Pavel Vegeles

List of Publications by Year
in descending order

48	457	759055 12	752573 20
papers	citations	h-index	g-index

48	48	48	228
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Spatial variations of doping and lifetime in epitaxial laterally overgrown GaN. Applied Physics Letters, 2007, 90, 152114.	1.5	43
2	Effects of laterally overgrown n-GaN thickness on defect and deep level concentrations. Journal of Vacuum Science & Technology B, 2008, 26, 990.	1.3	39
3	Donor nonuniformity in undoped and Si doped n-GaN prepared by epitaxial lateral overgrowth. Applied Physics Letters, 2008, 92, 042118.	1.5	38
4	Neutron Radiation Effects in Epitaxially Laterally Overgrown GaN Films. Journal of Electronic Materials, 2007, 36, 1320-1325.	1.0	30
5	Photosensitivity of Ga2O3 Schottky diodes: Effects of deep acceptor traps present before and after neutron irradiation. APL Materials, 2020, 8, .	2.2	30
6	Experimental estimation of electronâ€“hole pair creation energy in Î² -Ga2O3. Applied Physics Letters, 2021, 118, .	1.5	26
7	Movement of basal plane dislocations in GaN during electron beam irradiation. Applied Physics Letters, 2015, 106, .	1.5	24
8	Effect of low-energy electron irradiation on the cathodoluminescence of multiple quantum well (MQW) InGaN/GaN structures. Solid State Communications, 2011, 151, 208-211.	0.9	18
9	Recombination and optical properties of dislocations gliding at room temperature in GaN under applied stress. Journal of Alloys and Compounds, 2019, 776, 181-186.	2.8	17
10	Role of hole trapping by deep acceptors in electron-beam-induced current measurements in Î²-Ga₂O₃ vertical rectifiers. Journal Physics D: Applied Physics, 2020, 53, 495108.	1.3	16
11	EBIC and CL studies of ELOG GaN films. Superlattices and Microstructures, 2009, 45, 308-313.	1.4	14
12	EBIC characterization of light-emitting structures based on GaN. Semiconductors, 2007, 41, 491-494.	0.2	12
13	Radiation enhanced basal plane dislocation glide in GaN. Japanese Journal of Applied Physics, 2016, 55, 05FM03.	0.8	11
14	Effect of low energy electron irradiation on optical properties of InGaN/GaN light emitting structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1265-1268.	0.8	10
15	EBIC investigation of InGaN/GaN multiple quantum well structures irradiated with low energy electrons. Journal of Physics: Conference Series, 2011, 281, 012013.	0.3	9
16	Study of the effect of irradiation with the SEM electron beam on cathodoluminescence and the induced current in InGaN/GaN structures with multiple quantum wells. Journal of Surface Investigation, 2011, 5, 945-948.	0.1	9
17	Microcathodoluminescence spectra evolution for planar and nanopillar multiquantum-well GaN-based structures as a function of electron irradiation dose. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 011207.	0.6	8
18	EBIC investigations of GaN layers prepared by epitaxial lateral overgrowth. Journal of Surface Investigation, 2008, 2, 688-691.	0.1	7

