Shinuk Cho

List of Publications by Year
in descending order

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170 papers	12,574 citations	47 h-index	109 g-index
		47006	24982
172 all docs	172 docs citations	172 times ranked	12464 citing authors

#	Article	IF	Citations
1	Nonâ€Fullereneâ€Based Inverted Organic Photovoltaic Device with <scp>Longâ€Term</scp> Stability. Energy and Environmental Materials, 2023, 6, .	12.8	5
2	Importance of Highâ€Electron Mobility in Polymer Acceptors for Efficient Allâ€Polymer Solar Cells: Combined Engineering of Backbone Building Unit and Regioregularity. Advanced Functional Materials, 2022, 32, 2108508.	14.9	41
3	Conformal quantum dotâ€“SnO ₂ layers as electron transporters for efficient perovskite solar cells. Science, 2022, 375, 302-306.	12.6	872
4	Revisiting carbazole-based polymer donors for efficient and thermally stable polymer solar cells: structural utility of coplanar ï€-bridged spacers. Journal of Materials Chemistry A, 2022, 10, 9408-9418.	10.3	12
5	Influence of post-annealing on Mn-doped (K0.5Na0.5)NbO3 thin films. Journal of the Korean Physical Society, 2022, 80, 628-633.	0.7	0
6	Effect of the Selective Halogenation of Small Molecule Acceptors on the Blend Morphology and Voltage Loss of Highâ€Performance Solar Cells. Advanced Functional Materials, 2022, 32, .	14.9	27
7	Sequentially Fluorinated Polythiophene Donors for Highâ€Performance Organic Solar Cells with 16.4% Efficiency. Advanced Energy Materials, 2022, 12, .	19.5	22
8	Cu/graphene hybrid transparent conducting electrodes for organic photovoltaic devices. Carbon, 2021, 171, 341-349.	10.3	33
9	Improved exciton dissociation efficiency by a carbon-quantum-dot doped workfunction modifying layer in polymer solar cells. Current Applied Physics, 2021, 21, 140-146.	2.4	7
10	Importance of interface engineering between the hole transport layer and the indium-tin-oxide electrode for highly efficient polymer solar cells. Journal of Materials Chemistry A, 2021, 9, 15394-15403.	10.3	10
11	Folic Acid Functionalized Carbon Dot/Polypyrrole Nanoparticles for Specific Bioimaging and Photothermal Therapy. ACS Applied Bio Materials, 2021, 4, 3453-3461.	4.6	21
12	Enhanced flexible optoelectronic devices by controlling the wettability of an organic bifacial interlayer. Communications Materials, 2021, 2, .	6.9	13
13	Importance of Terminal Group Pairing of Polymer Donor and Smallâ€Molecule Acceptor in Optimizing Blend Morphology and Voltage Loss of Highâ€Performance Solar Cells. Advanced Functional Materials, 2021, 31, 2100870.	14.9	34
14	Inverted Polymer Solar Cells with Annealingâ€Free Solutionâ€Processable NiO. Small, 2021, 17, e2101729.	10.0	22
15	Planar Organic Bilayer Heterojunctions Fabricated on Water with Ultrafast Donorâ€toâ€Acceptor Charge Transfer. Solar Rrl, 2021, 5, 2100326.	5.8	8
16	Impact of symmetry-breaking of non-fullerene acceptors for efficient and stable organic solar cells. Chemical Science, 2021, 12, 14083-14097.	7.4	27
17	Large-area epitaxial CdTe(100) films grown on GaAs(100) substrates: MBE growth and substrate temperature effect. Journal of the Korean Physical Society, 2021, 79, 1057-1062.	0.7	0
18	Effect of an Al-doped ZnO electron transport layer on the efficiency of inverted bulk heterojunction solar cells. Current Applied Physics, 2020, 20, 172-177.	2.4	12

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19	Improved Efficiency of Perovskite Solar Cells Using a Nitrogen-Doped Graphene-Oxide-Treated Tin Oxide Layer. ACS Applied Materials & Interfaces, 2020, 12, 2417-2423.	8.0	40
20	PbS-Based Quantum Dot Solar Cells with Engineered Ï€-Conjugated Polymers Achieve 13% Efficiency. ACS Energy Letters, 2020, 5, 3452-3460.	17.4	32
21	Elimination of Charge Transfer Energy Loss by Introducing a Small-Molecule Secondary Donor into Fullerene-Based Polymer Solar Cells. ACS Applied Energy Materials, 2020, 3, 8375-8382.	5.1	8
