Rutger Schlatmann

List of Publications by Citations

152 papers	3,908 citations	27 h-index	58 g-index
171 ext. papers	5,040 ext. citations	6.2 avg, IF	5.32 L-index

#	Paper	IF	Citations
152	Monolithic perovskite/silicon-heterojunction tandem solar cells processed at low temperature. *Energy and Environmental Science*, **2016**, 9, 81-88	35.4	469
151	Monolithic perovskite/silicon tandem solar cell with >29% efficiency by enhanced hole extraction. *Science*, **2020**, 370, 1300-1309	33.3	438
150	Conformal monolayer contacts with lossless interfaces for perovskite single junction and monolithic tandem solar cells. *Energy and Environmental Science*, **2019**, 12, 3356-3369	35.4	229
149	Textured interfaces in monolithic perovskite/silicon tandem solar cells: advanced light management for improved efficiency and energy yield. *Energy and Environmental Science*, **2018**, 11, 3511-3523	35.4	194
148	Terawatt-scale photovoltaics: Transform global energy. *Science*, **2019**, 364, 836-838	33.3	178
147	Infrared Light Management Using a Nanocrystalline Silicon Oxide Interlayer in Monolithic Perovskite/Silicon Heterojunction Tandem Solar Cells with Efficiency above 25%. *Advanced Energy Materials*, **2019**, 9, 1803241	21.8	161
146	Highly efficient monolithic perovskite silicon tandem solar cells: analyzing the influence of current mismatch on device performance. *Sustainable Energy and Fuels*, **2019**, 3, 1995-2005	5.8	139
145	21.6%-Efficient Monolithic Perovskite/Cu(In,Ga)Se2 Tandem Solar Cells with Thin Conformal Hole Transport Layers for Integration on Rough Bottom Cell Surfaces. *ACS Energy Letters*, **2019**, 4, 583-590	20.1	106
144	p-type microcrystalline silicon oxide emitter for silicon heterojunction solar cells allowing current densities above 40 mA/cm2. *Applied Physics Letters*, **2015**, 106, 023902	3.4	76
143	Doping dependence of the chemical potential in Bi2Sr2Ca1-xYxCu2O8+ delta. *Physical Review B*, **1993**, 47, 446-450	3.3	66
142	Flexible amorphous and microcrystalline silicon tandem solar modules in the temporary superstrate concept. *Solar Energy Materials and Solar Cells*, **2007**, 91, 572-580	6.4	59
141	Elucidating the Mechanism of an RbF Post Deposition Treatment in CIGS Thin Film Solar Cells. *Solar Rrl*, **2018**, 2, 1800156	7.1	51
140	Effect of front TCO on the performance of rear-junction silicon heterojunction solar cells: Insights from simulations and experiments. *Solar Energy Materials and Solar Cells*, **2019**, 195, 339-345	6.4	42
139	. *IEEE Journal of Photovoltaics*, **2018**, 8, 70-78	3.7	42
138	Ultra-thin nanocrystalline n-type silicon oxide front contact layers for rear-emitter silicon heterojunction solar cells. *Solar Energy Materials and Solar Cells*, **2018**, 179, 386-391	6.4	40
137	Modification by Ar and Kr ion bombardment of Mo/Si X-ray multilayers. *Applied Surface Science*, **1994**, 78, 147-157	6.7	40
136	Hybrid organic/inorganic thin-film multijunction solar cells exceeding 11% power conversion efficiency. *Advanced Materials*, **2015**, 27, 1262-7	24	38

135	Potential of interdigitated back-contact silicon heterojunction solar cells for liquid phase crystallized silicon on glass with efficiency above 14%. *Solar Energy Materials and Solar Cells*, **2018**, 174, 187-195	6.4	37
134	The Tensile Strength of Polymer Fibres1-108		36
133	Enhancement of reflectivity of multilayer mirrors for soft x-ray projection lithography by temperature optimization and ion bombardment. *Microelectronic Engineering*, **1994**, 23, 215-218	2.5	35
132	Analysis of photo-current potentials and losses in thin film crystalline silicon solar cells. *Solar Energy Materials and Solar Cells*, **2015**, 143, 457-466	6.4	34
