Armin G Aberle

List of Publications by Year
in descending order

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166 papers	4,686 citations	147566 31 h-index	118652 62 g-index
171 all docs	171 docs citations	171 times ranked	4919 citing authors

#	Article	IF	Citations
1	Surface passivation of crystalline silicon solar cells: a review. Progress in Photovoltaics: Research and Applications, 2000, 8, 473-487.	4.4	571
2	Recent progress in flexibleâ€“wearable solar cells for self-powered electronic devices. Energy and Environmental Science, 2020, 13, 685-743.	15.6	340
3	Potential-induced degradation in photovoltaic modules: a critical review. Energy and Environmental Science, 2017, 10, 43-68.	15.6	329
4	Thin-film solar cells. Thin Solid Films, 2009, 517, 4706-4710.	0.8	244
5	A review of crystalline silicon bifacial photovoltaic performance characterisation and simulation. Energy and Environmental Science, 2019, 12, 116-148.	15.6	155
6	Excellent c-Si surface passivation by low-temperature atomic layer deposited titanium oxide. Applied Physics Letters, 2014, 104, .	1.5	126
7	A Fill Factor Loss Analysis Method for Silicon Wafer Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 1170-1177.	1.5	119
8	Performance Degradation of Various PV Module Technologies in Tropical Singapore. IEEE Journal of Photovoltaics, 2014, 4, 1288-1294.	1.5	90
9	A comparative life-cycle assessment of photovoltaic electricity generation in Singapore by multicrystalline silicon technologies. Solar Energy Materials and Solar Cells, 2018, 174, 157-162.	3.0	88
10	Optimal Orientation and Tilt Angle for Maximizing in-Plane Solar Irradiation for PV Applications in Singapore. IEEE Journal of Photovoltaics, 2014, 4, 647-653.	1.5	82
11	monoPolyâ„¢ cells: Large-area crystalline silicon solar cells with fire-through screen printed contact to doped polysilicon surfaces. Solar Energy Materials and Solar Cells, 2018, 187, 76-81.	3.0	79
12	The realistic energy yield potential of GaAs-on-Si tandem solar cells: a theoretical case study. Optics Express, 2015, 23, A382.	1.7	72
13	Highly Efficient Semitransparent Perovskite Solar Cells for Four Terminal Perovskite-Silicon Tandems. ACS Applied Materials & Interfaces, 2019, 11, 34178-34187.	4.0	71
14	Revealing the Degradation and Selfâ€Healing Mechanisms in Perovskite Solar Cells by Subâ€Bandgap External Quantum Efficiency Spectroscopy. Advanced Materials, 2021, 33, e2006170.	11.1	64
15	Elucidating potentialâ€induced degradation in bifacial PERC silicon photovoltaic modules. Progress in Photovoltaics: Research and Applications, 2018, 26, 859-867.	4.4	55
16	A Systematic Loss Analysis Method for Rear-Passivated Silicon Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 619-626.	1.5	53
17	Analytical Review of Spiroâ€OMeTAD Hole Transport Materials: Paths Toward Stable and Efficient Perovskite Solar Cells. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	53
18	A Quantitative Analysis of Photovoltaic Modules Using Halved Cells. International Journal of Photoenergy, 2013, 2013, 1-8.	1.4	50

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19	Advanced loss analysis method for silicon wafer solar cells. Energy Procedia, 2011, 8, 244-249.	1.8	47
20	Investigation of the Impact of Illumination on the Polarization-Type Potential-Induced Degradation of Crystalline Silicon Photovoltaic Modules. IEEE Journal of Photovoltaics, 2018, 8, 1168-1173.	1.5	44
21	Development of thin polysilicon layers for application in monoPolyâ„¢ cells with screen-printed and fired metallization. Solar Energy Materials and Solar Cells, 2020, 207, 110358.	3.0	44
22	Quantitative Electroluminescence Imaging Analysis for Performance Estimation of PID-Influenced PV Modules. IEEE Journal of Photovoltaics, 2018, 8, 1281-1288.	1.5	42
23	Effect of Solar Spectrum on the Performance of Various Thin-Film PV Module Technologies in Tropical Singapore. IEEE Journal of Photovoltaics, 2014, 4, 1268-1274.	1.5	41
