Lars Korte

List of Publications by Year
in descending order

146 papers	10,579 citations	61977 43 h-index	32838 100 g-index
148 all docs	148 docs citations	148 times ranked	9447 citing authors

#	Article	IF	Citations
1	A mixed-cation lead mixed-halide perovskite absorber for tandem solar cells. Science, 2016, 351, 151-155.	12.6	2,514
2	Monolithic perovskite/silicon tandem solar cell with >29% efficiency by enhanced hole extraction. Science, 2020, 370, 1300-1309.	12.6	1,120
3	Monolithic perovskite/silicon-heterojunction tandem solar cells processed at low temperature. Energy and Environmental Science, 2016, 9, 81-88.	30.8	536
4	Conformal monolayer contacts with lossless interfaces for perovskite single junction and monolithic tandem solar cells. Energy and Environmental Science, 2019, 12, 3356-3369.	30.8	519
5	Monolithic Perovskite Tandem Solar Cells: A Review of the Present Status and Advanced Characterization Methods Toward 30% Efficiency. Advanced Energy Materials, 2020, 10, 1904102.	19.5	321
6	Roadmap and roadblocks for the band gap tunability of metal halide perovskites. Journal of Materials Chemistry A, 2017, 5, 11401-11409.	10.3	307
7	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.	30.8	281
8	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.	19.5	239
9	Investigation of selective junctions using a newly developed tunnel current model for solar cell applications. Solar Energy Materials and Solar Cells, 2015, 141, 14-23.	6.2	233
10	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.	4.9	208
11	Perovskite Solar Cells with Large-Area CVD-Graphene for Tandem Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 2745-2750.	4.6	170
12	Physical aspects of a-Si:H/c-Si hetero-junction solar cells. Thin Solid Films, 2007, 515, 7475-7480.	1.8	145
13	Hydrogen plasma treatments for passivation of amorphous-crystalline silicon-heterojunctions on surfaces promoting epitaxy. Applied Physics Letters, 2013, 102, 122106.	3.3	131
14	Oxygen vacancies in tungsten oxide and their influence on tungsten oxide/silicon heterojunction solar cells. Solar Energy Materials and Solar Cells, 2016, 158, 77-83.	6.2	129
15	Interplay of amorphous silicon disorder and hydrogen content with interface defects in amorphous/crystalline silicon heterojunctions. Applied Physics Letters, 2010, 96, .	3.3	127
16	Numerical optical optimization of monolithic planar perovskite-silicon tandem solar cells with regular and inverted device architectures. Optics Express, 2017, 25, A473.	3.4	114
17	Advances in a-Si:H/c-Si heterojunction solar cell fabrication and characterization. Solar Energy Materials and Solar Cells, 2009, 93, 905-910.	6.2	108
18	It Takes Two to Tangoâ€"Double-Layer Selective Contacts in Perovskite Solar Cells for Improved Device Performance and Reduced Hysteresis. ACS Applied Materials & Interfaces, 2017, 9, 17245-17255.	8.0	107

