Myungkwan Song

List of Publications by Year
in descending order

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167 papers	5,431 citations	109321 35 h-index	98798 67 g-index
172 all docs	172 docs citations	172 times ranked	7720 citing authors

#	Article	IF	Citations
1	Charge-transfer-based Gas Sensing Using Atomic-layer MoS2. Scientific Reports, 2015, 5, 8052.	3.3	489
2	Highly Efficient and Bendable Organic Solar Cells with Solutionâ€Processed Silver Nanowire Electrodes. Advanced Functional Materials, 2013, 23, 4177-4184.	14.9	308
3	Graphene-based gas sensor: metal decoration effect and application to a flexible device. Journal of Materials Chemistry C, 2014, 2, 5280-5285.	5.5	198
4	Ultrasmooth, extremely deformable and shape recoverable Ag nanowire embedded transparent electrode. Scientific Reports, 2014, 4, 4788.	3.3	194
5	Silver Nanowire Embedded in P3HT:PCBM for High-Efficiency Hybrid Photovoltaic Device Applications. ACS Nano, 2011, 5, 3319-3325.	14.6	184
6	Highly Efficient Organic Hole Transporting Materials for Perovskite and Organic Solar Cells with Longâ€Term Stability. Advanced Materials, 2016, 28, 686-693.	21.0	166
7	Transparent Ultrathin Oxygenâ€Doped Silver Electrodes for Flexible Organic Solar Cells. Advanced Functional Materials, 2014, 24, 1551-1561.	14.9	158
8	Stable ultrathin partially oxidized copper film electrode for highly efficient flexible solar cells. Nature Communications, 2015, 6, 8830.	12.8	142
9	Highâ€Performance Longâ€Termâ€Stable Dopantâ€Free Perovskite Solar Cells and Additiveâ€Free Organic Solar Cells by Employing Newly Designed Multirole Ï€â€Conjugated Polymers. Advanced Materials, 2017, 29, 1700183.	21.0	141
10	Stable semi-transparent CH₃NH₃PbI₃planar sandwich solar cells. Energy and Environmental Science, 2015, 8, 2922-2927.	30.8	109
11	Bendable Solar Cells from Stable, Flexible, and Transparent Conducting Electrodes Fabricated Using a Nitrogenâ€Doped Ultrathin Copper Film. Advanced Functional Materials, 2016, 26, 4180-4191.	14.9	100
12	Extremely Flexible Transparent Conducting Electrodes for Organic Devices. Advanced Energy Materials, 2014, 4, 1300474.	19.5	97
13	Highly flexible and transparent conducting silver nanowire/ZnO composite film for organic solar cells. Nano Research, 2014, 7, 1370-1379.	10.4	96
14	Synthesis and Characterization of Redâ€Emitting Iridium(III) Complexes for Solutionâ€Processable Phosphorescent Organic Lightâ€Emitting Diodes. Advanced Functional Materials, 2009, 19, 2205-2212.	14.9	90
15	Deep-blue phosphorescent iridium complexes with picolinic acid N-oxide as the ancillary ligand for high efficiency organic light-emitting diodes. Organic Electronics, 2010, 11, 564-572.	2.6	83
16	Deepâ€Blue Phosphorescent Ir(III) Complexes with Lightâ€Harvesting Functional Moieties for Efficient Blue and White PhOLEDs in Solutionâ€Process. Advanced Functional Materials, 2017, 27, 1701002.	14.9	73
17	Enhanced efficiency in lead-free bismuth iodide with post treatment based on a hole-conductor-free perovskite solar cell. Nano Research, 2018, 11, 6283-6293.	10.4	72
18	Synthesis and characterization of indenofluoreneâ€based copolymers containing 2,5â€bis(2â€thienyl)â€Nâ€arylpyrrole for bulk heterojunction solar cells and polymer lightâ€emitting diodes. Journal of Polymer Science Part A, 2010, 48, 3169-3177.	2.3	68

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19	Optimization and Analysis of Conjugated Polymer Side Chains for Highâ€Performance Organic Photovoltaic Cells. Advanced Functional Materials, 2016, 26, 1517-1525.	14.9	67
