Hajime Shibata

List of Publications by Year in descending order

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227 papers 4,606 citations

35 h-index 58 g-index

229 all docs 229 docs citations

times ranked

229

3841 citing authors

#	Article	IF	CITATIONS
1	Impacts of KF Post-Deposition Treatment on the Band Alignment of Epitaxial Cu(In,Ga)Se ₂ Heterojunctions. ACS Applied Materials & Samp; Interfaces, 2022, 14, 16780-16790.	8.0	3
2	Analysis for non-radiative recombination and resistance loss in chalcopyrite and kesterite solar cells. Japanese Journal of Applied Physics, 2021, 60, SBBF05.	1.5	7
3	Study on photo-degradation of inverted organic solar cells caused by generation of potential barrier between PEDOT:PSS and PBDB-Ts. Sustainable Energy and Fuels, 2021, 5, 3092-3096.	4.9	6
4	Optical and Structural Properties of High-Efficiency Epitaxial Cu(In,Ga)Se ₂ Grown on GaAs. ACS Applied Materials & Interfaces, 2020, 12, 3150-3160.	8.0	11
5	Impact of rough substrates on hydrogen-doped indium oxides for the application in CIGS devices. Solar Energy Materials and Solar Cells, 2020, 206, 110300.	6.2	7
6	A comparative study of the effects of light and heavy alkali-halide postdeposition treatment on CuGaSe2 and Cu(In,Ga)Se2 thin-film solar cells. Solar Energy, 2020, 211, 1092-1101.	6.1	6
7	Efficient Narrow Band Gap Cu(In,Ga)Se2 Solar Cells with Flat Surface. ACS Applied Materials & Samp; Interfaces, 2020, 12, 45485-45492.	8.0	15
8	Characterization of Surface and Heterointerface of Cu 2 ZnSn 1– x Ge x Se 4 for Solar Cell Applications. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900708.	2.4	7
9	Current status of transparent conducting oxide layers with high electron mobility and their application in Cu(In,Ga)Se2 mini-modules. Thin Solid Films, 2019, 673, 26-33.	1.8	4
10	Study and optimization of alternative MBEâ€deposited metallic precursors for highly efficient kesterite CZTSe:Ge solar cells. Progress in Photovoltaics: Research and Applications, 2019, 27, 779-788.	8.1	12
11	Improving the Open Circuit Voltage through Surface Oxygen Plasma Treatment and 11.7% Efficient Cu ₂ ZnSnSe ₄ Solar Cell. ACS Applied Materials & Interfaces, 2019, 11, 13319-13325.	8.0	36
12	Improved efficiency of Cu(In,Ga)Se ₂ miniâ€module via highâ€mobility In ₂ O ₃ :W,H transparent conducting oxide layer. Progress in Photovoltaics: Research and Applications, 2019, 27, 491-500.	8.1	16
13	Band Alignment of the CdS/Cu ₂ Zn(Sn _{1â€"<i>x</i>} Ge <i>_x</i>)Se ₄ Heterointerface and Electronic Properties at the Cu ₂ 3(Sn _{1â€"<i>x</i>} 6(i>x6(i)>2sub>46(i>x)Se ₄ 6(i>x)Se ₄ 6(i>x)Se _{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se_{6(i>x)Se₇6(i>x)Se₇7}8(i>x)Se_{8(i>x)Se_{8(i>x)Se_{8(i>x)Se_{9(i>x)Se₉₍}}}	8.0	23
14	0, 0.2, and 0.4. ACS Applied Materials & Depth Profile of Impurity Phase in Wide-Bandgap Cu(In1â^'x,Gax)Se2 Film Fabricated by Three-Stage Process. Journal of Electronic Materials, 2018, 47, 4944-4949.	2.2	6
15	Analysis of future generation solar cells and materials. Japanese Journal of Applied Physics, 2018, 57, 04FS03.	1.5	20
16	Reduced recombination in a surface-sulfurized Cu(InGa)Se ₂ thin-film solar cell. Japanese Journal of Applied Physics, 2018, 57, 055701.	1.5	9
17	Group III Elemental Composition Dependence of RbF Postdeposition Treatment Effects on Cu(In,Ga)Se ₂ Thin Films and Solar Cells. Journal of Physical Chemistry C, 2018, 122, 3809-3817.	3.1	86
18	Evaluation of femtosecond laser-scribed Cu(In,Ga)Se2 solar cells using scanning spreading resistance microscopy. Applied Physics Express, 2018, 11, 032301.	2.4	10