#	Article	IF	Citations
19	Towards wafer quality crystalline silicon thin-film solar cells on glass. Solar Energy Materials and Solar Cells, 2014, 128, 190-197.	6.2	105
20	Efficient Light Management by Textured Nanoimprinted Layers for Perovskite Solar Cells. ACS Photonics, 2017, 4, 1232-1239.	6.6	103
21	Electrical transport mechanisms in a-Si:H/c-Si heterojunction solar cells. Journal of Applied Physics, 2010, 107, .	2.5	100
22	Band lineup in amorphous/crystalline silicon heterojunctions and the impact of hydrogen microstructure and topological disorder. Physical Review B, 2011, 83, .	3.2	96
23	p-type microcrystalline silicon oxide emitter for silicon heterojunction solar cells allowing current densities above 40â€‰mA/cm2. Applied Physics Letters, 2015, 106, .	3.3	93
24	Efficient interdigitated backâ€contacted silicon heterojunction solar cells. Physica Status Solidi - Rapid Research Letters, 2011, 5, 159-161.	2.4	83
25	Towards optical optimization of planar monolithic perovskite/silicon-heterojunction tandem solar cells. Journal of Optics (United Kingdom), 2016, 18, 064012.	2.2	82
26	Discerning passivation mechanisms at a-Si:H/c-Si interfaces by means of photoconductance measurements. Applied Physics Letters, 2011, 98, .	3.3	79
27	Stability and Dark Hysteresis Correlate in NiOâ€Based Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1901642.	19.5	69
28	Three-Terminal Perovskite/Silicon Tandem Solar Cells with Top and Interdigitated Rear Contacts. ACS Applied Energy Materials, 2020, 3, 1381-1392.	5.1	63
29	Investigation of gap states in phosphorous-doped ultra-thin a-Si:H by near-UV photoelectron spectroscopy. Journal of Non-Crystalline Solids, 2008, 354, 2138-2143.	3.1	62
30	Wet-chemical passivation of atomically flat and structured silicon substrates for solar cell application. Applied Surface Science, 2008, 254, 3615-3625.	6.1	61
31	27.9% Efficient Monolithic Perovskite/Silicon Tandem Solar Cells on Industry Compatible Bottom Cells. Solar Rrl, 2021, 5, 2100244.	5.8	59
32	Impact of the transparent conductive oxide work function on injection-dependent a-Si:H/c-Si band bending and solar cell parameters. Journal of Applied Physics, 2013, 113, .	2.5	55
33	Field Effect Passivation in Perovskite Solar Cells by a LiF Interlayer. Advanced Energy Materials, 2022, 12, .	19.5	53
34	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.	6.2	52
35	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.	2.5	52
36	Optimisation of electronic interface properties of a-Si:H/c-Si hetero-junction solar cells by wet-chemical surface pre-treatment. Thin Solid Films, 2008, 516, 6775-6781.	1.8	51

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37	Nanocrystalline n-Type Silicon Oxide Front Contacts for Silicon Heterojunction Solar Cells: Photocurrent Enhancement on Planar and Textured Substrates. IEEE Journal of Photovoltaics, 2018, 8, 70-78.	2.5	51
38	Polycrystalline silicon heterojunction thin-film solar cells on glass exhibiting 582mV open-circuit voltage. Solar Energy Materials and Solar Cells, 2013, 115, 7-10.	6.2	50
39	Inorganic photovoltaics â€“ Planar and nanostructured devices. Progress in Materials Science, 2016, 82, 294-404.	32.8	50
40	Sputtered Tungsten Oxide as Hole Contact for Silicon Heterojunction Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 1209-1215.	2.5	48
41	Infrared photocurrent management in monolithic perovskite/silicon heterojunction tandem solar cells by using a nanocrystalline silicon oxide interlayer. Optics Express, 2018, 26, A487.	3.4	48
42	Valence band alignment and hole transport in amorphous/crystalline silicon heterojunction solar cells. Applied Physics Letters, 2015, 107, 013902.	3.3	47
43	From Bulk to Surface: Sodium Treatment Reduces Recombination at the Nickel Oxide/Perovskite Interface. Advanced Materials Interfaces, 2019, 6, 1900789.	3.7	45
44	Doping type and thickness dependence of band offsets at the amorphous/crystalline silicon heterojunction. Journal of Applied Physics, 2011, 109, 063714.	2.5	44
45	Over 20% conversion efficiency on silicon heterojunction solar cells by IPA-free substrate texturization. Applied Surface Science, 2014, 301, 56-62.	6.1	44
46	Band bending and determination of band offsets in amorphous/crystalline silicon heterostructures from planar conductance measurements. Journal of Applied Physics, 2012, 112, .	2.5	43
47	Interface Molecular Engineering for Laminated Monolithic Perovskite/Silicon Tandem Solar Cells with 80.4% Fill Factor. Advanced Functional Materials, 2019, 29, 1901476.	14.9	43
48	Toward Annealingâ€Stable Molybdenumâ€Oxideâ€Based Holeâ€Selective Contacts For Silicon Photovoltaics. Solar Rrl, 2018, 2, 1700227.	5.8	42
49	Cs<i>_x</i>FA_{1â€“<i>x</i>}Pb(I_{1â€“<i>y</i>}Br<i>_y</i>)₃ Perovskite Compositions: the Appearance of Wrinkled Morphology and its Impact on Solar Cell Performance. Journal of Physical Chemistry C, 2018, 122, 17123-17135.	3.1	42
50	Density distribution of gap states in extremely thin a-Si:H layers on crystalline silicon wafers. Journal of Non-Crystalline Solids, 2004, 338-340, 211-214.	3.1	40
51	Electronic states in a-Si:H/c-Si heterostructures. Journal of Non-Crystalline Solids, 2006, 352, 1217-1220.	3.1	40
52	Silicon heterojunction solar cells: Optimization of emitter and contact properties from analytical calculation and numerical simulation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 593-598.	3.5	39
53	Passivation of textured substrates for a-Si:H/c-Si hetero-junction solar cells: Effect of wet-chemical smoothing and intrinsic a-Si:H interlayer. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 219-223.	3.5	38
54	Determination of the complex refractive index and optical bandgap of CH3NH3PbI3 thin films. Journal of Applied Physics, 2017, 121, .	2.5	38

