Shinuk Cho

List of Publications by Year
in descending order

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

#	Article	IF	Citations
1	Bulk heterojunction solar cells with internal quantum efficiency approaching 100%. Nature Photonics, 2009, 3, 297-302.	31.4	3,903
2	Conformal quantum dotâ€“SnO ₂ layers as electron transporters for efficient perovskite solar cells. Science, 2022, 375, 302-306.	12.6	872
3	Metallic transport in polyaniline. Nature, 2006, 441, 65-68.	27.8	834
4	Airâ€Stable Polymer Electronic Devices. Advanced Materials, 2007, 19, 2445-2449.	21.0	376
5	Effect of Processing Additive on the Nanomorphology of a Bulk Heterojunction Material. Nano Letters, 2010, 10, 4005-4008.	9.1	230
6	Transient photoconductivity in polymer bulk heterojunction solar cells: Competition between sweep-out and recombination. Physical Review B, 2011, 83, .	3.2	213
7	Functionalized Methanofullerenes Used as n-Type Materials in Bulk-Heterojunction Polymer Solar Cells and in Field-Effect Transistors. Journal of the American Chemical Society, 2008, 130, 6444-6450.	13.7	208
8	Highâ€Performance Planar Perovskite Optoelectronic Devices: A Morphological and Interfacial Control by Polar Solvent Treatment. Advanced Materials, 2015, 27, 3492-3500.	21.0	205
9	Thermal annealing-induced enhancement of the field-effect mobility of regioregular poly(3-hexylthiophene) films. Journal of Applied Physics, 2006, 100, 114503.	2.5	185
10	â€œColumnlikeâ€• Structure of the Cross-Sectional Morphology of Bulk Heterojunction Materials. Nano Letters, 2009, 9, 230-234.	9.1	183
11	A Thermally Stable Semiconducting Polymer. Advanced Materials, 2010, 22, 1253-1257.	21.0	165
12	Amineâ€Based Polar Solvent Treatment for Highly Efficient Inverted Polymer Solar Cells. Advanced Materials, 2014, 26, 494-500.	21.0	159
13	Relationship between the microscopic morphology and the charge transport properties in poly(3-hexylthiophene) field-effect transistors. Journal of Applied Physics, 2006, 100, 033712.	2.5	158
14	Poly(diketopyrrolopyrroleâ€benzothiadiazole) with Ambipolarity Approaching 100% Equivalency. Advanced Functional Materials, 2011, 21, 1910-1916.	14.9	149
15	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
16	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
17	Highly Efficient and Stable Inverted Perovskite Solar Cell Obtained via Treatment by Semiconducting Chemical Additive. Advanced Materials, 2019, 31, e1805554.	21.0	134
18	Titanium suboxide as an optical spacer in polymer solar cells. Applied Physics Letters, 2009, 95, .	3.3	131

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19	Improved Injection in n-Type Organic Transistors with Conjugated Polyelectrolytes. Journal of the American Chemical Society, 2009, 131, 18220-18221.	13.7	123
20	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
21	Enhanced diode characteristics of organic solar cells using titanium suboxide electron transport layer. Applied Physics Letters, 2010, 96, .	3.3	104
22	Nonlinear transport in semiconducting polymers at high carrier densities. Nature Materials, 2009, 8, 572-575.	27.5	103
23	Semicrystalline Dâ€“A Copolymers with Different Chain Curvature for Applications in Polymer Optoelectronic Devices. Macromolecules, 2014, 47, 1604-1612.	4.8	95
24	Highly efficient inverted bulk-heterojunction solar cells with a gradiently-doped ZnO layer. Energy and Environmental Science, 2016, 9, 240-246.	30.8	93
25	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
26	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
27	Role of additional PCBM layer between ZnO and photoactive layers in inverted bulk-heterojunction solar cells. Scientific Reports, 2014, 4, 4306.	3.3	83
28	17% Nonâ€Fullerene Organic Solar Cells with Annealingâ€Free Aqueous MoO<i>_x</i>. Advanced Science, 2020, 7, 2002395.	11.2	81
29	Carrier generation and transport in bulk heterojunction films processed with 1,8-octanedithiol as a processing additive. Journal of Applied Physics, 2008, 104, .	2.5	78
30	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
31	A low-bandgap alternating copolymer containing the dimethylbenzimidazole moiety. Journal of Materials Chemistry, 2010, 20, 6517.	6.7	68
32	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
33	Heteroanalogues of PCBM: Nâ€Bridged Iminoâ€PCBMs for Organic Fieldâ€Effect Transistors. Angewandte Chemie - International Edition, 2009, 48, 1592-1595.	13.8	67
34	Effect of substituted side chain on donor-acceptor conjugated copolymers. Applied Physics Letters, 2008, 93, 263301.	3.3	64
35	Visibleâ˘'Near Infrared Absorbing Dithienylcyclopentadienoneâ˘'Thiophene Copolymers for Organic Thin-Film Transistors. Journal of the American Chemical Society, 2008, 130, 16524-16526.	13.7	64
36	Efficacy of TiOx optical spacer in bulk-heterojunction solar cells processed with 1,8-octanedithiol. Applied Physics Letters, 2008, 92, 243308.	3.3	61