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19	In ₂ O ₃ â€Based Transparent Conducting Oxide Films with High Electron Mobility Fabricated at Low Process Temperatures. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700506.	1.8	60
20	Siâ€Doped Cu(In,Ga)Se ₂ Photovoltaic Devices with Energy Conversion Efficiencies Exceeding 16.5% without a Buffer Layer. Advanced Energy Materials, 2018, 8, 1702391.	19.5	8
21	Effect of thermal annealing on the redistribution of alkali metals in Cu(In,Ga)Se2solar cells on glass substrate. Journal of Applied Physics, 2018, 123, 093101.	2.5	14
22	How small amounts of Ge modify the formation pathways and crystallization of kesterites. Energy and Environmental Science, 2018, 11, 582-593.	30.8	169
23	Exploring suitable damp heat and potential induced degradation test procedures for Cu(In,Ga)(S,Se) photovoltaic modules. Japanese Journal of Applied Physics, 2018, 57, 08RG02.	1.5	12
24	Analysis of Optical and Recombination Losses in Solar Cells. Springer Series in Optical Sciences, 2018, , 29-82.	0.7	6
25	Accelerated Outdoor PID Testing of CIGS Modules and Comparison with Indoor PID Tests. , 2018, , .		3
26	Effect of Combined Alkali (KF + CsF) Postâ€Deposition Treatment on Cu(InGa)Se ₂ Solar Ce Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800372.	ells. 2.4	17
27	Very small tail state formation in Cu2ZnGeSe4. Applied Physics Letters, 2018, 113, .	3.3	28
28	Single-crystal Cu(In,Ga)Se ₂ solar cells grown on GaAs substrates. Applied Physics Express, 2018, 11, 082302.	2.4	30
29	Impact of front contact layers on performance of Cu(In,Ga)Se ₂ solar cells in relaxed and metastable states. Progress in Photovoltaics: Research and Applications, 2018, 26, 789-799.	8.1	11
30	Significance of metastable acceptors in Cu(In,Ga)Se ₂ solar cells in accelerated lifetime testing. Japanese Journal of Applied Physics, 2018, 57, 092301.	1.5	7
31	Effects of RbF postdeposition treatment and heat-light soaking on the metastable acceptor activation of CuInSe2 thin film photovoltaic devices. Applied Physics Letters, 2018, 113, .	3.3	25
32	Deep level emission in polycrystalline CuGaSe ₂ thin-films observed by micro-photoluminescence. Japanese Journal of Applied Physics, 2018, 57, 08RC02.	1.5	2
33	An over 18%-efficient completely buffer-free Cu(In,Ga)Se ₂ solar cell. Applied Physics Express, 2018, 11, 075502.	2.4	6
34	Tail state formation in solar cell materials: First principles analyses of zincblende, chalcopyrite, kesterite, and hybrid perovskite crystals. Physical Review Materials, 2018, 2, .	2.4	39
35	Device physics of Cu(In,Ga)Se2 solar cells for long-term operation. , 2017, , .		0
36	Ultrafast laser scribing of transparent conductive oxides in Cu(In,Ga)Se ₂ solar cells via laser lift-off process: the control of laser-induced damage. Proceedings of SPIE, 2017, , .	0.8	2

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37	Band Alignment of CdS/Cu2ZnSnSe4 Heterointerface and Solar Cell Performances. MRS Advances, 2017, 2, 3157-3162.	0.9	3
38	Selective corticotropin-releasing factor 1 receptor antagonist E2508 reduces restraint stress-induced defecation and visceral pain in rat models. Psychoneuroendocrinology, 2017, 75, 110-115.	2.7	14
39	Electronic structures of Cu ₂ ZnSnSe ₄ surface and CdS/Cu ₂ ZnSnSe ₄ heterointerface. Japanese Journal of Applied Physics, 2017, 56, 065701.	1.5	7
40	Improved performance in Cu2ZnSnSe4 solar cells using a sandwich-structured ZnSe/Cu2SnSe3/ZnSe precursor. Current Applied Physics, 2017, 17, 366-369.	2.4	5
41	Cu(In,Ga)Se ₂ Solar Cells with Amorphous In ₂ O ₃ -Based Front Contact Layers. ACS Applied Materials & Interfaces, 2017, 9, 29677-29686.	8.0	14
42	Si-Doping Effects in Cu(In,Ga)Se ₂ Thin Films and Applications for Simplified Structure High-Efficiency Solar Cells. ACS Applied Materials & Samp; Interfaces, 2017, 9, 31119-31128.	8.0	11
43	Improvement of minority carrier lifetime and conversion efficiency by Na incorporation in Cu2ZnSnSe4 solar cells. Journal of Applied Physics, 2017, 122, .	2.5	37
44	Effects of long-term heat-light soaking on Cu(In,Ga)Se ₂ solar cells with KF postdeposition treatment. Applied Physics Express, 2017, 10, 092301.	2.4	51
45	Determination and interpretation of the optical constants for solar cell materials. Applied Surface Science, 2017, 421, 276-282.	6.1	24
46	A comparative study of the effects of sputtering deposition conditions for ZnO surface electrode layers on Cu(In,Ga)Se2 and CuGaSe2 solar cells. Thin Solid Films, 2017, 633, 49-54.	1.8	5
47	Carrier Compensation Induced by Thermal Annealing in Al-Doped ZnO Films. Materials, 2017, 10, 141.	2.9	20
48	lonization effects on Cu(In, Ga)Se ₂ thinâ€film solar cells. Physica Status Solidi C: Current Topics in Solid State Physics, 2017, 14, 1600168.	0.8	4
49	Electronic structure of Cu ₂ ZnSn(S _{<i>x</i>} Se _{1â^²<i>x</i>}) ₄ surface and CdS/Cu ₂ ZnSn(S _{<i>x</i>} Se _{1â^²<i>x</i>}) ₄ interface. Physica Status Solidi C: Current Topics in Solid State Physics. 2017. 14	0.8	9
50	Effect of light irradiation and forward bias during PID tests of CIGS PV modules. , 2017, , .		1
51	Degradation mechanism of Cu(In,Ga)Se ₂ solar cells induced by exposure to air. Japanese Journal of Applied Physics, 2016, 55, 072301.	1.5	10
52	Interface oxygen and heat sensitivity of Cu(In,Ga)Se2 and CuGaSe2 solar cells. Applied Physics Letters, 2016, 108, 203902.	3.3	10
53	Quantitative determination of optical and recombination losses in thin-film photovoltaic devices based on external quantum efficiency analysis. Journal of Applied Physics, 2016, 120, .	2.5	105
54	Proposed new damp heat test standards for commercial CIGS modules with bias application or light irradiation. Proceedings of SPIE, 2016, , .	0.8	3