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55	Accelerated interface defect removal in amorphous/crystalline silicon heterostructures using pulsed annealing and microwave heating. Applied Physics Letters, 2009, 95, .	3.3	37
56	The Influence of ITO Dopant Density on J-V Characteristics of Silicon Heterojunction Solar Cells: Experiments and Simulations. Energy Procedia, 2015, 77, 725-732.	1.8	37
57	Nanocrystalline silicon emitter optimization for Si-HJ solar cells: Substrate selectivity and CO₂plasma treatment effect. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1532958.	1.8	36
58	Valence band offset in heterojunctions between crystalline silicon and amorphous silicon (sub)oxides (a-SiOx:H, 0 < x < 2). Applied Physics Letters, 2015, 106, .	3.3	34
59	Passivation of Textured Silicon Wafers:Influence of Pyramid Size Distribution, a-Si:H Deposition Temperature, and Post-treatment. Energy Procedia, 2013, 38, 881-889.	1.8	33
60	A recombination model for aâ€Si:H/câ€Si heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1005-1010.	0.8	32
61	Impact of Fermi-level dependent defect equilibration on Voc of amorphous/crystalline silicon heterojunction solar cells. Energy Procedia, 2011, 8, 282-287.	1.8	32
62	PECVD-AlOx/SiNx Passivation Stacks on Silicon: Effective Charge Dynamics and Interface Defect State Spectroscopy. Energy Procedia, 2014, 55, 845-854.	1.8	31
63	PECVD-AlOx/SiNx passivation stacks on wet chemically oxidized silicon: Constant voltage stress investigations of charge dynamics and interface defect states. Solar Energy Materials and Solar Cells, 2015, 135, 49-56.	6.2	30
64	Plasma-enhanced atomic-layer-deposited MoO x emitters for silicon heterojunction solar cells. Applied Physics A: Materials Science and Processing, 2015, 120, 811-816.	2.3	30
65	Atomic Structure of Interface States in Silicon Heterojunction Solar Cells. Physical Review Letters, 2013, 110, 136803.	7.8	29
66	Mixtures of Dopant-Free Spiro-OMeTAD and Water-Free PEDOT as a Passivating Hole Contact in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 9172-9181.	8.0	28
67	Planar rear emitter back contact silicon heterojunction solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 1900-1903.	6.2	27
68	Silicon Heterojunction Solar Cells With Nanocrystalline Silicon Oxide Emitter: Insights Into Charge Carrier Transport. IEEE Journal of Photovoltaics, 2015, 5, 1601-1605.	2.5	25
69	Optical characterization and bandgap engineering of flat and wrinkle-textured FA0.83Cs0.17Pb(I1â€"<i>x</i>Br<i>x</i>)3 perovskite thin films. Journal of Applied Physics, 2018, 123, .	2.5	25
70	High mobility In2O3:H as contact layer for a-Si:H/c-Si heterojunction and Î¼c-Si:H thin film solar cells. Thin Solid Films, 2015, 594, 316-322.	1.8	24
71	Nondestructive Probing of Perovskite Silicon Tandem Solar Cells Using Multiwavelength Photoluminescence Mapping. IEEE Journal of Photovoltaics, 2017, 7, 1081-1086.	2.5	24
72	Aluminum-Doped Zinc Oxide as Front Electrode for Rear Emitter Silicon Heterojunction Solar Cells with High Efficiency. Applied Sciences (Switzerland), 2019, 9, 862.	2.5	24

