Atsushi Masuda

List of Publications by Year
in descending order

230	3,762	136950	233421
papers	citations	32 h-index	45 g-index

231	231	231	1711
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Direct detection of H atoms in the catalytic chemical vapor deposition of the SiH4/H2 system. Journal of Applied Physics, 2002, 91, 1650-1656.	2.5	156
2	Annual degradation rates of recent crystalline silicon photovoltaic modules. Progress in Photovoltaics: Research and Applications, 2017, 25, 953-967.	8.1	95
3	Identification of Si and SiH in catalytic chemical vapor deposition of SiH4 by laser induced fluorescence spectroscopy. Journal of Applied Physics, 2000, 88, 5437-5443.	2.5	93
4	Air-stable n-type carbon nanotube field-effect transistors with Si3N4 passivation films fabricated by catalytic chemical vapor deposition. Applied Physics Letters, 2005, 86, 113115.	3.3	91
5	Potential-induced degradation in photovoltaic modules based on n-type single crystalline Si solar cells. Solar Energy Materials and Solar Cells, 2015, 140, 361-365.	6.2	88
6	Low-temperature crystallization of amorphous silicon using atomic hydrogen generated by catalytic reaction on heated tungsten. Applied Physics Letters, 1999, 74, 2143-2145.	3.3	77
7	Potential-induced degradation of Cu(In,Ga)Se₂photovoltaic modules. Japanese Journal of Applied Physics, 2015, 54, 08KC13.	1.5	64
8	Radical Species Formed by the Catalytic Decomposition of NH3on Heated W Surfaces. Japanese Journal of Applied Physics, 2003, 42, 5315-5321.	1.5	57
9	Crystalline Si photovoltaic modules based on TiO₂-coated cover glass against potential-induced degradation. RSC Advances, 2014, 4, 44291-44295.	3.6	57
10	Identification and gas phase kinetics of radical species in Cat-CVD processes of SiH4. Thin Solid Films, 2001, 395, 47-50.	1.8	56
11	Changes in structure and nature of defects by annealing of fluorinated amorphous carbon thin films with low dielectric constant. Applied Physics Letters, 1998, 72, 2704-2706.	3.3	55
12	Changes in the current densityâ€“voltage and external quantum efficiency characteristics of n-type single-crystalline silicon photovoltaic modules with a rear-side emitter undergoing potential-induced degradation. Solar Energy Materials and Solar Cells, 2016, 151, 113-119.	6.2	50
13	Highly OrientedPb(Zr,Ti)O3Thin Films Prepared by Pulsed Laser Ablation on GaAs and Si Substrates with MgO Buffer Layer. Japanese Journal of Applied Physics, 1995, 34, 5154-5157.	1.5	49
14	Effect of sputtering with hydrogen dilution on fluorine concentration of low hydrogen content fluorinated amorphous carbon thin films with low dielectric constant. Journal of Applied Physics, 1999, 86, 2468-2472.	2.5	48
15	Orientation of MgO Thin Films on Si(100) and GaAs(100) Prepared by Electron-Beam Evaporation. Japanese Journal of Applied Physics, 1994, 33, L793-L796.	1.5	45
16	Degradation by acetic acid for crystalline Si photovoltaic modules. Japanese Journal of Applied Physics, 2015, 54, 04DR04.	1.5	43
17	Cat-CVD (hot-wire CVD): how different from PECVD in preparing amorphous silicon. Journal of Non-Crystalline Solids, 2004, 338-340, 19-26.	3.1	41
18	Novel lighter weight crystalline silicon photovoltaic module using acrylic-film as a cover sheet. Japanese Journal of Applied Physics, 2014, 53, 092302.	1.5	41

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19	Deposition chemistry in the Cat-CVD processes of the SiH4/NH3 system. Thin Solid Films, 2003, 430, 24-27.	1.8	40
20	Transport mechanism of deposition precursors in catalytic chemical vapor deposition studied using a reactor tube. Journal of Non-Crystalline Solids, 2000, 266-269, 100-104.	3.1	39
21	Recent progress of Cat-CVD research in Japanâ€"bridging between the first and second Cat-CVD conferences. Thin Solid Films, 2003, 430, 7-14.	1.8	38
22	NH3-Plasma-Nitridation Process of (100) GaAs Surface Observed by Angle-Dependent X-Ray Photoelectron Spectroscopy. Japanese Journal of Applied Physics, 1995, 34, 1075-1079.	1.5	35
