Atsushi Masuda

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/7577043/atsushi-masuda-publications-by-year.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

2,960 29 40 217 h-index g-index citations papers 5.18 3,348 231 2.5 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
217	Effect of temperature and pre-annealing on the potential-induced degradation of silicon heterojunction photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2022 , 61, SC1021	1.4	O
216	Potential-Induced Degradation in High-Efficiency n-Type Crystalline-Silicon Photovoltaic Modules: A Literature Review. <i>Solar Rrl</i> , 2021 , 5, 2100708	7.1	1
215	Fabrication of Tantalum-Doped Titanium-Oxide Electron-Selective Contacts with High Passivation Quality. <i>ECS Journal of Solid State Science and Technology</i> , 2021 , 10, 045009	2	1
214	Influence of Light Irradiation on Potential-Induced Degradation for Thin-Film Si Photovoltaic Modules. <i>ECS Journal of Solid State Science and Technology</i> , 2021 , 10, 065018	2	
213	Influence of light illumination on the potential-induced degradation of n-type interdigitated back-contact crystalline Si photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2021 , 60, SBBF08	1.4	3
212	Effects of passivation configuration and emitter surface doping concentration on polarization-type potential-induced degradation in n-type crystalline-silicon photovoltaic modules. <i>Solar Energy Materials and Solar Cells</i> , 2021 , 226, 111074	6.4	4
211	Study on photo-degradation of inverted organic solar cells caused by generation of potential barrier between PEDOT:PSS and PBDB-Ts. <i>Sustainable Energy and Fuels</i> , 2021 , 5, 3092-3096	5.8	2
210	A scanning nonlinear dielectric microscopic investigation of potential-induced degradation in monocrystalline silicon solar cells. <i>Applied Physics Letters</i> , 2020 , 116, 182107	3.4	0
209	A single-phase brookite TiO2 nanoparticle bridge enhances the stability of perovskite solar cells. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 2009-2017	5.8	19
208	Elucidating the mechanism of potential induced degradation delay effect by ultraviolet light irradiation for p-type crystalline silicon solar cells. <i>Solar Energy</i> , 2020 , 199, 55-62	6.8	7
207	Temperature coefficient of the characteristic values of the charge-accumulation-type potential-induced-degraded n-type mono-crystalline silicon photovoltaic cell. <i>Japanese Journal of Applied Physics</i> , 2020 , 59, 051001	1.4	
206	Influence of hygrothermal stress on potential-induced degradation for homojunction and heterojunction crystalline Si photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2020 , 59, 07650)3 ^{1.4}	4
205	Effect of a silicon nitride film on the potential-induced degradation of n-type front-emitter crystalline silicon photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2020 , 59, 104002	1.4	5
204	Characteristics change in organic photovoltaics by thermal recovery and photodegradation. Japanese Journal of Applied Physics, 2020 , 59, SCCD04	1.4	1
203	Effect of a SiO2 film on the potential-induced degradation of n-type front-emitter crystalline Si photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2020 , 59, SCCD02	1.4	6
202	Influence of emitter position of silicon heterojunction photovoltaic solar cell modules on their potential-induced degradation behaviors. <i>Solar Energy Materials and Solar Cells</i> , 2020 , 216, 110716	6.4	6
201	Potential-induced degradation in photovoltaic modules composed of interdigitated back contact solar cells in photovoltaic systems under actual operating conditions. <i>Progress in Photovoltaics: Research and Applications</i> , 2020 , 28, 1322-1332	6.8	6

(2018-2019)

