

Harald Ade

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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.

425
papers

35,470⁰
citations

93
h-index

175
g-index

441
ext. papers

39,725
ext. citations

12.5
avg, IF

7.58
L-index

#	Paper	IF	Citations
425	Aggregation and morphology control enables multiple cases of high-efficiency polymer solar cells. <i>Nature Communications</i> , 2014 , 5, 5293	17.4	2609
424	Efficient organic solar cells processed from hydrocarbon solvents. <i>Nature Energy</i> , 2016 , 1,	62.3	1876
423	Energy-Level Modulation of Small-Molecule Electron Acceptors to Achieve over 12% Efficiency in Polymer Solar Cells. <i>Advanced Materials</i> , 2016 , 28, 9423-9429	24	1191
422	Fast charge separation in a non-fullerene organic solar cell with a small driving force. <i>Nature Energy</i> , 2016 , 1,	62.3	967
421	A Large-Bandgap Conjugated Polymer for Versatile Photovoltaic Applications with High Performance. <i>Advanced Materials</i> , 2015 , 27, 4655-60	24	586
420	A Wide Band Gap Polymer with a Deep Highest Occupied Molecular Orbital Level Enables 14.2% Efficiency in Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , 2018 , 140, 7159-7167	16.4	579
419	Absolute Measurement of Domain Composition and Nanoscale Size Distribution Explains Performance in PTB7:PC71BM Solar Cells. <i>Advanced Energy Materials</i> , 2013 , 3, 65-74	21.8	555
418	Interferometer-controlled scanning transmission X-ray microscopes at the Advanced Light Source. <i>Journal of Synchrotron Radiation</i> , 2003 , 10, 125-36	2.4	543
417	Alkyl Chain Tuning of Small Molecule Acceptors for Efficient Organic Solar Cells. <i>Joule</i> , 2019 , 3, 3020-3033	37.8	504
416	Fluorine substituents reduce charge recombination and drive structure and morphology development in polymer solar cells. <i>Journal of the American Chemical Society</i> , 2013 , 135, 1806-15	16.4	489
415	Quantitative relations between interaction parameter, miscibility and function in organic solar cells. <i>Nature Materials</i> , 2018 , 17, 253-260	27	409
414	The influence of molecular orientation on organic bulk heterojunction solar cells. <i>Nature Photonics</i> , 2014 , 8, 385-391	33.9	396
413	The Importance of Fullerene Percolation in the Mixed Regions of Polymer/Fullerene Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2013 , 3, 364-374	21.8	386
412	Molecular Miscibility of Polymer/Fullerene Blends. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 3160-3164	66.4	340
411	Achieving Highly Efficient Nonfullerene Organic Solar Cells with Improved Intermolecular Interaction and Open-Circuit Voltage. <i>Advanced Materials</i> , 2017 , 29, 1700254	24	314
410	Chemical contrast in X-ray microscopy and spatially resolved XANES spectroscopy of organic specimens. <i>Science</i> , 1992 , 258, 972-5	33.3	314
409	High performance all-polymer solar cell via polymer side-chain engineering. <i>Advanced Materials</i> , 2014 , 26, 3767-72	24	300

