Hitoshi Umezawa

List of Publications by Year
in descending order

191	4,869	94433 37	133252 59
papers	citations	h-index	g-index

194	194	194	2331
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Characterization of mosaic diamond wafers and hot-filament epilayers by using HR-EBSD technics. Diamond and Related Materials, 2022, 123, 108839.	3.9	1
2	Diamond Semiconductor Devices for harsh environmental applications. , 2022, , .		1
3	Efficient heat dissipation from Î²-Ga₂O₃ film directly bonded on diamond substrate. , 2022, , .		0
4	Low-temperature direct bonding of diamond (100) substrate on Si wafer under atmospheric conditions. Scripta Materialia, 2021, 191, 52-55.	5.2	19
5	Radiation hardened H-diamond MOSFET (RADDFET) operating after 1 MGy irradiation. Applied Physics Letters, 2021, 118, .	3.3	13
6	Direct bonding of diamond and Si substrates using NH₃/H₂O₂ cleaning. , 2021, , .		0
7	Low-temperature direct bonding of SiC and Ga2O3 substrates under atmospheric conditions. Journal of Applied Physics, 2021, 130, .	2.5	9
8	Diamond/Î²-Ga2O3 pn heterojunction diodes fabricated by low-temperature direct-bonding. AIP Advances, 2021, 11, .	1.3	15
9	Fabrication of p+-Si/p-diamond heterojunction diodes and effects of thermal annealing on their electrical properties. Diamond and Related Materials, 2021, 120, 108665.	3.9	7
10	Hydrophilic bonding of SiC substrate dipped in hydrofluoric acid with Ga2O3 film through atomically thin intermediate layer. , 2021, , .		0
11	Direct bonding of polycrystalline diamond substrate onto Si wafer under atmospheric conditions. , 2021, , .		0
12	High temperature stability of p⁺-Si/p-diamond heterojunction diodes. , 2021, , .		0
13	Ultrawide-bandgap semiconductors: An overview. Journal of Materials Research, 2021, 36, 4601-4615.	2.6	23
14	Hydrophilic low-temperature direct bonding of diamond and Si substrates under atmospheric conditions. Scripta Materialia, 2020, 175, 24-28.	5.2	16
15	Hydrophilic direct bonding of diamond (111) substrate using treatment with H₂SO₄/H₂O₂. Japanese Journal of Applied Physics, 2020, 59, SBBA01.	1.5	16
16	Suppression of killer defects in diamond vertical-type Schottky barrier diodes. Japanese Journal of Applied Physics, 2020, 59, SGGD10.	1.5	8
17	Direct Bonding of Diamond and Si Substrates at Low Temperatures Under Atmospheric Conditions. , 2020, , .		0
18	Ultrahigh conversion efficiency of betavoltaic cell using diamond pn junction. Applied Physics Letters, 2020, 117, .	3.3	19

#	Article	IF	Citations
19	Low-temperature direct bonding of Î²-Ga2O3 and diamond substrates under atmospheric conditions. Applied Physics Letters, 2020, 116, .	3.3	53
20	Heterogeneous direct bonding of diamond and semiconductor substrates using NH3/H2O2 cleaning. Applied Physics Letters, 2020, 117, 201601.	3.3	10
21	High yield uniformity in pseudo-vertical diamond Schottky barrier diodes fabricated on half-inch single-crystal wafers. Applied Physics Letters, 2020, 117, .	3.3	13
22	Diamond Semiconductor Devices, state-of-the-art of material growth and device processing. , 2020, , .		2
23	Determination of Current Leakage Sites in Diamond pâ€“n Junction. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900243.	1.8	1
24	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.	1.8	23
25	Thermally stable heavily boron-doped diamond resistors fabricated via selective area growth by hot-filament chemical vapor deposition. Thin Solid Films, 2019, 680, 81-84.	1.8	3
26	Improved drain current of diamond metalâ€“semiconductor field-effect transistor by selectively grown p+ contact layer. Japanese Journal of Applied Physics, 2019, 58, SBBD17.	1.5	3
27	Doping-induced strain in heavily B-doped (100) diamond films prepared by hot-filament chemical vapor deposition. Thin Solid Films, 2019, 680, 85-88.	1.8	4
