Keisuke Ohdaira

List of Publications by Year
in descending order

179 papers	1,935 citations	304743 22 h-index	395702 33 g-index
183 all docs	183 docs citations	183 times ranked	1017 citing authors

#	Article	IF	Citations
1	Explosive crystallization of amorphous silicon films by flash lamp annealing. Journal of Applied Physics, 2009, 106, .	2.5	81
2	Antireflection subwavelength structure of silicon surface formed by wet process using catalysis of single nano-sized gold particle. Solar Energy Materials and Solar Cells, 2008, 92, 919-922.	6.2	69
3	Extremely low surface recombination velocities on crystalline silicon wafers realized by catalytic chemical vapor deposited SiNx/a-Si stacked passivation layers. Applied Physics Letters, 2010, 97, .	3.3	61
4	Absolute measurement of second-order nonlinear-optical coefficients of Î²-BaB_2O_4 for visible to ultraviolet second-harmonic wavelengths. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 620.	2.1	57
5	Formation of Highly Uniform Micrometer-Order-Thick Polycrystalline Silicon Films by Flash Lamp Annealing of Amorphous Silicon on Glass Substrates. Japanese Journal of Applied Physics, 2007, 46, 7603.	1.5	54
6	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
7	Protection of organic light-emitting diodes over 50000Âhours by Cat-CVD SiNx/SiOxNy stacked thin films. Thin Solid Films, 2008, 516, 611-614.	1.8	39
8	Formation of Several-Micrometer-Thick Polycrystalline Silicon Films on Soda Lime Glass by Flash Lamp Annealing. Japanese Journal of Applied Physics, 2008, 47, 8239-8242.	1.5	39
9	Fabrication of PTFE thin films by dual catalytic chemical vapor deposition method. Thin Solid Films, 2008, 516, 687-690.	1.8	35
10	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
11	Progression of rapid potential-induced degradation of n-type single-crystalline silicon photovoltaic modules. Applied Physics Express, 2016, 9, 112301.	2.4	32
12	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
13	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
14	High-Quality Polycrystalline Silicon Films with Minority Carrier Lifetimes over 5 Âµs Formed by Flash Lamp Annealing of Precursor Amorphous Silicon Films Prepared by Catalytic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2007, 46, 7198.	1.5	29
15	Multistage performance deterioration in n-type crystalline silicon photovoltaic modules undergoing potential-induced degradation. Microelectronics Reliability, 2018, 84, 127-133.	1.7	29
16	Cat-doping: Novel method for phosphorus and boron shallow doping in crystalline silicon at 80â€‰Â°C. Journal of Applied Physics, 2014, 116, .	2.5	28
17	Drastic reduction in surface recombination velocity of crystalline silicon by surface treatment using catalytically-generated radicals. Solar Energy Materials and Solar Cells, 2011, 95, 797-799.	6.2	27
18	Lateral Crystallization Velocity in Explosive Crystallization of Amorphous Silicon Films Induced by Flash Lamp Annealing. Electrochemical and Solid-State Letters, 2011, 14, H372.	2.2	26

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19	Flash-lamp-induced explosive crystallization of amorphous germanium films leaving behind periodic microstructures. Thin Solid Films, 2012, 524, 161-165.	1.8	26
20	Application of crystalline silicon surface oxidation to silicon heterojunction solar cells. Current Applied Physics, 2015, 15, 1168-1172.	2.4	24
21	Vacuum deposition of CsPbI₃ layers on textured Si for Perovskite/Si tandem solar cells. Japanese Journal of Applied Physics, 2019, 58, SBBF06.	1.5	24
22	Drastic Improvement of Minority Carrier Lifetimes Observed in Hydrogen-Passivated Flash-Lamp-Crystallized Polycrystalline Silicon Films. Applied Physics Express, 0, 2, 061201.	2.4	23
23	Degradation behavior of crystalline silicon solar cells in a cell-level potential-induced degradation test. Solar Energy, 2017, 155, 739-744.	6.1	23