23	Relationship between cross-linking conditions of ethylene vinyl acetate and potential induced degradation for crystalline silicon photovoltaic modules. Japanese Journal of Applied Physics, 2015, 54, 08KG01.	1.5	35
24	Microscopic aspects of potential-induced degradation phenomena and their recovery processes for p-type crystalline Si photovoltaic modules. Current Applied Physics, 2016, 16, 1659-1665.	2.4	35
25	Preparation and crystallographic characterizations of highly oriented Pb(Zr0.52Ti0.48)O3 films and MgO buffer layers on (100)GaAs and (100)Si by pulsed laser ablation. Journal of Crystal Growth, 1996, 158, 84-88.	1.5	34
26	Catalytic Chemical Sputtering: A Novel Method for Obtaining Large-Grain Polycrystalline Silicon. Japanese Journal of Applied Physics, 2001, 40, L289-L291.	1.5	34
27	Various applications of silicon nitride by catalytic chemical vapor deposition for coating, passivation and insulating films. Thin Solid Films, 2006, 501, 149-153.	1.8	34
28	Reduction in the short-circuit current density of silicon heterojunction photovoltaic modules subjected to potential-induced degradation tests. Solar Energy Materials and Solar Cells, 2017, 161, 439-443.	6.2	34
29	Present status and future feasibility for industrial implementation of Cat-CVD (Hot-Wire CVD) technology. Thin Solid Films, 2006, 501, 58-60.	1.8	33
30	Causes of Degradation Identified by the Extended Thermal Cycling Test on Commercially Available Crystalline Silicon Photovoltaic Modules. IEEE Journal of Photovoltaics, 2017, 7, 1511-1518.	2.5	33
31	Structural and electrical properties of yttria-stabilized zirconia films with controlled Y content heteroepitaxially grown on Si by reactive sputtering. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1998, 54, 79-83.	3.5	32
32	Systematic study on photoresist removal using hydrogen atoms generated on heated catalyzer. Thin Solid Films, 2006, 501, 326-328.	1.8	32
33	Crystalline Si photovoltaic modules functionalized by a thin polyethylene film against potential and damp-heat-induced degradation. RSC Advances, 2015, 5, 15017-15023.	3.6	32
34	Progression of rapid potential-induced degradation of n-type single-crystalline silicon photovoltaic modules. Applied Physics Express, 2016, 9, 112301.	2.4	32
35	Influence of surface structure of n-type single-crystalline Si solar cells on potential-induced degradation. Solar Energy Materials and Solar Cells, 2017, 166, 132-139.	6.2	32
36	Preparation of fluorinated amorphous carbon thin films. Journal of Non-Crystalline Solids, 1998, 227-230, 641-644.	3.1	30

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37	Comprehensive study of potentialâ€induced degradation in silicon heterojunction photovoltaic cell modules. Progress in Photovoltaics: Research and Applications, 2018, 26, 697-708.	8.1	30
38	Rapid progression and subsequent saturation of polarization-type potential-induced degradation of n-type front-emitter crystalline-silicon photovoltaic modules. Japanese Journal of Applied Physics, 2018, 57, 122301.	1.5	30
39	Development of Cat-CVD apparatus for 1-m-size large-area deposition. Thin Solid Films, 2003, 430, 58-62.	1.8	29
40	Investigation on antireflection coating for high resistance to potential-induced degradation. Japanese Journal of Applied Physics, 2014, 53, 03CE01.	1.5	29
41	Field testing of thermoplastic encapsulants in highâ€temperature installations. Energy Science and Engineering, 2015, 3, 565-580.	4.0	29
42	Multistage performance deterioration in n-type crystalline silicon photovoltaic modules undergoing potential-induced degradation. Microelectronics Reliability, 2018, 84, 127-133.	1.7	29
43	Quantification of Gas-Phase H-Atom Number Density by Tungsten Phosphate Glass. Japanese Journal of Applied Physics, 2005, 44, 732-735.	1.5	28
44	High performance amorphous-silicon thin film transistors prepared by catalytic chemical vapor deposition with high deposition rate. Thin Solid Films, 2001, 395, 330-334.	1.8	26
45	Fabrication of Pb(Zr,Ti)O3/MgO/GaN/GaAs structure for optoelectronic device applications. Journal of Crystal Growth, 1998, 189-190, 227-230.	1.5	25