28	Schottky barrier diodes fabricated on diamond mosaic wafers: Dislocation reduction to mitigate the effect of coalescence boundaries. Applied Physics Letters, 2019, 114, .	3.3	25
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37	Thermal conductivity measurement of diamond and Î²-Ga<inf>2</inf>O<inf>3</inf> thin films by a 3Ï‰ method. , 2018, , .		0
38	Large reduction of threading dislocations in diamond by hot-filament chemical vapor deposition accompanying W incorporations. Applied Physics Letters, 2018, 113, .	3.3	43
39	Electric Field Characterization of Diamond Metal Semiconductor Field Effect Transistors Using Electron Beam Induced Current. Materials Science Forum, 2018, 924, 935-938.	0.3	0
40	Characterization of insulated-gate bipolar transistor temperature on insulating, heat-spreading polycrystalline diamond substrate. Japanese Journal of Applied Physics, 2017, 56, 011301.	1.5	3
41	Characterization of breakdown behavior of diamond Schottky barrier diodes using impact ionization coefficients. Japanese Journal of Applied Physics, 2017, 56, 04CR12.	1.5	10
42	Defect and field-enhancement characterization through electron-beam-induced current analysis. Applied Physics Letters, 2017, 110, .	3.3	19
43	Lifetime and migration length of B-related admolecules on diamond {1 0 0}-surface: Comparative study of hot-filament and microwave plasma-enhanced chemical vapor deposition. Journal of Crystal Growth, 2017, 479, 52-58.	1.5	8
44	Characterization of X-ray radiation hardness of diamond Schottky barrier diode and metal-semiconductor field-effect transistor. , 2017, , .		5
45	Fano factor evaluation of diamond detectors for alpha particles. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2629-2633.	1.8	13
46	Ohmic contact formation to heavily boron-doped p+ diamond prepared by hot-filament chemical vapor deposition. MRS Advances, 2016, 1, 3489-3495.	0.9	17
47	A diamond 14 MeV neutron energy spectrometer with high energy resolution. Review of Scientific Instruments, 2016, 87, 023503.	1.3	18
48	High-performance diamond radiation detectors produced by lift-off method. Europhysics Letters, 2016, 113, 62001.	2.0	22
49	Submicron-scale diamond selective-area growth by hot-filament chemical vapor deposition. Thin Solid Films, 2016, 615, 239-242.	1.8	5
50	Formation of Nitrogen-Vacancy Centers in Homoepitaxial Diamond Thin Films Grown via Microwave Plasma-Assisted Chemical Vapor Deposition. IEEE Nanotechnology Magazine, 2016, 15, 614-618.	2.0	5
51	Investigation of electrically-active deep levels in single-crystalline diamond by particle-induced charge transient spectroscopy. Nuclear Instruments & Methods in Physics Research B, 2016, 372, 151-155.	1.4	3
52	Crystal orientation dependence of piezoresistivity in boron doped single crystalline diamond films. Diamond and Related Materials, 2016, 63, 218-221.	3.9	2
53	Status of Beam Line Detectors for the BigRIPS Fragment Separator at RIKEN RI Beam Factory: Issues on High Rates and Resolution. , 2015, , .		0
54	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. Review of Scientific Instruments, 2015, 86, 053503.	1.3	2

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55	X-ray topographic study of defect in pâˆ’ diamond layer of Schottky barrier diode. Diamond and Related Materials, 2015, 57, 22-27.	3.9	17
56	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.	1.6	30
57	Low resistivity p+ diamond (100) films fabricated by hot-filament chemical vapor deposition. Diamond and Related Materials, 2015, 58, 110-114.	3.9	32
58	Pulse shape distortion of output signals from single-crystal CVD diamond detector in few-GHz broadband amplifiers. Europhysics Letters, 2014, 106, 22001.	2.0	0
59	Diamond Metalâ€"Semiconductor Field-Effect Transistor With Breakdown Voltage Over 1.5 kV. IEEE Electron Device Letters, 2014, 35, 1112-1114.	3.9	122
