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	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
2	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
3	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
4	Carrier lifetime measurement of perovskite films by differential microwave photoconductivity decay. Japanese Journal of Applied Physics, 2022, 61, 068001.	1.5	2
5	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
6	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
7	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
8	Tunnel nitride passivated contacts for silicon solar cells formed by catalytic CVD. Japanese Journal of Applied Physics, 2021, 60, SBBF09.	1.5	7
9	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
10	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
11	Potentialâ€Induced Degradation in Highâ€Efficiency nâ€Type Crystallineâ€Silicon Photovoltaic Modules: A Literature Review. Solar Rrl, 2021, 5, 2100708.	5.8	23
12	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
13	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
14	Barrier performance of ITO film on textured Si substrate. Journal of Materials Science: Materials in Electronics, 2020, 31, 13808-13816.	2.2	3
15	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
16	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
17	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
18	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

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19	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
20	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
21	Influence of sodium on the potential-induced degradation for n-type crystalline silicon photovoltaic modules. Applied Physics Express, 2019, 12, 064004.	2.4	17
22	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
23	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
24	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
25	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
26	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
27	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
28	Control of Texture Size on As-Cut Crystalline Silicon by Microparticle-Assisted Texturing (MPAT) Process. , 2019, , .		0
29	Influence of UV light on the increase of SiNx conductivity toward elucidation of potential induced degradation mechanism. , 2019, , .		1
30	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
31	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
32	Multistage performance deterioration in n-type crystalline silicon photovoltaic modules undergoing potential-induced degradation. Microelectronics Reliability, 2018, 84, 127-133.	1.7	29
33	Performance of silicon heterojunction solar cells with various metal-electrodes directly formed on a-Si films without insertion of TCO. , 2018, , .		2
34	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
35	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
36	Silicon Heterojunction Solar Cell with a p-type Amorphous Silicon Emitter Formed by Catalytic Impurity Doping. , 2018, , .		0

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37	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
38	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
39	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
40	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
41	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
42	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
43	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
44	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
45	Degradation behavior of crystalline silicon solar cells in a cell-level potential-induced degradation test. Solar Energy, 2017, 155, 739-744.	6.1	23
46	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
47	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
48	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
49	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
50	Simple fabrication of back contact heterojunction solar cells by plasma ion implantation. Japanese Journal of Applied Physics, 2017, 56, 08MB21.	1.5	3
51	Photoresist Removal Using H Radicals Generated by Iridium Hot-Wire Catalyst. International Journal of Polymer Science, 2017, 2017, 1-5.	2.7	5
52	Potential-Induced Degradation of a Si Nitride/Crystalline Si Interface Observed Through Minority Carrier Lifetime Measurement. , 2017, , .		0
53	Entrance of Low Cost Fabrication of Back-Contact Heterojunction Solar Cells by Using Plasma Ion Implantation. , 2017, , .		0
54	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

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55	Formation of High-Quality Passivation Films for Solar Cells by Cat-CVD. Hyomen Kagaku, 2017, 38, 234-239.	0.0	0
56	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
57	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
58	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
59	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
60	Potential-induced degradation behavior of n-type single-crystalline silicon photovoltaic modules with a rear-side emitter. , 2016, , .		4
61	Si heterojunction solar cells with a-Si passivation films formed from liquid Si. , 2016, , .		0
62	Cat-CVD passivation realizing extremely low surface recombination velocity < 0.2 cm/s in solar cell structure. , 2016, , .		1
63	Thermal Conductivity Measurement of Liquid-Quenched Higher Manganese Silicides. Journal of Electronic Materials, 2016, 45, 1821-1826.	2.2	4
64	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
65	Progression of rapid potential-induced degradation of n-type single-crystalline silicon photovoltaic modules. Applied Physics Express, 2016, 9, 112301.	2.4	32
66	Catalytic doping of phosphorus and boron atoms on hydrogenated amorphous silicon films. Japanese Journal of Applied Physics, 2016, 55, 04ES05.	1.5	12
67	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
68	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
69	The formation of poly-Si films on flat glass substrates by flash lamp annealing. Thin Solid Films, 2015, 595, 235-238.	1.8	14
70	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
71	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
72	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

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73	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
74	Photo-carrier generation at a-Si layer in SiNx/a-Si stacked passivation with extremely low surface recombination velocity. , 2015, , .		0
75	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
76	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
77	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
78	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
79	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
80	Phosphorus- and boron-doped hydrogenated amorphous silicon films prepared using vaporized liquid cyclopentasilane. Thin Solid Films, 2015, 589, 221-226.	1.8	16
81	Application of crystalline silicon surface oxidation to silicon heterojunction solar cells. Current Applied Physics, 2015, 15, 1168-1172.	2.4	24
82	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
83	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
84	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
85	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
86	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
87	Requirements for achieving extremely low surface recombination velocity and negligible optical loss in Cat-CVD SiNx/a-Si stacked passivation. , 2014, , .		2
88	Deposition of moisture barrier films by catalytic CVD using hexamethyldisilazane. Japanese Journal of Applied Physics, 2014, 53, 05FM03.	1.5	4
89	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
90	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