46	A single-phase brookite TiO₂ nanoparticle bridge enhances the stability of perovskite solar cells. Sustainable Energy and Fuels, 2020, 4, 2009-2017.	4.9	25
47	Influence of Buffer Layers on Lead Magnesium Niobate Titanate Thin Films Prepared by Pulsed Laser Ablation. Japanese Journal of Applied Physics, 1996, 35, 4750-4754.	1.5	24
48	Effects of atomic hydrogen in gas phase on a-Si:H and poly-Si growth by catalytic CVD. Journal of Non-Crystalline Solids, 2002, 299-302, 9-13.	3.1	24
49	Highly moisture-resistive silicon nitride films prepared by catalytic chemical vapor deposition and application to gallium arsenide field-effect transistors. Vacuum, 2004, 74, 525-529.	3.5	23
50	A concentrator module of spherical Si solar cell. Solar Energy Materials and Solar Cells, 2007, 91, 1805-1810.	6.2	23
51	Effects of UV on power degradation of photovoltaic modules in combined acceleration tests. Japanese Journal of Applied Physics, 2016, 55, 052301.	1.5	23
52	Potentialâ€induced Degradation in Highâ€efficiency nâ€type Crystallineâ€silicon Photovoltaic Modules: A Literature Review. Solar Rrl, 2021, 5, 2100708.	5.8	23
53	Defect Reduction in Polycrystalline Silicon Thin Films by Heat Treatment with High-Pressure H2O Vapor. Japanese Journal of Applied Physics, 2007, 46, 1286-1289.	1.5	22
54	Cat-CVD SiN passivation films for OLEDs and packaging. Thin Solid Films, 2008, 516, 553-557.	1.8	22

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55	Acceleration of potential-induced degradation by salt-mist preconditioning in crystalline silicon photovoltaic modules. Japanese Journal of Applied Physics, 2015, 54, 08KG08.	1.5	22
56	Electrical detection of gap formation underneath finger electrodes on c-Si PV cells exposed to acetic acid vapor under hygrothermal conditions. , 2016, , .		22
57	Mechanism of Stoichiometric Deposition of Volatile Elements in Multimetal-Oxide Films Prepared by Pulsed Laser Ablation. Japanese Journal of Applied Physics, 1996, 35, L237-L240.	1.5	21
58	Technique for the production, preservation, and transportation of H atoms in metal chambers for processings. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 1728-1731.	2.1	21
59	Sequential and combined acceleration tests for crystalline Si photovoltaic modules. Japanese Journal of Applied Physics, 2016, 55, 04ES10.	1.5	21
60	Consideration on Na diffusion and recovery phenomena in potential-induced degradation for crystalline Si photovoltaic modules. Japanese Journal of Applied Physics, 2016, 55, 02BF10.	1.5	21
61	Spectroscopic Study on N2O-Plasma Oxidation of Hydrogenated Amorphous Silicon and Behavior of Nitrogen. Japanese Journal of Applied Physics, 1993, 32, 2794-2802.	1.5	20
62	Highly Moisture-Resistive SiNxFilms Prepared by Catalytic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2004, 43, L1362-L1364.	1.5	20
63	H2 dilution effect in the Cat-CVD processes of the SiH4/NH3 system. Thin Solid Films, 2006, 501, 31-34.	1.8	20
64	Interface control of Pb(ZrxTi1 â^' x)O3 thin film on silicon substrate with heteroepitaxial YSZ buffer layer. Applied Surface Science, 1997, 117-118, 429-433.	6.1	19
65	Localization and Characterization of a Degraded Site in Crystalline Silicon Photovoltaic Cells Exposed to Acetic Acid Vapor. IEEE Journal of Photovoltaics, 2018, 8, 997-1004.	2.5	19
66	Novel oxidation process of hydrogenated amorphous silicon utilizing nitrous oxide plasma. Applied Physics Letters, 1992, 61, 816-818.	3.3	18
67	Preparation of SiN passivation films for PZT ferroelectric capacitors at low substrate temperatures by catalytic CVD. Thin Solid Films, 2001, 395, 284-287.	1.8	18
68	Mass-Spectrometric Studies of Catalytic Chemical Vapor Deposition Processes of Organic Silicon Compounds Containing Nitrogen. Japanese Journal of Applied Physics, 2006, 45, 961-966.	1.5	18
69	Grain Enlargement of Polycrystalline Silicon by Multipulse Excimer Laser Annealing: Role of Hydrogen. Japanese Journal of Applied Physics, 2006, 45, 2726-2730.	1.5	18
70	Seeding method with silicon powder for the formation of silicon spheres in the drop method. Journal of Applied Physics, 2007, 101, 093505.	2.5	18
