

Hajime Shibata

List of Publications by Year in descending order

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229
times ranked

3841
citing authors

#	ARTICLE	IF	CITATIONS
1	Negative Thermal Quenching Curves in Photoluminescence of Solids. Japanese Journal of Applied Physics, 1998, 37, 550-553.	1.5	177
2	How small amounts of Ge modify the formation pathways and crystallization of kesterites. Energy and Environmental Science, 2018, 11, 582-593.	30.8	169
3	Restriction landmark genomic scanning method and its various applications. Electrophoresis, 1993, 14, 251-258.	2.4	156
4	Na-induced variations in the structural, optical, and electrical properties of Cu(In,Ga)Se ₂ thin films. Journal of Applied Physics, 2009, 106, .	2.5	148
5	Band-gap modified Al-doped Zn _{1-x} Mg _x O transparent conducting films deposited by pulsed laser deposition. Applied Physics Letters, 2004, 85, 1374-1376.	3.3	131
6	Improvement of voltage deficit of Ge-incorporated kesterite solar cell with 12.3% conversion efficiency. Applied Physics Express, 2016, 9, 102301.	2.4	129
7	Two-dimensional electron gas in Zn polar ZnMgO $\hat{\cdot}$ ZnO heterostructures grown by radical source molecular beam epitaxy. Applied Physics Letters, 2006, 89, 132113.	3.3	118
8	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
9	Optical absorption and photoluminescence studies of $\hat{2}\hat{\text{FeSi}}_2$ prepared by heavy implantation of Fe ⁺ ions into Si. Journal of Applied Physics, 1996, 80, 5955-5962.	2.5	103
10	Inhibitions of acid secretion by E3810 and omeprazole, and their reversal by glutathione. Biochemical Pharmacology, 1991, 42, 321-328.	4.4	98
11	Ge-incorporated Cu ₂ ZnSnSe ₄ thin-film solar cells with efficiency greater than 10%. Solar Energy Materials and Solar Cells, 2016, 144, 488-492.	6.2	95
12	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
13	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
14	Direct observation of plasma-lens effect. Physical Review Letters, 1991, 66, 1870-1873.	7.8	67
15	Effects of the surface Cu _{2-x} Se phase on the growth and properties of CuInSe ₂ films. Applied Physics Letters, 1999, 74, 1630-1632.	3.3	66
16	Degenerate layers in epitaxial ZnO films grown on sapphire substrates. Applied Physics Letters, 2004, 84, 4412-4414.	3.3	65
17	Potential-induced degradation of Cu(In,Ga)Se ₂ photovoltaic modules. Japanese Journal of Applied Physics, 2015, 54, 08KC13.	1.5	64
18	Determination of crystallographic polarity of ZnO layers. Applied Physics Letters, 2005, 87, 141904.	3.3	63

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19	Structural tuning of wide-gap chalcopyrite CuGaSe ₂ thin films and highly efficient solar cells: differences from narrow-gap Cu(In,Ga)Se ₂ . Progress in Photovoltaics: Research and Applications, 2014, 22, 821-829.	8.1	61
20	In ₂ O ₃ -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
21	Strong excitonic transition of Zn _{1-x} Mg _x O alloy. Applied Physics Letters, 2007, 91, .	3.3	55
22	Excitonic emissions from CuInSe ₂ on GaAs(001) grown by molecular beam epitaxy. Applied Physics Letters, 1995, 67, 1289-1291.	3.3	53
23	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
24	Photoluminescence characterization of Zn _{1-x} Mg _x O epitaxial thin films grown on ZnO by radical source molecular beam epitaxy. Applied Physics Letters, 2007, 90, 124104.	3.3	49
25	Growth and characterization of coevaporated Cu ₂ SnSe ₃ thin films for photovoltaic applications. Thin Solid Films, 2013, 536, 111-114.	1.8	49
26	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
27	Excitation-Power Dependence of Free Exciton Photoluminescence of Semiconductors. Japanese Journal of Applied Physics, 2005, 44, 6113-6114.	1.5	48
28	Crystal growth of ZnO. Journal of Crystal Growth, 2002, 237-239, 509-513.	1.5	47
29	Negative thermal quenching of photoluminescence in ZnO. Physica B: Condensed Matter, 2006, 376-377, 711-714.	2.7	46
30	Switching Dynamics of Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ Intrinsic Josephson Junctions: Macroscopic Quantum Tunneling and Self-Heating Effect. Journal of the Physical Society of Japan, 2008, 77, 104708.	1.6	45
31	Effect of Se/(Ga+In) ratio on MBE grown Cu(In,Ga)Se ₂ thin film solar cell. Journal of Crystal Growth, 2009, 311, 2212-2214.	1.5	40
32	Dielectric functions of Cu ₂ ZnSnSe ₄ and Cu ₂ SnSe ₃ semiconductors. Journal of Applied Physics, 2015, 117, 015702.	2.5	40
33	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
34	Crystal growth of rare-earth orthovanadate (RVO ₄) by the floating-zone method. Journal of Crystal Growth, 2006, 286, 288-293.	1.5	38
35	Improvement of minority carrier lifetime and conversion efficiency by Na incorporation in Cu ₂ ZnSnSe ₄ solar cells. Journal of Applied Physics, 2017, 122, .	2.5	37
36	Band-edge photoluminescence of CuGaSe ₂ films grown by molecular beam epitaxy. Journal of Applied Physics, 1996, 79, 4318.	2.5	36

