## Atsushi Masuda

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7577043/publications.pdf

Version: 2024-02-01

230 papers 3,762 citations

32 h-index 233421 45 g-index

231 all docs

231 docs citations

231 times ranked

1711 citing authors

#	Article	IF	CITATIONS
1	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
2	Non-Destructive Measurement of Acetic Acid and Its Distribution in a Photovoltaic Module during Damp Heat Testing Using pH-Sensitive Fluorescent Dye Sensors. Sensors, 2022, 22, 2520.	3.8	4
3	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
4	Fabrication of Tantalum-Doped Titanium-Oxide Electron-Selective Contacts with High Passivation Quality. ECS Journal of Solid State Science and Technology, 2021, 10, 045009.	1.8	2
5	Influence of Light Irradiation on Potential-Induced Degradation for Thin-Film Si Photovoltaic Modules. ECS Journal of Solid State Science and Technology, 2021, 10, 065018.	1.8	O
6	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
7	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
8	Potentialâ€Induced Degradation in Highâ€Efficiency nâ€Type Crystallineâ€Silicon Photovoltaic Modules: A Literature Review. Solar Rrl, 2021, 5, 2100708.	5.8	23
9	Characteristics change in organic photovoltaics by thermal recovery and photodegradation. Japanese Journal of Applied Physics, 2020, 59, SCCD04.	1.5	2
10	Effect of a SiO <sub>2</sub> 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
11	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
12	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
13	A scanning nonlinear dielectric microscopic investigation of potential-induced degradation in monocrystalline silicon solar cells. Applied Physics Letters, 2020, 116, 182107.	3.3	1
14	A single-phase brookite TiO <sub>2</sub> nanoparticle bridge enhances the stability of perovskite solar cells. Sustainable Energy and Fuels, 2020, 4, 2009-2017.	4.9	25
15	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
16	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
17	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
18	Temperature coefficient of the characteristic values of the charge-accumulation-type potential-induced-degraded n-type mono-crystalline silicon photovoltaic cell. Japanese Journal of Applied Physics, 2020, 59, 051001.	1.5	0

#	Article	IF	CITATIONS
19	(Invited) Reliability Improvement and Remaining Issues on Photovoltaic Cells and Modules. ECS Meeting Abstracts, 2020, MA2020-02, 1846-1846.	0.0	O
20	Women in physics in Japan. AIP Conference Proceedings, 2019, , .	0.4	1
21	Japanese women researchers: Are they active? – Trends in numbers of members in JSAP. AIP Conference Proceedings, 2019, , .	0.4	0
22	Actions for gender equality in the Japan society of applied physics. AIP Conference Proceedings, 2019, , .	0.4	0
23	Temperature dependence of potential-induced degraded p-type mono-crystalline silicon photovoltaic cell characteristics. Japanese Journal of Applied Physics, 2019, 58, 101005.	1.5	3
24	Output power behavior of passivated emitter and rear cell photovoltaic modules during early installation stage: influence of light-induced degradation. Japanese Journal of Applied Physics, 2019, 58, 106510.	1.5	3
25	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
26	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
27	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
28	Influence of sodium on the potential-induced degradation for n-type crystalline silicon photovoltaic modules. Applied Physics Express, 2019, 12, 064004.	2.4	17
29	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
30	Investigation of UV and hygrothermal stress on back side of rack-mounted photovoltaic modules. Renewable Energy Focus, 2019, 29, 107-113.	4.5	4
31	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
32	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
33	Corrections to "Corrosion-Induced AC Impedance Elevation in Front Electrodes of Crystalline Silicon Photovoltaic Cells Within Field-Aged Photovoltaic Modules―[May 19 741-751]. IEEE Journal of Photovoltaics, 2019, 9, 1154-1154.	2.5	4
34	Roles of SiNx in Potential-induced Degradation for p-type Crystalline Si Photovoltaic Modules. , 2019, , .		0
35	Durable crystalline Si photovoltaic modules based on silicone-sheet encapsulants. Japanese Journal of Applied Physics, 2018, 57, 027101.	1.5	18
36	Bending cyclic load test for crystalline silicon photovoltaic modules. Japanese Journal of Applied Physics, 2018, 57, 02CE05.	1.5	9