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91	Amorphous silicon carbide films prepared using vaporized silicon ink. Japanese Journal of Applied Physics, 2014, 53, 031304.	1.5	9
92	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
93	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
94	Development of a-Si solar cells using â€œliquidâ€"Si printingâ€• Canadian Journal of Physics, 2014, 92, 928-931.	1.1	3
95	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
96	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
97	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
98	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
99	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
100	Low-temperature Phosphorus Doping To Silicon Using Phosphorus-related Radicals. Materials Research Society Symposia Proceedings, 2012, 1391, 1.	0.1	0
101	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
102	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
103	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
104	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
105	Flash-lamp-induced explosive crystallization of amorphous germanium films leaving behind periodic microstructures. Thin Solid Films, 2012, 524, 161-165.	1.8	26
106	Formation of polycrystalline silicon films with μm-order-long grains through liquid-phase explosive crystallization by flash lamp annealing. , 2012, , .		0
107	Large-Grain Polycrystalline Silicon Films Formed through Flash-Lamp-Induced Explosive Crystallization. Japanese Journal of Applied Physics, 2012, 51, 10NB15.	1.5	8
108	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

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109	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
110	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
111	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
112	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
113	Large-Grain Polycrystalline Silicon Films Formed through Flash-Lamp-Induced Explosive Crystallization. Japanese Journal of Applied Physics, 2012, 51, 10NB15.	1.5	4
114	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
115	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
116	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
117	Catalytic decomposition of NH3 on heated Ru and W surfaces. Thin Solid Films, 2011, 519, 4429-4431.	1.8	4
118	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
119	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
120	Advantage of plasma-less deposition in Cat-CVD to the performance of electronic devices. Thin Solid Films, 2011, 519, 4568-4570.	1.8	5
121	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
122	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
123	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
124	Low Temperature Phosphorus Doping in Silicon Using Catalytically Generated Radicals. Japanese Journal of Applied Physics, 2011, 50, 121301.	1.5	11
125	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
126	Carrier recombination mechanisms in solar cells fabricated using flash-lamp-crystallized polycrystalline silicon films. , 2011, , .		1

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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	Low Temperature Phosphorus Doping in Silicon Using Catalytically Generated Radicals. Japanese Journal of Applied Physics, 2011, 50, 121301.	1.5	11
129	Variation of crystallization mechanisms in flash-lamp-irradiated amorphous silicon films. Journal of Crystal Growth, 2010, 312, 2834-2839.	1.5	19
130	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
131	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
132	Flash-lamp-crystallized polycrystalline silicon films with remarkably long minority carrier lifetimes. Current Applied Physics, 2010, 10, S402-S405.	2.4	10
133	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
134	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
135	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
136	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
137	Propagation loss of amorphous silicon optical waveguides at the 0.8 µm-wavelength range. , 2010, , .		3
138	Carrier transport properties of flash-lamp-crystallized poly-Si films. , 2010, , .		1
139	Surface treatment of crystalline silicon realizing extremely low surface recombination velocity using catalytically generated radicals. , 2010, , .		0
140	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
141	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
142	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
143	Thin-film Formation by Catalytic Chemical Vapor Deposition(Cat-CVD). Hyomen Kagaku, 2010, 31, 178-183.	0.0	0
144	Explosive crystallization of amorphous silicon films by flash lamp annealing. Journal of Applied Physics, 2009, 106, .	2.5	81

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145	Improved performance of thin-film solar cells using surface-morphology-controlled poly-Si films crystallized by flash lamp annealing. , 2009, , .		0
146	New application of Cat-CVD technology and recent status of industrial implementation. Thin Solid Films, 2009, 517, 3420-3423.	1.8	14
147	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
148	Comparison of a-Si TFTs fabricated by Cat-CVD and PECVD methods. Thin Solid Films, 2009, 517, 3581-3583.	1.8	18
149	A novel patterning technique using super-hydrophobic PTFE thin films by Cat-CVD method. Thin Solid Films, 2009, 517, 3622-3624.	1.8	21
150	Thin-Film Poly-Si Formed by Flash Lamp Annealing. Advances in Materials Research, 2009, , 177-191.	0.2	0
151	Recent situation of industrial implementation of Cat-CVD technology in Japan. Thin Solid Films, 2008, 516, 537-540.	1.8	14
152	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
153	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
154	Fabrication of PTFE thin films by dual catalytic chemical vapor deposition method. Thin Solid Films, 2008, 516, 687-690.	1.8	35
155	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
156	Formation of gas barrier films by Cat-CVD method using organic silicon compounds. Thin Solid Films, 2008, 516, 604-606.	1.8	12
157	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
158	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
159	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
160	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
161	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
162	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

#	Article	IF	Citations
163	ãƒ•ãƒ©ãƒƒã‚·ãƒ¥ãƒ©ãƒ³ãƒ—åŠ熱ã«ã‚ˆã‚‹é«˜å“è³ªã‚·ãƒªã‚³ãƒ³è–„è†œå½¢æˆæŠ€è¡“ã®é–‹ç™º. Materia Japan, 2008, 47, 89-92.	0.1	0
164	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
165	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
166	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
167	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
168	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
169	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
170	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
171	Solar cell system using a polished concave Si-crystal mirror. Solar Energy Materials and Solar Cells, 2005, 88, 323-329.	6.2	10
172	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
173	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
174	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
175	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
176	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
177	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
178	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
179	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