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Molecular design toward highly efficient photovoltaic polymers based on two-dimensional conjugated benzodithio

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#	Paper	IF	Citations
648	Selecting a donor polymer for realizing favorable morphology in efficient non-fullerene acceptor-based solar cells. <b>2014</b> , 10, 4658-63		72
647	Optical engineering of uniformly decorated graphene oxide nanoflakes via in situ growth of silver nanoparticles with enhanced plasmonic resonance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 21069-77	9.5	22
646	Determining Optimal Crystallinity of Diketopyrrolopyrrole-Based Terpolymers for Highly Efficient Polymer Solar Cells and Transistors. <b>2014</b> , 26, 6963-6970		123
645	Self-assembled buffer layer from conjugated diblock copolymers with ethyleneoxide side chains for high efficiency polymer solar cells. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 8054-8064	7.1	15
644	Alkoxyphenylthiophene Linked Benzodithiophene Based Medium Band Gap Polymers for Organic Photovoltaics: Efficiency Improvement upon Methanol Treatment Depends on the Planarity of Backbone. <b>2014</b> , 47, 7060-7069		35
643	Effect of thermal annealing on active layer morphology and performance for small molecule bulk heterojunction organic solar cells. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 7247-7255	7.1	58
642	Improving the photovoltaic performance of ladder-type dithienonaphthalene-containing copolymers through structural isomerization. <b>2014</b> , 2, 13905-13915		20
641	Enhancement of photovoltaic performance by increasing conjugation of the acceptor unit in benzodithiophene and quinoxaline copolymers. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 8047-8053	7.1	36
640	Side Chain Selection for Designing Highly Efficient Photovoltaic Polymers with 2D-Conjugated Structure. <b>2014</b> , 47, 4653-4659		240
639	Investigations of the Conjugated Polymers Based on Dithienogermole (DTG) Units for Photovoltaic Applications. <b>2014</b> , 47, 5558-5565		30
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637	Donor-Acceptor copolymers based on benzo[1,2-b:4,5-b']dithiophene and pyrene-fused phenazine for high-performance polymer solar cells. <b>2014</b> , 15, 3375-3383		38
636	Highly Efficient 2D-Conjugated Benzodithiophene-Based Photovoltaic Polymer with Linear Alkylthio Side Chain. <b>2014</b> , 26, 3603-3605		509
635	Roll-Coated Fabrication of Fullerene-Free Organic Solar Cells with Improved Stability. <b>2015</b> , 2, 1500096		75
634	Dithienopyrrole Based Small Molecule with Low Band Gap for Organic Solar Cells. <b>2015</b> , 33, 852-858		12
633	Angular-Shaped 4,9-Dialkyl Benzo[1,2-b:4,5-b']naphthodithiophene-Based Donor-Acceptor Copolymers: Investigation of Isomeric Structural Effects on Molecular Properties and Performance of Field-Effect Transistors and Photovoltaics. <b>2015</b> , 25, 6131-6143		46
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631	Influence of Molecular Geometry of Perylene Diimide Dimers and Polymers on Bulk Heterojunction Morphology Toward High-Performance Nonfullerene Polymer Solar Cells. <b>2015</b> , 25, 5326-5332		106
630	Spiro Linkage as an Alternative Strategy for Promising Nonfullerene Acceptors in Organic Solar Cells. <b>2015</b> , 25, 5954-5966		123
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628	Wide-Bandgap Benzodithiophene-Benzothiadiazole Copolymers for Highly Efficient Multijunction Polymer Solar Cells. <b>2015</b> , 27, 4461-4468		95
627	A Large-Bandgap Conjugated Polymer for Versatile Photovoltaic Applications with High Performance. <b>2015</b> , 27, 4655-60		586
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625	The Effect of Processing Additives on Energetic Disorder in Highly Efficient Organic Photovoltaics: A Case Study on PBDTTT-C-T:PC71 BM. <b>2015</b> , 27, 3868-73		41
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508	The Importance of End Groups for Solution-Processed Small-Molecule Bulk-Heterojunction Photovoltaic Cells. <b>2016</b> , 9, 973-80		4
507	Synthesis and photovoltaic properties of 2,6-bis(2-thienyl) benzobisazole and 4,8-bis(thienyl)-benzo[1,2-B:4,5-B']dithiophene copolymers. <b>2016</b> , 54, 316-324		10
506	Broad Bandgap D-A Copolymer Based on Bithiazole Acceptor Unit for Application in High-Performance Polymer Solar Cells with Lower Fullerene Content. <i>Macromolecular Rapid Communications</i> , <b>2016</b> , 37, 1066-73	4.8	8

505	High efficiency arrays of polymer solar cells fabricated by spray-coating in air. <b>2016</b> , 24, 275-282		25
504	Alloy Acceptor: Superior Alternative to PCBM toward Efficient and Stable Organic Solar Cells. <b>2016</b> , 28, 8021-8028		189
503	Breaking the 10% Efficiency Barrier in Organic Photovoltaics: Morphology and Device Optimization of Well-Known PBDDTTT Polymers. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1502529	21.8	267
502	Effects of Alkylthio and Alkoxy Side Chains in Polymer Donor Materials for Organic Solar Cells. <i>Macromolecular Rapid Communications</i> , <b>2016</b> , 37, 287-302	4.8	58
501	Difluorobenzothiadiazole-Based Small-Molecule Organic Solar Cells with 8.7% Efficiency by Tuning of $\pi$ -Conjugated Spacers and Solvent Vapor Annealing. <b>2016</b> , 26, 1803-1812		94
500	Asymmetric-Indenothiophene-Based Copolymers for Bulk Heterojunction Solar Cells with 9.14% Efficiency. <b>2016</b> , 28, 3359-65		92
499	Layer-by-Layer Processed Organic Solar Cells. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600414	21.8	68
498	Defining Cyclic-Acyclic Exciton Transition at the Single-Molecule Level: Size-Dependent Conformational Heterogeneity and Exciton Delocalization in Ethynylene-Bridged Cyclic Oligothiophenes. <b>2016</b> , 7, 1260-6		11
497	Efficient polymer solar cells based on a new quinoxaline derivative with fluorinated phenyl side chain. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 2606-2613	7.1	36
496	Series of Multifluorine Substituted Oligomers for Organic Solar Cells with Efficiency over 9% and Fill Factor of 0.77 by Combination Thermal and Solvent Vapor Annealing. <b>2016</b> , 138, 7687-97		176
495	Fluorination as an effective tool to increase the photovoltaic performance of indacenodithiophene-alt-quinoxaline based wide-bandgap copolymers. <b>2016</b> , 33, 128-134		20
494	A comparative study of the electronic spectra, fluorescence quantum yields, cyclic voltammograms and theoretical calculations of phenanthrene-type benzodifurans. <b>2016</b> , 72, 4159-4168		4
493	Low band gap polymeric solar cells using solution-processable copper iodide as hole transporting layer. <b>2016</b> , 58, 116-120		11
492	Novel wide band gap polymers based on dithienobenzoxadiazole for polymer solar cells with high open circuit voltages over 1 V. <i>RSC Advances</i> , <b>2016</b> , 6, 51419-51425	3.7	6
491	An asymmetric small molecule based on thieno[2,3-f]benzofuran for efficient organic solar cells. <b>2016</b> , 35, 87-94		17
490	Dialkylthio benzo[1,2-b:4,5-b']difuran polymer for efficient organic photovoltaics with solvent treatment in active layers. <b>2016</b> , 131, 356-363		5
489	A comparative study of the effect of fluorine substitution on the photovoltaic performance of benzothiadiazole-based copolymers. <i>RSC Advances</i> , <b>2016</b> , 6, 47676-47686	3.7	5
488	Design, synthesis and photophysical properties of D1-A-D2-A-D1-type small molecules based on fluorobenzotriazole acceptor and dithienosilole core donor for solution processed organic solar cells. <b>2016</b> , 132, 387-397		7