3

#	Article	IF	CITATIONS
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	Multistage performance deterioration in n-type crystalline silicon photovoltaic modules undergoing potential-induced degradation. Microelectronics Reliability, 2018, 84, 127-133.	1.7	29
39	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
40	Sodium distribution at the surface of silicon nitride film after potential-induced degradation test and recovery test of photovoltaic modules. Japanese Journal of Applied Physics, 2018, 57, 08RG05.	1.5	5
41	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
42	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
43	Soiling by volcanic ash fall on photovoltaic modules and effects of hydrophilic coating on module cover glass. Japanese Journal of Applied Physics, 2018, 57, 08RG06.	1.5	1
44	Comparison between Estimated and Actual Power Generation Amounts of Photovoltaic Modules at Tosu City in Japan. , 2018, , .		0
45	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
46	Origin of Na causing potential-induced degradation for p-type crystalline Si photovoltaic modules. AlP Advances, 2018, $8$ , .	1.3	6
47	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
48	Annual Degradation Rates of Recent c-Si PV Modules under Subtropical Coastal Climate Conditions. , 2018, , .		4
49	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
50	Accelerated Outdoor PID Testing of CIGS Modules and Comparison with Indoor PID Tests. , 2018, , .		3
51	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
52	Reliability and long term durability of bifacial photovoltaic modules using transparent backsheet. Japanese Journal of Applied Physics, 2018, 57, 08RG15.	1.5	12
53	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
54	Guiding principle for crystalline Si photovoltaic modules with high tolerance to acetic acid. Japanese Journal of Applied Physics, 2018, 57, 04FS06.	1.5	9

#	Article	IF	Citations
55	Effect of bias voltage application on potential-induced degradation for crystalline silicon photovoltaic modules. Japanese Journal of Applied Physics, 2018, 57, 08RG01.	1.5	5
56	Performance degradation due to outdoor exposure and seasonal variation in amorphous silicon photovoltaic modules. Thin Solid Films, 2018, 661, 116-121.	1.8	13
57	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
58	Lamination-interface-dependent deacetylation of ethylene vinyl acetate encapsulant in crystalline Si photovoltaic modules evaluated by positron annihilation lifetime spectroscopy. Japanese Journal of Applied Physics, 2018, 57, 082301.	1.5	5
59	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
60	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
61	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
62	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
63	Annual degradation rates of recent crystalline silicon photovoltaic modules. Progress in Photovoltaics: Research and Applications, 2017, 25, 953-967.	8.1	95
64	Potential-induced degradation of thin-film Si photovoltaic modules. Japanese Journal of Applied Physics, 2017, 56, 04CS04.	1.5	12
65	Development of a practical method of estimating electric power from various photovoltaic technologies with high precision. Japanese Journal of Applied Physics, 2017, 56, 08MD05.	1.5	5
66	Effect of light irradiation and forward bias during PID tests of CIGS PV modules. , 2017, , .		1
67	Time-dependent changes in copper indium gallium (di)selenide and cadmium telluride photovoltaic modules due to outdoor exposure. Japanese Journal of Applied Physics, 2017, 56, 08MD06.	1.5	3
68	Sequential and combined acceleration tests for crystalline Si photovoltaic modules. Japanese Journal of Applied Physics, 2016, 55, 04ES10.	1.5	21
69	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
70	Degradation of encapsulants for photovoltaic modules made of ethylene vinyl acetate studied by positron annihilation lifetime spectroscopy. Japanese Journal of Applied Physics, 2016, 55, 102302.	1.5	5
71	Potential-induced degradation behavior of n-type single-crystalline silicon photovoltaic modules with a rear-side emitter. , $2016, \ldots$		4
72	Proposed new damp heat test standards for commercial CIGS modules with bias application or light irradiation. Proceedings of SPIE, 2016, , .	0.8	3