22	Effects on Photovoltaic Characteristics by Organic Bilayer- and Bulk-Heterojunctions: Energy Losses, Carrier Recombination and Generation. ACS Applied Materials & Interfaces, 2020, 12, 55945-55953.	8.0	14
23	17% Nonâ€Fullerene Organic Solar Cells with Annealingâ€Free Aqueous MoO_x. Advanced Science, 2020, 7, 2002395.	11.2	81
24	Importance of Optimal Crystallinity and Hole Mobility of BDTâ€Based Polymer Donor for Simultaneous Enhancements of V_{oc}, J_{sc}, and FF in Efficient Nonfullerene Organic Solar Cells. Advanced Functional Materials, 2020, 30, 2005787.	14.9	55
25	Multiply Charged Conjugated Polyelectrolytes as a Multifunctional Interlayer for Efficient and Scalable Perovskite Solar Cells. Advanced Materials, 2020, 32, e2002333.	21.0	48
26	Solution-processable ambipolar organic field-effect transistors with bilayer transport channels. Polymer Journal, 2020, 52, 581-588.	2.7	10
27	Highly Efficient and Stable Inverted Perovskite Solar Cell Obtained via Treatment by Semiconducting Chemical Additive. Advanced Materials, 2019, 31, e1805554.	21.0	134
28	The role of cation and anion dopant incorporated into a ZnO electron transporting layer for polymer bulk heterojunction solar cells. RSC Advances, 2019, 9, 37714-37723.	3.6	5
29	Enhanced ferroelectricity in perovskite oxysulfides. Physical Review Materials, 2019, 3, .	2.4	4
30	The effect of various solvent additives on the power conversion efficiency of polymer-polymer solar cells. Current Applied Physics, 2018, 18, 534-540.	2.4	11
31	Effect of emissive quantum cluster consisting of 22 Au atoms on the performance of semi-transparent plastic solar cells under low intensity illumination. Nano Energy, 2018, 48, 518-525.	16.0	12
32	Highly efficient and stable inverted perovskite solar cell employing PEDOT:GO composite layer as a hole transport layer. Scientific Reports, 2018, 8, 1070.	3.3	144
33	Carbazole and rhodanine based donor molecule with improved processability for high performance organic photovoltaics. Dyes and Pigments, 2018, 151, 272-278.	3.7	12
34	Highâ€Efficiency Polymer Homoâ€Tandem Solar Cells with Carbon Quantumâ€Dotâ€Doped Tunnel Junction Intermediate Layer. Advanced Energy Materials, 2018, 8, 1702165.	19.5	32
35	Ferroelectric seeds-induced phase evolution and large electrostrain under reduced poling field in bismuth-based composites. Ceramics International, 2018, 44, 13278-13285.	4.8	5
36	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. Polymer Bulletin, 2018, 75, 239-253.	3.3	3

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37	Semiâ€transparent plastic solar cell based on oxideâ€metalâ€oxide multilayer electrodes. Progress in Photovoltaics: Research and Applications, 2018, 26, 188-195.	8.1	36
38	Treating the Poly(3,4-ethylenedioxythiophene):Poly(styrenesulfonate) Surface with Hydroquinone Enhances the Performance of Polymer Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 41578-41585.	8.0	15
39	Surface potential mapping and n-type conductivity in organicâ€“inorganic lead iodide crystals. CrystEngComm, 2018, 20, 6551-6556.	2.6	8
40	Ultrasonic-Assisted Spin-Coating: Improved Junction by Enhanced Permeation of a Coating Material within Nanostructures. ACS Applied Materials & Interfaces, 2018, 10, 20025-20031.	8.0	2
41	11% Organic Photovoltaic Devices Based on PTB7â€Th: PC₇₁BM Photoactive Layers and Irradiationâ€Assisted ZnO Electron Transport Layers. Advanced Science, 2018, 5, 1700858.	11.2	42
42	Synthesis and Characterization of Cyclopentadithiophene and Thienothiophene-Based Polymers for Organic Thin-Film Transistors and Solar Cells. Macromolecular Research, 2018, 26, 934-941.	2.4	7