24	Influence of random pyramid surface texture on silver screen-printed contact formation for monocrystalline silicon wafer solar cells. Solar Energy Materials and Solar Cells, 2015, 132, 589-596.	3.0	40
25	Determination of metal contact recombination parameters for silicon wafer solar cells by photoluminescence imaging. Solar Energy, 2015, 118, 20-27.	2.9	39
26	Ultra-thin atomic layer deposited aluminium oxide tunnel layer passivated hole-selective contacts for silicon solar cells. Solar Energy Materials and Solar Cells, 2019, 191, 164-174.	3.0	39
27	Shunting problems due to subâ€micron pinholes in evaporated solidâ€phase crystallised polyâ€Si thinâ€film solar cells on glass. Progress in Photovoltaics: Research and Applications, 2009, 17, 35-46.	4.4	37
28	Advanced modeling of the effective minority carrier lifetime of passivated crystalline silicon wafers. Journal of Applied Physics, 2012, 112, .	1.1	36
29	Effect of sodium diffusion on the properties of CIGS solar absorbers prepared using elemental Se in a two-step process. Scientific Reports, 2019, 9, 2637.	1.6	36
30	Analysis of intrinsic hydrogenated amorphous silicon passivation layer growth for use in heterojunction silicon wafer solar cells by optical emission spectroscopy. Journal of Applied Physics, 2013, 113, .	1.1	34
31	Analysis of the Long-Term Performance Degradation of Crystalline Silicon Photovoltaic Modules in Tropical Climates. IEEE Journal of Photovoltaics, 2019, 9, 266-271.	1.5	34
32	Analysing partial shading of PV modules by circuit modelling. , 2012, , .		33
33	Extremely low surface recombination velocities on lowâ€resistivity nâ€type and pâ€type crystalline silicon using dynamically deposited remote plasma silicon nitride films. Progress in Photovoltaics: Research and Applications, 2014, 22, 641-647.	4.4	32
34	Numerical Analysis of Radiative Recombination and Reabsorption in GaAs/Si Tandem. IEEE Journal of Photovoltaics, 2015, 5, 1079-1086.	1.5	32
35	Analysis of Fine-Line Screen and Stencil-Printed Metal Contacts for Silicon Wafer Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 525-533.	1.5	32
36	Modified Surface Texturing of Aluminium-Doped Zinc Oxide (AZO) Transparent Conductive Oxides for Thin-Film Silicon Solar Cells. Energy Procedia, 2013, 33, 157-165.	1.8	31

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37	Investigation of the thickness effect on material and surface texturing properties of sputtered ZnO:Al films for thin-film Si solar cell applications. Vacuum, 2016, 123, 151-159.	1.6	31
38	Investigation of Potential-Induced Degradation in n-PERT Bifacial Silicon Photovoltaic Modules with a Glass/Glass Structure. IEEE Journal of Photovoltaics, 2018, 8, 16-22.	1.5	31
39	Evaluating the electrical properties of silicon wafer solar cells using hyperspectral imaging of luminescence. Applied Physics Letters, 2011, 99, 221915.	1.5	29
40	A new method to characterize bifacial solar cells. Progress in Photovoltaics: Research and Applications, 2014, 22, 903-909.	4.4	27
41	Screen-printed masking of transparent conductive oxide layers for copper plating of silicon heterojunction cells. Applied Surface Science, 2015, 349, 880-886.	3.1	27
42	Towards 22% efficient screen-printed bifacial n-type silicon solar cells. Solar Energy Materials and Solar Cells, 2018, 187, 91-96.	3.0	27
43	Impact of the phosphorus emitter doping profile on metal contact recombination of silicon wafer solar cells. Solar Energy Materials and Solar Cells, 2016, 147, 171-176.	3.0	26
44	Simulation and optimization of metal-insulator-semiconductor inversion-layer silicon solar cells. IEEE Transactions on Electron Devices, 2000, 47, 2167-2178.	1.6	25
45	Efficiency enhancement of ultra-thin Cu(In,Ga)Se2 solar cells: optimizing the absorber bandgap profile by numerical device simulations. Current Applied Physics, 2016, 16, 1334-1341.	1.1	25
46	Progress in screen-printed metallization of industrial solar cells with SiOx/poly-Si passivating contacts. Solar Energy Materials and Solar Cells, 2020, 218, 110751.	3.0	25