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55	A comparative study on charge carrier recombination across the junction region of Cu2ZnSn(S,Se)4 and Cu(In,Ga)Se2 thin film solar cells. AIP Advances, 2016, 6, .	1.3	10
56	Effect of pre-annealing on Cu2ZnSnSe4 thin-film solar cells prepared from stacked Zn/Cu/Sn metal precursors. Materials Letters, 2016, 176, 78-82.	2.6	7
57	Improvement of voltage deficit of Ge-incorporated kesterite solar cell with 12.3% conversion efficiency. Applied Physics Express, 2016, 9, 102301.	2.4	129
58	Structure of chemically deposited Zn(S,O,OH) buffer layer and the effects on the performance of Cu(in,Ga)Se ₂ solar cell. Progress in Photovoltaics: Research and Applications, 2016, 24, 397-404.	8.1	8
59	Comparison of ZnO:B and ZnO:Al layers for Cu(ln,Ga)Se2 submodules. Thin Solid Films, 2016, 614, 79-83.	1.8	18
60	Effects of Mo surface oxidation on Cu(In,Ga)Se ₂ solar cells fabricated by three-stage process with KF postdeposition treatment. Japanese Journal of Applied Physics, 2016, 55, 022304.	1.5	15
61	Ge-incorporated Cu2ZnSnSe4 thin-film solar cells with efficiency greater than 10%. Solar Energy Materials and Solar Cells, 2016, 144, 488-492.	6.2	95
62	Femtosecond Laser Scribing of Cu(In,Ga)Se2 Thin-Film Solar Cell. Journal of Laser Micro Nanoengineering, 2016, 11, 130-136.	0.1	4
63	Characterization of Electron-Induced Defects in Cu (In, Ga) Se2 Thin Films by Photoluminescence. Materials Research Society Symposia Proceedings, 2015, 1771, 157-161.	0.1	0
64	Compositional dependence photoluminescence study of polycrystalline CuGaSe2 thin films. , 2015, , .		1
65	Cu(In,Ga)Se ₂ Solar Cells With Amorphous Oxide Semiconducting Buffer Layers. IEEE Journal of Photovoltaics, 2015, 5, 956-961.	2.5	26
66	Narrow-bandgap Cu2Sn1â^'xGexSe3 thin film solar cells. Materials Letters, 2015, 158, 205-207.	2.6	21
67	Study of time-resolved photoluminescence in Cu ₂ ZnSn(S,Se) ₄ thin films with different Cu/Sn ratio. Japanese Journal of Applied Physics, 2015, 54, 08KC15.	1.5	4
68	Dielectric functions of Cu2ZnSnSe4 and Cu2SnSe3 semiconductors. Journal of Applied Physics, 2015, 117, 015702.	2.5	40
69	Potential-induced degradation of Cu(In,Ga)Se ₂ photovoltaic modules. Japanese Journal of Applied Physics, 2015, 54, 08KC13.	1.5	64
70	Determination of deep-level defects in Cu2ZnSn(S,Se)4 thin-films using photocapacitance method. Applied Physics Letters, 2015, 106, .	3.3	20
71	Study of Cu2ZnSn(S,Se)4Thin Films for Solar Cell Application. Journal of Physics: Conference Series, 2015, 596, 012019.	0.4	2
72	Degradation of Cu(In, Ga)Se 2 thin-film solar cells due to the ionization effect of low-energy electrons. Thin Solid Films, 2015, 582, 91-94.	1.8	3

