Adam J Barcz

List of Publications by Year
in descending order

81 papers	967 citations	516710 16 h-index	477307 29 g-index
81 all docs	81 docs citations	81 times ranked	1229 citing authors

#	Article	IF	Citations
1	Effects of electron concentration on the optical absorption edge of InN. Applied Physics Letters, 2004, 84, 2805-2807.	3.3	221
2	High mobility 2D electron gas in iodine modulation doped CdTe/CdMgTe heterostructures. Journal of Crystal Growth, 1998, 184-185, 814-817.	1.5	72
3	Carrier-induced ferromagnetic interactions in p-doped Zn(1â^'x)MnxTe epilayers. Journal of Crystal Growth, 2000, 214-215, 387-390.	1.5	56
4	Ion implantation for isolation of AlGaN/GaN HEMTs using C or Al. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1162-1169.	1.8	34
5	Influence of growth conditions on the lattice constant and composition of (Ga,Mn)As. Applied Physics Letters, 2003, 82, 4678-4680.	3.3	27
6	Origin of Magnetic Circular Dichroism in GaMnAs: Giant Zeeman Splitting versus Spin Dependent Density of States. Physical Review Letters, 2009, 102, 247202.	7.8	27
7	Observation of surface states on heavily indium-doped SnTe(111), a superconducting topological crystalline insulator. Physical Review B, 2016, 93, .	3.2	27
8	Diffusion and impurity segregation in hydrogen-implanted silicon carbide. Journal of Applied Physics, 2014, 115, .	2.5	26
9	XPS study of arsenic doped ZnO grown by Atomic Layer Deposition. Journal of Alloys and Compounds, 2014, 582, 594-597.	5.5	25
10	Si diffusion in epitaxial GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1416-1419.	0.8	24
11	Common origin of ferromagnetism and band edge Zeeman splitting in GaMnAs at low Mn concentrations. Applied Physics Letters, 2007, 91, 171118.	3.3	24
12	Manganese diffusion in MBE-grown Cd(Mn)Te structures. Journal of Crystal Growth, 1996, 159, 980-984.	1.5	21
13	Silicon detectors for the sLHC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 658, 11-16.	1.6	21
14	Effect of External Stress Applied during Annealing on Hydrogen- and Oxygen-Implanted Silicon. Solid State Phenomena, 1999, 69-70, 345-350.	0.3	20
15	Peculiarities of thin film deposition by means of reactive impulse plasma assisted chemical vapor deposition (RIPACVD) method. Thin Solid Films, 2004, 459, 160-164.	1.8	18
16	Channels of Cd diffusion and stoichiometry in CdTe grown by molecular beam epitaxy. Applied Physics Letters, 1998, 72, 206-208.	3.3	16
17	Extremely deep SIMS profiling: oxygen in FZ silicon. Applied Surface Science, 2003, 203-204, 396-399.	6.1	16
18	Diffusion of Mn in gallium nitride: Experiment and modelling. Journal of Alloys and Compounds, 2019, 771, 215-220.	5.5	13

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19	Cation diffusion in MBE-grown CdTe layers. Thin Solid Films, 2000, 367, 220-222.	1.8	11
20	Out- and in-diffusion of oxygen16O in silicon. Semiconductor Science and Technology, 2004, 19, 1311-1314.	2.0	11
21	New Chemical Method of Obtaining Thick Ga1-xMnxN Layers:Â Prospective Spintronic Material. Chemistry of Materials, 2007, 19, 3139-3143.	6.7	11
22	Oxygen diffusion into GaN from oxygen implanted GaN or Al₂O₃. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1513-1515.	0.8	11
23	Structure of Oxygen - Implanted Silicon Single Crystals Treated at â‰¥1400 K under High Argon Pressure. Crystal Research and Technology, 2001, 36, 933-941.	1.3	10
24	Effect of pressure annealing on structure of Si:Mn. Materials Science in Semiconductor Processing, 2006, 9, 270-274.	4.0	10
25	Analysis of Crystal Lattice Deformation by Ion Channeling. Acta Physica Polonica A, 2013, 123, 828-830.	0.5	10
26	Ultrahigh sensitivity SIMS analysis of oxygen in silicon. Surface and Interface Analysis, 2018, 50, 729-733.	1.8	10
27	Doping of low-temperature GaAs and GaMnAs with carbon. Applied Physics Letters, 2004, 85, 4678-4680.	3.3	9
28	Growth and structural properties of thick GaN layers obtained by sublimation sandwich method. Journal of Crystal Growth, 2007, 303, 395-399.	1.5	9
29	Structural and magnetic properties of the molecular beam epitaxy grown MnSb layers on GaAs substrates. Journal of Applied Physics, 2009, 106, .	2.5	9
30	Resonant Photoemission Spectroscopy Study on the Contribution of the Yb 4f States to the Electronic Structure of ZnO. Acta Physica Polonica A, 2018, 133, 907-909.	0.5	9
31	Diffusion and activation of Si implanted into GaAs. Vacuum, 2003, 70, 97-101.	3.5	8
32	Electrical activity of deep levels in the presence of InAs/GaAs quantum dots. Materials Science in Semiconductor Processing, 2006, 9, 36-40.	4.0	8
33	Determination of Mn Acceptor Compensation in MBE-Grown GaMnAs via Magnetic Circular Dichroism (MCD). IEEE Transactions on Magnetics, 2007, 43, 3031-3033.	2.1	8
34	Effect of processing on microstructure of Si:Mn. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 99-102.	3.5	8
35	Investigation of diffusion mechanism of beryllium in GaN. Physica B: Condensed Matter, 2020, 594, 412316.	2.7	8
36	Defect Structure of High-Temperature-Grown GaMnSb/GaSb. Acta Physica Polonica A, 2010, 117, 341-343.	0.5	8

