Akiyoshi Chayahara

List of Publications by Year
in descending order

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243	4,014	136740	168136
papers	citations	32	53
		h-index	g-index

244	244	244	2165
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Gold nanoparticles ion implanted in glass with enhanced nonlinear optical properties. Journal of Applied Physics, 1994, 75, 3075-3080.	1.1	233
2	Au+-Ion-Implanted Silica Glass with Non-Linear Optical Property. Japanese Journal of Applied Physics, 1991, 30, L742-L744.	0.8	149
3	The effect of nitrogen addition during high-rate homoepitaxial growth of diamond by microwave plasma CVD. Diamond and Related Materials, 2004, 13, 1954-1958.	1.8	148
4	Metastable GaAsBi Alloy Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2003, 42, L1235-L1237.	0.8	115
5	Synthesizing single-crystal diamond by repetition of high rate homoepitaxial growth by microwave plasma CVD. Diamond and Related Materials, 2005, 14, 1743-1746.	1.8	107
6	Synthesis of large single crystal diamond plates by high rate homoepitaxial growth using microwave plasma CVD and lift-off process. Diamond and Related Materials, 2008, 17, 415-418.	1.8	107
7	A 2-in. mosaic wafer made of a single-crystal diamond. Applied Physics Letters, 2014, 104, .	1.5	105
8	High-Dose Implantation of MeV Carbon Ion into Silicon. Japanese Journal of Applied Physics, 1992, 31, 139-140.	0.8	94
9	Function of Substrate Bias Potential for Formation of Cubic Boron Nitride Films in Plasma CVD Technique. Japanese Journal of Applied Physics, 1987, 26, L1435-L1436.	0.8	91
10	Widening of optical bandgap of polycrystalline InN with a few percent incorporation of oxygen. Applied Physics Letters, 2003, 83, 3480-3482.	1.5	86
11	Fabrication of 1 Inch Mosaic Crystal Diamond Wafers. Applied Physics Express, 2010, 3, 051301.	1.1	86
12	Fabrication and fundamental characterizations of tiled clones of single-crystal diamond with 1-inch size. Diamond and Related Materials, 2012, 24, 29-33.	1.8	75
13	Improving purity and size of single-crystal diamond plates produced by high-rate CVD growth and lift-off process using ion implantation. Diamond and Related Materials, 2009, 18, 1258-1261.	1.8	74
14	Highâ€rate deposition of amorphous hydrogenated silicon from a SiH4plasma. Applied Physics Letters, 1984, 44, 600-602.	1.5	64
15	Uniform growth and repeatable fabrication of inch-sized wafers of a single-crystal diamond. Diamond and Related Materials, 2013, 33, 27-31.	1.8	59
16	High rate homoepitaxial growth of diamond by microwave plasma CVD with nitrogen addition. Diamond and Related Materials, 2006, 15, 455-459.	1.8	58
17	Lattice Distortion of GaAsBi Alloy Grown on GaAs by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2006, 45, 67-69.	0.8	49
18	Characterization of Schottky barrier diodes on a 0.5-inch single-crystalline CVD diamond wafer. Diamond and Related Materials, 2010, 19, 208-212.	1.8	49

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19	Rutileâ€type TiO2 formation by ion beam dynamic mixing. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 3253-3259.	0.9	46
20	A new PBIID processing system supplying RF and HV pulses through a single feed-through. Surface and Coatings Technology, 2002, 156, 50-53.	2.2	44
21	Large reduction of threading dislocations in diamond by hot-filament chemical vapor deposition accompanying W incorporations. Applied Physics Letters, 2018, 113, .	1.5	43
22	New III-V Semiconductor InGaAsBi Alloy Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2005, 44, L1161-L1163.	0.8	42
23	Developments of elemental technologies to produce inch-size single-crystal diamond wafers. Diamond and Related Materials, 2011, 20, 616-619.	1.8	40
24	High-temperature characteristics of charge collection efficiency using single CVD diamond detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 789, 50-56.	0.7	40
25	Photoluminescence of Cu+-doped silica glass prepared by MeV ion implantation. Nuclear Instruments & Methods in Physics Research B, 1999, 149, 77-80.	0.6	39
