

# Christoph J Brabec

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

710 papers	60,318 citations	118 h-index	230 g-index
792 ext. papers	66,550 ext. citations	11.5 avg, IF	7.95 L-index

#	Paper	IF	Citations
710	Design Rules for Donors in Bulk-Heterojunction Solar Cells: Towards 10 % Energy-Conversion Efficiency. <i>Advanced Materials</i> , <b>2006</b> , 18, 789-794	24	4081
709	Polymer-Fullerene Bulk-Heterojunction Solar Cells. <i>Advanced Materials</i> , <b>2009</b> , 21, 1323-1338	24	2899
708	2.5% efficient organic plastic solar cells. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 841-843	3.4	2306
707	Polymer-fullerene bulk-heterojunction solar cells. <i>Advanced Materials</i> , <b>2010</b> , 22, 3839-56	24	1629
706	Processing additives for improved efficiency from bulk heterojunction solar cells. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 3619-23	16.4	1434
705	High Photovoltaic Performance of a Low-Bandgap Polymer. <i>Advanced Materials</i> , <b>2006</b> , 18, 2884-2889	24	1023
704	Organic photovoltaics: technology and market. <i>Solar Energy Materials and Solar Cells</i> , <b>2004</b> , 83, 273-292	6.4	958
703	High-efficiency and air-stable P3HT-based polymer solar cells with a new non-fullerene acceptor. <i>Nature Communications</i> , <b>2016</b> , 7, 11585	17.4	903
702	Reducing the efficiency-stability-cost gap of organic photovoltaics with highly efficient and stable small molecule acceptor ternary solar cells. <i>Nature Materials</i> , <b>2017</b> , 16, 363-369	27	807
701	Effect of LiF/metal electrodes on the performance of plastic solar cells. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 1288-1290	3.4	805
700	Recombination and loss analysis in polythiophene based bulk heterojunction photodetectors. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 3885-3887	3.4	771
699	Correlation Between Structural and Optical Properties of Composite Polymer/Fullerene Films for Organic Solar Cells. <i>Advanced Functional Materials</i> , <b>2005</b> , 15, 1193-1196	15.6	743
698	Detection of X-ray photons by solution-processed organic-inorganic perovskites. <i>Nature Photonics</i> , <b>2015</b> , 9, 444-449	33.9	685
697	Interface materials for organic solar cells. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 2499		634
696	Organic tandem solar cells: A review. <i>Energy and Environmental Science</i> , <b>2009</b> , 2, 347	35.4	634
695	Critical review of the molecular design progress in non-fullerene electron acceptors towards commercially viable organic solar cells. <i>Chemical Society Reviews</i> , <b>2019</b> , 48, 1596-1625	58.5	617
694	Organic ternary solar cells: a review. <i>Advanced Materials</i> , <b>2013</b> , 25, 4245-66	24	611