131	Quadruple-junction solar cells and modules based on amorphous and microcrystalline silicon with high stable efficiencies. *Japanese Journal of Applied Physics*, **2015**, 54, 08KB03	1.4	33
130	Infrared photocurrent management in monolithic perovskite/silicon heterojunction tandem solar cells by using a nanocrystalline silicon oxide interlayer. *Optics Express*, **2018**, 26, A487-A497	3.3	33
129	The Influence of ITO Dopant Density on J-V Characteristics of Silicon Heterojunction Solar Cells: Experiments and Simulations. *Energy Procedia*, **2015**, 77, 725-732	2.3	32
128	Compositional and Interfacial Engineering Yield High-Performance and Stable p-i-n Perovskite Solar Cells and Mini-Modules. *ACS Applied Materials & Interfaces*, **2021**, 13, 13022-13033	9.5	31
127	Achievements and challenges in thin film silicon module production. *Solar Energy Materials and Solar Cells*, **2013**, 119, 196-203	6.4	29
126	ITO-Free Silicon Heterojunction Solar Cells With ZnO:Al/SiO2 Front Electrodes Reaching a Conversion Efficiency of 23%. *IEEE Journal of Photovoltaics*, **2019**, 9, 34-39	3.7	28
125	Silicon Solar Cells on Glass with Power Conversion Efficiency above 13% at Thickness below 15 Micrometer. *Scientific Reports*, **2017**, 7, 873	4.9	26
124	On the Plasma Chemistry During Plasma Enhanced Chemical Vapor Deposition of Microcrystalline Silicon Oxides. *Plasma Processes and Polymers*, **2015**, 12, 82-91	3.4	26
123	Adjusting the Ga grading during fast atmospheric processing of Cu(In,Ga)Se2 solar cell absorber layers using elemental selenium vapor. *Progress in Photovoltaics: Research and Applications*, **2017**, 25, 341-357	6.8	25
122	Artificial Leaf for Water Splitting Based on a Triple-Junction Thin-Film Silicon Solar Cell and a PEDOT:PSS/Catalyst Blend. *Energy Technology*, **2016**, 4, 230-241	3.5	25
121	Effectiveness of an RbF Post Deposition Treatment of CIGS Solar Cells in Dependence on the Cu Content of the Absorber Layer. *IEEE Journal of Photovoltaics*, **2019**, 9, 1839-1845	3.7	24
120	Solar hydrogen production: a bottom-up analysis of different photovoltaic–electrolysis pathways. *Sustainable Energy and Fuels*, **2019**, 3, 801-813	5.8	24
119	PECVD Intermediate and Absorber Layers Applied in Liquid-Phase Crystallized Silicon Solar Cells on Glass Substrates. *IEEE Journal of Photovoltaics*, **2014**, 4, 1343-1348	3.7	24
118	Plasma monitoring and PECVD process control in thin film silicon-based solar cell manufacturing. *EPJ Photovoltaics*, **2014**, 5, 55202	0.7	24

117	High mobility In2O3:H as contact layer for a-Si:H/c-Si heterojunction and μc-Si:H thin film solar cells. *Thin Solid Films*, **2015**, 594, 316-322	2.2	23
116	Efficiency and stability enhancement of laser-crystallized polycrystalline silicon thin-film solar cells by laser firing of the absorber contacts. *Solar Energy Materials and Solar Cells*, **2014**, 120, 521-525	6.4	23
115	The growth of microcrystalline silicon oxide thin films studied by in situ plasma diagnostics. *Applied Physics Letters*, **2013**, 102, 051906	3.4	23
114	Nanocrystalline silicon emitter optimization for Si-HJ solar cells: Substrate selectivity and CO2 plasma treatment effect. *Physica Status Solidi (A) Applications and Materials Science*, **2017**, 214, 1532958	1.6	22
113	Improved conversion efficiency of a-Si:H/μc-Si:H thin-film solar cells by using annealed Al-doped zinc oxide as front electrode material. *Progress in Photovoltaics: Research and Applications*, **2014**, 22, 1285-1291	6.8	22
112	Helianthos: Roll-to-Roll Deposition of Flexible Solar Cell Modules. *Plasma Processes and Polymers*, **2007**, 4, 275-281	3.4	22
111	Evolution of surface morphology during growth and ion erosion of thin films. *Physical Review B*, **1996**, 54, 10880-10889	3.3	22