26	New Semiconductor GaNAsBi Alloy Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2004, 43, L845-L847.	0.8	36
27	Simulation of microwave plasmas concentrated on the top surface of a diamond substrate with finite thickness. Diamond and Related Materials, 2006, 15, 1383-1388.	1.8	36
28	Simplified description of microwave plasma discharge for chemical vapor deposition of diamond. Journal of Applied Physics, 2007, 101, 063302.	1.1	36
29	Properties of BN thin films deposited by plasma CVD. Applied Surface Science, 1988, 33-34, 561-566.	3.1	35
30	Effect of heat treatment on the oxygen content and resistivity in sputtered NiO films. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 1629-1630.	1.0	34
31	A nitrogen doped low-dislocation density free-standing single crystal diamond plate fabricated by a lift-off process. Applied Physics Letters, 2014, 104, .	1.5	34
32	New mode of plasma deposition in a capacitively coupled reactor. Applied Physics Letters, 1984, 44, 1049-1051.	1.5	33
33	Formation of Crystalline SiC Buried Layer by High-Dose Implantation of MeV Carbon Ions at High Temperature. Japanese Journal of Applied Physics, 1993, 32, L1286-L1288.	0.8	32
34	Low resistivity p+ diamond (100) films fabricated by hot-filament chemical vapor deposition. Diamond and Related Materials, 2015, 58, 110-114.	1.8	32
35	Radiation hardness of a single crystal CVD diamond detector for MeV energy protons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 784, 147-150.	0.7	30
36	Characterization of free-standing single-crystal diamond prepared by hot-filament chemical vapor deposition. Diamond and Related Materials, 2014, 48, 19-23.	1.8	29

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37	Surface Structure of Ion-Implanted Silica Glass. Japanese Journal of Applied Physics, 1990, 29, 905-908.	0.8	28
38	Two-Phase Structure of a-Si1-xNx:H Fabricated by Microwave Glow-Discharge Technique. Japanese Journal of Applied Physics, 1985, 24, 19-23.	0.8	27
39	Formation of Polycrystalline SiC in ECR Plasma. Japanese Journal of Applied Physics, 1986, 25, L564-L566.	0.8	27
40	Predominant physical quantity dominating macroscopic surface shape of diamond synthesized by microwave plasma CVD. Diamond and Related Materials, 2007, 16, 576-580.	1.8	27
41	Characterization of crystallinity of a large self-standing homoepitaxial diamond film. Diamond and Related Materials, 2009, 18, 216-219.	1.8	25
42	Schottky barrier diodes fabricated on diamond mosaic wafers: Dislocation reduction to mitigate the effect of coalescence boundaries. Applied Physics Letters, 2019, 114, .	1.5	25
43	Reflectance Spectra of BN Materials in the Vacuum Ultraviolet. Japanese Journal of Applied Physics, 1988, 27, 440-441.	0.8	24
44	Titanium nitride coating on implanted layer using titanium plasma based ion implantation. Nuclear Instruments & Methods in Physics Research B, 1999, 148, 37-41.	0.6	24
45	Improvements of crystallinity of single crystal diamond plates produced by lift-off process using ion implantation. Diamond and Related Materials, 2010, 19, 128-130.	1.8	23
46	Growth and evaluation of self-standing CVD diamond single crystals on off-axis (001) surface of HP/HT type IIa substrates. Diamond and Related Materials, 2012, 26, 45-49.	1.8	23
47	Toward Highâ€Performance Diamond Electronics: Control and Annihilation of Dislocation Propagation by Metalâ€Assisted Termination. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900498.	0.8	23
48	Macroparticle-Free Ti-Al Films by Newly Developed Coaxial Vacuum Arc Deposition. Japanese Journal of Applied Physics, 1999, 38, L467-L469.	0.8	22
49	High-performance diamond radiation detectors produced by lift-off method. Europhysics Letters, 2016, 113, 62001.	0.7	22
50	Tomography of Microstructures by Scanning Micro-RBS Probe. Japanese Journal of Applied Physics, 1989, 28, L1286-L1289.	0.8	21
51	Simulation of temperature and gas flow distributions in region close to a diamond substrate with finite thickness. Diamond and Related Materials, 2006, 15, 1738-1742.	1.8	21