408	Compatibilizing Bulk Polymer Blends by Using Organoclays. <i>Macromolecules</i> , 2006 , 39, 4793-4801	5.5	299
407	A High-Efficiency Organic Solar Cell Enabled by the Strong Intramolecular Electron Push-Pull Effect of the Nonfullerene Acceptor. <i>Advanced Materials</i> , 2018 , 30, e1707170	24	295
406	Miscibility, Crystallinity, and Phase Development in P3HT/PCBM Solar Cells: Toward an Enlightened Understanding of Device Morphology and Stability. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 3135-3145	6.4	290
405	Efficient Charge Transfer and Fine-Tuned Energy Level Alignment in a THF-Processed Fullerene-Free Organic Solar Cell with 11.3% Efficiency. <i>Advanced Materials</i> , 2017 , 29, 1604241	24	279
404	From binary to ternary solvent: morphology fine-tuning of D/A blends in PDPP3T-based polymer solar cells. <i>Advanced Materials</i> , 2012 , 24, 6335-41	24	276
403	Designing ternary blend bulk heterojunction solar cells with reduced carrier recombination and a fill factor of 77%. <i>Nature Energy</i> , 2016 , 1,	62.3	274
402	9.73% Efficiency Nonfullerene All Organic Small Molecule Solar Cells with Absorption-Complementary Donor and Acceptor. <i>Journal of the American Chemical Society</i> , 2017 , 139, 5085-5094	16.4	270
401	Polarized X-ray scattering reveals non-crystalline orientational ordering in organic films. <i>Nature Materials</i> , 2012 , 11, 536-43	27	258
400	Domain Purity, Miscibility, and Molecular Orientation at Donor/Acceptor Interfaces in High Performance Organic Solar Cells: Paths to Further Improvement. <i>Advanced Energy Materials</i> , 2013 , 3, 864-872	21.8	256
399	Ring-Fusion of Perylene Diimide Acceptor Enabling Efficient Nonfullerene Organic Solar Cells with a Small Voltage Loss. <i>Journal of the American Chemical Society</i> , 2017 , 139, 16092-16095	16.4	249
398	Improved Performance of All-Polymer Solar Cells Enabled by Naphthodiperylenetetraimide-Based Polymer Acceptor. <i>Advanced Materials</i> , 2017 , 29, 1700309	24	245
397	Trends in the Carbonyl Core (C 1S, O 1S) -jC=O Transition in the Near-Edge X-ray Absorption Fine Structure Spectra of Organic Molecules. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 8531-8538	3.4	243
396	Highly Efficient Organic Solar Cells with Improved Vertical Donor-Acceptor Compositional Gradient Via an Inverted Off-Center Spinning Method. <i>Advanced Materials</i> , 2016 , 28, 967-74	24	240
395	A Quantitative Study of PCBM Diffusion during Annealing of P3HT:PCBM Blend Films. <i>Macromolecules</i> , 2009 , 42, 8392-8397	5.5	238
394	NEXAFS microscopy and resonant scattering: Composition and orientation probed in real and reciprocal space. <i>Polymer</i> , 2008 , 49, 643-675	3.9	234
393	Mobility-controlled performance of thick solar cells based on fluorinated copolymers. <i>Journal of the American Chemical Society</i> , 2014 , 136, 15566-76	16.4	232
392	Manipulating aggregation and molecular orientation in all-polymer photovoltaic cells. <i>Advanced Materials</i> , 2015 , 27, 6046-54	24	232
391	Rigidifying Nonplanar Perylene Diimides by Ring Fusion Toward Geometry-Tunable Acceptors for High-Performance Fullerene-Free Solar Cells. <i>Advanced Materials</i> , 2016 , 28, 951-8	24	222