200	Universal explanation for degradation by charge accumulation in crystalline Si photovoltaic modules with application of high voltage. <i>Applied Physics Express</i> , 2019 , 12, 101003	2.4	4	
199	Influence of backsheet materials on potential-induced degradation in n-type crystalline-silicon photovoltaic cell modules. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, 120901	1.4	1	
198	Effect of additives in electrode paste of p-type crystalline Si solar cells on potential-induced degradation. <i>Solar Energy</i> , 2019 , 188, 1292-1297	6.8	6	
19	Influence of sodium on the potential-induced degradation for n-type crystalline silicon photovoltaic modules. <i>Applied Physics Express</i> , 2019 , 12, 064004	2.4	8	
190	Similarity of potential-induced degradation in superstrate-type thin-film CdTe and Si photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, SBBF07	1.4	6	
19	Investigation of UV and hygrothermal stress on back side of rack-mounted photovoltaic modules. Renewable Energy Focus, 2019 , 29, 107-113	5.4	2	
194	Investigation of the power generation of organic photovoltaic modules connected to the power grid for more than three years. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, 052001	1.4	5	
193	Corrosion-Induced AC Impedance Elevation in Front Electrodes of Crystalline Silicon Photovoltaic Cells Within Field-Aged Photovoltaic Modules. <i>IEEE Journal of Photovoltaics</i> , 2019 , 9, 741-751	3.7	4	
192	Temperature dependence of potential-induced degraded p-type mono-crystalline silicon photovoltaic cell characteristics. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, 101005	1.4	2	
19:	Output power behavior of passivated emitter and rear cell photovoltaic modules during early installation stage: influence of light-induced degradation. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, 106510	1.4	1	
190	Corrections to Corrosion-Induced AC Impedance Elevation in Front Electrodes of Crystalline Silicon Photovoltaic Cells Within Field-Aged Photovoltaic Modules [I] IEEE Journal of Photovoltaics, 2019, 9, 1154	-₹₹54	0	
189	Durable crystalline Si photovoltaic modules based on silicone-sheet encapsulants. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 027101	1.4	8	
188	Bending cyclic load test for crystalline silicon photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 02CE05	1.4	5	
187	Comprehensive study of potential-induced degradation in silicon heterojunction photovoltaic cell modules. <i>Progress in Photovoltaics: Research and Applications</i> , 2018 , 26, 697-708	6.8	18	
180	Multistage performance deterioration in n-type crystalline silicon photovoltaic modules undergoing potential-induced degradation. <i>Microelectronics Reliability</i> , 2018 , 84, 127-133	1.2	17	
185	Effect of bias voltage application on potential-induced degradation for crystalline silicon photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RG01	1.4	4	
182	Performance degradation due to outdoor exposure and seasonal variation in amorphous silicon photovoltaic modules. <i>Thin Solid Films</i> , 2018 , 661, 116-121	2.2	11	
183	Accurate measurement and estimation of solar cell temperature in photovoltaic module operating in real environmental conditions. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RG08	1.4	7	

182	Lamination-interface-dependent deacetylation of ethylene vinyl acetate encapsulant in crystalline Si photovoltaic modules evaluated by positron annihilation lifetime spectroscopy. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 082301	1.4	1
181	Localization and Characterization of a Degraded Site in Crystalline Silicon Photovoltaic Cells Exposed to Acetic Acid Vapor. <i>IEEE Journal of Photovoltaics</i> , 2018 , 8, 997-1004	3.7	13
180	Detection of acetic acid produced in photovoltaic modules based on tin film corrosion during damp heat test. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RG16	1.4	5
179	Sodium distribution at the surface of silicon nitride film after potential-induced degradation test and recovery test of photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RG05	1.4	2
178	Exploring suitable damp heat and potential induced degradation test procedures for Cu(In,Ga)(S,Se) photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RG02	1.4	7
177	Overall analysis of change in power generation with outdoor exposure of photovoltaic modules installed at AIST Kyushu Center. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RG04	1.4	6
176	Soiling by volcanic ash fall on photovoltaic modules and effects of hydrophilic coating on module cover glass. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RG06	1.4	1
175	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	1.4	O
174	Origin of Na causing potential-induced degradation for p-type crystalline Si photovoltaic modules. <i>AIP Advances</i> , 2018 , 8, 115311	1.5	6
173	Rapid progression and subsequent saturation of polarization-type potential-induced degradation of n-type front-emitter crystalline-silicon photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 122301	1.4	13
172	Annual Degradation Rates of Recent c-Si PV Modules under Subtropical Coastal Climate Conditions 2018 ,		2
171	Potential-induced degradation of n-type crystalline Si photovoltaic modules in practical outdoor systems. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 117102	1.4	4
170	Accelerated Outdoor PID Testing of CIGS Modules and Comparison with Indoor PID Tests 2018,		1
169	Effect of light irradiation during potential-induced degradation tests for p-type crystalline Si photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RG13	1.4	7
168	Reliability and long term durability of bifacial photovoltaic modules using transparent backsheet. Japanese Journal of Applied Physics, 2018 , 57, 08RG15	1.4	4
167	Temperature dependence measurements and performance analyses of high-efficiency interdigitated back-contact, passivated emitter and rear cell, and silicon heterojunction photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RG18	1.4	11
166	Guiding principle for crystalline Si photovoltaic modules with high tolerance to acetic acid. Japanese Journal of Applied Physics, 2018 , 57, 04FS06	1.4	4
165	Influence of surface structure of n-type single-crystalline Si solar cells on potential-induced degradation. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 166, 132-139	6.4	24

(2016-2017)