52	Carbon nitride thin films formed by low energy ion beam deposition with positive and negative ions. Nuclear Instruments & Methods in Physics Research B, 1997, 121, 73-78.	0.6	20
53	Numerical analyses of a microwave plasma chemical vapor deposition reactor for thick diamond syntheses. Diamond and Related Materials, 2006, 15, 1389-1394.	1.8	20
54	Imaginary Part of the Dielectric Function of Sintered and Microcrystalline Cubic Boron Nitride. Japanese Journal of Applied Physics, 1989, 28, 555-556.	0.8	19

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55	Preferentially Oriented Crystal Growth in Dynamic Mixing Processâ€“An Approach by Monte Carlo Simulationâ€“. Japanese Journal of Applied Physics, 1990, 29, 2059-2065.	0.8	19
56	Control of preferentially oriented crystal growth of titanium nitride effects of nitrogen adsorption and ion-beam irradiation in dynamic mixing process. Applied Surface Science, 1992, 60-61, 760-764.	3.1	19
57	Titanium nitride for transparent conductors. Applied Physics Letters, 1994, 64, 1048-1049.	1.5	19
58	Modeling and numerical analyses of microwave plasmas for optimizations of a reactor design and its operating conditions. Diamond and Related Materials, 2005, 14, 1776-1779.	1.8	19
59	A diamond 14 MeV neutron energy spectrometer with high energy resolution. Review of Scientific Instruments, 2016, 87, 023503.	0.6	18
60	Stable-Unstable Phase Transition of Densely Contract-Electrified Electrons on Thin Silicon Oxide. Japanese Journal of Applied Physics, 1993, 32, L1852-L1854.	0.8	17
61	Spatial Distribution and Its Phase Transition of Densely Contact-Electrified Electrons on a Thin Silicon Oxide. Japanese Journal of Applied Physics, 1994, 33, L70-L73.	0.8	17
62	Chemical States of Implanted Aluminum Ions in Silica and Silicon Ions in Alumina. Journal of the American Ceramic Society, 1994, 77, 3019-3022.	1.9	17
63	Formation process of CuCl nano-particles in silica glass by ion implantation. Journal of Non-Crystalline Solids, 1999, 259, 93-99.	1.5	17
64	Pulsed vacuum arc deposition of multilayers in the nanometer range. Surface and Coatings Technology, 2000, 132, 217-221.	2.2	17
65	Numerical analysis of power absorption and gas pressure dependence of microwave plasma using a tractable plasma description. Diamond and Related Materials, 2006, 15, 1395-1399.	1.8	17
66	Numerical microwave plasma discharge study for the growth of large single-crystal diamond. Diamond and Related Materials, 2015, 54, 9-14.	1.8	17
67	Effects of intentionally introduced nitrogen and substrate temperature on growth of diamond bulk single crystals. Japanese Journal of Applied Physics, 2016, 55, 01AC07.	0.8	17
68	Growth and characterization of freestanding p+ diamond (100) substrates prepared by hot-filament chemical vapor deposition. Diamond and Related Materials, 2018, 81, 33-37.	1.8	17
69	Time Dependent Dielectric Breakdown of Thin Silicon Oxide Using Dense Contact Electrification. Japanese Journal of Applied Physics, 1994, 33, 3756-3760.	0.8	16
70	Ni-defective value and resistivity of sputtered NiO films. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 1627-1628.	1.0	16
71	Atomic scale interactions between hydrocarbon radicals and diamond (100) surfaces. Diamond and Related Materials, 2006, 15, 522-525.	1.8	16
72	Annealing Effect on Hydrogenated Amorphous Silicon Films Prepared at High Deposition-Rate by Substrate Impedance Tuning Technique. Japanese Journal of Applied Physics, 1985, 24, 795-799.	0.8	15

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73	Focused High-Energy Heavy Ion Beams. Japanese Journal of Applied Physics, 1990, 29, 1230-1233.	0.8	15
74	Formation of CuCl ultrafine particles in silica glass by ion implantation. Journal of Non-Crystalline Solids, 1994, 178, 155-159.	1.5	15
75	High energy resolution PIXE with high efficiency using the heavy ion microbeam. Nuclear Instruments & Methods in Physics Research B, 1997, 130, 243-246.	0.6	15
76	Numerical and experimental studies of high growth-rate over area with 1-inch in diameter under moderate input-power by using MWPCVD. Diamond and Related Materials, 2008, 17, 1062-1066.	1.8	15