20	Preparation of Flexible Organic Solar Cells with Highly Conductive and Transparent Metal-Oxide Multilayer Electrodes Based on Silver Oxide. ACS Applied Materials & Interfaces, 2013, 5, 9933-9941.	8.0	66
21	Highly Efficient Bipolar Deepâ€Blue Fluorescent Emitters for Solutionâ€Processed Nonâ€Doped Organic Lightâ€Emitting Diodes Based on 9,9â€Dimethylâ€9,10â€dihydroacridine/Phenanthroimadazole Derivatives. Advanced Optical Materials, 2016, 4, 1236-1246.	7.3	60
22	High Efficiency Inorganic/Organic Hybrid Tandem Solar Cells. Advanced Materials, 2012, 24, 4523-4527.	21.0	59
23	Highly efficient air-stable/hysteresis-free flexible inverted-type planar perovskite and organic solar cells employing a small molecular organic hole transporting material. Nano Energy, 2017, 41, 10-17.	16.0	59
24	Fully spray-coated inverted organic solar cells. Solar Energy Materials and Solar Cells, 2012, 103, 76-79.	6.2	57
25	ITO-free highly bendable and efficient organic solar cells with Ag nanomesh/ZnO hybrid electrodes. Journal of Materials Chemistry A, 2015, 3, 65-70.	10.3	55
26	Low-temperature operation of perovskite solar cells: With efficiency improvement and hysteresis-less. Nano Energy, 2016, 27, 569-576.	16.0	54
27	Light trapping in bendable organic solar cells using silica nanoparticle arrays. Energy and Environmental Science, 2015, 8, 932-940.	30.8	50
28	Efficiency Exceeding 20% in Perovskite Solar Cells with Sideâ€Chain Liquid Crystalline Polymerâ€“Doped Perovskite Absorbers. Advanced Energy Materials, 2018, 8, 1801637.	19.5	48
29	Self-assembled monolayer as an interfacial modification material for highly efficient and air-stable inverted organic solar cells. Applied Physics Letters, 2013, 102, .	3.3	46
30	A simple structured and efficient triazine-based molecule as an interfacial layer for high performance organic electronics. Energy and Environmental Science, 2016, 9, 2595-2602.	30.8	45
31	Optical Transmittance Enhancement of Flexible Copper Film Electrodes with a Wetting Layer for Organic Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 38695-38705.	8.0	44
32	Synthesis and Characterization of Highly Efficient Solutionâ€Processable Green Ir(III) Complexes with High Current Efficiency and Very Low Efficiency Rollâ€Off. Advanced Functional Materials, 2018, 28, 1804714.	14.9	44
33	Improvement of charge balance, recombination zone confinement, and low efficiency roll-off in green phosphorescent OLEDs by altering electron transport layer thickness. Materials Research Express, 2018, 5, 076201.	1.6	42
34	Highly efficient, heat dissipating, stretchable organic light-emitting diodes based on a MoO3/Au/MoO3 electrode with encapsulation. Nature Communications, 2021, 12, 2864.	12.8	42
35	Alkoxyphenylthiophene Linked Benzodithiophene Based Medium Band Gap Polymers for Organic Photovoltaics: Efficiency Improvement upon Methanol Treatment Depends on the Planarity of Backbone. Macromolecules, 2014, 47, 7060-7069.	4.8	36
36	Low-temperature solution-processed flexible organic solar cells with PFN/AgNWs cathode. Nano Energy, 2015, 16, 122-129.	16.0	36

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37	Recombination Zone Control without Sensing Layer and the Exciton Confinement in Green Phosphorescent OLEDs by Excluding Interface Energy Transfer. Journal of Physical Chemistry C, 2018, 122, 2951-2958.	3.1	36