164	Reduction in the short-circuit current density of silicon heterojunction photovoltaic modules subjected to potential-induced degradation tests. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 161, 439-	443	26
163	Causes of Degradation Identified by the Extended Thermal Cycling Test on Commercially Available Crystalline Silicon Photovoltaic Modules. <i>IEEE Journal of Photovoltaics</i> , 2017 , 7, 1511-1518	3.7	21
162	Development of a practical method of estimating electric power from various photovoltaic technologies with high precision. <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 08MD05	1.4	2
161	Annual degradation rates of recent crystalline silicon photovoltaic modules. <i>Progress in Photovoltaics: Research and Applications</i> , 2017 , 25, 953-967	6.8	54
160	Potential-induced degradation of thin-film Si photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 04CS04	1.4	9
159	Effect of light irradiation and forward bias during PID tests of CIGS PV modules 2017,		1
158	Time-dependent changes in copper indium gallium (di)selenide and cadmium telluride photovoltaic modules due to outdoor exposure. <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 08MD06	1.4	3
157	Progression of rapid potential-induced degradation of n-type single-crystalline silicon photovoltaic modules. <i>Applied Physics Express</i> , 2016 , 9, 112301	2.4	20
156	Effects of UV on power degradation of photovoltaic modules in combined acceleration tests. Japanese Journal of Applied Physics, 2016 , 55, 052301	1.4	13
155	Issues and Solutions Concerned in the Coefficient of Thermal Expansion on Photovoltaic Modules. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2016 , 67, 146-148	0.1	
154	Acceleration of degradation by highly accelerated stress test and air-included highly accelerated stress test in crystalline silicon photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 022	302	9
153	Changes in the current densityMoltage and external quantum efficiency characteristics of n-type single-crystalline silicon photovoltaic modules with a rear-side emitter undergoing potential-induced degradation. <i>Solar Energy Materials and Solar Cells</i> , 2016 , 151, 113-119	6.4	38
152	Consideration on Na diffusion and recovery phenomena in potential-induced degradation for crystalline Si photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 02BF10	1.4	14
151	Sequential and combined acceleration tests for crystalline Si photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 04ES10	1.4	12
150	Behavior of the potential-induced degradation of photovoltaic modules fabricated using flat mono-crystalline silicon cells with different surface orientations. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 04ES14	1.4	5
149	Degradation of encapsulants for photovoltaic modules made of ethylene vinyl acetate studied by positron annihilation lifetime spectroscopy. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 102302	1.4	3
148	Potential-induced degradation behavior of n-type single-crystalline silicon photovoltaic modules with a rear-side emitter 2016 ,		3
147	Proposed new damp heat test standards for commercial CIGS modules with bias application or light irradiation 2016 ,		3

146	Direct evidence for pn junction without degradation in crystalline Si photovoltaic modules under hygrothermal stresses 2016 ,		3
145	Electrical detection of gap formation underneath finger electrodes on c-Si PV cells exposed to acetic acid vapor under hygrothermal conditions 2016 ,		11
144	Microscopic aspects of potential-induced degradation phenomena and their recovery processes for p-type crystalline Si photovoltaic modules. <i>Current Applied Physics</i> , 2016 , 16, 1659-1665	2.6	27
143	Multi angle laser light scattering evaluation of field exposed thermoplastic photovoltaic encapsulant materials. <i>Energy Science and Engineering</i> , 2016 , 4, 40-51	3.4	9
142	Potential-induced degradation of Cu(In,Ga)Se2photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 08KC13	1.4	44
141	Crystalline Si photovoltaic modules functionalized by a thin polyethylene film against potential and damp-heat-induced degradation. <i>RSC Advances</i> , 2015 , 5, 15017-15023	3.7	28
140	Potential-induced degradation in photovoltaic modules based on n-type single crystalline Si solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 140, 361-365	6.4	62
139	Module composition for reliability test of organic photovoltaics. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 08KF07	1.4	1
138	Relationship between cross-linking conditions of ethylene vinyl acetate and potential induced degradation for crystalline silicon photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 08KG01	1.4	29
137	Field testing of thermoplastic encapsulants in high-temperature installations. <i>Energy Science and Engineering</i> , 2015 , 3, 565-580	3.4	23
136	Acceleration of potential-induced degradation by salt-mist preconditioning in crystalline silicon photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 08KG08	1.4	14
135	Plasma-enhanced chemical-vapor deposition of silicon nitride film for high resistance to potential-induced degradation. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 08KD12	1.4	12
134	Degradation by acetic acid for crystalline Si photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 04DR04	1.4	27
133	Effects of light illumination during damp/dry heat tests on a flexible thin film photovoltaic module 2015 ,		2
132	Development of a pH sensor based on a nanostructured filter adding pH-sensitive fluorescent dye for detecting acetic acid in photovoltaic modules. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 08KG07	7 ^{1.4}	6
131	Crystalline Si photovoltaic modules based on TiO2-coated cover glass against potential-induced degradation. <i>RSC Advances</i> , 2014 , 4, 44291-44295	3.7	43
130	Investigation on antireflection coating for high resistance to potential-induced degradation. Japanese Journal of Applied Physics, 2014 , 53, 03CE01	1.4	29
129	Novel lighter weight crystalline silicon photovoltaic module using acrylic-film as a cover sheet. Japanese Journal of Applied Physics, 2014, 53, 092302	1.4	30