24	Potentialâ€Induced Degradation in Highâ€Efficiency nâ€Type Crystallineâ€Silicon Photovoltaic Modules: A Literature Review. Solar Rrl, 2021, 5, 2100708.	5.8	23
25	Passivation characteristics of SiNx/a-Si and SiNx/Si-rich-SiNx stacked layers on crystalline silicon. Solar Energy Materials and Solar Cells, 2012, 100, 169-173.	6.2	22
26	A novel patterning technique using super-hydrophobic PTFE thin films by Cat-CVD method. Thin Solid Films, 2009, 517, 3622-3624.	1.8	21
27	Extremely low recombination velocity on crystalline silicon surfaces realized by low-temperature impurity doping in Cat-CVD technology. Thin Solid Films, 2011, 519, 4466-4468.	1.8	21
28	Fabrication of high-quality amorphous silicon film from cyclopentasilane by vapor deposition between two parallel substrates. Chemical Communications, 2015, 51, 4417-4420.	4.1	21
29	Study of Silicidation Process of Tungsten Catalyzer during Silicon Film Deposition in Catalytic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2008, 47, 3692-3698.	1.5	20
30	Liquid-phase explosive crystallization of electron-beam-evaporated a-Si films induced by flash lamp annealing. Journal of Crystal Growth, 2013, 362, 149-152.	1.5	20
31	Precursor Cat-CVD a-Si films for the formation of high-quality poly-Si films on glass substrates by flash lamp annealing. Thin Solid Films, 2009, 517, 3472-3475.	1.8	19
32	Variation of crystallization mechanisms in flash-lamp-irradiated amorphous silicon films. Journal of Crystal Growth, 2010, 312, 2834-2839.	1.5	19
33	Comparison of a-Si TFTs fabricated by Cat-CVD and PECVD methods. Thin Solid Films, 2009, 517, 3581-3583.	1.8	18
34	Selection of Material for the Back Electrodes of Thin-Film Solar Cells Using Polycrystalline Silicon Films Formed by Flash Lamp Annealing. Japanese Journal of Applied Physics, 2010, 49, 04DP04.	1.5	18
35	Excellent passivation effect of Cat-CVD SiNx/i-a-Si stack films on Si substrates. Thin Solid Films, 2011, 519, 4473-4475.	1.8	17
36	Effect of hydrogen on passivation quality of SiNx/Si-rich SiNx stacked layers deposited by catalytic chemical vapor deposition on c-Si wafers. Thin Solid Films, 2015, 575, 60-63.	1.8	17

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37	Suppression of the epitaxial growth of Si films in Si heterojunction solar cells by the formation of ultra-thin oxide layers. Current Applied Physics, 2016, 16, 1026-1029.	2.4	17
38	Influence of sodium on the potential-induced degradation for n-type crystalline silicon photovoltaic modules. Applied Physics Express, 2019, 12, 064004.	2.4	17
39	Thin-film polycrystalline silicon solar cells formed by flash lamp annealing of a-Si films. Thin Solid Films, 2010, 518, 5003-5006.	1.8	16
40	Polycrystalline Silicon Films with Nanometer-Sized Dense Fine Grains Formed by Flash-Lamp-Induced Crystallization. Journal of Nanoscience and Nanotechnology, 2012, 12, 591-595.	0.9	16
41	Phosphorus- and boron-doped hydrogenated amorphous silicon films prepared using vaporized liquid cyclopentasilane. Thin Solid Films, 2015, 589, 221-226.	1.8	16
42	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
43	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
44	Effect of the compositional distribution on the photovoltaic power conversion of SiGe solar cells. Solar Energy Materials and Solar Cells, 2007, 91, 123-128.	6.2	15
45	Drastic reduction in the surface recombination velocity of crystalline silicon passivated with catalytic chemical vapor deposited SiNx films by introducing phosphorous catalytic-doped layer. Journal of Applied Physics, 2014, 116, .	2.5	15
46	Comparison of crystalline-silicon/amorphous-silicon interface prepared by plasma enhanced chemical vapor deposition and catalytic chemical vapor deposition. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, .	1.2	15
