Pavel Vegeles

List of Publications by Year in Descending Order

48 papers	359 citations	11 h-index	16 g-index
48 ext. papers	397 ext. citations	1.7 avg, IF	3.13 L-index

#	Paper	IF	Citations
48	Communication Electron-Beam Stimulated Release of Dislocations from Pinning Sites in GaN. *ECS Journal of Solid State Science and Technology*, **2022**, 11, 015003	2	
47	GaAs diodes for TiT-based betavoltaic cells. *Applied Radiation and Isotopes*, **2022**, 179, 110030	1.7	3
46	Investigation of the Effect of Irradiation by a Low-Energy Electron Beam on the Capacitance Voltage Characteristics of SiO2. *Journal of Surface Investigation*, **2021**, 15, 1045-1048	0.5	
45	Parasitic p n junctions formed at V-pit defects in p-GaN. *Journal of Applied Physics*, **2021**, 129, 155702	2.5	1
44	Experimental estimation of electron hole pair creation energy in Ga2O3. *Applied Physics Letters*, **2021**, 118, 202106	3.4	8
43	Estimations of Activation Energy for Dislocation Mobility in p-GaN. *ECS Journal of Solid State Science and Technology*, **2021**, 10, 026004	2	1
42	Photosensitivity of Ga2O3 Schottky diodes: Effects of deep acceptor traps present before and after neutron irradiation. *APL Materials*, **2020**, 8, 111105	5.7	13
41	Charging Effects in Al-SiO2-p-Si Structures After Low-Energy Electron Beam Irradiation. *Journal of Electronic Materials*, **2020**, 49, 5178-5183	1.9	3
40	Role of hole trapping by deep acceptors in electron-beam-induced current measurements in Ga2O3 vertical rectifiers. *Journal Physics D: Applied Physics*, **2020**, 53, 495108	3	11
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	1.9	1
38	Estimations of Low Temperature Dislocation Mobility in GaN. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1900163	1.6	3
37	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	0.5	0
36	On the mechanism of cross-hatch pattern formation in heterostructures with a small lattice mismatch. *Applied Surface Science*, **2019**, 479, 930-941	6.7	2
35	Recombination and optical properties of dislocations gliding at room temperature in GaN under applied stress. *Journal of Alloys and Compounds*, **2019**, 776, 181-186	5.7	12
34	Temperature Dependence of Low-Energy Electron Beam Irradiation Effect on Optical Properties of MQW InGaN/GaN Structures. *Physica Status Solidi (B): Basic Research*, **2018**, 255, 1700646	1.3	2
33	Structural investigation of light-emitting A3B5 structures grown on Ge/Si(100) substrate. *Journal of Physics: Conference Series*, **2018**, 1124, 022037	0.3	1
32	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	0.5	

31	Structural and optical characteristics of GaAs films grown on Si/Ge substrates. *Journal of Physics: Conference Series*, **2018**, 993, 012014	0.3	1
30	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	0.5	2
29	Radiation enhanced basal plane dislocation glide in GaN. *Japanese Journal of Applied Physics*, **2016**, 55, 05FM03	1.4	9
28	Effect of low-energy electron irradiation on the optical properties of structures containing multiple InGaN/GaN quantum well. *Semiconductors*, **2015**, 49, 143-148	0.7	4
27	Movement of basal plane dislocations in GaN during electron beam irradiation. *Applied Physics Letters*, **2015**, 106, 132101	3.4	19
26	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	0.5	1
25	Dislocation gliding and cross-hatch morphology formation in AIII-BV epitaxial heterostructures. *Applied Physics Letters*, **2014**, 105, 231608	3.4	3
24	Low energy electron beam irradiation effect on optical properties of nanopillar MQW InGaN/GaN structures **2014**,		1
23	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	1.3	7
22	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	0.5	1
21	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		4
20	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	0.5	3
19	EBIC investigation of InGaN/GaN multiple quantum well structures irradiated with low energy electrons. *Journal of Physics: Conference Series*, **2011**, 281, 012013	0.3	5
18	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	0.5	9
17	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		9
16	Effect of low-energy electron irradiation on the cathodoluminescence of multiple quantum well (MQW) InGaN/GaN structures. *Solid State Communications*, **2011**, 151, 208-211	1.6	14
15	Investigations of electron beam induced conductivity in silicon oxide thin films. *Journal of Surface Investigation*, **2010**, 4, 754-757	0.5	4
14	EBIC investigations of defect distribution in ELOG GaN films. *Physica B: Condensed Matter*, **2009**, 404, 4916-4918	2.8	4

13	EBIC and CL studies of ELOG GaN films. *Superlattices and Microstructures*, **2009**, 45, 308-313	2.8	14
12	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	1.6	5
11	Study of dislocation EBIC image width in GaN films and GaN based structures. *Journal of Surface Investigation*, **2009**, 3, 58-60	0.5	6
10	Effects of laterally overgrown n-GaN thickness on defect and deep level concentrations. *Journal of Vacuum Science & Technology B*, **2008**, 26, 990		36
9	Donor nonuniformity in undoped and Si doped n-GaN prepared by epitaxial lateral overgrowth. *Applied Physics Letters*, **2008**, 92, 042118	3.4	37
8	EBIC investigations of GaN layers prepared by epitaxial lateral overgrowth. *Journal of Surface Investigation*, **2008**, 2, 688-691	0.5	7
7	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		4
6	Defects with bright contrast in the induced-current mode in GaN-based light-emitting structures. *Journal of Surface Investigation*, **2007**, 1, 394-397	0.5	4
5	EBIC study of resistive photosensitive elements based on HgCdTe. *Semiconductors*, **2007**, 41, 235-239	0.7	1
4	Simulation and measurements of EBIC images of photoconductive elements based on HgCdTe. *Semiconductors*, **2007**, 41, 407-410	0.7	2
3	EBIC characterization of light-emitting structures based on GaN. *Semiconductors*, **2007**, 41, 491-494	0.7	12
2	Neutron Radiation Effects in Epitaxially Laterally Overgrown GaN Films. *Journal of Electronic Materials*, **2007**, 36, 1320-1325	1.9	28
1	Spatial variations of doping and lifetime in epitaxial laterally overgrown GaN. *Applied Physics Letters*, **2007**, 90, 152114	3.4	42