693	Highly efficient inverted organic photovoltaics using solution based titanium oxide as electron selective contact. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 233517	3.4	549
692	Tracing photoinduced electron transfer process in conjugated polymer/fullerene bulk heterojunctions in real time. <i>Chemical Physics Letters</i> , <b>2001</b> , 340, 232-236	2.5	516
691	A Low-Bandgap Semiconducting Polymer for Photovoltaic Devices and Infrared Emitting Diodes. <i>Advanced Functional Materials</i> , <b>2002</b> , 12, 709-712	15.6	483
690	Influence of blend microstructure on bulk heterojunction organic photovoltaic performance. <i>Chemical Society Reviews</i> , <b>2011</b> , 40, 1185-99	58.5	463
689	Design Rules for Donors in Bulk-Heterojunction Tandem Solar Cells? Towards 15 % Energy-Conversion Efficiency. <i>Advanced Materials</i> , <b>2008</b> , 20, 579-583	24	463
688	Reduced voltage losses yield 10% efficient fullerene free organic solar cells with >1 V open circuit voltages. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 3783-3793	35.4	425
687	High Photovoltaic Performance of Inkjet Printed Polymer:Fullerene Blends. <i>Advanced Materials</i> , <b>2007</b> , 19, 3973-3978	24	425
686	A generic interface to reduce the efficiency-stability-cost gap of perovskite solar cells. <i>Science</i> , <b>2017</b> , 358, 1192-1197	33.3	418
685	Rare-earth ion doped up-conversion materials for photovoltaic applications. <i>Advanced Materials</i> , <b>2011</b> , 23, 2675-80	24	409
684	Panchromatic Conjugated Polymers Containing Alternating Donor/Acceptor Units for Photovoltaic Applications. <i>Macromolecules</i> , <b>2007</b> , 40, 1981-1986	5.5	409
683	Highly efficient organic tandem solar cells: a follow up review. <i>Energy and Environmental Science</i> , <b>2013</b> , 6, 2390	35.4	389
682	Bimolecular Crystals of Fullerenes in Conjugated Polymers and the Implications of Molecular Mixing for Solar Cells. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 1173-1179	15.6	373
681	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. <i>Nature Energy</i> , <b>2020</b> , 5, 35-49	62.3	369
680	Printing highly efficient organic solar cells. <i>Nano Letters</i> , <b>2008</b> , 8, 2806-13	11.5	363
679	Influence of the Molecular Weight of Poly(3-hexylthiophene) on the Performance of Bulk Heterojunction Solar Cells. <i>Chemistry of Materials</i> , <b>2005</b> , 17, 2175-2180	9.6	359
678	Recombination dynamics as a key determinant of open circuit voltage in organic bulk heterojunction solar cells: a comparison of four different donor polymers. <i>Advanced Materials</i> , <b>2010</b> , 22, 4987-92	24	343
677	Recombination-Limited Photocurrents in Low Bandgap Polymer/Fullerene Solar Cells. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 1106-1111	15.6	314
676	Flexible organic P3HT:PCBM bulk-heterojunction modules with more than 1 year outdoor lifetime. <i>Solar Energy Materials and Solar Cells</i> , <b>2008</b> , 92, 727-731	6.4	314

675	Solar power wires based on organic photovoltaic materials. <i>Science</i> , <b>2009</b> , 324, 232-5	33.3	311
674	Influence of the solvent on the crystal structure of PCBM and the efficiency of MDMO-PPV:PCBM 'plastic' solar cells. <i>Chemical Communications</i> , <b>2003</b> , 2116-8	5.8	311
673	Influence of the bridging atom on the performance of a low-bandgap bulk heterojunction solar cell. <i>Advanced Materials</i> , <b>2010</b> , 22, 367-70	24	310
672	Accelerating the discovery of materials for clean energy in the era of smart automation. <i>Nature Reviews Materials</i> , <b>2018</b> , 3, 5-20	73.3	308
671	Solution-Processed Organic Solar Cells. <i>MRS Bulletin</i> , <b>2008</b> , 33, 670-675	3.2	303
670	High-performance direct conversion X-ray detectors based on sintered hybrid lead triiodide perovskite wafers. <i>Nature Photonics</i> , <b>2017</b> , 11, 436-440	33.9	289
669	Designing ternary blend bulk heterojunction solar cells with reduced carrier recombination and a fill factor of 77%. <i>Nature Energy</i> , <b>2016</b> , 1,	62.3	274
668	Brightly Luminescent and Color-Tunable Formamidinium Lead Halide Perovskite FAPbX (X = Cl, Br, I) Colloidal Nanocrystals. <i>Nano Letters</i> , <b>2017</b> , 17, 2765-2770	11.5	272
667	Photoconductivity of a Low-Bandgap Conjugated Polymer. <i>Advanced Functional Materials</i> , <b>2007</b> , 17, 632-636	63.6	263
666	High-performance semitransparent perovskite solar cells with solution-processed silver nanowires as top electrodes. <i>Nanoscale</i> , <b>2015</b> , 7, 1642-9	7.7	257
665	Near IR Sensitization of Organic Bulk Heterojunction Solar Cells: Towards Optimization of the Spectral Response of Organic Solar Cells. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 338-346	15.6	255
664	Dual Interfacial Design for Efficient CsPbI Br Perovskite Solar Cells with Improved Photostability. <i>Advanced Materials</i> , <b>2019</b> , 31, e1901152	24	248
663	Production Aspects of Organic Photovoltaics and Their Impact on the Commercialization of Devices. <i>MRS Bulletin</i> , <b>2005</b> , 30, 50-52	3.2	241
662	Fine-tuning of the chemical structure of photoactive materials for highly efficient organic photovoltaics. <i>Nature Energy</i> , <b>2018</b> , 3, 1051-1058	62.3	235
661	Interface modification for highly efficient organic photovoltaics. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 093303	33.4	229
660	Efficient Polymer Solar Cells Based on Non-fullerene Acceptors with Potential Device Lifetime Approaching 10 Years. <i>Joule</i> , <b>2019</b> , 3, 215-226	27.8	229
659	Scalable, ambient atmosphere roll-to-roll manufacture of encapsulated large area, flexible organic tandem solar cell modules. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 2925	35.4	224
658	Abnormal strong burn-in degradation of highly efficient polymer solar cells caused by spinodal donor-acceptor demixing. <i>Nature Communications</i> , <b>2017</b> , 8, 14541	17.4	223

