Andrey I Titov

List of Publications by Year
in descending order

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51	607	516710 16	677142 22
papers	citations	h-index	g-index

52	52	52	319
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of the density of collision cascades on ion implantation damage in ZnO. Journal of Applied Physics, 2007, 102, 083547.	2.5	37
2	Defect accumulation during room temperature N+ irradiation of silicon. Nuclear Instruments & Methods in Physics Research B, 1996, 119, 491-500.	1.4	31
3	Effect of the density of collision cascades on implantation damage in GaN. Applied Physics Letters, 2001, 78, 2694-2696.	3.3	30
4	Energy spike effects in ion-bombarded GaN. Journal Physics D: Applied Physics, 2009, 42, 085309.	2.8	29
5	Mechanism for the molecular effect in Si bombarded with clusters of light atoms. Physical Review B, 2006, 73, .	3.2	28
6	The application of low angle Rutherford backscattering and channelling techniques to determine implantation induced disorder profile distributions in semiconductors. Nuclear Instruments & Methods, 1980, 168, 283-288.	1.2	26
7	Damage buildup in Si under bombardment with MeV heavy atomic and molecular ions. Journal of Applied Physics, 2001, 90, 3867-3872.	2.5	25
8	Structural damage in ZnO bombarded by heavy ions. Vacuum, 2010, 84, 1058-1061.	3.5	22
9	Model for electrical isolation of GaN by light-ion bombardment. Journal of Applied Physics, 2002, 92, 5740-5744.	2.5	21
10	Effect of ion species on implantation-produced disorder in GaN at liquid nitrogen temperature. Nuclear Instruments & Methods in Physics Research B, 2002, 190, 782-786.	1.4	21
11	Damage buildup and the molecular effect in Si bombarded with PFn cluster ions. Nuclear Instruments & Methods in Physics Research B, 2007, 256, 207-210.	1.4	18
12	Density of displacement cascades for cluster ions: An algorithm of calculation and the influence on damage formation in ZnO and GaN. Semiconductors, 2009, 43, 691-700.	0.5	18
13	Atomistic simulation of damage production by atomic and molecular ion irradiation in GaN. Journal of Applied Physics, 2012, 112, .	2.5	18
14	Ion beam induced amorphousâ€“crystalline phase transition in Si: Quantitative approach. Nuclear Instruments & Methods in Physics Research B, 2000, 168, 375-388.	1.4	17
15	Formation of surface amorphous layers in semiconductors under low-energy light-ion irradiation: Experiment and theory. Nuclear Instruments & Methods in Physics Research B, 2003, 212, 169-178.	1.4	16
16	Model for radiation damage buildup in GaN. Nuclear Instruments & Methods in Physics Research B, 2012, 277, 80-83.	1.4	16
17	Damage accumulation in Si during N+ and bombardment along random and channeling directions. Nuclear Instruments & Methods in Physics Research B, 1999, 149, 129-135.	1.4	15
18	Effect of pre-existing disorder on surface amorphization in GaN. Journal of Applied Physics, 2010, 108, 033505.	2.5	15