77	Large Single Crystal Diamond Plates Produced by Microwave Plasma CVD. Materials Science Forum, 0, 615-617, 991-994.	0.3	15
78	Factors to control uniformity of single crystal diamond growth by using microwave plasma CVD. Diamond and Related Materials, 2016, 63, 17-20.	1.8	15
79	Method to increase the thickness and quality of diamond layers using plasma chemical vapor deposition under (H, C, N, O) system. Diamond and Related Materials, 2020, 101, 107652.	1.8	15
80	Optical properties of carbon and carbon nitride films prepared by mass-separated energetic negative carbon and carbon nitrogen ions. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 2384-2388.	0.9	14
81	Crystallinity of freestanding large undoped single crystal diamond plates produced using pre-ion-implanted substrates and lift-off processes. Diamond and Related Materials, 2010, 19, 1259-1262.	1.8	14
82	Effect of Ar addition on uniformity of diamond growth by using microwave plasma chemical vapor deposition. Diamond and Related Materials, 2018, 87, 143-148.	1.8	14
83	Localized modification of magnetic properties in 304 stainless steel foil by MeV ion beams. Applied Physics A: Solids and Surfaces, 1990, 50, 573-576.	1.4	13
84	WDX-PIXE analysis of low energy X-rays using a microbeam. Nuclear Instruments & Methods in Physics Research B, 1999, 150, 109-113.	0.6	13
85	Chemical state analysis of Cu, Cu2O and CuO with WDX using an ion microbeam. Nuclear Instruments & Methods in Physics Research B, 2001, 181, 128-133.	0.6	13
86	Formation of hydrogenated amorphous carbon films by plasma based ion implantation system applying RF and negative high voltage pulses through single feedthrough. Surface and Coatings Technology, 2002, 156, 328-331.	2.2	13
87	Enhanced annealing of damage in ion-implanted 4H-SiC by MeV ion-beam irradiation. Journal of Applied Physics, 2005, 97, 103538.	1.1	13
88	Fano factor evaluation of diamond detectors for alpha particles. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2629-2633.	0.8	13
89	Structural investigation on implanted copper ions in silica glass by XAFS spectroscopy. Journal of Non-Crystalline Solids, 1998, 238, 143-151.	1.5	12
90	Nano-indentation testing for plasma-based ion-implanted surface of plastics. Surface and Coatings Technology, 2001, 136, 249-251.	2.2	12

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91	Nitrogen diffusion in stainless steel during irradiation with mass-selected low-energy N+ ion beams. Surface and Coatings Technology, 2005, 196, 271-274.	2.2	12
92	Three-dimensional microanalysis using a focused MeV oxygen ion beam. Nuclear Instruments & Methods in Physics Research B, 1991, 54, 269-274.	0.6	11
93	Heavy ion microprobes and their applications. Nuclear Instruments & Methods in Physics Research B, 1993, 77, 8-16.	0.6	11
94	A study of deuterium permeation through thin BN films. Thin Solid Films, 1997, 299, 5-9.	0.8	11
95	High energy resolution PIXE analysis using focused MeV heavy ion beams. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 368-372.	0.6	11
96	Kinetic energy influence of hyperthermal dual ion beams on bonding and optical properties of carbon nitride films. Applied Physics Letters, 1998, 72, 1412-1414.	1.5	11
97	Titanium nitride prepared by plasma-based titanium-ion implantation. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 840.	1.6	11
98	Etching Rate Control by MeV O+Implantation for Laser-Chemical Reaction of Ferrite. Japanese Journal of Applied Physics, 1990, 29, 2260-2264.	0.8	10
99	Spatial Distributions of Densely Contact-Electrified Charges on a Thin Silicon Oxide. Japanese Journal of Applied Physics, 1994, 33, L74-L77.	0.8	10
100	Activation energies for light ions in ion beam induced epitaxial crystallization. Nuclear Instruments & Methods in Physics Research B, 1999, 148, 370-374.	0.6	10
101	Microwave plasma generated in a narrow gap to achieve high power efficiency during diamond growth. Diamond and Related Materials, 2009, 18, 117-120.	1.8	10
