Thomas Kirchartz

List of Publications by Citations

212 papers	11,345 citations	59 h-index	101 g-index
232 ext. papers	13,299 ext. citations	10.8 avg, IF	6.83 L-index

#	Paper	IF	Citations
212	Reducing the efficiency-stability-cost gap of organic photovoltaics with highly efficient and stable small molecule acceptor ternary solar cells. *Nature Materials*, **2017**, 16, 363-369	27	807
211	Reduced voltage losses yield 10% efficient fullerene free organic solar cells with >1 V open circuit voltages. *Energy and Environmental Science*, **2016**, 9, 3783-3793	35.4	425
210	Quantifying Losses in Open-Circuit Voltage in Solution-Processable Solar Cells. *Physical Review Applied*, **2015**, 4,	4.3	373
209	The impact of energy alignment and interfacial recombination on the internal and external open-circuit voltage of perovskite solar cells. *Energy and Environmental Science*, **2019**, 12, 2778-2788	35.4	348
208	Recombination via tail states in polythiophene:fullerene solar cells. *Physical Review B*, **2011**, 83,	3.3	312
207	Optoelectronic Properties of (CH3NH3)3Sb2I9 Thin Films for Photovoltaic Applications. *ACS Energy Letters*, **2016**, 1, 309-314	20.1	249
206	Photocurrent enhancement from diketopyrrolopyrrole polymer solar cells through alkyl-chain branching point manipulation. *Journal of the American Chemical Society*, **2013**, 135, 11537-40	16.4	248
205	Competition between the charge transfer state and the singlet states of donor or acceptor limiting the efficiency in polymer:fullerene solar cells. *Journal of the American Chemical Society*, **2012**, 134, 685-92	16.4	219
204	Open-Circuit Voltages Exceeding 1.26 V in Planar Methylammonium Lead Iodide Perovskite Solar Cells. *ACS Energy Letters*, **2019**, 4, 110-117	20.1	216
203	Optical Gaps of Organic Solar Cells as a Reference for Comparing Voltage Losses. *Advanced Energy Materials*, **2018**, 8, 1801352	21.8	211
202	Sensitivity of the Mott–Schottky Analysis in Organic Solar Cells. *Journal of Physical Chemistry C*, **2012**, 116, 7672-7680	3.8	202
201	Understanding the Thickness-Dependent Performance of Organic Bulk Heterojunction Solar Cells: The Influence of Mobility, Lifetime, and Space Charge. *Journal of Physical Chemistry Letters*, **2012**, 3, 3470-3	6.4	196
200	Efficiency Limits of Organic Bulk Heterojunction Solar Cells. *Journal of Physical Chemistry C*, **2009**, 113, 17958-17966	3.8	190
199	On the Differences between Dark and Light Ideality Factor in Polymer:Fullerene Solar Cells. *Journal of Physical Chemistry Letters*, **2013**, 4, 2371-2376	6.4	178
198	What Remains Unexplained about the Properties of Halide Perovskites?. *Advanced Materials*, **2018**, 30, e1800691	24	174
197	Meaning of reaction orders in polymer:fullerene solar cells. *Physical Review B*, **2012**, 86,	3.3	174
196	Modeling Nongeminate Recombination in P3HT:PCBM Solar Cells. *Journal of Physical Chemistry C*, **2011**, 115, 9806-9813	3.8	163

195	Organic photovoltaic greenhouses: a unique application for semi-transparent PV?. *Energy and Environmental Science*, **2015**, 8, 1317-1328	35.4	159
194	Efficiency Potential of Photovoltaic Materials and Devices Unveiled by Detailed-Balance Analysis. *Physical Review Applied*, **2017**, 7,	4.3	154
193	Zero-dimensional (CH3NH3)3Bi2I9 perovskite for optoelectronic applications. *Solar Energy Materials and Solar Cells*, **2016**, 158, 195-201	6.4	149
192	Beyond Bulk Lifetimes: Insights into Lead Halide Perovskite Films from Time-Resolved Photoluminescence. *Physical Review Applied*, **2016**, 6,	4.3	144
191	Robust nonfullerene solar cells approaching unity external quantum efficiency enabled by suppression of geminate recombination. *Nature Communications*, **2018**, 9, 2059	17.4	141
190	Electron Collection as a Limit to Polymer:PCBM Solar Cell Efficiency: Effect of Blend Microstructure on Carrier Mobility and Device Performance in PTB7:PCBM. *Advanced Energy Materials*, **2014**, 4, 1400311	21.8	139
189	Thermodynamics of light management in photovoltaic devices. *Physical Review B*, **2014**, 90,	3.3	137
