

Xiaowei Zhan

List of Publications by Citations

Source: <https://exaly.com/author-pdf/2876892/xiaowei-zhan-publications-by-citations.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

364
papers

40,429
citations

84
h-index

195
g-index

382
ext. papers

45,061
ext. citations

11.6
avg, IF

7.92
L-index

#	Paper	IF	Citations
364	Aggregation-induced emission of 1-methyl-1,2,3,4,5-pentaphenylsilole. <i>Chemical Communications</i> , 2001 , 1740-1	5.8	5057
363	An electron acceptor challenging fullerenes for efficient polymer solar cells. <i>Advanced Materials</i> , 2015 , 27, 1170-4	24	2522
362	Non-fullerene acceptors for organic solar cells. <i>Nature Reviews Materials</i> , 2018 , 3,	73.3	1634
361	Small molecule semiconductors for high-efficiency organic photovoltaics. <i>Chemical Society Reviews</i> , 2012 , 41, 4245-72	58.5	1465
360	Rylene and related diimides for organic electronics. <i>Advanced Materials</i> , 2011 , 23, 268-84	24	1366
359	Next-generation organic photovoltaics based on non-fullerene acceptors. <i>Nature Photonics</i> , 2018 , 12, 131-142	33.9	1155
358	A high-mobility electron-transport polymer with broad absorption and its use in field-effect transistors and all-polymer solar cells. <i>Journal of the American Chemical Society</i> , 2007 , 129, 7246-7	16.4	1023
357	n-Type organic semiconductors in organic electronics. <i>Advanced Materials</i> , 2010 , 22, 3876-92	24	963
356	High-Performance Electron Acceptor with Thienyl Side Chains for Organic Photovoltaics. <i>Journal of the American Chemical Society</i> , 2016 , 138, 4955-61	16.4	831
355	A Facile Planar Fused-Ring Electron Acceptor for As-Cast Polymer Solar Cells with 8.71% Efficiency. <i>Journal of the American Chemical Society</i> , 2016 , 138, 2973-6	16.4	784
354	Fused Nonacyclic Electron Acceptors for Efficient Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , 2017 , 139, 1336-1343	16.4	729
353	Non-fullerene acceptors for organic photovoltaics: an emerging horizon. <i>Materials Horizons</i> , 2014 , 1, 470	14.4	640
352	Stability of organic solar cells: challenges and strategies. <i>Chemical Society Reviews</i> , 2016 , 45, 2544-82	58.5	618
351	Single-Junction Binary-Blend Nonfullerene Polymer Solar Cells with 12.1% Efficiency. <i>Advanced Materials</i> , 2017 , 29, 1700144	24	566
350	High-performance fullerene-free polymer solar cells with 6.31% efficiency. <i>Energy and Environmental Science</i> , 2015 , 8, 610-616	35.4	534
349	Efficient blue emission from siloles. <i>Journal of Materials Chemistry</i> , 2001 , 11, 2974-2978		514
348	Oligomer Molecules for Efficient Organic Photovoltaics. <i>Accounts of Chemical Research</i> , 2016 , 49, 175-83	24.3	492

347	Structures, electronic states, photoluminescence, and carrier transport properties of 1,1-disubstituted 2,3,4,5-tetraphenylsiloles. <i>Journal of the American Chemical Society</i> , 2005 , 127, 6335-46	16.4	458
346	EConjugated Lewis Base: Efficient Trap-Passivation and Charge-Extraction for Hybrid Perovskite Solar Cells. <i>Advanced Materials</i> , 2017 , 29, 1604545	24	431
345	A star-shaped perylene diimide electron acceptor for high-performance organic solar cells. <i>Advanced Materials</i> , 2014 , 26, 5137-42	24	352
344	Electron transporting semiconducting polymers in organic electronics. <i>Chemical Society Reviews</i> , 2011 , 40, 3728-43	58.5	348
343	A solution-processable star-shaped molecule for high-performance organic solar cells. <i>Advanced Materials</i> , 2011 , 23, 1554-7	24	337
342	Mapping Polymer Donors toward High-Efficiency Fullerene Free Organic Solar Cells. <i>Advanced Materials</i> , 2017 , 29, 1604155	24	335
341	Fused Hexacyclic Nonfullerene Acceptor with Strong Near-Infrared Absorption for Semitransparent Organic Solar Cells with 9.77% Efficiency. <i>Advanced Materials</i> , 2017 , 29, 1701308	24	325
340	Triarylamine: Versatile Platform for Organic, Dye-Sensitized, and Perovskite Solar Cells. <i>Chemical Reviews</i> , 2016 , 116, 14675-14725	68.1	319
339	A highly pi-stacked organic semiconductor for field-effect transistors based on linearly condensed pentathienoacene. <i>Journal of the American Chemical Society</i> , 2005 , 127, 13281-6	16.4	312
338	Fused Tris(thienothiophene)-Based Electron Acceptor with Strong Near-Infrared Absorption for High-Performance As-Cast Solar Cells. <i>Advanced Materials</i> , 2018 , 30, 1705969	24	305
337	Effect of Isomerization on High-Performance Nonfullerene Electron Acceptors. <i>Journal of the American Chemical Society</i> , 2018 , 140, 9140-9147	16.4	296
336	A planar electron acceptor for efficient polymer solar cells. <i>Energy and Environmental Science</i> , 2015 , 8, 3215-3221	35.4	283
335	Conjugated polymers for high-efficiency organic photovoltaics. <i>Polymer Chemistry</i> , 2010 , 1, 409-419	4.9	279
334	Morphology Control in Organic Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1703147	21.8	272
333	A 3D star-shaped non-fullerene acceptor for solution-processed organic solar cells with a high open-circuit voltage of 1.18 V. <i>Chemical Communications</i> , 2012 , 48, 4773-5	5.8	268
332	Enhancing the Performance of Polymer Solar Cells via Core Engineering of NIR-Absorbing Electron Acceptors. <i>Advanced Materials</i> , 2018 , 30, e1706571	24	255
331	Efficient ternary blend polymer solar cells with indene-C60 bisadduct as an electron-cascade acceptor. <i>Energy and Environmental Science</i> , 2014 , 7, 2005	35.4	250
330	Thiazole-based organic semiconductors for organic electronics. <i>Advanced Materials</i> , 2012 , 24, 3087-106, 3081	24	235

329	Enhancing Performance of Nonfullerene Acceptors via Side-Chain Conjugation Strategy. <i>Advanced Materials</i> , 2017 , 29, 1702125	24	227
328	New Series of Blue-Emitting and Electron-Transporting Copolymers Based on Fluorene. <i>Macromolecules</i> , 2002 , 35, 2529-2537	5.5	222
327	Realizing Small Energy Loss of 0.55 eV, High Open-Circuit Voltage >1 V and High Efficiency >10% in Fullerene-Free Polymer Solar Cells via Energy Driver. <i>Advanced Materials</i> , 2017 , 29, 1605216	24	216
326	Binary additives synergistically boost the efficiency of all-polymer solar cells up to 3.45%. <i>Energy and Environmental Science</i> , 2014 , 7, 1351-1356	35.4	209
325	A Solution-Processable Small Molecule Based on Benzodithiophene and Diketopyrrolopyrrole for High-Performance Organic Solar Cells. <i>Advanced Energy Materials</i> , 2013 , 3, 1166-1170	21.8	195
324	Ultrafast and broadband photodetectors based on a perovskite/organic bulk heterojunction for large-dynamic-range imaging. <i>Light: Science and Applications</i> , 2020 , 9, 31	16.7	194
323	Alloy Acceptor: Superior Alternative to PCBM toward Efficient and Stable Organic Solar Cells. <i>Advanced Materials</i> , 2016 , 28, 8021-8028	24	189
322	Naphthodithiophene-Based Nonfullerene Acceptor for High-Performance Organic Photovoltaics: Effect of Extended Conjugation. <i>Advanced Materials</i> , 2018 , 30, 1704713	24	183
321	Extended squaraine dyes with large two-photon absorption cross-sections. <i>Journal of the American Chemical Society</i> , 2006 , 128, 14444-5	16.4	181
320	Hidden Structure Ordering Along Backbone of Fused-Ring Electron Acceptors Enhanced by Ternary Bulk Heterojunction. <i>Advanced Materials</i> , 2018 , 30, e1802888	24	177
319	Copolymers of perylene diimide with dithienothiophene and dithienopyrrole as electron-transport materials for all-polymer solar cells and field-effect transistors. <i>Journal of Materials Chemistry</i> , 2009 , 19, 5794		158
318	A Solution-Processable Electron Acceptor Based on Dibenzosilole and Diketopyrrolopyrrole for Organic Solar Cells. <i>Advanced Energy Materials</i> , 2013 , 3, 724-728	21.8	153
317	Versatile third components for efficient and stable organic solar cells. <i>Materials Horizons</i> , 2015 , 2, 462-485	16.4	150
316	Balanced Partnership between Donor and Acceptor Components in Nonfullerene Organic Solar Cells with >12% Efficiency. <i>Advanced Materials</i> , 2018 , 30, e1706363	24	148
315	Electron affinities of 1,1-diaryl-2,3,4,5-tetraphenylsiloles: direct measurements and comparison with experimental and theoretical estimates. <i>Journal of the American Chemical Society</i> , 2005 , 127, 9021-9	16.4	148
314	Breaking 10% Efficiency in Semitransparent Solar Cells with Fused-Undecacyclic Electron Acceptor. <i>Chemistry of Materials</i> , 2018 , 30, 239-245	9.6	144
313	Structure Evolution of Oligomer Fused-Ring Electron Acceptors toward High Efficiency of As-Cast Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2016 , 6, 1600854	21.8	141
312	The state of organic solar cells: A meta analysis. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 119, 84-93	6.4	141

