

Akiyoshi Chayahara

List of Publications by Year in descending order

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243
papers

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244
docs citations

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times ranked

2165
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterization of mosaic diamond wafers and hot-filament epilayers by using HR-EBSD technics. <i>Diamond and Related Materials</i> , 2022, 123, 108839.	1.8	1
2	Method to increase the thickness and quality of diamond layers using plasma chemical vapor deposition under (H, C, N, O) system. <i>Diamond and Related Materials</i> , 2020, 101, 107652.	1.8	15
3	Toward High-Performance Diamond Electronics: Control and Annihilation of Dislocation Propagation by Metal-Assisted Termination. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1900498.	0.8	23
4	Heat and radiation resistances of diamond semiconductor in gamma-ray detection. <i>Japanese Journal of Applied Physics</i> , 2019, 58, 106509.	0.8	7
5	Doping-induced strain in heavily B-doped (100) diamond films prepared by hot-filament chemical vapor deposition. <i>Thin Solid Films</i> , 2019, 680, 85-88.	0.8	4
6	Schottky barrier diodes fabricated on diamond mosaic wafers: Dislocation reduction to mitigate the effect of coalescence boundaries. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	25
7	Synthesis and characterization of diamond capsules for direct-drive inertial confinement fusion. <i>Diamond and Related Materials</i> , 2018, 86, 15-19.	1.8	9
8	Growth and characterization of freestanding p+ diamond (100) substrates prepared by hot-filament chemical vapor deposition. <i>Diamond and Related Materials</i> , 2018, 81, 33-37.	1.8	17
9	Substrate Effects on Charge Carrier Transport Properties of Single-Crystal CVD Diamonds and an 8 μ m Square Radiation Energy Spectrometer. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1800333.	0.8	2
10	Large reduction of threading dislocations in diamond by hot-filament chemical vapor deposition accompanying W incorporations. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	43
11	Effect of Ar addition on uniformity of diamond growth by using microwave plasma chemical vapor deposition. <i>Diamond and Related Materials</i> , 2018, 87, 143-148.	1.8	14
12	Fano factor evaluation of diamond detectors for alpha particles. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 2629-2633.	0.8	13
13	A diamond 14 MeV neutron energy spectrometer with high energy resolution. <i>Review of Scientific Instruments</i> , 2016, 87, 023503.	0.6	18
14	Short-pulse excitation of microwave plasma for efficient diamond growth. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	4
15	High-performance diamond radiation detectors produced by lift-off method. <i>Europhysics Letters</i> , 2016, 113, 62001.	0.7	22
16	Effects of intentionally introduced nitrogen and substrate temperature on growth of diamond bulk single crystals. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 01AC07.	0.8	17
17	Factors to control uniformity of single crystal diamond growth by using microwave plasma CVD. <i>Diamond and Related Materials</i> , 2016, 63, 17-20.	1.8	15
18	Crystal orientation dependence of piezoresistivity in boron doped single crystalline diamond films. <i>Diamond and Related Materials</i> , 2016, 63, 218-221.	1.8	2