657	2008,		223
656	Stability and photodegradation mechanisms of conjugated polymer/fullerene plastic solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2000</b> , 61, 35-42	6.4	223
655	Delocalization of exciton and electron wavefunction in non-fullerene acceptor molecules enables efficient organic solar cells. <i>Nature Communications</i> , <b>2020</b> , 11, 3943	17.4	222
654	Simulation of light intensity dependent current characteristics of polymer solar cells. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 2816-2819	2.5	217
653	Synthesis, Photophysical Properties, and Photovoltaic Devices of Oligo(p-phenylene vinylene)-fullerene Dyads?. <i>Journal of Physical Chemistry B</i> , <b>2000</b> , 104, 10174-10190	3.4	211
652	Interface Engineering of Perovskite Hybrid Solar Cells with Solution-Processed PeryleneDiimide Heterojunctions toward High Performance. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 227-234	9.6	208
651	Giant Rashba Splitting in CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> Organic-Inorganic Perovskite. <i>Physical Review Letters</i> , <b>2016</b> , 117, 126401	7.4	207
650	Recent advances in semi-transparent polymer and perovskite solar cells for power generating window applications. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 1688-1709	35.4	202
649	Determination of the P3HT:PCBM solubility parameters via a binary solvent gradient method: Impact of solubility on the photovoltaic performance. <i>Solar Energy Materials and Solar Cells</i> , <b>2012</b> , 100, 138-146	6.4	202
648	Spray-Coated Silver Nanowires as Top Electrode Layer in Semitransparent P3HT:PCBM-Based Organic Solar Cell Devices. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 1711-1717	15.6	199
647	Long-lived photoinduced charge separation for solar cell applications in phthalocyanineFulleropyrrolidine dyad thin films. <i>Journal of Materials Chemistry</i> , <b>2003</b> , 13, 700-704		199
646	Physics of organic bulk heterojunction devices for photovoltaic applications. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 104503	2.5	198
645	Ultrafast Electron Transfer and Decay Dynamics in a Small Band Gap Bulk Heterojunction Material. <i>Advanced Materials</i> , <b>2007</b> , 19, 2307-2312	24	192
644	Charge Recombination in Conjugated Polymer/Fullerene Blended Films Studied by Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 1567-1573	3.4	190
643	Performance Enhancement of the P3HT/PCBM Solar Cells through NIR Sensitization Using a Small-Bandgap Polymer. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 1198-1202	21.8	188
642	X-ray imaging with scintillator-sensitized hybrid organic photodetectors. <i>Nature Photonics</i> , <b>2015</b> , 9, 843-848	9.5	184
641	Performance Analysis of Printed Bulk Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , <b>2006</b> , 16, 1669-1672	15.6	183
640	Transient optical studies of charge recombination dynamics in a polymer/fullerene composite at room temperature. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 3001-3003	3.4	179