188	Photoluminescence-Based Characterization of Halide Perovskites for Photovoltaics. *Advanced Energy Materials*, **2020**, 10, 1904134	21.8	134
187	Understanding the Reduced Efficiencies of Organic Solar Cells Employing Fullerene Multiadducts as Acceptors. *Advanced Energy Materials*, **2013**, 3, 744-752	21.8	115
186	Charge-Carrier Recombination in Halide Perovskites. *Chemical Reviews*, **2019**, 119, 11007-11019	68.1	113
185	Physical aspects of ferroelectric semiconductors for photovoltaic solar energy conversion. *Physics Reports*, **2016**, 653, 1-40	27.7	112
184	Internal voltages in GaInP/GaInAs/Ge multijunction solar cells determined by electroluminescence measurements. *Applied Physics Letters*, **2008**, 92, 123502	3.4	107
183	What Makes a Good Solar Cell?. *Advanced Energy Materials*, **2018**, 8, 1703385	21.8	104
182	Impact of Photon Recycling on the Open-Circuit Voltage of Metal Halide Perovskite Solar Cells. *ACS Energy Letters*, **2016**, 1, 731-739	20.1	96
181	How to Report Record Open-Circuit Voltages in Lead-Halide Perovskite Solar Cells. *Advanced Energy Materials*, **2020**, 10, 1902573	21.8	94
180	Merocyanine/C60 Planar Heterojunction Solar Cells: Effect of Dye Orientation on Exciton Dissociation and Solar Cell Performance. *Advanced Functional Materials*, **2012**, 22, 86-96	15.6	92
179	Mobility dependent efficiencies of organic bulk heterojunction solar cells: Surface recombination and charge transfer state distribution. *Physical Review B*, **2009**, 80,	3.3	88
178	Comparative study of electroluminescence from Cu(In,Ga)Se2 and Si solar cells. *Thin Solid Films*, **2007**, 515, 6238-6242	2.2	88

177	Investigation of a Conjugated Polyelectrolyte Interlayer for Inverted Polymer:Fullerene Solar Cells. *Advanced Energy Materials*, **2013**, 3, 718-723	21.8	87
176	**2011**,		87
175	Detailed balance and reciprocity in solar cells. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 2737-2751	1.6	87
174	Detailed balance theory of excitonic and bulk heterojunction solar cells. *Physical Review B*, **2008**, 78,	3.3	86
173	Factors Controlling Open-Circuit Voltage Losses in Organic Solar Cells. *Trends in Chemistry*, **2019**, 1, 49-62	14.8	82
172	Relating Recombination, Density of States, and Device Performance in an Efficient Polymer:Fullerene Organic Solar Cell Blend. *Advanced Energy Materials*, **2013**, 3, 1201-1209	21.8	81
171	Influence of crystallinity and energetics on charge separation in polymer-inorganic nanocomposite films for solar cells. *Scientific Reports*, **2013**, 3, 1531	4.9	81
170	Balancing electrical and optical losses for efficient 4-terminal Si–perovskite solar cells with solution processed percolation electrodes. *Journal of Materials Chemistry A*, **2018**, 6, 3583-3592	13	80
169	The role of fullerenes in the environmental stability of polymer:fullerene solar cells. *Energy and Environmental Science*, **2018**, 11, 417-428	35.4	79
168	Electroluminescence analysis of high efficiency Cu(In,Ga)Se2 solar cells. *Journal of Applied Physics*, **2007**, 102, 104510	2.5	79
167	Classification of solar cells according to mechanisms of charge separation and charge collection. *Physical Chemistry Chemical Physics*, **2015**, 17, 4007-14	3.6	78
166	How To Quantify the Efficiency Potential of Neat Perovskite Films: Perovskite Semiconductors with an Implied Efficiency Exceeding 28. *Advanced Materials*, **2020**, 32, e2000080	24	75
165	Characterization and simulation of a-Si:H/□-Si:H tandem solar cells. *Solar Energy Materials and Solar Cells*, **2011**, 95, 3318-3327	6.4	74
164	Reciprocity between electroluminescence and quantum efficiency used for the characterization of silicon solar cells. *Progress in Photovoltaics: Research and Applications*, **2009**, 17, 394-402	6.8	73
163	Quantitative electroluminescence analysis of resistive losses in Cu(In, Ga)Se2 thin-film modules. *Solar Energy Materials and Solar Cells*, **2010**, 94, 979-984	6.4	71
162	Influence of Surface Recombination on Charge-Carrier Kinetics in Organic Bulk Heterojunction Solar Cells with Nickel Oxide Interlayers. *Physical Review Applied*, **2015**, 4,	4.3	70