311	PorphyrinDithienothiophene EConjugated Copolymers: Synthesis and Their Applications in Field-Effect Transistors and Solar Cells. <i>Macromolecules</i> , 2008 , 41, 6895-6902	5.5	137
310	Substituent effects on the electronic structure of siloles. <i>Chemical Communications</i> , 2009 , 1948-55	5.8	133
309	Asymmetric Diketopyrrolopyrrole Conjugated Polymers for Field-Effect Transistors and Polymer Solar Cells Processed from a Nonchlorinated Solvent. <i>Advanced Materials</i> , 2016 , 28, 943-50	24	128
308	An electron acceptor based on indacenodithiophene and 1,1-dicyanomethylene-3-indanone for fullerene-free organic solar cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 1910-1914	13	125
307	Dynamic Monte Carlo simulation for highly efficient polymer blend photovoltaics. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 36-41	3.4	123
306	Fullerene derivative anchored SnO ₂ for high-performance perovskite solar cells. <i>Energy and Environmental Science</i> , 2018 , 11, 3463-3471	35.4	123
305	Efficient all-polymer solar cells based on blend of tris(thienylenevinylene)-substituted polythiophene and poly[perylene diimide-alt-bis(dithienothiophene)]. <i>Applied Physics Letters</i> , 2008 , 93, 073309	3.4	120
304	Acceptor-donor-acceptor small molecules based on indacenodithiophene for efficient organic solar cells. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 8426-33	9.5	116
303	A Solution Processable D-A-D Molecule based on Thiazolothiazole for High Performance Organic Solar Cells. <i>Advanced Energy Materials</i> , 2012 , 2, 63-67	21.8	114
302	Molecular Lock: A Versatile Key to Enhance Efficiency and Stability of Organic Solar Cells. <i>Advanced Materials</i> , 2016 , 28, 5822-9	24	114
301	Nonfullerene All-Small-Molecule Organic Solar Cells. <i>ACS Energy Letters</i> , 2019 , 4, 1241-1250	20.1	112
300	A Twisted Dimeric Perylene Diimide Electron Acceptor for Efficient Organic Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1400420	21.8	112
299	Unique Energy Alignments of a Ternary Material System toward High-Performance Organic Photovoltaics. <i>Advanced Materials</i> , 2018 , 30, e1801501	24	110
298	Fused-Ring Electron Acceptors for Photovoltaics and Beyond. <i>Accounts of Chemical Research</i> , 2021 , 54, 132-143	24.3	109
297	High Exciton Diffusion Coefficients in Fused Ring Electron Acceptor Films. <i>Journal of the American Chemical Society</i> , 2019 , 141, 6922-6929	16.4	105
296	Achieving Balanced Crystallinity of Donor and Acceptor by Combining Blade-Coating and Ternary Strategies in Organic Solar Cells. <i>Advanced Materials</i> , 2018 , 30, e1805041	24	105
295	Enhancing the Performance of a Fused-Ring Electron Acceptor by Unidirectional Extension. <i>Journal of the American Chemical Society</i> , 2019 , 141, 19023-19031	16.4	102
294	Multiple stimuli-responsive polymeric micelles for controlled release. <i>Soft Matter</i> , 2013 , 9, 370-373	3.6	99

293	Nonfullerene Tandem Organic Solar Cells with High Open-Circuit Voltage of 1.97 V. <i>Advanced Materials</i> , 2016 , 28, 9729-9734	24	98
292	Synthesis and Photovoltaic Properties of Bithiazole-Based Donor-Acceptor Copolymers. <i>Macromolecules</i> , 2010 , 43, 5706-5712	5.5	97
291	Low bandgap π -conjugated copolymers based on fused thiophenes and benzothiadiazole: Synthesis and structure-property relationship study. <i>Journal of Polymer Science Part A</i> , 2009 , 47, 5498-5508	2.5	97
290	Ternary System with Controlled Structure: A New Strategy toward Efficient Organic Photovoltaics. <i>Advanced Materials</i> , 2018 , 30, 1705243	24	91
289	Unraveling Sunlight by Transparent Organic Semiconductors toward Photovoltaic and Photosynthesis. <i>ACS Nano</i> , 2019 , 13, 1071-1077	16.7	89
288	Side Chain Engineering of Copolymers Based on Bithiazole and Benzodithiophene for Enhanced Photovoltaic Performance. <i>Macromolecules</i> , 2011 , 44, 4230-4240	5.5	87
287	Ternary Organic Solar Cells with Small Nonradiative Recombination Loss. <i>ACS Energy Letters</i> , 2019 , 4, 1196-1203	20.1	84
286	Nonfullerene acceptors based on extended fused rings flanked with benzothiadiazolylmethylenemalononitrile for polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 20758-20766	13	84
285	Electron-Transport Materials in Perovskite Solar Cells. <i>Small Methods</i> , 2018 , 2, 1800082	12.8	84
284	Small-Molecule Solar Cells with Fill Factors up to 0.75 via a Layer-by-Layer Solution Process. <i>Advanced Energy Materials</i> , 2014 , 4, 1300626	21.8	84
283	High-Mobility Conjugated Polymers Based on Fused-Thiophene Building Blocks. <i>Macromolecular Chemistry and Physics</i> , 2011 , 212, 428-443	2.6	84
282	High-Performance Fluorinated Fused-Ring Electron Acceptor with 3D Stacking and Exciton/Charge Transport. <i>Advanced Materials</i> , 2020 , 32, e2000645	24	81
281	Fused-Ring Electron Acceptor ITIC-Th: A Novel Stabilizer for Halide Perovskite Precursor Solution. <i>Advanced Energy Materials</i> , 2018 , 8, 1703399	21.8	80
280	A bipolar small molecule based on indacenodithiophene and diketopyrrolopyrrole for solution processed organic solar cells. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 778-784	13	79
279	Dual-Accepting-Unit Design of Donor Material for All-Small-Molecule Organic Solar Cells with Efficiency Approaching 11%. <i>Chemistry of Materials</i> , 2018 , 30, 8661-8668	9.6	78
278	Effect of Core Size on Performance of Fused-Ring Electron Acceptors. <i>Chemistry of Materials</i> , 2018 , 30, 5390-5396	9.6	77
277	All polymer photovoltaics: From small inverted devices to large roll-to-roll coated and printed solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 112, 157-162	6.4	76
276	Roll-Coated Fabrication of Fullerene-Free Organic Solar Cells with Improved Stability. <i>Advanced Science</i> , 2015 , 2, 1500096	13.6	75