60	Leakage current analysis of diamond Schottky barrier diodes operated at high temperature. Japanese Journal of Applied Physics, 2014, 53, 04EP04.	1.5	10
61	Diamond Schottky barrier diode for high-temperature, high-power, and fast switching applications. Japanese Journal of Applied Physics, 2014, 53, 05FP06.	1.5	49
62	Characterization of free-standing single-crystal diamond prepared by hot-filament chemical vapor deposition. Diamond and Related Materials, 2014, 48, 19-23.	3.9	29
63	Modeling and simulation of non-ideal characteristics of vertical Mo/diamond Schottky barrier diode based on MIS model. Transactions of the Materials Research Society of Japan, 2014, 39, 297-303.	0.2	8
64	X-Ray Topographic Study of a Homoepitaxial Diamond Layer on an Ultraviolet-Irradiated Precision Polished Substrate. Acta Physica Polonica A, 2014, 125, 969-971.	0.5	9
65	Design and optimization of planar mesa termination for diamond Schottky barrier diodes. Diamond and Related Materials, 2013, 36, 51-57.	3.9	11
66	Vertical Diamond Schottky Barrier Diode Fabricated on Insulating Diamond Substrate Using Deep Etching Technique. IEEE Transactions on Electron Devices, 2013, 60, 1416-1420.	3.0	14
67	Leakage current analysis of diamond Schottky barrier diodes by defect imaging. Diamond and Related Materials, 2013, 40, 56-59.	3.9	31
68	One-port SAW resonators fabricated on single-crystal diamond. , 2013, , .		8
69	1 Î© On-Resistance Diamond Vertical-Schottky Barrier Diode Operated at 250 Â°C. Applied Physics Express, 2013, 6, 011302.	2.4	90
70	Position and density control of nitrogen-vacancy centers in diamond using micropatterned substrate for chemical vapor deposition. , 2013, , .		0
71	High temperature operation of diamond power SBD. , 2013, , .		1
72	Low propagation loss in a one-port SAW resonator fabricated on single-crystal diamond for super-high-frequency applications. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 986-992.	3.0	40

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73	Characterization of vertical Mo/diamond Schottky barrier diode from non-ideal Iâ€“V and Câ€“V measurements based on MIS model. Diamond and Related Materials, 2013, 35, 1-6.	3.9	28
74	Effect of an Ultraflat Substrate on the Epitaxial Growth of Chemical-Vapor-Deposited Diamond. Applied Physics Express, 2013, 6, 025506.	2.4	30
75	Pulse height reduction effects of single-crystal CVD diamond detector for low-energy heavy ions. Europhysics Letters, 2013, 104, 22003.	2.0	8
76	Development of diamond-based power devices. Synthesiology, 2013, 6, 152-161.	0.2	3
77	Development of diamond-based power devices. Synthesiology, 2013, 6, 147-157.	0.2	8
78	Doping Position Control of Nitrogen-vacancy Centers in Diamond using Nitrogen-doped Chemical Vapor Deposition on Micropatterned Substrate. , 2013, , .		1
79	High temperature switching operation of a power diamond Schottky barrier diode. IEICE Electronics Express, 2012, 9, 1835-1841.	0.8	31
80	Structural analysis of dislocations in type-IIa single-crystal diamond. Diamond and Related Materials, 2012, 29, 37-41.	3.9	31
81	High Q surface acoustic wave resonators in 2–3 GHz range using ScAlN/single crystalline diamond structure. , 2012, , .		33
82	Selective-Area Growth of Thick Diamond Films Using Chemically Stable Masks of Ru/Au and Mo/Au. Japanese Journal of Applied Physics, 2012, 51, 070202.	1.5	2
83	X-ray Topography Used to Observe Dislocations in Epitaxially Grown Diamond Film. Japanese Journal of Applied Physics, 2012, 51, 090103.	1.5	13
84	Local stress distribution of dislocations in homoepitaxial chemical vapor deposite single-crystal diamond. Diamond and Related Materials, 2012, 23, 109-111.	3.9	27
85	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.	3.9	4
86	Fabrication and fundamental characterizations of tiled clones of single-crystal diamond with 1-inch size. Diamond and Related Materials, 2012, 24, 29-33.	3.9	75