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19	Fast removal of surface damage layer from single crystal diamond by using chemical etching in molten KCl + KOH solution. <i>Diamond and Related Materials</i> , 2016, 63, 86-90.	1.8	7
20	Status of Beam Line Detectors for the BigRIPS Fragment Separator at RIKEN RI Beam Factory: Issues on High Rates and Resolution. , 2015, , .		0
21	Unintentional tungsten incorporation in diamond during hot-filament chemical vapor deposition. <i>Transactions of the Materials Research Society of Japan</i> , 2015, 40, 47-50.	0.2	1
22	Response measurement of single-crystal chemical vapor deposition diamond radiation detector for intense X-rays aiming at neutron bang-time and neutron burn-history measurement on an inertial confinement fusion with fast ignition. <i>Review of Scientific Instruments</i> , 2015, 86, 053503.	0.6	2
23	Effects of crystallographic orientation on the homoepitaxial overgrowth on tiled single crystal diamond clones. <i>Diamond and Related Materials</i> , 2015, 57, 17-21.	1.8	9
24	High-temperature characteristics of charge collection efficiency using single CVD diamond detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 789, 50-56.	0.7	40
25	Radiation hardness of a single crystal CVD diamond detector for MeV energy protons. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 784, 147-150.	0.7	30
26	Low resistivity p+ diamond (100) films fabricated by hot-filament chemical vapor deposition. <i>Diamond and Related Materials</i> , 2015, 58, 110-114.	1.8	32
27	Numerical microwave plasma discharge study for the growth of large single-crystal diamond. <i>Diamond and Related Materials</i> , 2015, 54, 9-14.	1.8	17
28	Pulse shape distortion of output signals from single-crystal CVD diamond detector in few-GHz broadband amplifiers. <i>Europhysics Letters</i> , 2014, 106, 22001.	0.7	0
29	Recent progresses in R&D of methods to fabricate inch-sized diamond wafers. , 2014, , 97-106.		1
30	A 2-in. mosaic wafer made of a single-crystal diamond. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	105
31	A nitrogen doped low-dislocation density free-standing single crystal diamond plate fabricated by a lift-off process. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	34
32	Characterization of free-standing single-crystal diamond prepared by hot-filament chemical vapor deposition. <i>Diamond and Related Materials</i> , 2014, 48, 19-23.	1.8	29
33	Neutron-enhanced annealing of ion-implantation induced damage in silicon heated by nuclear reactions. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014, 334, 48-51.	0.6	2
34	Uniform growth and repeatable fabrication of inch-sized wafers of a single-crystal diamond. <i>Diamond and Related Materials</i> , 2013, 33, 27-31.	1.8	59
35	Atomic force microscopy observations of a single crystal diamond surface lifted-off via ion implantation. <i>Diamond and Related Materials</i> , 2013, 31, 6-9.	1.8	1
36	Pulse height reduction effects of single-crystal CVD diamond detector for low-energy heavy ions. <i>Europhysics Letters</i> , 2013, 104, 22003.	0.7	8

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37	Freestanding single crystal chemical vapor deposited diamond films produced using a lift-off method: Response to \pm -particles from 241Am and crystallinity. Nuclear Instruments & Methods in Physics Research B, 2012, 286, 313-317.	0.6	4
38	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
39	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
40	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
41	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
42	Developments of elemental technologies to produce inch-size single-crystal diamond wafers. Diamond and Related Materials, 2011, 20, 616-619.	1.8	40
43	Model of Reactive Microwave Plasma Discharge for Growth of Single-Crystal Diamond. Japanese Journal of Applied Physics, 2011, 50, 01AB02.	0.8	6
44	Model of Reactive Microwave Plasma Discharge for Growth of Single-Crystal Diamond. Japanese Journal of Applied Physics, 2011, 50, 01AB02.	0.8	7
45	Fabrication of Discrete Track Media by Cr Ion Implantation. IEEE Transactions on Magnetics, 2010, 46, 1584-1586.	1.2	7
46	Development of single-crystalline diamond wafers. Synthesiology, 2010, 3, 259-267.	0.2	6
47	Development of single-crystalline diamond wafers. Synthesiology, 2010, 3, 272-280.	0.2	7
48	Characteristics of Diamond SBDs Fabricated on Half Inch Size CVD Wafer Made by the "Direct Wafer Fabrication Technique". Materials Science Forum, 2010, 645-648, 1227-1230.	0.3	1
49	Fabrication of 1 Inch Mosaic Crystal Diamond Wafers. Applied Physics Express, 2010, 3, 051301.	1.1	86
50	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
51	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
52	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
53	Surface stress measurement with interference microscopy of thick homoepitaxial single-crystal diamond layers. Diamond and Related Materials, 2010, 19, 1453-1456.	1.8	1
54	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