47	Improvement in passivation quality and open-circuit voltage in silicon heterojunction solar cells by the catalytic doping of phosphorus atoms. Japanese Journal of Applied Physics, 2015, 54, 072301.	1.5	15
48	Recent situation of industrial implementation of Cat-CVD technology in Japan. Thin Solid Films, 2008, 516, 537-540.	1.8	14
49	New application of Cat-CVD technology and recent status of industrial implementation. Thin Solid Films, 2009, 517, 3420-3423.	1.8	14
50	Formation of vertical concentration gradients in poly(3-hexylthiophene-2,5-diyl): Phenyl-C61-butyric acid methyl ester-graded bilayer solar cells. Thin Solid Films, 2014, 554, 41-45.	1.8	14
51	The formation of poly-Si films on flat glass substrates by flash lamp annealing. Thin Solid Films, 2015, 595, 235-238.	1.8	14
52	Passivation quality of a stoichiometric SiNxsingle passivation layer on crystalline silicon prepared by catalytic chemical vapor deposition and successive annealing. Japanese Journal of Applied Physics, 2014, 53, 022301.	1.5	13
53	Enhancement of Photoresist Removal Rate by Using Atomic Hydrogen Generated under Low-pressure Conditions. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2015, 28, 303-306.	0.3	13
54	The control of the film stress of Cat-CVD a-Si films and its impact on explosive crystallization induced by flash lamp annealing. Thin Solid Films, 2015, 575, 21-24.	1.8	13

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55	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
56	Distribution of Phosphorus Atoms and Carrier Concentrations in Single-Crystal Silicon Doped by Catalytically Generated Phosphorous Radicals. Japanese Journal of Applied Physics, 2012, 51, 061301.	1.5	13
57	Formation of gas barrier films by Cat-CVD method using organic silicon compounds. Thin Solid Films, 2008, 516, 604-606.	1.8	12
58	Low temperature boron doping into crystalline silicon by boron-containing species generated in Cat-CVD apparatus. Thin Solid Films, 2015, 575, 92-95.	1.8	12
59	Catalytic doping of phosphorus and boron atoms on hydrogenated amorphous silicon films. Japanese Journal of Applied Physics, 2016, 55, 04ES05.	1.5	12
60	A novel method for suppressing silicidation of tungsten catalyzer during silane decomposition in Cat-CVD. Thin Solid Films, 2008, 516, 826-828.	1.8	11
61	Low Temperature Phosphorus Doping in Silicon Using Catalytically Generated Radicals. Japanese Journal of Applied Physics, 2011, 50, 121301.	1.5	11
62	Defect termination on crystalline silicon surfaces by hydrogen for improvement in the passivation quality of catalytic chemical vapor-deposited SiN_x and SiN_x/P catalytic-doped layers. Japanese Journal of Applied Physics, 2016, 55, 02BF09.	1.5	11
63	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
64	Low Temperature Phosphorus Doping in Silicon Using Catalytically Generated Radicals. Japanese Journal of Applied Physics, 2011, 50, 121301.	1.5	11
65	Solar cell system using a polished concave Si-crystal mirror. Solar Energy Materials and Solar Cells, 2005, 88, 323-329.	6.2	10
66	Drastic suppression of the optical reflection of flash-lamp-crystallized poly-Si films with spontaneously formed periodic microstructures. Thin Solid Films, 2010, 518, 6061-6065.	1.8	10
67	Flash-lamp-crystallized polycrystalline silicon films with remarkably long minority carrier lifetimes. Current Applied Physics, 2010, 10, S402-S405.	2.4	10
68	Scanning transmission electron microscope analysis of amorphous-Si insertion layers prepared by catalytic chemical vapor deposition, causing low surface recombination velocities on crystalline silicon wafers. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	1.2	10
69	A method to evaluate explosive crystallization velocity of amorphous silicon films during flash lamp annealing. Canadian Journal of Physics, 2014, 92, 718-722.	1.1	10