128	Detection of acid moisture in photovoltaic modules using a dual wavelength pH-sensitive fluorescent dye. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 04ER18	1.4	7
127	Recent Situation and Future Prospects of Photovoltaic Industries and Technologies. <i>Journal of the Vacuum Society of Japan</i> , 2012 , 55, 520-528		
126	Microscopic Degradation Mechanisms in Silicon Photovoltaic Module under Long-Term Environmental Exposure. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 10NF07	1.4	12
125	Early Failure Detection of Interconnection with Rapid Thermal Cycling in Photovoltaic Modules. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 10NF13	1.4	3
124	Measuring Method of Moisture Ingress into Photovoltaic Modules. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 10NF12	1.4	4
123	Microscopic Degradation Mechanisms in Silicon Photovoltaic Module under Long-Term Environmental Exposure. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 10NF07	1.4	13
122	Measuring Method of Moisture Ingress into Photovoltaic Modules. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 10NF12	1.4	7
121	Early Failure Detection of Interconnection with Rapid Thermal Cycling in Photovoltaic Modules. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 10NF13	1.4	5
120	Recent Situation and Future Prospects of Photovoltaics. Nippon Gomu Kyokaishi, 2011, 84, 153-160	O	
119	Study on silicon-slicing technique using plasma-etching processing. <i>Solar Energy Materials and Solar Cells</i> , 2009 , 93, 789-791	6.4	9
118	Investigation on the crystal growth process of spherical Si single crystals by melting. <i>Journal of Crystal Growth</i> , 2009 , 311, 4116-4122	1.6	11
117	Epitaxial Growth of SiC on Silicon on Insulator Substrates with Ultrathin Top Si Layer by Hot-Mesh Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , 2008 , 47, 569-572	1.4	5
116	Formation of Low-Defect-Concentration Polycrystalline Silicon Films by Thermal Plasma Jet Crystallization Technique. <i>Japanese Journal of Applied Physics</i> , 2008 , 47, 6949-6952	1.4	15
115	Investigating minority-carrier lifetime in small spherical Si using microwave photoconductance decay. <i>Journal of Applied Physics</i> , 2008 , 103, 104909	2.5	6
114	Improvement of the uniformity in electronic properties of AZO films using an rf magnetron sputtering with a mesh grid electrode. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2008 , 148, 26-29	3.1	11
113	Coverage properties of SiNx films prepared by catalytic chemical vapor deposition on trenched substrates below 80IIC. <i>Thin Solid Films</i> , 2008 , 516, 3000-3004	2.2	2
112	Cat-CVD SiN passivation films for OLEDs and packaging. <i>Thin Solid Films</i> , 2008 , 516, 553-557	2.2	21
111	A concentrator module of spherical Si solar cell. Solar Energy Materials and Solar Cells, 2007, 91, 1805-1	8604	21

110	Improvement of the Production Yield of Spherical Si by Optimization of the Seeding Technique in the Dropping Method. <i>Japanese Journal of Applied Physics</i> , 2007 , 46, 5695-5700	1.4	7
109	Defect Reduction in Polycrystalline Silicon Thin Films by Heat Treatment with High-Pressure H2O Vapor. <i>Japanese Journal of Applied Physics</i> , 2007 , 46, 1286-1289	1.4	18
108	Characterization of spherical Si by photoluminescence measurement. <i>Journal of Applied Physics</i> , 2007 , 101, 103530	2.5	8
107	Seeding method with silicon powder for the formation of silicon spheres in the drop method. <i>Journal of Applied Physics</i> , 2007 , 101, 093505	2.5	17
106	Various applications of silicon nitride by catalytic chemical vapor deposition for coating, passivation and insulating films. <i>Thin Solid Films</i> , 2006 , 501, 149-153	2.2	28
105	Formation of highly moisture-resistive SiNx films on Si substrate by Cat-CVD at room temperature. <i>Thin Solid Films</i> , 2006 , 501, 154-156	2.2	6
104	Preparation of SiNx gate-insulating films for bottom-gate type TFTs by Cat-CVD method. <i>Thin Solid Films</i> , 2006 , 501, 307-309	2.2	
103	Grain Enlargement of Polycrystalline Silicon by Multipulse Excimer Laser Annealing: Role of Hydrogen. <i>Japanese Journal of Applied Physics</i> , 2006 , 45, 2726-2730	1.4	17
102	Mass-Spectrometric Studies of Catalytic Chemical Vapor Deposition Processes of Organic Silicon Compounds Containing Nitrogen. <i>Japanese Journal of Applied Physics</i> , 2006 , 45, 961-966	1.4	15
101	H2 dilution effect in the Cat-CVD processes of the SiH4/NH3 system. <i>Thin Solid Films</i> , 2006 , 501, 31-34	2.2	19
100	Systematic study on photoresist removal using hydrogen atoms generated on heated catalyzer. <i>Thin Solid Films</i> , 2006 , 501, 326-328	2.2	31
99	Present status and future feasibility for industrial implementation of Cat-CVD (Hot-Wire CVD) technology. <i>Thin Solid Films</i> , 2006 , 501, 58-60	2.2	31
98	High-rate deposition of SiNx films over 100 nm/min by Cat-CVD method at low temperatures below 80 °C. <i>Thin Solid Films</i> , 2006 , 501, 55-57	2.2	7
97	Low-Temperature Deposition of Silicon Nitride Films by a Cat-CVD Technique-Gas-Phase Diagnoses and Evaluation of Film Properties <i>Zairyo/Journal of the Society of Materials Science, Japan</i> , 2006 , 55, 142-147	0.1	
96	Preparation of Low-Stress SiNxFilms by Catalytic Chemical Vapor Deposition at Low Temperatures. Japanese Journal of Applied Physics, 2005 , 44, 4098-4102	1.4	11
95	Quantification of Gas-Phase H-Atom Number Density by Tungsten Phosphate Glass. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 732-735	1.4	25
94	Moisture-Resistive Properties of SiNxFilms Prepared by Catalytic Chemical Vapor Deposition below 100°C for Flexible Organic Light-Emitting Diode Displays. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 1923-1927	1.4	8
93	Technique for the production, preservation, and transportation of H atoms in metal chambers for processings. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2005 , 23, 1728-17	7 3 19	20