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37	A shallow state in molecular beam epitaxial grown CuGaSe ₂ film detectable by 1.62 eV photoluminescence. Journal of Applied Physics, 1997, 81, 2794-2798.	2.5	36
38	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
39	Correlation between oxygen stoichiometry, structure, and opto-electrical properties in amorphous In ₂ O ₃ :H films. Journal of Applied Physics, 2012, 111, .	2.5	35
40	Characterization of Zn _{1-x} Mg _x O transparent conducting thin films fabricated by multi-cathode RF-magnetron sputtering. Thin Solid Films, 2010, 518, 2949-2952.	1.8	34
41	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
42	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
43	Progress in the Efficiency of Wide-Gap Cu(In _{1-x} Ga _x)Se ₂ Solar Cells Using CIGSe Layers Grown in Water Vapor. Japanese Journal of Applied Physics, 2005, 44, L679-L682.	1.5	32
44	Band profiles of ZnMgO/ZnO heterostructures confirmed by Kelvin probe force microscopy. Applied Physics Letters, 2009, 94, .	3.3	32
45	Effect of Multiple-Step Annealing on the Formation of Semiconducting \hat{I}^2 -FeSi ₂ and Metallic \hat{I}^{\pm} -Fe ₂ Si ₅ on Si (100) by Ion Beam Synthesis. Japanese Journal of Applied Physics, 1997, 36, 2802-2812.	1.5	31
46	Characterization of electronic structure of Cu ₂ ZnSn(S Se _{1-x}) ₄ absorber layer and CdS/Cu ₂ ZnSn(S) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 2015, 582, 166-170.	1.8	31
47	Single-crystal Cu(In,Ga)Se ₂ solar cells grown on GaAs substrates. Applied Physics Express, 2018, 11, 082302.	2.4	30
48	Growth of polycrystalline Cu(In,Ga)Se ₂ thin films using a radio frequency-cracked Se-radical beam source and application for photovoltaic devices. Applied Physics Letters, 2007, 91, .	3.3	29
49	Structural and optical characterization of \hat{I}^2 -FeSi ₂ layers on Si formed by ion beam synthesis. Thin Solid Films, 1995, 270, 406-410.	1.8	28
50	Very small tail state formation in Cu ₂ ZnGeSe ₄ . Applied Physics Letters, 2018, 113, .	3.3	28
51	Buried <i>p-n</i> junction formation in CuGaSe ₂ thin-film solar cells. Applied Physics Letters, 2014, 104, 031606.	3.3	27
52	Cu(In,Ga)Se ₂ ; Solar Cells With Amorphous Oxide Semiconducting Buffer Layers. IEEE Journal of Photovoltaics, 2015, 5, 956-961.	2.5	26
53	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
54	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