275	Diluting concentrated solution: a general, simple and effective approach to enhance efficiency of polymer solar cells. <i>Energy and Environmental Science</i> , 2015 , 8, 2357-2364	35.4	73
274	Roll-coating fabrication of flexible organic solar cells: comparison of fullerene and fullerene-free systems. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 1044-1051	13	73
273	Reducing Voltage Losses in the A-DA?D-A Acceptor-Based Organic Solar Cells. <i>CheM</i> , 2020 , 6, 2147-2161	16.2	73
272	Advanced functional polymer materials. <i>Materials Chemistry Frontiers</i> , 2020 , 4, 1803-1915	7.8	70
271	Effect of Alkyl Side Chains of Conjugated Polymer Donors on the Device Performance of Non-Fullerene Solar Cells. <i>Macromolecules</i> , 2016 , 49, 6445-6454	5.5	70
270	Photomultiplication photodetectors with P3HT:fullerene-free material as the active layers exhibiting a broad response. <i>Nanoscale</i> , 2016 , 8, 5578-86	7.7	68
269	Layer-by-Layer Processed Organic Solar Cells. <i>Advanced Energy Materials</i> , 2016 , 6, 1600414	21.8	68
268	Spiro[fluorene-9,9'-xanthene]-based hole transporting materials for efficient perovskite solar cells with enhanced stability. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 100-110	7.8	67
267	A star-shaped oligothiophene end-capped with alkyl cyanoacetate groups for solution-processed organic solar cells. <i>Chemical Communications</i> , 2012 , 48, 9655-7	5.8	67
266	Solution processable D-A-D molecules based on triphenylamine for efficient organic solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2010 , 94, 457-464	6.4	67
265	Polymer Solar Cells with 90% External Quantum Efficiency Featuring an Ideal Light- and Charge-Manipulation Layer. <i>Advanced Materials</i> , 2018 , 30, e1706083	24	66
264	Alkoxy-Induced Near-Infrared Sensitive Electron Acceptor for High-Performance Organic Solar Cells. <i>Chemistry of Materials</i> , 2018 , 30, 4150-4156	9.6	66
263	Panchromatic Ternary Photovoltaic Cells Using a Nonfullerene Acceptor Synthesized Using C ₆₀ Functionalization. <i>Chemistry of Materials</i> , 2018 , 30, 309-313	9.6	65
262	New Series of Blue-Emitting and Electron-Transporting Copolymers Based on Cyanostilbene. <i>Chemistry of Materials</i> , 2003 , 15, 1963-1969	9.6	64
261	Conjugated Polymers of Rylene Diimide and Phenothiazine for n-Channel Organic Field-Effect Transistors. <i>Macromolecules</i> , 2012 , 45, 4115-4121	5.5	63
260	The effect of anchoring group number on the performance of dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2010 , 87, 249-256	4.6	61
259	Suppressing photo-oxidation of non-fullerene acceptors and their blends in organic solar cells by exploring material design and employing friendly stabilizers. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 25088-25101	13	61
258	Synthesis of Copolymers Based on Thiazolothiazole and Their Applications in Polymer Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 16843-16848	3.8	60

257	Highly Sensitive Organic Photodetectors with Tunable Spectral Response under Bi-Directional Bias. <i>Advanced Optical Materials</i> , 2016 , 4, 1711-1717	8.1	60
256	High Performance Nanocrystals of a Donor-Acceptor Conjugated Polymer. <i>Chemistry of Materials</i> , 2013 , 25, 2649-2655	9.6	59
255	An Acetylene-Containing Perylene Diimide Copolymer for High Mobility n-Channel Transistor in Air. <i>Macromolecules</i> , 2013 , 46, 2152-2158	5.5	58
254	Multi-responsive nitrobenzene-based amphiphilic random copolymer assemblies. <i>Chemical Communications</i> , 2013 , 49, 3516-8	5.8	57
253	Synthesis of a Conjugated Polymer with Broad Absorption and Its Application in High-Performance Phototransistors. <i>Macromolecules</i> , 2012 , 45, 1296-1302	5.5	57
252	A Copolymer of Benzodithiophene with TIPS Side Chains for Enhanced Photovoltaic Performance. <i>Macromolecules</i> , 2011 , 44, 9173-9179	5.5	57
251	Photophysical properties of intramolecular charge transfer in two newly synthesized tribranched donor-pi-acceptor chromophores. <i>Journal of Physical Chemistry A</i> , 2010 , 114, 7345-52	2.8	57
250	Efficiency enhancement in small molecule bulk heterojunction organic solar cells via additive. <i>Applied Physics Letters</i> , 2010 , 97, 133302	3.4	56
249	Photoinduced intramolecular electron transfer in conjugated perylene bisimide-dithienothiophene systems: a comparative study of a small molecule and a polymer. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 5039-46	2.8	56
248	Ambient roll-to-roll fabrication of flexible solar cells based on small molecules. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 8007	7.1	55
247	A fluorescent conjugated polymer for trace detection of diamines and biogenic polyamines. <i>Journal of Materials Chemistry</i> , 2010 , 20, 9628		55
246	Synthesis and Photovoltaic Properties of a Copolymer of Benzo[1,2-b:4,5-b']dithiophene and Bithiazole. <i>Macromolecules</i> , 2010 , 43, 8714-8717	5.5	55
245	Efficient Tandem Organic Photovoltaics with Tunable Rear Sub-cells. <i>Joule</i> , 2019 , 3, 432-442	27.8	54
244	Layer-by-Layer Solution-Processed Low-Bandgap Polymer-PC61BM Solar Cells with High Efficiency. <i>Advanced Energy Materials</i> , 2014 , 4, 1301349	21.8	53
243	Assessing the energy offset at the electron donor/acceptor interface in organic solar cells through radiative efficiency measurements. <i>Energy and Environmental Science</i> , 2019 , 12, 3556-3566	35.4	52
242	Narrow bandgap non-fullerene acceptor based on a thiophene-fused benzothiadiazole unit with a high short-circuit current density of over 20 mA cm ⁻² . <i>Journal of Materials Chemistry A</i> , 2018 , 6, 6393-6401 ³		51
241	High-Performance Fused Ring Electron Acceptor-Perovskite Hybrid. <i>Journal of the American Chemical Society</i> , 2018 , 140, 14938-14944	16.4	51
240	Recent progress of all-polymer solar cells [From chemical structure and device physics to photovoltaic performance. <i>Materials Science and Engineering Reports</i> , 2020 , 140, 100542	30.9	49

