

# Armin G Aberle

## List of Publications by Year in descending order

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166  
papers

4,686  
citations

147566

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118652

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docs citations

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times ranked

4919  
citing authors

#	ARTICLE	IF	CITATIONS
1	Large-area monoPoly solar cells on 110- $\mu\text{m}$ thin $\text{c-Si}$ wafers with a rear $\text{n}^+\text{poly-Si}/\text{SiO}_2$ stack deposited by inline plasma-enhanced chemical vapour deposition. Progress in Photovoltaics: Research and Applications, 2023, 31, 360-368.	4.4	3
2	Thermally stable $\text{poly-Si}$ tunnel junctions enabling next-generation high-efficiency Si solar cells. Progress in Photovoltaics: Research and Applications, 2022, 30, 85-95.	4.4	2
3	Progress with passivation and screen-printed metallization of Boron-doped $\text{poly-Si}$ layers. Solar Energy, 2022, 231, 8-26.	2.9	18
4	Device Simulation of $\text{Ag}_2\text{SrSnS}_4$ and $\text{Ag}_2\text{SrSnSe}_4$ Based Thin-Film Solar Cells from Scratch. Advanced Theory and Simulations, 2022, 5, .	1.3	6
5	Analytical Review of Spiro-OMeTAD Hole Transport Materials: Paths Toward Stable and Efficient Perovskite Solar Cells. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	53
6	Exploring the effect of $\text{Ga}^{3+}$ doping on structural, electronic and optical properties of $\text{CH}_3\text{NH}_3\text{PbCl}_3$ perovskites: an experimental study. Journal of Materials Science: Materials in Electronics, 2021, 32, 12841-12855.	1.1	7
7	Revealing the Degradation and Self-Healing Mechanisms in Perovskite Solar Cells by Sub-Bandgap External Quantum Efficiency Spectroscopy. Advanced Materials, 2021, 33, e2006170.	11.1	64
8	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
9	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
10	An ab-initio investigation of mechanical and thermodynamic properties of $\text{Ag}_2\text{MgSn}(\text{S}/\text{Se})_4$ in kesterite and stannite phases. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	5
11	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
12	Development of thin polysilicon layers for application in $\text{poly-Si}$ cells with screen-printed and fired metallization. Solar Energy Materials and Solar Cells, 2020, 207, 110358.	3.0	44
13	Four-Terminal Perovskite on Silicon Tandem Solar Cells Optimal Measurement Schemes. Energy Technology, 2020, 8, 1901267.	1.8	13
14	Progress in screen-printed metallization of industrial solar cells with $\text{SiO}_2/\text{poly-Si}$ passivating contacts. Solar Energy Materials and Solar Cells, 2020, 218, 110751.	3.0	25
15	Structural, electronic and optical properties of $\text{Ag}_2\text{MgSn}(\text{S}/\text{Se})_4$ quaternary chalcogenides as solar cell absorber layer: An Ab-initio study. Solar Energy, 2020, 209, 206-213.	2.9	16
16	Mid-infrared characterization and modelling of transparent conductive oxides. Solar Energy, 2020, 209, 424-430.	2.9	2
17	Characterization of screen printed and fire-through contacts on LPCVD based passivating contacts in $\text{poly-Si}$ solar cells. Solar Energy, 2020, 202, 73-79.	2.9	25
18	Impact of Sn doping on methylammonium lead chloride perovskite: An experimental study. Journal of Applied Physics, 2020, 127, .	1.1	11