#	Article	IF	Citations
73	Direct evidence for pn junction without degradation in crystalline Si photovoltaic modules under hygrothermal stresses. , $2016$ , , .		4
74	Electrical detection of gap formation underneath finger electrodes on c-Si PV cells exposed to acetic acid vapor under hygrothermal conditions. , $2016$ , , .		22
75	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
76	Multi angle laser light scattering evaluation of field exposed thermoplastic photovoltaic encapsulant materials. Energy Science and Engineering, 2016, 4, 40-51.	4.0	13
77	Progression of rapid potential-induced degradation of n-type single-crystalline silicon photovoltaic modules. Applied Physics Express, 2016, 9, 112301.	2.4	32
78	Effects of UV on power degradation of photovoltaic modules in combined acceleration tests. Japanese Journal of Applied Physics, 2016, 55, 052301.	1.5	23
79	Issues and Solutions Concerned in the Coefficient of Thermal Expansion on Photovoltaic Modules. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2016, 67, 146-148.	0.2	0
80	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
81	Changes in the current density–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
82	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
83	Field testing of thermoplastic encapsulants in highâ€ŧemperature installations. Energy Science and Engineering, 2015, 3, 565-580.	4.0	29
84	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
85	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
86	Degradation by acetic acid for crystalline Si photovoltaic modules. Japanese Journal of Applied Physics, 2015, 54, 04DR04.	1.5	43
87	Effects of light illumination during damp/dry heat tests on a flexible thin film photovoltaic module. Proceedings of SPIE, 2015, , .	0.8	2
88	Potential-induced degradation of Cu(In,Ga)Se <sub>2</sub> photovoltaic modules. Japanese Journal of Applied Physics, 2015, 54, 08KC13.	1.5	64
89	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
90	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

#	Article	IF	Citations
91	Module composition for reliability test of organic photovoltaics. Japanese Journal of Applied Physics, 2015, 54, 08KF07.	1.5	1
92	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
93	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
94	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
95	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
96	Crystalline Si photovoltaic modules based on TiO <sub>2</sub> -coated cover glass against potential-induced degradation. RSC Advances, 2014, 4, 44291-44295.	3.6	57
97	Investigation on antireflection coating for high resistance to potential-induced degradation. Japanese Journal of Applied Physics, 2014, 53, 03CE01.	1.5	29
98	Microscopic Degradation Mechanisms in Silicon Photovoltaic Module under Long-Term Environmental Exposure. Japanese Journal of Applied Physics, 2012, 51, 10NF07.	1.5	17
99	Early Failure Detection of Interconnection with Rapid Thermal Cycling in Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10NF13.	1.5	6
100	Measuring Method of Moisture Ingress into Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10NF12.	1.5	5
101	Failure Assessments for Outside-Exposed Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10NF04.	1.5	3
102	Recent Situation and Future Prospects of Photovoltaic Industries and Technologies. Journal of the Vacuum Society of Japan, 2012, 55, 520-528.	0.3	0
103	Microscopic Degradation Mechanisms in Silicon Photovoltaic Module under Long-Term Environmental Exposure. Japanese Journal of Applied Physics, 2012, 51, 10NF07.	1.5	15
104	Measuring Method of Moisture Ingress into Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10NF12.	1.5	8
105	Early Failure Detection of Interconnection with Rapid Thermal Cycling in Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10NF13.	1.5	6
106	Recent Situation and Future Prospects of Photovoltaics. Nippon Gomu Kyokaishi, 2011, 84, 153-160.	0.0	1
107	Study on silicon-slicing technique using plasma-etching processing. Solar Energy Materials and Solar Cells, 2009, 93, 789-791.	6.2	11
108	Investigation on the crystal growth process of spherical Si single crystals by melting. Journal of Crystal Growth, 2009, 311, 4116-4122.	1.5	14