47	Characterization of screen printed and fire-through contacts on LPCVD based passivating contacts in monoPolyâ„¢ solar cells. Solar Energy, 2020, 202, 73-79.	2.9	25
48	Excellent boron emitter passivation for highâ€efficiency Si wafer solar cells using AlO_x/SiN_x dielectric stacks deposited in an industrial inline plasma reactor. Progress in Photovoltaics: Research and Applications, 2013, 21, 760-764.	4.4	24
49	Comparative study of amorphous indium tin oxide prepared by pulsed-DC and unbalanced RF magnetron sputtering at low power and low temperature conditions for heterojunction silicon wafer solar cell applications. Vacuum, 2015, 119, 68-76.	1.6	24
50	On the methodology of energy yield assessment for one-Sun tandem solar cells. Solar Energy, 2016, 135, 598-604.	2.9	24
51	Efficiency improvement of CIGS solar cells by a modified rear contact. Solar Energy, 2017, 157, 486-495.	2.9	24
52	Evidence for Chemicals Intermingling at Silicon/Titanium Oxide (TiO_x) Interface and Existence of Multiple Bonding States in Monolithic TiO_x. Advanced Functional Materials, 2018, 28, 1707018.	7.8	23
53	Economic Viability Analysis of Silicon Solar Cell Manufacturing: Al-BSF versus PERC. Energy Procedia, 2017, 130, 43-49.	1.8	22
54	In-Situ Characterization of Potential-Induced Degradation in Crystalline Silicon Photovoltaic Modules Through Dark Iâ€“V Measurements. IEEE Journal of Photovoltaics, 2017, 7, 104-109.	1.5	22

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55	A Worldwide Theoretical Comparison of Outdoor Potential for Various Silicon-Based Tandem Module Architecture. Cell Reports Physical Science, 2020, 1, 100037.	2.8	22
56	Analytical solution for haze values of aluminium-induced texture (AIT) glass superstrates for a-Si:H solar cells. Optics Express, 2014, 22, A53.	1.7	21
57	Polarization analysis of luminescence for the characterization of silicon wafer solar cells. Applied Physics Letters, 2011, 98, .	1.5	20
58	Light Scattering Enhancement by Double Scattering Technique for Multijunction Thin-Film Silicon Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 605-612.	1.5	19
59	Excellentc-Si surface passivation by thermal atomic layer deposited aluminum oxide after industrial firing activation. Journal Physics D: Applied Physics, 2013, 46, 385102.	1.3	19
60	Deposition temperature independent excellent passivation of highly boron doped silicon emitters by thermal atomic layer deposited Al2O3. Journal of Applied Physics, 2013, 114, 094505.	1.1	18
61	Excellent Silicon Surface Passivation Achieved by Industrial Inductively Coupled Plasma Deposited Hydrogenated Intrinsic Amorphous Silicon Suboxide. International Journal of Photoenergy, 2014, 2014, 1-12.	1.4	18
62	Wet-Chemical Surface Texturing of Sputter-Deposited ZnO:Al Films as Front Electrode for Thin-Film Silicon Solar Cells. International Journal of Photoenergy, 2015, 2015, 1-10.	1.4	18
63	Predicting the outdoor performance of flat-plate IIIâ€“V/Si tandem solar cells. Solar Energy, 2017, 149, 77-84.	2.9	18
64	Embedding physics domain knowledge into a Bayesian network enables layer-by-layer process innovation for photovoltaics. Npj Computational Materials, 2020, 6, .	3.5	18
65	Progress with passivation and screen-printed metallization of Boron-doped monoPolyâ„¢ layers. Solar Energy, 2022, 231, 8-26.	2.9	18
66	Wire bonding as a cell interconnection technique for polycrystalline silicon thinâ€film solar cells on glass. Progress in Photovoltaics: Research and Applications, 2010, 18, 221-228.	4.4	17
67	Optimisation of p-doped Î¼c-Si:H Emitter Layers in Crystalline-amorphous Silicon Heterojunction Solar Cells. Energy Procedia, 2012, 15, 118-128.	1.8	17
68	Surface texturing studies of bilayer transparent conductive oxide (TCO) structures as front electrode for thin-film silicon solar cells. Journal of Materials Science: Materials in Electronics, 2015, 26, 7049-7058.	1.1	17
69	Characterisation and Optimisation of Indium Tin Oxide Films Deposited by Pulsed DC Magnetron Sputtering for Heterojunction Silicon Wafer Solar Cell Applications. Energy Procedia, 2013, 33, 91-98.	1.8	16