70	Novel chemical cleaning of textured crystalline silicon for realizing surface recombination velocity <0.2 cm/s using passivation catalytic CVD SiN<i>_x</i>/amorphous silicon stacked layers. Japanese Journal of Applied Physics, 2017, 56, 056502.	1.5	10
71	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
72	Floating Zone Growth of Si Bicrystals Using Seed Crystals with Artificially Designed Grain Boundary Configuration. Japanese Journal of Applied Physics, 2005, 44, L778-L780.	1.5	9

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73	Electrical properties of polycrystalline silicon films formed from amorphous silicon films by flash lamp annealing. Current Applied Physics, 2011, 11, 604-607.	2.4	9
74	Effect of Radical-Doped n⁺ Back Surface Field Layers on the Effective Minority Carrier Lifetimes of Crystalline Silicon with Amorphous Silicon Passivation Layers Deposited by Catalytic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2012, 51, 101301.	1.5	9
75	Amorphous silicon carbide films prepared using vaporized silicon ink. Japanese Journal of Applied Physics, 2014, 53, 031304.	1.5	9
76	Enhancement of Removal Uniformity by Oxygen Addition for Photoresist Removal Using H Radicals Generated on a Tungsten Hot-Wire Catalyst. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2016, 29, 639-642.	0.3	9
77	Indium tin oxide sputtering damage to catalytic chemical vapor deposited amorphous silicon passivation films and its recovery. Thin Solid Films, 2017, 635, 73-77.	1.8	9
78	Passivation of textured crystalline silicon surfaces by catalytic CVD silicon nitride films and catalytic phosphorus doping. Japanese Journal of Applied Physics, 2017, 56, 102301.	1.5	9
79	Catalytic phosphorus and boron doping of amorphous silicon films for application to silicon heterojunction solar cells. Japanese Journal of Applied Physics, 2017, 56, 08MB06.	1.5	9
80	Study on Stability of Amorphous Silicon Thin-Film Transistors Prepared by Catalytic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2008, 47, 8700-8706.	1.5	8
81	Polycrystalline Si films with unique microstructures formed from amorphous Si films by nonâ€thermal equilibrium flash lamp annealing. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 604-607.	0.8	8
82	Complementary Metalâ€“Oxideâ€“Semiconductor Ion-Sensitive Field-Effect Transistor Sensor Array with Silicon Nitride Film Formed by Catalytic Chemical Vapor Deposition as an Ion-Sensitive Membrane. Japanese Journal of Applied Physics, 2010, 49, 01AG06.	1.5	8
83	Large-Grain Polycrystalline Silicon Films Formed through Flash-Lamp-Induced Explosive Crystallization. Japanese Journal of Applied Physics, 2012, 51, 10NB15.	1.5	8
84	Oxygen additive amount dependence of rate of photoresist removal by H radicals generated on a tungsten hot-wire catalyst. Japanese Journal of Applied Physics, 2016, 55, 076503.	1.5	8
85	Improvement in the conversion efficiency of single-junction SiGe solar cells by intentional introduction of the compositional distribution. Journal of Applied Physics, 2007, 101, 054504.	2.5	7
86	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
87	Texture size control by mixing glass microparticles with alkaline solution for crystalline silicon solar cells. Journal of Materials Research, 2018, 33, 1515-1522.	2.6	7
88	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
89	Tunnel nitride passivated contacts for silicon solar cells formed by catalytic CVD. Japanese Journal of Applied Physics, 2021, 60, SBBF09.	1.5	7
90	Observation of Band Alignment Transition from Type-I to Type-II in AlInAs/AlGaAs Self-assembled Quantum Dots. Journal of the Physical Society of Japan, 2003, 72, 3271-3275.	1.6	6

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91	Relationship between Textured Structure of Substrates and Defect Density of Catalytic Chemical Vapor Deposition Amorphous Silicon Films. Japanese Journal of Applied Physics, 2007, 46, 2852-2857.	1.5	6