639	High-Performance Organic Solar Cells Based on a Small Molecule with Alkylthio-Thienyl-Conjugated Side Chains without Extra Treatments. <i>Advanced Materials</i> , <b>2015</b> , 27, 7469-75	24	174
638	Fabrication, Optical Modeling, and Color Characterization of Semitransparent Bulk-Heterojunction Organic Solar Cells in an Inverted Structure. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 1592-1598	15.6	174
637	Solution-Processed Organic n-Type Thin-Film Transistors. <i>Advanced Materials</i> , <b>2003</b> , 15, 2084-2088	24	174
636	High-performance ternary organic solar cells with thick active layer exceeding 11% efficiency. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 885-892	35.4	172
635	Two Novel Cyclopentadithiophene-Based Alternating Copolymers as Potential Donor Components for High-Efficiency Bulk-Heterojunction-Type Solar Cells. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 4045-4050	9.6	172
634	Morphology Optimization via Side Chain Engineering Enables All-Polymer Solar Cells with Excellent Fill Factor and Stability. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 8934-8943	16.4	171
633	Morphological and electrical control of fullerene dimerization determines organic photovoltaic stability. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 247-256	35.4	169
632	Nanomorphology and Charge Generation in Bulk Heterojunctions Based on Low-Bandgap Dithiophene Polymers with Different Bridging Atoms. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 1180-1188	15.6	169
631	High Fill Factor Polymer Solar Cells Incorporating a Low Temperature Solution Processed WO <sub>3</sub> Hole Extraction Layer. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 1433-1438	21.8	167
630	Organic photovoltaics for low light applications. <i>Solar Energy Materials and Solar Cells</i> , <b>2011</b> , 95, 3256-3261	26.1	167
629	Overcoming the Interface Losses in Planar Heterojunction Perovskite-Based Solar Cells. <i>Advanced Materials</i> , <b>2016</b> , 28, 5112-20	24	167
628	Highly Anisotropically Self-Assembled Structures of para-Sexiphenyl Grown by Hot-Wall Epitaxy. <i>Advanced Materials</i> , <b>2000</b> , 12, 629-633	24	166
627	Influence of the anodic work function on the performance of organic solar cells. <i>ChemPhysChem</i> , <b>2002</b> , 3, 795-9	3.2	165
626	Towards low-cost, environmentally friendly printed chalcopyrite and kesterite solar cells. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 1829-1849	35.4	164
625	Improved High-Efficiency Perovskite Planar Heterojunction Solar Cells via Incorporation of a Polyelectrolyte Interlayer. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 5190-5193	9.6	163
624	Temperature dependence for the photovoltaic device parameters of polymer-fullerene solar cells under operating conditions. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 5343-5350	2.5	161
623	Solution-Processed Metallic Nanowire Electrodes as Indium Tin Oxide Replacement for Thin-Film Solar Cells. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 4784-4787	15.6	160
622	Burn-in Free Nonfullerene-Based Organic Solar Cells. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700770	21.8	156