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73	Individual identification of free hole and electron dynamics in CuIn1â^xGaxSe2 thin films by simultaneous monitoring of two optical transitions. Applied Physics Letters, 2015, 106, .	3.3	4
74	Cu ₂ ZnSnSe ₄ thin-film solar cells fabricated using Cu ₂ SnSe ₃ and ZnSe bilayers. Applied Physics Express, 2015, 8, 042301.	2.4	21
75	Characterization of electronic structure of Cu2ZnSn(S Se1â^')4 absorber layer and CdS/Cu2ZnSn(S) Tj ETQq1 1 0. 2015, 582, 166-170.	784314 rg 1.8	gBT /Overlo 31
76	Characterization of electronic structure of oxysulfide buffers and band alignment at buffer/absorber interfaces in Cu(In,Ga)Se ₂ -based solar cells. Japanese Journal of Applied Physics, 2014, 53, 05FW09.	1.5	9
77	Bilayer contacts composed of amorphous and solid-phase crystallized transparent conducting oxides for solar cells. Japanese Journal of Applied Physics, 2014, 53, 05FA08.	1.5	7
78	Influence of electron irradiation on electroluminescence of Cu(In,Ga)Se ₂ solar cells. Japanese Journal of Applied Physics, 2014, 53, 05FW08.	1.5	9
79	Structural tuning of wide-gap chalcopyrite CuGaSe ₂ thin films and highly efficient solar cells: differences from narrow-gap Cu(ln,Ga)Se ₂ . Progress in Photovoltaics: Research and Applications, 2014, 22, 821-829.	8.1	61
80	Buried <i>p-n</i> junction formation in CuGaSe ₂ thin-film solar cells. Applied Physics Letters, 2014, 104, 031606.	3.3	27
81	Temperature induced phase transformation in coevaporated Cu2SnSe3 thin films. Materials Letters, 2014, 116, 61-63.	2.6	12
82	Composition control of Cu2ZnSnSe4-based solar cells grown by coevaporation. Thin Solid Films, 2014, 551, 27-31.	1.8	21
83	xmins:mmi= http://www.w3.org/1998/Nath/Nath/NL > <mmi:msub><mmi:mi mathvariant="normal">Culn</mmi:mi><mmi:mrow><mmi:mn>1</mmi:mn><mmi:mo>â^²</mmi:mo><mmi:mi>x</mmi:mi>x<mmi:mi mathvariant="normal">Ga/mmi:mi><mmi:mi>x</mmi:mi>x</mmi:mi>xxx<td>mml:mi>< 3.2</td><td>/mml:mrow 21</td></mmi:mrow></mmi:msub>	mml:mi>< 3.2	/mml:mrow 21
84	Interfacial Alkali Diffusion Control in Chalcopyrite Thin-Film Solar Cells. ACS Applied Materials & Control in Chalcopyrite Thin-Film Solar Cells. ACS Applied Materials & Control in Chalcopyrite Thin-Film Solar Cells. ACS Applied Materials & Control in Chalcopyrite Thin-Film Solar Cells. ACS Applied Materials & Control in Chalcopyrite Thin-Film Solar Cells. ACS Applied Materials & Control in Chalcopyrite Thin-Film Solar Cells. ACS Applied Materials & Control in Chalcopyrite Thin-Film Solar Cells. ACS Applied Materials & Control in Chalcopyrite Thin-Film Solar Cells. ACS Applied Materials & Control in Chalcopyrite Thin-Film Solar Cells.	8.0	23
85	Impact of a binary Ga2Se3 precursor on ternary CuGaSe2 thin-film and solar cell device properties. Applied Physics Letters, 2013, 103, .	3.3	24
86	Growth and characterization of coevaporated Cu2SnSe3 thin films for photovoltaic applications. Thin Solid Films, 2013, 536, 111-114.	1.8	49
87	Highly Efficient Cu(In,Ga)Se ₂ Thin-Film Submodule Fabricated Using a Three-Stage Process. Applied Physics Express, 2013, 6, 112303.	2.4	15
88	Cu(In,Ga)Se2 solar cells and mini-modules fabricated on thin soda-lime glass substrates. Solar Energy Materials and Solar Cells, 2013, 119, 163-168.	6.2	19
89	Characterization of Electron-Induced Defects in Cu (In, Ga) Se2 Thin-Film Solar Cells using Electroluminescence. Materials Research Society Symposia Proceedings, 2013, 1538, 27-32.	0.1	1
90	Observation of Sodium Diffusion in CIGS Solar Cells with Mo/TCO/Mo Hybrid Back Contacts. Materials Research Society Symposia Proceedings, 2013, 1538, 61-66.	0.1	2

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91	Correlation between Electrical Properties and Crystal c-Axis Orientation of Zinc Oxide Transparent Conducting Films. Japanese Journal of Applied Physics, 2012, 51, 10NC16.	1.5	2
92	Fabrication and Characterization of $Cu(In,Ga)(S,Se)$ \$_{2}\$-Based Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10NC04.	1.5	1
93	Correlation between oxygen stoichiometry, structure, and opto-electrical properties in amorphous In2O3:H films. Journal of Applied Physics, 2012, 111, .	2.5	35
94	Highâ€efficiency CIGS submodules. Progress in Photovoltaics: Research and Applications, 2012, 20, 595-599.	8.1	14
95	Fabrication and Characterization of Cu(In,Ga)(S,Se)2-Based Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10NC04.	1.5	2
96	Local Structure around Dopant Site in Ga-Doped ZnO from Extended X-ray Absorption Fine Structure Measurements. Journal of the Physical Society of Japan, 2011, 80, 074602.	1.6	5
97	CIGS thin films, solar cells, and submodules fabricated using a rf-plasma cracked Se-radical beam source. Thin Solid Films, 2011, 519, 7216-7220.	1.8	15
98	Fabrication of weak-link Nb-based nano-SQUIDs by FIB process. Physica C: Superconductivity and Its Applications, 2011, 471, 1246-1248.	1.2	7
99	Development of high-efficiency CIGS integrated submodules using in-line deposition technology. Solar Energy Materials and Solar Cells, 2011, 95, 254-256.	6.2	25
100	Multi-Junction Switching in Bi ₂ Sr _{1.6} La _{0.4} CuO _{6+δ} Intrinsic Josephson Junctions. Applied Physics Express, 2010, 3, 043101.	2.4	6
101	Formation of ionic bonds between a fatty-acid Langmuir–Blodgett monolayer and a zinc oxide substrate. Journal of Colloid and Interface Science, 2010, 352, 299-302.	9.4	1
102	Characterization of Zn1 \hat{a} 'xMgxO transparent conducting thin films fabricated by multi-cathode RF-magnetron sputtering. Thin Solid Films, 2010, 518, 2949-2952.	1.8	34
103	Two-dimensional polaron mass in ZnO quantum Hall systems. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1599-1601.	0.8	8
104	Optical dielectric constant inhomogeneity along the growth axis in ZnO-based transparent electrodes deposited on glass substrates. Journal of Applied Physics, 2009, 105, .	2.5	14
105	CIGS solar cell with CdS buffer layer deposited by ammoniaâ€free process. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1072-1075.	1.8	10
106	Effects of Mo back contact thickness on the properties of CIGS solar cells. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1063-1066.	1.8	25
107	Infrared reflection–absorption spectroscopy applied to a merocyanine dye J-aggregate deposited on transparent electrodes based on zinc oxide. Thin Solid Films, 2009, 518, 462-465.	1.8	6
108	Large grain Cu(In,Ga)Se2 thin film growth using a Se-radical beam source. Solar Energy Materials and Solar Cells, 2009, 93, 792-796.	6.2	24