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73	Exploring co-sputtering of ZnO:Al and SiO2 for efficient electron-selective contacts on silicon solar cells. Solar Energy Materials and Solar Cells, 2019, 194, 67-73.	6.2	23
74	Low-Temperature Atomic Layer Deposited Magnesium Oxide as a Passivating Electron Contact for c-Si-Based Solar Cells. IEEE Journal of Photovoltaics, 2020, 10, 398-406.	2.5	22
75	Revealing Fundamental Efficiency Limits of Monolithic Perovskite/Silicon Tandem Photovoltaics through Subcell Characterization. ACS Energy Letters, 2021, 6, 3982-3991.	17.4	22
76	Characterization and optimization of the interface quality in amorphous/crystalline silicon heterojunction solar cells. Journal of Non-Crystalline Solids, 2006, 352, 1958-1961.	3.1	21
77	CuInS2â€“CdS heterojunction valence band offset measured with near-UV constant final state yield spectroscopy. Journal of Applied Physics, 2009, 106, 073712.	2.5	20
78	Impact of a-Si:H hydrogen depth profiles on passivation properties in a-Si:H/c-Si heterojunctions. Thin Solid Films, 2012, 520, 4439-4444.	1.8	20
79	Band-fluctuations model for the fundamental absorption of crystalline and amorphous semiconductors: a dimensionless joint density of states analysis. Journal Physics D: Applied Physics, 2019, 52, 105303.	2.8	20
80	Revisiting the Determination of the Valence Band Maximum and Defect Formation in Halide Perovskites for Solar Cells: Insights from Highly Sensitive Nearâ€“UV Photoemission Spectroscopy. ACS Applied Materials & Interfaces, 2021, 13, 43540-43553.	8.0	20
81	Effect of wetâ€chemical substrate pretreatment on electronic interface properties and recombination losses of <i>a</i> â€Si:H/<i>c</i> â€Si and <i>a</i> â€SiN_x:H/<i>c</i> â€Si heteroâ€interfaces. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 879-882.	0.8	18
82	Monolithic Perovskite/Silicon Tandem Solar Cells Fabricated Using Industrial pâ€Type Polycrystalline Silicon on Oxide/Passivated Emitter and Rear Cell Silicon Bottom Cell Technology. Solar Rrl, 2022, 6, .	5.8	17
83	Nanocrystalline Silicon Oxide Emitters for Silicon Hetero Junction Solar Cells. Energy Procedia, 2015, 77, 304-310.	1.8	16
84	Hydrogen Plasma Treatments of Amorphous/Crystalline Silicon Heterojunctions. Energy Procedia, 2014, 55, 827-833.	1.8	15
85	Back- and Front-side Texturing for Light-management in Perovskite / Silicon-heterojunction Tandem Solar Cells. Energy Procedia, 2016, 102, 43-48.	1.8	14
86	Interdigitated Back-Contacted Silicon Heterojunction Solar Cells With Improved Fill Factor and Efficiency. IEEE Journal of Photovoltaics, 2011, 1, 130-134.	2.5	13
87	Solution-processed amorphous silicon surface passivation layers. Applied Physics Letters, 2014, 105, 122113.	3.3	13
88	Amorphous/crystalline silicon heterojunction solar cells with black silicon texture. Physica Status Solidi - Rapid Research Letters, 2014, 8, 831-835.	2.4	13
89	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.	2.5	13
90	Improved Surface Passivation by Wet Texturing, Ozoneâ€Based Cleaning, and Plasmaâ€Enhanced Chemical Vapor Deposition Processes for Highâ€Efficiency Silicon Heterojunction Solar Cells. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900518.	1.8	13