102	Effect of Annealing on Hydrogenated Amorphous Silicon Prepared at High Deposition Rate. Japanese Journal of Applied Physics, 1984, 23, L81-L82.	0.8	9
103	The properties of titanium nitride prepared by dynamic ion mixing. Nuclear Instruments & Methods in Physics Research B, 1993, 80-81, 1380-1383.	0.6	9
104	In-situ multi-dimensional observation of masklessly implanted sites using MeV heavy ion microprobes. Nuclear Instruments & Methods in Physics Research B, 1993, 77, 373-377.	0.6	9
105	Thermal annealing behavior of ion-implanted silica glass. Journal of Non-Crystalline Solids, 1993, 163, 59-64.	1.5	9
106	Structure of Au ultrafine particles in silica glass by x-ray absorption fine structure spectroscopy. Journal of Materials Research, 1995, 10, 2418-2421.	1.2	9
107	Titanium ion implantation into silicon substrate by plasma-based metal ion implantation system with 100-kV/2.5-A pulse modulator. Surface and Coatings Technology, 1998, 103-104, 252-256.	2.2	9
108	Coordination structures of implanted Fe, Co, and Ni ions in silica glass by x-ray absorption fine structure spectroscopy. Journal of Materials Research, 2001, 16, 155-162.	1.2	9

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109	Epitaxial Growth of Pure 28Si Thin Films Using Isotopically Purified Ion Beams. Japanese Journal of Applied Physics, 2001, 40, L1283-L1285.	0.8	9
110	Simulation with an improved plasma model utilized to design a new structure of microwave plasma discharge for chemical vapor deposition of diamond crystals. Diamond and Related Materials, 2008, 17, 494-497.	1.8	9
111	Effects of crystallographic orientation on the homoepitaxial overgrowth on tiled single crystal diamond clones. Diamond and Related Materials, 2015, 57, 17-21.	1.8	9
112	Synthesis and characterization of diamond capsules for direct-drive inertial confinement fusion. Diamond and Related Materials, 2018, 86, 15-19.	1.8	9
113	Plasma based ion implantation technology for high-temperature oxidation-resistant surface coatings. Surface and Coatings Technology, 2002, 158-159, 186-192.	2.2	8
114	Raman spectra of a cross section of a large single crystal diamond synthesized by using microwave plasma CVD. Diamond and Related Materials, 2010, 19, 171-173.	1.8	8
115	Pulse height reduction effects of single-crystal CVD diamond detector for low-energy heavy ions. Europhysics Letters, 2013, 104, 22003.	0.7	8
116	RBS tomography of SOI structures using a MeV ion microprobe. Nuclear Instruments & Methods in Physics Research B, 1990, 45, 523-526.	0.6	7
117	Surface structure of O+-ion-implanted silica glass. Journal of Non-Crystalline Solids, 1991, 128, 126-132.	1.5	7
118	Lateral growth of cobalt suicide observed by an MeV helium ion microprobe. Nuclear Instruments & Methods in Physics Research B, 1992, 64, 770-773.	0.6	7
119	Time Evolution of Contact-Electrified Electron Dissipation on Silicon Oxide Surface Investigated Using Noncontact Atomic Force Microscope. Japanese Journal of Applied Physics, 1994, 33, 379-382.	0.8	7
120	Refractive index change in Al+-ion-implanted silica glass. Journal of Applied Physics, 1996, 79, 1060.	1.1	7
121	Initial growth of heteroepitaxial 3Câ€“SiC on Si using energetic species. Applied Physics Letters, 2000, 77, 654-656.	1.5	7
122	Qualitative Correspondences of Experimentally Obtained Growth Rates and Morphology of Single-Crystal Diamond with Numerical Predictions of Plasma and Gas Dynamics in Microwave Discharges for Various Substrate Holder Shapes. Japanese Journal of Applied Physics, 2006, 45, 8177-8182.	0.8	7
123	Fabrication of Discrete Track Media by Cr Ion Implantation. IEEE Transactions on Magnetics, 2010, 46, 1584-1586.	1.2	7
124	Development of single-crystalline diamond wafers. Synthesiology, 2010, 3, 272-280.	0.2	7
125	Fast removal of surface damage layer from single crystal diamond by using chemical etching in molten KCl + KOH solution. Diamond and Related Materials, 2016, 63, 86-90.	1.8	7
126	Heat and radiation resistances of diamond semiconductor in gamma-ray detection. Japanese Journal of Applied Physics, 2019, 58, 106509.	0.8	7