71	Durable crystalline Si photovoltaic modules based on silicone-sheet encapsulants. Japanese Journal of Applied Physics, 2018, 57, 027101.	1.5	18
72	Relationship between Photodarkening and Light-Induced ESR in Amorphous Ge-S Films Alloyed with Lead. Japanese Journal of Applied Physics, 1991, 30, L1075-L1078.	1.5	17

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73	Crystallization by excimer laser annealing for a-Si:H films with low hydrogen content prepared by Cat-CVD. Thin Solid Films, 2003, 430, 296-299.	1.8	17
74	Formation of Low-Defect-Concentration Polycrystalline Silicon Films by Thermal Plasma Jet Crystallization Technique. Japanese Journal of Applied Physics, 2008, 47, 6949-6952.	1.5	17
75	Microscopic Degradation Mechanisms in Silicon Photovoltaic Module under Long-Term Environmental Exposure. Japanese Journal of Applied Physics, 2012, 51, 10NF07.	1.5	17
76	Influence of sodium on the potential-induced degradation for n-type crystalline silicon photovoltaic modules. Applied Physics Express, 2019, 12, 064004.	2.4	17
77	CAT-CVD Process and its Application to Preparation of Si-Based Thin Films. Materials Research Society Symposia Proceedings, 1999, 557, 67.	0.1	16
78	Dominant parameter determining dangling-bond density in hydrogenated amorphous silicon films prepared by catalytic chemical vapor deposition. Solar Energy Materials and Solar Cells, 2001, 66, 259-265.	6.2	16
79	Low-Resistivity Phosphorus-Doped Polycrystalline Silicon Thin Films Formed by Catalytic Chemical Vapor Deposition and Successive Rapid Thermal Annealing. Japanese Journal of Applied Physics, 2002, 41, 501-506.	1.5	16
80	Plasma-enhanced chemical-vapor deposition of silicon nitride film for high resistance to potential-induced degradation. Japanese Journal of Applied Physics, 2015, 54, 08KD12.	1.5	16
81	Influence of emitter position of silicon heterojunction photovoltaic solar cell modules on their potential-induced degradation behaviors. Solar Energy Materials and Solar Cells, 2020, 216, 110716.	6.2	16
82	Effects of passivation configuration and emitter surface doping concentration on polarization-type potential-induced degradation in n-type crystalline-silicon photovoltaic modules. Solar Energy Materials and Solar Cells, 2021, 226, 111074.	6.2	16
83	Ultrathin SiO2 films on Si formed by N2O-plasma oxidation technique. Applied Surface Science, 1994, 81, 277-280.	6.1	15
84	Anisotropic electrical conduction and reduction in dangling-bond density for polycrystalline Si films prepared by catalytic chemical vapor deposition. Journal of Applied Physics, 1999, 86, 985-990.	2.5	15
85	Effects of nitrogen incorporation on structural properties of fluorinated amorphous carbon films. Journal of Non-Crystalline Solids, 2000, 271, 147-151.	3.1	15
86	Elucidating the mechanism of potential induced degradation delay effect by ultraviolet light irradiation for p-type crystalline silicon solar cells. Solar Energy, 2020, 199, 55-62.	6.1	15
87	Microscopic Degradation Mechanisms in Silicon Photovoltaic Module under Long-Term Environmental Exposure. Japanese Journal of Applied Physics, 2012, 51, 10NF07.	1.5	15
88	Mechanism of low-temperature crystallization of amorphous silicon by atomic hydrogen anneal. Journal of Non-Crystalline Solids, 2000, 266-269, 619-623.	3.1	14
89	High-stability hydrogenated amorphous silicon films for light-soaking prepared by catalytic CVD at high deposition rates. Thin Solid Films, 2001, 395, 138-141.	1.8	14
90	Proposal of catalytic chemical sputtering method and its application to prepare large grain size poly-Si. Thin Solid Films, 2001, 395, 169-172.	1.8	14

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91	A Cat-CVD Si3N4 film study and its application to the ULSI process. Thin Solid Films, 2001, 395, 275-279.	1.8	14
92	Investigation on the crystal growth process of spherical Si single crystals by melting. Journal of Crystal Growth, 2009, 311, 4116-4122.	1.5	14
93	Acceleration of degradation by highly accelerated stress test and air-included highly accelerated stress test in crystalline silicon photovoltaic modules. Japanese Journal of Applied Physics, 2016, 55, 022302.	1.5	14