110	Enhanced reflectivity of soft x-ray multilayer mirrors by reduction of Si atomic density. *Applied Physics Letters*, **1993**, 63, 3297-3299	3.4	22
109	27.9% Efficient Monolithic Perovskite/Silicon Tandem Solar Cells on Industry Compatible Bottom Cells. *Solar Rrl*, **2021**, 5, 2100244	7.1	22
108	Optimization of the post-deposition annealing process of high-mobility In2O3:H for photovoltaic applications. *Thin Solid Films*, **2016**, 599, 78-83	2.2	21
107	Above 16% efficient sequentially grown Cu(In,Ga)(Se,S)2-based solar cells with atomic layer deposited Zn(O,S) buffers. *Progress in Photovoltaics: Research and Applications*, **2015**, 23, 1493-1500	6.8	21
106	Efficient hybrid inorganic/organic tandem solar cells with tailored recombination contacts. *Solar Energy Materials and Solar Cells*, **2014**, 127, 157-162	6.4	20
105	Silicon Heterojunction Solar Cells With Nanocrystalline Silicon Oxide Emitter: Insights Into Charge Carrier Transport. *IEEE Journal of Photovoltaics*, **2015**, 5, 1601-1605	3.7	20
104	Numerical and experimental study of disordered multilayers for broadband x-ray reflection. *Applied Optics*, **1996**, 35, 3614-9	1.7	20
103	Effects of KF and RbF post deposition treatments on the growth of the CdS buffer layer on CIGS thin films - a comparative study. *Solar Energy Materials and Solar Cells*, **2019**, 200, 109997	6.4	19
102	Perovskite/CIGS Tandem Solar Cells: From Certified 24.2% toward 30% and Beyond. *ACS Energy Letters*, **2022**, 7, 1298-1307	20.1	19
101	Ablation mechanisms of nanosecond and picosecond laser scribing for metal halide perovskite module interconnection – An experimental and numerical analysis. *Solar Energy*, **2020**, 198, 410-418	6.8	18
100	Advantageous light management in Cu(In,Ga)Se2 superstrate solar cells. *Solar Energy Materials and Solar Cells*, **2016**, 150, 76-81	6.4	18

99	Glow discharge optical emission spectrometry for quantitative depth profiling of CIGS thin-films. *Journal of Analytical Atomic Spectrometry*, **2019**, 34, 1233-1241	3.7	17
98	Zn(O,S) buffer prepared by atomic layer deposition for sequentially grown Cu(In,Ga)(Se,S)2 solar cells and modules. *Solar Energy Materials and Solar Cells*, **2014**, 126, 120-124	6.4	17
97	Rear-side All-by-Laser Point-contact Scheme for liquid-phase-crystallized silicon on glass solar cells. *Solar Energy Materials and Solar Cells*, **2015**, 137, 280-286	6.4	16
96	An improved silicon-oxide-based intermediate-reflector for micromorph solar cells. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 2145-2148		16
95	Thin film silicon modules on plastic superstrates. *Journal of Non-Crystalline Solids*, **2008**, 354, 2381-2385	3.9	16
94	Host, Suppressor, and Promoter□The Roles of Ni and Fe on Oxygen Evolution Reaction Activity and Stability of NiFe Alloy Thin Films in Alkaline Media. *ACS Catalysis*, **2021**, 11, 10537-10552	13.1	16
93	Crystalline silicon on glass□nterface passivation and absorber material quality. *Progress in Photovoltaics: Research and Applications*, **2016**, 24, 1499-1512	6.8	15
92	Nanocrystalline Silicon Oxide Emitters for Silicon Hetero Junction Solar Cells. *Energy Procedia*, **2015**, 77, 304-310	2.3	14
91	Impact of Dielectric Layers on Liquid-Phase Crystallized Silicon Solar Cells. *IEEE Journal of Photovoltaics*, **2018**, 8, 30-37	3.7	14
90	Implications of TCO Topography on Intermediate Reflector Design for a-Si/□-Si Tandem Solar Cells□Experiments and Rigorous Optical Simulations. *IEEE Journal of Photovoltaics*, **2014**, 4, 10-15	3.7	14
89	Diffuse-x-ray-scattering measurements of roughness on ion-etched multilayer interfaces. *Physical Review B*, **1995**, 51, 5345-5351	3.3	14