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109	Effect of Se/(Ga+In) ratio on MBE grown Cu(In,Ga)Se2 thin film solar cell. Journal of Crystal Growth, 2009, 311, 2212-2214.	1.5	40
110	Switching dynamics and MQT in Bi2201 intrinsic Josephson junctions. Physica C: Superconductivity and Its Applications, 2009, 469, 1593-1595.	1.2	1
111	Band profiles of ZnMgO/ZnO heterostructures confirmed by Kelvin probe force microscopy. Applied Physics Letters, 2009, 94, .	3.3	32
112	Na-induced variations in the structural, optical, and electrical properties of $Cu(In,Ga)Se2$ thin films. Journal of Applied Physics, 2009, 106, .	2.5	148
113	Modified thermoelectric figure of merit estimated from enhanced mobility of [100] oriented beta-FeSi2 thin film. Journal of Materials Science: Materials in Electronics, 2008, 19, 311-314.	2.2	2
114	Fabrication of intrinsic Josephson junction of bismuth-based cuprates. Physica C: Superconductivity and Its Applications, 2008, 468, 1916-1918.	1.2	3
115	Possible observation of energy level quantization in an intrinsic Josephson junction. Physica C: Superconductivity and Its Applications, 2008, 468, 1919-1921.	1.2	5
116	New nonlinear-laser effects in YbVO4 crystal: Sesqui-octave stokes and anti-Stokes comb generation and the cascaded self-frequency "tripling―of χ(3)-Stokes components under a one-micron picosecond pumping. Laser Physics, 2008, 18, 1546-1552.	1.2	13
117	Switching Dynamics of Bi2Sr2CaCu2O8+δIntrinsic Josephson Junctions: Macroscopic Quantum Tunneling and Self-Heating Effect. Journal of the Physical Society of Japan, 2008, 77, 104708.	1.6	45
118	Experimental study of macroscopic quantum tunnelling in Bi2212 intrinsic Josephson junctions. Superconductor Science and Technology, 2007, 20, S10-S13.	3.5	15
119	Formation of two-dimensional electron gas and enhancement of electron mobility by Zn polar ZnMgO/ZnO heterostructures. , 2007, 6474, 78.		0
120	Figure of Merit for Thermoelectric Generation Obtained by Enhanced Transport Properties of [100] Oriented Beta-FeSi ₂ Film. Key Engineering Materials, 2007, 350, 121-124.	0.4	0
121	Growth of polycrystalline Cu(In,Ga)Se2 thin films using a radio frequency-cracked Se-radical beam source and application for photovoltaic devices. Applied Physics Letters, 2007, 91, .	3.3	29
122	Optical Constants of \hat{l}^2 -FeSi2Film on Si Substrate Obtained from Transmittance and Reflectance Data and Origin of Urbach Tail. Japanese Journal of Applied Physics, 2007, 46, 2405-2408.	1.5	3
123	Strong excitonic transition of Zn1â^'xMgxO alloy. Applied Physics Letters, 2007, 91, .	3.3	55
124	Photoluminescence characterization of Zn1â^'xMgxO epitaxial thin films grown on ZnO by radical source molecular beam epitaxy. Applied Physics Letters, 2007, 90, 124104.	3.3	49
125	Oblique-Incidence Infrared Reflection in Thin ZnO Films Deposited on Sapphire by Gas-Source MBE. AIP Conference Proceedings, 2007, , .	0.4	3
126	Optical constants of \hat{l}^2 -FeSi2 thin film on Si(001) substrate obtained by simultaneous equations from reflectance and transmittance spectra. Thin Solid Films, 2007, 515, 8154-8157.	1.8	0

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127	High electron mobility Zn polar ZnMgO/ZnO heterostructures grown by molecular beam epitaxy. Journal of Crystal Growth, 2007, 301-302, 358-361.	1.5	33
128	Structural and transport properties of \hat{l}^2 -FeSi2 [100] oriented thin film on Si(001) substrate. Journal of Crystal Growth, 2007, 301-302, 400-403.	1.5	0
129	MQT observation in Bi2212 intrinsic Josephson junctions. Physica C: Superconductivity and Its Applications, 2007, 460-462, 1432-1433.	1.2	0
130	Measurement System for Switching Current Distribution in Intrinsic Josephson Junctions. IEICE Transactions on Electronics, 2007, E90-C, 605-606.	0.6	4
131	Control of the thin film properties of Cu(In,Ga)Se2 using water vapor introduction during growth. Journal of Applied Physics, 2006, 100, 096106.	2.5	11
132	Photoluminescence recombination centers in ZnO. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1026-1029.	0.8	0
133	Effects of water vapor introduction during Cu(ln1-xGax)Se2deposition on thin film properties and solar cell performance. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2609-2614.	1.8	4
134	Crystallographic growth orientation of Cu(InGa)Se2films in relation to substrate material nature. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2639-2643.	1.8	6
135	Crystal growth of rare-earth orthovanadate (RVO4) by the floating-zone method. Journal of Crystal Growth, 2006, 286, 288-293.	1.5	38
136	Negative thermal quenching of photoluminescence in ZnO. Physica B: Condensed Matter, 2006, 376-377, 711-714.	2.7	46
137	Two-dimensional electron gas in Zn polar ZnMgO∕ZnO heterostructures grown by radical source molecular beam epitaxy. Applied Physics Letters, 2006, 89, 132113.	3.3	118
138	Observation of stimulated Raman scattering in the tetragonal crystal YbVO4. Laser Physics Letters, 2006, 3, 263-267.	1.4	10
139	The effects of thermal treatments on the electrical properties of phosphorus doped ZnO layers grown by MBE. Journal of Crystal Growth, 2005, 278, 268-272.	1.5	33
140	Excitation-Power Dependence of Free Exciton Photoluminescence of Semiconductors. Japanese Journal of Applied Physics, 2005, 44, 6113-6114.	1.5	48
141	Photoluminescence characterization of excitonic centers in ZnO epitaxial films. Applied Physics Letters, 2005, 86, 221907.	3.3	22
142	Progress in the Efficiency of Wide-Gap Cu(In1-xGax)Se2Solar Cells Using CIGSe Layers Grown in Water Vapor. Japanese Journal of Applied Physics, 2005, 44, L679-L682.	1.5	32
143	Determination of crystallographic polarity of ZnO layers. Applied Physics Letters, 2005, 87, 141904.	3.3	63
144	Degenerate layers in epitaxial ZnO films grown on sapphire substrates. Applied Physics Letters, 2004, 84, 4412-4414.	3.3	65