94	Temperature dependence measurements and performance analyses of high-efficiency interdigitated back-contact, passivated emitter and rear cell, and silicon heterojunction photovoltaic modules. Japanese Journal of Applied Physics, 2018, 57, 08RG18.	1.5	14
95	Nitrogen-doping effects on electrical, optical, and structural properties in hydrogenated amorphous silicon. Journal of Applied Physics, 1997, 81, 6729-6737.	2.5	13
96	Surface cleaning and nitridation of compound semiconductors using gas-decomposition reaction in Cat-CVD method. Thin Solid Films, 1999, 343-344, 528-531.	1.8	13
97	Influence of a-Si:H deposition by catalytic CVD on transparent conducting oxides. Thin Solid Films, 2001, 395, 147-151.	1.8	13
98	Influence of atomic hydrogen on transparent conducting oxides during hydrogenated amorphous and microcrystalline Si preparation by catalytic chemical vapor deposition. Thin Solid Films, 2002, 411, 166-170.	1.8	13
99	Effect of Atomic Hydrogen on Preparation of Highly Moisture-Resistive SiNxFilms at Low Substrate Temperatures. Japanese Journal of Applied Physics, 2004, 43, L1546-L1548.	1.5	13
100	Multi angle laser light scattering evaluation of field exposed thermoplastic photovoltaic encapsulant materials. Energy Science and Engineering, 2016, 4, 40-51.	4.0	13
101	Performance degradation due to outdoor exposure and seasonal variation in amorphous silicon photovoltaic modules. Thin Solid Films, 2018, 661, 116-121.	1.8	13
102	Accurate measurement and estimation of solar cell temperature in photovoltaic module operating in real environmental conditions. Japanese Journal of Applied Physics, 2018, 57, 08RG08.	1.5	13
103	Effect of a SiO₂ film on the potential-induced degradation of n-type front-emitter crystalline Si photovoltaic modules. Japanese Journal of Applied Physics, 2020, 59, SCCD02.	1.5	13
104	Potentialâ€induced degradation in photovoltaic modules composed of interdigitated back contact solar cells in photovoltaic systems under actual operating conditions. Progress in Photovoltaics: Research and Applications, 2020, 28, 1322-1332.	8.1	13
105	Drastic Revolution in Catalytic Cvd using â€œCatalytic Plateâ€•Instead of â€œHot Wireâ€• Materials Research Society Symposia Proceedings, 2000, 609, 631.	0.1	12
106	Control of Polycrystalline Silicon Structure by the Two-Step Deposition Method. Japanese Journal of Applied Physics, 2000, 39, 3888-3895.	1.5	12
107	Development of Cat-CVD apparatus â€” a method to control wafer temperatures under thermal influence of heated catalyzer. Thin Solid Films, 2001, 395, 71-74.	1.8	12
108	Preparation of Low-Stress SiNxFilms by Catalytic Chemical Vapor Deposition at Low Temperatures. Japanese Journal of Applied Physics, 2005, 44, 4098-4102.	1.5	12

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109	Improvement of the uniformity in electronic properties of AZO films using an rf magnetron sputtering with a mesh grid electrode. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 148, 26-29.	3.5	12
110	Potential-induced degradation of thin-film Si photovoltaic modules. Japanese Journal of Applied Physics, 2017, 56, 04CS04.	1.5	12
111	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
112	Reliability and long term durability of bifacial photovoltaic modules using transparent backsheet. Japanese Journal of Applied Physics, 2018, 57, 08RG15.	1.5	12
113	Origin of charged dangling bonds in nitrogen-doped hydrogenated amorphous silicon. Journal of Non-Crystalline Solids, 1996, 198-200, 395-398.	3.1	11
114	Ambient-pressure influence on droplet formation and thickness distribution in pulsed laser ablation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1996, 41, 161-165.	3.5	11
115	Low-k silicon nitride film for copper interconnects process prepared by catalytic chemical vapor deposition method at low temperature. Thin Solid Films, 2001, 395, 280-283.	1.8	11
116	Catalytic decomposition of HCN on heated W surfaces to produce CN radicals. Journal of Non-Crystalline Solids, 2004, 338-340, 65-69.	3.1	11
