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**A polymer tandem solar cell with 10.6% power conversion efficiency**

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2354	Highly efficient organic tandem solar cells: a follow up review. <b>2013</b> , 6, 2390		389
2353	Nanochemistry and nanomaterials for photovoltaics. <b>2013</b> , 42, 8304-38		225
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2351	'Inorganics-in-organics': recent developments and outlook for 4G polymer solar cells. <b>2013</b> , 5, 8411-27		132
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2349	Aluminum nanoparticles for efficient and stable organic photovoltaics. <b>2013</b> , 3, 16288		32
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2346	Toward green solvent processable photovoltaic materials for polymer solar cells: the role of highly polar pendant groups in charge carrier transport and photovoltaic behavior. <b>2013</b> , 6, 3022		142
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1980	High performance organic photovoltaics with zinc oxide and graphene oxide buffer layers. <b>2014</b> , 6, 1537-44		34
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1961	Chloroboron subphthalocyanine/C60 planar heterojunction organic solar cell with N,N-dicarbazolyl-3,5-benzene blocking layer. <b>2014</b> , 122, 264-270	30
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1946	Upscaling from single cells to modules [Fabrication of vacuum- and ITO-free polymer solar cells on flexible substrates with long lifetime. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 1290-1297	7.1	88
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1943	Characteristics of a ZnTiO and ITO cathode-integrated electrodes for inverted organic solar cells. <b>2014</b> , 121, 85-91		6
1942	Hole-Transporting Spirothioxanthene Derivatives as Donor Materials for Efficient Small-Molecule-Based Organic Photovoltaic Devices. <b>2014</b> , 26, 6585-6594		39



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1923	Third-generation organic electroluminescence materials. <b>2014</b> , 53, 060101		349
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1917	Interpenetrating morphology based on highly crystalline small molecule and PCBM blends. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 9368-9374	7.1	6
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1910	New building blocks for $\pi$ -conjugated polymer semiconductors for organic thin film transistors and photovoltaics. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 8651-8661	7.1	71
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1906	Strong addition effect of charge-bridging polymer in polymer:fullerene solar cells with low fullerene content. <b>2014</b> , 4, 24914-24921		4

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1894	Flexible silver grid/PEDOT:PSS hybrid electrodes for large area inverted polymer solar cells. <b>2014</b> , 10, 259-267		103
1893	Determination of the optical constants of bulk heterojunction active layers from standard solar cell measurements. <b>2014</b> , 15, 3584-3589		3
1892	Spray-Coated Polymer Solar Cells based on Low-Band-Gap Donors Processed with ortho-Xylene. <b>2014</b> , 2, 786-791		10
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1888	Efficiency enhancement of inverted organic solar cells by introducing PFDTBT quantum dots into PCDTBT:PC71BM active layer. <b>2014</b> , 15, 2632-2638		13

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1885	Correlation of the electronic structure of an interconnection unit with the device performance of tandem organic solar cells. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 5450-5454	13	5
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1866	A dual-functional additive improves the performance of molecular bulk heterojunction photovoltaic cells. <b>2014</b> , 4, 9401		18
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1851	Size-Dependent Charge Transfer Yields in Conjugated Polymer/Quantum Dot Blends. <b>2014</b> , 118, 5710-5715	23
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1834	Trap-Assisted Recombination via Integer Charge Transfer States in Organic Bulk Heterojunction Photovoltaics. <b>2014</b> , 24, 6309-6316	60

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1816	Crystallinity Effects in Sequentially Processed and Blend-Cast Bulk-Heterojunction Polymer/Fullerene Photovoltaics. <b>2014</b> , 118, 18424-18435		35



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1773	Dispersion-Dominated Photocurrent in Polymer:Fullerene Solar Cells. <b>2014</b> , 24, 4507-4514		55
1772	Gold(III) Corroles for High Performance Organic Solar Cells. <b>2014</b> , 24, 4655-4665		45
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1762	Recent advances in transition metal complexes and light-management engineering in organic optoelectronic devices. <b>2014</b> , 26, 5368-98		229

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1756	Interplay of Optical, Morphological, and Electronic Effects of ZnO Optical Spacers in Highly Efficient Polymer Solar Cells. <b>2014</b> , 4, 1400805		69
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1737	Location and Number of Selenium Atoms in Two-Dimensional Conjugated Polymers Affect Their Band-Gap Energies and Photovoltaic Performance. <b>2014</b> , 47, 7070-7080	58
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1719	Novel fulleropyrrolidines bearing $\pi$ -conjugated thiophene derivatives as compatibilizing group for developing highly stable polymer solar cells. <b>2014</b> , 15, 2223-2233		10
1718	Cost analysis of roll-to-roll fabricated ITO free single and tandem organic solar modules based on data from manufacture. <b>2014</b> , 7, 2792		151
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1715	Strategy to Modulate the Electron-Rich Units in Donor-Acceptor Copolymers for Improvements of Organic Photovoltaics. <b>2014</b> , 118, 17266-17278		54
1714	The study of solvent additive effects in efficient polymer photovoltaics via impedance spectroscopy. <b>2014</b> , 130, 20-26		65
1713	Scalable, ambient atmosphere roll-to-roll manufacture of encapsulated large area, flexible organic tandem solar cell modules. <b>2014</b> , 7, 2925		224
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1711	A new method to disperse CdS quantum dot-sensitized TiO <sub>2</sub> nanotube arrays into P3HT:PCBM layer for the improvement of efficiency of inverted polymer solar cells. <b>2014</b> , 9, 240		8
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1708	Rational Design of Ternary-Phase Polymer Solar Cells by Controlling Polymer Phase Separation. <b>2014</b> , 118, 10552-10559		15

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1700	Organic solar cells using CVD-grown graphene electrodes. <b>2014</b> , 25, 014012	74
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1698	PbS Quantum Dot Solar Cells Integrated with Sol-Gel-Derived ZnO as an n-Type Charge-Selective Layer. <b>2014</b> , 118, 17374-17382	25
1697	Theoretical study on molecular packing and electronic structure of bi-1,3,4-oxadiazole derivatives. <b>2014</b> , 4, 51942-51949	7
1696	Homocoupling defects in diketopyrrolopyrrole-based copolymers and their effect on photovoltaic performance. <b>2014</b> , 136, 11128-33	143
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1693	Tailoring of the plasmonic and waveguide effect in bulk-heterojunction photovoltaic devices with ordered, nanopatterned structures. <b>2014</b> , 15, 3120-3126	3
1692	An efficient triple-junction polymer solar cell having a power conversion efficiency exceeding 11%. <b>2014</b> , 26, 5670-7	718
1691	5-Alkyloxy-6-fluorobenzo[c][1,2,5]thiadiazole- and Silafluorene-Based Diene Alternating Conjugated Polymers: Synthesis and Application in Polymer Photovoltaic Cells. <b>2014</b> , 47, 4645-4652	41
1690	Organic bulk heterojunction photovoltaic structures: design, morphology and properties. <b>2014</b> , 83, 575-599	32

1689	Radical Polymers and Their Application to Organic Electronic Devices. <b>2014</b> , 47, 6145-6158		108
1688	Flexible polymer solar cells with power conversion efficiency of 8.7%. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 5077-5082	7.1	70
1687	Small molecules incorporating regioregular oligothiophenes and fluorinated benzothiadiazole groups for solution-processed organic solar cells. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 5842-5849	7.1	18
1686	A comparative study of fluorine substituents for enhanced stability of flexible and ITO-free high-performance polymer solar cells. <b>2014</b> , 52, 893-899		33
1685	Predicting the $J-V$ Curve in Organic Photovoltaics Using Impedance Spectroscopy. <b>2014</b> , 4, 1400499		34
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1682	Solution processed, white emitting tandem organic light-emitting diodes with inverted device architecture. <b>2014</b> , 26, 5155-9		104
1681	Materials and structures for stretchable energy storage and conversion devices. <b>2014</b> , 26, 3592-617		318
1680	Bis-lactam-based donor polymers for organic solar cells: Evolution by design. <b>2014</b> , 560, 82-85		2
1679	High open-circuit voltage polymer solar cells based on D <sub>A</sub> copolymer of indacenodithiophene and fluorine-substituted benzotriazole. <b>2014</b> , 15, 818-823		16
1678	Synthesis and photovoltaic characterization of thiadiazole based low bandgap polymers. <b>2014</b> , 562, 75-83		12
1677	Improved photovoltaic performance of two-dimensional low band-gap conjugated polymers with thieno[3,2-b]thiophene and diketopyrrolopyrrole units by altering pendent position of conjugated side chain. <b>2014</b> , 109, 6-12		19
1676	Life cycle analysis of organic tandem solar cells: When are they warranted?. <b>2014</b> , 120, 692-700		28
1675	Cyclopentadithiophene $\beta$ -phthalenediimide polymers; synthesis, characterisation, and n-type semiconducting properties in field-effect transistors and photovoltaic devices. <b>2014</b> , 144, 519-528		14
1674	Near-IR dye sensitization of polymer blend solar cells. <i>Polymer</i> , <b>2014</b> , 55, 2856-2860	3.9	17
1673	Effect of asymmetric solubility of diketopyrrolopyrrole-based polymers and PC71BMs in a binary solvent system on the performance of bulk heterojunction solar cells. <b>2014</b> , 124, 232-240		9
1672	Bis-adducts of benzocyclopentane- and acenaphthene-C60 superior to mono-adducts as electron acceptors in polymer solar cells. <b>2014</b> , 125, 198-205		11



1671	Enhanced efficiency and stability of polymer solar cells with TiO <sub>2</sub> nanoparticles buffer layer. <b>2014</b> , 15, 835-843		57
1670	Synthesis and photovoltaic properties of an alternating polymer based on benzo[1,2-b:4,5-b']dithiophene and fluorine substituted 4,7-dithiophene-2-yl-2,1,3-benzothiadiazole. <i>Synthetic Metals</i> , <b>2014</b> , 192, 82-86	3.6	2
1669	Influence of encapsulation materials on the optical properties and conversion efficiency of heat-sealed flexible polymer solar cells. <b>2014</b> , 255, 69-73		12
1668	Makromolekulare Chemie 2013. <b>2014</b> , 62, 330-342		
1667	Effect of the fibrillar microstructure on the efficiency of high molecular weight diketopyrrolopyrrole-based polymer solar cells. <b>2014</b> , 26, 1565-70		186
1666	25th anniversary article: isoindigo-based polymers and small molecules for bulk heterojunction solar cells and field effect transistors. <b>2014</b> , 26, 1801-26		306
1665	Derivation of the open-circuit voltage of organic solar cells. <b>2014</b> , 89,		14
1664	Improved homogeneity and surface coverage of graphene oxide layers fabricated by horizontal-dip-coating for solution-processable organic semiconducting devices. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 2622	7.1	26
1663	Enhanced Photovoltaic Performance of Indacenodithiophene-Quinoxaline Copolymers by Side-Chain Modulation. <b>2014</b> , 4, 1400680		132
1662	Symmetry and coplanarity of organic molecules affect their packing and photovoltaic properties in solution-processed solar cells. <b>2014</b> , 6, 9298-306		32
1661	Thermally induced structural evolution and performance of mesoporous block copolymer-directed alumina perovskite solar cells. <b>2014</b> , 8, 4730-9		241
1660	Thiophene-Fused Benzothiadiazole: A Strong Electron-Acceptor Unit to Build D <sub>A</sub> Copolymer for Highly Efficient Polymer Solar Cells. <b>2014</b> , 26, 3495-3501		75
1659	Non-fullerene acceptors for organic photovoltaics: an emerging horizon. <b>2014</b> , 1, 470		640
1658	Au@Ag core-shell nanocubes for efficient plasmonic light scattering effect in low bandgap organic solar cells. <b>2014</b> , 8, 3302-12		193
1657	A star-shaped perylene diimide electron acceptor for high-performance organic solar cells. <b>2014</b> , 26, 5137-42		352
1656	4,5-Ethylene-2,7-Carbazole-Based Medium-Bandgap Conjugated Polymers with Low-Lying HOMO Levels Toward Efficient Polymer Solar Cells with High Open-Circuit Voltage. <b>2014</b> , 215, 1052-1059		1
1655	P3HT:PCBM Bulk-Heterojunctions: Observing Interfacial and Charge Transfer States with Surface Photovoltage Spectroscopy. <b>2014</b> , 118, 14723-14731		43
1654	Interface Modification of ZnO-Based Inverted PTB7:PC71BM Organic Solar Cells by Cesium Stearate and Simultaneous Enhancement of Device Parameters. <b>2014</b> , 2, 1331-1337		51



1653	Improving Structural Order for a High-Performance Diketopyrrolopyrrole-Based Polymer Solar Cell with a Thick Active Layer. <b>2014</b> , 4, 1300739	39
1652	Effect of Incorporation of Squaraine Dye on the Photovoltaic Response of Bulk Heterojunction Solar Cells Based on P3HT:PC70BM Blend. <b>2014</b> , 2, 1743-1751	24
1651	Direct (het)arylation of fluorinated benzothiadiazoles and benzotriazole with (het)aryl iodides. <b>2014</b> , 79, 1712-8	21
1650	In-situ investigation of interfacial effects on charge accumulation and extraction in organic solar cells based on transient photocurrent studies. <b>2014</b> , 15, 1624-1630	7
1649	Dimeric naphthalene diimide based small molecule acceptors: synthesis, characterization, and photovoltaic properties. <b>2014</b> , 70, 4726-4731	31
1648	Vacuum-deposited interconnection layers for tandem solar cells. <b>2014</b> , 15, 1828-1835	14
1647	Impact of Acceptor Crystallinity on the Photophysics of Nonfullerene Blends for Organic Solar Cells. <b>2014</b> , 118, 13460-13466	11
1646	Enhanced efficiency in organic solar cells via in situ fabricated p-type copper sulfide as the hole transporting layer. <b>2014</b> , 128, 77-84	44
1645	Effect of two-step annealing on the performance of ternary polymer solar cells based on P3HT:PC71BM:SQ. <b>2014</b> , 128, 215-220	33
1644	Highly efficient ITO-free polymer solar cells based on metal resonant microcavity using WO <sub>3</sub> /Au/WO <sub>3</sub> as transparent electrodes. <b>2014</b> , 15, 1545-1551	20
1643	Enhanced photovoltaic properties of the terpolymer containing diketopyrrolopyrrole and benzothiadiazole side chain. <b>2014</b> , 57, 83-90	4
1642	Enhanced performance of polymer solar cells with imprinted nanostructures on the active layer. <b>2014</b> , 564, 384-389	11
1641	Large active area inverted tandem polymer solar cell with high performance via alcohol treatment on the surface of bottom active layer P3HT:ICBA. <b>2014</b> , 128, 240-247	6
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1639	Fabrication of efficient organic and hybrid solar cells by fine channel mist spray coating. <b>2014</b> , 127, 111-121	20
1638	Prospects of layer-split tandem cells for high-efficiency OPV. <b>2014</b> , 120, 716-723	5
1637	Applications of Oxide Coatings in Photovoltaic Devices. <b>2014</b> , 4, 162-202	39
1636	Thiazole-fused Benzothiadiazole as a Key Skeleton for T-Shaped Electron-accepting Building Blocks. <b>2014</b> , 43, 1386-1388	4