487	Single precursor for the synthesis of donor and acceptor units of the low band gap polymers: synthesis of benzodithiophene and thienopyrroledione from maleic anhydride. <b>2016</b> , 57, 2608-2611		2
486	Modulation of charge carrier mobility by side-chain engineering of bi(thienylenevinylene)thiophene containing PPEPPVs. <i>RSC Advances</i> , <b>2016</b> , 6, 51642-51648	3.7	2
485	Non-conjugated water/alcohol soluble polymers with different oxidation states of sulfide as cathode interlayers for high-performance polymer solar cells. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 4288-4295	7.1	14
484	A Fluorinated Polythiophene Derivative with Stabilized Backbone Conformation for Highly Efficient Fullerene and Non-Fullerene Polymer Solar Cells. <b>2016</b> , 49, 2993-3000		125
483	Wide bandgap dithienobenzodithiophene-based $\pi$ -conjugated polymers consisting of fluorinated benzotriazole and benzothiadiazole for polymer solar cells. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 4719-4727	7.1	31
482	Efficient polymer solar cells processed by environmentally friendly halogen-free solvents. <i>RSC Advances</i> , <b>2016</b> , 6, 39074-39079	3.7	8
481	Incorporating a vertical BDT unit in conjugated polymers for drastically improving the open-circuit voltage of polymer solar cells. <i>New Journal of Chemistry</i> , <b>2016</b> , 40, 5300-5305	3.6	7
480	A D- $\pi$ A1- $\pi$ A2 push-pull small molecule donor for solution processed bulk heterojunction organic solar cells. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 13918-26	3.6	11
479	Influence of a $\pi$ -bridge dependent molecular configuration on the optical and electrical characteristics of organic solar cells. <b>2016</b> , 4, 8784-8792		14
478	Donor-acceptor conjugated polymers based on thieno[3,2-b]indole (TI) and 2,1,3-benzothiadiazole (BT) for high efficiency polymer solar cells. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 5448-5460	7.1	29
477	An efficient method to achieve a balanced open circuit voltage and short circuit current density in polymer solar cells. <b>2016</b> , 4, 8291-8297		36
476	D $\pi$ A conjugated polymers based on thieno[3,2-b]indole (TI) and 2,1,3-benzodithiazole (BT) derivatives: synthesis, characterization and side-chain influence on photovoltaic properties. <i>RSC Advances</i> , <b>2016</b> , 6, 45873-45883	3.7	10
475	Novel high band gap pendant-borylated carbazole polymers with deep HOMO levels through direct $\pi$ -N $\pi$ interaction for organic photovoltaics. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 4393-4401	7.1	5
474	Effects of a heteroatomic benzothienothiophenedione acceptor on the properties of a series of wide-bandgap photovoltaic polymers. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 9052-9059	7.1	10
473	Influence of molecular structure on the performance of low Voc loss polymer solar cells. <b>2016</b> , 4, 15232-15239		12
472	Energy-Level Modulation of Small-Molecule Electron Acceptors to Achieve over 12% Efficiency in Polymer Solar Cells. <b>2016</b> , 28, 9423-9429		1191
471	Dicyanomethylene-quinoid vs. dicyanovinyl-benzenoid organic semiconductors: Understanding structure-property correlations in mesomerism-like forms. <b>2016</b> , 37, 402-410		12
470	Effects of Backbone Planarity and Tightly Packed Alkyl Chains in the Donor-acceptor Polymers for High Photostability. <b>2016</b> , 49, 7844-7856		34

469	Non-fullerene small molecule acceptors based on perylene diimides. <b>2016</b> , 4, 17604-17622		227
468	Wide bandgap copolymers with vertical benzodithiophene dicarboxylate for high-performance polymer solar cells with an efficiency up to 7.49%. <b>2016</b> , 4, 18792-18803		28
467	Tuning the fused aromatic rings to enhance photovoltaic performance in wide band-gap polymer solar cells. <i>Polymer</i> , <b>2016</b> , 104, 130-137	3.9	9
466	Effect of Monofluoro Substitution on the Optoelectronic Properties of Benzo[c][1,2,5]thiadiazole Based Organic Semiconductors. <b>2016</b> , 49, 5806-5816		21
465	A fused-ring based electron acceptor for efficient non-fullerene polymer solar cells with small HOMO offset. <b>2016</b> , 27, 430-438		112
464	High-Performance Photovoltaic Polymers Employing Symmetry-Breaking Building Blocks. <b>2016</b> , 28, 8490-8498	86	
463	New Insights into the Correlation between Morphology, Excited State Dynamics, and Device Performance of Small Molecule Organic Solar Cells. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600961	21.8	27
462	Realizing 11.3% efficiency in fullerene-free polymer solar cells by device optimization. <b>2016</b> , 59, 1574-1582		72
461	A wide-bandgap conjugated polymer for highly efficient inverted single and tandem polymer solar cells. <b>2016</b> , 4, 13251-13258		49
460	High-Performance Polymer Solar Cells Based on a Wide-Bandgap Polymer Containing Pyrrolo[3,4-]benzotriazole-5,7-dione with a Power Conversion Efficiency of 8.63. <b>2016</b> , 3, 1600032		57
459	Molecular Engineering on Conjugated Side Chain for Polymer Solar Cells with Improved Efficiency and Accessibility. <b>2016</b> , 28, 5887-5895		54
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457	PCDTBT based solar cells: one year of operation under real-world conditions. <b>2016</b> , 6, 21632		47
456	New D-A1-D-A2-Type Regular Terpolymers Containing Benzothiadiazole and Benzotrithiophene Acceptor Units for Photovoltaic Application. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 32998-33009	9.5	14
455	Head-to-Head Linkage Containing Bithiophene-Based Polymeric Semiconductors for Highly Efficient Polymer Solar Cells. <b>2016</b> , 28, 9969-9977		81
454	Enhancement of photodetector performance by tuning donor-acceptor ratios in diketopyrrolopyrrole- and thiophene-based polymers. <i>Polymer</i> , <b>2016</b> , 99, 427-433	3.9	8
453	Synthesis and photovoltaic properties of donor-acceptor conjugated polymers based on 4,7-dithienyl-2,1,3-benzothiadiazole functionalized silole. <i>Synthetic Metals</i> , <b>2016</b> , 220, 433-439	3.6	14
452	Synthesis, field-effect and photovoltaic properties of random difluorobenzothiadiazole-isoindigo electron donor-acceptor polymers. <b>2016</b> , 134, 251-257		8

451	Unsubstituted Benzodithiophene-Based Conjugated Polymers for High-Performance Organic Field-Effect Transistors and Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 19665-7195	30
450	Synthesis of a 4,9-Didodecyl Angular-Shaped Naphthodiselenophene Building Block To Achieve High-Mobility Transistors. <b>2016</b> , 28, 5121-5130	42
449	Recent developments of di-amide/imide-containing small molecular non-fullerene acceptors for organic solar cells. <b>2016</b> , 27, 1283-1292	16
448	High-Performance All-Polymer Photoresponse Devices Based on Acceptor-Acceptor Conjugated Polymers. <b>2016</b> , 26, 6306-6315	79
447	Packing Principles for Donor-Acceptor Oligomers from Analysis of Single Crystals. <b>2016</b> , 28, 5175-5190	31
446	10.8% Efficiency Polymer Solar Cells Based on PTB7-Th and PC71BM via Binary Solvent Additives Treatment. <b>2016</b> , 26, 6635-6640	254
445	Regular terpolymers with fluorinated bithiophene units for high-performing photovoltaic cells. <b>2016</b> , 7, 5069-5078	15
444	Side-chain Engineering of Benzo[1,2-b:4,5-b']dithiophene Core-structured Small Molecules for High-Performance Organic Solar Cells. <b>2016</b> , 6, 25355	17
443	Efficient Naphthalenediimide-Based Hole Semiconducting Polymer with Vinylene Linkers between Donor and Acceptor Units. <b>2016</b> , 28, 8580-8590	41
442	Conjugated Oligothiophene Derivatives Based on Bithiophene with Unsaturated Bonds as Building Blocks for Solution-Processed Bulk Heterojunction Organic Solar Cells. <b>2016</b> , 11, 3557-3567	7
441	Manipulating the photovoltaic properties of small-molecule donor materials by tailoring end-capped alkylthio substitution. <i>RSC Advances</i> , <b>2016</b> , 6, 108908-108916	3.7 6
440	High-Efficiency Polymer Solar Cells Enabled by Environment-Friendly Single-Solvent Processing. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1502177	21.8 83
439	High-Performance Small Molecule via Tailoring Intermolecular Interactions and its Application in Large-Area Organic Photovoltaic Modules. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600228	21.8 61
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437	Influence of Thiophene Moiety on the Excited State Properties of PushPull Chromophores. <b>2016</b> , 120, 13922-13930	10
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435	Benzothiadiazole and its extended, heteroannulated derivatives: useful acceptor building blocks for high-performance donor-acceptor polymers in organic electronics. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 6200-6214	7.1 121
434	Molecular Design of Benzodithiophene-Based Organic Photovoltaic Materials. <b>2016</b> , 116, 7397-457	824

433	Development of intrinsically fullerene-compatible polymers: Strategy for developing high performance organic solar cells using a non-halogenated solvent. <b>2016</b> , 132, 103-109		2
432	New bulky side chain substituted benzodithiophene based 2D-conjugated polymers for optoelectronic applications. <b>2016</b> , 73, 2567-2581		2
431	A comparative study of bithiophene and thienothiophene based polymers for organic field-effect transistor applications. <b>2016</b> , 27, 9143-9151		2
430	D-A-D- $\pi$ -A-D type diketopyrrolopyrrole based small molecule electron donors for bulk heterojunction organic solar cells. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 16950-7	3.6	18
429	Synthesis and Optoelectronic Properties of Benzo[1,2-b:4,5-b']dithiophene-Based Copolymers with Conjugated 2-(2-Ethylhexyl)-3,4-dimethoxythiophene Side Chains. <b>2016</b> , 217, 1586-1599		6
428	High Bandgap (1.9 eV) Polymer with Over 8% Efficiency in Bulk Heterojunction Solar Cells. <b>2016</b> , 2, 1600084		31
427	Side-Chain Engineering for Enhancing the Properties of Small Molecule Solar Cells: A Trade-off Beyond Efficiency. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600515	21.8	56
426	Enhancing the photovoltaic properties of low bandgap terpolymers based on benzodithiophene and phenanthrophenazine by introducing different second acceptor units. <b>2016</b> , 7, 1747-1755		17
425	Synthesis and photovoltaic properties of a 2D-conjugated copolymer based on benzodithiophene with alkylthio-selenophene side chain. <i>RSC Advances</i> , <b>2016</b> , 6, 14229-14235	3.7	6
424	Toward high performance indacenodithiophene-based small-molecule organic solar cells: investigation of the effect of fused aromatic bridges on the device performance. <b>2016</b> , 4, 2252-2262		21
423	High-performance polymer solar cells based on a 2D-conjugated polymer with an alkylthio side-chain. <b>2016</b> , 9, 885-891		150
422	Vinylidenedithiophenemethyleneoxindole: a centrosymmetric building block for donor-acceptor copolymers. <b>2016</b> , 7, 1413-1421		24
421	Significant Improvement of Semiconducting Performance of the Diketopyrrolopyrrole-Quaterthiophene Conjugated Polymer through Side-Chain Engineering via Hydrogen-Bonding. <b>2016</b> , 138, 173-85		211
420	Side chain effect on poly(benzodithiophene-co-dithienobenzoquinoxaline) and their applications for polymer solar cells. <i>Polymer</i> , <b>2016</b> , 82, 228-237	3.9	17
419	Benzodi(pyridothiophene): a novel acceptor unit for application in A1-A-A1 type photovoltaic small molecules. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 1507-15	3.6	8
418	Synthesis and photovoltaic properties of alkylthiothienyl-substituted benzo[1,2-b:4,5-b']dithiophene D $\pi$ A copolymers with different accepting units. <i>Synthetic Metals</i> , <b>2016</b> , 211, 121-131	3.6	14
417	Photoprecursor Approach Enables Preparation of Well-Performing Bulk-Heterojunction Layers Comprising a Highly Aggregating Molecular Semiconductor. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 8644-51	9.5	11
416	Stability of organic solar cells: challenges and strategies. <b>2016</b> , 45, 2544-82		618