87	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.	3.9	23
88	High temperature application of diamond power device. Diamond and Related Materials, 2012, 24, 201-205.	3.9	133
89	Observation of Epitaxial Diamond Layer by Using X-ray Topography. Nihon Kessho Gakkaishi, 2012, 54, 54-58.	0.0	0
90	Selective-Area Growth of Thick Diamond Films Using Chemically Stable Masks of Ru/Au and Mo/Au. Japanese Journal of Applied Physics, 2012, 51, 070202.	1.5	5

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91	X-ray Topography Used to Observe Dislocations in Epitaxially Grown Diamond Film. Japanese Journal of Applied Physics, 2012, 51, 090103.	1.5	13
92	Characterization of crystallographic defects in homoepitaxial diamond films by synchrotron X-ray topography and cathodoluminescence. Diamond and Related Materials, 2011, 20, 523-526.	3.9	44
93	Local Stress-strain Structure in CVD Diamond Observed by Raman Peak-shift Mapping. Materials Research Society Symposia Proceedings, 2011, 1282, 61.	0.1	0
94	CVD Diamond Dislocations Observed by X-ray Topography, Birefrengence Image and Cathodoluminesence mapping. Materials Research Society Symposia Proceedings, 2011, 1282, 73.	0.1	0
95	Low propagation loss in a one-port resonator fabricated on single-crystal diamond. , 2011, , .		4
96	Fabrication of Metalâ€“Oxideâ€“Diamond Field-Effect Transistors with Submicron-Sized Gate Length on Boron-Doped (111) H-Terminated Surfaces Using Electron Beam Evaporated SiO2 and Al2O3. Journal of Electronic Materials, 2011, 40, 247-252.	2.2	29
97	Switching characteristics of a diamond Schottky barrier diode. IEICE Electronics Express, 2010, 7, 1246-1251.	0.8	25
98	Parasitic resistance analysis of pseudovertical structure diamond Schottky barrier diode. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1997-2001.	1.8	6
99	High Temperature Characteristics of Diamond SBDs. Materials Science Forum, 2010, 645-648, 1231-1234.	0.3	15
100	Characteristics of Diamond SBDâ€™s Fabricated on Half Inch Size CVD Wafer Made by the â€œDirect Wafer Fabrication Techniqueâ€. Materials Science Forum, 2010, 645-648, 1227-1230.	0.3	1
101	Growth of atomically step-free surface on diamond {111} mesas. Diamond and Related Materials, 2010, 19, 288-290.	3.9	33
102	Fabrication of 1 Inch Mosaic Crystal Diamond Wafers. Applied Physics Express, 2010, 3, 051301.	2.4	86
103	Characterization of Schottky barrier diodes on a 0.5-inch single-crystalline CVD diamond wafer. Diamond and Related Materials, 2010, 19, 208-212.	3.9	49
104	Vertical structure Schottky barrier diode fabrication using insulating diamond substrate. Diamond and Related Materials, 2010, 19, 1324-1329.	3.9	40
105	Diamond high-temperature power devices. Power Semiconductor Devices & IC's, 2009 ISPSD 2009 21st International Symposium on, 2009, , .	0.0	4
106	Diamond Schottky pâ€“n diode with high forward current density. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2086-2090.	1.8	20
107	Flattening of oxidized diamond (111) surfaces with H2SO4/H2O2 solutions. Diamond and Related Materials, 2009, 18, 213-215.	3.9	12
108	Increase in Reverse Operation Limit by Barrier Height Control of Diamond Schottky Barrier Diode. IEEE Electron Device Letters, 2009, 30, 960-962.	3.9	62

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109	Fabrication of a field plate structure for diamond Schottky barrier diodes. Diamond and Related Materials, 2009, 18, 292-295.	3.9	40
110	Device processing, fabrication and analysis of diamond pseudo-vertical Schottky barrier diodes with low leak current and high blocking voltage. Diamond and Related Materials, 2009, 18, 299-302.	3.9	33
111	Characterization of specific contact resistance on heavily phosphorus-doped diamond films. Diamond and Related Materials, 2009, 18, 782-785.	3.9	35