43	Water-resistant PEDOT:PSS hole transport layers by incorporating a photo-crosslinking agent for high-performance perovskite and polymer solar cells. Nanoscale, 2018, 10, 13187-13193.	5.6	37
44	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. Organic Electronics, 2017, 42, 34-41.	2.6	11
45	Stable organic-inorganic hybrid multilayered photoelectrochemical cells. Journal of Power Sources, 2017, 341, 411-418.	7.8	17
46	Polyelectrolytes: Improved Performance in nâ€Type Organic Fieldâ€Effect Transistors via Polyelectrolyteâ€Mediated Interfacial Doping (Adv. Electron. Mater. 10/2017). Advanced Electronic Materials, 2017, 3, .	5.1	0
47	Improved Performance in nâ€Type Organic Fieldâ€Effect Transistors via Polyelectrolyteâ€Mediated Interfacial Doping. Advanced Electronic Materials, 2017, 3, 1700184.	5.1	20
48	Optical and Scanning Probe Identification of Electronic Structure and Phases in CH₃NH₃PbBr₃ Crystal. Journal of Physical Chemistry C, 2017, 121, 21930-21934.	3.1	22
49	Efficient pyrrolo[3,4-c]pyrrole-1,3-dione-based wide band gap polymer for high-efficiency binary and ternary solar cells. Polymer, 2017, 125, 182-189.	3.8	15
50	Downward selfâ€polarization of leadâ€free (K_{0.5}Na_{0.5})(Mn_{0.005}Nb_{0.995})O₃ ferroelectric thin films on Nb:SrTiO₃ substrate. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1600235.	2.4	2
51	Solution-Processed Transparent Intermediate Layer for Organic Tandem Solar Cell Using Nitrogen-Doped Graphene Quantum Dots. Journal of Nanoscience and Nanotechnology, 2017, 17, 5686-5692.	0.9	5
52	Pyrrolo[3,4-c]pyrrole-1,3-dione Based Wide Band Gap Polymers for Polymer Solar Cells. Journal of Nanoscience and Nanotechnology, 2017, 17, 5556-5561.	0.9	4
53	High strain response in ternary Bi_{0.5}Na_{0.5}TiO₃â€“BaTiO₃â€“Bi(Mn_{0.5}Ti_{0.5})O₃ solid solutions. RSC Advances, 2016, 6, 63915-63921.	3.6	61
54	Imide-linked alkyl chain influence on the properties of pyrrole-based imide-functionalized polymers containing pyrrolo[3,4-c]pyrrole-1,3(2H,5H)-dione and benzodithiophene units for polymer solar cells. Synthetic Metals, 2016, 220, 34-40.	3.9	4

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55	Property modulation of ternary copolymer via the diverse arrangements of two different repeating units for polymer solar cells and thin film transistors. Polymer, 2016, 95, 18-25.	3.8	7
56	Benzodithiophene based ternary copolymer containing covalently bonded pyrrolo[3,4-c]pyrrole-1,3-dione and benzothiadiazole for efficient polymer solar cells utilizing high energy sunlight. Organic Electronics, 2016, 38, 283-291.	2.6	8
57	Enhancement of recombination process using silver and graphene quantum dot embedded intermediate layer for efficient organic tandem cells. Scientific Reports, 2016, 6, 30327.	3.3	21
58	Effects of the incorporation of bithiophene instead of thiophene between the pyrrolo[3,4-c]pyrrole-1,3-dione units of a bis(pyrrolo[3,4-c]pyrrole-1,3-dione)-based polymer for polymer solar cells. New Journal of Chemistry, 2016, 40, 10153-10160.	2.8	10
59	Photocurrent Extraction Efficiency near Unity in a Thick Polymer Bulk Heterojunction. Advanced Functional Materials, 2016, 26, 3324-3330.	14.9	48
60	Solution-processible organic-inorganic hybrid bipolar field-effect transistors. Journal of the Korean Physical Society, 2016, 68, 889-895.	0.7	1
61	Effects of the incorporation of an additional pyrrolo[3,4-c]pyrrole-1,3-dione unit on the repeating unit of highly efficient large band gap polymers containing benzodithiophene and pyrrolo[3,4-c]pyrrole-1,3-dione derivatives. Organic Electronics, 2016, 30, 253-264.	2.6	14
62	Highly efficient inverted bulk-heterojunction solar cells with a gradiently-doped ZnO layer. Energy and Environmental Science, 2016, 9, 240-246.	30.8	93
63	Diketopyrrolopyrrole-based polymer with a semi-fluorinated side chain for high-performance organic thin-film transistors. RSC Advances, 2016, 6, 29164-29171.	3.6	13