70	Integration of Î²-FeSi2 with poly-Si on glass for thin-film photovoltaic applications. RSC Advances, 2013, 3, 7733.	1.7	16
71	Effect of deposition pressure on the properties of magnetron-sputter-deposited molybdenum back contacts for CIGS solar cells. Japanese Journal of Applied Physics, 2015, 54, 08KC14.	0.8	16
72	An Improved Methodology for Extracting the Interface Defect Density of Passivated Silicon Solar Cells. IEEE Journal of Photovoltaics, 2016, 6, 1080-1089.	1.5	16

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73	Structural, electronic and optical properties of Ag2MgSn(S/Se)4 quaternary chalcogenides as solar cell absorber layer: An Ab-initio study. Solar Energy, 2020, 209, 206-213.	2.9	16
74	Impact of firing temperature on fire-through metal contacts to P-doped (n) and B-doped (p) poly-Si. Solar Energy Materials and Solar Cells, 2021, 230, 111217.	3.0	16
75	Influence of discharge power and annealing temperature on the properties of indium tin oxide thin films prepared by pulsed-DC magnetron sputtering. Vacuum, 2015, 121, 187-193.	1.6	15
76	Adhesion Improvement and Characterization of Magnetron Sputter Deposited Bilayer Molybdenum Thin Films for Rear Contact Application in CIGS Solar Cells. International Journal of Photoenergy, 2016, 2016, 1-10.	1.4	15
77	Predictive simulation framework for boron diffused p+ layer optimization: Sensitivity analysis of boron tube diffusion process parameters of industrial n-type silicon wafer solar cells. Solar Energy Materials and Solar Cells, 2019, 189, 63-74.	3.0	15
78	Surface passivation of crystalline silicon solar cells: a review. , 2000, 8, 473.		15
79	Effects of sheet resistance and contact shading on the characterization of solar cells by open-circuit voltage measurements. Journal of Applied Physics, 2003, 94, 2473-2479.	1.1	14
80	Analysing Solar Cells by Circuit Modelling. Energy Procedia, 2012, 25, 28-33.	1.8	14
81	Surface passivation investigation on ultra-thin atomic layer deposited aluminum oxide layers for their potential application to form tunnel layer passivated contacts. Japanese Journal of Applied Physics, 2017, 56, 08MB14.	0.8	14
82	Determination of Metallization-Induced Recombination Losses of Screen-Printed Silicon Solar Cell Contacts and Their Dependence on the Doping Profile. IEEE Journal of Photovoltaics, 2018, 8, 1470-1477.	1.5	14
83	Investigation of Potential-Induced Degradation in Bifacial n-PERL Modules. IEEE Journal of Photovoltaics, 2020, 10, 935-939.	1.5	14
84	Anomalous temperature dependence of diode saturation currents in polycrystalline silicon thin-film solar cells on glass. Journal of Applied Physics, 2009, 105, 103705.	1.1	13
85	Dielectric Charge Tailoring in PECVD SiO<inline-formula> <tex-math>${}_x$</tex-math> </inline-formula>/SiN <inline-formula> <tex-math>${}_x$</tex-math> </inline-formula> Stacks and Application at the Rear of Al Local Back Surface Field Si Wafer Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 1014-1019.	1.5	13
86	Numerical Simulation of Doping Process by BBr3 Tube Diffusion for Industrial n -Type Silicon Wafer Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 755-762.	1.5	13
87	Fourâ€Terminal Perovskite on Silicon Tandem Solar Cells Optimal Measurement Schemes. Energy Technology, 2020, 8, 1901267.	1.8	13
88	Impact of the n+ emitter layer on the structural and electrical properties of p-type polycrystalline silicon thin-film solar cells. Journal of Applied Physics, 2013, 114, 134505.	1.1	12
89	Comparison of Angular Reflectance Losses Between PV Modules With Planar and Textured Glass Under Singapore Outdoor Conditions. IEEE Journal of Photovoltaics, 2014, 4, 362-367.	1.5	12
90	Optoelectrical properties of high-performance low-pressure chemical vapor deposited phosphorus-doped polysilicon layers for passivating contact solar cells. Thin Solid Films, 2020, 699, 137886.	0.8	12

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91	Investigation of Screen-Printed Rear Contacts for Aluminum Local Back Surface Field Silicon Wafer Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 690-696.	1.5	11