117	Study on silicon-slicing technique using plasma-etching processing. Solar Energy Materials and Solar Cells, 2009, 93, 789-791.	6.2	11
118	Effect of light irradiation during potential-induced degradation tests for p-type crystalline Si photovoltaic modules. Japanese Journal of Applied Physics, 2018, 57, 08RG13.	1.5	11
119	Universal explanation for degradation by charge accumulation in crystalline Si photovoltaic modules with application of high voltage. Applied Physics Express, 2019, 12, 101003.	2.4	11
120	Corrosion-Induced AC Impedance Elevation in Front Electrodes of Crystalline Silicon Photovoltaic Cells Within Field-Aged Photovoltaic Modules. IEEE Journal of Photovoltaics, 2019, 9, 741-751.	2.5	11
121	Effect of a silicon nitride film on the potential-induced degradation of n-type front-emitter crystalline silicon photovoltaic modules. Japanese Journal of Applied Physics, 2020, 59, 104002.	1.5	11
122	Influence of Pb incorporation on light-induced phenomena in amorphous Ge100â^'xâ^'yPbxSy thin films. Journal of Non-Crystalline Solids, 1997, 217, 121-135.	3.1	10
123	Structural and electrical anisotropy and high absorption in poly-Si films prepared by catalytic chemical vapor deposition. Journal of Non-Crystalline Solids, 1998, 227-230, 987-991.	3.1	10
124	Annealing Effect of Pb(Zr, Ti)O3Ferroelectric Capacitor in Active Ammonia Gas Cracked by Catalytic Chemical Vapor Deposition System. Japanese Journal of Applied Physics, 1999, 38, 5358-5360.	1.5	10
125	Guiding principles for device-grade hydrogenated amorphous silicon films and design of catalytic chemical vapor deposition apparatus. Thin Solid Films, 2001, 395, 112-115.	1.8	10
126	Moisture-Resistive Properties of SiNxFilms Prepared by Catalytic Chemical Vapor Deposition below 100Â°C for Flexible Organic Light-Emitting Diode Displays. Japanese Journal of Applied Physics, 2005, 44, 1923-1927.	1.5	10

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127	Effect of additives in electrode paste of p-type crystalline Si solar cells on potential-induced degradation. Solar Energy, 2019, 188, 1292-1297.	6.1	10
128	Influence of hygrothermal stress on potential-induced degradation for homojunction and heterojunction crystalline Si photovoltaic modules. Japanese Journal of Applied Physics, 2020, 59, 076503.	1.5	10
129	Light-induced ESR and disappearance of photodarkening in amorphous Ge-S films alloyed with lead. Journal of Non-Crystalline Solids, 1991, 137-138, 985-988.	3.1	9
130	Fabrication of amorphous carbon nitride films by hot-wire chemical vapor deposition. Thin Solid Films, 2001, 395, 249-252.	1.8	9
131	In situ chamber cleaning using atomic H in catalytic-CVD apparatus for mass production of a-Si:H solar cells. Solar Energy Materials and Solar Cells, 2002, 74, 373-377.	6.2	9
132	Fabrication of a-Si1â^'xCx:H thin films for solar cells by the Cat-CVD method using a carbon catalyzer. Thin Solid Films, 2003, 430, 170-173.	1.8	9
133	Detection of acid moisture in photovoltaic modules using a dual wavelength pH-sensitive fluorescent dye. Japanese Journal of Applied Physics, 2014, 53, 04ER18.	1.5	9
134	Bending cyclic load test for crystalline silicon photovoltaic modules. Japanese Journal of Applied Physics, 2018, 57, 02CE05.	1.5	9
135	Guiding principle for crystalline Si photovoltaic modules with high tolerance to acetic acid. Japanese Journal of Applied Physics, 2018, 57, 04FS06.	1.5	9
136	Similarity of potential-induced degradation in superstrate-type thin-film CdTe and Si photovoltaic modules. Japanese Journal of Applied Physics, 2019, 58, SBBF07.	1.5	9
137	Improvement of the Production Yield of Spherical Si by Optimization of the Seeding Technique in the Dropping Method. Japanese Journal of Applied Physics, 2007, 46, 5695-5700.	1.5	8
138	Characterization of spherical Si by photoluminescence measurement. Journal of Applied Physics, 2007, 101, 103530.	2.5	8
139	Potential-induced degradation of n-type crystalline Si photovoltaic modules in practical outdoor systems. Japanese Journal of Applied Physics, 2018, 57, 117102.	1.5	8