#	ARTICLE	IF	CITATIONS
19	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
20	Embedding physics domain knowledge into a Bayesian network enables layer-by-layer process innovation for photovoltaics. Npj Computational Materials, 2020, 6, .	3.5	18
21	Recent progress in flexible “wearable solar cells for self-powered electronic devices. Energy and Environmental Science, 2020, 13, 685-743.	15.6	340
22	A Worldwide Theoretical Comparison of Outdoor Potential for Various Silicon-Based Tandem Module Architecture. Cell Reports Physical Science, 2020, 1, 100037.	2.8	22
23	Investigation of Potential-Induced Degradation in Bifacial n-PERL Modules. IEEE Journal of Photovoltaics, 2020, 10, 935-939.	1.5	14
24	Numerical Simulation of Tunneling Effect in High-Efficiency Perovskite/Silicon Tandem Solar Cell. , 2020, , .		1
25	Novel Firing Stable $n^{+}/p^{+}$ Polysilicon Tunnel Junction and its Successful Device Integration. , 2020, , .		0
26	(Invited) Progress with Crystalline Silicon Solar Cells and Modules at SERIS. ECS Meeting Abstracts, 2020, MA2020-02, 1847-1847.	0.0	0
27	Highly Efficient Semitransparent Perovskite Solar Cells for Four Terminal Perovskite-Silicon Tandems. ACS Applied Materials & Interfaces, 2019, 11, 34178-34187.	4.0	71
28	A review of crystalline silicon bifacial photovoltaic performance characterisation and simulation. Energy and Environmental Science, 2019, 12, 116-148.	15.6	155
29	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
30	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
31	Investigation of polysilicon passivated contact's resilience to potential-induced degradation. Solar Energy Materials and Solar Cells, 2019, 195, 168-173.	3.0	10
32	Impact of Light Soaking on p-Type Boron- and Indium-Doped Passivated Emitter and Rear Solar Cells on Czochralski-Grown Silicon. Solar Rrl, 2019, 3, 1900027.	3.1	3
33	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
34	Small-area Passivated Contact monoPoly<sup>TM</sup> Silicon Solar Cells for Tandem Device Integration. , 2019, , .		2
35	Development of p<sup>+</sup>/n<sup>+</sup> Polysilicon Tunnel Junctions Compatible for Industrial Screen Printing. , 2019, , .		3
36	Device Modeling for High Efficiency Lead Free Perovskite Solar Cell with Cu<sub>2</sub>O as Hole Transport Material. , 2019, , .		7

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37	Fast extraction of front ribbon resistance of silicon photovoltaic modules using electroluminescence imaging. <i>Solar Energy</i> , 2019, 194, 688-695.	2.9	11
38	Analysis of the Long-Term Performance Degradation of Crystalline Silicon Photovoltaic Modules in Tropical Climates. <i>IEEE Journal of Photovoltaics</i> , 2019, 9, 266-271.	1.5	34
39	Impact of the manufacturing process on the reverse-bias characteristics of high-efficiency n-type bifacial silicon wafer solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2019, 191, 117-122.	3.0	10
40	Ultra-thin atomic layer deposited aluminium oxide tunnel layer passivated hole-selective contacts for silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2019, 191, 164-174.	3.0	39
41	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. <i>Solar Energy Materials and Solar Cells</i> , 2019, 189, 63-74.	3.0	15
42	A comparative life-cycle assessment of photovoltaic electricity generation in Singapore by multicrystalline silicon technologies. <i>Solar Energy Materials and Solar Cells</i> , 2018, 174, 157-162.	3.0	88
43	Investigation of Potential-Induced Degradation in n-PERT Bifacial Silicon Photovoltaic Modules with a Glass/Glass Structure. <i>IEEE Journal of Photovoltaics</i> , 2018, 8, 16-22.	1.5	31
44	Evidence for Chemicals Intermingling at Silicon/Titanium Oxide (TiO <sub>x</sub> ) Interface and Existence of Multiple Bonding States in Monolithic TiO <sub>x</sub> . <i>Advanced Functional Materials</i> , 2018, 28, 1707018.	7.8	23
45	Ultra-Thin GaAs Double-Junction Solar Cell With Carbon-Doped Emitter. <i>IEEE Journal of Photovoltaics</i> , 2018, 8, 1627-1634.	1.5	2
46	Growth and Composition of Atomic Layer Deposited Titanium Oxide Films for c-Si Solar Cell Applications. , 2018, , .		0
47	Implementation of a novel LED based light soaking system for solar cell characterisation. , 2018, , .		1
48	Initial Results of monoPolyTM Silicon Solar Cells at SERIS. , 2018, , .		2
49	Optimization of Belt Furnace Anneal to Reduce Light and Elevated Temperature Induced Degradation of Effective Carrier Lifetime of P-Type Multicrystalline Silicon Wafers. <i>Solar Rrl</i> , 2018, 2, 1800070.	3.1	10
50	Determination of Metallization-Induced Recombination Losses of Screen-Printed Silicon Solar Cell Contacts and Their Dependence on the Doping Profile. <i>IEEE Journal of Photovoltaics</i> , 2018, 8, 1470-1477.	1.5	14
51	Mitigating Light and Elevated Temperature Induced Degradation in Multicrystalline Silicon Wafers and PERC Solar Cells Using Phosphorus Diffusion Gettering. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1800160.	0.8	5
52	Investigation of the Impact of Illumination on the Polarization-Type Potential-Induced Degradation of Crystalline Silicon Photovoltaic Modules. <i>IEEE Journal of Photovoltaics</i> , 2018, 8, 1168-1173.	1.5	44
53	monoPoly <sub>â</sub> ,ç cells: Large-area crystalline silicon solar cells with fire-through screen printed contact to doped polysilicon surfaces. <i>Solar Energy Materials and Solar Cells</i> , 2018, 187, 76-81.	3.0	79
54	Towards 22% efficient screen-printed bifacial n-type silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2018, 187, 91-96.	3.0	27