1635	Near-IR Sensitization of Polymer Solar Cells Incorporating Low-Bandgap Small Molecule. <b>2014</b> , 39, 439-442	3
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1633	Twisted but Conjugated: Building Blocks for Low Bandgap Polymers. <b>2014</b> , 126, 4077-4081	6
1632	Enhancing Fullerene-Based Solar Cell Lifetimes by Addition of a Fullerene Dumbbell. <b>2014</b> , 126, 13084-13089	6
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1630	Understanding the Impact of Hierarchical Nanostructure in Ternary Organic Solar Cells. <b>2015</b> , 2, 1500250	37
1629	Conjugated Polymer-Based Blends, Copolymers, and Composites: Synthesis, Properties, and Applications. <b>2015</b> , 1-118	5
1628	High performance polymer tandem solar cell. <b>2015</b> , 5, 18090	13
1627	Drift-Diffusion Modeling of the Effects of Structural Disorder and Carrier Mobility on the Performance of Organic Photovoltaic Devices. <b>2015</b> , 4,	7
1626	Theory of Primary Photoexcitations in Donor-Acceptor Copolymers. <b>2015</b> , 115, 267401	39
1625	Power generating reflective-type liquid crystal displays using a reflective polariser and a polymer solar cell. <b>2015</b> , 5, 11558	2
1624	Toward Improved Lifetimes of Organic Solar Cells under Thermal Stress: Substrate-Dependent Morphological Stability of PCDTBT:PCBM Films and Devices. <b>2015</b> , 5, 15149	43
1623	Development of Novel n-Type Materials Based on Benzothiadiazole Derivatives for Organic Photovoltaics: Effects of Acceptor Terminal Substituents. <b>2015</b> , 44, 680-682	3
1622	Spiro-1,3-dioxolanofullerenes with Low-lying LUMO Level for Organic Solar Cells. <b>2015</b> , 44, 282-284	10
1621	Manganese powder promoted highly efficient and selective synthesis of fullerene mono- and bicycloadducts at room temperature. <b>2015</b> , 5, 13920	4
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1619	Exciton size and binding energy limitations in one-dimensional organic materials. <b>2015</b> , 143, 244905	31
1618	Efficient all polymer solar cells employing donor polymer based on benzo[1,2-b:4,5-b']dithiophene unit. <b>2015</b> , 5, 117126	4

1617	Linking the HOMO-LUMO gap to torsional disorder in P3HT/PCBM blends. <b>2015</b> , 143, 224704	13
1616	Low Work-function Poly(3,4-ethylenedioxyethiophene): Poly(styrene sulfonate) as Electron-transport Layer for High-efficient and Stable Polymer Solar Cells. <b>2015</b> , 5, 12839	39
1615	Electrical characterization of fluorinated benzothiadiazole based conjugated copolymer $\bar{\mu}$ promising material for high-performance solar cells. <b>2015</b> , 5, 127240	2
1614	Operational electrochemical stability of thiophene-thiazole copolymers probed by resonant Raman spectroscopy. <b>2015</b> , 142, 244904	10
1613	A New $\bar{\mu}$ conjugated polymer P(PTQD-BDT) with PTQD acceptor and BDT donor units for BHJ polymer solar cells application. <b>2015</b> , 53, 2390-2398	8
1612	Subtle Balance Between Length Scale of Phase Separation and Domain Purification in Small-Molecule Bulk-Heterojunction Blends under Solvent Vapor Treatment. <b>2015</b> , 27, 6296-302	141
1611	Organic Solar Cells Based on a 2D Benzo[1,2-b:4,5-b']difuran-Conjugated Polymer with High-Power Conversion Efficiency. <b>2015</b> , 27, 6969-75	137
1610	Photophysics of Molecular-Weight-Induced Losses in Indacenodithienothiophene-Based Solar Cells. <b>2015</b> , 25, 4898-4907	51
1609	Measurement of the Charge Carrier Mobility Distribution in Bulk Heterojunction Solar Cells. <b>2015</b> , 27, 4989-96	24
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1607	Organic Photovoltaic Materials--Design, Synthesis and Scale-Up. <b>2015</b> , 15, 1006-20	5
1606	A New Interconnecting Layer of Metal Oxide/Dipole Layer/Metal Oxide for Efficient Tandem Organic Solar Cells. <b>2015</b> , 5, 1500631	34
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1602	In Situ Photocatalytically Heterostructured ZnO-Ag Nanoparticle Composites as Effective Cathode-Modifying Layers for Air-Processed Polymer Solar Cells. <b>2015</b> , 21, 11899-906	6
1601	Thiophene $\bar{\mu}$ bridge effect on photovoltaic performances of dithienosilole and bithiazole backboned polymers. <b>2015</b> , 132, n/a-n/a	2
1600	Optimizing Light-Harvesting Polymers via Side Chain Engineering. <b>2015</b> , 25, 6458-6469	32

1599	Roll-to-Roll Printed Silver Nanowire Semitransparent Electrodes for Fully Ambient Solution-Processed Tandem Polymer Solar Cells. <b>2015</b> , 25, 4539-4547	90
1598	Wide-Bandgap Benzodithiophene-Benzothiadiazole Copolymers for Highly Efficient Multijunction Polymer Solar Cells. <b>2015</b> , 27, 4461-4468	95
1597	Manipulating aggregation and molecular orientation in all-polymer photovoltaic cells. <b>2015</b> , 27, 6046-54	232
1596	High-Performance Ta <sub>2</sub> O <sub>5</sub> /Al-Doped Ag Electrode for Resonant Light Harvesting in Efficient Organic Solar Cells. <b>2015</b> , 5, 1500768	57
1595	Conjoint use of Dibenzosilole and Indan-1,3-dione Functionalities to Prepare an Efficient Non-Fullerene Acceptor for Solution-Processable Bulk-Heterojunction Solar Cells. <b>2015</b> , 4, 1096-1102	21
1594	Rhodium(III)-Catalyzed ortho C-H Heteroarylation of (Hetero)aromatic Carboxylic Acids: A Rapid and Concise Access to $\pi$ -Conjugated Poly-heterocycles. <b>2015</b> , 127, 7273-7276	31
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1592	Low-Energy-Gap Organic Based Acceptor-Donor-Acceptor $\pi$ -Conjugated Small Molecules for Bulk-Heterojunction Organic Solar Cells. <b>2015</b> , 2015, 4629-4634	9
1591	Thieno, Furo, and Selenopheno[3,4-c]pyrrole-4,6-dione Copolymers: Air-Processed Polymer Solar Cells with Power Conversion Efficiency up to 7.1%. <b>2015</b> , 5, 1501213	20
1590	Recently Advanced Polymer Materials Containing Dithieno[3,2-b:2',3'-d]phosphole Oxide for Efficient Charge Transfer in High-Performance Solar Cells. <b>2015</b> , 25, 3991-3997	50
1589	Ultrathin Metal Fluoride Interfacial Layers for Use in Organic Photovoltaic Cells. <b>2015</b> , 25, 6906-6912	10
1588	Amine-Based Interfacial Molecules for Inverted Polymer-Based Optoelectronic Devices. <b>2015</b> , 27, 3553-9	69
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1586	Toward Highly Efficient Large-Area ITO-Free Organic Solar Cells with a Conductance-Gradient Transparent Electrode. <b>2015</b> , 27, 6983-9	54
1585	High-Performance Organic Solar Cells Based on a Small Molecule with Alkylthio-Thienyl-Conjugated Side Chains without Extra Treatments. <b>2015</b> , 27, 7469-75	174
1584	Understanding the External Quantum Efficiency of Organic Homo-Tandem Solar Cells Utilizing a Three-Terminal Device Architecture. <b>2015</b> , 5, 1501019	30
1583	Stille cross-coupling applied to get higher molecular weight polymers: Synthesis, optoelectronic, Voc properties, and solar cell application. <b>2015</b> , 132, n/a-n/a	0
1582	Optimization of active nanomaterials and transparent electrodes using printing and vacuum processes. <b>2015</b> , 253-284	

1581	Rational Design of Diketopyrrolopyrrole-Based Small Molecules as Donating Materials for Organic Solar Cells. <b>2015</b> , 16, 20326-43	16
1580	Transient Photocurrent Response of Plasmon-Enhanced Polymer Solar Cells with Gold Nanoparticles. <b>2015</b> , 8, 4050-4060	6
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1578	Enhancing Solar Cell Efficiency Using Photon Upconversion Materials. <b>2015</b> , 5, 1782-1809	108
1577	All-Polymer Solar Cells Based on Fully Conjugated Donor-Acceptor Block Copolymers with Poly(naphthalene bisimide) Acceptor Blocks: Device Performance and Thin Film Morphology. <b>2015</b> , 2015, 1-7	2
1576	Investigation of Poly(3,4-ethylenedioxythiophene):Poly(styrenesulfonate) Hole Transport Layer for Solution-Processed Polymer Solar Cells. <b>2015</b> , 2015, 1-7	2
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1572	Molecular Design for Tuning Work Functions of Transparent Conducting Electrodes. <b>2015</b> , 6, 2269-76	28
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1565	Pyridine-bridged diketopyrrolopyrrole conjugated polymers for field-effect transistors and polymer solar cells. <b>2015</b> , 6, 4775-4783	31
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1560	Optimizing the fabrication process and interplay of device components of polymer solar cells using a field-based multiscale solar-cell algorithm. <b>2015</b> , 142, 184902		2
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1558	Beyond Shockley-Queisser: Molecular Approaches to High-Efficiency Photovoltaics. <b>2015</b> , 6, 2367-78		106
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1552	Charge transport model for photovoltaic devices based on printed polymer: Fullerene nanoparticles. <b>2015</b> , 141, 171-177		30
1551	Work function and interface control of amorphous IZO electrodes by MoO <sub>3</sub> layer grading for organic solar cells. <b>2015</b> , 141, 194-202		26
1550	Highly Stable Polymer Solar Cells Based on Poly(dithienobenzodithiophene-co-thienothiophene). <b>2015</b> , 48, 3890-3899		23
1549	High-performance ternary blend polymer solar cells involving both energy transfer and hole relay processes. <i>Nature Communications</i> , <b>2015</b> , 6, 7327	17.4	383
1548	Chemical Composition of Additives That Spontaneously Form Cathode Interlayers in OPVs. <b>2015</b> , 31, 6721-8		8
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1537	Dramatic performance enhancement for large bandgap thick-film polymer solar cells introduced by a difluorinated donor unit. <b>2015</b> , 15, 607-615	89
1536	Two new D $\pi$ A conjugated polymers P(PTQD-Th) and P(PTQD-2Th) with same 9-(2-octyldodecyl)-8 H -pyrrolo[3,4- b ]bisthieno[2,3- f :3',2'- h ]quinoxaline-8,10(9 H )-dione acceptor and different donor units for BHJ polymer solar cells application. <b>2015</b> , 24, 137-146	6
1535	Functionalized graphene and other two-dimensional materials for photovoltaic devices: device design and processing. <b>2015</b> , 44, 5638-79	238
1534	Betavoltaic Cells Using P3HT Semiconductive Conjugated Polymer. <b>2015</b> , 62, 2320-2326	11
1533	Conjugated Polymer Photovoltaic Materials. <b>2015</b> , 195-239	2
1532	Au nanorods-incorporated plasmonic-enhanced inverted organic solar cells. <b>2015</b> , 24, 115202	3
1531	A conjugated low band gap diketopyrrolopyrrole and dibenzosilole-based polymer for organic solar cell. <i>Synthetic Metals</i> , <b>2015</b> , 210, 201-207	3.6 4
1530	Stability enhancement of organic photovoltaic devices utilizing partially reduced graphene oxide as the hole transport layer: nanoscale insight into structural/interfacial properties and aging effects. <b>2015</b> , 5, 106930-106940	15
1529	Cyclopentadithiophene-Benzothiadiazole copolymers with permutations of repeating unit length and ratios; synthesis, optical and electrochemical properties and photovoltaic characteristics. <b>2015</b> , 5, 107276-107284	18
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1527	Continuous 1D-Metallic Microfibers Web for Flexible Organic Solar Cells. <b>2015</b> , 7, 27397-404		15
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1525	Perovskite-polymer hybrid solar cells with near-infrared external quantum efficiency over 40%. <b>2015</b> , 58, 953-960		34
1524	Synthesis and Performance of New Organic Dyes and Functional Fullerenes for Organic Solar Cells. <b>2015</b> , 193-236		1
1523	The preparation of a Eu <sup>3+</sup> -doped ZnO bi-functional layer and its application in organic photovoltaics. <b>2015</b> , 2, 125901		11
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1521	Efficiency Enhancement of Polymer Solar Cells with Three-Component Active Layer. <b>2015</b> , 620, 53-63		
1520	Analysis of Charge Transport and Device Performance in Organic Photovoltaic Devices with Active Layers of Self-Assembled Nanospheres. <b>2015</b> , 119, 25826-25839		15
1519	Simulation study of the losses and influences of geminate and bimolecular recombination on the performances of bulk heterojunction organic solar cells. <b>2015</b> , 24, 108501		2
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1516	Effect of the spacer group nature on the optical and electrical properties of confined poly(p-phenylene vinylene) derivatives. <b>2015</b> , 120, 897-908		5
1515	Mass Diffusion Coefficient and Soret Coefficient of o-Dichlorobenzene Solutions of PCBM and [60]Fullerene by the Soret Forced Rayleigh Scattering Method. <b>2015</b> , 60, 3621-3630		9
1514	Performance enhancement in inverted polymer solar cells incorporating ultrathin Au and LiF modified ZnO electron transporting interlayer. <b>2015</b> , 17, 364-370		23
1513	ITO-free large-area flexible organic solar cells with an embedded metal grid. <b>2015</b> , 17, 349-354		41
1512	Polymeric carbon Lewis base-acid adducts: poly(NHCCl <sub>6</sub> O). <b>2015</b> , 6, 1741-1750		4
1511	A Simple and Universal Method to Increase Light Absorption in Ternary Blend Polymer Solar Cells Based on Ladder-Type Polymers. <b>2015</b> , 3, 321-327		27
1510	Structural and morphological tuning of dithienobenzodithiophene-core small molecules for efficient solution processed organic solar cells. <b>2015</b> , 115, 23-34		19

1509	Side-chain-bulk effects on the molecular packing and photovoltaic performance of benzotrithiophene-benzooxadiazole conjugated copolymers. <b>2015</b> , 16, 1268-74		7
1508	An electron acceptor challenging fullerenes for efficient polymer solar cells. <b>2015</b> , 27, 1170-4		2522
1507	Dithienocarbazole- and benzothiadiazole-based donor-acceptor conjugated polymers for bulk heterojunction polymer solar cells. <i>Science China Chemistry</i> , <b>2015</b> , 58, 294-300	7.9	4
1506	New generation solar cells: concepts, trends and perspectives. <b>2015</b> , 51, 3957-72		134
1505	Synthesis, characterization, and solar cell and transistor applications of phenanthro[1,2-b:8,7-b']dithiopheneDiketopyrrolopyrrole semiconducting polymers. <b>2015</b> , 53, 709-718		17
1504	Colloidal quantum dot solar cells exploiting hierarchical structuring. <b>2015</b> , 15, 1101-8		127
1503	Efficient organic photovoltaics using solution-processed, annealing-free TiO <sub>2</sub> nanocrystalline particles as an interface modification layer. <b>2015</b> , 17, 253-261		44
1502	Synthesis and photovoltaic properties of conjugated polymers with an asymmetric 4-(2-ethylhexyloxy)-8-(2-ethylhexylthio)benzo[1,2-b:4,5-b']dithiophene unit. <b>2015</b> , 115, 58-66		8
1501	Fine-tuning of polymer photovoltaic properties by the length of alkyl side chains. <b>2015</b> , 33, 490-498		17
1500	Synthesis and characterization of E conjugated copolymers with thieno-imidazole units in the main chain: application for bulk heterojunction polymer solar cells. <b>2015</b> , 17, 7888-97		4
1499	Improving Solar Cell Efficiency through Hydrogen Bonding: A Method for Tuning Active Layer Morphology. <b>2015</b> , 27, 1201-1209		62
1498	High-performance multiple-donor bulk heterojunction solar cells. <b>2015</b> , 9, 190-198		440
1497	Single-junction polymer solar cells with high efficiency and photovoltage. <b>2015</b> , 9, 174-179		1495
1496	Polymer/small-molecule parallel tandem organic solar cells based on MoO <sub>x</sub> /Ag/MoO <sub>x</sub> intermediate electrodes. <b>2015</b> , 137, 34-43		17
1495	Synthesis of dithieno[2,3-d:2',3'-b']benzo[1,2-b:4,5-b']dithiophene -alt-isoindigo conjugated polymer and enhancement of photovoltaic property with diphenyl sulfide additives. <b>2015</b> , 22, 1		12
1494	Donor-acceptor-acceptor based charge transfer chromophore as electron donors for solution processed small molecule organic bulk heterojunction solar cells. <b>2015</b> , 19, 76-82		26
1493	High efficiency air-processed dithienogermole-based polymer solar cells. <b>2015</b> , 7, 4826-32		32
1492	Modification of a donor-acceptor photovoltaic polymer by integration of optoelectronic moieties into its side chains. <i>Polymer</i> , <b>2015</b> , 59, 57-66	3.9	5