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37	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
38	High strain response in ternary Bi_{0.5}Na_{0.5}TiO₃â€“BaTiO₃â€“Bi(Mn_{0.5}Ti_{0.5})O<sub>3</s solid solutions. RSC Advances, 2016, 6, 63915-63921.	3.6	61
39	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
40	Ambipolar organic field-effect transistors fabricated using a composite of semiconducting polymer and soluble fullerene. Applied Physics Letters, 2006, 89, 153505.	3.3	56
41	Importance of Optimal Crystallinity and Hole Mobility of BDTâ€Based Polymer Donor for Simultaneous Enhancements of <i>V</i>_{oc}, <i>J</i>_{sc}, and FF in Efficient Nonfullerene Organic Solar Cells. Advanced Functional Materials, 2020, 30, 2005787.	14.9	55
42	Easily Attainable Phenothiazine-Based Polymers for Polymer Solar Cells: Advantage of Insertion of <i>S</i>,<i>S</i>-dioxides into its Polymer for Inverted Structure Solar Cells. Macromolecules, 2012, 45, 1847-1857.	4.8	52
43	New Semiconducting Polymers Containing 3,6-Dimethyl(thieno[3,2-<i>b</i>]thiophene or) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 2009, 21, 2650-2660.	6.7	51
44	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
45	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
46	Synthesis and Characterization of a Novel Naphthodithiophene-Based Copolymer for Use in Polymer Solar Cells. Macromolecules, 2012, 45, 6938-6945.	4.8	48
47	Photocurrent Extraction Efficiency near Unity in a Thick Polymer Bulk Heterojunction. Advanced Functional Materials, 2016, 26, 3324-3330.	14.9	48
48	Multiply Charged Conjugated Polyelectrolytes as a Multifunctional Interlayer for Efficient and Scalable Perovskite Solar Cells. Advanced Materials, 2020, 32, e2002333.	21.0	48
49	Bulk heterojunction solar cells based on a low-bandgap carbazole-diketopyrrolopyrrole copolymer. Applied Physics Letters, 2010, 97, 203303.	3.3	47
50	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
51	Bulk heterojunction bipolar field-effect transistors processed with alkane dithiol. Organic Electronics, 2008, 9, 1107-1111.	2.6	44
52	Bulk Heterojunction Materials Composed of Poly(2,5-bis(3-tetradecylthiophen-2-yl)thieno[3,2-<i>b</i>]thiophene): Ultrafast Electron Transfer and Carrier Recombination. Journal of Physical Chemistry C, 2008, 112, 7853-7857.	3.1	44
53	Splitâ€Gate Organic Field Effect Transistors: Control Over Charge Injection and Transport. Advanced Materials, 2010, 22, 4649-4653.	21.0	42
54	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

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55	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
56	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
57	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
58	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
59	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
60	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
61	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
62	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
63	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
64	Photovoltaic effects on the organic ambipolar field-effect transistors. Applied Physics Letters, 2007, 90, 063511.	3.3	34
65	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
66	Synthesis and characterization of lowâ€bandgap cyclopentadithiopheneâ€biselenophene 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
67	Cu/graphene hybrid transparent conducting electrodes for organic photovoltaic devices. Carbon, 2021, 171, 341-349.	10.3	33
68	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
69	PbS-Based Quantum Dot Solar Cells with Engineered Ï€-Conjugated Polymers Achieve 13% Efficiency. ACS Energy Letters, 2020, 5, 3452-3460.	17.4	32
70	Multilayer bipolar field-effect transistors. Applied Physics Letters, 2008, 92, 063505.	3.3	31
71	Effects of substituted side-chain position on donor-acceptor conjugated copolymers. Journal of Polymer Science Part A, 2011, 49, 1821-1829.	2.3	31
72	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

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73	High mobility solution-processed hybrid light emitting transistors. Applied Physics Letters, 2014, 105, 183302.	3.3	29
74	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
75	Impact of symmetry-breaking of non-fullerene acceptors for efficient and stable organic solar cells. Chemical Science, 2021, 12, 14083-14097.	7.4	27
76	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
77	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
78	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
79	Synthesis and characterization of dithienylbenzobis(thiadiazole)-based low band-gap polymers for organic electronics. Chemical Communications, 2011, 47, 8931.	4.1	23
80	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
81	The effect of processing additive on aggregated fullerene derivatives in bulk-heterojunction polymer solar cells. Organic Electronics, 2012, 13, 570-578.	2.6	23
82	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
83	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
84	Inverted Polymer Solar Cells with Annealingâ€Free Solutionâ€Processable NiO. Small, 2021, 17, e2101729.	10.0	22
85	Sequentially Fluorinated Polythiophene Donors for Highâ€Performance Organic Solar Cells with 16.4% Efficiency. Advanced Energy Materials, 2022, 12, .	19.5	22
86	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
87	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
88	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
89	Folic Acid Functionalized Carbon Dot/Polypyrrole Nanoparticles for Specific Bioimaging and Photothermal Therapy. ACS Applied Bio Materials, 2021, 4, 3453-3461.	4.6	21
90	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