140	Measuring Method of Moisture Ingress into Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10NF12.	1.5	8
141	Development of a pH sensor based on a nanostructured filter adding pH-sensitive fluorescent dye for detecting acetic acid in photovoltaic modules. Japanese Journal of Applied Physics, 2015, 54, 08KG07.	1.5	8
142	Effects of Oxygen Gas Addition and Substrate Cooling on Preparation of Amorphous Carbon Nitride Films by Magnetron Sputtering. Japanese Journal of Applied Physics, 1998, 37, 4722-4725.	1.5	7
143	Recent Progress in Industrial Applications of CAT-CVD (Hot-Wire Cvd). Materials Research Society Symposia Proceedings, 2002, 715, 1741.	0.1	7
144	High-rate deposition of SiNx films over 100 nm/min by Cat-CVD method at low temperatures below 80 Â°C. Thin Solid Films, 2006, 501, 55-57.	1.8	7

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145	Behavior of the potential-induced degradation of photovoltaic modules fabricated using flat mono-crystalline silicon cells with different surface orientations. Japanese Journal of Applied Physics, 2016, 55, 04ES14.	1.5	7
146	Detection of acetic acid produced in photovoltaic modules based on tin film corrosion during damp heat test. Japanese Journal of Applied Physics, 2018, 57, 08RG16.	1.5	7
147	Overall analysis of change in power generation with outdoor exposure of photovoltaic modules installed at AIST Kyushu Center. Japanese Journal of Applied Physics, 2018, 57, 08RG04.	1.5	7
148	Effect of barrier property of backsheet on degradation of crystalline silicon photovoltaic modules under combined acceleration test composed of UV irradiation and subsequent damp-heat stress. Japanese Journal of Applied Physics, 2018, 57, 127101.	1.5	7
149	Investigation of the power generation of organic photovoltaic modules connected to the power grid for more than three years. Japanese Journal of Applied Physics, 2019, 58, 052001.	1.5	7
150	Influence of light illumination on the potential-induced degradation of n-type interdigitated back-contact crystalline Si photovoltaic modules. Japanese Journal of Applied Physics, 2021, 60, SBBF08.	1.5	7
151	N2-plasma-nitridation effects on porous silicon. Thin Solid Films, 1996, 281-282, 568-571.	1.8	6
152	Structural and conductivity change caused by N, O and C incorporation in a-Si:H. Journal of Non-Crystalline Solids, 1998, 227-230, 403-406.	3.1	6
153	Photo-induced volume changes in a-Si:H films prepared by Cat-CVD method. Thin Solid Films, 2001, 395, 84-86.	1.8	6
154	Formation of silicon films for solar cells by the Cat-CVD method. Thin Solid Films, 2001, 395, 198-201.	1.8	6
155	Formation of highly moisture-resistive SiNx films on Si substrate by Cat-CVD at room temperature. Thin Solid Films, 2006, 501, 154-156.	1.8	6
156	Epitaxial Growth of SiC on Silicon on Insulator Substrates with Ultrathin Top Si Layer by Hot-Mesh Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2008, 47, 569-572.	1.5	6
157	Investigating minority-carrier lifetime in small spherical Si using microwave photoconductance decay. Journal of Applied Physics, 2008, 103, 104909.	2.5	6
158	Early Failure Detection of Interconnection with Rapid Thermal Cycling in Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10NF13.	1.5	6
159	Origin of Na causing potential-induced degradation for p-type crystalline Si photovoltaic modules. AIP Advances, 2018, 8, .	1.3	6
160	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
161	Early Failure Detection of Interconnection with Rapid Thermal Cycling in Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10NF13.	1.5	6
162	Correlation between a.c. transport and electron spin resonance in amorphous Ge-S films alloyed with lead. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1994, 70, 1035-1044.	0.6	5

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163	Relationship between Electrical Conductivity and Charged- Dangling-Bond Density in Nitrogen- and Phosphorus-Doped Hydrogenated Amorphous Silicon. Japanese Journal of Applied Physics, 1994, 33, L1295-L1297.	1.5	5
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