38	Comprehensive Understanding and Controlling the Defect Structures: An Effective Approach for Organic-Inorganic Hybrid Perovskite-Based Solar-Cell Application. Frontiers in Energy Research, 2018, 6, .	2.3	35
39	A wide-bandgap Ï€-conjugated polymer for high-performance ternary organic solar cells with an efficiency of 17.40%. Nano Energy, 2021, 89, 106323.	16.0	35
40	Synthesis and photovoltaic properties of heteroaromatic low-band gap oligomers for bulk heterojunction solar cells. Synthetic Metals, 2011, 161, 1199-1206.	3.9	32
41	Homologous Series of Phenylquinoline-Carbazole Main Ligand Based On Red-Emitting Iridium(III) Complexes for Phosphorescent Organic Light-Emitting Diodes. Journal of Physical Chemistry C, 2012, 116, 7526-7533.	3.1	32
42	Accomplishment of Multifunctional Ï€-Conjugated Polymers by Regulating the Degree of Side-Chain Fluorination for Efficient Dopant-Free Ambient-Stable Perovskite Solar Cells and Organic Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 36053-36060.	8.0	31
43	Highly efficient, conventional and flexible deep-red phosphorescent OLEDs using ambipolar thiophene/selenophene-phenylquinoline ligand-based Ir(III) complexes. Dyes and Pigments, 2017, 136, 390-397.	3.7	31
44	Synthesis and photovoltaic properties of donorâ€“acceptor polymers incorporating a structurally-novel pyrrole-based imide-functionalized electron acceptor moiety. Polymer, 2013, 54, 6125-6132.	3.8	30
45	New alkylselenyl substituted benzodithiophene-based solution-processable 2D Ï€-conjugated polymers for bulk heterojunction polymer solar cell applications. Solar Energy Materials and Solar Cells, 2014, 122, 136-145.	6.2	30
46	Synthesis and Photovoltaic Properties of Sideâ€Chain Liquidâ€Crystal Click Polymers for Dyeâ€Sensitized Solarâ€Cells Application. Macromolecular Chemistry and Physics, 2010, 211, 2464-2473.	2.2	29
47	Synthesis of polymers containing 1,2,4â€oxadiazole as an electronâ€acceptor moiety in their main chain and their solar cell applications. Journal of Polymer Science Part A, 2013, 51, 2131-2141.	2.3	29
48	Synthesis of three new 1â€(2,6â€diisopropylphenyl)â€2,5â€di(2â€thienyl) pyrroleâ€based donor polymers and their bulk heterojunction solar cell applications. Journal of Polymer Science Part A, 2010, 48, 5514-5521.	2.3	28
49	Synthesis of conjugated polymers with broad absorption bands and photovoltaic properties as bulk heterojuction solar cells. Polymer, 2011, 52, 2384-2390.	3.8	28
50	Pt-free, cost-effective and efficient counter electrode with carbon nanotube yarn for solid-state fiber dye-sensitized solar cells. Dyes and Pigments, 2021, 185, 108855.	3.7	27
51	Comparison of Three Different Click Reaction Methods for the Synthesis of Fluoreneâ€Based Polymers and Performance in Quasiâ€Solidâ€State DSSCs. Macromolecular Chemistry and Physics, 2008, 209, 1967-1975.	2.2	26
52	Synthesis, Characterization, and Photovoltaic Properties of 4,8-Dithienylbenzo[1,2-b:4,5-bâ€²]dithiophene-Based Donorâ€“Acceptor Polymers with New Polymerization and 2D Conjugation Extension Pathways: A Potential Donor Building Block for High Performance and Stable Inverted Organic Solar Cells. Macromolecules, 2015, 48, 2454-2465.	4.8	26
53	High Performance Solutionâ€Processed Deepâ€Blue Phosphorescence Organic Lightâ€Emitting Diodes with EQE Over 24% by Employing New Carbenic Ir(III) Complexes. Advanced Optical Materials, 2022, 10, 2101686.	7.3	26
54	Liquid Crystals Embedded in Polymeric Electrolytes for Quasiâ€Solid State Dyeâ€Sensitized Solar Cell Applications. Macromolecular Chemistry and Physics, 2009, 210, 1844-1850.	2.2	25