#	Article	IF	Citations
19	In-situ transport and microstructural evolution in GaN Schottky diodes and epilayers exposed to swift heavy ion irradiation. Journal of Applied Physics, 2018, 123, 161539.	2.5	14
20	Influence of ion irradiation on internal residual stress in DLC films. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 3107-3110.	1.4	13
21	Molecular effect in semiconductors under heavy-ion bombardment: Quantitative approach based on the concept of nonlinear displacement spikes. Nuclear Instruments & Methods in Physics Research B, 2002, 194, 323-332.	1.4	12
22	Damage formation in Si under irradiation with PF n + ions of different energies. Semiconductors, 2013, 47, 242-246.	0.5	12
23	Effect of ion bombardment on the phase composition and mechanical properties of diamond-like carbon films. Journal of Surface Investigation, 2014, 8, 45-49.	0.5	12
24	Defect clustering in irradiation of GaN by single and molecular ions. Vacuum, 2014, 105, 88-90.	3.5	11
25	A model of electrical isolation in GaN and ZnO bombarded with light ions. Semiconductors, 2004, 38, 1179-1186.	0.5	10
26	Effect of collision cascade density on radiation damage in SiC. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 1247-1250.	1.4	10
27	Residual stress in diamond-like carbon films: Role of growth conditions and ion irradiation. Journal of Surface Investigation, 2010, 4, 241-244.	0.5	9
28	Molecular effect on surface topography of GaN bombarded with PF4 ions. Vacuum, 2012, 86, 1638-1641.	3.5	9
29	Effects of defect clustering on optical properties of GaN by single and molecular ion irradiation. Journal of Applied Physics, 2013, 114, .	2.5	9
30	Effects of the density of collision cascades: Separating contributions from dynamic annealing and energy spikes. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2701-2704.	1.4	8
31	Nonlinear optical effect upon the irradiation of GaN with cluster ions. Semiconductors, 2014, 48, 446-450.	0.5	8
32	Experimental study and MD simulation of damage formation in GaN under atomic and molecular ion irradiation. Vacuum, 2016, 129, 166-169.	3.5	8
33	Effect of an increase in the density of collision cascades on the efficiency of the generation of primary displacements during the ion bombardment of Si. Semiconductors, 2016, 50, 989-995.	0.5	7
34	Accumulation of structural defects in silicon irradiated with PF n + cluster ions with medium energies. Semiconductors, 2007, 41, 5-10.	0.5	6
35	The role of point defects generated in the crystalline region in ion beam induced epitaxial crystallization of silicon. Radiation Effects and Defects in Solids, 1996, 139, 189-195.	1.2	5
36	Using a chromatic-aberration correction system to achieve sub-1.6-nm resolutions of a focused-ion-beam microscope designed for characterization and processing. Russian Microelectronics, 2007, 36, 279-287.	0.5	5

#	Article	IF	Citations
37	Formation of Functional Conductive Carbon Coating on Si by C60 Ion Beam. Springer Proceedings in Physics, 2021, , 131-139.	0.2	5
38	Furthering the understanding of ion-irradiation-induced electrical isolation in wide band-gap semiconductors. Nuclear Instruments & Methods in Physics Research B, 2006, 243, 79-82.	1.4	4
39	Electronic stopping dependence of ion beam induced modifications in GaN. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 890-893.	1.4	4
40	Synthesis and tailoring of GaN nanocrystals at room temperature by RF magnetron sputtering. Radiation Effects and Defects in Solids, 2012, 167, 659-665.	1.2	4
41	Swift heavy ion irradiation of metal containing tetrahedral amorphous carbon films. Nuclear Instruments & Methods in Physics Research B, 2016, 379, 162-166.	1.4	4
42	Single and molecular ion irradiation-induced effects in GaN: experiment and cumulative MD simulations. Journal Physics D: Applied Physics, 2017, 50, 505110.	2.8	4
43	Kinetics of growth of surface amorphous layers under irradiation of silicon with low-energy light ions. Semiconductors, 2003, 37, 340-346.	0.5	3
44	Effect of collision cascade density on swelling and surface topography of GaN. Nuclear Instruments & Methods in Physics Research B, 2013, 315, 257-260.	1.4	3
45	Evaluation of focused O+ ion beams as a tool for making resist masks by reactive etching. Russian Microelectronics, 2006, 35, 298-303.	0.5	2
46	Influence of ion bombardment on residual stresses in diamond-like carbon films. Journal of Surface Investigation, 2009, 3, 235-238.	0.5	2
47	Modification of properties of metal containing carbon films by swift heavy ion irradiation. , 2014, , .		1
48	Delta-Doping of Monocrystalline Semiconductors by Al and Sb Implantation Using FIB Resistless Lithography. Russian Microelectronics, 2004, 33, 362-372.	0.5	0
49	Damage buildup in semiconductors bombarded by low-energy ions. Thin Solid Films, 2006, 515, 118-121.	1.8	0
50	Effect of growth conditions on carbon film properties. , 2014, , .		0
51	Impact of Chemical Effects on Topography and Thickness of Modified GaN Surface Layers Bombarded by F and Ne Ions. Springer Proceedings in Physics, 2021, , 151-157.	0.2	0