

Renata Ratajczak

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Modern analysis of ion channeling data by Monte Carlo simulations. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 277-282.	1.4	108
2	Hydrogen release in UHMWPE upon He-ion bombardment. Vacuum, 2005, 78, 281-284.	3.5	58
3	Mechanism of damage buildup in ion bombarded ZnO. Acta Materialia, 2017, 134, 249-256.	7.9	56
4	Ni-Based Ohmic Contacts to n-Type 4H-SiC: The Formation Mechanism and Thermal Stability. Advances in Condensed Matter Physics, 2016, 2016, 1-26.	1.1	41
5	Long-term stability of Ni-silicide ohmic contact to n-type 4H-SiC. Microelectronic Engineering, 2008, 85, 2142-2145.	2.4	25
6	Fabrication and characterization of nickel silicide ohmic contacts to n-type 4H silicon carbide. Journal of Physics: Conference Series, 2008, 100, 042003.	0.4	24
7	The photoluminescence response to structural changes of Yb implanted ZnO crystals subjected to non-equilibrium processing. Journal of Applied Physics, 2017, 121, .	2.5	23
8	Monte Carlo simulations of ion channeling in crystals containing dislocations and randomly displaced atoms. Journal of Applied Physics, 2019, 126, .	2.5	21
9	On the Formation of Ni-Based Ohmic Contacts to n-Type 4H-SiC. Materials Science Forum, 2009, 615-617, 573-576.	0.3	19
10	RBS/Channeling and TEM Study of Damage Buildup in Ion Bombarded GaN. Acta Physica Polonica A, 2011, 120, 153-155.	0.5	18
11	Virtues and pitfalls in structural analysis of compound semiconductors by the complementary use of RBS/channeling and high resolution X-ray diffraction. Nuclear Instruments & Methods in Physics Research B, 2004, 219-220, 618-625.	1.4	17
12	Modification of UHMWPE by ion, electron and $\hat{\gamma}$ -ray irradiation. Vacuum, 2009, 83, S54-S56.	3.5	17
13	Nanoscale Electrostructural Characterization of Compositionally Graded Al _x Ga _{1-x} N Heterostructures on GaN/Sapphire (0001) Substrate. ACS Applied Materials & Interfaces, 2015, 7, 23320-23327.	8.0	17
14	RBS/C, XRR, and XRD Studies of Damage Buildup in Er-Implanted ZnO. Physica Status Solidi (B): Basic Research, 2019, 256, 1800364.	1.5	17
15	Thermal degradation of Au/Ni ₂ Si/n-SiC ohmic contacts under different conditions. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 165, 38-41.	3.5	16
16	Atomic layer deposited ZnO films implanted with Yb: The influence of Yb location on optical and electrical properties. Thin Solid Films, 2017, 643, 7-15.	1.8	16
17	Amorphous Ta-Si-N diffusion barriers on GaAs. Thin Solid Films, 2004, 459, 292-296.	1.8	14
18	Compositional dependence of damage buildup in Ar-ion bombarded AlGaIn. Vacuum, 2009, 83, S145-S147.	3.5	14