390	Calibrated NEXAFS spectra of some common polymers. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2003 , 128, 85-96	1.7	221
389	High-Performance Non-Fullerene Polymer Solar Cells Based on a Pair of Donor-Acceptor Materials with Complementary Absorption Properties. <i>Advanced Materials</i> , 2015 , 27, 7299-304	24	219
388	High-efficiency all-polymer solar cells based on a pair of crystalline low-bandgap polymers. <i>Advanced Materials</i> , 2014 , 26, 7224-30	24	218
387	High-Efficiency Nonfullerene Organic Solar Cells: Critical Factors that Affect Complex Multi-Length Scale Morphology and Device Performance. <i>Advanced Energy Materials</i> , 2017 , 7, 1602000	21.8	205
386	Design of a New Small-Molecule Electron Acceptor Enables Efficient Polymer Solar Cells with High Fill Factor. <i>Advanced Materials</i> , 2017 , 29, 1704051	24	200
385	The role of regioregularity, crystallinity, and chain orientation on electron transport in a high-mobility n-type copolymer. <i>Journal of the American Chemical Society</i> , 2014 , 136, 4245-56	16.4	200
384	Enhanced photovoltaic performance by modulating surface composition in bulk heterojunction polymer solar cells based on PBDTTT-C-T/PC71 BM. <i>Advanced Materials</i> , 2014 , 26, 4043-9	24	198
383	PolLux: a new facility for soft x-ray spectromicroscopy at the Swiss Light Source. <i>Review of Scientific Instruments</i> , 2008 , 79, 113704	1.7	191
382	A Vinylene-Bridged Perylenediimide-Based Polymeric Acceptor Enabling Efficient All-Polymer Solar Cells Processed under Ambient Conditions. <i>Advanced Materials</i> , 2016 , 28, 8483-8489	24	190
381	Controlling Blend Morphology for Ultrahigh Current Density in Nonfullerene Acceptor-Based Organic Solar Cells. <i>ACS Energy Letters</i> , 2018 , 3, 669-676	20.1	187
380	Understanding the Morphology of PTB7:PCBM Blends in Organic Photovoltaics. <i>Advanced Energy Materials</i> , 2014 , 4, 1301377	21.8	187
379	Organic thermometry for chondritic parent bodies. <i>Earth and Planetary Science Letters</i> , 2008 , 272, 446-455	183	
378	PDT-S-T: a new polymer with optimized molecular conformation for controlled aggregation and π stacking and its application in efficient photovoltaic devices. <i>Advanced Materials</i> , 2013 , 25, 3449-55	24	179
377	Controlling molecular weight of a high efficiency donor-acceptor conjugated polymer and understanding its significant impact on photovoltaic properties. <i>Advanced Materials</i> , 2014 , 26, 4456-62	24	177
376	Miscibility-Function Relations in Organic Solar Cells: Significance of Optimal Miscibility in Relation to Percolation. <i>Advanced Energy Materials</i> , 2018 , 8, 1703058	21.8	175
375	Nanomorphology of bulk heterojunction photovoltaic thin films probed with resonant soft X-ray scattering. <i>Nano Letters</i> , 2010 , 10, 2863-9	11.5	175
374	A polythiophene derivative with superior properties for practical application in polymer solar cells. <i>Advanced Materials</i> , 2014 , 26, 5880-5	24	173
373	Characterization of the effects of soft X-ray irradiation on polymers. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2002 , 122, 65-78	1.7	172

372	Efficient Nonfullerene Polymer Solar Cells Enabled by a Novel Wide Bandgap Small Molecular Acceptor. <i>Advanced Materials</i> , 2017 , 29, 1606054	24	169
371	Spectromicroscopy of Poly(ethylene terephthalate): Comparison of Spectra and Radiation Damage Rates in X-ray Absorption and Electron Energy Loss. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 1950-1960	24	167
370	Efficient All-Polymer Solar Cells based on a New Polymer Acceptor Achieving 10.3% Power Conversion Efficiency. <i>ACS Energy Letters</i> , 2019 , 4, 417-422	20.1	160
369	Significant Influence of the Methoxyl Substitution Position on Optoelectronic Properties and Molecular Packing of Small-Molecule Electron Acceptors for Photovoltaic Cells. <i>Advanced Energy Materials</i> , 2017 , 7, 1700183	21.8	155
368	Morphology changes upon scaling a high-efficiency, solution-processed solar cell. <i>Energy and Environmental Science</i> , 2016 , 9, 2835-2846	35.4	152
367	On the role of intermixed phases in organic photovoltaic blends. <i>Energy and Environmental Science</i> , 2013 , 6, 2756	35.4	150
366	Influence of Processing Parameters and Molecular Weight on the Morphology and Properties of High-Performance PffBT4T-2OD:PC71BM Organic Solar Cells. <i>Advanced Energy Materials</i> , 2015 , 5, 1501400	21.8	149
365	Importance of domain purity and molecular packing in efficient solution-processed small-molecule solar cells. <i>Advanced Materials</i> , 2015 , 27, 1105-11	24	145
364	Correlating the efficiency and nanomorphology of polymer blend solar cells utilizing resonant soft X-ray scattering. <i>ACS Nano</i> , 2012 , 6, 677-88	16.7	145
363	Disentangling the impact of side chains and fluorine substituents of conjugated donor polymers on the performance of photovoltaic blends. <i>Energy and Environmental Science</i> , 2013 , 6, 316-326	35.4	145
362	Synthetic control over orientational degeneracy of spacer cations enhances solar cell efficiency in two-dimensional perovskites. <i>Nature Communications</i> , 2019 , 10, 1276	17.4	144
361	Unveiling the operation mechanism of layered perovskite solar cells. <i>Nature Communications</i> , 2019 , 10, 1008	17.4	143
360	X-ray Linear Dichroism Microscopy. <i>Science</i> , 1993 , 262, 1427-9	33.3	141
359	A History and Perspective of Non-Fullerene Electron Acceptors for Organic Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2003570	21.8	141
358	An easy and effective method to modulate molecular energy level of the polymer based on benzodithiophene for the application in polymer solar cells. <i>Advanced Materials</i> , 2014 , 26, 2089-95	24	132
357	High-Efficiency All-Small-Molecule Organic Solar Cells Based on an Organic Molecule Donor with Alkylsilyl-Thienyl Conjugated Side Chains. <i>Advanced Materials</i> , 2018 , 30, e1706361	24	130
356	Correlated Donor/Acceptor Crystal Orientation Controls Photocurrent Generation in All-Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2014 , 24, 4068-4081	15.6	129
355	Quenching to the Percolation Threshold in Organic Solar Cells. <i>Joule</i> , 2019 , 3, 443-458	27.8	128