1491	Efficient solar cells based on a new polymer from fluorinated benzothiadiazole and alkylthienyl substituted thieno[2,3- f]benzofuran. <b>2015</b> , 116, 139-145		13
1490	Dip-coating of poly(3,4-ethylenedioxythiophene):poly(styrenesulfonate) anodes for efficient polymer solar cells. <b>2015</b> , 578, 161-166		15
1489	Recent progress and perspective in solution-processed Interfacial materials for efficient and stable polymer and organometal perovskite solar cells. <b>2015</b> , 8, 1160-1189		637
1488	Dynamic Coupling between Electrode Interface and Donor/Acceptor Interface via Charge Dissociation in Organic Solar Cells at Device-Operating Condition. <b>2015</b> , 150122160354006		10
1487	Unravelling the Photodegradation Mechanisms of a Low Bandgap Polymer by Combining Experimental and Modeling Approaches. <b>2015</b> , 119, 2166-2176		30
1486	Rational design of two-dimensional molecular donor-acceptor nanostructure arrays. <b>2015</b> , 7, 4306-24		24
1485	Ambient Layer-by-Layer ZnO Assembly for Highly Efficient Polymer Bulk Heterojunction Solar Cells. <b>2015</b> , 25, 1558-1564		22
1484	An alcohol-soluble perylene diimide derivative as cathode interfacial layer for PDI-based nonfullerene organic solar cells. <b>2015</b> , 469, 326-332		15
1483	Linear and propeller-like fluoro-isoindigo based donor-acceptor small molecules for organic solar cells. <b>2015</b> , 20, 76-88		16
1482	Organic photovoltaic initial stage degradation analysis using impedance spectroscopy. <i>Synthetic Metals</i> , <b>2015</b> , 202, 63-67	3.6	6
1481	Diindeno[1,2-g:1',2'-s]rubicene: all-carbon non-fullerene electron acceptor for efficient bulk-heterojunction organic solar cells with high open-circuit voltage. <b>2015</b> , 5, 3381-3385		32
1480	Exciton Structure and Dynamics in Solution Aggregates of a Low-Bandgap Copolymer. <b>2015</b> , 119, 7666-72		14
1479	A close look at charge generation in polymer:fullerene blends with microstructure control. <b>2015</b> , 137, 2908-18		68
1478	Nanoimprinting-induced nanomorphological transition in polymer solar cells: enhanced electrical and optical performance. <b>2015</b> , 9, 2773-82		29
1477	Optical, Electrical, and Magnetic Studies of Organic Solar Cells Based on Low Bandgap Copolymer with Spin $\uparrow$ Radical Additives. <b>2015</b> , 25, 1895-1902		39
1476	A Selenophene Containing Benzodithiophene-alt-thienothiophene Polymer for Additive-Free High Performance Solar Cell. <b>2015</b> , 48, 562-568		52
1475	Interplay Between Side Chain Pattern, Polymer Aggregation, and Charge Carrier Dynamics in PBDTTPD:PCBM Bulk-Heterojunction Solar Cells. <b>2015</b> , 5, 1401778		62
1474	Solution-processable polymeric solar cells: A review on materials, strategies and cell architectures to overcome 10%. <b>2015</b> , 19, 34-60		201

1473	Simultaneous improvement in short circuit current, open circuit voltage, and fill factor of polymer solar cells through ternary strategy. <b>2015</b> , 7, 3691-8		104
1472	Nafion-modified MoOx as effective room-temperature hole injection layer for stable, high-performance inverted organic solar cells. <b>2015</b> , 7, 3581-9		31
1471	Elimination of burn-in open-circuit voltage degradation by ZnO surface modification in organic solar cells. <b>2015</b> , 7, 1608-15		43
1470	The enhanced performance of fluorinated quinoxaline-containing polymers by replacing carbon with silicon bridging atoms on the dithiophene donor skeleton. <b>2015</b> , 6, 2337-2347		19
1469	Efficient inverted polymer solar cells based on surface modified FTO transparent electrodes. <b>2015</b> , 136, 142-147		10
1468	Structural Evolution of Crystalline Conjugated Polymer/Fullerene Domains from Solution to the Solid State in the Presence and Absence of an Additive. <b>2015</b> , 119, 3408-3417		19
1467	Enhancing mechanical properties of highly efficient polymer solar cells using size-tuned polymer nanoparticles. <b>2015</b> , 7, 2668-76		15
1466	Effect of electron-withdrawing units on triphenylamine-based small molecules for solution-processed organic solar cells. <i>Science China Chemistry</i> , <b>2015</b> , 58, 331-338	7.9	6
1465	Nanoscale phase separation control in rationally designed conjugated polymer solar cells processed using co-additives. <b>2015</b> , 5, 16234-16238		3
1464	Acceptor-donor-acceptor small molecules containing benzo[1,2-b:4,5-b']dithiophene and rhodanine units for solution processed organic solar cells. <b>2015</b> , 116, 13-19		28
1463	Highly Thermal Stable and Efficient Organic Photovoltaic Cells with Crosslinked Networks Appending Open-Cage Fullerenes as Additives. <b>2015</b> , 25, 207-213		39
1462	Low band gap benzothiophene-thienothiophene copolymers with conjugated alkylthiothiethyl and alkoxy carbonyl cyanovinyl side chains for photovoltaic applications. <b>2015</b> , 51, 6290-2		25
1461	Influence of the fused hetero-aromatic centers on molecular conformation and photovoltaic performance of solution-processed organic solar cells. <b>2015</b> , 39, 2224-2232		4
1460	Efficient Microwave-Assisted Synthesis of PCBM Methanofullerenes (C60 and C70). <b>2015</b> , 2015, 1423-1427		1
1459	Synthesis and optical properties of photovoltaic materials based on the ambipolar dithienonaphthothiadiazole unit. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 4229-4238	13	10
1458	Conjugated polymer-porphyrin complexes for organic electronics. <b>2015</b> , 16, 1223-30		10
1457	Novel solution-processible small molecules based on benzo[1,2-b:3,4-b':5,6-b'']trithiophene for effective organic photovoltaics with high open-circuit voltage. <b>2015</b> , 5, 14540-14546		10
1456	Molecular length dictates the nature of charge carriers in single-molecule junctions of oxidized oligothiophenes. <b>2015</b> , 7, 209-14		119

1455	Improving the sensitivity of a near-infrared nanocomposite photodetector by enhancing trap induced hole injection. <b>2015</b> , 106, 023301		37
1454	Charge transfer-mediated singlet fission. <b>2015</b> , 66, 601-18		184
1453	4H-1,2,6-Thiadiazin-4-one-containing small molecule donors and additive effects on their performance in solution-processed organic solar cells. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 2358-2365	7.1	26
1452	Plasmonic Ag@oxide nanoprisms for enhanced performance of organic solar cells. <b>2015</b> , 11, 2454-62		42
1451	Thorough subcells diagnosis in a multi-junction solar cell via absolute electroluminescence-efficiency measurements. <b>2015</b> , 5, 7836		53
1450	Molecular engineering of donor-acceptor co-polymers for bulk heterojunction solar cells. <b>2015</b> , 1055, 15-24		8
1449	Isothermal structure development in submicron P3HT layers studied by fast scanning chip calorimetry. <i>Polymer</i> , <b>2015</b> , 57, 39-44	3.9	22
1448	Organic photovoltaic cells: from performance improvement to manufacturing processes. <b>2015</b> , 11, 2228-46		57
1447	A design strategy for intramolecular singlet fission mediated by charge-transfer states in donor-acceptor organic materials. <b>2015</b> , 14, 426-33		243
1446	Novel photovoltaic donor-acceptor-acceptor terpolymers with tunable energy levels based on a difluorinated benzothiadiazole acceptor. <b>2015</b> , 5, 12087-12093		11
1445	Highly Flexible Aqueous Photovoltaic Elastomer Gels Derived from Sulfonated Block Ionomers. <b>2015</b> , 5, 1401941		19
1444	Toward efficient non-fullerene polymer solar cells: Selection of donor polymers. <b>2015</b> , 17, 295-303		40
1443	Improving the conductivity of PEDOT:PSS hole transport layer in polymer solar cells via copper(II) bromide salt doping. <b>2015</b> , 7, 1439-48		65
1442	Design of a Series of Polythiophenes Containing C60 Groups: Synthesis and Optical and Electrochemical Properties. <b>2015</b> , 48, 323-336		7
1441	Suppressed charge recombination in polymer solar cells based on perylene diimide derivative acceptors via solvent vapor annealing. <b>2015</b> , 18, 24-31		12
1440	Polymer homo-tandem solar cells with best efficiency of 11.3%. <b>2015</b> , 27, 1767-73		386
1439	Synthesis of star-shaped small molecules carrying peripheral 1,8-naphthalimide functional groups and their applications in organic solar cells. <b>2015</b> , 115, 181-189		25
1438	Sulfonate Poly(aryl ether sulfone)-Modified PEDOT:PSS as Hole Transport Layer and Transparent Electrode for High Performance Polymer Solar Cells. <b>2015</b> , 119, 1943-1952		20

1437	Tuning the Isomeric Fused Heteroaromatic Core of Small Donor-Acceptor Molecules to Alter Their Crystalline Nature and Enhance Photovoltaic Performance. <b>2015</b> , 2015, 820-827		13
1436	High-efficiency large-bandgap material for polymer solar cells. <b>2015</b> , 36, 84-9		18
1435	Solution-Grown Organic Single-Crystalline Donor-Acceptor Heterojunctions for Photovoltaics. <b>2015</b> , 127, 970-974		11
1434	Correlation of structure and photovoltaic performance of benzo[1,2-b:4,5-b']dithiophene copolymers alternating with different acceptors. <b>2015</b> , 39, 2248-2255		14
1433	Growing perovskite into polymers for easy-processable optoelectronic devices. <b>2015</b> , 5, 7725		65
1432	Contrasting performance of donor-acceptor copolymer pairs in ternary blend solar cells and two-acceptor copolymers in binary blend solar cells. <b>2015</b> , 7, 2322-30		27
1431	Naphthodithiophene Diimide (NDTI)-Based Semiconducting Copolymers: From Ambipolar to Unipolar n-Type Polymers. <b>2015</b> , 48, 576-584		69
1430	Water/alcohol soluble conjugated polymers for the interface engineering of highly efficient polymer light-emitting diodes and polymer solar cells. <b>2015</b> , 51, 5572-85		140
1429	Thermally evaporated Ag nanoparticle films for plasmonic enhancement in organic solar cells: effects of particle geometry. <b>2015</b> , 9, 161-165		8
1428	Design and photovoltaic characterization of dialkylthio benzo[1,2-b:4,5-b']dithiophene polymers with different accepting units. <b>2015</b> , 17, 7848-56		15
1427	High efficiency all-polymer solar cells realized by the synergistic effect between the polymer side-chain structure and solvent additive. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 7077-7085	13	70
1426	Probing individual subcells of fully printed and coated polymer tandem solar cells using multichromatic opto-electronic characterization methods. <b>2015</b> , 137, 154-163		12
1425	High-performance all-polymer solar cells via side-chain engineering of the polymer acceptor: the importance of the polymer packing structure and the nanoscale blend morphology. <b>2015</b> , 27, 2466-71		259
1424	10.5% efficient polymer and amorphous silicon hybrid tandem photovoltaic cell. <i>Nature Communications</i> , <b>2015</b> , 6, 6391	17.4	38
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1422	Graphene-Based Integrated Photovoltaic Energy Harvesting/Storage Device. <b>2015</b> , 11, 2929-37		76
1421	A new oligobenzodithiophene end-capped with 3-ethyl-rhodanine groups for organic solar cells with high open-circuit voltage. <i>Science China Chemistry</i> , <b>2015</b> , 58, 339-346	7.9	21
1420	Fully printed organic tandem solar cells using solution-processed silver nanowires and opaque silver as charge collecting electrodes. <b>2015</b> , 8, 1690-1697		70

1419	Perovskite solar cells: film formation and properties. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 9032-9050	3	327
1418	Electroactive and Photoactive Poly[Isoindigo-alt-EDOT] Synthesized Using Direct (Hetero)Arylation Polymerization in Batch and in Continuous Flow. <b>2015</b> , 27, 2137-2143		66
1417	Hole-selective and impedance characteristics of an aqueous solution-processable MoO <sub>3</sub> layer for solution-processable organic semiconducting devices. <b>2015</b> , 66, 635-645		1
1416	Two-dimensional photovoltaic copolymers with spatial D-A-D structures: synthesis, characterization and hetero-atom effect. <i>Science China Chemistry</i> , <b>2015</b> , 58, 276-285	7.9	9
1415	Effect of halogen-terminated additives on the performance and the nanostructure of all-polymer solar cells. <b>2015</b> , 66, 521-525		4
1414	PEIE capped ZnO as cathode buffer layer with enhanced charge transfer ability for high efficiency polymer solar cells. <i>Synthetic Metals</i> , <b>2015</b> , 203, 243-248	3.6	28
1413	Dual Function Additives: A Small Molecule Crosslinker for Enhanced Efficiency and Stability in Organic Solar Cells. <b>2015</b> , 5, 1401426		54
1412	Polymer/Polymer Blend Solar Cells Using Tetraazabenzodifluoranthene Diimide Conjugated Polymers as Electron Acceptors. <b>2015</b> , 48, 1759-1766		38
1411	Diketopyrrolopyrrole (DPP)-Based Donor-Acceptor Polymers for Selective Dispersion of Large-Diameter Semiconducting Carbon Nanotubes. <b>2015</b> , 11, 2946-54		39
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1408	Outdoor performance of organic photovoltaics: Diurnal analysis, dependence on temperature, irradiance, and degradation. <b>2015</b> , 7, 013111		41
1407	Scalability of multi-junction organic solar cells for large area organic solar modules. <b>2015</b> , 106, 213301		17
1406	Performance evaluation of PTB7 : PC71BM based organic solar cells fabricated by spray coating method using chlorine free solvent. <b>2015</b> , 5, 56262-56269		19
1405	Annealing-free highly crystalline solution-processed molecular metal oxides for efficient single-junction and tandem polymer solar cells. <b>2015</b> , 8, 2448-2463		60
1404	Fluorination on both D and A units in D <sub>A</sub> type conjugated copolymers based on difluorobithiophene and benzothiadiazole for highly efficient polymer solar cells. <b>2015</b> , 8, 2427-2434		156
1403	Morphological study of polymer/fullerene interfaces via benzene/PC70BM interaction. <b>2015</b> , 26, 230-238		4
1402	Side chain modification: an effective approach to modulate the energy level of benzodithiophene based polymers for high-performance solar cells. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 18115-18126	13	33



1401	Characterization of tandem organic solar cells. <b>2015</b> , 9, 478-479		42
1400	Status and prospects for ternary organic photovoltaics. <b>2015</b> , 9, 491-500		457
1399	Phthalimide-based $\pi$ -conjugated small molecules with tailored electronic energy levels for use as acceptors in organic solar cells. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 8904-8915	7.1	57
1398	Rational design of multifunctional star-shaped molecules with a 1,3,5-triazine core and different arms for application in organic light-emitting diodes and organic solar cells. <b>2015</b> , 21, 219		3
1397	Morphology construction of vertical phase separation for large-area polymer solar cells. <b>2015</b> , 26, 48-54		21
1396	Panchromatic polymer-polymer ternary solar cells enhanced by F $\pi$ -ester resonance energy transfer and solvent vapor annealing. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 18611-18621	13	48
1395	Branched alkyl ester side chains rendering large polycyclic (3E,7E)-3,7-bis(2-oxoindolin-3-ylidene)benzo[1,2-b:4,5-b']difuran-2,6(3H,7H)-dione (IBDF) based donor-acceptor polymers solution-processability for organic thin film transistors. <b>2015</b> , 6, 6689-6697		16
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1393	Dialkoxynaphthalene as an electron-rich unit for high-performance polymer solar cells with large open circuit voltages. <i>Polymer</i> , <b>2015</b> , 67, 258-266	3.9	3
1392	Effective medium analysis of thermally evaporated Ag nanoparticle films for plasmonic enhancement in organic solar cell. <b>2015</b> , 85, 294-304		7
1391	Recent Advances in Bulk Heterojunction Polymer Solar Cells. <b>2015</b> , 115, 12666-731		1994
1390	Direct arylation polycondensation for efficient synthesis of narrow-bandgap alternating DA copolymers consisting of naphthalene diimide as an acceptor. <b>2015</b> , 6, 6836-6844		41
1389	Effect of size and morphology of Au nanostructures on boosting performance of organic photovoltaic devices: Plasmonic and non-plasmonic effects. <b>2015</b> , 15, 1090-1094		
1388	PbSe nanocrystal solar cells using bandgap engineering. <b>2015</b> , 5, 65569-65574		12
1387	Photovoltaic effect by vapor-printed polyselenophene. <b>2015</b> , 26, 55-60		6
1386	Improved Performance for Inverted Organic Photovoltaics via Spacer between Benzodithiophene and Benzothiazole in Polymers. <b>2015</b> , 119, 18992-19000		13
1385	Synthesis and photovoltaic properties of two new alkoxyphenyl substituted thieno[2,3-f]benzofuran based polymers. <b>2015</b> , 17, 17592-600		20
1384	A new V-shaped triphenylamine/diketopyrrolopyrrole containing donor material for small molecule organic solar cells. <b>2015</b> , 5, 68192-68199		16