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55	Effects of RbF postdeposition treatment and heat-light soaking on the metastable acceptor activation of CuInSe ₂ thin film photovoltaic devices. Applied Physics Letters, 2018, 113, .	3.3	25
56	Large grain Cu(In,Ga)Se ₂ thin film growth using a Se-radical beam source. Solar Energy Materials and Solar Cells, 2009, 93, 792-796.	6.2	24
57	Impact of a binary Ga ₂ Se ₃ precursor on ternary CuGaSe ₂ thin-film and solar cell device properties. Applied Physics Letters, 2013, 103, .	3.3	24
58	Determination and interpretation of the optical constants for solar cell materials. Applied Surface Science, 2017, 421, 276-282.	6.1	24
59	Interfacial Alkali Diffusion Control in Chalcopyrite Thin-Film Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 14123-14130.	8.0	23
60	Band Alignment of the CdS/Cu ₂ Zn(Sn _{1-x} Ge _x)Se ₄ Heterointerface and Electronic Properties at the Cu ₂ Zn(Sn _{1-x} Ge _x)Se ₄ Surface: $x = 0, 0.2, \text{ and } 0.4$. ACS Applied Materials & Interfaces, 2019, 11, 4637-4648.	8.0	23
61	Characterization of ZnO crystals by photoluminescence spectroscopy. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 872-875.	0.8	22
62	Photoluminescence characterization of excitonic centers in ZnO epitaxial films. Applied Physics Letters, 2005, 86, 221907.	3.3	22
63	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
64	Formation of four new shallow emissions in Mn ²⁺ -implanted GaAs grown by molecular beam epitaxy having extremely low concentration of background impurities. Applied Physics Letters, 1993, 63, 1780-1782.	3.3	21
65	Growth of CuGaSe ₂ film by molecular beam epitaxy. Microelectronics Journal, 1996, 27, 53-58.	2.0	21
66	Composition control of Cu ₂ ZnSnSe ₄ -based solar cells grown by coevaporation. Thin Solid Films, 2014, 551, 27-31.	1.8	21
67	Slow infrared band relaxation and localization of photogenerated carriers in $\text{CuIn}_{1-x}\text{Ga}_x\text{Se}_2$. Physical Review	3.2	21
68	Narrow-bandgap Cu ₂ Sn _{1-x} GexSe ₃ thin film solar cells. Materials Letters, 2015, 158, 205-207.	2.6	21
69	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
70	Determination of deep-level defects in Cu ₂ ZnSn(S,Se) ₄ thin-films using photocapacitance method. Applied Physics Letters, 2015, 106, .	3.3	20
71	Carrier Compensation Induced by Thermal Annealing in Al-Doped ZnO Films. Materials, 2017, 10, 141.	2.9	20
72	Analysis of future generation solar cells and materials. Japanese Journal of Applied Physics, 2018, 57, 04FS03.	1.5	20

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73	Cu(In,Ga)Se ₂ 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
74	Comparison of ZnO:B and ZnO:Al layers for Cu(In,Ga)Se ₂ submodules. Thin Solid Films, 2016, 614, 79-83.	1.8	18
75	Effect of Combined Alkali (KF+CsF) Post-Deposition Treatment on Cu(InGa)Se ₂ Solar Cells. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800372.	2.4	17
76	Synthesis of ¹²⁵ I-FeSi ₂ 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
77	Improved efficiency of Cu(In,Ga)Se ₂ mini-module via high-mobility In ₂ O ₃ :W,H transparent conducting oxide layer. Progress in Photovoltaics: Research and Applications, 2019, 27, 491-500.	8.1	16
78	Effects of annealing on CuInSe ₂ films grown by molecular beam epitaxy. Solar Energy Materials and Solar Cells, 1997, 49, 319-326.	6.2	15
79	Experimental study of macroscopic quantum tunnelling in Bi ₂ 212 intrinsic Josephson junctions. Superconductor Science and Technology, 2007, 20, S10-S13.	3.5	15
80	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
81	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
82	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
83	Efficient Narrow Band Gap Cu(In,Ga)Se ₂ Solar Cells with Flat Surface. ACS Applied Materials & Interfaces, 2020, 12, 45485-45492.	8.0	15
84	Measurement of the cosmic-ray muon spectrum and charge ratio at large zenith angles in the momentum range 100 GeV/c to 10 TeV/c using a magnet spectrometer. Physical Review D, 1983, 28, 40-48.	4.7	14
85	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
86	High-efficiency CIGS submodules. Progress in Photovoltaics: Research and Applications, 2012, 20, 595-599.	8.1	14
87	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
88	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
89	Effect of thermal annealing on the redistribution of alkali metals in Cu(In,Ga)Se ₂ solar cells on glass substrate. Journal of Applied Physics, 2018, 123, 093101.	2.5	14
90	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