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55	Quantitative Electroluminescence Imaging Analysis for Performance Estimation of PID-Influenced PV Modules. IEEE Journal of Photovoltaics, 2018, 8, 1281-1288.	1.5	42
56	Impact of femtosecond laser processing on dielectric layers for solar cell applications. Journal of Laser Applications, 2018, 30, 032019.	0.8	1
57	Elucidating potential-induced degradation in bifacial PERC silicon photovoltaic modules. Progress in Photovoltaics: Research and Applications, 2018, 26, 859-867.	4.4	55
58	Predicting the outdoor performance of flat-plate III-V/Si tandem solar cells. Solar Energy, 2017, 149, 77-84.	2.9	18
59	Numerical Simulation of Doping Process by BBr <sub>3</sub> Tube Diffusion for Industrial n-Type Silicon Wafer Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 755-762.	1.5	13
60	Economic Viability Analysis of Silicon Solar Cell Manufacturing: Al-BSF versus PERC. Energy Procedia, 2017, 130, 43-49.	1.8	22
61	Efficiency improvement of CIGS solar cells by a modified rear contact. Solar Energy, 2017, 157, 486-495.	2.9	24
62	Modulated Photoluminescence Lifetime Measurement of Bifacial Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 1687-1692.	1.5	6
63	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
64	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
65	Numerical investigation of metal-semiconductor-insulator-semiconductor passivated hole contacts based on atomic layer deposited AlO <sub>x</sub> . Japanese Journal of Applied Physics, 2017, 56, 08MB08.	0.8	4
66	In-Situ Characterization of Potential-Induced Degradation in Crystalline Silicon Photovoltaic Modules Through Dark I-V Measurements. IEEE Journal of Photovoltaics, 2017, 7, 104-109.	1.5	22
67	Potential-induced degradation in photovoltaic modules: a critical review. Energy and Environmental Science, 2017, 10, 43-68.	15.6	329
68	Femtosecond vs Nanosecond: An Analysis on the Laser Ablation Properties of Dielectric Layers for Solar Cells. , 2017, , .		1
69	A New Method to Quantify Contact Resistance Using Localized-Illumination Photoluminescence Technique in a Solar Cell. , 2017, , .		0
70	Towards Monolithically Integrated GaAs on Si Tandem Solar Cell. , 2017, , .		0
71	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
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	Efficiency enhancement of ultra-thin Cu(In,Ga)Se <sub>2</sub> solar cells: optimizing the absorber bandgap profile by numerical device simulations. <i>Current Applied Physics</i> , 2016, 16, 1334-1341.	1.1	25
74	Two-dimensional current flow in stringed PV cells and its influence on the cell-to-module resistive losses. <i>Solar Energy</i> , 2016, 130, 224-231.	2.9	10
75	Optical scattering modeling of etched ZnO:Al superstrates and device simulation studies of a-Si:H solar cells with different texture morphologies. <i>Applied Optics</i> , 2016, 55, 6718.	2.1	4
76	Solar Energy and Energy Storage Materials and Devices Research in Singapore. , 2016, , 113-156.		0
77	On the methodology of energy yield assessment for one-Sun tandem solar cells. <i>Solar Energy</i> , 2016, 135, 598-604.	2.9	24
78	Analysis of Microstructure and Surface Morphology of Sputter Deposited Molybdenum Back Contacts for CIGS Solar Cells. <i>Procedia Engineering</i> , 2016, 139, 1-6.	1.2	10
79	Impact of the phosphorus emitter doping profile on metal contact recombination of silicon wafer solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2016, 147, 171-176.	3.0	26
80	Investigation of the thickness effect on material and surface texturing properties of sputtered ZnO:Al films for thin-film Si solar cell applications. <i>Vacuum</i> , 2016, 123, 151-159.	1.6	31
81	Investigation of Low-Temperature Hydrogen Plasma-Etching Processes for Silicon Wafer Solar Cell Surface Passivation in an Industrial Inductively Coupled Plasma Deposition Tool. <i>IEEE Journal of Photovoltaics</i> , 2016, 6, 10-16.	1.5	9
82	Three-dimensional numerical analysis of hybrid heterojunction silicon wafer solar cells with heterojunction rear point contacts. <i>AIP Advances</i> , 2015, 5, .	0.6	9
83	Influence of non-uniform fine lines in silicon solar cell front metal grid design. <i>Progress in Photovoltaics: Research and Applications</i> , 2015, 23, 1877-1883.	4.4	4
84	Investigation of laser ablation on boron emitters for n <sup>+</sup> -type rear-junction PERT type silicon wafer solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2015, 23, 1706-1714.	4.4	8
85	Study of hydrogen influence and conduction mechanism of amorphous indium tin oxide for heterojunction silicon wafer solar cells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 2226-2232.	0.8	7
86	Wet-Chemical Surface Texturing of Sputter-Deposited ZnO:Al Films as Front Electrode for Thin-Film Silicon Solar Cells. <i>International Journal of Photoenergy</i> , 2015, 2015, 1-10.	1.4	18
87	Investigation of Wide Process Temperature Window for Amorphous Silicon Suboxide Thin-Film Passivation Deposited by Inductively Coupled PECVD. <i>IEEE Journal of Photovoltaics</i> , 2015, 5, 705-710.	1.5	10
88	Determination of metal contact recombination parameters for silicon wafer solar cells by photoluminescence imaging. <i>Solar Energy</i> , 2015, 118, 20-27.	2.9	39
89	Progress with surface passivation of heavily doped n <sup>+</sup> silicon by industrial PECVD SiN <sub>x</sub> films. , 2015, , .		4
90	Effect of deposition pressure on the properties of magnetron-sputter-deposited molybdenum back contacts for CIGS solar cells. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 08KC14.	0.8	16