1383	Spirobifluorene-based acceptors for polymer solar cells: Effect of isomers. <b>2015</b> , 123, 16-25		15
1382	Diketopyrrolopyrrole-based conjugated polymers containing alkyl and aryl side-chains for bulk heterojunction solar cells. <i>Synthetic Metals</i> , <b>2015</b> , 203, 221-227	3.6	2
1381	Nanostructured Electron-Selective Interlayer for Efficient Inverted Organic Solar Cells. <b>2015</b> , 7, 18460-6		4
1380	Correlating Structure and Function in Organic Electronics: From Single Molecule Transport to Singlet Fission. <b>2015</b> , 27, 5453-5463		44
1379	High efficiency air stable organic photovoltaics with an aqueous inorganic contact. <b>2015</b> , 7, 14241-7		9
1378	Investigation of the organic solar cell characteristics for indoor LED light applications. <b>2015</b> , 54, 071602		51
1377	Balancing the H- and J-aggregation in DTS(PTTh2)2/PC70BM to yield a high photovoltaic efficiency. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 8183-8192	7.1	34
1376	High performance airbrush spray coated organic solar cells via tuning the surface tension and saturated vapor pressure of different ternary solvent systems. <b>2015</b> , 25, 275-282		14
1375	Investigation of the effect of large aromatic fusion in the small molecule backbone on the solar cell device fill factor. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 16679-16687	13	23
1374	Cooperative assembly of an active layer utilizing the synergistic effect of a functional fullerene triad as an acceptor for efficient P3HT-based PSCs. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 17991-18000	13	6
1373	Effect of different solvents on the performance of ternary polymer solar cells based on PTB7 : PC71BM : F8BT. <b>2015</b> , 48, 295105		11
1372	Efficient synthesis of dibenzopyran building block and its application in organic photovoltaics. <b>2015</b> , 122, 184-191		6
1371	Imaging Charge Transfer State Excitations in Polymer/Fullerene Solar Cells with Time-Resolved Electrostatic Force Microscopy. <b>2015</b> , 6, 2852-8		24
1370	Efficient small molecular ternary solar cells by synergistically optimized photon harvesting and phase separation. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 16653-16662	13	70
1369	Metal oxide semiconducting interfacial layers for photovoltaic and photocatalytic applications. <b>2015</b> , 4, 1		54
1368	Improving the efficiency of subphthalocyanine based planar organic solar cells through the use of MoO3/CuI double anode buffer layer. <b>2015</b> , 141, 429-435		30
1367	High-Efficiency Polycrystalline Thin Film Tandem Solar Cells. <b>2015</b> , 6, 2676-81		147
1366	Interfacial Morphology and Effects on Device Performance of Organic Bilayer Heterojunction Solar Cells. <b>2015</b> , 7, 16161-8		17

1365	Effect of dye end groups in non-fullerene fluorene- and carbazole-based small molecule acceptors on photovoltaic performance. <b>2015</b> , 5, 62739-62746		24
1364	Evidences of photocurrent generation by hole-exciton interaction at organic semiconductor interfaces. <b>2015</b> , 26, 75-80		3
1363	Synthesis of a benzotriazole bearing alternating copolymer for organic photovoltaic applications. <b>2015</b> , 39, 6623-6630		16
1362	A dual ternary system for highly efficient ITO-free inverted polymer solar cells. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 18365-18371	13	21
1361	Highly Efficient Photovoltaic Polymers Based on Benzodithiophene and Quinoxaline with Deeper HOMO Levels. <b>2015</b> , 48, 5172-5178		96
1360	Stability of graphene-based heterojunction solar cells. <b>2015</b> , 5, 73575-73600		63
1359	Quantitative operando visualization of the energy band depth profile in solar cells. <i>Nature Communications</i> , <b>2015</b> , 6, 7745	17.4	52
1358	Syntheses and solar cell applications of conjugated copolymers containing tetrafluorophenylene units. <i>Polymer</i> , <b>2015</b> , 71, 113-121	3.9	5
1357	A generic concept to overcome bandgap limitations for designing highly efficient multi-junction photovoltaic cells. <i>Nature Communications</i> , <b>2015</b> , 6, 7730	17.4	50
1356	Highly efficient polymer solar cells cast from non-halogenated xylene/anisaldehyde solution. <b>2015</b> , 8, 2744-2752		125
1355	Dithieno[3,2-b:2',3'-d]silole-based low band gap polymers: the effect of fluorine and side chain substituents on photovoltaic performance. <b>2015</b> , 6, 6219-6226		16
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1188	Copper thiocyanate: An attractive hole transport/extraction layer for use in organic photovoltaic cells. <b>2015</b> , 107, 013301		48
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1182	Solution-processed small molecules based on benzodithiophene and difluorobenzothiadiazole for inverted organic solar cells. <b>2015</b> , 6, 7726-7736		13
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1173	Dithieno[3,2-b:2',3'-d]pyridin-5(4H)-one-based polymers with a bandgap up to 2.02 eV for high performance field-effect transistors and polymer solar cells with an open-circuit voltage up to 0.98 V and an efficiency up to 6.84%. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 20516-20526	13	30
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1158	Photocurrent enhancement of an efficient large band gap polymer incorporating benzodithiophene and weak electron accepting pyrrolo[3,4B]pyrrole-1,3-dione derivatives via the insertion of a strong electron accepting thieno[3,4B]thiophene unit. <i>Polymer</i> , <b>2015</b> , 80, 95-103	3.9	8
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1146	Heteroatom-bridged benzothiazolyls for organic solar cells: a theoretical study. <b>2015</b> , 119, 583-91		24
1145	Round-Robin Studies on Roll-Processed ITO-free Organic Tandem Solar Cells Combined with Inter-Laboratory Stability Studies. <b>2015</b> , 3, 423-427		7
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1131	Predicting current from cross section images of organic photovoltaic devices. <b>2015</b> , 134, 231-235	2
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1129	Semitransparent polymer-based solar cells with aluminum-doped zinc oxide electrodes. <b>2015</b> , 7, 287-300	34
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1115	Triple-junction hybrid tandem solar cells with amorphous silicon and polymer-fullerene blends. <b>2014</b> , 4, 7154	19
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1077	Single junction inverted polymer solar cell reaching power conversion efficiency 10.31% by employing dual-doped zinc oxide nano-film as cathode interlayer. <b>2014</b> , 4, 6813	448
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1046	Indium-Free Inverted Organic Solar Cells Using Niobium-Doped Titanium Oxide with Integrated Dual Function of Transparent Electrode and Electron Transport Layer. <b>2016</b> , 2, 1500341	6
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1035	Graphene-Based Flexible and Stretchable Electronics. <b>2016</b> , 28, 4184-202	406
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1033	Bulk-Heterojunction Organic Solar Cells: Five Core Technologies for Their Commercialization. <b>2016</b> , 28, 7821-7861	317
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1017	Ternary Organic Solar Cells Based on Two Highly Efficient Polymer Donors with Enhanced Power Conversion Efficiency. <b>2016</b> , 6, 1502109		141
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861	Effect of 3,4,9,10-perylenetetracarboxylic bisbenzimidazole (PTCBI) as well as bathocuproine (BCP) and Ag interlayer thickness on the performance of organic tandem solar cells. <i>Synthetic Metals</i> , <b>2016</b> , 221, 179-185	3.6	5
860	Nonfullerene Tandem Organic Solar Cells with High Open-Circuit Voltage of 1.97 V. <b>2016</b> , 28, 9729-9734		98
859	Effect of fluorination and symmetry on the properties of polymeric photovoltaic materials based on an asymmetric building block. <b>2016</b> , 6, 90051-90060		11
858	Ternary D1D2A2 Structured Conjugated Polymer: Efficient Green Solvent-Processed Polymer/Neat-C70 Solar Cells. <b>2016</b> , 28, 7479-7486		40
857	Head-to-Head Linkage Containing Bithiophene-Based Polymeric Semiconductors for Highly Efficient Polymer Solar Cells. <b>2016</b> , 28, 9969-9977		81
856	2,1,3-benzothiadiazole-5,6-dicarboxylicimide based semicrystalline polymers for photovoltaic cells. <b>2016</b> , 54, 3826-3834		3
855	Electron Transfer in Nanoparticle Dyads Assembled on a Colloidal Template. <b>2016</b> , 138, 13260-13270		24
854	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
853	Theoretical investigations on enhancing the performance of terminally diketopyrrolopyrrole-based small-molecular donors in organic solar cell applications. <b>2016</b> , 22, 15		9
852	Tandem Solar Cells from Accessible Low Band-Gap Polymers Using an Efficient Interconnecting Layer. <b>2016</b> , 8, 16-9		14
851	C-H-Activated Direct Arylation of Strong Benzothiadiazole and Quinoxaline-Based Electron Acceptors. <b>2016</b> , 81, 360-70		29
850	Electron-transporting third component modifying cathode for simplified inverted ternary blend solar cells. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 1051-1056	7.1	18
849	Highly crystalline, low band-gap semiconducting polymers based on phenanthrodithiophene-benzothiadiazole for solar cells and transistors. <b>2016</b> , 7, 1549-1558		17
848	Photoconductivity of composites based on CdSe quantum dots and low-band-gap polymers. <b>2016</b> , 79, 206-211		13
847	Electrical properties of patterned photoactive layers in organic photovoltaic modules. <b>2016</b> , 144, 493-499		7
846	A side-chain engineering approach to solvent-resistant semiconducting polymer thin films. <b>2016</b> , 7, 648-655		30
845	WO <sub>3</sub> with surface oxygen vacancies as an anode buffer layer for high performance polymer solar cells. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 894-900	13	58
844	Fluorinated and non-fluorinated conjugated polymers showing different photovoltaic properties in polymer solar cells with PFNBr interlayers. <b>2016</b> , 28, 178-183		19

843	Organic Photovoltaics. <b>2016</b> , 169-196	4
842	Synthesis and photovoltaic performance of DPP-based small molecules with tunable energy levels by altering the molecular terminals. <b>2016</b> , 125, 151-158	18
841	Oligomer Molecules for Efficient Organic Photovoltaics. <b>2016</b> , 49, 175-83	492
840	Low-temperature, solution-processed aluminum-doped zinc oxide as electron transport layer for stable efficient polymer solar cells. <b>2016</b> , 605, 202-207	3
839	Locking the morphology with a green, fast and efficient physical cross-linking approach for organic electronic applications. <b>2016</b> , 28, 53-58	2
838	Versatile ternary organic solar cells: a critical review. <b>2016</b> , 9, 281-322	508
837	Novel dithienosilole-based conjugated copolymers and their application in bulk heterojunction solar cells. <b>2016</b> , 7, 319-329	9
836	Dialkylthio Substitution: An Effective Method to Modulate the Molecular Energy Levels of 2D-BDT Photovoltaic Polymers. <b>2016</b> , 8, 3575-83	41
835	NIR absorbing D- $\pi$ -D structured diketopyrrolopyrrole-dithiafulvalene based small molecule for solution processed organic solar cells. <b>2016</b> , 52, 210-3	32
834	Dielectric Antireflection Fiber Arrays for Absorption Enhancement in Thin-Film Organic Tandem Solar Cells. <b>2016</b> , 22, 1-6	170
833	Enhanced high-open circuit voltage in fluorinated benzoselenadiazole-based polymer solar cells. <b>2016</b> , 28, 401-410	2
832	Improving stability of organic devices: a time/space resolved structural monitoring approach applied to plasmonic photovoltaics. <b>2017</b> , 159, 617-624	14
831	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
830	Development of quinoxaline based polymers for photovoltaic applications. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 1858-1879	7.1 74
829	Synthesis and photovoltaic properties of three different types of terpolymers. <b>2017</b> , 1, 1147-1155	4
828	An easily prepared carbon quantum dots and employment for inverted organic photovoltaic devices. <b>2017</b> , 315, 621-629	25
827	Toward Thermal Stable and High Photovoltaic Efficiency Ternary Conjugated Copolymers: Influence of Backbone Fluorination and Regioselectivity. <b>2017</b> , 29, 1758-1768	55
826	Strong Enhancement of Photoelectric Conversion Efficiency of Co-hybridized Polymer Solar Cell by Silver Nanoplates and Core-Shell Nanoparticles. <b>2017</b> , 9, 5358-5365	17

825	Solution-processed semiconductors for next-generation photodetectors. <b>2017</b> , 2,		674
824	A simple synthesis method to prepare a molybdenum oxide hole-transporting layer for efficient polymer solar cells. <b>2017</b> , 7, 7890-7900		35
823	Enhanced photovoltaic performances of bis(pyrrolo[3,4-c]pyrrole-1,3-dione)-based wide band gap polymer via the incorporation of an appropriate spacer unit between pyrrolo[3,4-c]pyrrole-1,3-dione units. <b>2017</b> , 42, 34-41		7
822	Excited-states spectroscopies and its magnetic field effect of $\pi$ -conjugated polymer-fullerene blends with below-gap excitation. <i>Synthetic Metals</i> , <b>2017</b> , 223, 132-136	3.6	1
821	Solid-State Organic Photovoltaics. <b>2017</b> , 255-266		
820	Organic PV Module Design and Manufacturing. <b>2017</b> , 292-302		
819	Long lifetime stable and efficient semitransparent organic solar cells using a ZnMgO-modified cathode combined with a thin MoO <sub>3</sub> /Ag anode. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 3888-3899	13	29
818	Flexible photovoltaic power systems: integration opportunities, challenges and advances. <b>2017</b> , 2, 013001		30
817	Self-powered wearable graphene fiber for information expression. <b>2017</b> , 32, 329-335		88
816	Synthesis and charge transport properties of new methanofullerenes. <b>2017</b> , 41, 1933-1939		9
815	Efficient P3HT:PC61BM solar cells employing 1,2,4-trichlorobenzene as the processing additives. <b>2017</b> , 35, 302-308		4
814	Synthesis and photovoltaic properties low bandgap D-A copolymers based on fluorinated thiadiazoloquinoxaline. <b>2017</b> , 43, 268-276		5
813	Design, Synthesis, and Photovoltaic Characterization of a Small Molecular Acceptor with an Ultra-Narrow Band Gap. <b>2017</b> , 129, 3091-3095		43
812	Design, Synthesis, and Photovoltaic Characterization of a Small Molecular Acceptor with an Ultra-Narrow Band Gap. <b>2017</b> , 56, 3045-3049		590
811	Two new medium bandgap asymmetric copolymers based on thieno[2,3-f]benzofuran for efficient organic solar cells. <b>2017</b> , 140, 337-345		12
810	Indacenodithiophene-based wide bandgap copolymers for high performance single-junction and tandem polymer solar cells. <b>2017</b> , 33, 313-324		45
809	Preparation of Reduced Graphene Oxide:ZnO Hybrid Cathode Interlayer Using In Situ Thermal Reduction/Annealing for Interconnecting Nanostructure and Its Effect on Organic Solar Cell. <b>2017</b> , 9, 4898-4907		37
808	Crystallinity dependent thermal degradation in organic solar cell. <b>2017</b> , 110, 053301		7