112	Device scaling of pseudo-vertical diamond power Schottky barrier diodes. Diamond and Related Materials, 2009, 18, 1196-1199.	3.9	39
113	Recent Progress of Diamond Device toward Power Application. Materials Science Forum, 2009, 615-617, 999-1002.	0.3	10
114	Thermally Stable Schottky Barrier Diode by Ru/Diamond. Applied Physics Express, 2009, 2, 011202.	2.4	67
115	Electrical activity of doped phosphorus atoms in (001) nâ€type diamond. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2195-2199.	1.8	29
116	Low specific contact resistance of heavily phosphorus-doped diamond film. Applied Physics Letters, 2008, 93, .	3.3	68
117	Channel mobility evaluation for diamond MOSFETs using gate-to-channel capacitance measurement. Diamond and Related Materials, 2008, 17, 1256-1258.	3.9	7
118	Atomically flat diamond (111) surface formation by homoepitaxial lateral growth. Diamond and Related Materials, 2008, 17, 1051-1054.	3.9	43
119	Roughening of atomically flat diamond (111) surfaces by a hot HNO3/H2SO4 solution. Diamond and Related Materials, 2008, 17, 486-488.	3.9	14
120	Edge termination techniques for p-type diamond Schottky barrier diodes. Diamond and Related Materials, 2008, 17, 809-812.	3.9	35
121	DC and RF Performance of Diamond MISFETs with Alumina Gate Insulator. Materials Science Forum, 2008, 600-603, 1349-1351.	0.3	2
122	Spontaneous polarization model for surface orientation dependence of diamond hole accumulation layer and its transistor performance. Applied Physics Letters, 2008, 92, .	3.3	106
123	Hillock-Free Heavily Boron-Doped Homoepitaxial Diamond Films on Misoriented (001) Substrates. Japanese Journal of Applied Physics, 2007, 46, 1469-1470.	1.5	28
124	Miniaturized diamond field-effect transistors for application in biosensors in electrolyte solution. Applied Physics Letters, 2007, 90, 063901.	3.3	24
125	High-performance p-channel diamond MOSFETs with alumina gate insulator. , 2007, , .		45
126	Surface roughening of diamond (001) films during homoepitaxial growth in heavy boron doping. Diamond and Related Materials, 2007, 16, 767-770.	3.9	37

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127	Diamond MISFETs fabricated on high quality polycrystalline CVD diamond. , 2007, , .		1
128	Leakage current analysis of diamond Schottky barrier diode. Applied Physics Letters, 2007, 90, 073506.	3.3	121
129	The role of boron atoms in heavily boron-doped semiconducting homoepitaxial diamond growth â€" Study of surface morphology. Diamond and Related Materials, 2007, 16, 409-411.	3.9	11
130	Superconducting properties of homoepitaxial CVD diamond. Diamond and Related Materials, 2007, 16, 911-914.	3.9	104
131	Characterization of leakage current on diamond Schottky barrier diodes using thermionic-field emission modeling. Diamond and Related Materials, 2006, 15, 1949-1953.	3.9	66
132	Fabrication of T-Shaped Gate Diamond Metalâ€"Insulatorâ€"Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2006, 45, 5681-5684.	1.5	9
133	Characterization of diamond metal-insulator-semiconductor field-effect transistors with aluminum oxide gate insulator. Applied Physics Letters, 2006, 88, 112117.	3.3	35
134	Trapping mechanism on oxygen-terminated diamond surfaces. Applied Physics Letters, 2006, 89, 203503.	3.3	27
135	Characterization of locally modified diamond surface using Kelvin probe force microscope. Surface Science, 2005, 581, 207-212.	1.9	58
136	RF Diamond Transistors: Current Status and Future Prospects. Japanese Journal of Applied Physics, 2005, 44, 7789-7794.	1.5	21
137	Micropatterning Oligonucleotides on Single-Crystal Diamond Surface by Photolithography. Japanese Journal of Applied Physics, 2005, 44, L295-L298.	1.5	8
138	Electrical Properties of Diamond MISFETs with Submicron-Sized Gate on Boron-Doped (111) Surface. Materials Research Society Symposia Proceedings, 2005, 891, 1.	0.1	0