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19	Hydrogen-ion implantation in GaAs. <i>Vacuum</i> , 2001, 63, 697-700.	3.5	12
20	Comparative study of radiation-induced damage in magnesium aluminate spinel by means of IL, CL and RBS/C techniques. <i>Physics and Chemistry of Minerals</i> , 2016, 43, 439-445.	0.8	12
21	Structural and optical studies of Pr implanted ZnO films subjected to a long-time or ultra-fast thermal annealing. <i>Thin Solid Films</i> , 2017, 643, 24-30.	1.8	11
22	Luminescence in the Visible Region from Annealed Thin ALD-grown ZnO Films Implanted with Different Rare Earth Ions. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700889.	1.8	11
23	Correlations between the structural transformations and concentration quenching effect for RE-implanted ZnO systems. <i>Applied Surface Science</i> , 2020, 521, 146421.	6.1	10
24	Defect evolution in Ni and solid-solution alloys of NiFe and NiFeCoCr under ion irradiation at 16 and 300 ÅK. <i>Journal of Nuclear Materials</i> , 2020, 534, 152138.	2.7	10
25	Resonant Photoemission Spectroscopy Study on the Contribution of the Yb 4f States to the Electronic Structure of ZnO. <i>Acta Physica Polonica A</i> , 2018, 133, 907-909.	0.5	9
26	Barrier properties of Ta-Si-N films in Ag- and Au-containing metallization. <i>Vacuum</i> , 2004, 74, 195-199.	3.5	8
27	Structural and tribological properties of carbon steels modified by plasma pulses containing inert and active ions. <i>Surface and Coatings Technology</i> , 2007, 201, 8295-8298.	4.8	8
28	Electron-beam pulse annealed Ti-implanted GaP. <i>Journal of Applied Physics</i> , 2016, 120, 085103.	2.5	8
29	Stopping Power and Energy Straggling of Channeled He-Ions in GaN. <i>Acta Physica Polonica A</i> , 2011, 120, 163-166.	0.5	8
30	Characterization of InGaN/GaN heterostructures by means of RBS/channeling. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2000, 161-163, 539-543.	1.4	7
31	Ion Beam Modification of ZnO Epilayers: Sequential Processing. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700887.	1.8	7
32	Modification of the near surface layer of carbon steels with intense argon and nitrogen plasma pulses. <i>Vacuum</i> , 2005, 78, 181-186.	3.5	6
33	Relationship between Condition of Deposition and Properties of W-Ti-N Thin Films Prepared by Reactive Magnetron Sputtering. <i>Advanced Engineering Materials</i> , 2006, 8, 209-212.	3.5	6
34	Luminescence analysis of damage accumulation; case study of calcium molybdate. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014, 332, 60-62.	1.4	6
35	Electrical properties of ZnO films implanted with rare earth and their relationship with structural and optical parameters. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2022, 275, 115526.	3.5	6
36	Nitrogen sublattice analysis in GaN by non-Rutherford He-ion scattering. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2008, 266, 1897-1902.	1.4	5

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37	Reliability Tests of Au-Metallized Ni-Based Ohmic Contacts to 4H-n-SiC with and without Nanocomposite Diffusion Barriers. <i>Materials Science Forum</i> , 0, 645-648, 737-740.	0.3	5
38	Comparison of the structural properties of Zn-face and O-face single crystal homoepitaxial ZnO epilayers grown by RF-magnetron sputtering. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	5
39	Determination of hydrogen in GaMnN and GaMnMgN by nuclear reaction analysis. <i>Vacuum</i> , 2003, 70, 207-213.	3.5	4
40	Thermal stability of the phases formed in the near surface layers of unalloyed steels by nitrogen pulsed plasma treatment. <i>Vacuum</i> , 2007, 81, 1188-1190.	3.5	4
41	Channeling study of thermal decomposition of III-N compound semiconductors. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2008, 266, 1224-1228.	1.4	4
42	Strain profiles and defect structure in 6H-SiC crystals implanted with 2MeV As ⁺ ions. <i>Vacuum</i> , 2009, 83, S40-S44.	3.5	4
43	Chemical effects in Zr- and Co-implanted sapphire. <i>Vacuum</i> , 2009, 83, S57-S60.	3.5	4
44	RBS/Channeling Analysis of Zinc Oxide Films Grown at Low Temperature by Atomic Layer Deposition. <i>Acta Physica Polonica A</i> , 2013, 123, 899-903.	0.5	4
45	Ion beam-induced luminescence as method of characterization of radiation damage in polycrystalline materials. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2015, 365, 273-277.	1.4	4
46	Valence band of ZnO:Yb probed by resonant photoemission spectroscopy. <i>Materials Science in Semiconductor Processing</i> , 2019, 91, 306-309.	4.0	4
47	Optical Response of Epitaxial ZnO Films Grown by Atomic Layer Deposition and Coimplanted with Dy and Yb. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 1900513.	1.5	4
48	On the Question of Ferromagnetism in Proton and He-Irradiated Carbon. <i>Acta Physica Polonica A</i> , 2008, 114, 1387-1390.	0.5	4
49	Damage buildup and recovery in III-V compound semiconductors at low temperatures. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005, 240, 105-110.	1.4	3
50	Towards identification of localized donor states in InN. <i>Semiconductor Science and Technology</i> , 2007, 22, 1161-1164.	2.0	3
51	Phase Composition and Properties of Unalloyed Steels' Surfaces Modified by Intense Plasma Pulses with Various Reactive Gas Fluencies. <i>Plasma Processes and Polymers</i> , 2007, 4, S314-S318.	3.0	3
52	Proton beam induced luminescence of silicon dioxide implanted with silicon. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2009, 267, 2579-2582.	1.4	3
53	Advanced Monte Carlo Simulations for Ion-Channeling Studies of Complex Defects in Crystals. <i>Springer Series in Materials Science</i> , 2020, , 133-160.	0.6	3
54	Structural analysis of distributed Bragg reflector mirrors. <i>Vacuum</i> , 2009, 83, S148-S151.	3.5	2