64	Facile fabrication of thermally reduced graphene oxideâ€“platinum nanohybrids and their application in catalytic reduction and dye-sensitized solar cells. RSC Advances, 2016, 6, 1535-1541.	3.6	20
65	NiO nanoarrays of a few atoms thickness on 3D nickel network for enhanced pseudocapacitive electrode applications. Journal of Power Sources, 2016, 303, 363-371.	7.8	68
66	Simultaneous Improvement of Charge Generation and Extraction in Colloidal Quantum Dot Photovoltaics Through Optical Management. Advanced Functional Materials, 2015, 25, 6241-6249.	14.9	16
67	Enhanced efficiency of bilayer polymer solar cells by the solvent treatment method. Synthetic Metals, 2015, 199, 408-412.	3.9	16
68	Fabrication of Au/Graphene-Wrapped ZnO-Nanoparticle-Assembled Hollow Spheres with Effective Photoinduced Charge Transfer for Photocatalysis. ACS Applied Materials & Interfaces, 2015, 7, 3524-3531.	8.0	123
69	Effect of size and morphology of Au nanostructures on boosting performance of organic photovoltaic devices: Plasmonic and non-plasmonic effects. Current Applied Physics, 2015, 15, 1090-1094.	2.4	0
70	Property modulation of dithienosilole-based polymers via the incorporation of structural isomers of imide- and lactam-functionalized pyrrolo[3,4-c]pyrrole units for polymer solar cells. Polymer, 2015, 65, 243-252.	3.8	15
71	Emissive Nanoclusters Based on Subnanometerâ€Sized Au38 Cores for Boosting the Performance of Inverted Organic Photovoltaic Cells. Advanced Energy Materials, 2015, 5, 1500393.	19.5	31
72	Opto-electrical, charge transport and photovoltaic property modulation of 2,5-di(2-thienyl)pyrrole-based polymers via the incorporation of alkyl, aryl and cyano groups on the pyrrole unit. Polymer Bulletin, 2015, 72, 1899-1919.	3.3	3

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73	Enhanced performance in isoindigo based organic small molecule field-effect transistors through solvent additives. Journal of Materials Chemistry C, 2015, 3, 5951-5957.	5.5	16
74	Benzodithiopheneâ€Based Broad Absorbing Random Copolymers Incorporating Weak and Strong Electron Accepting Imide and Lactam Functionalized Pyrrolo[3,4â€c]pyrrole Derivatives for Polymer Solar Cells. Macromolecular Chemistry and Physics, 2015, 216, 996-1007.	2.2	12
75	Highâ€Performance Planar Perovskite Optoelectronic Devices: A Morphological and Interfacial Control by Polar Solvent Treatment. Advanced Materials, 2015, 27, 3492-3500.	21.0	205
76	Modulation of the properties of pyrrolo[3,4-c]pyrrole-1,4-dione based polymers containing 2,5-di(2-thienyl)pyrrole derivatives with different substitutions on the pyrrole unit. New Journal of Chemistry, 2015, 39, 4658-4669.	2.8	8
77	Photocurrent enhancement of an efficient large band gap polymer incorporating benzodithiophene and weak electron accepting pyrrolo[3,4â^'c]pyrroleâ^'1,3â^'dione derivatives via the insertion of a strong electron accepting thieno[3,4â^'b]thiophene unit. Polymer, 2015, 80, 95-103.	3.8	8
78	Tuning the physical properties of pyrrolo[3,4-c]pyrrole-1,3-dione-based highly efficient large band gap polymers via the chemical modification on the polymer backbone for polymer solar cells. RSC Advances, 2015, 5, 99217-99227.	3.6	12
79	High mobility solution-processed hybrid light emitting transistors. Applied Physics Letters, 2014, 105, 183302.	3.3	29
80	Pyrrolo[3,4-c]pyrrole-1,3-dione-based large band gap polymers containing benzodithiophene derivatives for highly efficient simple structured polymer solar cells. Journal of Polymer Science Part A, 2014, 52, n/a-n/a.	2.3	9
81	Amineâ€Based Polar Solvent Treatment for Highly Efficient Inverted Polymer Solar Cells. Advanced Materials, 2014, 26, 494-500.	21.0	159
82	Effect of backbone structures on photovoltaic properties in naphthodithiopheneâ€based copolymers. Journal of Polymer Science Part A, 2014, 52, 305-312.	2.3	5