92	Novel technique for formation of metal lines by functional liquid containing metal nanoparticles and reduction of their resistivity by hydrogen treatment. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, 775-782.	1.2	6
93	Microstructure of Polycrystalline Silicon Films Formed through Explosive Crystallization Induced by Flash Lamp Annealing. Japanese Journal of Applied Physics, 2011, 50, 04DP01.	1.5	6
94	Distribution of Phosphorus Atoms and Carrier Concentrations in Single-Crystal Silicon Doped by Catalytically Generated Phosphorous Radicals. Japanese Journal of Applied Physics, 2012, 51, 061301.	1.5	6
95	Defect Termination of Flash-Lamp-Crystallized Large-Grain Polycrystalline Silicon Films by High-Pressure Water Vapor Annealing. Japanese Journal of Applied Physics, 2013, 52, 04CR11.	1.5	6
96	Direct observation of changes in the effective minority-carrier lifetime of SiN x -passivated n-type crystalline-silicon substrates caused by potential-induced degradation and recovery tests. Microelectronics Reliability, 2017, 79, 91-95.	1.7	6
97	Poly-Si films with long carrier lifetime prepared by rapid thermal annealing of Cat-CVD amorphous silicon thin films. Thin Solid Films, 2008, 516, 600-603.	1.8	5
98	Advantage of plasma-less deposition in Cat-CVD to the performance of electronic devices. Thin Solid Films, 2011, 519, 4568-4570.	1.8	5
99	Flash-lamp-crystallized polycrystalline silicon films with high hydrogen concentration formed from Cat-CVD a-Si films. Thin Solid Films, 2011, 519, 4459-4461.	1.8	5
100	Effects of catalyst-generated atomic hydrogen treatment on amorphous silicon fabricated by Liquid-Si printing. Japanese Journal of Applied Physics, 2014, 53, 05FM06.	1.5	5
101	Development of a Thermal Conductivity Measurement System Using the 3Ï‰ Method and Application to Thermoelectric Particles. Journal of Electronic Materials, 2014, 43, 2151-2156.	2.2	5
102	Thermal Conductivity Measurements of Aggregated (Bi1â˘’x Sb x)2Te3 Nanoparticles Using 3Ï‰ Method. Journal of Electronic Materials, 2015, 44, 2034-2038.	2.2	5
103	Photoresist Removal Using H Radicals Generated by Iridium Hot-Wire Catalyst. International Journal of Polymer Science, 2017, 2017, 1-5.	2.7	5
104	Effects of SiN _{<i>x</i>} refractive index and SiO ₂ thickness on polarizationâ€type potentialâ€induced degradation in frontâ€emitter nâ€type crystallineâ€silicon photovoltaic cell modules. Energy Science and Engineering, 0, , .	4.0	5
105	Advantage of plasma-less deposition: Cat-CVD fabrication of a-Si TFT with current drivability equivalent to poly-Si TFT. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, NA-NA.	0.8	4
106	Catalytic decomposition of NH3 on heated Ru and W surfaces. Thin Solid Films, 2011, 519, 4429-4431.	1.8	4
107	Mechanism and control of crack generation in glass substrates during crystallization of a-Si Films by flash lamp annealing. Journal of Non-Crystalline Solids, 2012, 358, 2154-2158.	3.1	4
108	Deposition of moisture barrier films by catalytic CVD using hexamethyldisilazane. Japanese Journal of Applied Physics, 2014, 53, 05FM03.	1.5	4

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109	Potential-induced degradation behavior of n-type single-crystalline silicon photovoltaic modules with a rear-side emitter. , 2016, , .		4
110	Thermal Conductivity Measurement of Liquid-Quenched Higher Manganese Silicides. Journal of Electronic Materials, 2016, 45, 1821-1826.	2.2	4
111	Super water-repellent treatment of various cloths by deposition of catalytic-CVD polytetrafluoroethylene films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 061514.	2.1	4
112	High-quality surface passivation of crystalline silicon with chemical resistance and optical transparency by using catalytic chemical vapor deposition SiN<i> _x </i> layers and an ultrathin SiO<i> _x </i> film. Japanese Journal of Applied Physics, 2018, 57, 08RB17.	1.5	4