88	Influence of Silicon Layers on the Growth of ITO and AZO in Silicon Heterojunction Solar Cells. *IEEE Journal of Photovoltaics*, **2020**, 10, 703-709	3.7	14
87	Plasma enhanced chemical vapor deposition process optimization for thin film silicon tandem junction solar cells. *Thin Solid Films*, **2014**, 558, 337-343	2.2	12
86	Comparison of TMB and B2H6 as Precursors for Emitter Doping in High Efficiency Silicon Hetero Junction Solar Cells. *Energy Procedia*, **2014**, 60, 123-128	2.3	12
85	Understanding the Hydrogen Evolution Reaction Kinetics of Electrodeposited Nickel-Molybdenum in Acidic, Near-Neutral, and Alkaline Conditions. *ChemElectroChem*, **2021**, 8, 195-208	4.3	12
84	Inorganic Materials as Hole Selective Contacts and Intermediate Tunnel Junction Layer for Monolithic Perovskite-CIGSe Tandem Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1801692	21.8	12
83	Progress in and potential of liquid phase crystallized silicon solar cells. *Solar Energy*, **2018**, 175, 75-83	6.8	11
82	Architectures for scalable integrated photo driven catalytic devices-A concept study. *International Journal of Hydrogen Energy*, **2016**, 41, 20823-20831	6.7	11

81	The Importance of Sodium Control in CIGSe Superstrate Solar Cells. *IEEE Journal of Photovoltaics*, **2015**, 5, 378-381	3.7	11
80	Improved Surface Passivation by Wet Texturing, Ozone-Based Cleaning, and Plasma-Enhanced Chemical Vapor Deposition Processes for High-Efficiency Silicon Heterojunction Solar Cells. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900518	1.6	11
79	All-Thin-Film Tandem Cells Based on Liquid Phase Crystallized Silicon and Perovskites. *IEEE Journal of Photovoltaics*, **2019**, 9, 621-628	3.7	10
78	Influence of Chemical Composition and Structure in Silicon Dielectric Materials on Passivation of Thin Crystalline Silicon on Glass. *ACS Applied Materials & Interfaces*, **2015**, 7, 19282-94	9.5	10
77	Emitter Patterning for Back-Contacted Si Heterojunction Solar Cells Using Laser Written Mask Layers for Etching and Self-Aligned Passivation (LEAP). *IEEE Journal of Photovoltaics*, **2016**, 6, 894-899	3.7	10
76	Efficient Cu(In,Ga)(Se,S)2 modules with sputtered Zn(O,S) buffer layer. *Thin Solid Films*, **2017**, 633, 231-234	2.2	10
75	Micro gratings written in ZnO:Al thin films using picosecond UV-laser interference patterning. *Physica Status Solidi - Rapid Research Letters*, **2013**, 7, 635-638	2.5	9
74	Light trapping for a-Si:H/μc-Si:H tandem solar cells using direct pulsed laser interference texturing. *Physica Status Solidi - Rapid Research Letters*, **2015**, 9, 36-40	2.5	9
73	Enhanced x-ray optical contrast of Mo/Si multilayers by H implantation of Si. *Journal of Applied Physics*, **1996**, 80, 2121-2126	2.5	9
72	Soft x-ray projection lithography using a high repetition rate laser-induced x-ray source for sub- 100 nanometer lithography processes. *Microelectronic Engineering*, **1993**, 21, 67-70	2.5	9
71	Interface passivation of liquid-phase crystallized silicon on glass studied with high-frequency capacitance–voltage measurements. *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 1697-1704	1.6	9
70	Investigating sulfur distribution and corresponding bandgap grading in Cu(In,Ga)(S,Se)2 absorber layers processed by fast atmospheric chalcogenization of metal precursors. *Journal of Alloys and Compounds*, **2017**, 703, 600-604	5.7	8
69	Interface Engineering for Liquid-Phase Crystallized-Silicon Solar Cells on Glass. *Solar Rrl*, **2017**, 1, 1700015	7.1	8
68	. *IEEE Journal of Photovoltaics*, **2018**, 8, 1244-1251	3.7	8
67	Very thin, highly-conductive ZnO:Al front electrode on textured glass as substrate for thin-film silicon solar cells. *Physica Status Solidi - Rapid Research Letters*, **2014**, 8, 44-47	2.5	8