(2003-2005)

92	Air-stable n-type carbon nanotube field-effect transistors with Si3N4 passivation films fabricated by catalytic chemical vapor deposition. <i>Applied Physics Letters</i> , 2005 , 86, 113115	3.4	80	
91	Effect of Atomic Hydrogen on Preparation of Highly Moisture-Resistive SiNxFilms at Low Substrate Temperatures. <i>Japanese Journal of Applied Physics</i> , 2004 , 43, L1546-L1548	1.4	11	
90	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. <i>Japanese Journal of Applied Physics</i> , 2004 , 43, 4198-4201	1.4	2	
89	Highly Moisture-Resistive SiNxFilms Prepared by Catalytic Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , 2004 , 43, L1362-L1364	1.4	19	
88	Nitridation of Ultrathin SiO2 Layers in Metal-Ferroelectric-Insulator-Semiconductor Structures. <i>Integrated Ferroelectrics</i> , 2004 , 68, 29-36	0.8	1	
87	Highly moisture-resistive silicon nitride films prepared by catalytic chemical vapor deposition and application to gallium arsenide field-effect transistors. <i>Vacuum</i> , 2004 , 74, 525-529	3.7	20	
86	Study on change in SIMS intensities near the interface between silicon-nitride film and silicon substrate. <i>Applied Surface Science</i> , 2004 , 231-232, 725-728	6.7	4	
85	Cat-CVD (hot-wire CVD): how different from PECVD in preparing amorphous silicon. <i>Journal of Non-Crystalline Solids</i> , 2004 , 338-340, 19-26	3.9	33	
84	Catalytic decomposition of HCN on heated W surfaces to produce CN radicals. <i>Journal of Non-Crystalline Solids</i> , 2004 , 338-340, 65-69	3.9	10	
83	Catalytic Chemical Vapor Deposition of a-Si:H TFT 2004 , 377-394			
82	Radical Species Formed by the Catalytic Decomposition of NH3on Heated W Surfaces. <i>Japanese Journal of Applied Physics</i> , 2003 , 42, 5315-5321	1.4	53	
81	57.1: Invited Paper: Present Status of Cat-CVD as a New Fabrication Technology for Large Area Display. <i>Digest of Technical Papers SID International Symposium</i> , 2003 , 34, 1504	0.5		
80	Development of Cat-CVD apparatus for 1-m-size large-area deposition. <i>Thin Solid Films</i> , 2003 , 430, 58-6	22.2	25	
79	Fabrication of a-Si1⊠Cx:H thin films for solar cells by the Cat-CVD method using a carbon catalyzer. <i>Thin Solid Films</i> , 2003 , 430, 170-173	2.2	7	
78	Deposition chemistry in the Cat-CVD processes of the SiH4/NH3 system. <i>Thin Solid Films</i> , 2003 , 430, 24-	27 .2	35	
77	Recent progress of Cat-CVD research in JapanBridging between the first and second Cat-CVD conferences. <i>Thin Solid Films</i> , 2003 , 430, 7-14	2.2	31	
76	Crystallization by excimer laser annealing for a-Si:H films with low hydrogen content prepared by Cat-CVD. <i>Thin Solid Films</i> , 2003 , 430, 296-299	2.2	12	
75	Properties of High Quality p-Type Micro-Crystalline-Si Prepared by Cat-CVD. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 762, 1321		1	