161	A unified description of non-radiative voltage losses in organic solar cells. *Nature Energy*, **2021**, 6, 799-806	62.3	70
160	Analysis of the Relationship between Linearity of Corrected Photocurrent and the Order of Recombination in Organic Solar Cells. *Journal of Physical Chemistry Letters*, **2011**, 2, 2407-2411	6.4	68

159	Influence of energetic disorder on electroluminescence emission in polymer:fullerene solar cells. *Physical Review B*, **2012**, 86,	3.3	67
158	Impact of Small Phonon Energies on the Charge-Carrier Lifetimes in Metal-Halide Perovskites. *Journal of Physical Chemistry Letters*, **2018**, 9, 939-946	6.4	66
157	Influence of the indium tin oxide/organic interface on open-circuit voltage, recombination, and cell degradation in organic small-molecule solar cells. *Physical Review B*, **2011**, 83,	3.3	66
156	Electro-optical modeling of bulk heterojunction solar cells. *Journal of Applied Physics*, **2008**, 104, 094513	2.5	63
155	Quantitative analysis of the transient photoluminescence of CH3NH3PbI3/PC61BM heterojunctions by numerical simulations. *Sustainable Energy and Fuels*, **2018**, 2, 1027-1034	5.8	61
154	Exploring the validity and limitations of the Mott-Gurney law for charge-carrier mobility determination of semiconducting thin-films. *Journal of Physics Condensed Matter*, **2018**, 30, 105901	1.8	58
153	Influence of doping on charge carrier collection in normal and inverted geometry polymer:fullerene solar cells. *Scientific Reports*, **2013**, 3,	4.9	57
152	Low-temperature a-Si:H/ZnO/Al back contacts for high-efficiency silicon solar cells. *Solar Energy Materials and Solar Cells*, **2006**, 90, 1345-1352	6.4	57
151	Transient Optoelectronic Analysis of the Impact of Material Energetics and Recombination Kinetics on the Open-Circuit Voltage of Hybrid Perovskite Solar Cells. *Journal of Physical Chemistry C*, **2017**, 121, 13496-13506	3.8	56
150	Understanding the Apparent Charge Density Dependence of Mobility and Lifetime in Organic Bulk Heterojunction Solar Cells. *Journal of Physical Chemistry C*, **2014**, 118, 8837-8842	3.8	56
149	Device Performance of Emerging Photovoltaic Materials (Version 1). *Advanced Energy Materials*, **2021**, 11, 2002774	21.8	56
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147	Rugate filter for light-trapping in solar cells. *Optics Express*, **2008**, 16, 9332-43	3.3	52
146	Charge extraction and photocurrent in organic bulk heterojunction solar cells. *Physical Review B*, **2012**, 85,	3.3	51
145	Directional selectivity and ultra-light-trapping in solar cells. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 2831-2843	1.6	51
144	Isostructural, Deeper Highest Occupied Molecular Orbital Analogues of Poly(3-hexylthiophene) for High-Open Circuit Voltage Organic Solar Cells. *Chemistry of Materials*, **2013**, 25, 4239-4249	9.6	50
143	Approaching the Lambertian limit in randomly textured thin-film solar cells. *Optics Express*, **2011**, 19 Suppl 4, A865-74	3.3	49
142	Decreasing Radiative Recombination Coefficients via an Indirect Band Gap in Lead Halide Perovskites. *Journal of Physical Chemistry Letters*, **2017**, 8, 1265-1271	6.4	47

141	Understanding Transient Photoluminescence in Halide Perovskite Layer Stacks and Solar Cells. *Advanced Energy Materials*, **2021**, 11, 2003489	21.8	44
140	Extracting Information about the Electronic Quality of Organic Solar-Cell Absorbers from Fill Factor and Thickness. *Physical Review Applied*, **2016**, 6,	4.3	44
139	Research Update: Recombination and open-circuit voltage in lead-halide perovskites. *APL Materials*, **2018**, 6, 100702	5.7	44
138	Manipulating the Net Radiative Recombination Rate in Lead Halide Perovskite Films by Modification of Light Outcoupling. *Journal of Physical Chemistry Letters*, **2017**, 8, 5084-5090	6.4	42
137	Compositional and electrical properties of line and planar defects in Cu(In,Ga)Se2 thin films for solar cells a review. *Physica Status Solidi - Rapid Research Letters*, **2016**, 10, 363-375	2.5	42