807	Quinoxaline-based D-A conjugated polymers for organic solar cells: Probing the effect of quinoxaline side chains and fluorine substitution on the power conversion efficiency. <b>2017</b> , 55, 1209-1218		6
806	A novel random terpolymer for high-efficiency bulk-heterojunction polymer solar cells. <b>2017</b> , 7, 1975-1980		12
805	2,2'-Bis(1,3,4-thiadiazole)-Based $\pi$ -Conjugated Copolymers for Organic Photovoltaics with Exceeding 8% and Its Molecular Weight Dependence of Device Performance. <b>2017</b> , 50, 891-899		27
804	Flexible large-area organic tandem solar cells with high defect tolerance and device yield. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 3186-3192	13	47
803	Photocurrent imaging of phase segregation in a ternary polymer blend induced via a non-solvent route. <b>2017</b> , 24, 1		1
802	High-Performance Ternary Organic Solar Cell Enabled by a Thick Active Layer Containing a Liquid Crystalline Small Molecule Donor. <b>2017</b> , 139, 2387-2395		351
801	Simultaneous Substitution of Silicon and Fluorine Atom on Donor/Acceptor Copolymers for Photovoltaic Applications. <b>2017</b> , 218, 1600410		0
800	Energy Level Tuning of Poly(phenylene-dithienobenzothiadiazole)s for Low Photon Energy Loss Solar Cells. <b>2017</b> , 218, 1600502		11
799	Thienopyrroledione and benzodithiophene/thiophene-based random terpolymer for polymer solar cells with improved fill factor. <b>2017</b> , 140, 229-235		14
798	Recent advances in perovskite solar cells: efficiency, stability and lead-free perovskite. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 11462-11482	13	307
797	Efficient Organic Photovoltaics with Improved Charge Extraction and High Short-Circuit Current. <b>2017</b> , 121, 5523-5530		18
796	The marriage of AIE and interface engineering: convenient synthesis and enhanced photovoltaic performance. <b>2017</b> , 8, 3750-3758		31
795	Enhanced open-circuit voltage in methoxyl substituted benzodithiophene-based polymer solar cells. <i>Science China Chemistry</i> , <b>2017</b> , 60, 243-250	7.9	11
794	Transparent and High Refractive Index Thermoplastic Polymer Glasses Using Evaporative Ligand Exchange of Hybrid Particle Fillers. <b>2017</b> , 9, 7515-7522		39
793	Polymer/Bullerene Solar Cells. <b>2017</b> , 1-21		1
792	Novel benzo[c][1,2,5]oxadiazole-naphthalenediimide based copolymer for high-performance air-stable n-type field-effect transistors exhibiting high electron mobility of 2.43 cm <sup>2</sup> V <sup>-1</sup> s <sup>-1</sup> . <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 2892-2898	7.1	19
791	Atomistic modelling $\pi$ Impact and opportunities in thin-film photovoltaic solar cell technologies. <b>2017</b> , 43, 774-796		4
790	Development of Dithienosilole-Pyridalthiadiazole-Based Copolymer as an Electron Donor in Organic Photovoltaic Cells. <b>2017</b> , 16, 574-581		2

789	Design of donor-acceptor-donor (DAD) type small molecule donor materials with efficient photovoltaic parameters. <b>2017</b> , 117, e25363		33
788	Colloidal metal oxide nanocrystals as charge transporting layers for solution-processed light-emitting diodes and solar cells. <b>2017</b> , 46, 1730-1759		77
787	Custom-Shaped Organic Photovoltaic Modules-Freedom of Design by Printing. <b>2017</b> , 12, 117		20
786	A series of dithienobenzodithiophene based small molecules for highly efficient organic solar cells. <i>Science China Chemistry</i> , <b>2017</b> , 60, 552-560	7.9	15
785	Organic heterostructures deposited by MAPLE on AZO substrate. <b>2017</b> , 417, 196-203		10
784	Nanostructuring methylammonium lead iodide perovskite by ultrafast nano imprinting lithography. <b>2017</b> , 176, 106-110		10
783	Improving, characterizing and predicting the lifetime of organic photovoltaics. <b>2017</b> , 50, 103001		39
782	Quantum-sized nanomaterials for solar cell applications. <b>2017</b> , 73, 821-839		61
781	Toward a better understanding of conjugated polymer blends with non-spherical small molecules: coupling of molecular structure to polymer chain microstructure. <b>2017</b> , 32, 1935-1945		1
780	Semi-crystalline photovoltaic polymers with siloxane-terminated hybrid side-chains. <i>Science China Chemistry</i> , <b>2017</b> , 60, 528-536	7.9	3
779	Bithienopyrroledione vs. thienopyrroledione based copolymers: dramatic increase of power conversion efficiency in bulk heterojunction solar cells. <b>2017</b> , 53, 3543-3546		11
778	Highly Efficient Parallel-Like Ternary Organic Solar Cells. <b>2017</b> , 29, 2914-2920		140
777	Orthogonal solubility in fully conjugated donor-acceptor block copolymers: Compatibilizers for polymer/fullerene bulk-heterojunction solar cells. <b>2017</b> , 35, 207-218		14
776	Conjugated-Polymer Blends for Organic Photovoltaics: Rational Control of Vertical Stratification for High Performance. <b>2017</b> , 29, 1601674		91
775	Novel low bandgap phenothiazine functionalized DPP derivatives prepared by direct heteroarylation: Application in bulk heterojunction organic solar cells. <b>2017</b> , 141, 169-178		30
774	Efficient Top-Illuminated Organic-Quantum Dots Hybrid Tandem Solar Cells with Complementary Absorption. <b>2017</b> , 4, 1172-1177		13
773	Stable and Highly Efficient PbS Quantum Dot Tandem Solar Cells Employing a Rationally Designed Recombination Layer. <b>2017</b> , 7, 1602667		43
772	Effect of spatial distribution of generation rate on bulk heterojunction organic solar cell performance: A novel semi-analytical approach. <b>2017</b> , 46, 226-241		11



771	Spontaneous growth by sol-gel process of low temperature ZnO as cathode buffer layer in flexible inverted organic solar cells. <b>2017</b> , 46, 218-225	8
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768	Film morphology of solution-processed regioregular ternary conjugated polymer solar cells under processing additive stress. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 8903-8908	13 8
767	Improved performance of polymer-fullerene composite solar cells with fluorinated compound as an additive in active layer. <b>2017</b> , 645, 199-206	1
766	From Binary to Ternary: Improving the External Quantum Efficiency of Small-Molecule Acceptor-Based Polymer Solar Cells with a Minute Amount of Fullerene Sensitization. <b>2017</b> , 7, 1700328	49
765	Improving self-assembly behavior and photovoltaic performance of the indacenodithiophene-based small molecules via increasing dipole moment of the terminal group. <b>2017</b> , 144, 142-150	18
764	Limiting factors of photon-to-current conversion in polymer/nanocrystal bilayer hybrid solar cells: An analytical quantum efficiency model study. <b>2017</b> , 47, 108-116	2
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762	Side-Chain Influence of Wide-Bandgap Copolymers Based on Naphtho[1,2-b:5,6-b']bispyrazine and Benzo[1,2-b:4,5-b']dithiophene for Efficient Photovoltaic Applications. <b>2017</b> , 9, 18142-18150	15
761	Regular terpolymers with benzothiadiazole side groups for improving the performances of polymer solar cells. <b>2017</b> , 143, 261-269	5
760	Step-by-step improvement in photovoltaic properties of fluorinated quinoxaline-based low-band-gap polymers. <b>2017</b> , 47, 14-23	21
759	Achieving 12.8% Efficiency by Simultaneously Improving Open-Circuit Voltage and Short-Circuit Current Density in Tandem Organic Solar Cells. <b>2017</b> , 29, 1606340	91
758	High-efficiency photovoltaic cells with wide optical band gap polymers based on fluorinated phenylene-alkoxybenzothiadiazole. <b>2017</b> , 10, 1443-1455	63
757	Improved Performance of All-Polymer Solar Cells Enabled by Naphthodiperylenetetraimide-Based Polymer Acceptor. <b>2017</b> , 29, 1700309	245
756	Room temperature processed polymers for high-efficient polymer solar cells with power conversion efficiency over 9%. <b>2017</b> , 37, 32-39	44
755	Effect of substituents of twisted benzodiperylenediimides on non-fullerene solar cells. <b>2017</b> , 47, 72-78	8
754	Carbazole-based small molecules for vacuum-deposited organic photovoltaic devices with open-circuit voltage exceeding 1 V. <b>2017</b> , 47, 162-173	12

753	High performance thermal-treatment-free tandem polymer solar cells with high fill factors. <b>2017</b> , 47, 79-84		14
752	Impact of distributed power electronics on the lifetime and reliability of PV systems. <b>2017</b> , 25, 821-835		14
751	Recent advances in the application of two-dimensional materials as charge transport layers in organic and perovskite solar cells. <b>2017</b> , 2, 54-66		38
750	Improved hydrogenated amorphous silicon thin-film solar cells realized by replacing n-type Si layer with PFN interfacial layer. <i>Synthetic Metals</i> , <b>2017</b> , 228, 91-98	3.6	6
749	Solution-processed colloidal quantum dot/organic hybrid tandem photovoltaic devices with 8.3% efficiency. <b>2017</b> , 31, 403-409		19
748	Alkyl Side-Chain Engineering in Wide-Bandgap Copolymers Leading to Power Conversion Efficiencies over 10. <b>2017</b> , 29, 1604251		199
747	Solution processed cathode and interconnecting layer of silver nanowires in an efficient inverted tandem organic solar cells. <b>2017</b> , 160, 494-502		20
746	Panchromatic ternary/quaternary polymer/fullerene BHJ solar cells based on novel silicon naphthalocyanine and silicon phthalocyanine dye sensitizers. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 2550-2562	13	27
745	Efficiency improvement of polymer solar cells with random micro-nanostructured back electrode formed by active layer self-aggregation. <b>2017</b> , 41, 362-368		6
744	Achieving High-Performance Ternary Organic Solar Cells through Tuning Acceptor Alloy. <b>2017</b> , 29, 1603154		149
743	Solution-processed organic tandem solar cells with power conversion efficiencies >12%. <b>2017</b> , 11, 85-90		458
742	Panchromatic Sequentially Cast Ternary Polymer Solar Cells. <b>2017</b> , 29, 1604603		63
741	Poly(3,4-Ethylenedioxythiophene): Methyl-naphthalene Sulfonate Formaldehyde Condensate: The Effect of Work Function and Structural Homogeneity on Hole Injection/Extraction Properties. <b>2017</b> , 7, 1601499		38
740	Optical absorption enhancement by inserting ZnO optical spacer in plasmonic organic solar cells. <b>2017</b> , 12, 012502		5
739	The Influence of Oxygen Atoms on Conformation and $\pi$ -Stacking of Ladder-Type Donor-Based Polymers and Their Photovoltaic Properties. <b>2017</b> , 38, 1700156		5
738	Chlorinated 2,1,3-Benzothiadiazole-Based Polymers for Organic Field-Effect Transistors. <b>2017</b> , 50, 4649-4657		28
737	High-performance ternary polymer solar cells from a structurally similar polymer alloy. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 12400-12406	13	30
736	The conversion of donor to acceptor and rational design for diketopyrrolopyrrole-containing small molecule acceptors by introducing nitrogen-atoms for organic solar cells. <b>2017</b> , 7, 31800-31806		15

735	Relating polymer chemical structure to the stability of polymer:fullerene solar cells. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 6611-6619	7.1	33
734	Efficiency enhancement in DIBSQ:PC71BM organic photovoltaic cells by using Liq-doped Bphen as a cathode buffer layer. <b>2017</b> , 11, 233-240		3
733	Morphology visualization of P3HT:Fullerene blends by using subsurface atomic layer deposition. <b>2017</b> , 49, 234-241		11
732	Low-bandgap conjugated polymers based on alkylthiothienyl-substituted benzodithiophene for efficient bulk heterojunction polymer solar cells. <i>Polymer</i> , <b>2017</b> , 122, 96-104	3.9	15
731	Pixelated speckle image holography carrier fringes for efficient superimposed light harvesting in organic solar cells. <b>2017</b> , 110, 253301		1
730	New naphtho[1,2-b:5,6-b']difuran based two-dimensional conjugated small molecules for photovoltaic application. <b>2017</b> , 72, 147-155		7
729	Effect of angle of incidence on the performance of bulk heterojunction organic solar cells: A unified optoelectronic analytical framework. <b>2017</b> , 7, 065101		10
728	Higher-Energy Charge Transfer States Facilitate Charge Separation in Donor-Acceptor Molecular Dyads. <b>2017</b> , 121, 13043-13051		11
727	Facile synthesis of a narrow-bandgap strong-donor- alt -strong-acceptor copolymer of poly(5,6-difluorobenzo-[ c ][1,2,5]-thiadiazole- alt -5 H -dithieno[3,2- b :2',3'- d ]pyran) via direct C-H arylation polymerization. <b>2017</b> , 145, 331-338		7
726	Investigation of the hole transport characterization and mechanisms in co-evaporated organic semiconductor mixtures. <b>2017</b> , 7, 28494-28498		13
725	A near-infrared non-fullerene electron acceptor for high performance polymer solar cells. <b>2017</b> , 10, 1610-1620	238	
724	Small molecular PDI-functionalized 9,9'-bifluorenylidene acceptors for bulk heterojunction organic solar cells. <b>2017</b> , 41, 6822-6827		12
723	Effect of methanol treatment on the performance of P3HT:PC71BM bulk heterojunction solar cells with various cathodes. <b>2017</b> , 28, 12909-12915		5
722	Optical properties of (Z)-2-(2-phenylhydrazinylidene)acenaphthen-1(2H)-one: a potential electron donor in organic solar cells. <b>2017</b> , 73, 458-463		
721	Direct arylation polymerization toward a narrow bandgap donor-Acceptor conjugated polymer of alternating 5,6-difluoro-2,1,3-benzothiadiazole and alkyl-quarternarythiophene: From synthesis, optoelectronic properties to devices. <b>2017</b> , 55, 1869-1879		15
720	Large area flexible polymer solar cells with high efficiency enabled by imprinted Ag grid and modified buffer layer. <b>2017</b> , 130, 208-214		21
719	Emerging Earth-abundant materials for scalable solar water splitting. <b>2017</b> , 2, 120-127		14
718	Efficient alternating polymer based on benzodithiophene and di-fluorinated quinoxaline derivatives for bulk heterojunction photovoltaic cells. <i>Polymer</i> , <b>2017</b> , 116, 35-42	3.9	5

717	Optimization of the power conversion efficiency in high bandgap pyridopyridinedithiophene-based conjugated polymers for organic photovoltaics by the random terpolymer approach. <b>2017</b> , 91, 92-99		6
716	Systematic Tuning of 2,1,3-Benzothiadiazole Acceptor Strength by Monofunctionalization with Alkylamine, Thioalkyl, or Alkoxy Groups in Carbazole Donor-Acceptor Polymers. <b>2017</b> , 50, 2736-2746		20
715	Influence of 2,2-bithiophene and thieno[3,2-b] thiophene units on the photovoltaic performance of benzodithiophene-based wide-bandgap polymers. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 4471-4479	7.1	11
714	Theoretical studies for forecasting the power conversion efficiencies of polymer-based organic photovoltaic cells. <b>2017</b> , 55, 919-927		12
713	A new polymer acceptor containing naphthalene diimide and 1,3,4-thiadiazole for all-polymer solar cells. <b>2017</b> , 55, 990-996		12
712	Comparing the device physics, dynamics and morphology of polymer solar cells employing conventional PCBM and non-fullerene polymer acceptor N2200. <b>2017</b> , 35, 251-262		72
711	Recent Advances in Wide-Bandgap Photovoltaic Polymers. <b>2017</b> , 29, 1605437		249
710	Design of perylene-diimides-based small-molecules semiconductors for organic solar cells. <b>2017</b> , 115, 1591-1597		6
709	A novel organic/inorganic hybrid tandem solar cell with inverted structure. <b>2017</b> , 123, 1		1
708	Towards a bright future: polymer solar cells with power conversion efficiencies over 10%. <i>Science China Chemistry</i> , <b>2017</b> , 60, 571-582	7.9	104
707	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
706	Recent progress of interconnecting layer for tandem organic solar cells. <i>Science China Chemistry</i> , <b>2017</b> , 60, 460-471	7.9	12
705	Effect of fluorination on n-type conjugated polymers for all-polymer solar cells. <b>2017</b> , 7, 17076-17084		16
704	Crystallization of Sensitizers Controls Morphology and Performance in Si-/C-PCPDTBT-Sensitized P3HT:ICBA Ternary Blends. <b>2017</b> , 50, 2415-2423		19
703	Inverted organic solar cell with ultrasonic spray deposited active layer. <b>2017</b> , 131, 1079-1084		3
702	An All-Solution Processed Recombination Layer with Mild Post-Treatment Enabling Efficient Homo-Tandem Non-fullerene Organic Solar Cells. <b>2017</b> , 29, 1604231		63
701	Synthesis and photovoltaic properties of the copolymers containing zinc porphyrin derivatives as pendant groups. <i>Synthetic Metals</i> , <b>2017</b> , 223, 205-211	3.6	9
700	Light Harvesting for Organic Photovoltaics. <b>2017</b> , 117, 796-837		357