415	Dicyanoquinodimethane-substituted benzothiadiazole for efficient small-molecule solar cells. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 7235-41	3.6	17
414	A benzodithiophene-thienothiophene derivative with cyano acrylate side chain: A novel donor polymer with deep HOMO level for p-n heterojunction solar cells. <b>2016</b> , 603, 165-172		2
413	Selenium-substituted polymers for improved photovoltaic performance. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 7978-86	3.6	14
412	Electronic Structure Properties of Two-Dimensional $\pi$ -Conjugated Polymers. <b>2016</b> , 49, 1305-1312		27
411	Controlling the morphology and hole mobility of terpolymers for polymer solar cells. <i>RSC Advances</i> , <b>2016</b> , 6, 13177-13184	3.7	14
410	Recent progress in high efficiency polymer solar cells by rational design and energy level tuning of low bandgap copolymers with various electron-withdrawing units. <b>2016</b> , 31, 149-170		86
409	Toward high open-circuit voltage by smart chain engineering in 2D-conjugated polymer for polymer solar cells. <b>2016</b> , 149, 162-169		11
408	An Indacenodithiophene-Quinoxaline Polymer Prepared by Direct Arylation Polymerization for Organic Photovoltaics. <b>2016</b> , 49, 527-536		59
407	Ring-fusion as a perylene-dimide dimer design concept for high-performance non-fullerene organic photovoltaic acceptors. <b>2016</b> , 7, 3543-3555		149
406	Significant enhancement of photodetector performance by subtle changes in the side chains of dithienopyrrole-based polymers. <i>RSC Advances</i> , <b>2016</b> , 6, 22494-22499	3.7	6
405	Rational tuning of high-energy visible light absorption for panchromatic small molecules by a two-dimensional conjugation approach. <b>2016</b> , 7, 3857-3861		21
404	The effect of acceptor end groups on the physical and photovoltaic properties of AD $\pi$ type oligomers with same S, N-heteropentacene central electron donor unit for solution processed organic solar cells. <b>2016</b> , 129, 209-219		18
403	Improved performance of polymer solar cells using PBDTT-F-TT:PC 71 BM blend film as active layer. <b>2016</b> , 376, 138-144		11
402	Optimization of the Energy Level Alignment between the Photoactive Layer and the Cathode Contact Utilizing Solution-Processed Hafnium Acetylacetonate as Buffer Layer for Efficient Polymer Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 432-41	9.5	21
401	Monodisperse macromolecules based on benzodithiophene and diketopyrrolopyrrole with strong NIR absorption and high mobility. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 3781-3791	7.1	22
400	PBDT-TSR: a highly efficient conjugated polymer for polymer solar cells with a regioregular structure. <b>2016</b> , 4, 1708-1713		68
399	Influence of the terminal donor on the performance of 4,8-dialkoxybenzo[1,2-b:4,5-b']dithiophene based small molecules for efficient solution-processed organic solar cells. <i>New Journal of Chemistry</i> , <b>2016</b> , 40, 2063-2070	3.6	7
398	A di(1-benzothieno)[3,2-b:2',3'-d]pyrrole and isoindigo-based electron donating conjugated polymer for efficient organic photovoltaics. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 663-667	7.1	16

397	Effect of side chain length on the charge transport, morphology, and photovoltaic performance of conjugated polymers in bulk heterojunction solar cells. <b>2016</b> , 4, 1855-1866		65
396	4-Alkyl-3,5-difluorophenyl-Substituted Benzodithiophene-Based Wide Band Gap Polymers for High-Efficiency Polymer Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 3686-92	9.5	63
395	Side-chain manipulation on accepting units of two-dimensional benzo[1,2-b:4,5-b']dithiophene polymers for organic photovoltaics. <b>2016</b> , 7, 1486-1493		15
394	CdSphenanthroline derivative hybrid cathode interlayers for high performance inverted organic solar cells. <b>2016</b> , 4, 297-302		4
393	Fluorinated and non-fluorinated conjugated polymers showing different photovoltaic properties in polymer solar cells with PFNBr interlayers. <b>2016</b> , 28, 178-183		19
392	Donor-acceptor copolymers based on dithienopyrrolobenzothiadiazole: Synthesis, characterization, and photovoltaic applications. <i>European Polymer Journal</i> , <b>2016</b> , 74, 180-189	5.2	9
391	Fullerene-free small molecule organic solar cells with a high open circuit voltage of 1.15 V. <b>2016</b> , 52, 465-8		69
390	Oligomer Molecules for Efficient Organic Photovoltaics. <i>Accounts of Chemical Research</i> , <b>2016</b> , 49, 175-83	4.3	492
389	Improving the open-circuit voltage of alkylthio-substituted photovoltaic polymers via post-oxidation. <b>2016</b> , 28, 39-46		12
388	Dialkylthio Substitution: An Effective Method to Modulate the Molecular Energy Levels of 2D-BDT Photovoltaic Polymers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 3575-83	9.5	41
387	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. <b>2017</b> , 29, 1605216		216
386	Peripherally diketopyrrolopyrrole-functionalized dendritic oligothiophenes: Synthesis, molecular structure, properties and applications. <b>2017</b> , 8, 1460-1476		7
385	Indacenodithiophene-based wide bandgap copolymers for high performance single-junction and tandem polymer solar cells. <b>2017</b> , 33, 313-324		45
384	Development of Spiro[cyclopenta[1,2-b:5,4-b']dithiophene-4,9-fluorene]-Based A-ED-A Small Molecules with Different Acceptor Units for Efficient Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 4614-4625	9.5	40
383	New Wide Band Gap Donor for Efficient Fullerene-Free All-Small-Molecule Organic Solar Cells. <b>2017</b> , 139, 1958-1966		225
382	Donor End-Capped Hexafluorinated Oligomers for Organic Solar Cells with 9.3% Efficiency by Engineering the Position of Bridge and Sequence of Two-Step Annealing. <b>2017</b> , 29, 1036-1046		34
381	Solution-Processable Hyperbranched Conjugated Polymer Nanoparticles Based on C <sub>3</sub> -Symmetric Benzotrithiophene for Polymer Solar Cells. <i>Macromolecular Rapid Communications</i> , <b>2017</b> , 38, 1700001	4.8	8
380	Finely designed medium-band-gap polymer donor with judiciously selecting chalcogen atom for high efficiency polymer solar cell. <b>2017</b> , 141, 342-347		8



379	Abnormal strong burn-in degradation of highly efficient polymer solar cells caused by spinodal donor-acceptor demixing. <b>2017</b> , 8, 14541		223
378	Molecular Origin of Donor- and Acceptor-Rich Domain Formation in Bulk-Heterojunction Solar Cells with an Enhanced Charge Transport Efficiency. <b>2017</b> , 121, 5864-5870		16
377	Buta-1,3-diyne-Based $\pi$ Conjugated Polymers for Organic Transistors and Solar Cells. <b>2017</b> , 50, 1430-1441		37
376	New donor polymer with tetrafluorinated blocks for enhanced performance in perylenediimide-based solar cells. <b>2017</b> , 5, 5351-5361		24
375	Semi-crystalline photovoltaic polymers with siloxane-terminated hybrid side-chains. <b>2017</b> , 60, 528-536		3
374	Cyano substituted benzotriazole based polymers for use in organic solar cells. <b>2017</b> , 5, 6465-6470		21
373	Significantly improving the efficiency of polymer solar cells through incorporating noncovalent conformational locks. <b>2017</b> , 1, 1317-1323		15
372	Conjugated-Polymer Blends for Organic Photovoltaics: Rational Control of Vertical Stratification for High Performance. <b>2017</b> , 29, 1601674		91
371	High-Performance Long-Term-Stable Dopant-Free Perovskite Solar Cells and Additive-Free Organic Solar Cells by Employing Newly Designed Multirole $\pi$ Conjugated Polymers. <b>2017</b> , 29, 1700183		113
370	Efficient Top-Illuminated Organic-Quantum Dots Hybrid Tandem Solar Cells with Complementary Absorption. <b>2017</b> , 4, 1172-1177		13
369	Benzothiadiazole-Based Small-Molecule Semiconductors for Organic Thin-Film Transistors and Complementary-like Inverters. <b>2017</b> , 82, 742-749		7
368	Oriented Covalent Organic Framework Film on Graphene for Robust Ambipolar Vertical Organic Field-Effect Transistor. <b>2017</b> , 29, 4367-4374		113
367	Polymer Electron Acceptors with Conjugated Side Chains for Improved Photovoltaic Performance. <b>2017</b> , 50, 3171-3178		33
366	Density Functional Study on A-Units Based on Thieno[3,4-c]pyrrole-4,6-dione for Organic Solar Cells. <b>2017</b> , 46, 4825-4834		1
365	New cyclopentadithiophene (CDT) linked porphyrin donors with different end-capping acceptors for efficient small molecule organic solar cells. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 4742-4751	7.1	15
364	$\pi$ Conjugation Effects of Oligo(thienylenevinylene) Side Chains in Semiconducting Polymers on Photovoltaic Performance. <b>2017</b> , 50, 3557-3564		6
363	An eco-friendly and inexpensive solvent for solution processable CuSCN as a hole transporting layer in organic solar cells. <b>2017</b> , 69, 367-371		15
362	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> , <b>2017</b> , 7, 1700183	21.8	155