239	High-Performance Fullerene-Free Polymer Solar Cells Featuring Efficient Photocurrent Generation from Dual Pathways and Low Nonradiative Recombination Loss. <i>ACS Energy Letters</i> , 2019 , 4, 8-16	20.1	49
238	Towards high-efficiency non-fullerene organic solar cells: Matching small molecule/polymer donor/acceptor. <i>Organic Electronics</i> , 2014 , 15, 2270-2276	3.5	47
237	Low-Bandgap Conjugated Donor-Acceptor Copolymers Based on Porphyrin with Strong Two-Photon Absorption. <i>Macromolecules</i> , 2010 , 43, 9620-9626	5.5	47
236	Efficient Quaternary Organic Solar Cells with Parallel-Alloy Morphology. <i>Advanced Functional Materials</i> , 2019 , 29, 1806804	15.6	47
235	Ferrocene as a highly volatile solid additive in non-fullerene organic solar cells with enhanced photovoltaic performance. <i>Energy and Environmental Science</i> , 2020 , 13, 5117-5125	35.4	46
234	Efficient fullerene-free organic solar cells based on fused-ring oligomer molecules. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 1486-1494	13	45
233	Fluorinated fused nonacyclic interfacial materials for efficient and stable perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 21414-21421	13	45
232	Butterfly Effects Arising from Starting Materials in Fused-Ring Electron Acceptors. <i>Journal of the American Chemical Society</i> , 2020 , 142, 20124-20133	16.4	45
231	Synthesis and electroluminescence of poly(aryleneethynylene)s based on fluorene containing hole-transport units. <i>Journal of Materials Chemistry</i> , 2001 , 11, 1606-1611		44
230	A perylene diimide based polymer: a dual function interfacial material for efficient perovskite solar cells. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 1079-1086	7.8	43
229	Effect of the Longer Unsubstituted Oligothiophene Unit (6T and 7T) on the Organic Thin-Film Transistor Performances of Diketopyrrolopyrrole-Oligothiophene Copolymers. <i>Chemistry of Materials</i> , 2013 , 25, 4290-4296	9.6	43
228	Evolved structure of thiazolothiazole based small molecules towards enhanced efficiency in organic solar cells. <i>Organic Electronics</i> , 2013 , 14, 599-606	3.5	43
227	Large Femtosecond Third-Order Nonlinear Optical Response in a Novel Donor-Acceptor Copolymer Consisting of Ethynylfluorene and Tetraphenyldiaminobiphenyl Units. <i>Chemistry of Materials</i> , 2001 , 13, 1540-1544	9.6	43
226	Perylene and naphthalene diimide polymers for all-polymer solar cells: a comparative study of chemical copolymerization and physical blend. <i>Polymer Chemistry</i> , 2015 , 6, 5254-5263	4.9	42
225	Water-soluble hyperbranched polyelectrolytes with high fluorescence quantum yield: Facile synthesis and selective chemosensor for Hg ²⁺ and Cu ²⁺ ions. <i>Journal of Polymer Science Part A</i> , 2010 , 48, 3431-3439	2.5	42
224	Charge transport mechanism in pressed pellets of polymer proton conductors. <i>Solid State Ionics</i> , 1997 , 100, 217-224	3.3	42
223	Color and transparency-switchable semitransparent polymer solar cells towards smart windows. <i>Science Bulletin</i> , 2020 , 65, 217-224	10.6	42
222	Rylene Diimide Electron Acceptors for Organic Solar Cells. <i>Trends in Chemistry</i> , 2019 , 1, 869-881	14.8	41

221	Soluble dithienothiophene polymers: Effect of link pattern. <i>Journal of Polymer Science Part A</i> , 2009 , 47, 2843-2852	2.5	41
220	Enhancing performance of non-fullerene organic solar cells via side chain engineering of fused-ring electron acceptors. <i>Dyes and Pigments</i> , 2017 , 139, 627-634	4.6	40
219	Oligothiophene-bridged perylene diimide dimers for fullerene-free polymer solar cells: effect of bridge length. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 13000-13010	13	40
218	Roll-coating fabrication of flexible large area small molecule solar cells with power conversion efficiency exceeding 1%. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 19809-19814	13	40
217	One, two and three-branched triphenylamine-oligothiophene hybrids for solution-processed solar cells. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 5128	13	40
216	Fused-ring pyrazine derivatives for n-type field-effect transistors. <i>ACS Applied Materials & Interfaces</i> , 2009 , 1, 1122-9	9.5	40
215	Fluorenyl-substituted silole molecules: geometric, electronic, optical, and device properties. <i>Journal of Materials Chemistry</i> , 2008 , 18, 3157		40
214	A novel resistive-type humidity sensor based on poly(p-diethynylbenzene). <i>Journal of Applied Polymer Science</i> , 1999 , 74, 2010-2015	2.9	40
213	Efficient and stable organic solar cells via a sequential process. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 8086-8093	7.1	39
212	Enhancing the performance of non-fullerene organic solar cells via end group engineering of fused-ring electron acceptors. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 16638-16644	13	38
211	A diketopyrrolopyrrole molecule end-capped with a furan-2-carboxylate moiety: the planarity of molecular geometry and photovoltaic properties. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 6589	13	38
210	Top-gate organic thin-film transistors constructed by a general lamination approach. <i>Advanced Materials</i> , 2010 , 22, 3537-41	24	37
209	Nanopatterning of donor/acceptor hybrid supramolecular architectures on highly oriented pyrolytic graphite: a scanning tunneling microscopy study. <i>Journal of the American Chemical Society</i> , 2008 , 130, 13433-41	16.4	37
208	Rhodanine flanked indacenodithiophene as non-fullerene acceptor for efficient polymer solar cells. <i>Science China Chemistry</i> , 2017 , 60, 257-263	7.9	36
207	Enhancing the performance of the electron acceptor ITIC-Th via tailoring its end groups. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 537-543	7.8	36
206	Semitransparent, non-fullerene and flexible all-plastic solar cells. <i>Polymer</i> , 2016 , 107, 108-112	3.9	36
205	A low temperature processed fused-ring electron transport material for efficient planar perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 24820-24825	13	36
204	Synthesis and photovoltaic properties of copolymers of carbazole and thiophene with conjugated side chain containing acceptor end groups. <i>Polymer Chemistry</i> , 2011 , 2, 1678	4.9	36

203	A Low-Bandgap Conjugated Copolymer Based on Porphyrin and Dithienocoronene Diimide with Strong Two-Photon Absorption. <i>Macromolecules</i> , 2012 , 45, 7823-7828	5.5	35
202	An acceptor-acceptor conjugated copolymer based on perylene diimide for high mobility n-channel transistor in air. <i>Journal of Polymer Science Part A</i> , 2012 , 50, 4266-4271	2.5	35
201	A Low-Bandgap Conjugated Polymer Based on Squaraine with Strong Two-Photon Absorption. <i>Macromolecules</i> , 2011 , 44, 3759-3765	5.5	35
200	Single crystal ribbons and transistors of a solution processed sickle-like fused-ring thienoacene. <i>Journal of Materials Chemistry</i> , 2010 , 20, 6014		35
199	Dithienocoronene diimide based conjugated polymers as electron acceptors for all-polymer solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 112, 13-19	6.4	34
198	Transparent Hole-Transporting Frameworks: A Unique Strategy to Design High-Performance Semitransparent Organic Photovoltaics. <i>Advanced Materials</i> , 2020 , 32, e2003891	24	34
197	Enhancing the performance of a fused-ring electron acceptor via extending benzene to naphthalene. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 66-71	7.1	34
196	Low-bandgap thieno[3,4-c]pyrrole-4,6-dione-polymers for high-performance solar cells with significantly enhanced photocurrents. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 11194-11198	13	33
195	Fluorescence detection of DNA hybridization based on the aggregation-induced emission of a perylene-functionalized polymer. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 11136-41	9.5	33
194	Small molecules based on bithiazole for solution-processed organic solar cells. <i>Organic Electronics</i> , 2012 , 13, 673-680	3.5	33
193	A star-shaped electron acceptor based on 5,5'-bibenzothiadiazole for solution processed solar cells. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 14627	13	33
192	Copolymers of fluorene and thiophene with conjugated side chain for polymer solar cells: Effect of pendant acceptors. <i>Journal of Polymer Science Part A</i> , 2011 , 49, 1462-1470	2.5	33
191	Synthesis, self-assembly, and solution-processed nanoribbon field-effect transistor of a fused-nine-ring thienoacene. <i>Chemical Communications</i> , 2010 , 46, 2841-3	5.8	33
190	High-performance organic solar cells based on polymer donor/small molecule donor/nonfullerene acceptor ternary blends. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 2268-2274	13	32
189	Highly Transparent Organic Solar Cells with All-Near-Infrared Photoactive Materials. <i>Small Methods</i> , 2019 , 3, 1900424	12.8	32
188	Polymer nanoparticles for controlled release stimulated by visible light and pH. <i>Macromolecular Rapid Communications</i> , 2014 , 35, 1255-9	4.8	32
187	Layer by layer solution processed organic solar cells based on a small molecule donor and a polymer acceptor. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 447-452	7.1	31
186	Pyridine-bridged diketopyrrolopyrrole conjugated polymers for field-effect transistors and polymer solar cells. <i>Polymer Chemistry</i> , 2015 , 6, 4775-4783	4.9	31