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37	Kinetic model of Auâ€GaAs interfacial reaction. Journal of Applied Physics, 1993, 74, 3172-3176.	2.5	7
38	Effect of External Stress at Annealing on Microstructure of Silicon Co-Implanted with Hydrogen and Helium. Solid State Phenomena, 2003, 95-96, 313-318.	0.3	7
39	Proton implantation for the isolation of AlGaAs/GaAs quantum cascade lasers. Semiconductor Science and Technology, 2016, 31, 075010.	2.0	7
40	Iodine-impurity level in MBE-grownCd1â^'xMnxTe. Physical Review B, 1999, 59, 12917-12923.	3.2	6
41	Properties of ZrN films as substrate masks in liquid phase epitaxial lateral overgrowth of compound semiconductors. Crystal Research and Technology, 2005, 40, 492-497.	1.3	6
42	Diffusion of Mn in gallium arsenide. Journal of Alloys and Compounds, 2006, 423, 132-135.	5.5	6
43	High temperature arsenic doping of CdHgTe epitaxial layers. Crystal Research and Technology, 2004, 39, 11-22.	1.3	5
44	Recrystallisation and dopant diffusion in amorphised germanium layers upon pulsed laser annealing. Journal of Alloys and Compounds, 2004, 362, 265-268.	5.5	5
45	Communicationâ€"Direct Imaging of Irradiation Damage in Semiconductors by Low-Energy SEM. ECS Journal of Solid State Science and Technology, 2017, 6, P415-P417.	1.8	5
46	Analysis of defect structure in GaN epilayers doped with implanted Si+ by RBS/c method. Nuclear Instruments & Methods in Physics Research B, 2019, 450, 248-251.	1.4	5
47	Incorporation of oxygen in SiC implanted with hydrogen. Nuclear Instruments & Methods in Physics Research B, 2015, 365, 146-149.	1.4	4
48	Study of the Local Environment of Mn Ions Implanted in GaSb. Acta Physica Polonica A, 2010, 117, 286-292.	0.5	4
49	X-ray electrono-optical and SIMS characterization of Si crystals implanted with Bi ions before and after rapid thermal annealing. Crystal Research and Technology, 1995, 30, 129-133.	1.3	3
50	Study of Zn-related structural transformations at p-GaAs/Ni/Zn interfaces relative to the formation of an ohmic contact. Materials Science in Semiconductor Processing, 2001, 4, 289-291.	4.0	3
51	Controlled arsenic diffusion in epitaxial CdxHg1â^'xTe layers in the evaporationâ€"condensationâ€"diffusion process. Thin Solid Films, 2002, 403-404, 144-147.	1.8	3
52	Porous-like silicon prepared from Si:H annealed at high argon pressure. Physica Status Solidi A, 2003, 197, 236-240.	1.7	3
53	New Silicon-Based Materials for Spintronics Applications - Si:V and Si:Cr. ECS Transactions, 2006, 3, 481-489.	0.5	3
54	Properties of Si:Cr Annealed under Enhanced Stress Conditions. Solid State Phenomena, 2007, 131-133, 375-380.	0.3	3