92	Role of post-metallization anneal sequence and forming gas anneal to mitigate light and elevated temperature induced degradation of multicrystalline silicon solar cells. Solar Energy Materials and Solar Cells, 2019, 195, 160-167.	3.0	11
93	Fast extraction of front ribbon resistance of silicon photovoltaic modules using electroluminescence imaging. Solar Energy, 2019, 194, 688-695.	2.9	11
94	Impact of Sn doping on methylammonium lead chloride perovskite: An experimental study. Journal of Applied Physics, 2020, 127, .	1.1	11
95	Investigation of Wide Process Temperature Window for Amorphous Silicon Suboxide Thin-Film Passivation Deposited by Inductively Coupled PECVD. IEEE Journal of Photovoltaics, 2015, 5, 705-710.	1.5	10
96	Two-dimensional current flow in stringed PV cells and its influence on the cell-to-module resistive losses. Solar Energy, 2016, 130, 224-231.	2.9	10
97	Analysis of Microstructure and Surface Morphology of Sputter Deposited Molybdenum Back Contacts for CIGS Solar Cells. Procedia Engineering, 2016, 139, 1-6.	1.2	10
98	Optimization of Belt Furnace Anneal to Reduce Light and Elevated Temperature Induced Degradation of Effective Carrier Lifetime of Pâ€Type Multicrystalline Silicon Wafers. Solar Rrl, 2018, 2, 1800070.	3.1	10
99	Investigation of polysilicon passivated contact's resilience to potential-induced degradation. Solar Energy Materials and Solar Cells, 2019, 195, 168-173.	3.0	10
100	Impact of the manufacturing process on the reverse-bias characteristics of high-efficiency n-type bifacial silicon wafer solar cells. Solar Energy Materials and Solar Cells, 2019, 191, 117-122.	3.0	10
101	Analysis of Optical and Morphological Properties of Aluminium Induced Texture Glass Superstrates. Japanese Journal of Applied Physics, 2012, 51, 10NB08.	0.8	10
102	Observations on the spectral characteristics of defect luminescence of silicon wafer solar cells. , 2010, , .		9
103	Three-dimensional numerical analysis of hybrid heterojunction silicon wafer solar cells with heterojunction rear point contacts. AIP Advances, 2015, 5, .	0.6	9
104	Investigation of Low-Temperature Hydrogen Plasma-Etching Processes for Silicon Wafer Solar Cell Surface Passivation in an Industrial Inductively Coupled Plasma Deposition Tool. IEEE Journal of Photovoltaics, 2016, 6, 10-16.	1.5	9
105	Polarisation analysis of luminescence for the characterisation of defects in silicon wafer solar cells. Progress in Photovoltaics: Research and Applications, 2012, 20, 661-669.	4.4	8
106	Investigation of laser ablation on boron emitters for nâ€type rearâ€junction PERT type silicon wafer solar cells. Progress in Photovoltaics: Research and Applications, 2015, 23, 1706-1714.	4.4	8
107	Optimizing the Front Electrode of Silicon-Wafer-Based Solar Cells and Modules. IEEE Journal of Photovoltaics, 2013, 3, 716-722.	1.5	7
108	Study of hydrogen influence and conduction mechanism of amorphous indium tin oxide for heterojunction silicon wafer solar cells. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2226-2232.	0.8	7

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109	Determination of Metal-Induced Recombination of n-Type Bifacial Si Solar Cells Using Special Print Patterns. IEEE Journal of Photovoltaics, 2019, 9, 643-651.	1.5	7
110	Device Modeling for High Efficiency Lead Free Perovskite Solar Cell with Cu₂O as Hole Transport Material. , 2019, , .		7
111	Exploring the effect of Ga3+ doping on structural, electronic and optical properties of CH3NH3PbCl3 perovskites: an experimental study. Journal of Materials Science: Materials in Electronics, 2021, 32, 12841-12855.	1.1	7
112	Excellent passivation of thin silicon wafers by HF-free hydrogen plasma etching using an industrial ICPECVD tool. Physica Status Solidi - Rapid Research Letters, 2015, 9, 47-52.	1.2	6
113	Modulated Photoluminescence Lifetime Measurement of Bifacial Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 1687-1692.	1.5	6