185	New X-shaped oligothiophenes for solution-processed solar cells. <i>Journal of Materials Chemistry</i> , 2011 , 21, 9667		31
184	High-Performance Mid-Bandgap Fused-Pyrene Electron Acceptor. <i>Chemistry of Materials</i> , 2019 , 31, 6484-6490	6.4	31
183	Light Harvesting at Oblique Incidence Decoupled from Transmission in Organic Solar Cells Exhibiting 9.8% Efficiency and 50% Visible Light Transparency. <i>Advanced Energy Materials</i> , 2020 , 10, 1904196	21.8	30
182	Comparison of Linear- and Star-Shaped Fused-Ring Electron Acceptors 2019 , 1, 367-374		30
181	Comparison of additive amount used in spin-coated and roll-coated organic solar cells. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 19542-19549	13	30
180	Solution-processable small molecules based on thieno[3,4-c]pyrrole-4,6-dione for high-performance solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 99, 301-307	6.4	30
179	Hierarchical assembly of an achiral pi-conjugated molecule into a chiral nanotube through the air/water interface. <i>Langmuir</i> , 2009 , 25, 6633-6	4	30
178	High-Mobility p-Type Organic Semiconducting Interlayer Enhancing Efficiency and Stability of Perovskite Solar Cells. <i>Advanced Science</i> , 2017 , 4, 1700025	13.6	29
177	Highly ordered thin films of a bis(dithienothiophene) derivative. <i>Journal of Materials Chemistry</i> , 2007 , 17, 4972		29
176	Femtosecond Third-Order Optical Nonlinearity of Conjugated Polymers Consisting of Fluorene and Tetraphenyldiaminobiphenyl Units: Structure-Property Relationships. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 1884-1888	3.4	29
175	High-Efficiency Perovskite Quantum Dot Hybrid Nonfullerene Organic Solar Cells with Near-Zero Driving Force. <i>Advanced Materials</i> , 2020 , 32, e2002066	24	28
174	Large third-order nonlinear optical response of conjugated copolymers consisting of fluorene and carbazole units. <i>Chemical Physics Letters</i> , 2002 , 362, 165-169	2.5	27
173	Constructing High-Performance Organic Photovoltaics via Emerging Non-Fullerene Acceptors and Tandem-Junction Structure. <i>Advanced Energy Materials</i> , 2020 , 10, 2000746	21.8	27
172	Conjugated Polymers Based on a New Building Block: Dithienophthalimide. <i>Macromolecules</i> , 2011 , 44, 4213-4221	5.5	26
171	Nonfullerene Acceptor with "Donor-Acceptor Combined Bridge" for Organic Photovoltaics with Large Open-Circuit Voltage. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 18984-18992	9.5	26
170	High-Sensitivity Visible-Near Infrared Organic Photodetectors Based on Non-Fullerene Acceptors. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 17769-17775	9.5	25
169	Copolymers of benzo[1,2-b:4,5-b']dithiophene and bithiazole for high-performance thin film phototransistors. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 9505-9511	7.1	25
168	Synthesis and photovoltaic properties of DA copolymers of benzodithiophene and naphtho[2,3-c]thiophene-4,9-dione. <i>Polymer Chemistry</i> , 2012 , 3, 99-104	4.9	25

167	Film-depth-dependent crystallinity for light transmission and charge transport in semitransparent organic solar cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 401-411	13	25
166	High-performance ternary organic solar cells with photoresponses beyond 1000 nm. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 24210-24215	13	25
165	Thiazolothiazole-containing polythiophenes with low HOMO level and high hole mobility for polymer solar cells. <i>Journal of Polymer Science Part A</i> , 2011 , 49, 4875-4885	2.5	24
164	Photoluminescence, Electroluminescence, Nonlinear Optical, and Humidity Sensitive Properties of Poly(p-diethynylbenzene) Prepared with a Nickel Acetylide Catalyst. <i>Advanced Materials</i> , 2000 , 12, 51-53 ²⁴		24
163	Donor polymer fluorination doubles the efficiency in non-fullerene organic photovoltaics. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 22536-22541	13	23
162	Designing a thiophene-fused DPP unit to build an ADA molecule for solution-processed solar cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 6894-6900	13	23
161	High performance photoswitches based on flexible and amorphous D-A polymer nanowires. <i>Small</i> , 2013 , 9, 294-9	11	23
160	Synthesis of a soluble conjugated copolymer based on dialkyl-substituted dithienothiophene and its application in photovoltaic cells. <i>Polymer</i> , 2009 , 50, 3595-3599	3.9	23
159	Perylene diimide-thienylenevinylene-based small molecule and polymer acceptors for solution-processed fullerene-free organic solar cells. <i>Dyes and Pigments</i> , 2015 , 114, 283-289	4.6	22
158	Monodisperse macromolecules based on benzodithiophene and diketopyrrolopyrrole with strong NIR absorption and high mobility. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 3781-3791	7.1	22
157	Black Phosphorous Quantum Dots Sandwiched Organic Solar Cells. <i>Small</i> , 2019 , 15, e1903977	11	22
156	Worldwide outdoor round robin study of organic photovoltaic devices and modules. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 130, 281-290	6.4	22
155	A DMF-assisted solution process boosts the efficiency in P3HT:PCBM solar cells up to 5.31%. <i>Nanotechnology</i> , 2013 , 24, 484008	3.4	22
154	Fused octacyclic electron acceptor isomers for organic solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 21432-21437	13	21
153	Roll-coating fabrication of ITO-free flexible solar cells based on a non-fullerene small molecule acceptor. <i>RSC Advances</i> , 2015 , 5, 36001-36006	3.7	21
152	Medium-Bandgap Small-Molecule Donors Compatible with Both Fullerene and Nonfullerene Acceptors. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 9587-9594	9.5	21
151	Highly sensitive thin film phototransistors based on a copolymer of benzodithiophene and diketopyrrolopyrrole. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 1942-1948	7.1	21
150	Solvent-vapor induced self-assembly of a conjugated polymer: A correlation between solvent nature and transistor performance. <i>Organic Electronics</i> , 2012 , 13, 2372-2378	3.5	21

149	Transition metal acetylide catalysts for polymerization of alkynes. <i>Journal of Molecular Catalysis A</i> , 2001 , 169, 27-31		21
148	The impact of fluorination on both donor polymer and non-fullerene acceptor: The more fluorine, the merrier. <i>Nano Research</i> , 2019 , 12, 2400-2405	10	20
147	Inverse Optical Cavity Design for Ultrabroadband Light Absorption Beyond the Conventional Limit in Low-Bandgap Nonfullerene Acceptor-Based Solar Cells. <i>Advanced Energy Materials</i> , 2019 , 9, 1900463	21.8	20
146	Transition metal acetylide catalysts for polymerization of alkynes. <i>Journal of Molecular Catalysis A</i> , 2001 , 169, 63-66		20
145	Large third-order nonlinear optical response of a conjugated copolymer consisting of 2,5-diethynylthiophene and carbazole units. <i>Chemical Physics Letters</i> , 2001 , 343, 493-498	2.5	20
144	ITC-2Cl: A Versatile Middle-Bandgap Nonfullerene Acceptor for High-Efficiency Panchromatic Ternary Organic Solar Cells. <i>Solar Rrl</i> , 2020 , 4, 1900377	7.1	20
143	Perylene diimide copolymers with dithienothiophene and dithienopyrrole: Use in n-channel and ambipolar field-effect transistors. <i>Journal of Polymer Science Part A</i> , 2013 , 51, 1550-1558	2.5	19
142	A conjugated polymer based on 5,5'-bibenzo[c][1,2,5]thiadiazole for high-performance solar cells. <i>Journal of Materials Chemistry</i> , 2012 , 22, 3432		19
141	Evolved phase separation toward balanced charge transport and high efficiency in polymer solar cells. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 3646-53	9.5	19
140	Synthesis and photovoltaic properties of copolymers based on bithiophene and bithiazole. <i>Journal of Polymer Science Part A</i> , 2011 , 49, 2746-2754	2.5	19
139	Comparative studies of the geometric and electronic properties of 1,1-disubstituted-2,3,4,5-tetraphenylsiloles and 1,1,2,2-tetramethyl-3,4,5,6-tetraphenyl-1,2-disila-3,5-cyclohexadiene. <i>Journal of Materials Chemistry</i> , 2006 , 16, 3814-3822		19
138	Poly(p-diethynylbenzene) Derivatives for Nonlinear Optics. <i>Macromolecular Rapid Communications</i> , 2001 , 22, 358-362	4.8	19
137	NIR polymers and phototransistors. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 13049-13058	7.1	19
136	Conjugated polymers with deep LUMO levels for field-effect transistors and polymer/polymer solar cells. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 8255-8261	7.1	18
135	Enhancing Performance of Fused-Ring Electron Acceptor Using Pyrrole Instead of Thiophene. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 14029-14036	9.5	18
134	Small molecule donors based on benzodithiophene and diketopyrrolopyrrole compatible with both fullerene and non-fullerene acceptors. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 5843-5848	7.1	18
133	Electron-transporting third component modifying cathode for simplified inverted ternary blend solar cells. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 1051-1056	7.1	18
132	Perylene and naphthalene diimide copolymers for all-polymer solar cells: Effect of perylene/naphthalene ratio. <i>Journal of Polymer Science Part A</i> , 2017 , 55, 682-689	2.5	18