Properties of Phosphorus-Doped Polycrystalline Silicon Films Formed by Catalytic Chemical Vapor Deposition and Successive Rapid Thermal Annealing **2003**, 63-68 74 Catalytic Chemical Vapor Deposition Recent Development and Future Prospects. Shinku/Journal of

73	Catalytic Chemical Vapor Deposition Recent Development and Future Prospects. Shinku/Journal of the Vacuum Society of Japan, 2003 , 46, 92-97		1
72	Recent Progress in Industrial Applications of CAT-CVD (Hot-Wire Cvd). <i>Materials Research Society Symposia Proceedings</i> , 2002 , 715, 1741		7
71	In situ chamber cleaning using atomic H in catalytic-CVD apparatus for mass production of a-Si:H solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2002 , 74, 373-377	6.4	7
70	Influence of atomic hydrogen on transparent conducting oxides during hydrogenated amorphous and microcrystalline Si preparation by catalytic chemical vapor deposition. <i>Thin Solid Films</i> , 2002 , 411, 166-170	2.2	11
69	What is the difference between catalytic CVD and plasma-enhanced CVD? Gas-phase kinetics and film properties. <i>Vacuum</i> , 2002 , 66, 293-297	3.7	5
68	Low-Resistivity Phosphorus-Doped Polycrystalline Silicon Thin Films Formed by Catalytic Chemical Vapor Deposition and Successive Rapid Thermal Annealing. <i>Japanese Journal of Applied Physics</i> , 2002 , 41, 501-506	1.4	14
67	Effects of atomic hydrogen in gas phase on a-Si:H and poly-Si growth by catalytic CVD. <i>Journal of Non-Crystalline Solids</i> , 2002 , 299-302, 9-13	3.9	23
66	Direct detection of H atoms in the catalytic chemical vapor deposition of the SiH4/H2 system. <i>Journal of Applied Physics</i> , 2002 , 91, 1650-1656	2.5	140
65	Development of Large-Area Uniform Deposition Technique on 1-m-Size Substrate by Catalytic Chemical Vapor Deposition <i>Shinku/Journal of the Vacuum Society of Japan</i> , 2002 , 45, 123-126		2
64	Preparation of Amorphous Silicon Films and Device Application by Catalytic Chemical Vapor Deposition Method. <i>Shinku/Journal of the Vacuum Society of Japan</i> , 2002 , 45, 727-732		
63	Identification and gas phase kinetics of radical species in Cat-CVD processes of SiH4. <i>Thin Solid Films</i> , 2001 , 395, 47-50	2.2	47
62	Development of Cat-CVD apparatus has method to control wafer temperatures under thermal influence of heated catalyzer. <i>Thin Solid Films</i> , 2001 , 395, 71-74	2.2	10
61	Photo-induced volume changes in a-Si:H films prepared by Cat-CVD method. <i>Thin Solid Films</i> , 2001 , 395, 84-86	2.2	6
60	Guiding principles for device-grade hydrogenated amorphous silicon films and design of catalytic chemical vapor deposition apparatus. <i>Thin Solid Films</i> , 2001 , 395, 112-115	2.2	8
59	High-stability hydrogenated amorphous silicon films for light-soaking prepared by catalytic CVD at high deposition rates. <i>Thin Solid Films</i> , 2001 , 395, 138-141	2.2	12
58	Influence of a-Si:H deposition by catalytic CVD on transparent conducting oxides. <i>Thin Solid Films</i> , 2001 , 395, 147-151	2.2	10
57	Proposal of catalytic chemical sputtering method and its application to prepare large grain size poly-Si. <i>Thin Solid Films</i> , 2001 , 395, 169-172	2.2	12