354	Surpassing 10% Efficiency Benchmark for Nonfullerene Organic Solar Cells by Scalable Coating in Air from Single Nonhalogenated Solvent. <i>Advanced Materials</i> , 2018 , 30, 1705485	24	127
353	A Printable Organic Cathode Interlayer Enables over 13% Efficiency for 1-cm ² Organic Solar Cells. <i>Joule</i> , 2019 , 3, 227-239	27.8	127
352	Crystallization in the Thin and Ultrathin Films of Poly(ethyleneVinyl acetate) and Linear Low-Density Polyethylene. <i>Macromolecules</i> , 2004 , 37, 3319-3327	5.5	125
351	Defining the nanostructured morphology of triblock copolymers using resonant soft X-ray scattering. <i>Nano Letters</i> , 2011 , 11, 3906-11	11.5	124
350	Quantification of nano- and mesoscale phase separation and relation to donor and acceptor quantum efficiency, J(sc), and FF in polymer:fullerene solar cells. <i>Advanced Materials</i> , 2014 , 26, 4234-41	24	123
349	Near-edge X-ray absorption fine-structure microscopy of organic and magnetic materials. <i>Nature Materials</i> , 2009 , 8, 281-90	27	123
348	Quantitative organic and light-element analysis of comet 81P/Wild 2 particles using C-, N-, and O-KANES. <i>Meteoritics and Planetary Science</i> , 2008 , 43, 353-365	2.8	121
347	A Difluorobenzoxadiazole Building Block for Efficient Polymer Solar Cells. <i>Advanced Materials</i> , 2016 , 28, 1868-73	24	118
346	Multiple Cases of Efficient Nonfullerene Ternary Organic Solar Cells Enabled by an Effective Morphology Control Method. <i>Advanced Energy Materials</i> , 2018 , 8, 1701370	21.8	116
345	Significance of Average Domain Purity and Mixed Domains on the Photovoltaic Performance of High-Efficiency Solution-Processed Small-Molecule BHJ Solar Cells. <i>Advanced Energy Materials</i> , 2015 , 5, 1500877	21.8	116
344	A new bend-magnet beamline for scanning transmission X-ray microscopy at the Advanced Light Source. <i>Journal of Synchrotron Radiation</i> , 2002 , 9, 254-7	2.4	108
343	Effect of Methyl Methacrylate/Polyhedral Oligomeric Silsesquioxane Random Copolymers in Compatibilization of Polystyrene and Poly(methyl methacrylate) Blends. <i>Macromolecules</i> , 2002 , 35, 8029-8038	5.5	107
342	Quantitative Morphology Performance Correlations in Organic Solar Cells: Insights from Soft X-Ray Scattering. <i>Advanced Energy Materials</i> , 2017 , 7, 1700084	21.8	105
341	Influence of Annealing and Interfacial Roughness on the Performance of Bilayer Donor/Acceptor Polymer Photovoltaic Devices. <i>Advanced Functional Materials</i> , 2010 , 20, 4329-4337	15.6	100
340	Soft x-ray resonant reflectivity of low-Z material thin films. <i>Applied Physics Letters</i> , 2005 , 87, 214109	3.4	99
339	X-ray spectromicroscopy with a zone plate generated microprobe. <i>Applied Physics Letters</i> , 1990 , 56, 1841-1843	3.1	98
338	Determination of chemical-structural changes in vitrinite accompanying luminescence alteration using C-NEXAFS analysis. <i>Organic Geochemistry</i> , 1998 , 28, 441-455	3.1	97
337	X-ray Microscopy of Photovoltaic Polyfluorene Blends: Relating Nanomorphology to Device Performance. <i>Macromolecules</i> , 2007 , 40, 3263-3270	5.5	97