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55	Channeled PIXE and magnetic measurements in Co implanted and thermally annealed ZnO single crystals. Applied Surface Science, 2014, 310, 242-247.	6.1	2
56	Ion implantation of the 4H-SiC epitaxial layers and substrates with 2 MeV Se^{+} and 1 MeV Al^{+} ions. X-Ray Spectrometry, 2015, 44, 371-378.	1.4	2
57	Stoichiometric MgB ₂ layers produced by multi-energy implantation of boron into magnesium. Surface and Coatings Technology, 2009, 203, 2712-2716.	4.8	1
58	Stability of gold bonding and Ti/Au ohmic contact metallization to n-SiC in high power devices. , 2009, , .		1
59	Low energy cathodoluminescence analysis of damage build-up in ion irradiated spinel mono- and polycrystals. Nuclear Instruments & Methods in Physics Research B, 2018, 435, 290-295.	1.4	1
60	Defect Transformations in Ion Bombarded InGaAsP. Acta Physica Polonica A, 2011, 120, 136-139.	0.5	1
61	Channeling Study of Co and Mn Implanted and Thermally Annealed Wide Band-Gap Semiconducting Compounds. Acta Physica Polonica A, 2015, 128, 845-849.	0.5	1
62	Polarized dependence of soft X-ray absorption near edge structure of ZnO films implanted by Yb. Materials Science in Semiconductor Processing, 2022, 144, 106609.	4.0	1
63	$\text{AgTe/ZrB}_2/\text{Au}$ multilayer metallization for improved ohmic contacts to n-GaSb. , 2003, , .		0
64	Characterization of the near-surface layers of carbon steels modified by interaction with intense pulsed plasma beams: scanning electron microscopy investigations. Journal of Microscopy, 2006, 224, 114-116.	1.8	0
65	Structural Characterization of GaN Epitaxial Layers Grown on 4H-SiC Substrates with Different Off-Cut. Materials Science Forum, 2009, 615-617, 939-942.	0.3	0
66	Cathodoluminescence-Based Quantitative Analysis of Radiation Damage in Powellite Single Crystals. Microscopy and Microanalysis, 2013, 19, 1108-1109.	0.4	0
67	Analysis of Radiation Damage in Magnesium Aluminate Spinel by Means of Cathodoluminescence. Microscopy and Microanalysis, 2015, 21, 1005-1006.	0.4	0
68	The stopping power of heavy ions for energies below 0.2 MeV/nucleon measured by the semi-thick target method. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 774, 82-88.	1.6	0
69	Effect of rapid thermal annealing on damage of silicon matrix implanted by low-energy rhenium ions. Journal of Alloys and Compounds, 2020, 846, 156433.	5.5	0
70	Post-implantation defects in heavy ion implanted monocrystalline ZnO. Radiation Effects and Defects in Solids, 0, , 1-11.	1.2	0
71	Electron Microscopy and X-ray Diffraction Study of AlN Layers. Acta Physica Polonica A, 2002, 102, 221-225.	0.5	0