136	Tail state limited photocurrent collection of thick photoactive layers in organic solar cells. *Nature Communications*, **2019**, 10, 5159	17.4	41
135	Selection Metric for Photovoltaic Materials Screening Based on Detailed-Balance Analysis. *Physical Review Applied*, **2017**, 8,	4.3	41
134	Note on the interpretation of electroluminescence images using their spectral information. *Solar Energy Materials and Solar Cells*, **2008**, 92, 1621-1627	6.4	37
133	The photonic light trapImproved light trapping in solar cells by angularly selective filters. *Solar Energy Materials and Solar Cells*, **2009**, 93, 1721-1727	6.4	36
132	Nonradiative Energy Losses in Bulk-Heterojunction Organic Photovoltaics. *Physical Review X*, **2018**, 8,	9.1	36
131	Understanding the interplay of stability and efficiency in A-site engineered lead halide perovskites. *APL Materials*, **2020**, 8, 070901	5.7	35
130	Efficiency limits of Si/SiO2 quantum well solar cells from first-principles calculations. *Journal of Applied Physics*, **2009**, 105, 104511	2.5	35
129	Statistics of the Auger Recombination of Electrons and Holes via Defect Levels in the Band Gap-Application to Lead-Halide Perovskites. *ACS Omega*, **2018**, 3, 8009-8016	3.9	34
128	Influence of diffusion on space-charge-limited current measurements in organic semiconductors. *Beilstein Journal of Nanotechnology*, **2013**, 4, 180-8	3	34
127	**2016**,		34
126	Charge Transport in Spiro-OMeTAD Investigated through Space-Charge-Limited Current Measurements. *Physical Review Applied*, **2018**, 9,	4.3	33
125	Field-dependent exciton dissociation in organic heterojunction solar cells. *Physical Review B*, **2012**, 85,	3.3	32
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123	Figures of Merit Guiding Research on Organic Solar Cells. *Journal of Physical Chemistry C*, **2018**, 122, 5829-5843	3.8	30
122	Reciprocity between Charge Injection and Extraction and Its Influence on the Interpretation of Electroluminescence Spectra in Organic Solar Cells. *Physical Review Applied*, **2016**, 5,	4.3	30
121	A silicon carbide-based highly transparent passivating contact for crystalline silicon solar cells approaching efficiencies of 24%. *Nature Energy*, **2021**, 6, 529-537	62.3	29
120	Analyzing Interface Recombination in Lead-Halide Perovskite Solar Cells with Organic and Inorganic Hole-Transport Layers. *Advanced Materials Interfaces*, **2020**, 7, 2000366	4.6	28
119	Understanding Thermal Admittance Spectroscopy in Low-Mobility Semiconductors. *Journal of Physical Chemistry C*, **2018**, 122, 9795-9803	3.8	28
118	Parameter free calculation of the subgap density of states in poly(3-hexylthiophene). *Faraday Discussions*, **2014**, 174, 255-66	3.6	28
117	Photoluminescence Analysis of Thin-Film Solar Cells **2011**, 151-175		28
116	Roadmap on organic–inorganic hybrid perovskite semiconductors and devices. *APL Materials*, **2021**, 9, 109202	5.7	28
115	Interface Optimization via Fullerene Blends Enables Open-Circuit Voltages of 1.35 V in CH3NH3Pb(I0.8Br0.2)3 Solar Cells. *Advanced Energy Materials*, **2021**, 11, 2003386	21.8	28
114	Understanding Mott-Schottky Measurements under Illumination in Organic Bulk Heterojunction Solar Cells. *Physical Review Applied*, **2017**, 7,	4.3	27
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112	Apparent Defect Densities in Halide Perovskite Thin Films and Single Crystals. *ACS Energy Letters*, **2021**, 6, 3244-3251	20.1	26
111	Spectroscopic Evaluation of Mixing and Crystallinity of Fullerenes in Bulk Heterojunctions. *Advanced Functional Materials*, **2014**, 24, 6972-6980	15.6	25
110	Comparison of device models for organic solar cells: Band-to-band vs. tail states recombination. *Physica Status Solidi (A) Applications and Materials Science*, **2012**, 209, 207-215	1.6	25
109	On the correct interpretation of the low voltage regime in intrinsic single-carrier devices. *Journal of Physics Condensed Matter*, **2017**, 29, 205901	1.8	24
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107	Capacitance Spectroscopy of Thin-Film Solar Cells **2011**, 81-105		24