131	Triple stimuli-responsive crosslinked polymeric nanoparticles for controlled release. <i>RSC Advances</i> , 2014 , 4, 35757	3.7	18
130	Physicochemical, self-assembly and field-effect transistor properties of anti- and syn- thienoacene isomers. <i>Journal of Materials Chemistry</i> , 2011 , 21, 11335		18
129	Recombination between Photogenerated and Electrode-Induced Charges Dominates the Fill Factor Losses in Optimized Organic Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 3473-3480	6.4	17
128	Enhancing the organic thin-film transistor performance of diketopyrrolopyrrole-Benzodithiophene copolymers via the modification of both conjugated backbone and side chain. <i>Polymer Chemistry</i> , 2015 , 6, 5369-5375	4.9	17
127	Comparison of conventional and inverted structures in fullerene-free organic solar cells. <i>Journal of Energy Chemistry</i> , 2015 , 24, 744-749	12	17
126	Enhancing the of P3HT-Based OSCs via a Thiophene-Fused Aromatic Heterocycle as a "Bridge" for A-D-A-Type Acceptors. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 26005-26016	9.5	17
125	Constructing DA copolymers based on thiophene-fused benzotriazole units containing different alkyl side-chains for non-fullerene polymer solar cells. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 8179-8186	7.1	17
124	Thermally stable light-emitting polymers of substituted polyacetylenes. <i>Thin Solid Films</i> , 2000 , 363, 126-129		17
123	Passivated Metal Oxide n-Type Contacts for Efficient and Stable Organic Solar Cells. <i>ACS Applied Energy Materials</i> , 2020 , 3, 1111-1118	6.1	17
122	Fast Response Organic Tandem Photodetector for Visible and Near-Infrared Digital Optical Communications. <i>Small</i> , 2021 , 17, e2101316	11	17
121	Modulating morphology via side-chain engineering of fused ring electron acceptors for high performance organic solar cells. <i>Science China Chemistry</i> , 2019 , 62, 790-796	7.9	16
120	n-Type organic light-emitting transistors with high mobility and improved air stability. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 535-540	7.1	16
119	Cracking perylene diimide backbone for fullerene-free polymer solar cells. <i>Dyes and Pigments</i> , 2016 , 128, 226-234	4.6	16
118	Synthesis, Self-Assembly and Solution-Processed Field-Effect Transistors of a Liquid Crystalline Bis(dithienothiophene) Derivative. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 16232-16237	3.8	16
117	Photo- and electroluminescence properties of fluorene-based copolymers containing electron- or hole-transporting unit. <i>Thin Solid Films</i> , 2003 , 440, 247-254	2.2	16
116	A Novel Bipolar Electroluminescent Poly(arylene ethynylene) Consisting of Carbazole and Diethynylthiophene Units. <i>Macromolecular Chemistry and Physics</i> , 2001 , 202, 2341-2345	2.6	16
115	Large and ultrafast third-order optical nonlinearity of novel copolymers containing fluorene and tetraphenyldiaminobiphenyl units in backbones. <i>Chemical Physics Letters</i> , 2001 , 350, 99-105	2.5	16
114	Side-Chain Engineering of Benzodithiophene-Bridged Dimeric Porphyrin Donors for All-Small-Molecule Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 41506-41514	9.5	16

113	Enabling High-Performance Tandem Organic Photovoltaic Cells by Balancing the Front and Rear Subcells. <i>Advanced Materials</i> , 2020 , 32, e2002315	24	16
112	Spirobifluorene-based acceptors for polymer solar cells: Effect of isomers. <i>Dyes and Pigments</i> , 2015 , 123, 16-25	4.6	15
111	Reducing VOC loss via structure compatible and high lowest unoccupied molecular orbital nonfullerene acceptors for over 17%-efficiency ternary organic photovoltaics. <i>EcoMat</i> , 2020 , 2, e12061	9.4	15
110	Facile synthesis of high-performance nonfullerene acceptor isomers via a one stone two birds strategy. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 20667-20674	13	15
109	Self-assembled π -extended condensed benzothiophene nanoribbons for field-effect transistors. <i>Chemistry - A European Journal</i> , 2013 , 19, 9771-4	4.8	15
108	High-mobility, air stable bottom-contact n-channel thin film transistors based on N,N'-ditridecyl perylene diimide. <i>Applied Physics Letters</i> , 2013 , 103, 203303	3.4	15
107	An amino-substituted perylene diimide polymer for conventional perovskite solar cells. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 2078-2084	7.8	15
106	Synthesis, electron mobility, and electroluminescence of a polynorbornene-supported silole. <i>Polymer</i> , 2009 , 50, 397-403	3.9	15
105	Narrow blue light-emitting diodes based on a copolymer consisting of fluorene and quinoline units. <i>Synthetic Metals</i> , 2003 , 137, 1153-1154	3.6	15
104	Transition metal acetylide catalysts for polymerization of alkynes. <i>Journal of Molecular Catalysis A</i> , 2001 , 169, 57-62		15
103	Transition metal acetylide catalysts for polymerization of polar alkynes. <i>Catalysis Letters</i> , 2000 , 70, 79-82.8		15
102	Fine-tuning solid state packing and significantly improving photovoltaic performance of conjugated polymers through side chain engineering via random polymerization. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 5585-5593	13	14
101	Z-Shaped Fused-Chrysene Electron Acceptors for Organic Photovoltaics. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 33006-33011	9.5	14
100	Effect of substituents on electronic properties, thin film structure and device performance of dithienothiophene- π -phenylene cooligomers. <i>Thin Solid Films</i> , 2009 , 517, 2968-2973	2.2	14
99	Polymerization of Substituted Acetylenes Carrying Non-Polar and Polar Groups with Transition Metal Acetylide Catalysts. <i>Macromolecular Rapid Communications</i> , 2001 , 22, 530-534	4.8	14
98	Polymerization of p-diethynylbenzene and its derivatives with nickelocene acetylide catalysts containing different phosphine and alkynyl ligands. <i>Macromolecular Rapid Communications</i> , 2000 , 21, 1263-1266	4.8	14
97	Photophysical pathways in efficient bilayer organic solar cells: The importance of interlayer energy transfer. <i>Nano Energy</i> , 2021 , 84, 105924	17.1	14
96	High-Performance Nonfullerene Organic Solar Cells with Unusual Inverted Structure. <i>Solar Rrl</i> , 2020 , 4, 2000115	7.1	13