114	Device Simulation of Ag₂SrSnS₄ and Ag₂SrSnSe₄ Based Thinâ€Film Solar Cells from Scratch. Advanced Theory and Simulations, 2022, 5, .	1.3	6
115	Static Large-Area Hydrogenation of Polycrystalline Silicon Thin-Film Solar Cells on Glass Using a Linear Microwave Plasma Source. IEEE Journal of Photovoltaics, 2012, 2, 580-585.	1.5	5
116	Investigating Local Inhomogeneity Effects of Silicon Wafer Solar Cells by Circuit Modelling. Energy Procedia, 2013, 33, 110-117.	1.8	5
117	Hybrid silver nanoparticle and transparent conductive oxide structure for silicon solar cell applications. Physica Status Solidi - Rapid Research Letters, 2014, 8, 399-403.	1.2	5
118	Optical Modeling of Alkaline Saw-Damage-Etched Rear Surfaces of Monocrystalline Silicon Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 1436-1444.	1.5	5
119	Mitigating Light and Elevated Temperature Induced Degradation in Multicrystalline Silicon Wafers and PERC Solar Cells Using Phosphorus Diffusion Gettering. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800160.	0.8	5
120	An ab-initio investigation of mechanical and thermodynamic properties of Ag2MgSn(S/Se)4 in kesterite and stannite phases. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	5
121	Surface passivation of crystalline silicon solar cells: a review. , 0, .		5
122	Laser assisted boron doping of silicon wafer solar cells using nanosecond and picosecond laser pulses. , 2011, , .		4
123	State-of-the-art surface passivation of boron emitters using inline PECVD AlO<inf>x</inf>/SiN<inf>x</inf> stacks for industrial high-efficiency silicon wafer solar cells. , 2012, , .		4
124	Electrical activity of geometrically necessary dislocations in polycrystalline silicon thin films prepared by solid phase crystallization. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 2488-2492.	0.8	4
125	Influence of nonâ€uniform fine lines in silicon solar cell front metal grid design. Progress in Photovoltaics: Research and Applications, 2015, 23, 1877-1883.	4.4	4
126	Progress with surface passivation of heavily doped n+ silicon by industrial PECVD SiNx films. , 2015, , .		4

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127	Optical scattering modeling of etched ZnO:Al superstrates and device simulation studies of a-Si:H solar cells with different texture morphologies. Applied Optics, 2016, 55, 6718.	2.1	4
128	Numerical investigation of metalâ€“semiconductorâ€“insulatorâ€“semiconductor passivated hole contacts based on atomic layer deposited AlO _x . Japanese Journal of Applied Physics, 2017, 56, 08MB08.	0.8	4
129	Study of large-grained n-type polycrystalline silicon thin films made by the solid phase crystallization method. , 2013, , .		3
130	Extracting physical properties of arbitrarily shaped laser-doped micro-scale areas in semiconductors. Applied Physics Letters, 2013, 103, .	1.5	3
131	Synthesis and characterization of large-grain solid-phase crystallized polycrystalline silicon thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, 061509.	0.9	3
132	On the use of a charged tunnel layer as a hole collector to improve the efficiency of amorphous silicon thin-film solar cells. Journal of Applied Physics, 2015, 117, .	1.1	3
133	Impact of Light Soaking on pâ€•Type Boronâ€•and Indiumâ€Doped Passivated Emitter and Rear Solar Cells on Czochralskiâ€Grown Silicon. Solar Rrl, 2019, 3, 1900027.	3.1	3
134	Development of p⁺/n⁺ Polysilicon Tunnel Junctions Compatible for Industrial Screen Printing. , 2019, , .		3
135	Largeâ€area monoPoly solar cells on 110â€‰Î¼m thin câ€“Si wafers with a rear n⁺polyâ€Si/SiO_x stack deposited by inline plasmaâ€enhanced chemical vapour deposition. Progress in Photovoltaics: Research and Applications, 2023, 31, 360-368.	4.4	3
136	Thick poly-Si films fabricated by the aluminium-induced crystallization bi-layer process on glass substrates. , 0, , .		2
137	Recent Advances in Solar Cells. Advances in OptoElectronics, 2007, 2007, 1-2.	0.6	2
138	Aluminum induced glass texturing process on borosilicate and soda-lime glass superstrates for thin-film solar cells. , 2011, , .		2