336	Achieving Net Zero Energy Greenhouses by Integrating Semitransparent Organic Solar Cells. <i>Joule</i> , 2020 , 4, 490-506	27.8	96
335	High-molecular-weight insulating polymers can improve the performance of molecular solar cells. <i>Advanced Materials</i> , 2014 , 26, 4168-72	24	96
334	On the efficiency of charge transfer state splitting in polymer:fullerene solar cells. <i>Advanced Materials</i> , 2014 , 26, 2533-9	24	94
333	Optimized Active Layer Morphologies via Ternary Copolymerization of Polymer Donors for 17.6 % Efficiency Organic Solar Cells with Enhanced Fill Factor. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 2322-2329	16.4	94
332	High-Performance All-Polymer Solar Cells: Synthesis of Polymer Acceptor by a Random Ternary Copolymerization Strategy. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 15181-15185	16.4	92
331	Surface Morphology of Annealed Polystyrene and Poly(methyl methacrylate) Thin Film Blends and Bilayers. <i>Macromolecules</i> , 2003 , 36, 3307-3314	5.5	91
330	Flexible Inorganic Ferroelectric Thin Films for Nonvolatile Memory Devices. <i>Advanced Functional Materials</i> , 2017 , 27, 1700461	15.6	90
329	Optimization Requirements of Efficient Polythiophene:Nonfullerene Organic Solar Cells. <i>Joule</i> , 2020 , 4, 1278-1295	27.8	90
328	Dramatic performance enhancement for large bandgap thick-film polymer solar cells introduced by a difluorinated donor unit. <i>Nano Energy</i> , 2015 , 15, 607-615	17.1	89
327	Rational Strategy to Stabilize an Unstable High-Efficiency Binary Nonfullerene Organic Solar Cells with a Third Component. <i>Advanced Energy Materials</i> , 2019 , 9, 1900376	21.8	88
326	Time-Dependent Morphology Evolution of Solution-Processed Small Molecule Solar Cells during Solvent Vapor Annealing. <i>Advanced Energy Materials</i> , 2016 , 6, 1502579	21.8	88
325	Fluorinated Polymer Yields High Organic Solar Cell Performance for a Wide Range of Morphologies. <i>Advanced Functional Materials</i> , 2013 , 23, 3463-3470	15.6	88
324	NEXAFS spectromicroscopy of polymers: overview and quantitative analysis of polyurethane polymers. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1999 , 100, 119-135	1.7	87
323	Long-range exciton diffusion in molecular non-fullerene acceptors. <i>Nature Communications</i> , 2020 , 11, 5220	17.4	87
322	Modulation of End Groups for Low-Bandgap Nonfullerene Acceptors Enabling High-Performance Organic Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1801203	21.8	86
321	Precise Manipulation of Multilength Scale Morphology and Its Influence on Eco-Friendly Printed All-Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2017 , 27, 1702016	15.6	85
320	Effect of Alkylsilyl Side-Chain Structure on Photovoltaic Properties of Conjugated Polymer Donors. <i>Advanced Energy Materials</i> , 2018 , 8, 1702324	21.8	85
319	A multi-objective optimization-based layer-by-layer blade-coating approach for organic solar cells: rational control of vertical stratification for high performance. <i>Energy and Environmental Science</i> , 2019 , 12, 3118-3132	35.4	83