113	Crystallization of electron beam evaporated a-Si films on textured glass substrates by flash lamp annealing. Japanese Journal of Applied Physics, 2019, 58, SBBF10.	1.5	4
114	Control of solution wettability on fine-textured crystalline silicon surface to obtain high-quality passivation for solar cells. Applied Physics Letters, 2019, 114, 133901.	3.3	4
115	Large-Grain Polycrystalline Silicon Films Formed through Flash-Lamp-Induced Explosive Crystallization. Japanese Journal of Applied Physics, 2012, 51, 10NB15.	1.5	4
116	Influence of stacked Ge islands on the dark currentâ€“voltage characteristics and the conversion efficiency of the solar cells. Thin Solid Films, 2006, 508, 402-405.	1.8	3
117	High-Efficiency Concave and Conventional Solar Cell Integration System Using Focused Reflected Light. Japanese Journal of Applied Physics, 2006, 45, 1664-1667.	1.5	3
118	Propagation loss of amorphous silicon optical waveguides at the 0.8 µm-wavelength range. , 2010, , .		3
119	Development of a-Si solar cells using â€œliquidâ€“Si printingâ€• Canadian Journal of Physics, 2014, 92, 928-931.	1.1	3
120	Formation of amorphous silicon passivation films with high stability against postannealing, air exposure, and light soaking using liquid silicon. Japanese Journal of Applied Physics, 2016, 55, 04ES12.	1.5	3
121	Simple fabrication of back contact heterojunction solar cells by plasma ion implantation. Japanese Journal of Applied Physics, 2017, 56, 08MB21.	1.5	3
122	Passivation effect of ultra-thin SiN<i> _x </i> films formed by catalytic chemical vapor deposition for crystalline silicon surface. Japanese Journal of Applied Physics, 2018, 57, 08RB03.	1.5	3
123	Influence of backsheet materials on potential-induced degradation in n-type crystalline-silicon photovoltaic cell modules. Japanese Journal of Applied Physics, 2019, 58, 120901.	1.5	3
124	Barrier performance of ITO film on textured Si substrate. Journal of Materials Science: Materials in Electronics, 2020, 31, 13808-13816.	2.2	3
125	Influence of light irradiation on the charge-accumulation-type potential-induced degradation of n-type front-emitter crystalline Si photovoltaic modules. Japanese Journal of Applied Physics, 0, , .	1.5	3
126	Formation of Polycrystalline Silicon Films for Solar Cells by Flash Lamp Annealing. Journal of the Vacuum Society of Japan, 2012, 55, 535-540.	0.3	3

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127	Microstructure of Polycrystalline Silicon Films Formed through Explosive Crystallization Induced by Flash Lamp Annealing. Japanese Journal of Applied Physics, 2011, 50, 04DP01.	1.5	3
128	Effect of Radical-Doped n⁺Back Surface Field Layers on the Effective Minority Carrier Lifetimes of Crystalline Silicon with Amorphous Silicon Passivation Layers Deposited by Catalytic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2012, 51, 101301.	1.5	3
129	Effect of temperature and pre-annealing on the potential-induced degradation of silicon heterojunction photovoltaic modules. Japanese Journal of Applied Physics, 2022, 61, SC1021.	1.5	3
130	Analysis of the Dark-Current Density in Solar Cells Based on Multicrystalline SiGe. Japanese Journal of Applied Physics, 2005, 44, 8019-8022.	1.5	2
131	Investigation of surface treatment effect of catalyst on the lifetime for Cat-CVD method. Journal of Non-Crystalline Solids, 2008, 354, 2117-2120.	3.1	2
132	Thin film p-i-n poly-Si solar cells directly converted from p-i-n a-Si structures by a single shot of flash lamp. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	2
133	Requirements for achieving extremely low surface recombination velocity and negligible optical loss in Cat-CVD SiNx/a-Si stacked passivation. , 2014, , .		2