66	Large area PECVD of a-Si:H/a-Si:H tandem solar cells. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 2982-2985		8
65	Wafer Surface Tuning for a-Si:H/μc-Si:H/c-Si Triple Junction Solar Cells for Application in Water Splitting. *Energy Procedia*, **2016**, 102, 126-135	2.3	8
64	Evaluation of recombination losses in thin film solar cells using an LED sun simulator – the effect of RbF post-deposition on CIGS solar cells. *EPJ Photovoltaics*, **2018**, 9, 9	0.7	8

63	Lateral phase separation in Cu-In-Ga precursor and Cu(In,Ga)Se2 absorber thin films. *Solar Energy Materials and Solar Cells*, **2017**, 162, 120-126	6.4	7
62	Influence of Cu(In,Ga)(Se,S)2 surface treatments on the properties of 30×30cm2 large area modules with atomic layer deposited Zn(O,S) buffers. *Thin Solid Films*, **2015**, 574, 28-31	2.2	7
61	Toward High Solar Cell Efficiency with Low Material Usage: 15% Efficiency with 14 μm Polycrystalline Silicon on Glass. *Solar Rrl*, **2020**, 4, 2000058	7.1	7
60	Efficient plasmonic scattering of colloidal silver particles through annealing-induced changes. *Nanotechnology*, **2014**, 25, 455706	3.4	7
59	Potential of high-mobility sputtered zinc oxide as front contact for high efficiency thin film silicon solar cells. *Thin Solid Films*, **2014**, 555, 138-142	2.2	7
58	A techno-economic perspective on solar-to-hydrogen concepts through 2025. *Sustainable Energy and Fuels*, **2020**, 4, 5818-5834	5.8	7
57	Effect of the ambient conditions on the operation of a large-area integrated photovoltaic-electrolyser. *Sustainable Energy and Fuels*, **2020**, 4, 4831-4847	5.8	7
56	Passivation at the interface between liquid-phase crystallized silicon and silicon oxynitride in thin film solar cells. *Progress in Photovoltaics: Research and Applications*, **2017**, 25, 515-524	6.8	6
55	Limitation of Current Transport across the Heterojunction in Cu(In,Ga)Se2 Solar Cells Prepared with Alkali Fluoride Postdeposition Treatment. *Solar Rrl*, **2020**, 4, 1900560	7.1	6
54	Laser-induced local phase transformation of CIGSe for monolithic serial interconnection: Analysis of the material properties. *Solar Energy Materials and Solar Cells*, **2016**, 157, 636-643	6.4	6
53	Low energy ion beam mixing as a tool for multilayer x-ray mirror fabrication. *Applied Physics Letters*, **1996**, 68, 2948-2950	3.4	6
52	Impact of rough substrates on hydrogen-doped indium oxides for the application in CIGS devices. *Solar Energy Materials and Solar Cells*, **2020**, 206, 110300	6.4	6
51	Assessment of Bulk and Interface Quality for Liquid Phase Crystallized Silicon on Glass. *IEEE Journal of Photovoltaics*, **2019**, 9, 364-373	3.7	6
50	Properties of Co-Evaporated RbInSe2 Thin Films. *Physica Status Solidi - Rapid Research Letters*, **2018**, 13, 1800564	2.5	6
49	Thin-film a-Si:H solar cells processed on aluminum-induced texture (AIT) glass superstrates: prediction of light absorption enhancement. *Applied Optics*, **2015**, 54, 4366-73	1.7	5
48	ZnO:Al/a-SiOx front contact for polycrystalline-silicon-on-oxide (POLO) solar cells **2018**,		5
47	Laser firing in silicon heterojunction interdigitated back contact architecture for low contact resistance. *Solar Energy Materials and Solar Cells*, **2019**, 203, 110201	6.4	5
46	A simple method with analytical model to extract heterojunction solar cell series resistance components and to extract the A-Si:H(i/p) to transparent conductive oxide contact resistivity **2019**,		5

45	NIR diode laser spectroscopy of HF and HCl at multiple points in the atmospheric pressure CVD of tin oxide films. *Surface and Coatings Technology*, **2007**, 201, 9030-9034	4.4	5