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127	Model of Reactive Microwave Plasma Discharge for Growth of Single-Crystal Diamond. Japanese Journal of Applied Physics, 2011, 50, 01AB02.	0.8	7
128	Microbeam Line of MeV Heavy Ions for Materials Modification andIn-SituAnalysis. Japanese Journal of Applied Physics, 1990, 29, 2680-2683.	0.8	6
129	Restoration of superconducting properties of proton-implanted ceramicYBa2Cu3O7â^'xby annealing in oxygen. Physical Review B, 1992, 45, 3098-3102.	1.1	6
130	Parameter Dependence of Stable State of Densely Contact-Electrified Electrons on Thin Silicon Oxide. Japanese Journal of Applied Physics, 1994, 33, 6739-6745.	0.8	6
131	Damage of polyimide thin films irradiated by MeV proton microbeams. Nuclear Instruments & Methods in Physics Research B, 1995, 104, 55-58.	0.6	6
132	The microstructure of transparent and electrically conducting titanium nitride films. Materials Chemistry and Physics, 1998, 54, 330-333.	2.0	6
133	Nucleation and growth of vacuum arc deposited gold films under pulsed bias. Surface and Coatings Technology, 2001, 137, 241-245.	2.2	6
134	Dense Structure of SiNxFilms Fabricated by Radical Beam Deposition Method Using Hexamethyldisilazane. Japanese Journal of Applied Physics, 2004, 43, L1403-L1405.	0.8	6
135	Limitations on ultra-thin multilayers: pulsed cathodic arc and computer simulation. Surface and Coatings Technology, 2004, 182, 171-174.	2.2	6
136	Development of single-crystalline diamond wafers. Synthesiology, 2010, 3, 259-267.	0.2	6
137	Model of Reactive Microwave Plasma Discharge for Growth of Single-Crystal Diamond. Japanese Journal of Applied Physics, 2011, 50, 01AB02.	0.8	6
138	Image processing for three-dimensional analysis by an MeV ion microprobe. Nuclear Instruments & Methods in Physics Research B, 1991, 54, 275-278.	0.6	5
139	Nitridation of vanadium by ion beam irradiation. Surface and Coatings Technology, 1994, 65, 142-147.	2.2	5
140	Observation of local SIMOX layers by microprobe RBS. Nuclear Instruments & Methods in Physics Research B, 1994, 85, 921-924.	0.6	5
141	Comparison of formation process of ultraviolet induced color centers in GeO2î—¸SiO2 glass fiber preform and Ge-implanted SiO2. Nuclear Instruments & Methods in Physics Research B, 1996, 116, 150-153.	0.6	5
142	XANES study on coordination geometry of implanted Cu+ ions in silica glass: dependence on doses. Journal of Non-Crystalline Solids, 2000, 271, 171-175.	1.5	5
143	Properties of diamond like carbon films by plasma based ion implantation and deposition method applying radio frequency wave and negative high voltage pulses through single feedthrough. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 717-720.	0.6	5
144	Metal plasma source for PBII using arc-like discharge with hot cathode. Surface and Coatings Technology, 2004, 186, 157-160.	2.2	5

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145	Formation of a heavily B doped diamond layer using an ion implantation technique. Diamond and Related Materials, 2008, 17, 498-501.	1.8	5
146	Characterization of a sandwich-type large CVD single crystal diamond particle detector fabricated using a lift-off method. Diamond and Related Materials, 2012, 24, 74-77.	1.8	5
147	Martensitic transformation of type 304 stainless steel by high-energy ion implantation. Nuclear Instruments & Methods in Physics Research B, 1991, 59-60, 893-896.	0.6	4
148	Phase composition of chromium films deposited under nitrogen ion bombardment and their corrosion protection potential. Surface and Coatings Technology, 1992, 51, 466-470.	2.2	4
149	Titanium oxide films prepared by dynamic ion mixing. Nuclear Instruments & Methods in Physics Research B, 1993, 80-81, 1406-1408.	0.6	4
150	Structure of Au ultrafine particles in silica glass: Xâ€ray diffraction study. Applied Physics Letters, 1994, 64, 3410-3412.	1.5	4
151	MeV heavy ion microprobe PIXE for the analysis of the materials surface. Nuclear Instruments & Methods in Physics Research B, 1994, 85, 741-743.	0.6	4