361	Indacenodithiophene: a promising building block for high performance polymer solar cells. <b>2017</b> , 5, 10798-10814		14
360	Enhancing the performance of non-fullerene solar cells with polymer acceptors containing large-sized aromatic units. <b>2017</b> , 47, 133-138		13
359	Selenium-Containing Medium Bandgap Copolymer for Bulk Heterojunction Polymer Solar Cells with High Efficiency of 9.8%. <b>2017</b> , 29, 4811-4818		49
358	Lateral Extension of a Benzodithiophene System: Construction of Heteroacenes Containing Various Chalcogens. <b>2017</b> , 12, 1879-1882		13
357	Small Molecule Acceptor and Polymer Donor Crystallinity and Aggregation Effects on Microstructure Templating: Understanding Photovoltaic Response in Fullerene-Free Solar Cells. <b>2017</b> , 29, 4432-4444		58
356	Polymer/Small Molecule/Fullerene Based Ternary Solar Cells. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 16025-16030	40.8	93
355	Asymmetric 2D benzodithiophene and quinoxaline copolymer for photovoltaic applications. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 6798-6804	7.1	9
354	Enhancing the Performance of Polymer Solar Cells by Using Donor Polymers Carrying Discretely Distributed Side Chains. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 24020-24026	9.5	8
353	Strain-released method to enhance the photovoltaic performance in solution-processed organic solar cells. <b>2017</b> , 145, 263-269		
352	Applying Thienyl Side Chains and Different Bridge to Aromatic Side-Chain Substituted Indacenodithiophene-Based Small Molecule Donors for High-Performance Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 19998-20009	9.5	9
351	A ternary conjugated D <sub>A</sub> copolymer yields over 9.0% efficiency in organic solar cells. <b>2017</b> , 5, 12015-12021		9
350	Polymer with conjugated alkylthiophenylthienyl side chains for efficient photovoltaic cells. <b>2017</b> , 48, 298-307		3
349	Effect of Alkyl Side Chains on the Photovoltaic Performance of 2,1,3-Benzoxadiazole-Based (-X-DADAD-)n-Type Copolymers. <b>2017</b> , 218, 1700055		5
348	Benzodichalcogenophene-diketopyrrolopyrrole small molecules as donors for efficient solution processable solar cells. <b>2017</b> , 493, 77-84		8
347	Design and synthesis of thieno[3,4-c]pyrrole-4,6-dione based conjugated copolymers for organic solar cells. <b>2017</b> , 66, 1206-1213		1
346	Small Molecules with Asymmetric 4-Alkyl-8-alkoxybenzo[1,2-b:4,5-b']dithiophene as the Central Unit for High-Performance Solar Cells with High Fill Factors. <b>2017</b> , 29, 3694-3703		22
345	Regioregular narrow-bandgap-conjugated polymers for plastic electronics. <b>2017</b> , 8, 14047		157
344	Efficient Polymer Solar Cells with High Open-Circuit Voltage Containing Diketopyrrolopyrrole-Based Non-Fullerene Acceptor Core End-Capped with Rhodanine Units. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 11739-11748	9.5	38

343	Molecular Doping and Trap Filling in Organic Semiconductor Host-Guest Systems. <b>2017</b> , 121, 7767-7775		58
342	Effects of alkoxy substitution on molecular structure, physicochemical and photovoltaic properties of 2D-conjugated polymers based on benzo[1,2-b:4,5-b']dithiophene and fluorinated benzothiadiazole. <b>2017</b> , 672, 63-69		6
341	A new fluoropyrido[3,4-b]pyrazine based polymer for efficient photovoltaics. <b>2017</b> , 8, 2227-2234		3
340	Effects on Photovoltaic Performance of Dialkylalkoxy-benzothiadiazole Copolymers by Varying the Thienoacene Donor. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 12617-12628	9.5	24
339	Structure-performance correlation of indacenodithiophene-based narrow band-gap polymers with pendant diketopyrrolopyrrole units. <b>2017</b> , 141, 21-28		14
338	Perylene diimide-benzodithiophene D-A copolymers as acceptor in all-polymer solar cells. <b>2017</b> , 41, 49-55		19
337	Developing high-performance small molecule organic solar cells via a large planar structure and an electron-withdrawing central unit. <b>2016</b> , 53, 451-454		20
336	Novel Copolymers Based Tetrafluorobenzene and Difluorobenzothiadiazole for Organic Solar Cells with Prominent Open Circuit Voltage and Stability. <i>Macromolecular Rapid Communications</i> , <b>2017</b> , 38, 1600556	4.8	15
335	High-Performance Solution-Processed Single-Junction Polymer Solar Cell Achievable by Post-Treatment of PEDOT:PSS Layer with Water-Containing Methanol. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 1446-1452	9.5	27
334	Non-planar perylenediimide acceptors with different geometrical linker units for efficient non-fullerene organic solar cells. <b>2017</b> , 5, 1713-1723		47
333	Fine-Tuning LUMO Energy Levels of Conjugated Polymers Containing a B<-N Unit. <b>2017</b> , 50, 8521-8528		36
332	Non-fullerene acceptors based on fused-ring oligomers for efficient polymer solar cells via complementary light-absorption. <b>2017</b> , 5, 23926-23936		57
331	Importance of 2D Conjugated Side Chains of Benzodithiophene-Based Polymers in Controlling Polymer Packing, Interfacial Ordering, and Composition Variations of All-Polymer Solar Cells. <b>2017</b> , 29, 9407-9415		57
330	An approach to high open-circuit voltage polymer solar cells via alcohol/water-soluble cathode interlayers based on anthrathiadiazole derivatives. <i>New Journal of Chemistry</i> , <b>2017</b> , 41, 13166-13174	3.6	3
329	Biocompatible conjugated polymer nanoparticles for highly efficient photoacoustic imaging of orthotopic brain tumors in the second near-infrared window. <b>2017</b> , 4, 1151-1156		98
328	A Ladder-type Heteroheptacene 12H-Dithieno[2J3J4,5]thieno[3,2-b:2J3Jh]fluorene Based D-A Copolymer with Strong Intermolecular Interactions toward Efficient Polymer Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 35159-35168	9.5	9
327	Two-Dimensional BDT-Based Wide Band Gap Polymer Donor for Efficient Non-Fullerene Organic Solar Cells. <b>2017</b> , 121, 19634-19641		16
326	Enhanced Photovoltaic Performance of Tetrazine-Based Small Molecules with Conjugated Side Chains. <b>2017</b> , 5, 8684-8692		7

325	Influence of the replacement of alkoxy with alkylthienyl on photovoltaic properties of two small molecule donors for organic solar cells. <b>2017</b> , 60, 1340-1348		19
324	Racemic Effect on the Performance of Organic Multilevel Memory: Beyond Molecular Design. <b>2017</b> , 2, 1700202		10
323	Intermediate-Sized Conjugated Donor Molecules for Organic Solar Cells: Comparison of Benzodithiophene and Benzobisthiazole-Based Cores. <b>2017</b> , 29, 7880-7887		14
322	Versatile Device Architectures for High-Performing Light-Soaking-Free Inverted Polymer Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 32678-32687	9.5	17
321	A difluorobenzothiadiazole-based conjugated polymer with alkylthiophene as the side chains for efficient, additive-free and thick-film polymer solar cells. <b>2017</b> , 5, 20473-20481		15
320	Functionalized few-layer black phosphorus with super-wettability towards enhanced reaction kinetics for rechargeable batteries. <b>2017</b> , 40, 576-586		75
319	Modulating the Molecular Packing and Nanophase Blending via a Random Terpolymerization Strategy toward 11% Efficiency Nonfullerene Polymer Solar Cells. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1701125	21.8	81
318	A theoretical investigation of the structural, electronic and UV-vis absorption spectra of fullerene derivatives based on PC61B-NHCS compound. <b>2017</b> , 199, 597-608		1
317	Enhancing Performance of Nonfullerene Acceptors via Side-Chain Conjugation Strategy. <b>2017</b> , 29, 1702125		227
316	Taming Charge Transport in Semiconducting Polymers with Branched Alkyl Side Chains. <b>2017</b> , 27, 1701973		59
315	Understanding charge transport and recombination losses in high performance polymer solar cells with non-fullerene acceptors. <b>2017</b> , 5, 17230-17239		54
314	Alternating polymers based on fluorinated alkoxyphenyl-substituted benzo[1,2-b:4,5-b']dithiophene and isoindigo derivatives for polymer solar cells. <b>2017</b> , 146, 529-536		10
313	Understanding the correlation and balance between the miscibility and optoelectronic properties of polymer/fullerene solar cells. <b>2017</b> , 5, 17570-17579		27
312	Conjugated Donor Polymers: Structure Formation and Morphology in Solution, Bulk and Photovoltaic Blends. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700314	21.8	51
311	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> , <b>2017</b> , 5, 8988-8998	7.1	9
310	Synthesis and properties of a series of quinoxaline-based copolymers: an example to understand the effect of the structure of the mainchain and sidechain on the charge transport ability of the polymers. <b>2017</b> , 1, 2085-2093		8
309	Steric-Hindrance Modulation toward High-Performance 1,3-Bis(thieno[3,4-b]thiophen-6-yl)-4H-thieno[3,4-c]pyrrole-4,6(5H)-dione-Based Polymer Solar Cells with Enhanced Open-Circuit Voltage. <b>2017</b> , 3, 1700213		3
308	Methylthionated benzo[1,2-b:4,5-b']dithiophenes: a model study to control packing structures and molecular orientation in thienoacene-based organic semiconductors. <b>2017</b> , 53, 9594-9597		15