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91	Direct determination of the band offset in atomic layer deposited ZnO/hydrogenated amorphous silicon heterojunctions from X-ray photoelectron spectroscopy valence band spectra. Journal of Applied Physics, 2014, 115, .	2.5	12
92	Comparison of TMB and B2H6 as Precursors for Emitter Doping in High Efficiency Silicon Hetero Junction Solar Cells. Energy Procedia, 2014, 60, 123-128.	1.8	12
93	Optimized Metallization for Interdigitated Back Contact Silicon Heterojunction Solar Cells. Solar Rrl, 2017, 1, 1700021.	5.8	12
94	<i>In situ</i> graphene doping as a route toward efficient perovskite tandem solar cells. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1989-1996.	1.8	11
95	Wild band edges: The role of bandgap grading and band-edge fluctuations in high-efficiency chalcogenide devices. , 2016, , .		11
96	Amorphous Silicon Passivation of Surfaces Promoting Epitaxy. Energy Procedia, 2013, 38, 855-861.	1.8	10
97	Evolution of the Charge Carrier Lifetime Characteristics in Crystalline Silicon Wafers During Processing of Heterojunction Solar Cells. Energy Procedia, 2014, 55, 219-228.	1.8	10
98	Influence of black silicon surfaces on the performance of back-contacted back silicon heterojunction solar cells. Optics Express, 2014, 22, A1469.	3.4	10
99	Hybrid Perovskite Degradation from an Optical Perspective: A Spectroscopic Ellipsometry Study from the Deep Ultraviolet to the Middle Infrared. Advanced Optical Materials, 2022, 10, 2101553.	7.3	10
100	Physical and Technological Aspects of a-Si:H/c-Si Hetero-Junction Solar Cells. , 2006, , .		9
101	Measurements of effective optical reflectivity using a conventional flatbed scannerâ€"Fast assessment of optical layer properties. Solar Energy Materials and Solar Cells, 2008, 92, 844-850.	6.2	9
102	Approach for a Simplified Fabrication Process for IBC-SHJ Solar Cells with High Fill Factors. Energy Procedia, 2013, 38, 732-736.	1.8	9
103	Simulation of Contact Schemes for Silicon Heterostructure Rear Contact Solar Cells. Energy Procedia, 2013, 38, 677-683.	1.8	9
104	High-forward-bias transport mechanism in a-Si:H/c-Si heterojunction solar cells. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 657-660.	1.8	8
105	Photoconductivity and optical properties of silicon coated by thin TiO₂ film <i>in situ</i> doped by Au nanoparticles. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 687-694.	1.8	8
106	Passivation Properties of Subnanometer Thin Interfacial Silicon Oxide Films. Energy Procedia, 2014, 55, 805-812.	1.8	8
107	In-system photoelectron spectroscopy study of tin oxide layers produced from tetrakis(dimethylamino)tin by plasma enhanced atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	2.1	8
108	Versatility of Nanocrystalline Silicon Films: from Thin-Film to Perovskite/c-Si Tandem Solar Cell Applications. Coatings, 2020, 10, 759.	2.6	8

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109	Surface photovoltage investigation of recombination at the a-Si/c-Si heterojunction. Thin Solid Films, 2009, 517, 6396-6400.	1.8	7
110	An effective medium approach for modeling polycrystalline silicon thin film solar cells. Solar Energy Materials and Solar Cells, 2013, 117, 152-160.	6.2	7
111	<i>In Situ</i> PL and SPV Monitored Charge Carrier Injection During Metal Assisted Etching of Intrinsic a-Si Layers on c-Si. ACS Applied Materials & Interfaces, 2015, 7, 11654-11659.	8.0	7
112	Wet-Chemical Preparation of Textured Silicon Solar Cell Substrates: Surface Conditioning and Electronic Interface Properties. Solid State Phenomena, 2012, 187, 349-352.	0.3	6
113	Electronic structure of indium-tungsten-oxide alloys and their energy band alignment at the heterojunction to crystalline silicon. Applied Physics Letters, 2018, 112, .	3.3	6
114	Electronic Properties of Ultrathin a-Si:H Layers and the a-Si:H/c-Si Interface. Engineering Materials, 2012, , 161-221.	0.6	6
115	Structural investigations of silicon nanostructures grown by self-organized island formation for photovoltaic applications. Applied Physics A: Materials Science and Processing, 2012, 108, 719-726.	2.3	5
116	Interdigitated back contact silicon heterojunction solar cells: Towards an industrially applicable structuring method. AIP Conference Proceedings, 2018, , .	0.4	5
117	Low-Resistance Hole Contact Stacks for Interdigitated Rear-Contact Silicon Heterojunction Solar Cells. IEEE Journal of Photovoltaics, 2021, 11, 914-925.	2.5	5
118	Etching of a-Si:H on c-Si absorber monitored by in situ photoluminescence measurements. Energy Procedia, 2011, 8, 269-274.	1.8	4
119	Comparison of growth methods for Si/SiO2 nanostructures as nanodot hetero-emitters for photovoltaic applications. Journal of Non-Crystalline Solids, 2012, 358, 2253-2256.	3.1	4
120	Field-effect passivation and degradation analyzed with photoconductance decay measurements. Applied Physics Letters, 2014, 104, 193504.	3.3	4
121	Optimization of PECVD process for ultra-thin tunnel SiO<inf>x</inf> film as passivation layer for silicon heterojunction solar cells. , 2016, , .		4
122	ITO-free metallization for interdigitated back contact silicon heterojunction solar cells. Energy Procedia, 2017, 124, 379-383.	1.8	4
123	Aluminium metallisation for interdigitated back-contact silicon heterojunction solar cells. Japanese Journal of Applied Physics, 2017, 56, 08MB22.	1.5	4
124	Indirect excitation and luminescence activation of Tb doped indium tin oxide and its impact on the hostâ€™s optical and electrical properties. Journal Physics D: Applied Physics, 2022, 55, 210002.	2.8	4
125	AFORS-HET, an open-source on demand numerical PC program for simulation of (thin film) heterojunction solar cells, version 1.2. , 0, , .		3
126	Influence of the amorphous/crystalline silicon heterostructure properties on planar conductance measurements. Journal of Non-Crystalline Solids, 2012, 358, 2236-2240.	3.1	3