106	Fermi-level pinning in methylammonium lead iodide perovskites. *Nanoscale*, **2019**, 11, 16828-16836	7.7	23

105	Optical design of spectrally selective interlayers for perovskite/silicon heterojunction tandem solar cells. *Optics Express*, **2018**, 26, A750-A760	3.3	22
104	Charge Carrier Collection and Contact Selectivity in Solar Cells. *Advanced Materials Interfaces*, **2019**, 6, 1900252	4.6	22
103	Effect of localized states on the reciprocity between quantum efficiency and electroluminescence in Cu(In,Ga)Se2 and Si thin-film solar cells. *Solar Energy Materials and Solar Cells*, **2014**, 129, 95-103	6.4	22
102	Highly Compact TiO2 Films by Spray Pyrolysis and Application in Perovskite Solar Cells. *Advanced Engineering Materials*, **2019**, 21, 1801196	3.5	22
101	Role of Polymer Fractionation in Energetic Losses and Charge Carrier Lifetimes of Polymer: Fullerene Solar Cells. *Journal of Physical Chemistry C*, **2015**, 119, 19668-19673	3.8	21
100	What is a deep defect? Combining Shockley-Read-Hall statistics with multiphonon recombination theory. *Physical Review Materials*, **2020**, 4,	3.2	21
99	On the thermodynamics of light trapping in solar cells. *Nature Materials*, **2014**, 13, 103-4	27	20
98	Modeling of photoluminescence spectra and quasi-Fermi level splitting in □-Si:H solar cells. *Solar Energy Materials and Solar Cells*, **2010**, 94, 1851-1854	6.4	20
97	Reverse biased electroluminescence spectroscopy of crystalline silicon solar cells with high spatial resolution. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 2597-2600	1.6	20
96	Quantifying the Absorption Onset in the Quantum Efficiency of Emerging Photovoltaic Devices. *Advanced Energy Materials*, **2021**, 11, 2100022	21.8	20
95	High open-circuit voltages in lead-halide perovskite solar cells: experiment, theory and open questions. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2019**, 377, 20180286	3	19
94	Discriminating between surface and bulk recombination in organic solar cells by studying the thickness dependence of the open-circuit voltage. *Applied Physics Letters*, **2016**, 109, 183301	3.4	18
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92	Pitfalls and prospects of optical spectroscopy to characterize perovskite-transport layer interfaces. *Applied Physics Letters*, **2020**, 116, 100501	3.4	16
91	Spin-coated planar SbS hybrid solar cells approaching 5% efficiency. *Beilstein Journal of Nanotechnology*, **2018**, 9, 2114-2124	3	16
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88	Pathways toward 30% Efficient Single-Junction Perovskite Solar Cells and the Role of Mobile Ions. *Solar Rrl*, **2021**, 5, 2100219	7.1	15

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85	Overcoming the Limitations of Transient Photovoltage Measurements for Studying Recombination in Organic Solar Cells. *Solar Rrl*, **2020**, 4, 1900581	7.1	14
84	Impact of Marginal Exciton□Charge-Transfer State Offset on Charge Generation and Recombination in Polymer:Fullerene Solar Cells. *ACS Energy Letters*, **2019**, 4, 2096-2103	20.1	14
83	Device modelling of organic bulk heterojunction solar cells. *Topics in Current Chemistry*, **2014**, 352, 279-324		14
82	Transient phenomena in Cu(In,Ga)Se2 solar modules investigated by electroluminescence imaging. *Thin Solid Films*, **2013**, 535, 307-310	2.2	14
81	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. *Joule*, **2022**, 6, 8-15	27.8	14
80	How Contact Layers Control Shunting Losses from Pinholes in Thin-Film Solar Cells. *Journal of Physical Chemistry C*, **2018**, 122, 27263-27272	3.8	14
79	Cost-Effective Absorber Patterning of Perovskite Solar Cells by Nanosecond Laser Processing. *Solar Rrl*, **2017**, 1, 1700003	7.1	13
78	Understanding the Effect of Unintentional Doping on Transport Optimization and Analysis in Efficient Organic Bulk-Heterojunction Solar Cells. *Physical Review X*, **2015**, 5,	9.1	13
77	Analysis of the series resistance in pin-type thin-film silicon solar cells. *Journal of Applied Physics*, **2013**, 113, 134503	2.5	13