44	X-ray reflection, a technique for measuring sputtering yields of thin films. *Nuclear Instruments & Methods in Physics Research B*, **1994**, 94, 395-403	1.2	5
43	Optoelectrical analysis of TCO+Silicon oxide double layers at the front and rear side of silicon heterojunction solar cells. *Solar Energy Materials and Solar Cells*, **2021**, 236, 111493	6.4	5
42	Improved Electrical Performance of Perovskite Photovoltaic Mini-Modules through Controlled PbI2 Formation Using Nanosecond Laser Pulses for P3 Patterning. *Energy Technology*, **2021**, 9, 2000969	3.5	5
41	Depth-resolved analysis of the effect of RbF post deposition treatment on CIGSe with two different Cu concentrations. *Solar Energy Materials and Solar Cells*, **2021**, 226, 111071	6.4	5
40	Growth process of microcrystalline silicon studied by combined photoluminescence and Raman investigations. *Journal of Applied Physics*, **2013**, 114, 223511	2.5	4
39	Revealing and Identifying Laser-Induced Damages in CIGSe Solar Cells by Photoluminescence Spectroscopy. *IEEE Journal of Photovoltaics*, **2017**, 7, 1442-1449	3.7	4
38	Encapsulation and Outdoor Testing of Perovskite Solar Cells: Comparing Industrially Relevant Process with a Simplified Lab Procedure.. *ACS Applied Materials & Interfaces*, **2022**, 14, 5159-5167	9.5	4
37	A Device Model for Rb-Conditioned Chalcopyrite Solar Cells. *IEEE Journal of Photovoltaics*, **2021**, 11, 232-240	3.7	4
36	Influence of the precursor layer composition and deposition processes on the electronic quality of liquid phase crystallized silicon absorbers. *Progress in Photovoltaics: Research and Applications*, **2018**, 26, 524-532	6.8	4
35	Influence of ZnO-Based Sub-Layers on the Growth of Hydrogen Doped Indium Oxide. *ACS Applied Energy Materials*, **2018**, 1, 5490-5499	6.1	4
34	Development of Various Photovoltaic-Driven Water Electrolysis Technologies for Green Solar Hydrogen Generation. *Solar Rrl*,2100479	7.1	4
33	Zinc oxide films grown by galvanic deposition from 99% metals basis zinc nitrate electrolyte. *Journal of Materials Chemistry A*, **2014**, 2, 9626-9635	13	3
32	Comparison of the influence of boron and aluminium doping on the material properties of electrochemically deposited ZnO films. *Thin Solid Films*, **2015**, 594, 215-224	2.2	3
31	Controlling the thermal impact of ns laser pulses for the preparation of the P2 interconnect by local phase transformation in CIGSe **2015**,		3
30	Versatility of Nanocrystalline Silicon Films: from Thin-Film to Perovskite/c-Si Tandem Solar Cell Applications. *Coatings*, **2020**, 10, 759	2.9	3
29	Efficient Hybrid Amorphous Silicon/Organic Tandem Solar Cells Enabled by Near-Infrared Absorbing Nonfullerene Acceptors. *Advanced Energy Materials*, **2021**, 11, 2100166	21.8	3
28	Prospects for Hermetic Sealing of Scaled-Up Photoelectrochemical Hydrogen Generators for Reliable and Risk Free Operation. *Energies*, **2019**, 12, 4176	3.1	3

27	Improved electrical properties of pulsed DC magnetron sputtered hydrogen doped indium oxide after annealing in air. *Materials Science in Semiconductor Processing*, **2019**, 89, 170-175	4.3	3
26	Impact of RbF post deposition treatment on CdS/CIGSe and Zn(O,S)/CIGSe interfaces A comparative HAXPES study. *Renewable Energy*, **2021**, 180, 626-636	8.1	3
25	Serial cosputtering for aluminum doping manipulated zinc oxide as front contact for Cu(In,Ga)Se2 solar cells. *Japanese Journal of Applied Physics*, **2018**, 57, 08RC18	1.4	2
24	Interface engineering of Cu(In,Ga)Se2and atomic layer deposited Zn(O,S) heterojunctions. *Japanese Journal of Applied Physics*, **2017**, 56, 08MC16	1.4	2
23	Light Scattering and Current Enhancement for Microcrystalline Silicon Thin-Film Solar Cells on Aluminium-Induced Texture Glass Superstrates with Double Texture. *International Journal of Photoenergy*, **2015**, 2015, 1-8	2.1	2