699	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
698	Progress in Understanding Degradation Mechanisms and Improving Stability in Organic Photovoltaics. <b>2017</b> , 29, 1603940		248
697	Cyclopentadithiophene organic core in small molecule organic solar cells: morphological control of carrier recombination. <b>2017</b> , 19, 3640-3648		6
696	Fine Tuning the Optoelectronic Properties of Triphenylamine Based Donor Molecules for Organic Solar Cells. <b>2017</b> , 231, 1127-1139		35
695	Dissociation exists in s-triazine based donor-accepter organic systems by photo-induced electron transfer. <b>2017</b> , 139, 264-273		10
694	All-polymer solar cells with perylenediimide polymer acceptors. <b>2017</b> , 35, 293-301		28
693	Large-area, flexible polymer solar cell based on silver nanowires as transparent electrode by roll-to-roll printing. <b>2017</b> , 35, 261-268		24
692	Effect of photo-induced charge separated state lifetimes in donor-acceptor <sup>1</sup> -acceptor <sup>2</sup> organic ambipolar semiconductors on their photovoltaic performances. <b>2017</b> , 139, 601-610		7
691	Multifunctional ternary additive in bulk heterojunction OPV: increased device performance and stability. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 1581-1587	13	49
690	Dark carrier dynamics and electrical characteristics of organic solar cells integrated with Ag-SiO <sub>2</sub> core-shell nanoparticles. <i>Synthetic Metals</i> , <b>2017</b> , 223, 34-42	3.6	4
689	Eco-friendly direct (hetero)-arylation polymerization: scope and limitation. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 29-40	7.1	40
688	Modifying the valence state of molybdenum in the efficient oxide buffer layer of organic solar cells via a mild hydrogen peroxide treatment. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 889-895	7.1	7
687	Fabrication of air-stable, large-area, PCDTBT:PC70BM polymer solar cell modules using a custom built slot-die coater. <b>2017</b> , 161, 388-396		20
686	Improving photovoltaic properties of the linear A-Ar-A type small molecules with rhodanine by extending arylene core. <b>2017</b> , 139, 42-49		6
685	Improved Performance of Ternary Polymer Solar Cells Based on A Nonfullerene Electron Cascade Acceptor. <b>2017</b> , 7, 1602127		90
684	Critical Dimensions in Small-Molecule Plasmonic Particle Solar Cells. <b>2017</b> , 327-349		
683	Morphology-driven photocurrent enhancement in PTB7/PC71BM bulk heterojunction solar cells via the use of ternary solvent processing blends. <b>2017</b> , 41, 229-236		5
682	Recently developed high-efficiency organic photoactive materials for printable photovoltaic cells: a mini review. <i>Synthetic Metals</i> , <b>2017</b> , 223, 107-121	3.6	33

681	Fullerene-free polymer solar cells processed from non-halogenated solvents in air with PCE of 4.8. <b>2017</b> , 53, 1164-1167		52
680	Recent advances in wide bandgap semiconducting polymers for polymer solar cells. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 1860-1872	13	76
679	Synthesis of fluorinated benzotriazole (BTZ)- and benzodithiophene (BDT)-based low-bandgap conjugated polymers for solar cell applications. <b>2017</b> , 139, 349-360		11
678	Bromine-Terminated Additives for Phase-Separated Morphology Control of PTB7:PC71BM-Based Polymer Solar Cells. <b>2017</b> , 5, 11668-11675		18
677	A random donor polymer based on an asymmetric building block to tune the morphology of non-fullerene organic solar cells. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 22480-22488	13	10
676	High-Performance Field-Effect Transistor Based on Novel Conjugated P-o-Fluoro-p-alkoxyphenyl-Substituted Polymers by Graphdiyne Doping. <b>2017</b> , 121, 23300-23306		14
675	High-Performance CHNHPbI-Inverted Planar Perovskite Solar Cells with Fill Factor Over 83% via Excess Organic/Inorganic Halide. <b>2017</b> , 9, 35871-35879		32
674	Improved Domain Size and Purity Enables Efficient All-Small-Molecule Ternary Solar Cells. <b>2017</b> , 29, 1703777		83
673	Near-infrared absorbing metal functionalized diketopyrrolopyrroles. <b>2017</b> , 852, 48-53		5
672	Impact of Active Layer Morphology on Bimolecular Recombination Dynamics in Organic Solar Cells. <b>2017</b> , 121, 24954-24961		23
671	Formation of Organic Alloys in Ternary-Blend Solar Cells with Two Acceptors Having Energy-Level Offsets Exceeding 0.4 eV. <b>2017</b> , 2, 2149-2156		22
670	Performance enhancement of inverted type organic solar cells by using Eu doped TiO <sub>2</sub> thin film. <b>2017</b> , 9, 64-69		16
669	Roadmap on solar water splitting: current status and future prospects. <b>2017</b> , 1, 022001		115
668	Dye based photodiodes for solar energy applications. <b>2017</b> , 123, 1		10
667	Accurate Characterization of Triple-Junction Polymer Solar Cells. <b>2017</b> , 7, 1701664		12
666	High-Efficiency Organic Tandem Solar Cells With Effective Transition Metal Chelates Interconnecting Layer. <b>2017</b> , 1, 1700139		15
665	Promotion of performances of quantum dot solar cell and its tandem solar cell with low bandgap polymer (PTB7-Th):PC71BM by water vapor treatment on quantum dot layer on its surface. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 21528-21535	13	7
664	Photon Harvesting in Conjugated Polymer-Based Functional Nanoparticles. <b>2017</b> , 8, 4608-4620		25

663	Functionalized 2D-MoS-Incorporated Polymer Ternary Solar Cells: Role of Nanosheet-Induced Long-Range Ordering of Polymer Chains on Charge Transport. <b>2017</b> , 9, 34111-34121	24
662	New insights and perspectives into biological materials for flexible electronics. <b>2017</b> , 46, 6764-6815	245
661	Ternary organic solar cells incorporating zinc phthalocyanine with improved performance exceeding 8.5%. <b>2017</b> , 146, 408-413	20
660	Molecular-Shape-Induced Efficiency Enhancement in PC61BM and PC71BM Based Ternary Blend Organic Solar Cells. <b>2017</b> , 121, 17104-17111	11
659	Unraveling the High Open Circuit Voltage and High Performance of Integrated Perovskite/Organic Bulk-Heterojunction Solar Cells. <b>2017</b> , 17, 5140-5147	61
658	Organic thin film transistor with conjugated polymers for highly sensitive gas sensors. <b>2017</b> , 25, 489-495	38
657	Donor-Acceptor-Acceptor-based non-fullerene acceptors comprising terminal chromen-2-one functionality for efficient bulk-heterojunction devices. <b>2017</b> , 146, 502-511	18
656	Efficiency Exceeding 11% in Tandem Polymer Solar Cells Employing High Open-Circuit Voltage Wide-Bandgap $\pi$ -Conjugated Polymers. <b>2017</b> , 7, 1700782	20
655	Low-bandgap conjugated polymers enabling solution-processable tandem solar cells. <b>2017</b> , 2,	229
654	Precise Characterization of Performance Metrics of Organic Solar Cells. <b>2017</b> , 1, 1700159	10
653	Emerging Semitransparent Solar Cells: Materials and Device Design. <b>2017</b> , 29, 1700192	154
652	High-Efficiency Nonfullerene Organic Solar Cells with a Parallel Tandem Configuration. <b>2017</b> , 29, 1702547	64
651	Recent Development of Quinoxaline Based Polymers/Small Molecules for Organic Photovoltaics. <b>2017</b> , 7, 1700575	85
650	The effect of conjugated $\pi$ -bridge and fluorination on the properties of asymmetric-building-block-containing polymers (ABC polymers) based on dithienopyran donor and benzothiadiazole acceptors. <b>2017</b> , 8, 5396-5406	13
649	Environmental analysis of perovskites and other relevant solar cell technologies in a tandem configuration. <b>2017</b> , 10, 1874-1884	71
648	Direct arylation polymerization toward ultra-low bandgap poly(thienoisoindigo-alt-diketopyrrolopyrrole) conjugated polymers: The effect of $\pi$ -protection on the polymerization and properties of the polymers. <b>2017</b> , 55, 3205-3213	7
647	Morphology Control for Fully Printable Organic-Inorganic Bulk-heterojunction Solar Cells Based on a Ti-alkoxide and Semiconducting Polymer. <b>2017</b> ,	0
646	Hybrid Organic Tandem Solar Cell Comprising Small-Molecule Bottom and Polymer:Fullerene Top Subcells Fabricated by Thin-Film Transfer. <b>2017</b> , 7, 1942	12



645	Ternary organic solar cells based on ZnO-Ge double electron transport layer with enhanced power conversion efficiency. <b>2017</b> , 155, 1052-1058		10
644	Properties of Vanadium-Doped Indium Oxide Deposited at Room Temperature as Transparent Conductor for Inverted Polymer Solar Cells. <b>2017</b> , 46, 5797-5803		2
643	A Switchable Interconnecting Layer for High Performance Tandem Organic Solar Cell. <b>2017</b> , 7, 1701164		25
642	Efficient pyrrolo[3,4-c]pyrrole-1,3-dione-based wide band gap polymer for high-efficiency binary and ternary solar cells. <i>Polymer</i> , <b>2017</b> , 125, 182-189	3.9	11
641	Ternary Organic Solar Cells with Coumarin7 as the Donor Exhibiting Greater Than 10% Power Conversion Efficiency and a High Fill Factor of 75. <b>2017</b> , 9, 29907-29916		29
640	Ternary Solar Cells Based on Two Small Molecule Donors with Same Conjugated Backbone: The Role of Good Miscibility and Hole Relay Process. <b>2017</b> , 9, 29917-29923		38
639	Molecular design of organic small molecules based on diindoleimide with fused aromatic heterocycles as donors for organic solar cells. <b>2017</b> , 7, 39899-39905		25
638	Fluorene Side-Chained Benzodithiophene Polymers for Low Energy Loss Solar Cells. <b>2017</b> , 50, 6880-6887		24
637	A New Electron Acceptor with -Alkoxyphenyl Side Chain for Fullerene-Free Polymer Solar Cells with 9.3% Efficiency. <b>2017</b> , 4, 1700152		35
636	Nanoscale Morphology of Doctor Bladed versus Spin-Coated Organic Photovoltaic Films. <b>2017</b> , 7, 1701269		16
635	Synergistic effect of halogenation on molecular energy level and photovoltaic performance modulations of highly efficient small molecular materials. <b>2017</b> , 40, 214-223		34
634	Effect of capping group on the properties of non-polymeric diketopyrrolopyrroles for solution-processed bulk heterojunction solar cells. <b>2017</b> , 50, 339-346		2
633	All-Small-Molecule Nonfullerene Organic Solar Cells with High Fill Factor and High Efficiency over 10%. <b>2017</b> , 29, 7543-7553		164
632	Rational design of peryleneimide-based polymer acceptor for efficient all-polymer solar cells. <b>2017</b> , 50, 376-383		9
631	Wide bandgap conjugated polymers based on bithiophene and benzotriazole for bulk heterojunction solar cells: Thiophene versus thieno[3,2-b]thiophene as $\pi$ -conjugated spacers. <b>2017</b> , 54, 565-574		4
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629	Functional materials from polymer derivatives: Properties and characterization. <b>2017</b> , 1-38		1
628	Effect of Optical Microcavity on Absorption Behavior of Homo-Tandem Organic Solar Cells. <b>2017</b> , 34, 118801		

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626	Alcohol-Soluble Isoindigo Derivative IIDTh-NSB as a Novel Modifier of ZnO in Inverted Polymer Solar Cells. <b>2017</b> , 9, 42969-42977		13
625	High Efficiency Near-Infrared and Semitransparent Non-Fullerene Acceptor Organic Photovoltaic Cells. <b>2017</b> , 139, 17114-17119		312
624	A Designed Ladder-Type Heteroarene Benzodi(Thienopyran) for High-Performance Fullerene-Free Organic Solar Cells. <b>2017</b> , 1, 1700165		23
623	Novel Dimethylmethylene-Bridged Triphenylamine-PDI Acceptor for Bulk-Heterojunction Organic Solar Cells. <b>2017</b> , 4, 1700110		23
622	Electronic noise analyses on organic electronic devices. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 7123-7141		13
621	Amplitude-Mode Spectroscopy of Charge Excitations in PTB7 $\pi$ -Conjugated Donor-Acceptor Copolymer for Photovoltaic Applications. <b>2017</b> , 7,		4
620	Prolonged lifetime of polymer solar cells with amphiphilic monolayers modified cathodes. <b>2017</b> , 49, 368-374		1
619	Benzo[1,2-b:4,5-b']difuran and furan substituted diketopyrrolopyrrole alternating copolymer for organic photovoltaics with high fill factor. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 15591-15600	13	21
618	Tuning the electronic and optical properties of NDT-based conjugated polymers by adopting fused heterocycles as acceptor units: a theoretical study. <b>2017</b> , 23, 225		2
617	Quantifying local thickness and composition in thin films of organic photovoltaic blends by Raman scattering. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 7270-7282	7.1	15
616	Controllable Bulk Heterojunction Morphology by Self-Assembly of Oppositely Charged Nanoparticles. <b>2017</b> , 121, 16045-16050		3
615	Spiro-Shaped cis-Stilbene/Fluorene Hybrid Template for the Fabrication of Small-Molecule Bulk Heterojunction Solar Cells. <b>2017</b> , 121, 15943-15948		5
614	Push-Pull Type Non-Fullerene Acceptors for Polymer Solar Cells: Effect of the Donor Core. <b>2017</b> , 9, 24771-24779		9
613	Low-Cost and Green Fabrication of Polymer Electronic Devices by Push-Coating of the Polymer Active Layers. <b>2017</b> , 9, 25434-25444		24
612	Transient Magnetophotoinduced Absorption Studies of Photoexcitations in $\pi$ -Conjugated Donor-Acceptor Copolymers. <b>2017</b> , 119, 017401		19
611	Isomeric small molecule acceptors based on perylene diimide and spirobifluorene for non-fullerene organic solar cells. <b>2017</b> , 146, 151-158		14
610	Stacking Sequence and Acceptor Dependence of Photocurrent Spectra and Photovoltage in Organic Two-Junction Devices. <b>2017</b> , 9, 24027-24034		8