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55	Accumulation of Hydrogen within Implantation-Damaged Areas in Processed Si:N and Si:O. Solid State Phenomena, 0, 156-158, 319-324.	0.3	3
56	Stress-mediated redistribution of Mn in annealed Si:Mn. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 361-364.	3.5	3
57	Damage-induced voltage alteration (DIVA) contrast in SEM images of ion-irradiated semiconductors. Ultramicroscopy, 2019, 204, 6-9.	1.9	3
58	SIMS accurate determination of matrix composition of topological crystalline insulator material Pb1 â^' xSnxSe. Surface and Interface Analysis, 2020, 52, 71-75.	1.8	3
59	Second metastableDXcenter inCdF2:Gacrystals. Physical Review B, 2000, 61, 9295-9299.	3.2	2
60	Investigation of the Hydrogen Transport Processes in Crystalline Silicon of n-Type Conductivity. Solid State Phenomena, 2007, 131-133, 425-430.	0.3	2
61	Buried spongy-like layers in silicon implanted with He+, annealed and treated in D+plasma. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 1551-1556.	0.8	2
62	Electrical isolation of GaAs and AlGaAs/GaAs Quantum Cascade Lasers by deep hydrogen implantation. Materials Science in Semiconductor Processing, 2018, 74, 88-97.	4.0	2
63	Pulsed laser annealing of nitrogen-implanted GaP. Materials Letters, 1985, 3, 141-144.	2.6	1
64	The microstructure and electrical properties of hydrogenated Czochralski silicon treated at high temperatureâ€“pressure. Journal of Physics Condensed Matter, 2003, 15, 7445-7453.	1.8	1
65	Evolution of defect structure of Ge-implanted Si crystal during nanosecond laser annealing. EPJ Applied Physics, 2004, 27, 149-153.	0.7	1
66	Pressure-induced transformations of nitrogen implanted into silicon. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 781-785.	1.8	1
67	Response to â€œComment on â€˜Common origin of ferromagnetism and band edge Zeeman splitting in GaMnAs at low Mn concentrationsâ€™â€•[Appl. Phys. Lett. 94, 156101 (2009)]. Applied Physics Letters, 2009, 94, 156102.	3.3	1
68	Ion-Irradiated Damage in Semiconductors Visualized by Means of Low-kV Scanning Electron Microscopy. Microscopy and Microanalysis, 2019, 25, 486-487.	0.4	1
69	Modification of Al-based metallization for improved surface morphology. Microelectronic Engineering, 1997, 37-38, 341-346.	2.4	0
70	High-quality pâ€“n junction fabrication by ion implantation using the LPCVD amorphous silicon films. Vacuum, 2003, 70, 81-85.	3.5	0
71	Cr3+ ions in hydrogenated and proton exchanged lithium niobate crystals. Physica Status Solidi A, 2004, 201, 298-303.	1.7	0
72	ZnO-based p-n Junctions with p-type ZnO by ZnTe Oxidation. Materials Research Society Symposia Proceedings, 2005, 891, 1.	0.1	0

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73	Pressure mediated release of hydrogen from silicon co-implanted with H2+ and He+. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2011-2015.	0.8	0
74	Deuterium accumulation within nano-structured layers in Si:He upon plasma treatment. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2789-2791.	0.8	0
75	Silicon Dioxide as a Boundary for Oxygen Outdiffusion from CZ-Si. Defect and Diffusion Forum, 2010, 297-301, 688-693.	0.4	0
76	Hydrogen Gettering within Processed Oxygen-Implanted Silicon. Advanced Materials Research, 2011, 276, 35-40.	0.3	0
77	Structure of self-implanted silicon annealed under enhanced hydrostatic pressure. High Pressure Research, 2011, 31, 102-105.	1.2	0
78	Solid Phase Epitaxial Re-Growth of Amorphous Layer in Si:Si Annealed under Enhanced Hydrostatic Pressure. Solid State Phenomena, 0, 178-179, 416-420.	0.3	0
79	Properties of Si:V Annealed under Enhanced Hydrostatic Pressure. Acta Physica Polonica A, 2011, 120, 196-199.	0.5	0
80	Performance of a nitrogen implanted large aperture THz emitter. Photonics Letters of Poland, 2012, 4, .	0.4	0
81	Response of ZnO/GaN Heterostructure to Ion Irradiation. Acta Physica Polonica A, 2015, 128, 832-835.	0.5	0