152	Tribological properties of titanium nitride films prepared by dynamic ion beam mixing method. Nuclear Instruments & Methods in Physics Research B, 1997, 121, 279-282.	0.6	4
153	Ultramicrohardness measurement of ion implanted alumina. Nuclear Instruments & Methods in Physics Research B, 1997, 121, 335-339.	0.6	4
154	Enhanced interfacial roughness in metallic multilayers prepared by pulsed cathodic arc deposition. Surface and Coatings Technology, 2000, 127, 281-283.	2.2	4
155	Ion beam assisted deposition under off-normal ion incidence: an experimental and analytical study of re-sputtering effects. Surface and Coatings Technology, 2000, 128-129, 303-307.	2.2	4
156	Structure and optical properties of boron nitride thin films deposited by radio-frequency sputtering on polycarbonate. Journal of Physics Condensed Matter, 2000, 12, 9215-9220.	0.7	4
157	BN coating adhesion on ion-implanted polymer surfaces. Thin Solid Films, 2001, 398-399, 222-227.	0.8	4
158	Development of plasma-based ion implantation (PBII) techniques at Osaka National Research Institute (ONRI). Surface and Coatings Technology, 2001, 136, 32-35.	2.2	4
159	Ion-Beam 3Câ€“SiC Heteroepitaxy on Si. Japanese Journal of Applied Physics, 2002, 41, 7353-7354.	0.8	4
160	3C-SiC thin epilayer formation at low temperature using ion beams. Applied Surface Science, 2003, 212-213, 920-925.	3.1	4
161	X-ray absorption fine structure study on the formation of Cuâ€“Br bonds in (Br + Cu) ion implanted silica glass. Journal of Materials Research, 2003, 18, 885-894.	1.2	4
162	Freestanding single crystal chemical vapor deposited diamond films produced using a lift-off method: Response to Ì±-particles from 241Am and crystallinity. Nuclear Instruments & Methods in Physics Research B, 2012, 286, 313-317.	0.6	4

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163	Lattice structure of a freestanding nitrogen doped large single crystal diamond plate fabricated using the lift-off process: X-ray diffraction studies. Diamond and Related Materials, 2012, 25, 119-123.	1.8	4
164	Short-pulse excitation of microwave plasma for efficient diamond growth. Applied Physics Letters, 2016, 109, .	1.5	4
165	Doping-induced strain in heavily B-doped (100) diamond films prepared by hot-filament chemical vapor deposition. Thin Solid Films, 2019, 680, 85-88.	0.8	4
166	Annealing effect on structure and properties of a-Si:H prepared at high deposition-rate. Journal of Non-Crystalline Solids, 1985, 77-78, 821-824.	1.5	3
167	Effect of Annealing on Photoinduced Absorption in Amorphous Silicon Films Prepared at High Deposition Rates. Japanese Journal of Applied Physics, 1986, 25, 515-518.	0.8	3
168	Characterization of masklessly deposited metal lines by a micro-RBS probe. Nuclear Instruments & Methods in Physics Research B, 1990, 45, 536-539.	0.6	3
169	Role of Hydrogen in Improvement of the Critical Temperature of Ceramic YBa2Cu3O7-xby Proton Implantation. Japanese Journal of Applied Physics, 1991, 30, 2483-2484.	0.8	3
170	Modification of magnetic property in Mnâ€Zn ferrite by MeV ion implantation. Applied Physics Letters, 1991, 58, 983-985.	1.5	3
171	Three-Dimensional Analysis of Locally Implanted Atoms by MeV Helium Ion Microprobe. Japanese Journal of Applied Physics, 1992, 31, 105-109.	0.8	3
172	Observation of buried oxide layers in silicon by microprobe RBS. Nuclear Instruments & Methods in Physics Research B, 1993, 77, 369-372.	0.6	3
173	Residual rate of defects in heavy-ion induced cascades. Radiation Effects and Defects in Solids, 1993, 126, 197-200.	0.4	3
174	Development of a New Ion-Beam Deposition Technology for Ultra-High-Purity Film Fabrication. Physica Status Solidi A, 1997, 160, 583-589.	1.7	3
175	Metallic Alloy Coatings Using Coaxial Vacuum Arc Deposition. Materials Transactions, JIM, 2000, 41, 44-46.	0.9	3
176	Metallic multilayers by new pulsed vacuum arc. Applied Surface Science, 2001, 169-170, 607-611.	3.1	3
177	Chemical State and Refractive Index of Mg-Ion-Implanted Silica Glass. Japanese Journal of Applied Physics, 2002, 41, 7447-7452.	0.8	3
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