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91	Dopamine infused continuously at high concentration with a low flow rate affects arterial blood pressure fluctuation waves. <i>Critical Care Medicine</i> , 1993, 21, 801-804.	0.9	13
92	New nonlinear-laser effects in YbVO ₄ crystal: Sesqui-octave Stokes and anti-Stokes comb generation and the cascaded self-frequency tripling of σ (3)-Stokes components under a one-micron picosecond pumping. <i>Laser Physics</i> , 2008, 18, 1546-1552.	1.2	13
93	Measurement of Cosmic-Ray Muon Spectrum and Charge Ratio at Large Zenith Angles in the Momentum Range 100 GeV/c to 10 TeV/c Using a Magnet Spectrograph. <i>Physical Review Letters</i> , 1979, 43, 974-977.	7.8	12
94	Temperature induced phase transformation in coevaporated Cu ₂ SnSe ₃ thin films. <i>Materials Letters</i> , 2014, 116, 61-63.	2.6	12
95	Exploring suitable damp heat and potential induced degradation test procedures for Cu(In,Ga)(S,Se) photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 08RG02.	1.5	12
96	Study and optimization of alternative MBE-deposited metallic precursors for highly efficient kesterite CZTSe:Ge solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2019, 27, 779-788.	8.1	12
97	The trigger system of neutron, a cosmic ray magnetic spectrometer. <i>Nuclear Instruments & Methods</i> , 1978, 150, 387-400.	1.2	11
98	Control of the thin film properties of Cu(In,Ga)Se ₂ using water vapor introduction during growth. <i>Journal of Applied Physics</i> , 2006, 100, 096106.	2.5	11
99	Si-Doping Effects in Cu(In,Ga)Se ₂ Thin Films and Applications for Simplified Structure High-Efficiency Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 31119-31128.	8.0	11
100	Impact of front contact layers on performance of Cu(In,Ga)Se ₂ solar cells in relaxed and metastable states. <i>Progress in Photovoltaics: Research and Applications</i> , 2018, 26, 789-799.	8.1	11
101	Optical and Structural Properties of High-Efficiency Epitaxial Cu(In,Ga)Se ₂ Grown on GaAs. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 3150-3160.	8.0	11
102	Wakefield accelerator using twin linacs. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1993, 328, 596-598.	1.6	10
103	Observation of stimulated Raman scattering in the tetragonal crystal YbVO ₄ . <i>Laser Physics Letters</i> , 2006, 3, 263-267.	1.4	10
104	CIGS solar cell with CdS buffer layer deposited by ammonia-free process. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 1072-1075.	1.8	10
105	Degradation mechanism of Cu(In,Ga)Se ₂ solar cells induced by exposure to air. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 072301.	1.5	10
106	Interface oxygen and heat sensitivity of Cu(In,Ga)Se ₂ and CuGaSe ₂ solar cells. <i>Applied Physics Letters</i> , 2016, 108, 203902.	3.3	10
107	A comparative study on charge carrier recombination across the junction region of Cu ₂ ZnSn(S,Se) ₄ and Cu(In,Ga)Se ₂ thin film solar cells. <i>AIP Advances</i> , 2016, 6, .	1.3	10
108	Evaluation of femtosecond laser-scribed Cu(In,Ga)Se ₂ solar cells using scanning spreading resistance microscopy. <i>Applied Physics Express</i> , 2018, 11, 032301.	2.4	10