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91	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
92	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
93	Numerical Analysis of Radiative Recombination and Reabsorption in GaAs/Si Tandem. IEEE Journal of Photovoltaics, 2015, 5, 1079-1086.	1.5	32
94	Dielectric Charge Tailoring in PECVD $\text{SiO}_x$ and $\text{SiN}_x$ 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
95	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
96	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
97	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
98	A Systematic Loss Analysis Method for Rear-Passivated Silicon Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 619-626.	1.5	53
99	The realistic energy yield potential of GaAs-on-Si tandem solar cells: a theoretical case study. Optics Express, 2015, 23, A382.	1.7	72
100	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
101	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
102	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
103	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
104	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
105	Excellent $\text{c}/\text{j}$ -Si surface passivation by low-temperature atomic layer deposited titanium oxide. Applied Physics Letters, 2014, 104, .	1.5	126
106	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
107	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
108	Accurate potential drop sheet resistance measurements of laser-doped areas in semiconductors. Journal of Applied Physics, 2014, 116, 134505.	1.1	2

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109	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
110	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
111	A new method to characterize bifacial solar cells. Progress in Photovoltaics: Research and Applications, 2014, 22, 903-909.	4.4	27
112	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
113	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
114	Extremely low surface recombination velocities on low-resistivity n-type and p-type crystalline silicon using dynamically deposited remote plasma silicon nitride films. Progress in Photovoltaics: Research and Applications, 2014, 22, 641-647.	4.4	32
115	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
116	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
117	Performance Degradation of Various PV Module Technologies in Tropical Singapore. IEEE Journal of Photovoltaics, 2014, 4, 1288-1294.	1.5	90
118	Excellent boron emitter passivation for high-efficiency Si wafer solar cells using AlO <sub>x</sub> /SiN <sub>x</sub> dielectric stacks deposited in an industrial inline plasma reactor. Progress in Photovoltaics: Research and Applications, 2013, 21, 760-764.	4.4	24
119	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
120	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
121	Optimizing the Front Electrode of Silicon-Wafer-Based Solar Cells and Modules. IEEE Journal of Photovoltaics, 2013, 3, 716-722.	1.5	7
122	A Fill Factor Loss Analysis Method for Silicon Wafer Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 1170-1177.	1.5	119
123	Impact of the n <sup>+</sup> 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
124	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
125	Deposition temperature independent excellent passivation of highly boron doped silicon emitters by thermal atomic layer deposited Al <sub>2</sub> O <sub>3</sub> . Journal of Applied Physics, 2013, 114, 094505.	1.1	18
126	Study of large-grained n-type polycrystalline silicon thin films made by the solid phase crystallization method., 2013, , .		3



