Werner Wesch

List of Publications by Year
in descending order

62 papers	1,780 citations	279701 23 h-index	276775 41 g-index
62 all docs	62 docs citations	62 times ranked	1134 citing authors

#	Article	IF	Citations
1	Ion-beam induced damage and annealing behaviour in SiC. Nuclear Instruments & Methods in Physics Research B, 1998, 141, 105-117.	0.6	188
2	Effect of high electronic energy deposition in semiconductors. Nuclear Instruments & Methods in Physics Research B, 2004, 225, 111-128.	0.6	129
3	Damage formation and annealing at low temperatures in ion implanted ZnO. Applied Physics Letters, 2005, 87, 191904.	1.5	100
4	Radiation damage formation in InP, InSb, GaAs, GaP, Ge, and Si due to fast ions. Physical Review B, 2008, 78, .	1.1	96
5	Swift heavy ion irradiation of InP: Thermal spike modeling of track formation. Physical Review B, 2006, 73, .	1.1	92
6	Formation of discontinuous tracks in single-crystalline InP by 250-MeV Xe-ion irradiation. Physical Review B, 1998, 58, 4832-4837.	1.1	74
7	Three-step amorphisation process in ion-implanted GaN at 15 K. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 1028-1032.	0.6	71
8	Radiation damage in ZnO ion implanted at 15K. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2708-2711.	0.6	64
9	Ion beam enhanced etching of LiNbO3. Nuclear Instruments & Methods in Physics Research B, 2006, 250, 164-168.	0.6	63
10	Two-beam irradiation chamber for in situ ion-implantation and RBS at temperatures from 15 K to 300 K. Nuclear Instruments & Methods in Physics Research B, 2001, 174, 199-204.	0.6	60
11	Defect production during ion implantation of variousAIIIBVsemiconductors. Journal of Applied Physics, 1989, 65, 519-526.	1.1	58
12	Comparative study of damage production in ion implanted IIIâ€“V-compounds at temperatures from 20 to 420 K. Nuclear Instruments & Methods in Physics Research B, 1999, 147, 155-165.	0.6	46
13	Damage evolution and amorphization in semiconductors under ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2012, 277, 58-69.	0.6	40
14	Ion implantation in IIIâ€“V compounds. Nuclear Instruments & Methods in Physics Research B, 1992, 68, 342-354.	0.6	39
15	Structural modifications of low-energy heavy-ion irradiated germanium. Physical Review B, 2011, 84, .	1.1	39
16	Damage evolution in crystalline InP during irradiation with swift Xe ions. Nuclear Instruments & Methods in Physics Research B, 2000, 164-165, 377-383.	0.6	38
17	Damage formation in InP due to high electronic excitation by swift heavy ions. Nuclear Instruments & Methods in Physics Research B, 1998, 146, 341-349.	0.6	37
18	A comparative study of MeV and medium-energy ion implantation into IIIâ€“V compounds. Nuclear Instruments & Methods in Physics Research B, 1995, 96, 290-293.	0.6	34

#	Article	IF	Citations
19	Influence of electronic energy deposition on the structural modification of swift heavy-ion-irradiated amorphous germanium layers. Physical Review B, 2011, 83, .	1.1	28
20	Optical-absorption studies of ion-implantation damage in Si on sapphire. Physical Review B, 1994, 49, 14322-14330.	1.1	25
21	593MeV Au irradiation of InP, GaP, GaAs and AlAs. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 363-366.	0.6	24
22	Defect production in ion implanted GaAs, GaP and InP. Nuclear Instruments & Methods in Physics Research B, 1991, 55, 789-793.	0.6	23
23	Anomalous Plastic Deformation and Sputtering of Ion Irradiated Silicon Nanowires. Nano Letters, 2015, 15, 3800-3807.	4.5	23
24	Damage formation and annealing in InP due to swift heavy ions. Nuclear Instruments & Methods in Physics Research B, 2004, 225, 129-135.	0.6	22
25	Boundary effects on the plastic flow of amorphous layers during high-energy heavy-ion irradiation. Physical Review B, 2005, 72, .	1.1	22
26	Wurtzite InP formation during swift Xe-ion irradiation. Physical Review B, 2000, 61, 15785-15788.	1.1	21
27	In situ RBS investigation of damage production during ion implantation in AlxGa1â^'xAs at 20 K. Nuclear Instruments & Methods in Physics Research B, 1999, 148, 468-473.	0.6	20
28	Charge state effect on near-surface damage formation in swift heavy ion irradiated InP. Journal of Applied Physics, 2005, 97, 123532.	1.1	20
29	Low temperature transformations of defects in GaAs and AlGaAs. Nuclear Instruments & Methods in Physics Research B, 1999, 148, 401-405.	0.6	18
30	Temperature and dose dependence of damage production in Si+ and Se+ implanted InP. Nuclear Instruments & Methods in Physics Research B, 1995, 106, 303-307.	0.6	17
31	Comparison of ion-induced damage formation in <110> and <100> MgO. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2872-2876.	0.6	17
32	Ion-beam-induced damage formation in CdTe. Journal of Applied Physics, 2011, 109, 113531.	1.1	17
33	Direction-dependent RBS channelling studies in ion implanted LiNbO3. Nuclear Instruments & Methods in Physics Research B, 2016, 379, 195-199.	0.6	17
34	Ionisation stimulated defect annealing in GaAs and InP. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 1018-1023.	0.6	16
35	Ion-beam induced effects at 15K in Î±-Al2O3 of different orientations. Journal of Applied Physics, 2006, 99, 123511.	1.1	15
36	Effect of high electronic excitation in swift heavy ion irradiated semiconductors. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 283-286.	0.6	14