95	N-acylated isoindigo based conjugated polymers for n-channel and ambipolar organic thin-film transistors. <i>Dyes and Pigments</i> , 2014 , 109, 200-205	4.6	13
94	Enhancing Efficiency and Stability of Organic Solar Cells by UV Absorbent. <i>Solar Rrl</i> , 2017 , 1, 1700148	7.1	13
93	Highly Conjugated, Fused-Ring, Quadrupolar Organic Chromophores with Large Two-Photon Absorption Cross-Sections in the Near-Infrared. <i>Journal of Physical Chemistry A</i> , 2020 , 124, 4367-4378	2.8	12
92	All-polymer solar cells based on side-chain-isolated polythiophenes and poly(perylene diimide-alt-dithienothiophene). <i>Solar Energy Materials and Solar Cells</i> , 2013 , 117, 336-342	6.4	12
91	A DAD swivel-cruciform oligothiophene based on 5,5'-bibenzothiadiazole. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 414-417	7.1	12
90	Nonfullerene acceptor with strong near-infrared absorption for polymer solar cells. <i>Dyes and Pigments</i> , 2017 , 137, 553-559	4.6	12
89	An oligothiophene dye with triphenylamine as side chains for efficient dye-sensitized solar cells. <i>Organic Electronics</i> , 2012 , 13, 2395-2400	3.5	12
88	Ternary Blend Organic Solar Cells Based on P3HT/TT-TTPA/PC61BM. <i>Acta Chimica Sinica</i> , 2015 , 73, 252	3.3	12
87	Polymer Dots of Peryleneimide-Functionalized Polyethyleneimine: Facile Synthesis and Effective Fluorescent Sensing of Iron (III) Ions. <i>Macromolecular Rapid Communications</i> , 2016 , 37, 2052-2056	4.8	11
86	Utilizing Difluorinated Thiophene Units To Improve the Performance of Polymer Solar Cells. <i>Macromolecules</i> , 2019 , 52, 6523-6532	5.5	11
85	The photovoltaic behaviors of PPV- and PPE-type conjugated polymers featured with diketopyrrolopyrrole (DPP) units. <i>Synthetic Metals</i> , 2009 , 159, 1991-1995	3.6	11
84	High-performance NIR-sensitive fused tetrathienoacene electron acceptors. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 3011-3017	13	11
83	Printing fabrication of large-area non-fullerene organic solar cells. <i>Materials Horizons</i> , 2021 ,	14.4	11
82	A thiophene-fused benzotriazole unit as a bridge in A-D-A type acceptor to achieve more balanced JSC and VOC for OSCs. <i>Organic Electronics</i> , 2020 , 82, 105705	3.5	10
81	Influence of Thiophene Moiety on the Excited State Properties of PushPull Chromophores. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 13922-13930	3.8	10
80	Solvent-resistant small molecule solar cells by roll-to-roll fabrication via introduction of azide cross-linkable group. <i>Synthetic Metals</i> , 2014 , 195, 299-305	3.6	10
79	A round robin study of polymer solar cells and small modules across China. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 117, 382-389	6.4	10
78	Transition metal acetylide catalysts for polymerization of p-diethynylbenzene 4. <i>Journal of Molecular Catalysis A</i> , 2002 , 184, 139-145		10

77	Fused-ring electron acceptors in China. <i>Science China Chemistry</i> , 2020 , 63, 1179-1181	7.9	10
76	Ternary Blending Driven Molecular Reorientation of Non-Fullerene Acceptor IDIC with Backbone Order. <i>ACS Applied Energy Materials</i> , 2020 , 3, 10814-10822	6.1	10
75	Effect of the Energy Offset on the Charge Dynamics in Nonfullerene Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 43984-43991	9.5	10
74	Integrated Perovskite/Organic Photovoltaics with Ultrahigh Photocurrent and Photoresponse Approaching 1000 nm. <i>Solar Rrl</i> , 2020 , 4, 2000140	7.1	10
73	Advances in Organic Photovoltaics. <i>Acta Chimica Sinica</i> , 2021 , 79, 257	3.3	10
72	Synthesis and fluorescence study of a pyrene-functionalized poly(4-vinylpyridine) quaternary ammonium for detection of DNA hybridization. <i>Polymer</i> , 2013 , 54, 1289-1294	3.9	9
71	Ladder-type nonacyclic indacenodithieno[3,2-b]indole for highly efficient organic field-effect transistors and organic photovoltaics. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 8988-8998	7.1	9
70	Efficient Inverted Organic Solar Cells Based on a Fullerene Derivative-Modified Transparent Cathode. <i>Materials</i> , 2017 , 10,	3.5	9
69	Polymerization of p-diethynylbenzene catalyzed by (EC5H5)(PPh3)Ni(C ₂ CC6H4C ₂ CH). <i>European Polymer Journal</i> , 2001 , 37, 1649-1654	5.2	9
68	Pushing the Efficiency of High Open-Circuit Voltage Binary Organic Solar Cells by Vertical Morphology Tuning.. <i>Advanced Science</i> , 2022 , e2200578	13.6	9
67	Hybrid molecular nanostructures with donor-acceptor chains. <i>Science China Chemistry</i> , 2013 , 56, 124-130	7.9	8
66	Triple stimuli-responsive polymers based on pyrene-functionalized poly(dimethylaminoethyl methacrylate): synthesis, self-assembled nanoparticles and controlled release. <i>Colloid and Polymer Science</i> , 2014 , 292, 2735-2744	2.4	8
65	Synthesis and fluorescence study of a quaternized copolymer containing pyrene for DNA-hybridization detection. <i>ChemPhysChem</i> , 2012 , 13, 4099-104	3.2	8
64	A carboxylic acid-functionalized polyfluorene as fluorescent probe for protein sensing. <i>Journal of Applied Polymer Science</i> , 2011 , 121, 3541-3546	2.9	8
63	Electrical properties and spectroscopic studies of HClO ₄ -doped poly(p-diethynylbenzene). <i>Synthetic Metals</i> , 1998 , 94, 249-253	3.6	8
62	Uncovering the out-of-plane nanomorphology of organic photovoltaic bulk heterojunction by GTSAXS. <i>Nature Communications</i> , 2021 , 12, 6226	17.4	8
61	Charge separation boosts exciton diffusion in fused ring electron acceptors. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 23304-23312	13	8
60	Structural regulation of thiophene-fused benzotriazole as a bridge for A-ED-EA type acceptor:P3HT-based OSCs to achieve high efficiency. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 6520-6528	12.8	8

59	Pairing 1D/2D-conjugation donors/acceptors towards high-performance organic solar cells. <i>Materials Chemistry Frontiers</i> , 2019 , 3, 276-283	7.8	7
58	Impact of an electron withdrawing group on the thiophene-fused benzotriazole unit on the photovoltaic performance of the derived polymer solar cells. <i>Dyes and Pigments</i> , 2019 , 166, 381-389	4.6	7
57	Synthesis of an octathienyl-fused phthalocyanine as a donor material for organic solar cells. <i>Dyes and Pigments</i> , 2015 , 114, 124-128	4.6	7
56	An Alkoxy-Solubilizing Decacyclic Electron Acceptor for Efficient Ecofriendly As-Cast Blade-Coated Organic Solar Cells. <i>Solar Rrl</i> , 2020 , 4, 2000108	7.1	7
55	Effects of linking units on fused-ring electron acceptor dimers. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 13735-13741	13	7
54	Comparison of Fused-Ring Electron Acceptors with One- and Multidimensional Conformations. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 23976-23983	9.5	7
53	Polymer light-emitting electrochemical cell based on a novel poly(aryleneethynylene) consisting of ethynylfluorene and tetraphenyldiaminobiphenyl units. <i>Polymers for Advanced Technologies</i> , 2004 , 15, 70-74	3.2	7
52	Vibration and X-ray photoelectron spectroscopies of FeCl ₃ -doped poly(p-diethynylbenzene). <i>European Polymer Journal</i> , 2002 , 38, 2057-2061	5.2	7
51	Effect of Substitution of Crown Ether on the Luminescence Performances of PPV. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 10618-10621	3.4	7
50	Unveiling the crystalline packing of Y6 in thin films by thermally induced Backbone-on□ orientation. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 17030-17038	13	7
49	Designing a thiophene-fused benzoxadizole as an acceptor to build a narrow bandgap polymer for all-polymer solar cells. <i>RSC Advances</i> , 2017 , 7, 19990-19995	3.7	6
48	Effects of alkoxylation position on fused-ring electron acceptors. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 15128-15134	7.1	6
47	Organic dyes based on triphenylamine for dye-sensitized solar cells: Structure-property relationships. <i>Journal of Energy Chemistry</i> , 2016 , 25, 615-620	12	6
46	Detection of DNA hybridization by a pyrene-labeled polyelectrolyte prepared by ATRP. <i>Polymer</i> , 2013 , 54, 297-302	3.9	6
45	Conformation diversity of a fused-ring pyrazine derivative on au(111) and highly ordered pyrolytic graphite. <i>Chemistry - an Asian Journal</i> , 2015 , 10, 1311-7	4.5	6
44	Effect of electron-withdrawing units on triphenylamine-based small molecules for solution-processed organic solar cells. <i>Science China Chemistry</i> , 2015 , 58, 331-338	7.9	6
43	Fluorescence study of interaction between an anionic conjugated polyelectrolyte and bovine serum albumin. <i>Polymer Bulletin</i> , 2011 , 67, 1907-1915	2.4	6
42	Synthesis and characterization of processible electroluminescent poly[(2,7-diethynyl-9,9-di-2-ethylhexylfluorene)- alt - co -(2,5-thienylene)]. <i>Synthetic Metals</i> , 2001 , 124, 323-327	3.6	6