621	Increased open-circuit voltage of organic solar cells by reduced donor-acceptor interface area. <i>Advanced Materials</i> , <b>2014</b> , 26, 3839-43	24	152
620	ITO-Free and Fully Solution-Processed Semitransparent Organic Solar Cells with High Fill Factors. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 1062-1067	21.8	152
619	Cost analysis of roll-to-roll fabricated ITO free single and tandem organic solar modules based on data from manufacture. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 2792	35.4	151
618	Bipolar Charge Transport in PCPDTBT-PCBM Bulk-Heterojunctions for Photovoltaic Applications. <i>Advanced Functional Materials</i> , <b>2008</b> , 18, 1757-1766	15.6	149
617	Hybrid solar cells based on dye-sensitized nanoporous TiO <sub>2</sub> electrodes and conjugated polymers as hole transport materials. <i>Synthetic Metals</i> , <b>2001</b> , 125, 279-287	3.6	148
616	Photoinduced charge carriers in conjugated polymerfullerene composites studied with light-induced electron-spin resonance. <i>Physical Review B</i> , <b>1999</b> , 59, 8019-8025	3.3	146
615	Comparison of various sol-gel derived metal oxide layers for inverted organic solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2011</b> , 95, 2194-2199	6.4	145
614	Influence of Molecular Weight Distribution on the Gelation of P3HT and Its Impact on the Photovoltaic Performance. <i>Macromolecules</i> , <b>2009</b> , 42, 4661-4666	5.5	145
613	Air-processed polymer tandem solar cells with power conversion efficiency exceeding 10%. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 2902-2909	35.4	144
612	Determination of the degradation constant of bulk heterojunction solar cells by accelerated lifetime measurements. <i>Applied Physics A: Materials Science and Processing</i> , <b>2004</b> , 79, 37-40	2.6	143
611	Reducing burn-in voltage loss in polymer solar cells by increasing the polymer crystallinity. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 2974-2980	35.4	142
610	A Universal Interface Layer Based on an Amine-Functionalized Fullerene Derivative with Dual Functionality for Efficient Solution Processed Organic and Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1401692	21.8	141
609	A History and Perspective of Non-Fullerene Electron Acceptors for Organic Solar Cells. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003570	21.8	141
608	Robust nonfullerene solar cells approaching unity external quantum efficiency enabled by suppression of geminate recombination. <i>Nature Communications</i> , <b>2018</b> , 9, 2059	17.4	141
607	Angle dependence of external and internal quantum efficiencies in bulk-heterojunction organic solar cells. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 054516	2.5	137
606	High shunt resistance in polymer solar cells comprising a MoO <sub>3</sub> hole extraction layer processed from nanoparticle suspension. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 253308	3.4	133
605	The influence of materials work function on the open circuit voltage of plastic solar cells. <i>Thin Solid Films</i> , <b>2002</b> , 403-404, 368-372	2.2	133
604	Inverted organic solar cells using a solution processed aluminum-doped zinc oxide buffer layer. <i>Organic Electronics</i> , <b>2011</b> , 12, 1539-1543	3.5	128



603	Disorder-Induced Open-Circuit Voltage Losses in Organic Solar Cells During Photoinduced Burn-In. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1500111	21.8	127
602	An inter-laboratory stability study of roll-to-roll coated flexible polymer solar modules. <i>Solar Energy Materials and Solar Cells</i> , <b>2011</b> , 95, 1398-1416	6.4	127
601	Solar spectral conversion for improving the photosynthetic activity in algae reactors. <i>Nature Communications</i> , <b>2013</b> , 4, 2047	17.4	125
600	Local Observation of Phase Segregation in Mixed-Halide Perovskite. <i>Nano Letters</i> , <b>2018</b> , 18, 2172-2178	11.5	124
599	Material and device concepts for organic photovoltaics: towards competitive efficiencies. <i>Thin Solid Films</i> , <b>2004</b> , 451-452, 503-507	2.2	124
598	The interplay of efficiency and morphology in photovoltaic devices based on interpenetrating networks of conjugated polymers with fullerenes. <i>Synthetic Metals</i> , <b>2001</b> , 118, 1-9	3.6	124
597	Highly efficient, large area, roll coated flexible and rigid OPV modules with geometric fill factors up to 98.5% processed with commercially available materials. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 89-94	35.4	120
596	Performance improvement of organic solar cells with moth eye anti-reflection coating. <i>Thin Solid Films</i> , <b>2008</b> , 516, 7167-7170	2.2	120
595	Photovoltaic properties of conjugated polymer/methanofullerene composites embedded in a polystyrene matrix. <i>Journal of Applied Physics</i> , <b>1999</b> , 85, 6866-6872	2.5	120
594	Analyzing the efficiency, stability and cost potential for fullerene-free organic photovoltaics in one figure of merit. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 1355-1361	35.4	119
593	The influence of polymer purification on photovoltaic device performance of a series of indacenodithiophene donor polymers. <i>Advanced Materials</i> , <b>2013</b> , 25, 2029-34	24	119
592	Achieving over 17% efficiency of ternary all-polymer solar cells with two well-compatible polymer acceptors. <i>Joule</i> , <b>2021</b> , 5, 1548-1565	27.8	118
591	The impact of water vapor transmission rate on the lifetime of flexible polymer solar cells. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 103306	3.4	113
590	Inorganic Halide Perovskite Solar Cells: Progress and Challenges. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2000183	21.8	111
589	Ultrafast dynamics of charge carrier photogeneration and geminate recombination in conjugated polymer:fullerene solar cells. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	111
588	Solubility Based Identification of Green Solvents for Small Molecule Organic Solar Cells. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 1449-1457	15.6	110
587	Realization of large area flexible fullerene-conjugated polymer photocells: A route to plastic solar cells. <i>Synthetic Metals</i> , <b>1999</b> , 102, 861-864	3.6	110
586	The role of exciton lifetime for charge generation in organic solar cells at negligible energy-level offsets. <i>Nature Energy</i> , <b>2020</b> , 5, 711-719	62.3	110