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145	Characterization of ZnO crystals by photoluminescence spectroscopy. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 872-875.	0.8	22
146	Effects of low temperature buffer layer treatments on the growth of high quality ZnO films. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 888-891.	0.8	9
147	Band-gap modified Al-doped Zn1â^'xMgxO transparent conducting films deposited by pulsed laser deposition. Applied Physics Letters, 2004, 85, 1374-1376.	3.3	131
148	Doping Dependence of Superconducting Energy Gap of NCCO Observed by Tunneling Spectroscopy. Journal of Low Temperature Physics, 2003, 131, 327-330.	1.4	3
149	Far-infrared optical conductivity of Nb thin films. Physica B: Condensed Matter, 2003, 329-333, 1369-1370.	2.7	0
150	Crystal growth of La2â^'xCexCuO4. Physica C: Superconductivity and Its Applications, 2003, 388-389, 389-390.	1.2	7
151	Superconductivity in NCCO thin films and effect of Gd and Ni doping. Physica C: Superconductivity and Its Applications, 2003, 388-389, 439-440.	1.2	2
152	Anisotropic s-wave superconductivity in MgB2: comparison with experiments on optical properties. Physica C: Superconductivity and Its Applications, 2003, 392-396, 276-280.	1.2	0
153	Orbital-Dependent Two-Band Superconductivity in MgB2. Journal of the Physical Society of Japan, 2003, 72, 1619-1622.	1.6	2
154	Point Defect Changes in CuGaSe2 Induced by Gas Annealing. Materials Research Society Symposia Proceedings, 2003, 763, 5171.	0.1	3
155	Far-infrared optical conductivity of NbN1â^'xCx thin films. Physica C: Superconductivity and Its Applications, 2002, 367, 337-342.	1.2	2
156	Anisotropic pairing symmetry in Nd2â^'xCexCuO4. Physica C: Superconductivity and Its Applications, 2002, 378-381, 173-177.	1.2	0
157	Crystal growth of ZnO. Journal of Crystal Growth, 2002, 237-239, 509-513.	1.5	47
158	Influence of a Surface on the Franz-Keldysh Effect in n- and p-type GaAs Epitaxial Layers. Journal of the Physical Society of Japan, 2001, 70, 1064-1074.	1.6	2
159	Far-infrared optical conductivity of Nd2â^'Ce CuO4 thin films. Physica C: Superconductivity and Its Applications, 2001, 357-360, 112-116.	1.2	0
160	Traveling solvent floating-zone growth and reduction condition optimization of Nd2â^'xCexCuO4 single crystals. Physica C: Superconductivity and Its Applications, 2001, 357-360, 363-366.	1.2	2
161	Far-infrared optical conductivity of YBCO single crystal thin films from transmission and reflection spectra. Journal of Physics and Chemistry of Solids, 2001, 62, 253-256.	4.0	2
162	Anisotropic Optical Conductivity of Nd2-xCexCuO4 Thin Films. Journal of the Physical Society of Japan, 2001, 70, 2833-2835.	1.6	6