307	Impact of the number of fluorine atoms on crystalline, physicochemical and photovoltaic properties of low bandgap copolymers based on 1,4-dithienylphenylene and diketopyrrolopyrrole. <i>Polymer</i> , <b>2017</b> , 125, 217-226	3.9	12
306	All-Small-Molecule Nonfullerene Organic Solar Cells with High Fill Factor and High Efficiency over 10%. <b>2017</b> , 29, 7543-7553		164
305	Environmentally-friendly solvent processed fullerene-free organic solar cells enabled by screening halogen-free solvent additives. <b>2017</b> , 60, 697-706		22
304	Novel benzodithiophene-based polymer acceptors for efficient organic solar cells. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 23444-23453	3.6	19
303	From Semi- to Full-Two-Dimensional Conjugated Side-Chain Design: A Way toward Comprehensive Solar Energy Absorption. <b>2017</b> , 50, 9617-9625		16
302	Selenophene-Incorporated Quaterchalcogenophene-Based Donor-Acceptor Copolymers To Achieve Efficient Solar Cells with Jsc Exceeding 20 mA/cm <sup>2</sup> . <b>2017</b> , 29, 10045-10052		39
301	Benzo[1,2-b:4,5-b']difuran and furan substituted diketopyrrolopyrrole alternating copolymer for organic photovoltaics with high fill factor. <b>2017</b> , 5, 15591-15600		21
300	A stereoregular Edicyanodistyrylbenzene (EDCS)-based conjugated polymer for high-performance organic solar cells with small energy loss and high quantum efficiency. <b>2017</b> , 5, 16681-16688		20
299	Study of series-connected polymer tandem solar cells based on a highly efficient donor material of PTB7-Th. <b>2017</b> , 123, 1		2
298	Acceptor manipulation of bisalkylthiothienyl benzo[1,2-b:4,5-b']dithiophene core-structured oligomers for efficient organic photovoltaics. <b>2017</b> , 140, 512-519		6
297	Overcoming the Thermal Instability of Efficient Polymer Solar Cells by Employing Novel Fullerene-Based Acceptors. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1601204	21.8	61
296	Donor-Acceptor conjugated polymers based on two-dimensional thiophene derivatives for bulk heterojunction solar cells. <b>2017</b> , 8, 421-430		15
295	High performance polymer solar cells with electron extraction and light-trapping dual functional cathode interfacial layer. <b>2017</b> , 31, 201-209		26
294	Control of Mesoscale Morphology and Photovoltaic Performance in Diketopyrrolopyrrole-Based Small Band Gap Terpolymers. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1601138	21.8	53
293	A low band gap conjugated small molecule based on isoindigo flanked with diketopyrrolopyrrole for efficient organic solar cells. <b>2017</b> , 137, 512-517		9
292	Bisalkylthio side chain manipulation on two-dimensional benzo[1,2-b:4,5-b']dithiophene copolymers with deep HOMO levels for efficient organic photovoltaics. <b>2017</b> , 136, 312-320		10
291	Diethynylbenzo[1,2-b:4,5-b']dithiophene-based small molecule and cross-conjugated copolymers for organic solar cells. <b>2017</b> , 55, 660-671		3
290	A1-A1 type small molecules terminated with naphthalimide building blocks for efficient non-fullerene organic solar cells. <b>2017</b> , 137, 43-49		17

289	Enhancing the efficiency of solution-processable bulk-heterojunction devices via a three-dimensional molecular architecture comprising triphenylamine and cyanopyridone. <b>2017</b> , 137, 126-134		9
288	A double B<-N bridged bipyridine (BNBP)-based polymer electron acceptor: all-polymer solar cells with a high donor : acceptor blend ratio. <b>2017</b> , 1, 852-858		24
287	Decahedral gold nanoparticles for enhancing performance of polymer solar cells. <b>2017</b> , 138, 83-89		9
286	The Literature of Heterocyclic Chemistry, Part XIV, 2014. <b>2017</b> , 245-301		12
285	Fullerene Derivatives for the Applications as Acceptor and Cathode Buffer Layer Materials for Organic and Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1601251	21.8	126
284	Automatic High-Throughput Screening Scheme for Organic Photovoltaics: Estimating the Orbital Energies of Polymers from Oligomers and Evaluating the Photovoltaic Characteristics. <b>2017</b> , 121, 28275-28286 <sup>17</sup>		
283	Influence of the Crystalline Nature of Small Donors Molecules on the Efficiency and Stability of Organic Photovoltaic Devices. <b>2018</b> , 2, 1700235		9
282	Effect of Thieno[3,2-b]thiophene Bridge on photovoltaic performance of a D-A copolymer of alkoxy-benzodithiophene-alt-fluoro-benzotriazole. <b>2018</b> , 55, 106-111		6
281	Low Energy Loss of 0.57 eV and High Efficiency of 8.80% in Porphyrin-Based BHJ Solar Cells. <b>2018</b> , 1, 1304-1315		13
280	Chlorine substituted 2D-conjugated polymer for high-performance polymer solar cells with 13.1% efficiency via toluene processing. <b>2018</b> , 48, 413-420		212
279	Performance comparison of fluorinated and chlorinated donor-acceptor copolymers for polymer solar cells. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 4658-4662	7.1	10
278	A narrow-bandgap donor polymer for highly efficient as-cast non-fullerene polymer solar cells with a high open circuit voltage. <b>2018</b> , 58, 82-87		16
277	Realizing Enhanced Efficiency in Nonhalogen Solvent Processed Ternary Polymer Solar Cells by Incorporating Compatible Polymer Donor. <b>2018</b> , 2, 1800060		22
276	Synthesis and Photovoltaic Properties of the Copolymers Based on Carbazole with Tetrathiophene Porphyrin Side Chains Linked by a Flexible Alkyl-interval. <b>2018</b> , 36, 599-604		5
275	Design of asymmetric benzodithiophene based wide band-gap conjugated polymers toward efficient polymer solar cells promoted by a low boiling point additive. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 2806-2813	7.1	16
274	Efficient carbazole-based small-molecule organic solar cells with an improved fill factor.. <i>RSC Advances</i> , <b>2018</b> , 8, 4867-4871	3.7	6
273	On the Molecular Origin of Charge Separation at the Donor-Acceptor Interface. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702232	21.8	45
272	Developing High-Performance Electron-Rich Unit End-Capped Wide Bandgap Oligomeric Donor by Weak Electron-Deficient Central Core Strategy. <b>2018</b> , 2, 1700212		11

271	Incorporating Trialkylsilylethynyl-Substituted Head-to-Head Bithiophene Unit into Copolymers for Efficient Non-Fullerene Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 7271-7280	9.5	6
270	Side-chain fluorination on the pyrido[3,4-b]pyrazine unit towards efficient photovoltaic polymers. <b>2018</b> , 61, 206-214		10
269	Low Boiling Point Solvent Additives for Improved Photooxidative Stability in Organic Photovoltaics. <b>2018</b> , 4, 1700416		18
268	Synthesis of Two-Dimensional Terbenzodithiophene-based Derivative by Palladium-catalyzed C-H Benzannulation and Its Donor-Acceptor Copolymers for Organic Photovoltaics. <b>2018</b> , 65, 133-140		
267	Meeting Our New Associate Editors. <b>2018</b> , 36, 73-79		
266	Recent Progress in Ternary Organic Solar Cells Based on Nonfullerene Acceptors. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702814	21.8	133
265	2D expanded conjugated polymers with non-fullerene acceptors for efficient polymer solar cells. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 1753-1758	7.1	11
264	Alkylthienyl substituted asymmetric 2D BDT and DTBT-based polymer solar cells with a power conversion efficiency of 9.2%. <b>2018</b> , 6, 2371-2378		28
263	The crucial role of intermolecular interactions in AD <sub>n</sub> A-type electron acceptors and their effective modulation. <b>2018</b> , 6, 2664-2670		25
262	Synthesis and characterization of thienyl-substituted methanofullerene dyads. <b>2018</b> , 37, 1433-1437		
261	Isomeric organic semiconductors containing fused-thiophene cores: molecular packing and charge transport. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 13171-13177	3.6	7
260	Synthesis and photovoltaic properties of 2D-conjugated polymers with alkylsilyl-substituted thieno[3,2-b]thiophene conjugated side chains. <b>2018</b> , 57, 255-262		9
259	Two-Dimensional Copolymers Based on an Alkylthionaphthyl-Substituted Benzo[1,2-b:4,5-b']dithiophene for High-Efficiency Polymer Solar Cells. <b>2018</b> , 1, 1506-1511		10
258	A trifluoromethyl substituted wide bandgap conjugated polymer for non-fullerene polymer solar cells with 10.4% efficiency. <b>2018</b> , 6, 6551-6558		18
257	Strategies to design conjugated polymer based materials for biological sensing and imaging. <b>2018</b> , 354, 135-154		65
256	Fabrication and photoelectric properties of bio-inspired honeycomb film based on semiconducting polymer. <b>2018</b> , 512, 1-6		10
255	High-Performance Wide Bandgap Copolymers Using an EDOT Modified Benzodithiophene Donor Block with 10.11% Efficiency. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1602773	21.8	29
254	Recent advances in the design of dopant-free hole transporting materials for highly efficient perovskite solar cells. <b>2018</b> , 29, 219-231		32