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55	Measurement of charge carrier's transportation in a large size self-standing CVD single crystal diamond film fabricated using lift-off method. <i>Diamond and Related Materials</i> , 2010, 19, 162-165.	1.8	2
56	Improving purity and size of single-crystal diamond plates produced by high-rate CVD growth and lift-off process using ion implantation. <i>Diamond and Related Materials</i> , 2009, 18, 1258-1261.	1.8	74
57	Characterization of crystallinity of a large self-standing homoepitaxial diamond film. <i>Diamond and Related Materials</i> , 2009, 18, 216-219.	1.8	25
58	Microwave plasma generated in a narrow gap to achieve high power efficiency during diamond growth. <i>Diamond and Related Materials</i> , 2009, 18, 117-120.	1.8	10
59	Simulation with an improved plasma model utilized to design a new structure of microwave plasma discharge for chemical vapor deposition of diamond crystals. <i>Diamond and Related Materials</i> , 2008, 17, 494-497.	1.8	9
60	Synthesis of large single crystal diamond plates by high rate homoepitaxial growth using microwave plasma CVD and lift-off process. <i>Diamond and Related Materials</i> , 2008, 17, 415-418.	1.8	107
61	Numerical and experimental studies of high growth-rate over area with 1-inch in diameter under moderate input-power by using MWPCVD. <i>Diamond and Related Materials</i> , 2008, 17, 1062-1066.	1.8	15
62	Formation of a heavily B doped diamond layer using an ion implantation technique. <i>Diamond and Related Materials</i> , 2008, 17, 498-501.	1.8	5
63	Simplified description of microwave plasma discharge for chemical vapor deposition of diamond. <i>Journal of Applied Physics</i> , 2007, 101, 063302.	1.1	36
64	Predominant physical quantity dominating macroscopic surface shape of diamond synthesized by microwave plasma CVD. <i>Diamond and Related Materials</i> , 2007, 16, 576-580.	1.8	27
65	Numerical analysis of power absorption and gas pressure dependence of microwave plasma using a tractable plasma description. <i>Diamond and Related Materials</i> , 2006, 15, 1395-1399.	1.8	17
66	High rate homoepitaxial growth of diamond by microwave plasma CVD with nitrogen addition. <i>Diamond and Related Materials</i> , 2006, 15, 455-459.	1.8	58
67	Simulation of microwave plasmas concentrated on the top surface of a diamond substrate with finite thickness. <i>Diamond and Related Materials</i> , 2006, 15, 1383-1388.	1.8	36
68	Atomic scale interactions between hydrocarbon radicals and diamond (100) surfaces. <i>Diamond and Related Materials</i> , 2006, 15, 522-525.	1.8	16
69	Simulation of temperature and gas flow distributions in region close to a diamond substrate with finite thickness. <i>Diamond and Related Materials</i> , 2006, 15, 1738-1742.	1.8	21
70	Numerical analyses of a microwave plasma chemical vapor deposition reactor for thick diamond syntheses. <i>Diamond and Related Materials</i> , 2006, 15, 1389-1394.	1.8	20
71	Effect of Fe and Ar implantation on the resistivity of Cr films. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2006, 242, 137-139.	0.6	0
72	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. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 8177-8182.	0.8	7

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73	Lattice Distortion of GaAsBi Alloy Grown on GaAs by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2006, 45, 67-69.	0.8	49
74	Neutron-enhanced annealing of radiation damage formed by self-ion implantation in silicon. Applied Physics Letters, 2006, 88, 241921.	1.5	2
75	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
76	NANOMETER-RANGED METALLIC COATINGS BY NOBLE PULSED CATHODIC ARC DEPOSITION. , 2005, , 83-86.		2
77	Enhanced annealing of damage in ion-implanted 4H-SiC by MeV ion-beam irradiation. Journal of Applied Physics, 2005, 97, 103538.	1.1	13
78	New III-V Semiconductor InGaAsBi Alloy Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2005, 44, L1161-L1163.	0.8	42
79	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
80	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
81	Dense Structure of SiN _x Films Fabricated by Radical Beam Deposition Method Using Hexamethyldisilazane. Japanese Journal of Applied Physics, 2004, 43, L1403-L1405.	0.8	6
82	New Semiconductor GaNAsBi Alloy Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2004, 43, L845-L847.	0.8	36
83	Limitations on ultra-thin multilayers: pulsed cathodic arc and computer simulation. Surface and Coatings Technology, 2004, 182, 171-174.	2.2	6
84	Metal plasma source for PBI using arc-like discharge with hot cathode. Surface and Coatings Technology, 2004, 186, 157-160.	2.2	5
85	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
86	Sequential implantation of halogen and copper ions in silica glass. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 353-356.	0.6	3
87	Resistivity of nanostructured Fe ⁶⁵ Cr films. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 601-605.	0.6	1
88	Electrochemical porosity determination of thin protective films on iron base materials. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 754-759.	0.6	0
89	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
90	In situ monitoring of polyimide windows for external ion microbeams. Nuclear Instruments & Methods in Physics Research B, 2003, 210, 75-78.	0.6	3