318	Synthesis and Photovoltaic Properties of a Series of Narrow Bandgap Organic Semiconductor Acceptors with Their Absorption Edge Reaching 900 nm. <i>Chemistry of Materials</i> , 2017 , 29, 10130-10138	9.6	83
317	Molecular design toward efficient polymer solar cells with high polymer content. <i>Journal of the American Chemical Society</i> , 2013 , 135, 8464-7	16.4	83
316	High Performance Organic Solar Cells Processed by Blade Coating in Air from a Benign Food Additive Solution. <i>Chemistry of Materials</i> , 2016 , 28, 7451-7458	9.6	83
315	Sequential Deposition of Organic Films with Eco-Compatible Solvents Improves Performance and Enables Over 12%-Efficiency Nonfullerene Solar Cells. <i>Advanced Materials</i> , 2019 , 31, e1808153	24	80
314	Selective Hole and Electron Transport in Efficient Quaternary Blend Organic Solar Cells. <i>Joule</i> , 2020 , 4, 1790-1805	27.8	79
313	Manipulation of Domain Purity and Orientational Ordering in High Performance All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2016 , 28, 6178-6185	9.6	78
312	Quantifying Charge Extraction in Organic Solar Cells: The Case of Fluorinated PCPDTBT. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1131-8	6.4	78
311	X-ray spectromicroscopy of polymers and tribological surfaces at beamline X1A at the NSLS. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1997 , 84, 53-72	1.7	78
310	A scanning transmission x-ray microscope for materials science spectromicroscopy at the advanced light source. <i>Review of Scientific Instruments</i> , 1998 , 69, 2964-2973	1.7	78
309	Charge Creation and Recombination in Multi-Length Scale Polymer:Fullerene BHJ Solar Cell Morphologies. <i>Advanced Energy Materials</i> , 2016 , 6, 1600699	21.8	75
308	Delineation of Thermodynamic and Kinetic Factors that Control Stability in Non-fullerene Organic Solar Cells. <i>Joule</i> , 2019 , 3, 1328-1348	27.8	74
307	Asymmetric Alkoxy and Alkyl Substitution on Nonfullerene Acceptors Enabling High-Performance Organic Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2003141	21.8	74
306	Influence of Regio- and Chemoselectivity on the Properties of Fluoro-Substituted Thienothiophene and Benzodithiophene Copolymers. <i>Journal of the American Chemical Society</i> , 2015 , 137, 7616-9	16.4	73
305	Inner-Shell Spectroscopy and Imaging of a Subbituminous Coal: In-Situ Analysis of Organic and Inorganic Microstructure Using C(1s)-, Ca(2p)-, and Cl(2s)-NEXAFS. <i>Energy & Fuels</i> , 1995 , 9, 525-533	4.1	72
304	High-energy mechanical milling of poly(methyl methacrylate), polyisoprene and poly(ethylene-alt-propylene). <i>Polymer</i> , 2000 , 41, 6271-6283	3.9	71
303	A molecular interaction-diffusion framework for predicting organic solar cell stability. <i>Nature Materials</i> , 2021 , 20, 525-532	27	71
302	Dual Sensitizer and Processing-Aid Behavior of Donor Enables Efficient Ternary Organic Solar Cells. <i>Joule</i> , 2019 , 3, 846-857	27.8	68
301	Efficient Energy Funneling in Quasi-2D Perovskites: From Light Emission to Lasing. <i>Advanced Materials</i> , 2020 , 32, e1906571	24	68