83	The effects of P3HT crystallinity in bilayer structure organic solar cells. Current Applied Physics, 2014, 14, 1369-1373.	2.4	4
84	Reliability improvement of bulk-heterojunction organic solar cell by using reduced graphene oxide as hole-transport layer. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1873-1876.	1.8	5
85	Synthesis and characterization of an ester-terminated organic semiconductor for ethanol vapor detection. Organic Electronics, 2014, 15, 2277-2284.	2.6	6
86	Highly efficient imide functionalized pyrrolo[3,4-c]pyrrole-1,3-dione-based random copolymer containing thieno[3,4-c]pyrrole-4,6-dione and benzodithiophene for simple structured polymer solar cells. Journal of Materials Chemistry A, 2014, 2, 20126-20132.	10.3	40
87	Semicrystalline Dâ€“A Copolymers with Different Chain Curvature for Applications in Polymer Optoelectronic Devices. Macromolecules, 2014, 47, 1604-1612.	4.8	95
88	Effects of processing additive on bipolar field-effect transistors based on blends of poly(3-hexylthiophene) and fullerene bearing long alkyl tails. Organic Electronics, 2014, 15, 1002-1011.	2.6	5
89	Role of additional PCBM layer between ZnO and photoactive layers in inverted bulk-heterojunction solar cells. Scientific Reports, 2014, 4, 4306.	3.3	83
90	Enhanced Stability of Organic Photovoltaics by Additional ZnO Layers on Rippled ZnO Electron-collecting Layer using Atomic Layer Deposition. Bulletin of the Korean Chemical Society, 2014, 35, 353-356.	1.9	11

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91	Isoindigo-based small molecules for high-performance solution-processed organic photovoltaic devices: the electron donating effect of the donor group on photo-physical properties and device performance. Physical Chemistry Chemical Physics, 2013, 15, 15193.	2.8	41
92	Surface Modification of a ZnO Electron-Collecting Layer Using Atomic Layer Deposition to Fabricate High-Performing Inverted Organic Photovoltaics. ACS Applied Materials & Interfaces, 2013, 5, 8718-8723.	8.0	58
93	Naphtho[1,2-b:5,6-bâ€²]dithiophene-based copolymers for applications to polymer solar cells. Polymer Chemistry, 2013, 4, 2132.	3.9	24
94	Synthesis and electron transporting properties of methanofullerene-o-carborane dyads in organic field-effect transistors. Dalton Transactions, 2013, 42, 8104.	3.3	15
95	Enhanced performance of organic photovoltaics by TiO2-interlayer with precisely controlled thickness between ZnO electron collecting and active layers. Applied Surface Science, 2013, 279, 380-383.	6.1	21
96	Towards fabrication of high-performing organic photovoltaics: new donor-polymer, atomic layer deposited thin buffer layer and plasmonic effects. Energy and Environmental Science, 2012, 5, 9803.	30.8	78
97	Planar Star-Shaped Organic Semiconductor with Fused Triphenylamine Core for Solution-Processed Small-Molecule Organic Solar Cells and Field-Effect Transistors. Organic Letters, 2012, 14, 6326-6329.	4.6	61
98	Observation of ambipolar field-effect behavior in donorâ€“acceptor conjugated copolymers. Journal of Materials Chemistry, 2012, 22, 21238.	6.7	12
99	Easily Attainable Phenothiazine-Based Polymers for Polymer Solar Cells: Advantage of Insertion of S,S-dioxides into its Polymer for Inverted Structure Solar Cells. Macromolecules, 2012, 45, 1847-1857.	4.8	52
100	Synthesis and Characterization of a Novel Naphthodithiophene-Based Copolymer for Use in Polymer Solar Cells. Macromolecules, 2012, 45, 6938-6945.	4.8	48
101	Organic Solar Cells Fabricated by One-Step Deposition of a Bulk Heterojunction Mixture and TiO₂/NiO Hole-Collecting Agents. Journal of Physical Chemistry C, 2012, 116, 15348-15352.	3.1	21
102	New TIPS-substituted benzo[1,2-b:4,5-bâ€²]dithiophene-based copolymers for application in polymer solar cells. Journal of Materials Chemistry, 2012, 22, 22224.	6.7	42