609	Analysis of Interfacial Layer-Induced Open-Circuit Voltage Burn-In Loss in Polymer Solar Cells on the Basis of Electroluminescence and Impedance Spectroscopy. <b>2017</b> , 9, 24052-24060	9
608	Study of series-connected polymer tandem solar cells based on a highly efficient donor material of PTB7-Th. <b>2017</b> , 123, 1	2
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606	Ionizing radiation exposure reveals instability of purified domains in polymer/fullerene solar cells. <b>2017</b> , 160, 85-93	8
605	A solution approach to p-type Cu <sub>2</sub> FeSnS <sub>4</sub> thin-films and pn-junction solar cells: Role of electron selective materials on their performance. <b>2017</b> , 160, 233-240	71
604	Ternary Polymer Solar Cells based on Two Acceptors and One Donor for Achieving 12.2% Efficiency. <b>2017</b> , 29, 1604059	314
603	Mapping Polymer Donors toward High-Efficiency Fullerene Free Organic Solar Cells. <b>2017</b> , 29, 1604155	335
602	Ternary solar cells with a mixed face-on and edge-on orientation enable an unprecedented efficiency of 12.1%. <b>2017</b> , 10, 258-265	273
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600	Organic and perovskite solar cells: Working principles, materials and interfaces. <b>2017</b> , 488, 373-389	121
599	Solution-processed black phosphorus/PCBM hybrid heterojunctions for solar cells. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 8280-8286	13 46
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596	Rational design of Ebridges for ambipolar DPP-RH-based small molecules in organic photovoltaic cells. <b>2017</b> , 45, 338-348	16
595	High efficiency polymer solar cells based on alkylthio substituted benzothiadiazole-quaterthiophene alternating conjugated polymers. <b>2017</b> , 40, 36-41	15
594	Toward High-Temperature Stability of PTB7-Based Bulk Heterojunction Solar Cells: Impact of Fullerene Size and Solvent Additive. <b>2017</b> , 7, 1601486	46
593	Carbon Nanotubes in Thin-Film Solar Cells. <b>2017</b> , 7, 1601205	17
592	Design of charge transporting grids for efficient ITO-free flexible up-scaled organic photovoltaics. <b>2017</b> , 1, 304-309	16

591	Novel donor-acceptor type conjugated polymers based on quinoxalino[6,5-f]quinoxaline for photovoltaic applications. <b>2017</b> , 1, 499-506		24
590	Structure and design of polymers for durable, stretchable organic electronics. <b>2017</b> , 49, 41-60		55
589	Development of novel naphtho[1,2-b:5,6-b']dithiophene and thieno[3,4-c]pyrrole-4,6-dione based small molecules for bulk-heterojunction organic solar cells. <b>2017</b> , 137, 117-125		4
588	Vertically aligned ZnCdS nanowire arrays/P3HT heterojunctions for solar cell applications. <b>2017</b> , 487, 73-79		11
587	Introduction. <b>2017</b> , 1-23		1
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584	Effect of Molecular Orientation of Donor Polymers on Charge Generation and Photovoltaic Properties in Bulk Heterojunction All-Polymer Solar Cells. <b>2017</b> , 7, 1601365		48
583	Improved performance and stability of inverted polymer solar cells with ammonium heptamolybdate acted as hole extraction layers via thermal annealing method. <b>2017</b> , 181, 310-314		4
582	A wide temperature tolerance, solution-processed MoO <sub>x</sub> interface layer for efficient and stable organic solar cells. <b>2017</b> , 159, 136-142		27
581	Double acceptor donor-acceptor alternating conjugated polymers containing cyclopentadithiophene, benzothiadiazole and thienopyrroledione: toward subtractive color organic photovoltaics. <b>2017</b> , 49, 113-122		20
580	Comparative analysis of different structures of photovoltaic cell based on organic materials. <b>2017</b> ,		1
579	Solar Cells. <b>2017</b> , 145-237		
578	Printed Electronics Solutions-Based Processes with Flexible Glass. <b>2017</b> , 181-209		2
577	Acceptor Side-Chain Effects on the Excited State Dynamics of Two-Dimensional-Like Conjugated Copolymers in Solution. <b>2017</b> , 22,		
576	Bulk Heterojunction Solar Cells Based on Blends of Conjugated Polymers with II?VI and IV?VI Inorganic Semiconductor Quantum Dots. <b>2017</b> , 9,		33
575	Non-Fullerene Acceptor-Based Solar Cells: From Structural Design to Interface Charge Separation and Charge Transport. <b>2017</b> , 9,		18
574	Knowledge Domain and Emerging Trends in Organic Photovoltaic Technology: A Scientometric Review Based on CiteSpace Analysis. <b>2017</b> , 5, 67		41

573	Indacenodithienothiophene-Based Ternary Organic Solar Cells. <b>2017</b> , 4,		6
572	Efficient Inverted ITO-Free Organic Solar Cells Based on Transparent Silver Electrode with Aqueous Solution-Processed ZnO Interlayer. <b>2017</b> , 2017, 1-6		
571	Tandem polymer solar cells: simulation and optimization through a multiscale scheme. <b>2017</b> , 8, 123-133		5
570	Introduction. <b>2017</b> , 1-8		1
569	Naturally-derived biopolymer nanocomposites: Interfacial design, properties and emerging applications. <b>2018</b> , 125, 1-41		130
568	Pentacene-assisted planarization of photo-active layers for high performance tandem organic photovoltaics. <b>2018</b> , 163, 434-442		1
567	Hybrid Donor-Acceptor Polymer Particles with Amplified Energy Transfer for Detection and On-Demand Treatment of Breast Cancer. <b>2018</b> , 10, 7697-7703		14
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564	Rationalizing the Regioselectivity of the Diels-Alder Biscycloaddition of Fullerenes. <b>2018</b> , 83, 3285-3292		10
563	Enhancing the Performance of Polymer Solar Cells via Core Engineering of NIR-Absorbing Electron Acceptors. <b>2018</b> , 30, e1706571		255
562	Engineering the interconnecting layer for efficient inverted tandem polymer solar cells with absorption complementary fullerene and nonfullerene acceptors. <b>2018</b> , 180, 1-9		23
561	Fabrication of flexible indium tin oxide-free polymer solar cells with silver nanowire transparent electrode. <b>2018</b> , 57, 03DD01		5
560	Strategies for high performance perovskite/crystalline silicon four-terminal tandem solar cells. <b>2018</b> , 179, 36-44		23
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530	Interfacial engineering of printable bottom back metal electrodes for full-solution processed flexible organic solar cells. <b>2018</b> , 39, 014002		8
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526	Polymer Solar Cells with 90% External Quantum Efficiency Featuring an Ideal Light- and Charge-Manipulation Layer. <b>2018</b> , 30, e1706083		66
525	Highly efficient polymer solar cells with a thienopyrroledione and benzodithiophene containing planar random copolymer. <b>2018</b> , 9, 1216-1222		15
524	Highly Efficient Tandem Organic Solar Cell Enabled by Environmentally Friendly Solvent Processed Polymeric Interconnecting Layer. <b>2018</b> , 8, 1703180		36
523	Enhanced power conversion efficiency in iridium complex-based terpolymers for polymer solar cells. <b>2018</b> , 2,		56
522	Organic solar cells based on non-fullerene acceptors. <b>2018</b> , 17, 119-128		1743
521	Improved Tandem All-Polymer Solar Cells Performance by Using Spectrally Matched Subcells. <b>2018</b> , 8, 1703291		49
520	Fabrication of tunable aluminum nanodisk arrays via a self-assembly nanoparticle template method and their applications for performance enhancement in organic photovoltaics. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 3649-3658	13	7



519	Morphological consequences of ligand exchange in quantum dot - Polymer solar cells. <b>2018</b> , 54, 119-125		8
518	Investigating coating method induced vertical phase distribution in polymer-fullerene organic solar cells. <b>2018</b> , 179, 241-246		6
517	Fundamentals of bulk heterojunction organic solar cells: An overview of stability/degradation issues and strategies for improvement. <b>2018</b> , 84, 43-53		121
516	High-efficiency and air stable fullerene-free ternary organic solar cells. <b>2018</b> , 45, 177-183		169
515	Organic solar cells on Al electroded opaque substrates: Assessing the need of ZnO as electron transport layer. <b>2018</b> , 160, 396-403		10
514	Design and Synthesis of a Novel n-Type Polymer Based on Asymmetric Rylene Diimide for the Application in All-Polymer Solar Cells. <b>2018</b> , 39, e1700715		20
513	Efficient Red/Green/Blue Tandem Quantum-Dot Light-Emitting Diodes with External Quantum Efficiency Exceeding 21. <b>2018</b> , 12, 697-704		176
512	A silanol-functionalized polyoxometalate with excellent electron transfer mediating behavior to ZnO and TiO <sub>2</sub> cathode interlayers for highly efficient and extremely stable polymer solar cells. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 1459-1469	7.1	19
511	Interplay of Interfacial Layers and Blend Composition To Reduce Thermal Degradation of Polymer Solar Cells at High Temperature. <b>2018</b> , 10, 3874-3884		6
510	Selenium and Tellurium Containing Conjugated Polymers. <b>2018</b> , 451-482		2
509	High-Performance Organic Bulk-Heterojunction Solar Cells Based on Multiple-Donor or Multiple-Acceptor Components. <b>2018</b> , 30, 1705706		124
508	Design of donor-acceptor copolymers for organic photovoltaic materials: a computational study. <b>2018</b> , 20, 3581-3591		30
507	Amphiphilic Diblock Fullerene Derivatives as Cathode Interfacial Layers for Organic Solar Cells. <b>2018</b> , 10, 2649-2657		18
506	Novel titanium nitride halide TiNX (X = F, Cl, Br) monolayers: potential materials for highly efficient excitonic solar cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 2073-2080	13	51
505	Electron transport layer-free polymer solar cells show 40% higher efficiency than using ZnO transparent cathode. <b>2018</b> , 29, 11296-11305		5
504	Ir(III)-Catalyzed Oxidative Annulation of Phenylglyoxylic Acids with Benzo[b]thiophenes. <b>2018</b> , 20, 3001-3005		18
503	Epitaxial-Growth-Induced Junction Welding of Silver Nanowire Network Electrodes. <b>2018</b> , 12, 4894-4902		41
502	2D/2D vanadyl phosphate (VP) on reduced graphene oxide as a hole transporting layer for efficient organic solar cells. <b>2018</b> , 59, 92-98		11

501	Well-aligned Vertically Oriented ZnO Nanorod Arrays and their Application in Inverted Small Molecule Solar Cells. <b>2018</b> ,		3
500	Near-infrared absorbing non-fullerene acceptors with selenophene as bridges for efficient organic solar cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 8059-8067	13	79
499	Over 14% Efficiency in Polymer Solar Cells Enabled by a Chlorinated Polymer Donor. <b>2018</b> , 30, e1800868		832
498	A High-Efficiency Organic Solar Cell Enabled by the Strong Intramolecular Electron Push-Pull Effect of the Nonfullerene Acceptor. <b>2018</b> , 30, e1707170		295
497	Efficient removal of methyl orange using Cu <sub>2</sub> O as a dual function catalyst. <b>2018</b> , 444, 559-568		33
496	Efficient Bifacial Semitransparent Perovskite Solar Cells Using Ag/VO as Transparent Anodes. <b>2018</b> , 10, 12731-12739		39
495	Low bandgap diketopyrrolopyrrole-based polymers with an asymmetric unit of fluoridated phenylene-thiophene for efficient polymer solar cells. <i>Synthetic Metals</i> , <b>2018</b> , 240, 30-36	3.6	10
494	Enhanced photovoltaic performance of polymer solar cells through design of a fused dithienosilolodithiophene structure with an enlarged conjugated system. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 4208-4216	7.1	10
493	Highly crystalline new benzodithiopheneBenzothiadiazole copolymer for efficient ternary polymer solar cells with an energy conversion efficiency of over 10%. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 4281-4289	7.1	21
492	Extended Linear Acceptors with an Indacenodithiophene Core. <b>2018</b> , 63-85		2
491	Tackling Energy Loss for High-Efficiency Organic Solar Cells with Integrated Multiple Strategies. <b>2018</b> , 30, e1706816		75
490	The role of hydrogen bonding in bulk-heterojunction (BHJ) solar cells: A review. <b>2018</b> , 182, 1-13		26
489	PEDOT:PSS Modification by blending graphene oxide to improve the efficiency of organic solar cells. <b>2018</b> , 39, 3066-3072		7
488	Two new tercopolymers incorporating electron-rich benzodithiophene and electron-accepting pyrrolo[3,4-c]pyrrole-1,3-dione and difluorobenzothiadiazole derivatives for polymer solar cells. <b>2018</b> , 75, 239-253		3
487	Conjugated polymers based on 1,8-naphthalene monoimide with high electron mobility. <b>2018</b> , 56, 276-281		6
486	A star-shaped photovoltaic organic molecule based on 1,3-diethyl-2-thiobarbituric acid reaches a power conversion efficiency of 3.07%. <b>2018</b> , 645, 129-133		3
485	Benzothiadiazole Versus Thiophene: Influence of the Auxiliary Acceptor on the Photovoltaic Properties of Donor-Acceptor-Based Copolymers. <b>2018</b> , 39, 1700547		5
484	Development of antimony sulfideBelenide Sb <sub>2</sub> (S, Se) <sub>3</sub> -based solar cells. <b>2018</b> , 27, 713-721		100

483	The electronic structures and optical properties of fullerene derivatives for organic solar cells: The number and size effects of fullerene-cage. <b>2018</b> , 204, 95-104	12
482	Processability Issue in Inverted Organic Solar Cells. <b>2018</b> , 405-420	1
481	High-Performance Wide Bandgap Copolymers Using an EDOT Modified Benzodithiophene Donor Block with 10.11% Efficiency. <b>2018</b> , 8, 1602773	29
480	Semi-transparent polymer solar cells with all-copper nanowire electrodes. <b>2018</b> , 11, 1956-1966	19
479	Fully Solution-Processed TCO-Free Semitransparent Perovskite Solar Cells for Tandem and Flexible Applications. <b>2018</b> , 8, 1701569	67
478	Secondary electron spectra of semi-crystalline polymers [A novel polymer characterisation tool?] <b>2018</b> , 222, 95-105	6
477	Polymer Solar Cells. <b>2018</b> , 45-108	1
476	Broadening the Photoresponse to Near-Infrared Region by Cooperating Fullerene and Nonfullerene Acceptors for High Performance Ternary Polymer Solar Cells. <b>2018</b> , 39, 1700492	10
475	Advances in Non-Fullerene Acceptor Based Ternary Organic Solar Cells. <b>2018</b> , 2, 1700158	79
474	Solution Processed Inverted Organic Bulk Heterojunction Solar Cells Under Ambient Air-Atmosphere. <b>2018</b> , 28, 1029-1036	14
473	Environmentally Friendly Solvent-Processed Organic Solar Cells that are Highly Efficient and Adaptable for the Blade-Coating Method. <b>2018</b> , 30, 1704837	138
472	Overcoming Fill Factor Reduction in Ternary Polymer Solar Cells by Matching the Highest Occupied Molecular Orbital Energy Levels of Donor Polymers. <b>2018</b> , 8, 1702251	41
471	Effect of silver nanospheres embedded in buffer layer based on organic solar cells. <b>2018</b> , 29, 1349-1355	6
470	Host-Guest Molecular Crystals of Diamino-4,4-bithiazole and Dynamic Molecular Motions via Guest Sorption. <b>2018</b> , 18, 286-296	9
469	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
468	Ternary Nonfullerene Polymer Solar Cells with 12.16% Efficiency by Introducing One Acceptor with Cascading Energy Level and Complementary Absorption. <b>2018</b> , 30, 1703005	156
467	Thermal Stability of Bulk Heterojunction Photovoltaics Revealed by Electrical Scanning Probe Microscopy. <b>2018</b> ,	
466	Junction Welding Techniques for Metal Nanowire Network Electrodes. <b>2018</b> , 26, 1066-1073	10