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37	Investigation of the amorphization process in ion implanted AIIIBV compounds. Nuclear Instruments & Methods in Physics Research B, 1992, 63, 47-51.	0.6	13
38	Ferromagnetism and ferromagnetic resonance in Mn and As co-implanted Si and GaAs. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 126, 148-150.	1.7	11
39	Ion-beam induced effects at 15K in MgO. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 488-491.	0.6	11
40	Rapid ion-implantation-induced amorphization of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>In</mml:mtext></mml:mrow><mml:mi>x</mml:mi></mml:msub> to InAs and GaAs. Physical Review B, 2009, 79, .	1.1	11
41	Correlation between structural defects and optical properties in ion-implanted silicon. Physica Status Solidi A, 1981, 65, 225-232.	1.7	10
42	The rapid amorphisation of In0.53Ga0.47As relative to both InAs and GaAs. Materials Science in Semiconductor Processing, 2004, 7, 35-38.	1.9	10
43	Production of radiation defects in silicon at different temperatures. Radiation Effects, 1980, 48, 19-23.	0.4	9
44	Swift heavy ion irradiation of crystalline CdTe. Journal Physics D: Applied Physics, 2014, 47, 065301.	1.3	8
45	Modification of A_mB_v Semiconductor Layers by Ion Implantation. Materials Research Society Symposia Proceedings, 1993, 300, 297.	0.1	7
46	Damage production in GaAs during MeV ion implantation. Nuclear Instruments & Methods in Physics Research B, 1996, 120, 230-235.	0.6	7
47	Damage formation and recovery in Nd:CNGG crystal by carbon ion implantation. Nuclear Instruments & Methods in Physics Research B, 2020, 462, 119-125.	0.6	7
48	Anomalous damaging behaviour of AlAs during ion implantation at 15 K. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 78-82.	0.6	6
49	Rapid amorphization in InxGa1â^'xAs alloys at temperatures between 15K and 300K. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 480-483.	0.6	6
50	Damage evolution in LiNbO3 due to electronic energy deposition below the threshold for direct amorphous track formation. Journal of Applied Physics, 2019, 126, 125105.	1.1	6
51	Compositional dependence of defect mobility and damage buildup in AlxGa1â^'xAs. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 219-223.	0.6	5
52	Radiation hardness of Kr+ ion implanted BaWO4 at room temperature. Nuclear Instruments & Methods in Physics Research B, 2018, 435, 203-208.	0.6	5
53	Determination of track radii and relation to the electronic energy density deposited in swift heavy ion irradiated LiNbO3. Nuclear Instruments & Methods in Physics Research B, 2020, 485, 50-56.	0.6	5
54	Ion beam synthesis of Mn/As-based clusters in silicon. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 90-93.	0.6	4

#	Article	IF	Citations
55	Ion beam synthesis of Mn/Sb clusters in silicon. Journal Physics D: Applied Physics, 2009, 42, 035406.	1.3	4
56	In-Situ Growth of MnAs Nanocrystals in Si studied by Transmission Electron Microscopy. Microscopy and Microanalysis, 2007, 13, 114-115.	0.2	2
57	Ion-implantation-induced amorphization of InxGa1â^'xP alloys as functions of stoichiometry and temperature. Journal of Applied Physics, 2016, 119, .	1.1	2
58	He beam annealing and self-healing of Kr implanted BaWO4 at low temperature. Journal of Applied Physics, 2021, 129, 165102.	1.1	2
59	Amorphous phase formation in ion implanted InxGa1â^'xAs. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 344-347.	0.6	1
60	Primary Processes of Damage Formation in Semiconductors. Springer Series in Surface Sciences, 2016, , 189-241.	0.3	1
61	Response to â€œComment on â€˜Damage evolution in LiNbO3 due to electronic energy deposition below the threshold for direct amorphous track formationâ€™â€•[J. Appl. Phys. 127, 156101 (2020)]. Journal of Applied Physics, 2020, 127, 156102.	1.1	0
62	Swift Heavy Ion Irradiation of Crystalline Semiconductors. Springer Series in Surface Sciences, 2016, , 365-402.	0.3	0