585	P3HT: non-fullerene acceptor based large area, semi-transparent PV modules with power conversion efficiencies of 5%, processed by industrially scalable methods. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2225-2234	35.4	108
584	Increasing the Fill Factor of Inverted P3HT:PCBM Solar Cells Through Surface Modification of Al-Doped ZnO via Phosphonic Acid-Anchored C60 SAMs. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 532-535	21.8	108
583	Influence of oxygen on semi-transparent organic solar cells with gas permeable electrodes. <i>Organic Electronics</i> , <b>2009</b> , 10, 1424-1428	3.5	105
582	Charge Transport and Recombination in Low-Bandgap Bulk Heterojunction Solar Cell using Bis-adduct Fullerene. <i>Advanced Energy Materials</i> , <b>2011</b> , 1, 1162-1168	21.8	103
581	Characterization of Organic Solar Cells: the Importance of Device Layout. <i>Advanced Functional Materials</i> , <b>2007</b> , 17, 3906-3910	15.6	102
580	Environmentally Printing Efficient Organic Tandem Solar Cells with High Fill Factors: A Guideline Towards 20% Power Conversion Efficiency. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400084	21.8	101
579	Reliability of IR-imaging of PV-plants under operating conditions. <i>Solar Energy Materials and Solar Cells</i> , <b>2012</b> , 107, 154-164	6.4	101
578	Effects of Alkyl Terminal Chains on Morphology, Charge Generation, Transport, and Recombination Mechanisms in Solution-Processed Small Molecule Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1500386	21.8	98
577	Efficient Organic Solar Cells with Extremely High Open-Circuit Voltages and Low Voltage Losses by Suppressing Nonradiative Recombination Losses. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1801699	21.8	97
576	Surpassing the 10% efficiency milestone for 1-cm all-polymer solar cells. <i>Nature Communications</i> , <b>2019</b> , 10, 4100	17.4	96
575	The Physics of Small Molecule Acceptors for Efficient and Stable Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1703298	21.8	96
574	IR sensitization of an indene-C60 bisadduct (ICBA) in ternary organic solar cells. <i>Energy and Environmental Science</i> , <b>2013</b> , 6, 1796	35.4	96
573	Graded 2D/3D Perovskite Heterostructure for Efficient and Operationally Stable MA-Free Perovskite Solar Cells. <i>Advanced Materials</i> , <b>2020</b> , 32, e2000571	24	95
572	Topographical and morphological aspects of spray coated organic photovoltaics. <i>Organic Electronics</i> , <b>2009</b> , 10, 587-593	3.5	94
571	Molecular engineering of C60-based conjugated oligomer ensembles: modulating the competition between photoinduced energy and electron transfer processes. <i>Journal of Organic Chemistry</i> , <b>2002</b> , 67, 1141-52	4.2	94
570	Organic Field-Effect Devices as Tool to Characterize the Bipolar Transport in Polymer-Fullerene Blends: The Case of P3HT-PCBM. <i>Advanced Functional Materials</i> , <b>2007</b> , 17, 3274-3283	15.6	92
569	Photoinduced degradation of methylammonium lead triiodide perovskite semiconductors. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 15896-15903	13	92
568	Determination of Solubility Parameters for Organic Semiconductor Formulations. <i>Macromolecular Chemistry and Physics</i> , <b>2011</b> , 212, 2159-2165	2.6	91

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