103	Build-up of symmetry breaking using a titanium suboxide in bulk-heterojunction solar cells. Physical Chemistry Chemical Physics, 2012, 14, 4062.	2.8	12
104	Anthradithiopheneâ€“thiophene copolymers with broad UVâ€“vis absorption for organic solar cells and fieldâ€effect transistors. Journal of Polymer Science Part A, 2012, 50, 4119-4126.	2.3	10
105	Swapping field-effect transistor characteristics in polymeric diketopyrrolopyrrole semiconductors: debut of an electron dominant transporting polymer. Journal of Materials Chemistry, 2012, 22, 1504-1510.	6.7	40
106	Photovoltaic performance of bifunctional low band gap conjugated copolymer. Current Applied Physics, 2012, 12, 531-533.	2.4	2
107	Effect of side chain position on solar cell performance in cyclopentadithiophene-based copolymers. Thin Solid Films, 2012, 520, 5438-5441.	1.8	8
108	The effect of processing additive on aggregated fullerene derivatives in bulk-heterojunction polymer solar cells. Organic Electronics, 2012, 13, 570-578.	2.6	23

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109	Highly reproducible organic field-effect transistor from pseudo 3-dimensional triphenylamine-based amorphous conjugated copolymer. Journal of Materials Chemistry, 2011, 21, 8528.	6.7	26
110	Transient photoconductivity in polymer bulk heterojunction solar cells: Competition between sweep-out and recombination. Physical Review B, 2011, 83, .	3.2	213
111	Ladder-type heteroacenepolymers bearing carbazole and thiophene ring units and their use in field-effect transistors and photovoltaic cells. Journal of Materials Chemistry, 2011, 21, 843-850.	6.7	48
112	Syntheses and characterization of new low-band gap polymers containing 4H-cyclopenta[def]phenanthrene unit and 4,7-di(thien-2-yl)-2H-benzimidazole-2-spirocyclohexane for photovoltaic device. Synthetic Metals, 2011, 161, 1336-1342.	3.9	7
113	Solution-processable fullerene derivatives for organic photovoltaics and n-type thin-film transistors. Current Applied Physics, 2011, 11, e44-e48.	2.4	15
114	Synthesis and characterization of dithienylbenzobis(thiadiazole)-based low band-gap polymers for organic electronics. Chemical Communications, 2011, 47, 8931.	4.1	23
115	Syntheses and characterization of carbazole based new lowâ€band gap copolymers containing highly soluble benzimidazole derivatives for solar cell application. Journal of Polymer Science Part A, 2011, 49, 369-380.	2.3	23
116	Effects of substituted side-chain position on donor-acceptor conjugated copolymers. Journal of Polymer Science Part A, 2011, 49, 1821-1829.	2.3	31
117	The influence of electron deficient unit and interdigitated packing shape of new polythiophene derivatives on organic thinâ€film transistors and photovoltaic cells. Journal of Polymer Science Part A, 2011, 49, 2886-2898.	2.3	22
118	Poly(diketopyrrolopyrroleâ€benzothiadiazole) with Ambipolarity Approaching 100% Equivalency. Advanced Functional Materials, 2011, 21, 1910-1916.	14.9	149
119	Ambipolar Transitors: Poly(diketopyrrolopyrrole-benzothiadiazole) with Ambipolarity Approaching 100% Equivalency (Adv. Funct. Mater. 10/2011). Advanced Functional Materials, 2011, 21, 1745-1745.	14.9	3
120	Copolymers Comprising 2,7â€Carbazole and Bisâ€benzothiadiazole Units for Bulkâ€Heterojunction Solar Cells. Chemistry - A European Journal, 2011, 17, 14681-14688.	3.3	27
121	Energy level alignments at poly[N-9â€²â€²-hepta-decanyl-2,7-carbazole-alt-5,5-(4â€²,7â€²-di-2-thienyl-2â€²,1â€²,3â€²-benzothiadiazole)] on metal and polymer interfaces. Chemical Physics Letters, 2011, 503, 101-104.	2.6	20
122	A study of stabilization of P3HT/PCBM organic solar cells by photochemical active TiOx layer. Solar Energy Materials and Solar Cells, 2011, 95, 1123-1130.	6.2	51