#	Article	IF	Citations
163	Far-Infrared Reflectance and Transmittance Studies of YBa2Cu3O7-xSingle-Crystal Thin Films. Japanese Journal of Applied Physics, 2001, 40, 3163-3170.	1.5	5
164	Far-infrared optical conductivity of YBa2Cu3O7 â°' χ thin films. Physica C: Superconductivity and Its Applications, 2000, 341-348, 2197-2200.	1.2	0
165	Deposition of SiO2Thin Films by Combined Low-Energy Ion-Beam and Molecular-Beam Epitaxial Method. Japanese Journal of Applied Physics, 2000, 39, 1327-1328.	1.5	8
166	Deposition of Ge1-xCxAlloy on Si by Combined Low-Energy Ion Beam and Molecular Beam Epitaxial Method. Japanese Journal of Applied Physics, 1999, 38, 3459-3465.	1.5	6
167	Effects of the surface Cu2â^'xSe phase on the growth and properties of CuInSe2 films. Applied Physics Letters, 1999, 74, 1630-1632.	3.3	66
168	Negative Thermal Quenching Curves in Photoluminescence of Solids. Japanese Journal of Applied Physics, 1998, 37, 550-553.	1.5	177
169	A shallow state in molecular beam epitaxial grown CuGaSe2film detectable by 1.62 eV photoluminescence. Journal of Applied Physics, 1997, 81, 2794-2798.	2.5	36
170	Effect of Multiple-Step Annealing on the Formation of Semiconducting \hat{l}^2 -FeSi2and Metallic \hat{l}_\pm -Fe2Si5on Si (100) by Ion Beam Synthesis. Japanese Journal of Applied Physics, 1997, 36, 2802-2812.	1.5	31
171	Effects of strain on the growth and properties of CulnSe2 epitaxial films. Journal of Crystal Growth, 1997, 175-176, 1051-1056.	1.5	4
172	Effects of annealing on CuInSe2 films grown by molecular beam epitaxy. Solar Energy Materials and Solar Cells, 1997, 49, 319-326.	6.2	15
173	Crystallization of SiSn and SiSnC layers in Si by solid phase epitaxy and ion-beam-induced epitaxy. Nuclear Instruments & Methods in Physics Research B, 1997, 121, 199-202.	1.4	5
174	Photoluminescence characterization of dually Cd+ and N+ ion-implanted GaAs. Nuclear Instruments & Methods in Physics Research B, 1997, 121, 302-305.	1.4	2
175	Photoluminescence studies of epitaxial Si1â^'xGex and Si1â^'xâ^'yGexCy layers on Si formed by ion beam synthesis. Nuclear Instruments & Methods in Physics Research B, 1997, 121, 146-150.	1.4	2
176	Ion-beam-induced epitaxial crystallization (IBIEC) and solid phase epitaxial growth (SPEG) of Si1â^'xCx layers in Si fabricated by C ion implantation. Nuclear Instruments & Methods in Physics Research B, 1997, 127-128, 350-354.	1.4	4
177	Optical absorption and photoluminescence studies of βâ€FeSi2prepared by heavy implantation of Fe+ions into Si. Journal of Applied Physics, 1996, 80, 5955-5962.	2.5	103
178	Synthesis of \hat{l}^2 -FeSi2 for optical applications by Fe triple-energy ion implantation into Si(100) and Si(111) substrates. Thin Solid Films, 1996, 281-282, 252-255.	1.8	16
179	Synthesis of metastable group-IV alloy semiconductors by ion implantation and ion-beam-induced epitaxial crystallization. Applied Surface Science, 1996, 100-101, 498-502.	6.1	5
180	Growth of CuGaSe2 film by molecular beam epitaxy. Microelectronics Journal, 1996, 27, 53-58.	2.0	21

#	Article	IF	Citations
181	Band-edge photoluminescence of CuGaSe2 films grown by molecular beam epitaxy. Journal of Applied Physics, 1996, 79, 4318.	2.5	36
182	Structural and optical properties of \hat{l}^2 -FeSi 2 film prepared by laser ablation method and comparison of \hat{l}^2 -FeSi 2 films prepared by three different methods. , 1996, , .		0
183	Heavily carbon-doped GaAs layers prepared by low-energy ion-beam impingement during molecular beam epitaxy. , 1996, , 133-136.		0
184	Novel optical features in Cd+ ion-implanted LEC-grown GaAs. , 1996, , 466-470.		0
185	Ion-Beam-Induced Epitaxy and Solid Phase Epitaxy of Sigec on Si Formed by Ge and C Ion Implantation and their Structural and Optical Properties. Materials Research Society Symposia Proceedings, 1995, 388, 189.	0.1	1
186	Optical and Electrical Properties of Heavily Carbon-Doped Gaas Fabricated by High-Energy Ion-Implantation. Materials Research Society Symposia Proceedings, 1995, 396, 795.	0.1	1
187	Structural and optical characterization of \hat{l}^2 -FeSi2 layers on Si formed by ion beam synthesis. Thin Solid Films, 1995, 270, 406-410.	1.8	28
188	Heavily carbon-doped GaAs layers prepared by low-energy ion-beam impingement during molecular beam epitaxy. Nuclear Instruments & Methods in Physics Research B, 1995, 106, 133-136.	1.4	2
189	Ion-beam-induced epitaxial crystallisation of metastable Si1â^'xâ^'yGexCy layers fabricated by Ge and C ion implantation. Nuclear Instruments & Methods in Physics Research B, 1995, 106, 289-293.	1.4	6
190	Novel optical features in Cd+ ion-implanted LEC-grown GaAs. Nuclear Instruments & Methods in Physics Research B, 1995, 106, 466-470.	1.4	5
191	Excitonic emissions from CulnSe2 on GaAs(001) grown by molecular beam epitaxy. Applied Physics Letters, 1995, 67, 1289-1291.	3.3	53
192	Highâ€energy implantation of Hg+ ions into GaAs grown by liquid encapsulated Czochralski method: Formation of multiple shallow emissions. Applied Physics Letters, 1995, 67, 2845-2847.	3.3	3
193	Characterization of Ca+ionâ€implanted GaAs by photoluminescence. Applied Physics Letters, 1994, 65, 1427-1429.	3.3	7
194	Restriction landmark genomic scanning method and its various applications. Electrophoresis, 1993, 14, 251-258.	2.4	156
195	Wakefield accelerator using twin linacs. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1993, 328, 596-598.	1.6	10
196	Ion implantation of isoelectronic impurities into InP. Nuclear Instruments & Methods in Physics Research B, 1993, 80-81, 910-914.	1.4	3
197	Pulsed UV laser irradiation effect for Sn+-implanted GaAs. Nuclear Instruments & Methods in Physics Research B, 1993, 80-81, 578-582.	1.4	2
198	Molecular Cloning of Polymorphic Markers on RLGS Gel Using the Spot Target Cloning Method. Biochemical and Biophysical Research Communications, 1993, 194, 1406-1412.	2.1	48