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127	The influence of space charge regions on effective charge carrier lifetime in thin films and resulting opportunities for materials characterization. Journal of Applied Physics, 2013, 113, 044510.	2.5	3
128	ZnO:Al with tuned properties for photovoltaic applications: thin layers and high mobility material. Proceedings of SPIE, 2013, , .	0.8	3
129	Towards solar cell emitters based on colloidal Si nanocrystals. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 156-161.	1.8	3
130	Oxidation of Si Surfaces: Effect of Ambient Air and Water Treatments on Surface Charge and Interface State Density. Solid State Phenomena, 2016, 255, 331-337.	0.3	3
131	Surface Optimization of Random Pyramid Textured Silicon Substrates for Improving Heterojunction Solar Cells. Solid State Phenomena, 0, 255, 338-343.	0.3	3
132	Electrical and optical simulation of perovskite/silicon tandem solar cells using Tcad-Sentaurus. , 2021, , .		3
133	Optimization of Silicon Heterojunction Interface Passivation on pâ€•and nâ€Type Wafers Using Optical Emission Spectroscopy. Physica Status Solidi (A) Applications and Materials Science, 0, , 2100511.	1.8	3
134	Impact of a-Si:H structural properties on the annealing behavior of a-Si:H/c-Si heterostructures used as precursors for high-efficiency solar cells. Materials Research Society Symposia Proceedings, 2010, 1268, 1.	0.1	2
135	Band alignment at amorphous/crystalline silicon hetero-interfaces. Materials Research Society Symposia Proceedings, 2011, 1321, 323.	0.1	2
136	Nanocrystalline silicon oxide interlayer in monolithic perovskite/silicon heterojunction tandem solar cells with total current density >39 mA/cm². , 2018, , .		2
137	Imaging of Bandtail States in Silicon Heterojunction Solar Cells: Nanoscopic Current Effects on Photovoltaics. ACS Applied Nano Materials, 2021, 4, 2404-2412.	5.0	2
138	Optoelectronic Inactivity of Dislocations in Cu(In,Ga)Se₂ Thin Films. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100042.	2.4	2
139	Silicon heterojunction solar cells with nanocrystalline Silicon Oxide emitter: Insights into charge carrier transport. , 2015, , .		1
140	Evolution of Optical, Electrical, and Structural Properties of Indium Tungsten Oxide upon High Temperature Annealing. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000165.	1.8	1
141	Silicon interface passivation studied by modulated surface photovoltage spectroscopy. Journal of Physics: Conference Series, 2021, 1841, 012003.	0.4	1
142	Structural properties of Si/SiO₂ nanostructures grown by decomposition of substoichiometric SiO_{<i>x</i>}N_{<i>y</i>} layers for photovoltaic applications. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 676-681.	1.8	0
143	2D modelling of polycrystalline silicon thin film solar cells. EPJ Photovoltaics, 2013, 4, 45104.	1.6	0
144	Numerical Optical Optimization of Planar Monolithic Perovskite-Silicon Tandem Solar Cells. , 2016, , .		0

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145	Determination of the complex refractive index, optical bandgap and Urbach energy of CH3NH3PbI3 and FA1â^'yCsyPb(I1â^'xBrx)3 perovskite thin films. , 2018, , .		0
146	Implementation of ALD-grown MgO layers as electron-selective contact for silicon solar cells. , 2020, , .		0