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91	3C-SiC thin epilayer formation at low temperature using ion beams. Applied Surface Science, 2003, 212-213, 920-925.	3.1	4
92	Metastable GaAsBi Alloy Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2003, 42, L1235-L1237.	0.8	115
93	Structure of Cu Ions in (Cu + Halogen or Chalcogen)-Ion Implanted Silica Glasses. Materials Research Society Symposia Proceedings, 2003, 792, 245.	0.1	0
94	X-ray absorption fine structure study on the formation of Cu-Br bonds in (Br + Cu) ion implanted silica glass. Journal of Materials Research, 2003, 18, 885-894.	1.2	4
95	Widening of optical bandgap of polycrystalline InN with a few percent incorporation of oxygen. Applied Physics Letters, 2003, 83, 3480-3482.	1.5	86
96	Fe Deposition or Implantation into Vacuum Arc Deposited Cr Films. Japanese Journal of Applied Physics, 2003, 42, 4457-4458.	0.8	0
97	Ion-Beam 3C-SiC Heteroepitaxy on Si. Japanese Journal of Applied Physics, 2002, 41, 7353-7354.	0.8	4
98	Chemical State and Refractive Index of Mg-Ion-Implanted Silica Glass. Japanese Journal of Applied Physics, 2002, 41, 7447-7452.	0.8	3
99	Reaction Mechanism of the Carbonization Process by Low-Energy Ion Subplantation. Materials Science Forum, 2002, 389-393, 363-366.	0.3	0
100	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
101	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
102	Plasma based ion implantation technology for high-temperature oxidation-resistant surface coatings. Surface and Coatings Technology, 2002, 158-159, 186-192.	2.2	8
103	Electrochemical porosity evaluation of thin films on iron base materials. Surface and Coatings Technology, 2002, 158-159, 588-593.	2.2	2
104	BN coating adhesion on ion-implanted polymer surfaces. Thin Solid Films, 2001, 398-399, 222-227.	0.8	4
105	Metallic multilayers by new pulsed vacuum arc. Applied Surface Science, 2001, 169-170, 607-611.	3.1	3
106	Nano-indentation testing for plasma-based ion-implanted surface of plastics. Surface and Coatings Technology, 2001, 136, 249-251.	2.2	12
107	Negative bias effect on film growth using pulsed vacuum arc plasma for multilayers. Surface and Coatings Technology, 2001, 136, 285-289.	2.2	0
108	Nucleation and growth of vacuum arc deposited gold films under pulsed bias. Surface and Coatings Technology, 2001, 137, 241-245.	2.2	6

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109	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
110	Movement of defects and atoms during ion beam induced crystallization. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 319-323.	0.6	2
111	Electronic transport in thin Cr films modified by Fe ion implantation. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 296-299.	0.6	1
112	Chemical state analysis of Cu, Cu ₂ O and CuO with WDX using an ion microbeam. Nuclear Instruments & Methods in Physics Research B, 2001, 181, 128-133.	0.6	13
113	Ni-defective value and resistivity of sputtered NiO films. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 1627-1628.	1.0	16
114	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
115	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
116	Epitaxial Growth of Pure ²⁸ Si Thin Films Using Isotopically Purified Ion Beams. Japanese Journal of Applied Physics, 2001, 40, L1283-L1285.	0.8	9
117	Reflection high-energy electron diffraction study of ion-beam induced carbonization for ³ C-SiC heteroepitaxial growth on Si (100). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 1882-1886.	0.9	2
118	Formation of Ultra High Pure Metal Thin Films by Means of a Dry Process. Materials Transactions, JIM, 2000, 41, 28-30.	0.9	0
119	Formation of High Purity Films by Negative Ion Beam Sputtering Using an Ultra-high Vacuum Self-Sputtering Method. Materials Transactions, JIM, 2000, 41, 31-33.	0.9	0
120	Silicon Carbide Film Growth Using Dual Isotopical ²⁸ Si and ¹² C Ion Species. Materials Transactions, JIM, 2000, 41, 34-36.	0.9	1
121	Metallic Alloy Coatings Using Coaxial Vacuum Arc Deposition. Materials Transactions, JIM, 2000, 41, 44-46.	0.9	3
122	Initial growth temperature of crystalline SiC by simultaneous irradiation of energetic ²⁸ Si ⁺ and ¹² C ⁺ . Review of Scientific Instruments, 2000, 71, 993-995.	0.6	2
123	Enhanced interfacial roughness in metallic multilayers prepared by pulsed cathodic arc deposition. Surface and Coatings Technology, 2000, 127, 281-283.	2.2	4
124	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
125	Limits of ultra-thin multilayers by pulsed vacuum arc deposition. Surface and Coatings Technology, 2000, 132, 198-201.	2.2	0
126	Pulsed vacuum arc deposition of multilayers in the nanometer range. Surface and Coatings Technology, 2000, 132, 217-221.	2.2	17