#	Article	IF	Citations
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	Coverage properties of SiNx films prepared by catalytic chemical vapor deposition on trenched substrates below 80°C. Thin Solid Films, 2008, 516, 3000-3004.	1.8	3
111	Cat-CVD SiN passivation films for OLEDs and packaging. Thin Solid Films, 2008, 516, 553-557.	1.8	22
112	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
113	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
114	Investigating minority-carrier lifetime in small spherical Si using microwave photoconductance decay. Journal of Applied Physics, 2008, 103, 104909.	2.5	6
115	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
116	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
117	Characterization of spherical Si by photoluminescence measurement. Journal of Applied Physics, 2007, 101, 103530.	2.5	8
118	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
119	A concentrator module of spherical Si solar cell. Solar Energy Materials and Solar Cells, 2007, 91, 1805-1810.	6.2	23
120	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
121	Improvement of Crystallinity and Solar Cell Efficiency of Spherical Silicon by Seeding Crystallization Techniques., 2006,,.		0
122	H2 dilution effect in the Cat-CVD processes of the SiH4/NH3 system. Thin Solid Films, 2006, 501, 31-34.	1.8	20
123	Systematic study on photoresist removal using hydrogen atoms generated on heated catalyzer. Thin Solid Films, 2006, 501, 326-328.	1.8	32
124	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
125	High-rate deposition of SiNx films over 100 nm/min by Cat-CVD method at low temperatures below 80 $\hat{A}^{\circ}$ C. Thin Solid Films, 2006, 501, 55-57.	1.8	7
126	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

#	Article	IF	Citations
127	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
128	Preparation of SiNx gate-insulating films for bottom-gate type TFTs by Cat-CVD method. Thin Solid Films, 2006, 501, 307-309.	1.8	1
129	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
130	Low-Temperature Deposition of Silicon Nitride Films by a Cat-CVD Technique-Gas-Phase Diagnoses and Evaluation of Film Properties Zairyo/Journal of the Society of Materials Science, Japan, 2006, 55, 142-147.	0.2	0
131	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
132	Quantification of Gas-Phase H-Atom Number Density by Tungsten Phosphate Glass. Japanese Journal of Applied Physics, 2005, 44, 732-735.	1.5	28
133	Moisture-Resistive Properties of SiNxFilms Prepared by Catalytic Chemical Vapor Deposition below 100°C for Flexible Organic Light-Emitting Diode Displays. Japanese Journal of Applied Physics, 2005, 44, 1923-1927.	1.5	10
134	Improvement of Deposition Rate by Sandblasting of Tungsten Wire in Catalytic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2005, 44, 1943-1944.	1.5	0
135	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
136	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
137	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
138	Correlation between O/Er Content Ratio and Photoluminescence Intensity of (Er, O)-Doped Hydrogenated Amorphous Si Thin Films Prepared by a Catalytic Chemical Vapor Deposition/Laser Ablation Hybrid Process. Japanese Journal of Applied Physics, 2004, 43, 4198-4201.	1.5	2
139	Highly Moisture-Resistive SiNxFilms Prepared by Catalytic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2004, 43, L1362-L1364.	1.5	20
140	Nitridation of Ultrathin SiO2 Layers in Metal-Ferroelectric-Insulator-Semiconductor Structures. Integrated Ferroelectrics, 2004, 68, 29-36.	0.7	1
141	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
142	Study on change in SIMS intensities near the interface between silicon-nitride film and silicon substrate. Applied Surface Science, 2004, 231-232, 725-728.	6.1	4
143	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
144	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