76	Oxygen vacancy doping of hematite analyzed by electrical conductivity and thermoelectric power measurements. *Physical Review Materials*, **2017**, 1,	3.2	13
75	Understanding the Light-Intensity Dependence of the Short-Circuit Current of Organic Solar Cells. *Advanced Theory and Simulations*, **2020**, 3, 2000116	3.5	12
74	Comment on "Resolving spatial and energetic distributions of trap states in metal halide perovskite solar cells". *Science*, **2021**, 371,	33.3	12
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72	Modelling of photo- and electroluminescence of hydrogenated microcrystalline silicon solar cells. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 1963-1967		11
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70	Optimization of Transparent Passivating Contact for Crystalline Silicon Solar Cells. *IEEE Journal of Photovoltaics*, **2020**, 10, 46-53	3.7	11

69	A Bias-Free, Stand-Alone, and Scalable Photovoltaic□Electrochemical Device for Solar Hydrogen Production. *Advanced Sustainable Systems*, **2020**, 4, 2000070	5.9	10
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67	How solar cell efficiency is governed by the □product. *Physical Review Research*, **2020**, 2,	3.9	10
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62	Transparent-conductive-oxide-free front contacts for high-efficiency silicon heterojunction solar cells. *Joule*, **2021**, 5, 1535-1547	27.8	9
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59	Hydrogen Effusion Experiments **2011**, 449-475		8
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57	Minimum doping densities for p□ junctions. *Nature Energy*, **2020**, 5, 973-975	62.3	8
56	Photon Management in Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2019**, 10, 5892-5896	6.4	7
55	Electroluminescence Analysis of Solar Cells and Solar Modules **2011**, 61-80		6
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51	Extracting Recombination Parameters from Impedance Measurements on Organic Solar Cells. *Physical Review Applied*, **2019**, 11,	4.3	5
50	X-Ray and Neutron Diffraction on Materials for Thin-Film Solar Cells **2011**, 347-363		5
49	Modeling charge carrier collection in multiple exciton generating PbSe quantum dots. *Thin Solid Films*, **2009**, 517, 2438-2442	2.2	5
48	Quantifying Efficiency Limitations in All-Inorganic Halide Perovskite Solar Cells.. *Advanced Materials* , **2022**, e2108132	24	5
47	Capacitance Spectroscopy of Thin-Film Solar Cells **2016**, 93-119		4
46	Absorption and Photocurrent Spectroscopy with High Dynamic Range **2016**, 189-214		4
45	Raman Spectroscopy on Thin Films for Solar Cells **2011**, 365-386		4
44	Directional selectivity and light-trapping in solar cells **2008**,		4
43	Reply to Ideal solar cell efficiencies *Nature Photonics*, **2021**, 15, 165-166	33.9	4
42	Multilayer Capacitances: How Selective Contacts Affect Capacitance Measurements of Perovskite Solar Cells **2022**, 1,		4
41	In Situ Real-Time Characterization of Thin-Film Growth **2016**, 441-467		3
40	Fundamental Electrical Characterization of Thin-Film Solar Cells **2016**, 41-69		3
39	Electroluminescence Analysis of Solar Cells and Solar Modules **2016**, 71-92		3
38	Introduction to Thin-Film Photovoltaics **2011**, 1-32		3
37	Two- and Three-Dimensional Electronic Modeling of Thin-Film Solar Cells **2011**, 529-540		3
36	Electroluminescence imaging of Cu(In,Ga)Se2 thin film solar modules. *Materials Research Society Symposia Proceedings*, **2009**, 1165, 1		3
35	Quantification of Light Trapping Using a Reciprocity Between Electroluminescent Emission and Photovoltaic Action in a Solar Cell. *Materials Research Society Symposia Proceedings*, **2008**, 1101, 1		3
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31	Transient Optoelectronic Characterization of Thin-FilmSolar Cells **2016**, 147-162		2
30	Scanning Probe Microscopy on Inorganic Thin Films for Solar Cells **2011**, 275-298		2
29	Electron Microscopy on Thin Films for Solar Cells **2011**, 299-345		2
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