22	Comparative study of backside reflectors on a-Si:H/c-Si:H thin film solar cells. *Physica Status Solidi (A) Applications and Materials Science*, **2014**, 211, 2078-2081	1.6	2
21	MoSe2 formation during fabrication of Cu(In, Ga)Se2 solar cell absorbers by using stacked elemental layer precursor and selenization at high temperatures **2013**,		2
20	Enhanced recombination next to laser-patterned lines in CIGSe solar cells revealed by spectral and time-resolved photoluminescence. *Applied Surface Science*, **2021**, 536, 147721	6.7	2
19	Electronic Structure of the CdS/Cu(In,Ga)Se Interface of KF- and RbF-Treated Samples by Kelvin Probe and Photoelectron Yield Spectroscopy. *ACS Applied Materials & Interfaces*, **2021**, 13, 7745-7755	9.5	2
18	Observation of PbI2 Residuals after P2 Nanosecond Laser Ablation of Perovskite Absorber Layers **2018**,		2
17	Nanocrystalline silicon oxide interlayer in monolithic perovskite/silicon heterojunction tandem solar cells with total current density >39 mA/cm2 **2018**,		2
16	Functional Data Analysis of Electrical Measurements on Thin-Film Photovoltaic Devices. *IEEE Journal of Photovoltaics*, **2019**, 9, 1436-1441	3.7	1
15	Investigation of Laser-fired Rear-side Point Contacts of Laser-crystallized Silicon Thin-film Solar Cells by Conductive Probe Atomic Force Microscopy. *Energy Procedia*, **2014**, 60, 76-80	2.3	1
14	Influence of the Frontside Charge Inversion Layer on the Minority Carrier Collection in Backside Contacted Liquid Phase Crystallized Silicon on Glass Solar Cells. *Solar Rrl*, **2017**, 1, 1700100	7.1	1
13	Electrical and structural functionality of CIGSe solar cells patterned with picosecond laser pulses of different wavelengths **2015**,		1
12	Modification of light scattering properties of boron doped zinc oxide grown by Low Pressure Chemical Vapour Deposition using wet chemical etching **2010**,		1
11	Flexible a-Si/-Si Tandem Modules in the Helianthos Project **2006**,		1
10	Applicability of Atmospheric Pressure Plasma Jet (APPJ) Discharge for the Reduction in Graphene Oxide Films and Synthesis of Carbon Nanomaterials. *Journal of Carbon Research*, **2021**, 7, 71	3.3	1

9	Decay mechanisms in CdS-buffered Cu(In,Ga)Se2 thin-film solar cells after exposure to thermal stress: Understanding the role of Na. *Progress in Photovoltaics: Research and Applications*, **2021**, 29, 1034-1053	6.8	1
8	Improvement of the homogeneity of high mobility In2O3:H films by sputtering through a mesh electrode studied by Monte Carlo simulation and thin film analysis. *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 2310-2316	1.6	1
7	Backside contacted solar cells with heterojunction emitters and laser fired absorber contacts for crystalline silicon on glass **2016**,		1
6	Towards Photovoltaic Technology on the Terawatt Scale: Status and Challenges283-306		1
5	Passivation of Liquid-Phase Crystallized Silicon With PECVD-SiNx and PECVD-SiNx/SiOx. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1800239	1.6	0
4	Elucidating the Effect of the Different Buffer Layers on the Thermal Stability of CIGSe Solar Cells. *IEEE Journal of Photovoltaics*, **2021**, 11, 648-657	3.7	0
3	Understanding deposition temperature dependent photovoltaic characteristics of Cu(In,Ga)Se2 solar cells: A study with thermally stable alkali aluminosilicate glass substrates. *Solar Energy Materials and Solar Cells*, **2021**, 221, 110875	6.4	0
2	Thin Crystalline Silicon Solar Cells on Glass **2017**, 226-237		
1	Investigation of laser-fired point contacts on KOH structured laser-crystallized silicon by conductive atomic force microscopy. *Applied Surface Science*, **2016**, 374, 243-247	6.7	