139	Investigation of defect luminescence from multicrystalline Si wafer solar cells using Xâ€ray fluorescence and luminescence imaging. Physica Status Solidi - Rapid Research Letters, 2012, 6, 460-462.	1.2	2
140	Accurate potential drop sheet resistance measurements of laser-doped areas in semiconductors. Journal of Applied Physics, 2014, 116, 134505.	1.1	2
141	Effects of indium tin oxide on the performance of heterojunction silicon wafer solar cells. Japanese Journal of Applied Physics, 2017, 56, 08MB17.	0.8	2
142	Ultra-Thin GaAs Double-Junction Solar Cell With Carbon-Doped Emitter. IEEE Journal of Photovoltaics, 2018, 8, 1627-1634.	1.5	2
143	Initial Results of monoPolyTM Silicon Solar Cells at SERIS. , 2018, , .		2
144	Small-area Passivated Contact monoPoly^{TM} Silicon Solar Cells for Tandem Device Integration. , 2019, , .		2

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145	Mid-infrared characterization and modelling of transparent conductive oxides. Solar Energy, 2020, 209, 424-430.	2.9	2
146	First principle study on structural and optoelectronic properties and band-gap modulation in germanium incorporated tin (IV) oxide. Materials Today Communications, 2021, 27, 102393.	0.9	2
147	Thermally stable polyâ€Si tunnel junctions enabling nextâ€generation highâ€efficiency Si solar cells. Progress in Photovoltaics: Research and Applications, 2022, 30, 85-95.	4.4	2
148	Commencement of world's first Bachelor of Engineering in Photovoltaics and Solar Energy. , 0, , .		1
149	Thin semiconducting layers as selective emitters in thermophotonic systems. , 0, , .		1
150	Voc Saturation Effect in High-temperature Hydrogenated Polycrystalline Silicon Thin-film Solar Cells. Materials Research Society Symposia Proceedings, 2011, 1321, 33.	0.1	1
151	Aluminum local back surface field solar cells with inkjet-opened rear dielectric films. , 2012, , .		1
152	Femtosecond vs Nanosecond: An Analysis on the Laser Ablation Properties of Dielectric Layers for Solar Cells. , 2017, , .		1
153	Implementation of a novel LED based light soaking system for solar cell characterisation. , 2018, , .		1
154	Impact of femtosecond laser processing on dielectric layers for solar cell applications. Journal of Laser Applications, 2018, 30, 032019.	0.8	1
155	A Comprehensive Fundamental Understanding of Atomic Layer Deposited Titanium Oxide Films for c-Si Solar Cell Applications. IEEE Journal of Photovoltaics, 2021, 11, 319-328.	1.5	1
156	Advanced Modelling of Silicon Wafer Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10NA06.	0.8	1
157	Numerical Simulation of Tunneling Effect in High-Efficiency Perovskite/Silicon Tandem Solar Cell. , 2020, , .		1
158	Materials Engineering Education in Two New Engineering Degree Programs at the Centre for Photovoltaic Engineering. Materials Research Society Symposia Proceedings, 2005, 909, 1.	0.1	0
159	Series resistance modeling of complex metallization geometries of solar cells using conductive line decomposition. , 2012, , .		0
160	Micro Raman Spectroscopy Analysis of Doped Amorphous and Microcrystalline Silicon Thin Film Layers and its Application in Heterojunction Silicon Wafer Solar Cells. Transactions of the Materials Research Society of Japan, 2014, 39, 11-18.	0.2	0
161	Solar Energy and Energy Storage Materials and Devices Research in Singapore. , 2016, , 113-156.		0
162	A New Method to Quantify Contact Resistance Using Localized-Illumination Photoluminescence Technique in a Solar Cell. , 2017, , .		0

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163	Towards Monolithically Integrated GaAs on Si Tandem Solar Cell. , 2017, , .		0
164	Growth and Composition of Atomic Layer Deposited Titanium Oxide Films for c-Si Solar Cell Applications. , 2018, , .		0
165	Novel Firing Stable n^{+}/p^{+} Polysilicon Tunnel Junction and its Successful Device Integration. , 2020, , .		0
166	(Invited) Progress with Crystalline Silicon Solar Cells and Modules at SERIS. ECS Meeting Abstracts, 2020, MA2020-02, 1847-1847.	0.0	0