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91	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
92	Improved Performance in nâ€Type Organic Fieldâ€Effect Transistors via Polyelectrolyteâ€Mediated Interfacial Doping. Advanced Electronic Materials, 2017, 3, 1700184.	5.1	20
93	Perfluorocyclobutane containing polymeric gate dielectric for organic thin film transistors with high on/off ratio. Applied Physics Letters, 2006, 89, 202516.	3.3	18
94	New approach for forming bulk-heterojunction solar cells comprising a Ï€-conjugated polymer and C60. Organic Electronics, 2009, 10, 1223-1227.	2.6	18
95	Increased open-circuit voltage in bulk-heterojunction solar cells using a C60 derivative. Applied Physics Letters, 2010, 97, 193309.	3.3	18
96	Stable organic-inorganic hybrid multilayered photoelectrochemical cells. Journal of Power Sources, 2017, 341, 411-418.	7.8	17
97	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
98	Enhanced efficiency of bilayer polymer solar cells by the solvent treatment method. Synthetic Metals, 2015, 199, 408-412.	3.9	16
99	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
100	Influence of crystal growth atmosphere on the formation of color centers in PbWO4 single crystals. Applied Physics Letters, 2002, 81, 3756-3758.	3.3	15
101	Solution-processable fullerene derivatives for organic photovoltaics and n-type thin-film transistors. Current Applied Physics, 2011, 11, e44-e48.	2.4	15
102	Synthesis and electron transporting properties of methanofullerene-o-carborane dyads in organic field-effect transistors. Dalton Transactions, 2013, 42, 8104.	3.3	15
103	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
104	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
105	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
106	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
107	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
108	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

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109	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
110	Enhanced flexible optoelectronic devices by controlling the wettability of an organic bifacial interlayer. Communications Materials, 2021, 2, .	6.9	13
111	Observation of ambipolar field-effect behavior in donorâ€“acceptor conjugated copolymers. Journal of Materials Chemistry, 2012, 22, 21238.	6.7	12
112	Build-up of symmetry breaking using a titanium suboxide in bulk-heterojunction solar cells. Physical Chemistry Chemical Physics, 2012, 14, 4062.	2.8	12
113	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
114	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
115	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
116	Carbazole and rhodanine based donor molecule with improved processability for high performance organic photovoltaics. Dyes and Pigments, 2018, 151, 272-278.	3.7	12
117	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
118	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
119	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
120	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
121	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
122	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
123	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
124	Solution-processable ambipolar organic field-effect transistors with bilayer transport channels. Polymer Journal, 2020, 52, 581-588.	2.7	10
125	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
126	Organic Thin-Film Transistors Based on Î±,Ï‰-Dihexyldithienyl-Dihydrophenanthrene. Chemistry of Materials, 2008, 20, 6289-6291.	6.7	9

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127	Î±,Ï‰-Dihexylthienoselenophene derivatives: a new class of high-performance semiconductors for organic thin-film transistors. Journal of Materials Chemistry, 2008, 18, 4909.	6.7	9
128	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
129	Effect of side chain position on solar cell performance in cyclopentadithiophene-based copolymers. Thin Solid Films, 2012, 520, 5438-5441.	1.8	8
130	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
131	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
132	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
133	Surface potential mapping and n-type conductivity in organicâ€"inorganic lead iodide crystals. CrystEngComm, 2018, 20, 6551-6556.	2.6	8
134	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
135	Planar Organic Bilayer Heterojunctions Fabricated on Water with Ultrafast Donorâ€toâ€Acceptor Charge Transfer. Solar Rrl, 2021, 5, 2100326.	5.8	8
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	Flexible light-emitting three-terminal device with color-controlled emission. Organic Electronics, 2009, 10, 426-431.	2.6	7
138	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
139	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
140	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
141	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
142	Synthesis and characterization of an ester-terminated organic semiconductor for ethanol vapor detection. Organic Electronics, 2014, 15, 2277-2284.	2.6	6
143	Amorphous dithenylcyclopentadienone-carbazole copolymer for organic thin-film transistors. Journal of Materials Chemistry, 2010, 20, 2759.	6.7	5
144	Effect of backbone structures on photovoltaic properties in naphthodithiopheneâ€based copolymers. Journal of Polymer Science Part A, 2014, 52, 305-312.	2.3	5

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145	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
146	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
147	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
148	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
149	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
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151	The effects of P3HT crystallinity in bilayer structure organic solar cells. Current Applied Physics, 2014, 14, 1369-1373.	2.4	4
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