134	Efficient Organic Devices Based on Ï€-Electron Systems: Comparative Study of Fullerene Derivatives Blended with a High Efficiency Naphthobisthiadiazole-Based Polymer for Organic Photovoltaic Applications. , 2015, , 575-588.		2
135	Photo-stability of a-Si solar cells fabricated by â€œLiquid-Si printing methodâ€•and treated with catalytic generated atomic hydrogen. Thin Solid Films, 2015, 575, 100-102.	1.8	2
136	Effect of antireflection coating on the crystallization of amorphous silicon films by flash lamp annealing. Japanese Journal of Applied Physics, 2017, 56, 04CS10.	1.5	2
137	Performance of silicon heterojunction solar cells with various metal-electrodes directly formed on a-Si films without insertion of TCO. , 2018, , .		2
138	Effect of evacuating a chamber on the degradation rate of solar cells in a cell-level potential-induced degradation test. Japanese Journal of Applied Physics, 2018, 57, 108002.	1.5	2
139	Improvement in the passivation quality of catalytic-chemical-vapor-deposited silicon nitride films on crystalline Si at room temperature. Thin Solid Films, 2019, 674, 103-106.	1.8	2
140	Carrier lifetime measurement of perovskite films by differential microwave photoconductivity decay. Japanese Journal of Applied Physics, 2022, 61, 068001.	1.5	2
141	Enhancement of ferroelectricity in sputtered HZO thin films by catalytically generated atomic hydrogen treatment. Japanese Journal of Applied Physics, 2022, 61, SH1004.	1.5	2
142	Holeâ€Selective Ultrathin Alâ€Doped SiO_{<i>x</i>} Passivation Layer Formed by Immersing in Aluminum Nitrate Aqueous Solution. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	2.4	2
143	Carrier transport properties of flash-lamp-crystallized poly-Si films. , 2010, , .		1
144	Carrier recombination mechanisms in solar cells fabricated using flash-lamp-crystallized polycrystalline silicon films. , 2011, , .		1

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145	Application of heterojunction to Si-based solar cells using photonic nanostructures coupled with vertically aligned Ge quantum dots. Japanese Journal of Applied Physics, 2015, 54, 08KA06.	1.5	1
146	Cat-CVD passivation realizing extremely low surface recombination velocity < 0.2 cm/s in solar cell structure. , 2016, , .		1
147	Improved quality of flash-lamp-crystallized polycrystalline silicon films by using low defect density Cat-CVD a-Si films. International Journal of Materials Research, 2017, 108, 827-831.	0.3	1
148	Effect of starting point formation on the crystallization of amorphous silicon films by flash lamp annealing. Japanese Journal of Applied Physics, 2018, 57, 04FS05.	1.5	1
149	Fabrication of silicon heterojunction solar cells with a boron-doped a-Si:H layer formed by catalytic impurity doping. AIP Advances, 2019, 9, 115013.	1.3	1
150	Oxygen additive effects on decomposition rate of poly(vinyl phenol)-based polymers using hydrogen radicals produced by a tungsten hot-wire catalyst. Thin Solid Films, 2019, 679, 22-26.	1.8	1
151	Influence of UV light on the increase of SiNx conductivity toward elucidation of potential induced degradation mechanism. , 2019, , .		1
152	Passivation of textured crystalline silicon with small pyramids by silicon nitride films formed by catalytic chemical vapor deposition and phosphorus catalytic impurity doping. Surfaces and Interfaces, 2020, 21, 100690.	3.0	1
153	Thickness dependence of the passivation quality of Cat-CVD SiN_{<i>x</i>} films. Japanese Journal of Applied Physics, 2020, 59, SCCB07.	1.5	1
154	Crystallization behavior of electron-beam-evaporated amorphous silicon films on textured glass substrates by flash lamp annealing. Thin Solid Films, 2021, 728, 138681.	1.8	1
155	Magneto-photoluminescence Studies of AlInAs/AlGaAs Self-assembled Quantum Dots with Type-II Band Alignment. Journal of the Physical Society of Japan, 2004, 73, 480-484.	1.6	0