139	Superconductivity in polycrystalline diamond thin films. Diamond and Related Materials, 2005, 14, 1936-1938.	3.9	72
140	Fabrication of diamond MISFET with micron-sized gate length on boron-doped (111) surface. Diamond and Related Materials, 2005, 14, 2043-2046.	3.9	11
141	Memory effect of diamond in-plane-gated field-effect transistors. Applied Physics Letters, 2004, 85, 139-141.	3.3	10
142	Surface-modified Diamond Field-effect Transistors for Enzyme-immobilized Biosensors. Japanese Journal of Applied Physics, 2004, 43, L814-L817.	1.5	51
143	Large-Area Synthesis of Carbon Nanofibers by Low-Power Microwave Plasma-Assisted CVD. Chemical Vapor Deposition, 2004, 10, 125-128.	1.3	21
144	Over 20-GHz Cutoff Frequency Submicrometer-Gate Diamond MISFETs. IEEE Electron Device Letters, 2004, 25, 480-482.	3.9	56

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145	Superconductivity in diamond thin films well above liquid helium temperature. Applied Physics Letters, 2004, 85, 2851-2853.	3.3	277
146	Clâˆ’ sensitive biosensor used electrolyte-solution-gate diamond FETs. Biosensors and Bioelectronics, 2003, 19, 137-140.	10.1	44
147	Diamond nanofabrication and characterization for biosensing application. Physica Status Solidi A, 2003, 199, 39-43.	1.7	28
148	Ozone-treated channel diamond field-effect transistors. Diamond and Related Materials, 2003, 12, 1971-1975.	3.9	55
149	High performance diamond MISFETs using CaF2 gate insulator. Diamond and Related Materials, 2003, 12, 399-402.	3.9	29
150	Effect of iodide ions on the hydrogen-terminated and partially oxygen-terminated diamond surface. Diamond and Related Materials, 2003, 12, 618-622.	3.9	35
151	Deep sub-micron gate diamond MISFETs. Diamond and Related Materials, 2003, 12, 1814-1818.	3.9	11
152	Non-linear increases in excitonic emission in synthetic type-IIa diamond. Diamond and Related Materials, 2003, 12, 1995-1998.	3.9	5
153	Fabrication of diamond in-plane-gated field effect transistors using oxygen plasma etching. Diamond and Related Materials, 2003, 12, 408-412.	3.9	6
154	Control wettability of the hydrogen-terminated diamond surface and the oxidized diamond surface using an atomic force microscope. Diamond and Related Materials, 2003, 12, 560-564.	3.9	85
155	Cryogenic operation of surface-channel diamond field-effect transistors. Diamond and Related Materials, 2003, 12, 1800-1803.	3.9	8
156	Fabrication of single-hole transistors on hydrogenated diamond surface using atomic force microscope. Applied Physics Letters, 2002, 81, 2854-2856.	3.3	36
157	Effect of Cl-Ionic Solutions on Electrolyte-Solution-Gate Diamond Field-Effect Transistors. Japanese Journal of Applied Physics, 2002, 41, 2595-2597.	1.5	20
158	RF Performance of High Transconductance and High-Channel-Mobility Surface-Channel Polycrystalline Diamond Metal-Insulator-Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2002, 41, 2611-2614.	1.5	24
159	Investigation of Current-Voltage Characteristics of Oxide Region Induced by Atomic Force Microscope on Hydrogen-Terminated Diamond Surface. Japanese Journal of Applied Physics, 2002, 41, 4980-4982.	1.5	10
160	Microwave Performance of Diamond Field-Effect Transistors. Japanese Journal of Applied Physics, 2002, 41, 2591-2594.	1.5	2
161	Low-temperature operation of diamond surface-channel field-effect transistors. Materials Research Society Symposia Proceedings, 2002, 719, 551.	0.1	0
162	RF performance of diamond MISFETs. IEEE Electron Device Letters, 2002, 23, 121-123.	3.9	22

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163	Fabrication of diamond single-hole transistors using AFM anodization process. Diamond and Related Materials, 2002, 11, 387-391.	3.9	30
164	DC and RF characteristics of 0.7-Î¼m-gate-length diamond metalâ€“insulatorâ€“semiconductor field effect transistor. Diamond and Related Materials, 2002, 11, 378-381.	3.9	24