9

#	Article	IF	CITATIONS
145	Catalytic Chemical Vapor Deposition of a-Si:H TFT. , 2004, , 377-394.		O
146	Development of Cat-CVD apparatus for 1-m-size large-area deposition. Thin Solid Films, 2003, 430, 58-62.	1.8	29
147	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
148	Deposition chemistry in the Cat-CVD processes of the SiH4/NH3 system. Thin Solid Films, 2003, 430, 24-27.	1.8	40
149	Recent progress of Cat-CVD research in Japan—bridging between the first and second Cat-CVD conferences. Thin Solid Films, 2003, 430, 7-14.	1.8	38
150	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
151	Radical Species Formed by the Catalytic Decomposition of NH3on Heated W Surfaces. Japanese Journal of Applied Physics, 2003, 42, 5315-5321.	1.5	57
152	57.1: Invited Paper: Present Status of Cat-CVD as a New Fabrication Technology for Large Area Display. Digest of Technical Papers SID International Symposium, 2003, 34, 1504.	0.3	0
153	Properties of High Quality p-Type Micro-Crystalline-Si Prepared by Cat-CVD. Materials Research Society Symposia Proceedings, 2003, 762, 1321.	0.1	1
154	Properties of Phosphorus-Doped Polycrystalline Silicon Films Formed by Catalytic Chemical Vapor Deposition and Successive Rapid Thermal Annealing., 2003,, 63-68.		0
155	Catalytic Chemical Vapor Deposition Recent Development and Future Prospects. Shinku/Journal of the Vacuum Society of Japan, 2003, 46, 92-97.	0.2	1
156	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
157	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
158	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
159	Recent Progress in Industrial Applications of CAT-CVD (Hot-Wire Cvd). Materials Research Society Symposia Proceedings, 2002, 715, 1741.	0.1	7
160	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
161	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
162	What is the difference between catalytic CVD and plasma-enhanced CVD? Gas-phase kinetics and film properties. Vacuum, 2002, 66, 293-297.	3.5	5

#	Article	IF	Citations
163	Development of Large-Area Uniform Deposition Technique on 1-m-Size Substrate by Catalytic Chemical Vapor Deposition Shinku/Journal of the Vacuum Society of Japan, 2002, 45, 123-126.	0.2	2
164	Title is missing!. Shinku/Journal of the Vacuum Society of Japan, 2002, 45, 727-732.	0.2	0
165	Properties of Large Grain-Size poly-Si Films by Catalytic Chemical Sputtering. Materials Research Society Symposia Proceedings, 2001, 664, 451.	0.1	5
166	Identification and gas phase kinetics of radical species in Cat-CVD processes of SiH4. Thin Solid Films, 2001, 395, 47-50.	1.8	56
167	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
168	Photo-induced volume changes in a-Si:H films prepared by Cat-CVD method. Thin Solid Films, 2001, 395, 84-86.	1.8	6
169	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
170	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
171	Influence of a-Si:H deposition by catalytic CVD on transparent conducting oxides. Thin Solid Films, 2001, 395, 147-151.	1.8	13
172	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
173	Formation of silicon films for solar cells by the Cat-CVD method. Thin Solid Films, 2001, 395, 198-201.	1.8	6
174	Fabrication of amorphous carbon nitride films by hot-wire chemical vapor deposition. Thin Solid Films, 2001, 395, 249-252.	1.8	9
175	A Cat-CVD Si3N4 film study and its application to the ULSI process. Thin Solid Films, 2001, 395, 275-279.	1.8	14
176	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
177	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
178	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
179	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
180	Catalytic Chemical Sputtering: A Novel Method for Obtaining Large-Grain Polycrystalline Silicon. Japanese Journal of Applied Physics, 2001, 40, L289-L291.	1.5	34