465	Design, Electrical, and Optical Modelling of Bulk Heterojunction Polymer Solar Cell. <b>2018</b> , 2018, 1-6		
464	Rational design of near-infrared dyes based on boron dipyrromethene derivatives for application in organic solar cells.. <b>2018</b> , 8, 33659-33665		5
463	Improvement in interlayer structure of p-i-n-type organic solar cells with the use of fullerene-linked tetrabenzoporphyrin as additive.. <b>2018</b> , 8, 35237-35245		2
462	Terahertz short-range mobilities in neat and intermixed regions of polymer:fullerene blends with controlled phase morphology. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 22301-22309	13	8
461	A donor-acceptor semiconducting polymer with a random configuration for efficient, green-solvent-processable flexible solar cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 24580-24587	13	16
460	Achieving efficient thick active layer and large area ternary polymer solar cells by incorporating a new fused heptacyclic non-fullerene acceptor. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 20313-20326	13	30
459	Suzuki-Miyaura Micellar One-Pot Synthesis of Symmetrical and Unsymmetrical 4,7-Diaryl-5,6-difluoro-2,1,3-benzothiadiazole Luminescent Derivatives in Water and under Air. <b>2018</b> , 83, 15029-15042		22
458	High Efficiency Non-fullerene Organic Tandem Photovoltaics Based on Ternary Blend Subcells. <b>2018</b> , 18, 7977-7984		25
457	Overcoming efficiency and stability limits in water-processing nanoparticulate organic photovoltaics by minimizing microstructure defects. <i>Nature Communications</i> , <b>2018</b> , 9, 5335	17.4	57
456	Halide Perovskite Tandem Solar Cells. <b>2018</b> , 183-197		
455	Manufacturing of All Inkjet-Printed Organic Photovoltaic Cell Arrays and Evaluating their Suitability for Flexible Electronics. <i>Micromachines</i> , <b>2018</b> , 9,	3.3	12
454	Palladium-catalyzed direct allylation of fluorinated benzothiadiazoles with allyl chlorides. <b>2018</b> , 74, 6329-6334		0
453	Fluorobenzotriazole-Based Medium-Bandgap Conjugated D $\pi$ A Copolymers for Applications to Fullerene-Based and Nonfullerene Polymer Solar Cells. <b>2018</b> , 56, 2330-2343		5
452	Exceeding 14% Efficiency for Solution-Processed Tandem Organic Solar Cells Combining Fullerene- and Nonfullerene-Based Subcells with Complementary Absorption. <b>2018</b> , 3, 2566-2572		39
451	Roll-to-roll redox-welding and embedding for silver nanowire network electrodes. <b>2018</b> , 10, 18627-18634		12
450	Direct arylation polymerization toward efficient synthesis of benzo[1,2-c:4,5-c'] dithiophene-4,8-dione based donor-acceptor alternating copolymers for organic optoelectronic applications. <b>2018</b> , 56, 2554-2564		2
449	Dithienonaphthalene-Based Non-fullerene Acceptors With Different Bandgaps for Organic Solar Cells. <b>2018</b> , 6, 427		5
448	Toward Efficient Carbon-Dots-Based Electron-Extraction Layer Through Surface Charge Engineering. <b>2018</b> , 10, 40255-40264		9

447	Effect of External Electric Field on the Ordered Structure of Molecular Chains and Hole Mobility in Regioregular Poly(3-hexylthiophene) with Different Molecular Weights. <b>2018</b> , 34, 13871-13881		6
446	Development of a phenanthrodithiophene-difluorobenzoxadiazole copolymer exhibiting high open-circuit voltage in organic solar cells. <b>2018</b> , 56, 2646-2655		2
445	Modifying the morphology via employing rigid phenyl side chains achieves efficient nonfullerene polymer solar cells. <b>2018</b> , 56, 2762-2770		6
444	Charge carrier transport in poly(p-phenylene vinylene):methanofullerene photovoltaic blends. <b>2018</b> , 124, 1		
443	Design Principles for Nanoparticle Plasmon-Enhanced Organic Solar Cells. <b>2018</b> , 13, 211		21
442	Bifunctional donor polymers bearing amino pendant groups for efficient cathode interlayer-free polymer solar cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 19828-19833	13	4
441	Multiphoton Microscopy of $\pi$ -Conjugated Copolymers and Copolymer/Fullerene Blends for Organic Photovoltaic Applications. <b>2018</b> , 10, 31813-31823		4
440	Elucidating Aggregation Pathways in the Donor-Acceptor Type Molecules p-DTS(FBTTh) and p-SIDT(FBTTh). <b>2018</b> , 122, 9191-9201		5
439	Highly Selective Palladium-Catalyzed Arene C-H Acyloxylation with Benzothiadiazole as a Modifiable Directing Group. <b>2018</b> , 20, 5692-5695		19
438	Efficient inverted polymer solar cells via pyridine-based organic molecules as interfacial modification layer on sol-gel zinc oxide surface. <b>2018</b> , 63, 93-97		4
437	An extremely narrow band gap conjugated polymer for photovoltaic devices covering UV to near-infrared light. <b>2018</b> , 158, 319-325		8
436	Excitonic Absorption Lines of PbS in a CdS/PbS Composite. <b>2018</b> , 44, 309-312		
435	Plasmonically-enhanced absorption in organic solar cells with metal nanostructures. <b>2018</b> ,		0
434	Panchromatic ternary organic solar cells with 9.44% efficiency incorporating porphyrin-based donors. <b>2018</b> , 10, 12100-12108		13
433	Five-minute synthesis of silver nanowires and their roll-to-roll processing for large-area organic light emitting diodes. <b>2018</b> , 10, 12087-12092		31
432	Identifying Molecular Orientation in a Bulk Heterojunction Film by Infrared Reflection Absorption Spectroscopy. <b>2018</b> , 3, 5678-5684		9
431	Ternary non-fullerene polymer solar cells with an efficiency of 11.6% by simultaneously optimizing photon harvesting and phase separation. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 11751-11758	13	29
430	High-Efficiency Ternary Polymer Solar Cells Based on Intense FRET Energy Transfer Process. <b>2018</b> , 2, 1800101		29

429	Adjusted photovoltaic performance of tetrafluorobenzene-based small molecules by tailoring with different arm of acceptor units. <b>2018</b> , 158, 402-411		9
428	Organic tandem solar cells: How impedance analyses can improve the quality of external quantum efficiency measurements. <b>2018</b> , 26, 763-777		
427	Eliminating light soaking effect of inverted polymer solar cells functionalized with a conjugated macroelectrolyte electron-collecting interlayer. <b>2018</b> , 281, 218-226		2
426	A simple synthesis of transparent and highly conducting p-type Cu Al S nanocomposite thin films as the hole transporting layer for organic solar cells.. <b>2018</b> , 8, 16887-16896		3
425	Employing Pentacene To Balance the Charge Transport in Inverted Organic Solar Cells. <b>2018</b> , 122, 17110-17117		5
424	Quantitative Determination of Contribution by Enhanced Local Electric Field, Antenna-Amplified Light Scattering, and Surface Energy Transfer to the Performance of Plasmonic Organic Solar Cells. <b>2018</b> , 14, e1800870		16
423	From PCBM-Polymer to Low-Cost and Thermally Stable C60/C70-Polymer Solar Cells: The Role of Molecular Structure, Crystallinity, and Morphology Control. <b>2018</b> , 10, 24037-24045		9
422	Improved light harvesting efficiency of semitransparent organic solar cells enabled by broadband/omnidirectional subwavelength antireflective architectures. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 14769-14779	13	29
421	Effect of Donor-Acceptor Vertical Composition Profile on Performance of Organic Bulk Heterojunction Solar Cells. <b>2018</b> , 8, 9574		15
420	Controlling Molecular Weight to Achieve High-Efficient Polymer Solar Cells With Unprecedented Fill Factor of 79% Based on Non-Fullerene Small Molecule Acceptor. <b>2018</b> , 2, 1800129		14
419	Organic Solar Cells. <b>2018</b> , 567-597		3
418	Graphene Oxide-Like Materials in Organic and Perovskite Solar Cells. <b>2018</b> , 357-394		5
417	Organic synaptic devices for neuromorphic systems. <b>2018</b> , 51, 314004		66
416	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%. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 16529-16536	12	21
415	Container Compounds. <b>2018</b> , 31-95		
414	Fluorination Triggered New Small Molecule Donor Materials for Efficient As-Cast Organic Solar Cells. <b>2018</b> , 14, e1801542		20
413	Synergistic Effects of Fluorination and Alkylthiolation on the Photovoltaic Performance of the Poly(benzodithiophene-benzothiadiazole) Copolymers. <b>2018</b> , 1, 4686-4694		8
412	Influence of perfluorinated ionomer in PEDOT:PSS on the rectification and degradation of organic photovoltaic cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 16012-16028	13	19

411	Light Harvesting in Organic Solar cells. <b>2018</b> , 292-308		
410	New Extended Naphthalene Diimides for High-Performance n-Type Organic Semiconductors with NIR Absorption Properties. <b>2018</b> , 7, 2279-2284		9
409	Effects of fused-ring regiochemistry on the properties and photovoltaic performance of n-type organic semiconductor acceptors. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 15933-15941	13	23
408	Tandem dual-functioning multiple-quantum-well diodes for a self-powered light source. <b>2018</b> , 43, 3710-3713		3
407	Efficient Polymer Solar Cells with Alcohol-Soluble Zirconium(IV) Isopropoxide Cathode Buffer Layer. <b>2018</b> , 11, 328		4
406	Flexible Organic Solar Cells. <b>2018</b> , 305-337		0
405	Synthesis of Trifluoromethylated Quinoxaline-Based Polymers for Photovoltaic Applications. <b>2018</b> , 39, e1800260		5
404	Recent Developments in Graphene/Polymer Nanocomposites for Application in Polymer Solar Cells. <b>2018</b> , 10,		76
403	Polymeric Materials for Conversion of Electromagnetic Waves from the Sun to Electric Power. <b>2018</b> , 10,		6
402	Printable MoO Anode Interlayers for Organic Solar Cells. <b>2018</b> , 30, e1801718		50
401	A Highly Efficient Non-Fullerene Organic Solar Cell with a Fill Factor over 0.80 Enabled by a Fine-Tuned Hole-Transporting Layer. <b>2018</b> , 30, e1801801		299
400	Concentrated photovoltaic: A review of thermal aspects, challenges and opportunities. <b>2018</b> , 94, 835-852		55
399	Effect of Substituents of ThienyleneVinyleneThienylene-Based Conjugated Polymer Donors on the Performance of Fullerene and Nonfullerene Solar Cells. <b>2018</b> , 122, 16613-16623		9
398	Nonfullerene Acceptors for Semitransparent Organic Solar Cells. <b>2018</b> , 8, 1800002		123
397	Organic Single-Crystalline Donor-Acceptor Heterojunctions with Ambipolar Band-Like Charge Transport for Photovoltaics. <b>2018</b> , 5, 1800336		15
396	Subtle Side-Chain Engineering of Random Terpolymers for High-Performance Organic Solar Cells. <b>2018</b> , 30, 3294-3300		50
395	Graphene- and Carbon-Nanotube-Based Transparent Electrodes for Semitransparent Solar Cells. <b>2018</b> , 11,		25
394	Plasmonic effect of different nanoarchitectures in the efficiency enhancement of polymer based solar cells: A review. <b>2018</b> , 173, 905-919		25



393	Poly(o-phenylenediamine) thin film for organic solar cell applications. <b>2018</b> , 22, 3673-3687		43
392	Chemical optimization of benzo-dithiophene and benzo-[2,1,3]thiadiazole copolymers for the high performance, green-solvent-processed polymer solar cells. <b>2018</b> , 173, 1043-1050		2
391	Effects of conjugated bridges on the photovoltaic properties of ortho-functionalized perylene diimides for non-fullerene polymer solar cells. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 13171-13178	7.1	9
390	Recent advances in electron acceptors with ladder-type backbone for organic solar cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 17256-17287	13	45
389	Organic and solution-processed tandem solar cells with 17.3% efficiency. <b>2018</b> , 361, 1094-1098		1905
388	The influence of chloride and hydrogen sulfate anions in two polymerised ionic liquids based on the poly(1-(hydroxyethyl)-3-vinylimidazolium cation, synthesis, thermal and vibrational studies. <b>2018</b> , 108, 138-149		5
387	Functionalized Thermoplastic Polyurethane as Hole Conductor for Quantum Dot-Sensitized Solar Cell. <b>2018</b> , 1, 4641-4650		13
386	Two Novel Small Molecule Donors and the Applications in Bulk-Heterojunction Solar Cells. <b>2018</b> , 6, 260		9
385	BODIPY-based panchromatic chromophore for efficient organic solar cell. <b>2018</b> , 61, 215-222		19
384	Eliminating the solvent blocking requirement of interconnection layers in polymer tandem solar cells by thin-film transfer technique. <b>2018</b> , 10, 12588-12594		8
383	Time-domain transient fluorescence spectroscopy for thermal characterization of polymers. <b>2018</b> , 138, 403-408		2
382	Organic Flexible Electronics. <b>2018</b> , 2, 1800070		106
381	Fully Solution-Processed Tandem White Quantum-Dot Light-Emitting Diode with an External Quantum Efficiency Exceeding 25. <b>2018</b> , 12, 6040-6049		61
380	Metal Oxide-Based Charge Extraction and Recombination Layers for Organic Solar Cells. <b>2018</b> , 159-181		1
379	High-efficiency flexible III-V photovoltaic solar cells based on single-crystal-like thin films directly grown on metallic tapes. <b>2019</b> , 27, 30-36		17
378	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
377	High-Performance Polymer Solar Cells Achieved by Introducing Side-Chain Heteroatom on Small-Molecule Electron Acceptor. <b>2019</b> , 40, e1800393		29
376	Efficient indoor p-i-n hybrid perovskite solar cells using low temperature solution processed NiO as hole extraction layers. <b>2019</b> , 201, 110071		22

375	Architectural design and promises of carbon materials for energy conversion and storage: in laboratory and industry. <b>2019</b> , 25-61		3
374	Synthesis of a thiophene derivative and its effects as an additive on the performance of solar cells. <b>2019</b> , 678, 121-130		1
373	Nanoimaging of Organic Charge Retention Effects: Implications for Nonvolatile Memory, Neuromorphic Computing, and High Dielectric Breakdown Devices. <b>2019</b> , 2, 4711-4716		2
372	Energy level gamut-a wide-angle lens to look at photoelectronic properties of diketopyrrolopyrrole-benzothiadiazole-based small molecules. <b>2019</b> , 25, 224		
371	Designing dithienothiophene (DTT)-based donor materials with efficient photovoltaic parameters for organic solar cells. <b>2019</b> , 25, 222		29
370	Highly polarized absorption and emission from polymer-stabilized smectic guest-host systems. <b>2019</b> , 46, 1574-1583		4
369	Investigation of Fluorine Atom Effect on Benzothiadiazole Acceptor Unit in Donor Acceptor Donor Systems. <b>2019</b> , 166, G141-G147		4
368	Star-Shaped Non-Fullerene Small Acceptors for Organic Solar Cells. <b>2019</b> , 12, 4570-4600		20
367	Field emission scanning electron microscopy (FESEM): an easy way to characterize morphologies of P3HT:PCBM coated and printed solar cells. <b>2019</b> , 4, 034001		
366	Improved performance of polymer solar cells by doping with Bi <sub>2</sub> O <sub>2</sub> S nanocrystals. <b>2019</b> , 200, 110030		16
365	Recent progress in fundamental understanding of halide perovskite semiconductors. <b>2019</b> , 106, 100580		69
364	Dual-functional cathode buffer layer for power conversion efficiency enhancement of bulk-heterojunction solar cells. <i>Synthetic Metals</i> , <b>2019</b> , 255, 116112	3.6	4
363	Terpolymer Strategy toward High-Efficiency Polymer Solar Cells: Integrating Symmetric Benzodithiophene and Asymmetrical Thieno[2,3-f]benzofuran Segments. <b>2019</b> , 31, 6163-6173		39
362	Ladder-type high gap conjugated polymers based on indacenodithieno[3,2-b]thiophene and bithiazole for organic photovoltaics. <b>2019</b> , 74, 211-217		3
361	Side-chain engineering of wide-bandgap polymers based on benzo[1,2-b:4,5-b']dithiophene and [2,2'-bithiophene]-4,4'-dicarboxylate for fullerene-free organic solar cells. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 9581-9590	7.1	6
360	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. <b>2019</b> , 11, 42412-42419		7
359	Improving Performance of Nonfullerene Organic Solar Cells over 13% by Employing Silver Nanowires-Doped PEDOT:PSS Composite Interface. <b>2019</b> , 11, 42447-42454		16
358	Alkyl Chain Tuning of Small Molecule Acceptors for Efficient Organic Solar Cells. <b>2019</b> , 3, 3020-3033		504

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