and phase-space density in superradiant semiconductor heterostructures at room temperature. Europhysics Letters, 2021, 133, 37004.	2.0	2
44	Diode-pumped amplification of Q-switched AlGaAs diode laser to high power using fluoride fibre amplifier. Electronics Letters, 1994, 30, 1298-1299.	1.0	1
45	Influence of femtosecond superradiant pulses on spontaneous emission spectra of GaAs/AlGaAs heterostructures. Quantum Electronics, 2007, 37, 1001-1005.	1.0	1
46	Dicke superradiance in GaN quantum wells. , 2010, , .		1
47	Femtosecond superradiance in semiconductor lasers: anomalous internal second-harmonic generation. Quantum Electronics, 2016, 46, 888-890.	1.0	1
48	Semiconductor laser with a biconical waveguide. Journal of Russian Laser Research, 2000, 21, 214-222.	0.6	0
49	Instability of the steady-state regime of generation in laser diodes with a broad gain spectrum. Journal of Russian Laser Research, 2008, 29, 311-321.	0.6	0
50	Instability of stationary lasing and self-starting mode locking in external-cavity semiconductor lasers. Quantum Electronics, 2009, 39, 36-42.	1.0	0
51	Theory of high-power mode-locked lasers with a slow absorber. Journal of Russian Laser Research, 2010, 31, 614-622.	0.6	0
52	Comparison of the coherence properties of superradiance and laser emission in semiconductor structures. Quantum Electronics, 2012, 42, 1081-1086.	1.0	0
53	Ultrashort pulse generation in diode laser devices. , 2012, , .		0
54	1.4ps Superradiant Pulses from a GaN-based Laser. , 2012, , .		0

#	Article	IF	Citations
55	Dynamics of Quantum Dot Lasers on Silicon. , 2019, , .		0