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127	Initial growth of heteroepitaxial 3C-SiC on Si using energetic species. Applied Physics Letters, 2000, 77, 654-656.	1.5	7
128	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
129	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
130	High impact resistance plastic hard disk using plasma-based ion-implantation. IEEE Transactions on Magnetics, 2000, 36, 2689-2691.	1.2	1
131	Macroparticle-Free Ti-Al Films by Newly Developed Coaxial Vacuum Arc Deposition. Japanese Journal of Applied Physics, 1999, 38, L467-L469.	0.8	22
132	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
133	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
134	Formation of pure thin films by means of self-sputtering deposition. Thin Solid Films, 1999, 343-344, 60-62.	0.8	0
135	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
136	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
137	Low energy ion beam deposition with positive and negative ions experiments to and modeling of subsurface growth. Nuclear Instruments & Methods in Physics Research B, 1999, 148, 143-148.	0.6	1
138	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
139	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
140	Formation process of CuCl nano-particles in silica glass by ion implantation. Journal of Non-Crystalline Solids, 1999, 259, 93-99.	1.5	17
141	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
142	Structural relaxation of MeV ion-implanted silica glasses by thermal annealing. Nuclear Instruments & Methods in Physics Research B, 1998, 141, 620-624.	0.6	0
143	Titanium implantation profiles in silicon using metal plasma-based ion implantation technique. Materials Chemistry and Physics, 1998, 54, 127-130.	2.0	1
144	The microstructure of transparent and electrically conducting titanium nitride films. Materials Chemistry and Physics, 1998, 54, 330-333.	2.0	6

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145	Thin films formed by single and dual ion beam deposition of positive and negative ions (Au ⁺ and N ⁺). Materials Chemistry and Physics, 1998, 54, 247-250.	2.0	1
146	Characterization of carbon nitride films produced by simultaneous low energy dual ion beams irradiation. Materials Chemistry and Physics, 1998, 54, 325-329.	2.0	1
147	Approach to Formation of Ultra-Pure Metal Films by Means of Ion Beam Technology. Physica Status Solidi A, 1998, 167, 405-410.	1.7	2
148	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
149	Structural investigation on implanted copper ions in silica glass by XAFS spectroscopy. Journal of Non-Crystalline Solids, 1998, 238, 143-151.	1.5	12
150	X-ray Absorption Fine Structure Study on Coordination State of Implanted Gold Ions in Silica Glass. Journal of Materials Research, 1998, 13, 2649-2654.	1.2	0
151	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
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	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
155	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
156	A study of deuterium permeation through thin BN films. Thin Solid Films, 1997, 299, 5-9.	0.8	11
157	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
158	Formation of Thin Au Films Using Negative-Ion-Beam Deposition. Physica Status Solidi A, 1997, 160, 591-597.	1.7	0
159	Dynamic Process Control of rf Reactive Sputtering by Monitoring Plasma Emission Intensity. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1997, 61, 1108-1114.	0.2	2
160	Coaxial Evaporation Source Using Vacuum Arc Discharge.. Shinku/Journal of the Vacuum Society of Japan, 1997, 40, 300-302.	0.2	2
161	Refractive index change in Al ⁺ -ion-implanted silica glass. Journal of Applied Physics, 1996, 79, 1060.	1.1	7
162	PIXE analysis of heavy elements in silicon using MeV heavy ion beams. Nuclear Instruments & Methods in Physics Research B, 1996, 109-110, 573-575.	0.6	2

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163	Comparison of formation process of ultraviolet induced color centers in GeO ₂ -SiO ₂ glass fiber preform and Ge-implanted SiO ₂ . Nuclear Instruments & Methods in Physics Research B, 1996, 116, 150-153.	0.6	5
164	Ion-beam deposition with positive and negative ions. Surface and Coatings Technology, 1996, 84, 544-549.	2.2	2
165	Diffusivities and Activities of S Implanted into GaAs through an As-doped a-Si:H Film. Japanese Journal of Applied Physics, 1996, 35, 1624-1629.	0.8	1
166	Application of a MeV nickel ion beam for PIXE analysis of iron near the surface of a silicon wafer. Nuclear Instruments & Methods in Physics Research B, 1995, 100, 122-124.	0.6	2
167	Damage of polyimide thin films irradiated by MeV proton microbeams. Nuclear Instruments & Methods in Physics Research B, 1995, 104, 55-58.	0.6	6
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169	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
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