#	Article	IF	Citations
19	Electrical properties and deep traps spectra in undoped M-plane GaN films prepared by standard MOCVD and by selective lateral overgrowth. Journal of Crystal Growth, 2009, 311, 2923-2925.	0.7	7
20	Study of dislocation EBIC image width in GaN films and GaN based structures. Journal of Surface Investigation, 2009, 3, 58-60.	0.1	7
21	GaAs diodes for TiT2-based betavoltaic cells. Applied Radiation and Isotopes, 2022, 179, 110030.	0.7	6
22	Comparative study of quantum efficiency of blue LED with different nanostructural arrangement. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2981-2985.	0.8	5
23	Defects with bright contrast in the induced-current mode in GaN-based light-emitting structures. Journal of Surface Investigation, 2007, 1, 394-397.	0.1	5
24	EBIC investigations of defect distribution in ELOG GaN films. Physica B: Condensed Matter, 2009, 404, 4916-4918.	1.3	5
25	Influence of electron-beam irradiation in SEM on the cathodoluminescence and electron-beam-induced current in InGaN/GaN light-emitting diodes with a buried active region. Journal of Surface Investigation, 2012, 6, 890-893.	0.1	5
26	Role of extended defects in the transformation of InGaN/GaN multiple quantum well structure optical properties under low energy electron beam irradiation. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 464-467.	0.8	5
27	Effect of low-energy electron irradiation on the optical properties of structures containing multiple InGaN/GaN quantum well. Semiconductors, 2015, 49, 143-148.	0.2	5
28	Estimations of Low Temperature Dislocation Mobility in GaN. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900163.	0.8	5
29	Investigations of electron beam induced conductivity in silicon oxide thin films. Journal of Surface Investigation, 2010, 4, 754-757.	0.1	4
30	On the mechanism of cross-hatch pattern formation in heterostructures with a small lattice mismatch. Applied Surface Science, 2019, 479, 930-941.	3.1	4
31	Charging Effects in Al-SiO2-p-Si Structures After Low-Energy Electron Beam Irradiation. Journal of Electronic Materials, 2020, 49, 5178-5183.	1.0	4
32	Simulation and measurements of EBIC images of photoconductive elements based on HgCdTe. Semiconductors, 2007, 41, 407-410.	0.2	3
33	Dislocation gliding and cross-hatch morphology formation in AIII-BV epitaxial heterostructures. Applied Physics Letters, 2014, 105, 231608.	1.5	3
34	Temperature Dependence of Lowâ€Energy Electron Beam Irradiation Effect on Optical Properties of MQW InGaN/GaN Structures. Physica Status Solidi (B): Basic Research, 2018, 255, 1700646.	0.7	3
35	Low energy electron beam irradiation effect on optical properties of nanopillar MQW InGaN/GaN structures. , 2014, , .		2
36	Dislocation glide in GaN films grown by the lateral-overgrowth method induced by low-energy electron-beam irradiation. Journal of Surface Investigation, 2016, 10, 959-961.	0.1	2

#	Article	IF	Citations
37	Structural investigation of light-emitting A3B5 structures grown on Ge/Si(100) substrate. Journal of Physics: Conference Series, 2018, 1124, 022037.	0.3	2
38	Structural and optical characteristics of GaAs films grown on Si/Ge substrates. Journal of Physics: Conference Series, 2018, 993, 012014.	0.3	2
39	Comparative Study of Optical and Electrical Properties of Grown-In and Freshly Introduced Dislocations in GaN by SEM Methods. Journal of Electronic Materials, 2020, 49, 5173-5177.	1.0	2
40	Estimations of Activation Energy for Dislocation Mobility in p-GaN. ECS Journal of Solid State Science and Technology, 2021, 10, 026004.	0.9	2
41	Parasitic pâ€“n junctions formed at V-pit defects in p-GaN. Journal of Applied Physics, 2021, 129, 155702.	1.1	2
42	Communicationâ€”Electron-Beam Stimulated Release of Dislocations from Pinning Sites in GaN. ECS Journal of Solid State Science and Technology, 2022, 11, 015003.	0.9	2
43	EBIC study of resistive photosensitive elements based on HgCdTe. Semiconductors, 2007, 41, 235-239.	0.2	1
44	Temperature dependence of the cathodoluminescence spectra of irradiated light-emitting-diode structures with multiple InGaN/GaN quantum wells. Journal of Surface Investigation, 2013, 7, 844-847.	0.1	1
45	Inverse bias effect on the optical properties of light-emitting diodes with multiple InGaN/GaN quantum wells when irradiated by an electron beam in a scanning electron microscope. Journal of Surface Investigation, 2015, 9, 944-947.	0.1	1
46	Study of Extended Electrically Active Defects in Heterostructures Based on (Ga,Mn)As/(In,Ga)As by Electron Beam-Induced Current and Deep-Level Transient Spectroscopy. Journal of Surface Investigation, 2019, 13, 105-110.	0.1	1
47	Investigation of the Effect of Electron-Beam Irradiation on the Defect Structure of Laterally Overgrown GaN Films via the Induced-Current and Cathodoluminescence Methods. Journal of Surface Investigation, 2018, 12, 994-999.	0.1	0
48	Investigation of the Effect of Irradiation by a Low-Energy Electron Beam on the Capacitanceâ€“Voltage Characteristics of SiO2. Journal of Surface Investigation, 2021, 15, 1045-1048.	0.1	0