41	Perylene Diimide-Based Oligomers and Polymers for Organic Optoelectronics. <i>Accounts of Materials Research</i> ,	7.5	6
40	Enhancing Open-Circuit Voltage of High-Efficiency Nonfullerene Ternary Solar Cells with a Star-Shaped Acceptor. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 50660-50667	9.5	6
39	Bay-annulated indigo based near-infrared sensitive polymer for organic solar cells. <i>Journal of Polymer Science Part A</i> , 2018 , 56, 213-220	2.5	6
38	Fluorinated Thieno[2',3':4,5]benzo[1,2-][1,2,3]triazole: New Acceptor Unit To Construct Polymer Donors. <i>ACS Omega</i> , 2018 , 3, 13894-13901	3.9	6
37	Highly efficient, thermally stable and optically transparent third-order nonlinear optical copolymers consisting of fluorene and quinoxaline/quinoline units. <i>Applied Physics A: Materials Science and Processing</i> , 2003 , 77, 375-378	2.6	5
36	Designing a thiophene-fused quinoxaline unit to build D π A copolymers for non-fullerene organic solar cells. <i>Dyes and Pigments</i> , 2020 , 174, 108022	4.6	5
35	A novel hole extraction layer to enhance the performance of inverted organic solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 25385-25390	13	4
34	Vibration and photoelectron spectroscopies of iodine-doped poly(p-diethynylbenzene). <i>European Polymer Journal</i> , 2002 , 38, 2349-2353	5.2	4
33	Simultaneous polymerization and formation of polyphenylacetylene film by Nd(P2O4) ₃ Be(AA) ₃ Al(i-Bu) ₃ combined catalyst system. <i>Journal of Polymer Science Part A</i> , 1995 , 33, 1873-1879	2.5	4
32	Effects of Fluorination Position on Fused-Ring Electron Acceptors. <i>Small Structures</i> , 2020 , 1, 2000006	8.7	4
31	Precise Synthesis of Fused Decacyclic Electron Acceptor Isomers for Organic Solar Cells. <i>Solar Rrl</i> , 2021 , 5, 2100163	7.1	4
30	Effects of EBridge on Fused-Ring Electron Acceptor Dimers. <i>ACS Applied Polymer Materials</i> , 2021 , 3, 23-29	4.3	4
29	New roles of fused-ring electron acceptors in organic solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 4766-4770	13	3
28	A new perspective for organic solar cells: triplet nonfullerene acceptors. <i>Science China Chemistry</i> , 2018 , 61, 637-638	7.9	3
27	Effects of Terminal Groups in Third Components on Performance of Organic Solar Cells. <i>Wuli Huaxue Xuebao/Acta Physico-Chimica Sinica</i> , 2019 , 35, 275-283	3.8	3
26	Isomeric Effect in Unidirectionally Extended Fused-Ring Electron Acceptors. <i>Chemistry of Materials</i> , 2021 , 33, 441-451	9.6	3
25	Fused thienobenzene-thienothiophene electron acceptors for organic solar cells. <i>Journal of Energy Chemistry</i> , 2019 , 37, 58-65	12	3
24	Enhancing photovoltaic performance via aggregation dynamics control in fused-ring electron acceptor. <i>Aggregate</i> , 2021 , 2, e29	22.9	3

23	A new random D-A copolymer based on two different benzotriazole units as co-acceptors for polymer solar cells. <i>Polymer</i> , 2018 , 139, 123-129	3.9	2
22	Tandem Organic Solar Cells: Nonfullerene Tandem Organic Solar Cells with High Open-Circuit Voltage of 1.97 V (Adv. Mater. 44/2016). <i>Advanced Materials</i> , 2016 , 28, 9870-9870	24	2
21	Molecular Tuning of Titanium Complexes with Controllable Work Function for Efficient Organic Photovoltaics. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 20800-20807	3.8	2
20	Photoswitches: High Performance Photoswitches Based on Flexible and Amorphous D π A Polymer Nanowires (Small 2/2013). <i>Small</i> , 2013 , 9, 166-166	11	2
19	Solar Cells: A Star-Shaped Perylene Diimide Electron Acceptor for High-Performance Organic Solar Cells (Adv. Mater. 30/2014). <i>Advanced Materials</i> , 2014 , 26, 5224-5224	24	2
18	Enhancing organic photovoltaic performance with 3D-transport dual nonfullerene acceptors. <i>Journal of Materials Chemistry A</i> , 2022 , 10, 1948-1955	13	2
17	Designing an Organic Acceptor with Unsymmetrical Structure Based on Rhodanine and Thiazolidine-2, 4-dione Units to Study the Structure-Property Relationship. <i>Wuli Huaxue Xuebao/Acta Physico-Chimica Sinica</i> , 2019 , 35, 257-267	3.8	2
16	Convenient fabrication of conjugated polymer semiconductor nanotubes and their application in organic electronics. <i>Royal Society Open Science</i> , 2018 , 5, 180868	3.3	2
15	Effects of Side Chains in Third Components on the Performance of Fused-Ring Electron-Acceptor-Based Ternary Organic Solar Cells. <i>Energy & Fuels</i> ,	4.1	2
14	Icing on the cake: combining a dual PEG-functionalized pillararene and an A-D-A small molecule photosensitizer for multimodal phototherapy. <i>Science China Chemistry</i> , 1	7.9	2
13	Dye-Sensitized Solar Cells (DSSCs) 2013 , 437-465		1
12	Polymer Solar Cells 2013 , 407-435		1
11	Organic Solar Cells Based on Small Molecules 2013 , 375-405		1
10	Chloro-Nickel and Chloro-Cobalt Complexes Containing Phosphine Ligands: Efficient Initiators for Polymerization of Alkynes. <i>Catalysis Letters</i> , 2002 , 80, 59-61	2.8	1
9	Effect of Molecular Symmetry on Fused-Ring Electron Acceptors. <i>Solar Rrl</i> , 2100797	7.1	1
8	A Novel, Weakly N-Doped Cathode-Modifying Layer in Organic Solar Cells. <i>Energy Technology</i> , 2021 , 9, 2100281	3.5	1
7	Intrinsically inert hyperbranched interlayer for enhanced stability of organic solar cells. <i>Science Bulletin</i> , 2021 , 67, 171-171	10.6	1
6	Poly(p-diethynylbenzene) Derivatives for Nonlinear Optics 2001 , 22, 358		1

5	Revealing the Sole Impact of Acceptor's Molecular Conformation to Energy Loss and Device Performance of Organic Solar Cells through Positional Isomers.. <i>Advanced Science</i> , 2022 , e2103428	13.6	1
4	The Impact of Benzothiadiazole on the Optoelectronic Performance of Polymer/PC 71 BM Blend Films and Their Application in NIR Phototransistors. <i>Advanced Electronic Materials</i> , 2101297	6.4	1
3	Towards High-Performance Semitransparent Organic Photovoltaics: Dual-Functional -Type Soft Interlayer.. <i>ACS Nano</i> , 2021 ,	16.7	1
2	Pyrrolo[3,2-b]pyrrole-based fused-ring electron acceptors with strong near-infrared absorption beyond 1000 nm. <i>Dyes and Pigments</i> , 2021 , 195, 109705	4.6	0
1	Transparent Solar Cells: Light Harvesting at Oblique Incidence Decoupled from Transmission in Organic Solar Cells Exhibiting 9.8% Efficiency and 50% Visible Light Transparency (Adv. Energy Mater. 17/2020). <i>Advanced Energy Materials</i> , 2020 , 10, 2070078	21.8	