300	The role of bulk and interfacial morphology in charge generation, recombination, and extraction in non-fullerene acceptor organic solar cells. <i>Energy and Environmental Science</i> , 2020 , 13, 3679-3692	35.4	68
299	Thermodynamic Properties and Molecular Packing Explain Performance and Processing Procedures of Three D18:NFA Organic Solar Cells. <i>Advanced Materials</i> , 2020 , 32, e2005386	24	67
298	Soft X-ray characterisation of organic semiconductor films. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 187-201	7.1	67
297	Effect of Carbon Black and Silica Fillers in Elastomer Blends. <i>Macromolecules</i> , 2001 , 34, 7056-7065	5.5	65
296	2D-Conjugated Benzodithiophene-Based Polymer Acceptor: Design, Synthesis, Nanomorphology, and Photovoltaic Performance. <i>Macromolecules</i> , 2015 , 48, 7156-7163	5.5	64
295	Resonant soft x-ray reflectivity of organic thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2007 , 25, 575-586	2.9	64
294	Panchromatic Sequentially Cast Ternary Polymer Solar Cells. <i>Advanced Materials</i> , 2017 , 29, 1604603	24	63
293	A Highly Crystalline Fused-Ring n-Type Small Molecule for Non-Fullerene Acceptor Based Organic Solar Cells and Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2018 , 28, 1802895	15.6	63
292	Towards a detailed understanding of the NEXAFS spectra of bulk polyethylene copolymers and related alkanes. <i>Chemical Physics Letters</i> , 2003 , 370, 834-841	2.5	63
291	Electronic structure of noncrystalline transition metal silicate and aluminate alloys. <i>Applied Physics Letters</i> , 2001 , 79, 1775-1777	3.4	62
290	Identification and Quantitation of Urea Precipitates in Flexible Polyurethane Foam Formulations by X-ray Spectromicroscopy. <i>Macromolecules</i> , 2002 , 35, 5873-5882	5.5	62
289	Long-Lived, Non-Geminate, Radiative Recombination of Photogenerated Charges in a Polymer/Small-Molecule Acceptor Photovoltaic Blend. <i>Journal of the American Chemical Society</i> , 2018 , 140, 9996-10008	16.4	61
288	Resonant soft x-ray scattering from structured polymer nanoparticles. <i>Applied Physics Letters</i> , 2006 , 89, 124106	3.4	61
287	Pseudo-bilayer architecture enables high-performance organic solar cells with enhanced exciton diffusion length. <i>Nature Communications</i> , 2021 , 12, 468	17.4	61
286	Effect of Ring-Fusion on Miscibility and Domain Purity: Key Factors Determining the Performance of PDI-Based Nonfullerene Organic Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1800234	21.8	59
285	Tuning Open-Circuit Voltage in Organic Solar Cells with Molecular Orientation. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 13208-16	9.5	59
284	X-ray spectromicroscopy of immiscible polymer blends: polystyrene/poly(methyl methacrylate). <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2001 , 121, 203-224	1.7	59
283	Fullerene-Dependent Miscibility in the Silole-Containing Copolymer PSBTBT-08. <i>Macromolecules</i> , 2011 , 44, 9747-9751	5.5	58

282	Bulk and surface characterization of a dewetting thin film polymer bilayer. <i>Applied Physics Letters</i> , 1998 , 73, 3775-3777	3.4	58
281	Importance of 2D Conjugated Side Chains of Benzodithiophene-Based Polymers in Controlling Polymer Packing, Interfacial Ordering, and Composition Variations of All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2017 , 29, 9407-9415	9.6	57
280	Quantitative compositional analysis of organic thin films using transmission NEXAFS spectroscopy in an X-ray microscope. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2012 , 185, 119-128	1.7	57
279	Conduction band-edge States associated with the removal of d-state degeneracies by the Jahn-Teller effect. <i>IEEE Transactions on Device and Materials Reliability</i> , 2005 , 5, 65-83	1.6	56
278	Phase segregation in polymer thin films: Elucidations by X-ray and scanning force microscopy. <i>Europhysics Letters</i> , 1999 , 45, 526-532	1.6	56
277	Inner-Shell Excitation Spectroscopy of Polymer and Monomer Isomers of Dimethyl Phthalate. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 2267-2276	3.4	55
276	A simple method for determining linear polarization and energy calibration of focused soft X-ray beams. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2008 , 162, 49-55	1.7	55
275	Improved efficiency of bulk heterojunction poly(3-hexylthiophene):[6,6]-phenyl-C61-butyric acid methyl ester photovoltaic devices using discotic liquid crystal additives. <i>Applied Physics Letters</i> , 2010 , 96, 183305	3.4	54
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