123	Effect of a symmetry breaking layer on the open circuit voltage of conventional bulk-heterojunction solar cells. Applied Physics Letters, 2011, 99, .	3.3	13
124	Effects of Substituted Side Chains on the Optical and Electrical Properties of D-A Conjugated Copolymers. Materials Research Society Symposia Proceedings, 2011, 1360, 103101.	0.1	0
125	Higher Molecular Weight Leads to Improved Photoresponsivity, Charge Transport and Interfacial Ordering in a Narrow Bandgap Semiconducting Polymer. Advanced Functional Materials, 2010, 20, 3959-3965.	14.9	139
126	A Thermally Stable Semiconducting Polymer. Advanced Materials, 2010, 22, 1253-1257.	21.0	165

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127	Splitâ€Gate Organic Field Effect Transistors: Control Over Charge Injection and Transport. Advanced Materials, 2010, 22, 4649-4653.	21.0	42
128	Low-bandgap poly(4H-cyclopenta[def]phenanthrene) derivatives with 4,7-dithienyl-2,1,3-benzothiadiazole unit for photovoltaic cells. Polymer, 2010, 51, 390-396.	3.8	35
129	Increased open-circuit voltage in bulk-heterojunction solar cells using a C60 derivative. Applied Physics Letters, 2010, 97, 193309.	3.3	18
130	Bulk heterojunction solar cells based on a low-bandgap carbazole-diketopyrrolopyrrole copolymer. Applied Physics Letters, 2010, 97, 203303.	3.3	47
131	Enhanced diode characteristics of organic solar cells using titanium suboxide electron transport layer. Applied Physics Letters, 2010, 96, .	3.3	104
132	Amorphous dithenylcyclopentadienone-carbazole copolymer for organic thin-film transistors. Journal of Materials Chemistry, 2010, 20, 2759.	6.7	5
133	A low-bandgap alternating copolymer containing the dimethylbenzimidazole moiety. Journal of Materials Chemistry, 2010, 20, 6517.	6.7	68
134	Effect of Processing Additive on the Nanomorphology of a Bulk Heterojunction Material. Nano Letters, 2010, 10, 4005-4008.	9.1	230
135	Synthesis and characterization of indeno[1,2-b]fluorene-based low bandgap copolymers for photovoltaic cells. Journal of Materials Chemistry, 2010, 20, 1577.	6.7	45
136	Thermal annealing induced bicontinuous networks in bulk heterojunction solar cells and bipolar field-effect transistors. Applied Physics Letters, 2009, 95, 173301.	3.3	7
137	Enhanced Performance of Fullerene nâ€Channel Fieldâ€Effect Transistors with Titanium Subâ€Oxide Injection Layer. Advanced Functional Materials, 2009, 19, 1459-1464.	14.9	85
138	Extended Lifetime of Organic Fieldâ€Effect Transistors Encapsulated with Titanium Subâ€Oxide as an â€˜Activeâ€™ Passivation/Barrier Layer. Advanced Materials, 2009, 21, 1941-1944.	21.0	92
139	Heteroanalogues of PCBM: Nâ€Bridged Iminoâ€PCBMs for Organic Fieldâ€Effect Transistors. Angewandte Chemie - International Edition, 2009, 48, 1592-1595.	13.8	67
140	Synthesis and characterization of lowâ€bandgap cyclopentadithiopheneâ€bisselenophene copolymer and its use in fieldâ€effect transistor and polymer solar cells. Journal of Polymer Science Part A, 2009, 47, 6873-6882.	2.3	33
141	Nonlinear transport in semiconducting polymers at high carrier densities. Nature Materials, 2009, 8, 572-575.	27.5	103
142	Bulk heterojunction solar cells with internal quantum efficiency approaching 100%. Nature Photonics, 2009, 3, 297-302.	31.4	3,903
143	New approach for forming bulk-heterojunction solar cells comprising a Ï€-conjugated polymer and C60. Organic Electronics, 2009, 10, 1223-1227.	2.6	18
144	Flexible light-emitting three-terminal device with color-controlled emission. Organic Electronics, 2009, 10, 426-431.	2.6	7

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145	New Semiconducting Polymers Containing 3,6-Dimethyl(thieno[3,2-b]thiophene or) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T 5 2009, 21, 2650-2660.	6.7	51
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