253	The effect of alkylthio side chains in oligothiophene-based donor materials for organic solar cells. <b>2018</b> , 3, 131-141	9
252	Covalent Organic Framework Electrocatalysts for Clean Energy Conversion. <b>2018</b> , 30, 1703646	200
251	Achieving high short-circuit current and fill-factor via increasing quinoidal character on nonfullerene small molecule acceptor. <b>2018</b> , 29, 381-384	27
250	Distinction between PTB7-Th samples prepared from Pd(PPh <sub>3</sub> ) <sub>4</sub> and Pd <sub>2</sub> (dba) <sub>3</sub> /P(o-tol) <sub>3</sub> catalysed stille coupling polymerization and the resultant photovoltaic performance. <b>2018</b> , 6, 179-188	16
249	Ladder-type heteroheptacene-cored semiconductors for small-molecule solar cells. <b>2018</b> , 149, 747-754	5
248	Rational design of asymmetric benzodithiophene based photovoltaic polymers for efficient solar cells. <b>2018</b> , 6, 948-956	33
247	Modulation of the power conversion efficiency of organic solar cells via architectural variation of a promising non-fullerene acceptor. <b>2018</b> , 6, 574-582	11
246	Novel perylene diimide-based polymers with electron-deficient segments as the comonomer for efficient all-polymer solar cells. <b>2018</b> , 6, 414-422	54
245	Exploring more effective polymer donors for the famous non-fullerene acceptor ITIC in organic solar cells by increasing electron-withdrawing ability. <b>2018</b> , 53, 308-314	19
244	Optimization of the Donor Material Structure and Processing Conditions to Obtain Efficient Small-Molecule Donors for Bulk Heterojunction Solar Cells. <b>2018</b> , 2, 81-88	1
243	Fluorination effects of A-D-A-type small molecules on physical property and the performance of organic solar cell. <b>2018</b> , 52, 342-349	13
242	Self-doping small molecular conjugated electrolytes enabled by n-type side chains for highly efficient non-fullerene polymer solar cells. <b>2018</b> , 6, 22503-22507	25
241	Testing the Conjugative Properties of Benzodithiophene and Benzotrithiophene in Charge Transfer Multi(ferrocenyl) Systems. <b>2018</b> , 37, 4242-4249	9
240	Recent Progress in Fused-Ring Based Nonfullerene Acceptors for Polymer Solar Cells. <b>2018</b> , 6, 404	16
239	Conjugated polymer donor with alkylthio-thiophene bridge for efficient polymer solar cells. <b>2018</b> , 63, 289-295	4
238	Modifying the morphology via employing rigid phenyl side chains achieves efficient nonfullerene polymer solar cells. <b>2018</b> , 56, 2762-2770	6
237	Recent development of efficient A-D-A type fused-ring electron acceptors for organic solar. <b>2018</b> , 174, 171-188	39
236	Effects of Alkoxy and Fluorine Atom Substitution of Donor Molecules on the Morphology and Photovoltaic Performance of All Small Molecule Organic Solar Cells. <b>2018</b> , 6, 413	13



235	Molecular Controlling the Transport Properties for Benzothiadiazole-Based Hole Transport Materials. <b>2018</b> , 8, 1461			1
234	High-Efficiency All-Small-Molecule Organic Solar Cells Based on an Organic Molecule Donor with Alkylsilyl-Thienyl Conjugated Side Chains. <b>2018</b> , 30, e1706361			130
233	Effect of Active Layer Thickness on the Performance of Polymer Solar Cells Based on a Highly Efficient Donor Material of PTB7-Th. <b>2018</b> , 122, 16532-16539			30
232	Fluorine-functionalization of an isoindoline-1,3-dione-based conjugated polymer for organic solar cells. <b>2018</b> , 59, 247-252			9
231	Improved Efficiency of Polymer Solar Cells by Modifying the Side Chain of Wide-Band Gap Conjugated Polymers Containing Pyrrolo[3,4-f]benzotriazole-5,7(6 H)-dione Moiety. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 22495-22503	9.5		19
230	Sensitivity of Molecular Packing and Photovoltaic Performance to Subtle Fluctuation of Steric Distortions within D <sub>A</sub> Copolymer Backbones. <b>2018</b> , 1, 4332-4340			9
229	A wide-bandgap polymer based on the alkylphenyl-substituted benzo[1,2-b:4,5-b']dithiophene unit with high power conversion efficiency of over 11%. <b>2018</b> , 6, 16529-16536			21
228	Fluorination Triggered New Small Molecule Donor Materials for Efficient As-Cast Organic Solar Cells. <b>2018</b> , 14, e1801542			20
227	The Crucial Role of Chlorinated Thiophene Orientation in Conjugated Polymers for Photovoltaic Devices. <b>2018</b> , 130, 13093-13097			4
226	The Crucial Role of Chlorinated Thiophene Orientation in Conjugated Polymers for Photovoltaic Devices. <b>2018</b> , 57, 12911-12915			66
225	Synthesis and Photovoltaic Properties of 2D-Conjugated Polymers Based on Alkylthiothienyl-Substituted Benzodithiophene and Different Accepting Units. <i>Polymers</i> , <b>2018</b> , 10,	4.5		10
224	PANI Branches onto Donor-Acceptor Copolymers: Synthesis, Characterization and Electroluminescent Properties of New 2D-Materials. <i>Polymers</i> , <b>2018</b> , 10,	4.5		10
223	All-small molecule solar cells based on donor molecule optimization with highly enhanced efficiency and stability. <b>2018</b> , 6, 15675-15683			45
222	A Wide Band Gap Polymer with a Deep Highest Occupied Molecular Orbital Level Enables 14.2% Efficiency in Polymer Solar Cells. <b>2018</b> , 140, 7159-7167			579
221	Significant impact of monomer curvatures for polymer curved shape composition on backbone orientation and solar cell performances. <b>2018</b> , 65, 195-204			8
220	Post-polymerization modification of phosphorus containing conjugated copolymers. <i>European Polymer Journal</i> , <b>2018</b> , 104, 157-163	5.2		4
219	Tris(8-hydroxyquinoline)aluminum(III)-Cored Molecular Cathode Interlayer: Improving Electron Mobility and Photovoltaic Efficiency of Polymer Solar Cells. <b>2018</b> , 2, 1800182			14
218	BODIPY-based panchromatic chromophore for efficient organic solar cell. <b>2018</b> , 61, 215-222			19

217	Organic Flexible Electronics. <b>2018</b> , 2, 1800070		106
216	Quinoxaline-Based Wide Band Gap Polymers for Efficient Nonfullerene Organic Solar Cells with Large Open-Circuit Voltages. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 23235-23246	9.5	30
215	Thieno[3,2-b]indole (TI) bridged A-D-A small molecules: Synthesis, characterizations and organic solar cell applications. <b>2019</b> , 160, 16-24		12
214	Sequential Symmetry-Breaking Intercolumnar Transformations of a Conjugated Rod Molecule with a Flexible Coil. <b>2019</b> , 27, 1255-1260		
213	Molecular design of star-shaped benzotrithiophene materials for organic electronics. <b>2019</b> , 60, 151021		7
212	Bis-Diketopyrrolopyrrole and Carbazole-Based Terpolymer for High Performance Organic Field-Effect Transistors and Infra-Red Photodiodes. <b>2019</b> , 220, 1900287		14
211	Imide-Functionalized Heteroarene-Based n-Type Terpolymers Incorporating Intramolecular Noncovalent Sulfur-Oxygen Interactions for Additive-Free All-Polymer Solar Cells. <b>2019</b> , 29, 1903970		45
210	Conformational Heterogeneity in Large Macrocyclic Thiophenes. <b>2019</b> , 10, 4136-4141		4
209	Resolving the Mechanisms of Photocurrent Improvement in Ternary Organic Solar Cells. <b>2019</b> , 123, 18294-18305		10
208	Fluorinated Photovoltaic Materials for High-Performance Organic Solar Cells. <b>2019</b> , 14, 3085-3095		49
207	Improving optoelectronic and charge transport properties of D-ED type diketopyrrolopyrrole-pyrene derivatives as multifunctional materials for organic solar cell applications.. <i>RSC Advances</i> , <b>2019</b> , 9, 22597-22603	3.7	6
206	Effect of linear side-chain length on the photovoltaic performance of benzodithiophene-alt-dicarboxylic ester terthiophene polymers. <i>New Journal of Chemistry</i> , <b>2019</b> , 43, 12950-12956	3.6	7
205	A series of V-shaped small molecule non-fullerene electron acceptors for efficient bulk-heterojunction devices. <b>2019</b> , 171, 107677		12
204	A New Small-Molecule Donor Containing Non-Fused Ring Bridge Enables Efficient Organic Solar Cells with High Open Circuit Voltage and Low Acceptor Content. <b>2019</b> , 20, 2674-2682		4
203	Alkylthiazole-based semicrystalline polymer donors for fullerene-free organic solar cells. <b>2019</b> , 10, 4314-4321		10
202	Exploring a Fused 2-(Thiophen-2-yl)thieno[3,2-]thiophene (T-TT) Building Block to Construct n-Type Polymer for High-Performance All-Polymer Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 42412-42419	9.5	7
201	Thieno[2,3-f]benzofuran based donor-acceptor polymer for fullerene-free solar cells. <i>European Polymer Journal</i> , <b>2019</b> , 120, 109205	5.2	3
200	Design of parallel-connected polymer tandem solar cells using efficient low bandgap PTB7-Th:PC71BM blend. <b>2019</b> , 125, 1		0