#	Article	IF	Citations
181	Gas-Phase and Surface Reactions of Decomposed Species In Catalytic Cvd. Materials Research Society Symposia Proceedings, 2000, 609, 1911.	0.1	0
182	Drastic Revolution in Catalytic Cvd using "Catalytic Plate―Instead of "Hot Wire― Materials Research Society Symposia Proceedings, 2000, 609, 631.	0.1	12
183	200 °C Preparation of SiNx Passivation Films for PZT Ferroelectric Capacitors by Catalytic CVD. Materials Research Society Symposia Proceedings, 2000, 655, 16.	0.1	1
184	Novel thin-film fabrication method combining pulsed laser ablation and catalytic chemical vapor deposition: application to preparation of Er-doped hydrogenated amorphous Si films. Vacuum, 2000, 59, 635-640.	3.5	1
185	Control of Polycrystalline Silicon Structure by the Two-Step Deposition Method. Japanese Journal of Applied Physics, 2000, 39, 3888-3895.	1.5	12
186	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
187	Effects of nitrogen incorporation on structural properties of fluorinated amorphous carbon films. Journal of Non-Crystalline Solids, 2000, 271, 147-151.	3.1	15
188	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
189	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
190	Novel deposition technique of Er-doped a-Si:H combining catalytic chemical vapor deposition and pulsed laser-ablation. Journal of Non-Crystalline Solids, 2000, 266-269, 136-140.	3.1	3
191	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
192	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
193	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
194	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
195	Suppression of hexagonal GaN mixing by As4 molecular beam in cubic GaN growth on GaAs (001) substrates. Journal of Crystal Growth, 1999, 201-202, 392-395.	1.5	4
196	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
197	CAT-CVD Process and its Application to Preparation of Si-Based Thin Films. Materials Research Society Symposia Proceedings, 1999, 557, 67.	0.1	16
198	Effects of Active Ammonia Gas Cracked in Catalytic-CVD on PZT Ferroelectric Capacitors. Materials Research Society Symposia Proceedings, 1999, 596, 271.	0.1	2

#	Article	IF	CITATIONS
199	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
200	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 <b>.</b> 5	32
201	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
202	Preparation of fluorinated amorphous carbon thin films. Journal of Non-Crystalline Solids, 1998, 227-230, 641-644.	3.1	30
203	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
204	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
205	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
206	Nitrogen-doping effects on electrical, optical, and structural properties in hydrogenated amorphous silicon. Journal of Applied Physics, 1997, 81, 6729-6737.	2.5	13
207	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
208	Nitrogen- and ammonia-plasma nitridation of hydrogenated amorphous silicon. Applied Surface Science, 1997, 113-114, 610-613.	6.1	2
209	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
210	Origin of charged dangling bonds in nitrogen-doped hydrogenated amorphous silicon. Journal of Non-Crystalline Solids, 1996, 198-200, 395-398.	3.1	11
211	N2-plasma-nitridation effects on porous silicon. Thin Solid Films, 1996, 281-282, 568-571.	1.8	6
212	X-ray photoelectron spectroscopy and electron spin resonance studies on O2 and N2O plasma oxidation of silicon. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1996, 39, 173-178.	<b>3.</b> 5	2
213	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
214	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
215	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
216	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

#	Article	IF	CITATIONS
217	Interfacial neutral―and chargedâ€danglingâ€bond densities between hydrogenated amorphous silicon and hydrogenated amorphous silicon nitride in top nitride and bottom nitride structures. Applied Physics Letters, 1995, 66, 2718-2720.	3.3	5
218	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
219	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
220	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
221	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
222	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
223	Ultrathin SiO2 films on Si formed by N2O-plasma oxidation technique. Applied Surface Science, 1994, 81, 277-280.	6.1	15
224	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
225	Novel oxidation process of hydrogenated amorphous silicon utilizing nitrous oxide plasma. Applied Physics Letters, 1992, 61, 816-818.	3.3	18
226	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
227	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
228	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
229	Acetic acid detection in photovoltaic modules during ultraviolet irradiation and damp-heat combined tests. Japanese Journal of Applied Physics, 0, , .	1.5	1
230	Effects of SiN <sub> <i>x</i> </sub> refractive index and SiO <sub>2</sub> 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