#	Article	IF	CITATIONS
199	Formation of four new shallow emissions in Mn+ionâ€implanted GaAs grown by molecular beam epitaxy having extremely low concentration of background impurities. Applied Physics Letters, 1993, 63, 1780-1782.	3.3	21
200	Steric Effects in Photochemical Cycloadditions of 9-Phenanthrenecarboxylates Bulletin of the Chemical Society of Japan, 1993, 66, 340-343.	3.2	3
201	Dopamine infused continuously at high concentration with a low flow rate affects arterial blood pressure fluctuation waves. Critical Care Medicine, 1993, 21, 801-804.	0.9	13
202	Discharge-Pumped VUV F2 Molecular Laser Annealing of Heavily Se+-Implanted GaAs. Materials Research Society Symposia Proceedings, 1993, 316, 373.	0.1	0
203	Annealing Effect on Photoluminescence Properties of Be-Doped MBE GaAs. Materials Research Society Symposia Proceedings, 1993, 325, 267.	0.1	2
204	Solid-gas effect in K-vacancy production in near symmetric slow heavy-ion-atom collisions. Zeitschrift FÅ $\frac{1}{4}$ r Physik D-Atoms Molecules and Clusters, 1992, 22, 451-456.	1.0	6
205	Effect of Water Supply and Defoliation on Photosynthesis, Transpiration and Yield of Soybean Japanese Journal of Crop Science, 1992, 61, 264-270.	0.2	14
206	Effects of the Proton Pump Inhibitor, E3810, on Gastric Secretion and Gastric and Duodenal Ulcers or Erosions in Rats. Drug Investigation, 1991, 3, 328-332.	0.6	21
207	Direct observation of plasma-lens effect. Physical Review Letters, 1991, 66, 1870-1873.	7.8	67
208	Inhibitions of acid secretion by E3810 and omeprazole, and their reversal by glutathione. Biochemical Pharmacology, 1991, 42, 321-328.	4.4	98
209	Vortex core-like structure observed on a surface of superconducting NbN thin film by LT-STM. Physica B: Condensed Matter, 1991, 169, 465-466.	2.7	3
210	A seismic test of large-scale liquid-filled piping. Related to liquid boundary conditions , 1990, 33, 357-365.		0
211	Excitedâ€state spectroscopy of identified Mg acceptor in InP. Applied Physics Letters, 1990, 56, 349-351.	3.3	3
212	Optical and electrical properties of C+-implanted GaAs. Nuclear Instruments & Methods in Physics Research B, 1989, 39, 457-460.	1.4	3
213	Formation of Radiative Binding States for the Pairs Between Acceptors in Heavily Acceptor-Doped Gaas Materials Research Society Symposia Proceedings, 1989, 145, 493.	0.1	5
214	Light scattering spectra of low-lying modes in KH2PO4under hydrostatic pressure. Ferroelectrics, 1988, 80, 129-132.	0.6	3
215	Measurement of impact parameter dependent probabilities and total cross sections for targetK-shell ionization by He+ ions. Zeitschrift F¼r Physik D-Atoms Molecules and Clusters, 1987, 4, 339-342.	1.0	6
216	Afferent projections to the interpeduncular nucleus in the rat, as studied by retrograde and anterograde transport of wheat germ agglutinin conjugated to horseradish peroxidase. Journal of Comparative Neurology, 1986, 248, 272-284.	1.6	72

#	Article	IF	CITATIONS
217	High-Pressure Brillouin Scattering Cell with Crystal Rotation Axis. Japanese Journal of Applied Physics, 1986, 25, 137-139.	1.5	5
218	Light Scattering Study of Effect of Hydrostatic-Pressure on the Ferroelectric Relaxational Mode in KH2PO4. Journal of the Physical Society of Japan, 1986, 55, 2543-2546.	1.6	6
219	Cosmic-ray muon spectrum derived from the transferred energy spectrum of bursts observed by the mutron calorimeter. Il Nuovo Cimento A, 1983, 73, 209-234.	0.2	4
220	Electromagnetic interactions of cosmic-ray muons up to 10 TeV (pair productions and) Tj ETQq0 0 0 rgBT /Overlo	ock 10 Tf 0.2	50 622 Td (br
221	Measurement of the cosmic-ray muon spectrum and charge ratio at large zenith angles in the momentum range 100 GeV/cto 10 TeV/cusing a magnet spectrometer. Physical Review D, 1983, 28, 40-48.	4.7	14
222	Measurement of Cosmic-Ray Muon Spectrum and Charge Ratio at Large Zenith Angles in the Momentum Range 100 GeV/cto 10 TeV/cUsing a Magnet Spectrograph. Physical Review Letters, 1979, 43, 974-977.	7.8	12
223	The trigger system of mutron, a cosmic ray magnetic spectrometer. Nuclear Instruments & Methods, 1978, 150, 387-400.	1.2	11
224	Direct observation of plasma wakefield caused by a train of LINAC bunches. , 0, , .		0
225	Electrical properties of \hat{l}^2 -FeSi/sub 2/ bulk crystal grown by horizontal gradient freeze method., 0, , .		1
226	Optical, electrical and structural properties of polycrystalline \hat{l}^2 -FeSi/sub 2/ thin films fabricated by electron beam evaporation of ferrosilicon. , 0, , .		0
227	Fabrication of Ultrasmall High-Quality Bi ₂ Sr ₂ CaCu ₂ O _{8+Î} Intrinsic Josephson Junctions. Applied Physics Express, 0, 1, 101701.	2.4	5