199	Recent advances in molecular design of functional conjugated polymers for high-performance polymer solar cells. <b>2019</b> , 99, 101175		83
198	Carbazolevinylene and phenylenevinylene polymers by ring-opening metathesis polymerization and their characterization, nanoaggregates and optical and electrochemical properties. <i>Polymer</i> , <b>2019</b> , 181, 121770	3.9	2
197	Solution-Processable All-Small-Molecules for High-Performance Nonfullerene Organic Solar Cells with High Crystallinity Acceptor. <b>2019</b> , 123, 28021-28026		9
196	Double B<-N bridged bipyridine-containing polymer acceptors with enhanced electron mobility for all-polymer solar cells. <b>2019</b> , 3, 70-77		25
195	Low-Energy-Loss Polymer Solar Cells with 14.52% Efficiency Enabled by Wide-Band-Gap Copolymers. <b>2019</b> , 12, 1-12		51
194	Multi-length scale morphology of nonfullerene all-small molecule blends and its relation to device function in organic solar cells. <b>2019</b> , 3, 137-144		10
193	Green solvent-processed efficient non-fullerene organic solar cells enabled by low-bandgap copolymer donors with EDOT side chains. <b>2019</b> , 7, 716-726		31
192	Conjugated Donor-Acceptor Terpolymers Toward High-Efficiency Polymer Solar Cells. <b>2019</b> , 31, e1807019		89
191	Side-chain effect in ethynylene fused thiophene-vinylene-thiophene (ETVT) based photovoltaic polymers. <i>Polymer</i> , <b>2019</b> , 167, 31-39	3.9	3
190	New Benzo[1,2-d:4,5-d']bis([1,2,3]thiadiazole) (iso-BBT)-Based Polymers for Application in Transistors and Solar Cells. <b>2019</b> , 31, 6519-6529		14
189	Slow magnetic relaxation in a {EuCu} metallocrown. <b>2019</b> , 48, 1686-1692		18
188	Pairing 1D/2D-conjugation donors/acceptors towards high-performance organic solar cells. <b>2019</b> , 3, 276-283		7
187	Medium-Bandgap Conjugated Polymer Donors for Organic Photovoltaics. <i>Macromolecular Rapid Communications</i> , <b>2019</b> , 40, e1900074	4.8	25
186	4-Methylthio substitution on benzodithiophene-based conjugated polymers for high open-circuit voltage polymer solar cells. <i>Synthetic Metals</i> , <b>2019</b> , 254, 122-127	3.6	8
185	Recent Advances, Design Guidelines, and Prospects of All-Polymer Solar Cells. <b>2019</b> , 119, 8028-8086		367
184	Tuning electronic properties of molecular acceptor- $\Gamma$ porphyrin- $\Gamma$ acceptor donors via $\Gamma$ linkage structural engineering. <b>2019</b> , 73, 146-151		7
183	An effective heteroatom-substituted strategy on photovoltaic properties of D(A-Ar) <sub>2</sub> small molecules for efficient organic solar cells. <b>2019</b> , 170, 107595		6
182	Optical characterization of a two-dimensional BODIPY-based polymer material and its related chromophores. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 7872-7884	7.1	5

181	Precise Deciphering of Brain Vasculatures and Microscopic Tumors with Dual NIR-II Fluorescence and Photoacoustic Imaging. <b>2019</b> , 31, e1902504		107
180	Modification of NFA-Conjugated Bridges with Symmetric Structures for High-Efficiency Non-Fullerene PSCs. <i>Polymers</i> , <b>2019</b> , 11,	4.5	10
179	Temperature-Modulated Optimization of High-Performance Polymer Solar Cells Based on BenzodithiopheneDifluorodialkylthienylBenzothiadiazole Copolymers: Aggregation Effect. <b>2019</b> , 52, 4447-4457		10
178	Influence of the backbone structure of the donor material and device processing conditions on the photovoltaic properties of small molecular BHJSCs. <b>2019</b> , 186, 84-93		7
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176	A theoretical exploration on why the replacement of hexyl group by alkoxy carbonyl in P3HT could greatly improve the performance of non-fullerene organic solar cell. <b>2019</b> , 100, 160-167		1
175	Diketopyrrolopyrrole-based conjugated materials for non-fullerene organic solar cells. <b>2019</b> , 7, 10174-10199		72
174	A new small molecule donor for efficient and stable all small molecule organic solar cells. <b>2019</b> , 70, 78-85		16
173	Chlorination strategy on polymer donors toward efficient solar conversions. <b>2019</b> , 39, 208-216		26
172	Methyl Thioether Functionalization of a Polymeric Donor for Efficient Solar Cells Processed from Non-Halogenated Solvents. <b>2019</b> , 31, 3025-3033		19
171	A Simple Approach to Prepare Chlorinated Polymer Donors with Low-Lying HOMO Level for High Performance Polymer Solar Cells. <b>2019</b> , 31, 6558-6567		43
170	Isomeric Pyrenodithiophenediones and Their Derivatives: Synthesis, Reactivity, and Device Performance. <b>2019</b> , 84, 5936-5942		3
169	Dithienocyclopentadibenzothiophene: a C <sub>2v</sub> -symmetric core for nonfullerene acceptors with tunable bandgaps. <b>2019</b> , 7, 9609-9617		11
168	Molecular engineering of benzodithiophene and diketopyrrolopyrrole-contained push-pull small molecules for efficient solution-processed organic solar cells. <b>2019</b> , 166, 480-489		1
167	Effect of Flank Rotation on the Photovoltaic Properties of Dithieno[2,3-:2,3-]benzo[1,2-:4,5-]dithiophene-Based Narrow Band Gap Copolymers. <i>Polymers</i> , <b>2019</b> , 11,	4.5	6
166	Influence of Backbone Chlorination on the Electronic Properties of Diketopyrrolopyrrole (DPP)-Based Dimers. <b>2019</b> , 14, 1050-1058		6
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161	Polymer Side-Chain Variation Induces Microstructural Disparity in Nonfullerene Solar Cells. <b>2019</b> , 31, 6568-6577		35
160	Recent Advances in n-Type Polymers for All-Polymer Solar Cells. <b>2019</b> , 31, e1807275		132
159	Fully Conjugated Two-Dimensional sp <sup>-</sup> Carbon Covalent Organic Frameworks as Artificial Photosystem I with High Efficiency. <b>2019</b> , 58, 5376-5381		133
158	Fully Conjugated Two-Dimensional sp <sup>2</sup> -Carbon Covalent Organic Frameworks as Artificial Photosystem I with High Efficiency. <b>2019</b> , 131, 5430-5435		36
157	High-Performance All-Polymer Solar Cells Enabled by an n-Type Polymer Based on a Fluorinated Imide-Functionalized Arene. <b>2019</b> , 31, e1807220		123
156	Synthesis of indacenodithienothiophene-based conjugated polymers containing electron-donating/accepting comonomers and their phototransistor characteristics. <b>2019</b> , 10, 6324-6333		7
155	High-performance conjugated polymer donor materials for polymer solar cells with narrow-bandgap nonfullerene acceptors. <b>2019</b> , 12, 3225-3246		154
154	Morphology Driven by Molecular Structure of Thiazole-Based Polymers for Use in Field-Effect Transistors and Solar Cells. <b>2019</b> , 25, 649-656		7
153	A Maverick Asymmetrical Backbone with Distinct Flanked Twist Angles Modulating the Molecular Aggregation and Crystallinity for High Performance Nonfullerene Solar Cells. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1802530	21.8	40
152	Fluorine Substituted Bithiophene Imide-Based n-Type Polymer Semiconductor for High-Performance Organic Thin-Film Transistors and All-Polymer Solar Cells. <b>2019</b> , 3, 1800265		33
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150	Steady Enhancement in Photovoltaic Properties of Fluorine Functionalized Quinoxaline-Based Narrow Bandgap Polymer. <b>2018</b> , 24,		4
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148	Systematic investigation of methyl substitution effect on physicochemical properties and photovoltaic performance in nonfullerene small-molecule electron acceptors. <b>2019</b> , 164, 126-132		3
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143	Synthesis of organic molecule donor for efficient organic solar cells with low acceptor content. <b>2019</b> , 64, 54-61		3
142	Ladder-Type Nonacyclic Arene Bis(thieno[3,2-b]thieno)cyclopentafluorene as a Promising Building Block for Non-Fullerene Acceptors. <b>2019</b> , 14, 1814-1822		28
141	Angular/linear-shaped indacenodithiophene (IDT) for donor-acceptor copolymers: Geometric shape effects on physical properties and photovoltaic performance. <i>Polymer</i> , <b>2019</b> , 162, 11-19	3.9	4
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138	Rationally pairing photoactive materials for high-performance polymer solar cells with efficiency of 16.53%. <b>2020</b> , 63, 265-271		104
137	Solution-processable fluorene derivative for organic thin-film transistors. <b>2020</b> , 76, 105464		13
136	Recent Progress in Organic Phototransistors: Semiconductor Materials, Device Structures and Optoelectronic Applications. <b>2020</b> , 4, 9-38		25
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133	Insight into the optoelectronic characteristics of diimide-based acceptors in organic solar cells by performing DFT calculation and molecular dynamics simulation. <b>2020</b> , 94, 107488		3
132	Challenges to the Stability of Active Layer Materials in Organic Solar Cells. <i>Macromolecular Rapid Communications</i> , <b>2020</b> , 41, e1900437	4.8	37
131	Aqueous-Alcohol-Processable High-Mobility Semiconducting Copolymers with Engineered Oligo(ethylene glycol) Side Chains. <b>2020</b> , 32, 1111-1119		15
130	Photovoltaic Performances of Fused Ring Acceptors with Isomerized Ladder-Type Dipyran Cores. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 4887-4894	9.5	13
129	Ordering self-assembly structures via intermolecular BrS interactions. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 1437-1443	3.6	3
128	Chlorination of Conjugated Side Chains To Enhance Intermolecular Interactions for Elevated Solar Conversion. <b>2020</b> , 53, 165-173		14