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127	Investigating Local Inhomogeneity Effects of Silicon Wafer Solar Cells by Circuit Modelling. Energy Procedia, 2013, 33, 110-117.	1.8	5
128	Integration of $\text{FeSi}_2$ with poly-Si on glass for thin-film photovoltaic applications. RSC Advances, 2013, 3, 7733.	1.7	16
129	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
130	A Quantitative Analysis of Photovoltaic Modules Using Halved Cells. International Journal of Photoenergy, 2013, 2013, 1-8.	1.4	50
131	Excellent $\text{Si}$ surface passivation by thermal atomic layer deposited aluminum oxide after industrial firing activation. Journal Physics D: Applied Physics, 2013, 46, 385102.	1.3	19
132	Extracting physical properties of arbitrarily shaped laser-doped micro-scale areas in semiconductors. Applied Physics Letters, 2013, 103, .	1.5	3
133	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
134	Advanced modeling of the effective minority carrier lifetime of passivated crystalline silicon wafers. Journal of Applied Physics, 2012, 112, .	1.1	36
135	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
136	Aluminum local back surface field solar cells with inkjet-opened rear dielectric films. , 2012, , .		1
137	Analysing partial shading of PV modules by circuit modelling. , 2012, , .		33
138	Investigation of defect luminescence from multicrystalline Si wafer solar cells using X-ray fluorescence and luminescence imaging. Physica Status Solidi - Rapid Research Letters, 2012, 6, 460-462.	1.2	2
139	Series resistance modeling of complex metallization geometries of solar cells using conductive line decomposition. , 2012, , .		0
140	State-of-the-art surface passivation of boron emitters using inline PECVD $\text{AlO}_x/\text{SiN}_x$ stacks for industrial high-efficiency silicon wafer solar cells. , 2012, , .		4
141	Optimisation of p-doped $\text{Si:H}$ Emitter Layers in Crystalline-amorphous Silicon Heterojunction Solar Cells. Energy Procedia, 2012, 15, 118-128.	1.8	17
142	Analysing Solar Cells by Circuit Modelling. Energy Procedia, 2012, 25, 28-33.	1.8	14
143	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
144	Advanced Modelling of Silicon Wafer Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10NA06.	0.8	1

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145	Analysis of Optical and Morphological Properties of Aluminium Induced Texture Glass Superstrates. Japanese Journal of Applied Physics, 2012, 51, 10NB08.	0.8	10
146	Polarization analysis of luminescence for the characterization of silicon wafer solar cells. Applied Physics Letters, 2011, 98, .	1.5	20
147	Advanced loss analysis method for silicon wafer solar cells. Energy Procedia, 2011, 8, 244-249.	1.8	47
148	Evaluating the electrical properties of silicon wafer solar cells using hyperspectral imaging of luminescence. Applied Physics Letters, 2011, 99, 221915.	1.5	29
149	Aluminum induced glass texturing process on borosilicate and soda-lime glass superstrates for thin-film solar cells. , 2011, , .		2
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	Laser assisted boron doping of silicon wafer solar cells using nanosecond and picosecond laser pulses. , 2011, , .		4
152	Wire bonding as a cell interconnection technique for polycrystalline silicon thin-film solar cells on glass. Progress in Photovoltaics: Research and Applications, 2010, 18, 221-228.	4.4	17
153	Observations on the spectral characteristics of defect luminescence of silicon wafer solar cells. , 2010, , .		9
154	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
155	Shunting problems due to sub-micron pinholes in evaporated solid-phase crystallised poly-Si thin-film solar cells on glass. Progress in Photovoltaics: Research and Applications, 2009, 17, 35-46.	4.4	37
156	Thin-film solar cells. Thin Solid Films, 2009, 517, 4706-4710.	0.8	244
157	Recent Advances in Solar Cells. Advances in OptoElectronics, 2007, 2007, 1-2.	0.6	2
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	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
160	Surface passivation of crystalline silicon solar cells: a review. Progress in Photovoltaics: Research and Applications, 2000, 8, 473-487.	4.4	571
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