165	Potential applications of surface channel diamond field-effect transistors. Diamond and Related Materials, 2001, 10, 1743-1748.	3.9	33
166	High-frequency performance of diamond field-effect transistor. IEEE Electron Device Letters, 2001, 22, 390-392.	3.9	91
167	Nanodevice fabrication on hydrogenated diamond surface using atomic force microscope. Materials Research Society Symposia Proceedings, 2001, 675, 1.	0.1	3
168	Fabrication of 0.1 Âµm channel diamond Metal-Insulator-Semiconductor Field-Effect Transistor. Materials Research Society Symposia Proceedings, 2001, 680, 1.	0.1	3
169	Electrolyte-Solution-Gate FETs Using Diamond Surface for Biocompatible Ion Sensors. Physica Status Solidi A, 2001, 185, 79-83.	1.7	122
170	High-Performance Surface-Channel Diamond Field-Effect Transistors. Materials Science Forum, 2001, 353-356, 815-0.	0.3	0
171	Characterization of Diamond Surface-Channel Metal-Semiconductor Field-Effect Transistor with Device Simulation. Japanese Journal of Applied Physics, 2001, 40, 3101-3107.	1.5	16
172	Electrolyte-Solution-Gate FETs Using Diamond Surface for Biocompatible Ion Sensors. , 2001, 185, 79.		2
173	Control of adsorbates and conduction on CVD-grown diamond surface, using scanning probe microscope. Applied Surface Science, 2000, 159-160, 578-582.	6.1	32
174	Cu/CaF2/Diamond Metal-Insulator-Semiconductor Field-Effect Transistor Utilizing Self-Aligned Gate Fabrication Process. Japanese Journal of Applied Physics, 2000, 39, L908-L910.	1.5	32
175	Nanofabrication on Hydrogen-Terminated Diamond Surfaces by Atomic Force Microscope Probe-Induced Oxidation. Japanese Journal of Applied Physics, 2000, 39, 4631-4632.	1.5	44
176	High-Performance Diamond Metal-Semiconductor Field-Effect Transistor with 1 Âµm Gate Length. Japanese Journal of Applied Physics, 1999, 38, L1222-L1224.	1.5	47
177	MOSFETs on polished surfaces of polycrystalline diamond. Diamond and Related Materials, 1999, 8, 1831-1833.	3.9	15
178	Tilde substitution law in thermo field dynamics: Thermal state conditions. Physical Review D, 1985, 31, 429-432.	4.7	20
179	Free energy in thermo field dynamics. Physical Review D, 1985, 31, 1495-1498.	4.7	29
180	Spin rotational invariance and the thermal excitation of magnons at low temperatures. Physical Review B, 1984, 29, 423-432.	3.2	8

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181	Renormalization group at finite temperature. Physical Review D, 1984, 29, 1116-1124.	4.7	56
182	An equivalence class of quantum field theories at finite temperature. Journal of Mathematical Physics, 1984, 25, 3076-3085.	1.1	73
183	A diagrammatic approach to spin algebras. Physics Letters, Section A: General, Atomic and Solid State Physics, 1984, 103, 408-410.	2.1	15
184	Equivalence theorem and gauge theory at finite temperature. Physical Review D, 1983, 28, 1931-1938.	4.7	19
185	High frequency application of high transconductance surface-channel diamond field-effect transistors. , 0, , .		1
186	Device Characteristics Dependence on Diamond SDBs Area. Materials Science Forum, 0, 615-617, 1003-1006.	0.3	2
187	Nanometer Scale Height Standard Using Atomically Controlled Diamond Surface. Applied Physics Express, 0, 2, 055001.	2.4	20
188	Characterization of Fast Switching Capability for Diamond Schottky Barrier Diode. Materials Science Forum, 0, 679-680, 820-823.	0.3	7
189	Diamond Vertical Schottky Barrier Diode with Al₂O₃ Field Plate. Materials Science Forum, 0, 717-720, 1319-1321.	0.3	10
190	Direct Bonding of Diamond Substrate at Low Temperatures under Atmospheric Condition. Materials Science Forum, 0, 1004, 206-210.	0.3	0
191	Impact of Laserâ€Induced Graphitization on Diamond Schottky Barrier Diodes. Physica Status Solidi (A) Applications and Materials Science, 0, , .	1.8	1