127	Organic Small Molecule Based Photothermal Agents with Molecular Rotors for Malignant Breast Cancer Therapy. <b>2020</b> , 30, 1907093		45
126	Functionalized alkenyl side chains: a feasible strategy to improve charge transport and photovoltaic performance. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 2171-2177	7.1	4
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124	A systematic evaluation of triisopropylsilylethynyl-substituted thienyl side chain effects on series of benzo[1,2-b:4,5-b']dithiophene based polymer donors and their photovoltaic performances. <b>2020</b> , 175, 108083		7
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122	Regulating molecular orientations of dipyran-based nonfullerene acceptors through side-chain engineering at the bridge. <b>2020</b> , 8, 22416-22422		11
121	Methyl functionalization on conjugated side chains for polymer solar cells processed from non-chlorinated solvents. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 11532-11539	7.1	2
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119	Progress in the synthesis of imide-based N-type polymer semiconductor materials.. <i>RSC Advances</i> , <b>2020</b> , 10, 41764-41779	3.7	2
118	Panchromatic Triple Organic Semiconductor Heterojunctions for Efficient Solar Cells. <b>2020</b> , 3, 12506-12516		1
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116	Influence of Alkyl Substitution Position on Wide-Bandgap Polymers in High-Efficiency Nonfullerene Polymer Solar Cells. <i>Macromolecular Rapid Communications</i> , <b>2020</b> , 41, e2000170	4.8	1
115	Asymmetric ITIC acceptor for asymmetric benzodithiophene polymer solar cells. <b>2020</b> , 183, 108727		2
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113	Influences of Quinoid Structures on Stability and Photovoltaic Performance of Nonfullerene Acceptors. <b>2020</b> , 4, 2000286		10
112	Boosting the Power Factor of Benzodithiophene Based Donor-Acceptor Copolymers/SWCNTs Composites through Doping. <i>Polymers</i> , <b>2020</b> , 12,	4.5	2
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110	Chlorination of dithienobenzodithiophene (DTBDT) based polymers to simultaneously improve the VOC, JSC and FF of non-fullerene organic solar cells. <i>Sustainable Energy and Fuels</i> , <b>2020</b> , 4, 5665-5673	5.8	7

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108	Synthesis and photovoltaic properties of organic molecules based on difluoroquinoxaline derivatives for OPVs. <b>2020</b> , 705, 57-64		1
107	Encapsulation effect of $\pi$ -conjugated quaterthiophene on the radial breathing and tangential modes of semiconducting and metallic single-walled carbon nanotubes. <b>2020</b> , 41, 2420-2428		3
106	Benzoselenadiazole-core asymmetric D-A-A small molecule for solution processed bulk heterojunction organic solar cells. <b>2020</b> , 44, 12100-12111		3
105	Tunable magnetic anisotropy in 2D magnets via molecular adsorption. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 14948-14953	7.1	9
104	Conjugated side-chain engineering of polymer donors enabling improved efficiency for polymer solar cells. <b>2020</b> , 8, 15919-15926		4
103	Designing 2D fused ring materials for small molecules organic solar cells. <b>2020</b> , 1183, 112848		23
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101	Distannylated Bithiophene Imide: Enabling High-Performance n-Type Polymer Semiconductors with an Acceptor-Acceptor Backbone. <b>2020</b> , 59, 14449-14457		34
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98	Polymer design to promote low work function surfaces in organic electronics. <b>2020</b> , 103, 101222		27
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95	Efficient top illuminated microcavity organic solar cells using air stable composite semitransparent electrodes. <b>2020</b> , 79, 105636		6
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92	Alkoxyphenyl or alkylphenyl side-chained Thieno[2,3-f]benzofuran polymer for efficient non-fullerene solar cells. <b>2020</b> , 16, 100381		3



91	Design Principles and Synergistic Effects of Chlorination on a Conjugated Backbone for Efficient Organic Photovoltaics: A Critical Review. <b>2020</b> , 32, e1906175		97
90	Structure-Mobility Relationship of Benzodithiophene-Based Conjugated Polymers with Varied Biaxially Extended Conjugated Side Chains. <b>2020</b> , 59, 9105-9115		9
89	Developing Wide Bandgap Polymers Based on Sole Benzodithiophene Units for Efficient Polymer Solar Cells. <b>2020</b> , 26, 11241-11249		7
88	Research Progress in Covalent Organic Frameworks for Photoluminescent Materials. <b>2020</b> , 26, 16568-16581		16
87	Synthesis and Characterization of Wide-Bandgap Conjugated Polymers Consisting of Same Electron Donor and Different Electron-Deficient Units and Their Application for Nonfullerene Polymer Solar Cells. <b>2020</b> , 221, 2000030		5
86	Optimized Molecular Packing and Nonradiative Energy Loss Based on Terpolymer Methodology Combining Two Asymmetric Segments for High-Performance Polymer Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 20393-20403	9.5	6
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83	Conjugated Polymers for Photon-to-Electron and Photon-to-Fuel Conversions. <b>2021</b> , 3, 60-92		20
82	Recent progress on all-small molecule organic solar cells using small-molecule nonfullerene acceptors. <i>Information Materials</i> , <b>2021</b> , 3, 175-200	23.1	45
81	Carboxylate substituted pyrazine: A simple and low-cost building block for novel wide bandgap polymer donor enables 15.3% efficiency in organic solar cells. <b>2021</b> , 82, 105679		17
80	Progress and prospects of thick-film organic solar cells. <b>2021</b> , 9, 3125-3150		20
79	Organic Semiconductors at the University of Washington: Advancements in Materials Design and Synthesis and toward Industrial Scale Production. <b>2021</b> , 33, e1904239		18
78	Designing high performance conjugated materials for photovoltaic cells with the aid of intramolecular noncovalent interactions. <b>2021</b> , 57, 302-314		22
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75	A pyrrolopyridazinedione-based copolymer for fullerene-free organic solar cells. <i>New Journal of Chemistry</i> , <b>2021</b> , 45, 1001-1009	3.6	2
74	Morphology optimization of photoactive layers in organic solar cells. <b>2021</b> , 2, e31		8

73	A Facile Synthesized Polymer Featuring B-N Covalent Bond and Small Singlet-Triplet Gap for High-Performance Organic Solar Cells. <b>2021</b> , 60, 8813-8817		32
72	Flexible organic solar cells for biomedical devices. <b>2021</b> , 14, 2891-2903		5
71	90% yield production of polymer nano-memristor for in-memory computing. <b>2021</b> , 12, 1984		22
70	A Facile Synthesized Polymer Featuring B-N Covalent Bond and Small Singlet-Triplet Gap for High-Performance Organic Solar Cells. <b>2021</b> , 133, 8895-8899		7
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68	A Quinoxaline-Based D-A Copolymer Donor Achieving 17.62% Efficiency of Organic Solar Cells. <b>2021</b> , 33, e2100474		70
67	Optimizing molecular alignment to reduce dark current via side-chain engineering for high-performance polymer photodetector. <i>Polymer</i> , <b>2021</b> , 223, 123728	3-9	1
66	Control of aggregated structure of photovoltaic polymers for high-efficiency solar cells. <b>2021</b> , e46		18
65	Two star-shaped small molecule donors based on benzodithiophene unit for organic solar cells. <b>2021</b> ,		2
64	Modulating Crystallinity and Miscibility via Side-chain Variation Enable High Performance All-Small-Molecule Organic Solar Cells. <b>2021</b> , 39, 2147-2153		4
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61	Nanogap Electrodes and Molecular Electronic Devices. <b>2021</b> , 1-24		
60	Synergetic Effect of Side-Chain Engineering of Polymer Donors and Conformation Tuning of Small-Molecule Acceptors on Molecular Properties, Morphology, and Photovoltaic Performance. <b>2021</b> , 4, 8117-8129		2
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