56	Formation of silicon films for solar cells by the Cat-CVD method. <i>Thin Solid Films</i> , 2001 , 395, 198-201	2.2	5
55	Fabrication of amorphous carbon nitride films by hot-wire chemical vapor deposition. <i>Thin Solid Films</i> , 2001 , 395, 249-252	2.2	9
54	A Cat-CVD Si3N4 film study and its application to the ULSI process. <i>Thin Solid Films</i> , 2001 , 395, 275-279	2.2	11
53	Low-k silicon nitride film for copper interconnects process prepared by catalytic chemical vapor deposition method at low temperature. <i>Thin Solid Films</i> , 2001 , 395, 280-283	2.2	10
52	Preparation of SiNx passivation films for PZT ferroelectric capacitors at low substrate temperatures by catalytic CVD. <i>Thin Solid Films</i> , 2001 , 395, 284-287	2.2	14
51	High performance amorphous-silicon thin film transistors prepared by catalytic chemical vapor deposition with high deposition rate. <i>Thin Solid Films</i> , 2001 , 395, 330-334	2.2	18
50	Dominant parameter determining dangling-bond density in hydrogenated amorphous silicon films prepared by catalytic chemical vapor deposition. <i>Solar Energy Materials and Solar Cells</i> , 2001 , 66, 259-26	55 ^{6.4}	12
49	Catalytic Chemical Sputtering: A Novel Method for Obtaining Large-Grain Polycrystalline Silicon. <i>Japanese Journal of Applied Physics</i> , 2001 , 40, L289-L291	1.4	31
48	Properties of Large Grain-Size poly-Si Films by Catalytic Chemical Sputtering. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 664, 451		4
47	Gas-Phase and Surface Reactions of Decomposed Species in Catalytic CVD. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 609, 1911		
46	Drastic Revolution in Catalytic Cvd using Catalytic PlatelInstead of Hot Wirelimaterials Research Society Symposia Proceedings, 2000, 609, 631		12
45	200 LC Preparation of SiNx Passivation Films for PZT Ferroelectric Capacitors by Catalytic CVD. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 655, 16		1
44	Novel thin-film fabrication method combining pulsed laser ablation and catalytic chemical vapor deposition: application to preparation of Er-doped hydrogenated amorphous Si films. <i>Vacuum</i> , 2000 , 59, 635-640	3.7	1
43	Control of Polycrystalline Silicon Structure by the Two-Step Deposition Method. <i>Japanese Journal of Applied Physics</i> , 2000 , 39, 3888-3895	1.4	10
42	Identification of Si and SiH in catalytic chemical vapor deposition of SiH4 by laser induced fluorescence spectroscopy. <i>Journal of Applied Physics</i> , 2000 , 88, 5437-5443	2.5	83
41	Effects of nitrogen incorporation on structural properties of fluorinated amorphous carbon films. Journal of Non-Crystalline Solids, 2000 , 271, 147-151	3.9	15
40	Transport mechanism of deposition precursors in catalytic chemical vapor deposition studied using a reactor tube. <i>Journal of Non-Crystalline Solids</i> , 2000 , 266-269, 100-104	3.9	39

38	Novel deposition technique of Er-doped a-Si:H combining catalytic chemical vapor deposition and pulsed laser-ablation. <i>Journal of Non-Crystalline Solids</i> , 2000 , 266-269, 136-140	3.9	3
37	Annealing Effect of Pb(Zr, Ti)O3Ferroelectric Capacitor in Active Ammonia Gas Cracked by Catalytic Chemical Vapor Deposition System. <i>Japanese Journal of Applied Physics</i> , 1999 , 38, 5358-5360	1.4	7
36	Effect of sputtering with hydrogen dilution on fluorine concentration of low hydrogen content fluorinated amorphous carbon thin films with low dielectric constant. <i>Journal of Applied Physics</i> , 1999 , 86, 2468-2472	2.5	46
35	Anisotropic electrical conduction and reduction in dangling-bond density for polycrystalline Si films prepared by catalytic chemical vapor deposition. <i>Journal of Applied Physics</i> , 1999 , 86, 985-990	2.5	13
34	Low-temperature crystallization of amorphous silicon using atomic hydrogen generated by catalytic reaction on heated tungsten. <i>Applied Physics Letters</i> , 1999 , 74, 2143-2145	3.4	62
33	Suppression of hexagonal GaN mixing by As4 molecular beam in cubic GaN growth on GaAs (0 0 1) substrates. <i>Journal of Crystal Growth</i> , 1999 , 201-202, 392-395	1.6	4
32	Surface cleaning and nitridation of compound semiconductors using gas-decomposition reaction in Cat-CVD method. <i>Thin Solid Films</i> , 1999 , 343-344, 528-531	2.2	13
31	CAT-CVD Process and its Application to Preparation of Si-Based Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 557, 67		16
30	Effects of Active Ammonia Gas Cracked in Catalytic-CVD on PZT Ferroelectric Capacitors. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 596, 271		2
29	Fabrication of Pb(Zr,Ti)O3/MgO/GaN/GaAs structure for optoelectronic device applications. <i>Journal of Crystal Growth</i> , 1998 , 189-190, 227-230	1.6	23
28	Structural and electrical properties of yttria-stabilized zirconia films with controlled Y content heteroepitaxially grown on Si by reactive sputtering. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1998 , 54, 79-83	3.1	30
27	Structural and conductivity change caused by N, O and C incorporation in a-Si:H. <i>Journal of Non-Crystalline Solids</i> , 1998 , 227-230, 403-406	3.9	5
26	Preparation of fluorinated amorphous carbon thin films. <i>Journal of Non-Crystalline Solids</i> , 1998 , 227-230, 641-644	3.9	29
25	Structural and electrical anisotropy and high absorption in poly-Si films prepared by catalytic chemical vapor deposition. <i>Journal of Non-Crystalline Solids</i> , 1998 , 227-230, 987-991	3.9	10
24	Changes in structure and nature of defects by annealing of fluorinated amorphous carbon thin films with low dielectric constant. <i>Applied Physics Letters</i> , 1998 , 72, 2704-2706	3.4	53
23	Effects of Oxygen Gas Addition and Substrate Cooling on Preparation of Amorphous Carbon Nitride Films by Magnetron Sputtering. <i>Japanese Journal of Applied Physics</i> , 1998 , 37, 4722-4725	1.4	7
22	Nitrogen-doping effects on electrical, optical, and structural properties in hydrogenated amorphous silicon. <i>Journal of Applied Physics</i> , 1997 , 81, 6729-6737	2.5	13
21	Influence of Pb incorporation on light-induced phenomena in amorphous Ge100\(\textstyle{\textstyle{I}}\) PbxSy thin films. Journal of Non-Crystalline Solids, 1997 , 217, 121-135	3.9	9