156	ãƒ•ãƒ©ãƒƒã‚·ãƒ¥ãƒ©ãƒ³ãƒ—åŠ熱ã«ã‚ˆã‚‹é«˜å“è³ªã‚·ãƒªã‚³ãƒ³è–„è†œå½¢æˆæ™¶ã®æˆé•·. Materia Japan, 2008, 47, 89-92.	0.1	0
157	Improved performance of thin-film solar cells using surface-morphology-controlled poly-Si films crystallized by flash lamp annealing. , 2009, , .		0
158	Effects of High Nitrogen Pressure and Thermal Treatment on Adhesion to Amorphous Silicon/Silicon Nitride/Polyethersulfone Substrate during Excimer Laser Annealing. Journal of the Vacuum Society of Japan, 2010, 53, 692-695.	0.3	0
159	Surface treatment of crystalline silicon realizing extremely low surface recombination velocity using catalytically generated radicals. , 2010, , .		0
160	Low resistivity metal lines formed by functional liquids and successive treatment of catalytically generated hydrogen atoms in the Cat-CVD system. Thin Solid Films, 2011, 519, 4565-4567.	1.8	0
161	A Novel Method for Low-Resistivity Metal-Interconnection by Using Metallic Functional Liquids and Catalytically Generated Hydrogen Atoms. Materials Research Society Symposia Proceedings, 2012, 1401, 8.	0.1	0
162	Low-temperature Phosphorus Doping To Silicon Using Phosphorus-related Radicals. Materials Research Society Symposia Proceedings, 2012, 1391, 1.	0.1	0

#	Article	IF	Citations
163	Formation of polycrystalline silicon films with μm-order-long grains through liquid-phase explosive crystallization by flash lamp annealing. , 2012, , .		0
164	62.2: Pixel Controlling Substrate Fabricated by Embedding Millions of Silicon IC Chips in Plastic Substrate and Self-Aligned Metal Interconnection among Such IC Chips. Digest of Technical Papers SID International Symposium, 2012, 43, 842-845.	0.3	0
165	Effect of annealing and hydrogen radical treatment on the structure of solution-processed hydrogenated amorphous silicon films. Japanese Journal of Applied Physics, 2014, 53, 04ER07.	1.5	0
166	Photo-carrier generation at a-Si layer in SiNx/a-Si stacked passivation with extremely low surface recombination velocity. , 2015, , .		0
167	Si heterojunction solar cells with a-Si passivation films formed from liquid Si. , 2016, , .		0
168	Potential-Induced Degradation of a Si Nitride/Crystalline Si Interface Observed Through Minority Carrier Lifetime Measurement. , 2017, , .		0
169	Entrance of Low Cost Fabrication of Back-Contact Heterojunction Solar Cells by Using Plasma Ion Implantation. , 2017, , .		0
170	Low Cost Fabrication of Back Contact Crystalline-Silicon Heterojunction Solar Cells with n-a-Si Layers Partially Converted from p-a-Si by Phosphine (PH<inf>3</inf>) Plasma Ion-Implantation. , 2018, , .		0
171	Silicon Heterojunction Solar Cell with a p-type Amorphous Silicon Emitter Formed by Catalytic Impurity Doping. , 2018, , .		0
172	Conversion of the conduction type of a catalytic-chemical-vapor-deposited p-type a-Si by PH3 plasma ion implantation. Thin Solid Films, 2019, 683, 150-155.	1.8	0
173	Control of Texture Size on As-Cut Crystalline Silicon by Microparticle-Assisted Texturing (MPAT) Process. , 2019, , .		0
174	Crystallization of catalytic CVD hydrogenated n-a-Si films on textured glass substrates by flash lamp annealing. Japanese Journal of Applied Physics, 2022, 61, SB1019.	1.5	0
175	Use of n-type amorphous silicon films as an electron transport layer in the perovskite solar cells. Japanese Journal of Applied Physics, 2022, 61, SB1012.	1.5	0
176	Thin-Film Poly-Si Formed by Flash Lamp Annealing. Advances in Materials Research, 2009, , 177-191.	0.2	0
177	Thin-film Formation by Catalytic Chemical Vapor Deposition(Cat-CVD). Hyomen Kagaku, 2010, 31, 178-183.	0.0	0
178	Formation of High-Quality Î¼m-Order-Thick Poly-Si Films on Glass-Substrates by Flash Lamp Annealing. Springer Series in Materials Science, 2014, , 173-187.	0.6	0
179	Formation of High-Quality Passivation Films for Solar Cells by Cat-CVD. Hyomen Kagaku, 2017, 38, 234-239.	0.0	0