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109	Effects of low temperature buffer layer treatments on the growth of high quality ZnO films. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 888-891.	0.8	9
110	Characterization of electronic structure of oxysulfide buffers and band alignment at buffer/absorber interfaces in Cu(In,Ga)Se ₂ -based solar cells. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 05FW09.	1.5	9
111	Influence of electron irradiation on electroluminescence of Cu(In,Ga)Se ₂ solar cells. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 05FW08.	1.5	9
112	Reduced recombination in a surface-sulfurized Cu(InGa)Se ₂ thin-film solar cell. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 055701.	1.5	9
113	Electronic structure of Cu ₂ ZnSn(S _x) _{1-x} Se ₄ surface and CdS/Cu ₂ ZnSn(S _x) _{1-x} Se ₄ interface. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2017, 14, .	0.8	9
114	Deposition of SiO ₂ Thin Films by Combined Low-Energy Ion-Beam and Molecular-Beam Epitaxial Method. <i>Japanese Journal of Applied Physics</i> , 2000, 39, 1327-1328.	1.5	8
115	Two-dimensional polaron mass in ZnO quantum Hall systems. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010, 7, 1599-1601.	0.8	8
116	Structure of chemically deposited Zn(S,O,OH) buffer layer and the effects on the performance of Cu(in,Ga)Se ₂ solar cell. <i>Progress in Photovoltaics: Research and Applications</i> , 2016, 24, 397-404.	8.1	8
117	Si-Doped Cu(In,Ga)Se ₂ Photovoltaic Devices with Energy Conversion Efficiencies Exceeding 16.5% without a Buffer Layer. <i>Advanced Energy Materials</i> , 2018, 8, 1702391.	19.5	8
118	Characterization of Ca-ion-implanted GaAs by photoluminescence. <i>Applied Physics Letters</i> , 1994, 65, 1427-1429.	3.3	7
119	Crystal growth of La _{2-x} Ce _x CuO ₄ . <i>Physica C: Superconductivity and Its Applications</i> , 2003, 388-389, 389-390.	1.2	7
120	Fabrication of weak-link Nb-based nano-SQUIDS by FIB process. <i>Physica C: Superconductivity and Its Applications</i> , 2011, 471, 1246-1248.	1.2	7
121	Bilayer contacts composed of amorphous and solid-phase crystallized transparent conducting oxides for solar cells. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 05FA08.	1.5	7
122	Effect of pre-annealing on Cu ₂ ZnSnSe ₄ thin-film solar cells prepared from stacked Zn/Cu/Sn metal precursors. <i>Materials Letters</i> , 2016, 176, 78-82.	2.6	7
123	Electronic structures of Cu ₂ ZnSnSe ₄ surface and CdS/Cu ₂ ZnSnSe ₄ heterointerface. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 065701.	1.5	7
124	Significance of metastable acceptors in Cu(In,Ga)Se ₂ solar cells in accelerated lifetime testing. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 092301.	1.5	7
125	Impact of rough substrates on hydrogen-doped indium oxides for the application in CIGS devices. <i>Solar Energy Materials and Solar Cells</i> , 2020, 206, 110300.	6.2	7
126	Characterization of Surface and Heterointerface of Cu ₂ ZnSn _{1-x} Ge _x Se ₄ for Solar Cell Applications. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020, 14, 1900708.	2.4	7

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127	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
128	Electromagnetic interactions of cosmic-ray muons up to 10 TeV (pair productions and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td (br	0.2	6
129	Measurement of impact parameter dependent probabilities and total cross sections for targetK-shell ionization by He+ ions. Zeitschrift FÅ¼r Physik D-Atoms Molecules and Clusters, 1987, 4, 339-342.	1.0	6
130	Solid-gas effect inK-vacancy production in near symmetric slow heavy-ion-atom collisions. Zeitschrift FÅ¼r Physik D-Atoms Molecules and Clusters, 1992, 22, 451-456.	1.0	6
131	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
132	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
133	Anisotropic Optical Conductivity of Nd2-xCexCuO4 Thin Films. Journal of the Physical Society of Japan, 2001, 70, 2833-2835.	1.6	6
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	Infrared reflectionâ€“absorption spectroscopy applied to a mercyanine dye J-aggregate deposited on transparent electrodes based on zinc oxide. Thin Solid Films, 2009, 518, 462-465.	1.8	6
136	Multi-Junction Switching in Bi₂Sr_{1.6}La_{0.4}CuO_{6+Î~} Intrinsic Josephson Junctions. Applied Physics Express, 2010, 3, 043101.	2.4	6
137	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
138	Analysis of Optical and Recombination Losses in Solar Cells. Springer Series in Optical Sciences, 2018, , 29-82.	0.7	6
139	An over 18%-efficient completely buffer-free Cu(In,Ga)Se₂ solar cell. Applied Physics Express, 2018, 11, 075502.	2.4	6
140	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
141	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
142	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
143	High-Pressure Brillouin Scattering Cell with Crystal Rotation Axis. Japanese Journal of Applied Physics, 1986, 25, 137-139.	1.5	5
144	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

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145	Novel optical features in Cd ⁺ ion-implanted LEC-grown GaAs. Nuclear Instruments & Methods in Physics Research B, 1995, 106, 466-470.	1.4	5
146	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
147	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
148	Far-Infrared Reflectance and Transmittance Studies of YBa ₂ Cu ₃ O _{7-x} Single-Crystal Thin Films. Japanese Journal of Applied Physics, 2001, 40, 3163-3170.	1.5	5
149	Possible observation of energy level quantization in an intrinsic Josephson junction. Physica C: Superconductivity and Its Applications, 2008, 468, 1919-1921.	1.2	5
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151	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
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