20	Nitrogen- and ammonia-plasma nitridation of hydrogenated amorphous silicon. <i>Applied Surface Science</i> , 1997 , 113-114, 610-613	6.7	2	
19	Interface control of Pb(ZrxTi1 ៤)O3 thin film on silicon substrate with heteroepitaxial YSZ buffer layer. <i>Applied Surface Science</i> , 1997 , 117-118, 429-433	6.7	19	
18	Influence of Buffer Layers on Lead Magnesium Niobate Titanate Thin Films Prepared by Pulsed Laser Ablation. <i>Japanese Journal of Applied Physics</i> , 1996 , 35, 4750-4754	1.4	23	
17	Mechanism of Stoichiometric Deposition of Volatile Elements in Multimetal-Oxide Films Prepared by Pulsed Laser Ablation. <i>Japanese Journal of Applied Physics</i> , 1996 , 35, L237-L240	1.4	16	
16	Origin of charged dangling bonds in nitrogen-doped hydrogenated amorphous silicon. <i>Journal of Non-Crystalline Solids</i> , 1996 , 198-200, 395-398	3.9	11	
15	N2-plasma-nitridation effects on porous silicon. <i>Thin Solid Films</i> , 1996 , 281-282, 568-571	2.2	3	
14	X-ray photoelectron spectroscopy and electron spin resonance studies on O2 and N2O plasma oxidation of silicon. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1996 , 39, 173-178	3.1	2	
13	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. <i>Journal of Crystal Growth</i> , 1996 , 158, 84-88	1.6	34	
12	Ambient-pressure influence on droplet formation and thickness distribution in pulsed laser ablation. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1996 , 41, 161-165	3.1	10	
11	Interfacial neutral- and charged-dangling-bond densities between hydrogenated amorphous silicon and hydrogenated amorphous silicon nitride in top nitride and bottom nitride structures. <i>Applied Physics Letters</i> , 1995 , 66, 2718-2720	3.4	5	
10	Highly OrientedPb(Zr,Ti)O3Thin Films Prepared by Pulsed Laser Ablation on GaAs and Si Substrates with MgO Buffer Layer. <i>Japanese Journal of Applied Physics</i> , 1995 , 34, 5154-5157	1.4	45	
9	NH3-Plasma-Nitridation Process of (100) GaAs Surface Observed by Angle-Dependent X-Ray Photoelectron Spectroscopy. <i>Japanese Journal of Applied Physics</i> , 1995 , 34, 1075-1079	1.4	33	
8	Correlation between a.c. transport and electron spin resonance in amorphous Ge-S films alloyed with lead. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1994 , 70, 1035-1044		5	
7	Relationship between Electrical Conductivity and Charged- Dangling-Bond Density in Nitrogen- and Phosphorus-Doped Hydrogenated Amorphous Silicon. <i>Japanese Journal of Applied Physics</i> , 1994 , 33, L	129 5 -L1	12 9 7	
6	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	1.4	43	
5	Ultrathin SiO2 films on Si formed by N2O-plasma oxidation technique. <i>Applied Surface Science</i> , 1994 , 81, 277-280	6.7	12	
4	Spectroscopic Study on N2O-Plasma Oxidation of Hydrogenated Amorphous Silicon and Behavior of Nitrogen. <i>Japanese Journal of Applied Physics</i> , 1993 , 32, 2794-2802	1.4	18	
3	Novel oxidation process of hydrogenated amorphous silicon utilizing nitrous oxide plasma. <i>Applied Physics Letters</i> , 1992 , 61, 816-818	3.4	16	

Relationship between Photodarkening and Light-Induced ESR in Amorphous Ge-S Films Alloyed with Lead. *Japanese Journal of Applied Physics*, **1991**, 30, L1075-L1078

1.4 17

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

3.9