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55	Blue phosphorescent iridium(iii) complexes containing carbazole-functionalized phenylpyridine for organic light-emitting diodes: energy transfer from carbazolyl moieties to iridium(iii) cores. RSC Advances, 2011, 1, 755.	3.6	25
56	Effects of the Wrinkle Structure and Flat Structure Formed During Static Low-Temperature Annealing of ZnO on the Performance of Inverted Polymer Solar Cells. Journal of Physical Chemistry C, 2017, 121, 9191-9201.	3.1	25
57	Efficient and hysteresis-less perovskite and organic solar cells by employing donor-acceptor type Ï€-conjugated polymer. Organic Electronics, 2019, 72, 18-24.	2.6	25
58	Harvesting near- and far-field plasmonic enhancements from large size gold nanoparticles for improved performance in organic bulk heterojunction solar cells. Organic Electronics, 2019, 66, 94-101.	2.6	25
59	All-spray-coated semitransparent inverted organic solar cells: From electron selective to anode layers. Organic Electronics, 2012, 13, 2940-2944.	2.6	23
60	Influential effects of Ï€-spacers, alkyl side chains, and various processing conditions on the photovoltaic properties of alkylselenyl substituted benzodithiophene based polymers. Journal of Materials Chemistry C, 2015, 3, 796-808.	5.5	23
61	Efficient Approach for Improving the Performance of Nonhalogenated Green Solvent-Processed Polymer Solar Cells via Ternary-Blend Strategy. ACS Applied Materials & Interfaces, 2018, 10, 13748-13756.	8.0	23
62	High efficiency and stable solid-state fiber dye-sensitized solar cells obtained using TiO2 photoanodes enhanced with metal organic frameworks. Journal of Energy Chemistry, 2022, 67, 458-466.	12.9	23
63	Highly efficient and stable cupronickel nanomesh electrode for flexible organic photovoltaic devices. Journal of Power Sources, 2016, 331, 22-25.	7.8	22
64	Nonhalogenated Solvent-Processed Fullerene-Free Ambient Stable Organic Solar Cells: Impact of Molecular Weight of New Ï€-Conjugated Donor Polymer on Efficiency. ACS Applied Energy Materials, 2019, 2, 4159-4166.	5.1	22
65	All-Polymer Solar Cells Approaching 12% Efficiency with a New Ï€-Conjugated Polymer Donor Enabled by a Nonhalogenated Solvent Process. ACS Applied Materials & Interfaces, 2021, 13, 28231-28241.	8.0	22
66	New liquid crystal-embedded PVdF-co-HFP-based polymer electrolytes for dye-sensitized solar cell applications. Macromolecular Research, 2009, 17, 963-968.	2.4	20
67	Nonhalogenated Solventâ€Processed Thickâ€Film Ternary Nonfullerene Organic Solar Cells with Power Conversion Efficiency >13% Enabled by a New Wideâ€Bandgap Polymer. Solar Rrl, 2021, 5, 2000787.	5.8	20
68	Enhanced photoluminescence quantum efficiency and stability of water assisted CsPbBr3 perovskite nanocrystals. Journal of Industrial and Engineering Chemistry, 2020, 88, 84-89.	5.8	20
69	Synthesis and characterization of fluoreneâ€based lowâ€band gap copolymers containing propylenedioxythiophene and benzothiadiazole derivatives for bulk heterojunction photovoltaic cell applications. Journal of Polymer Science Part A, 2008, 46, 6175-6184.	2.3	19
70	Synthesis and characterization of fluoreneâ€based copolymers containing benzothiadiazole derivative for lightâ€emitting diodes applications. Journal of Polymer Science Part A, 2008, 46, 6762-6769.	2.3	19
71	Synthesis of N-[4-Octylphenyl]dithieno[3,2-b:2â€²,3â€²-d]pyrrole-based broad absorbing polymers and their photovoltaic applications. Polymer, 2013, 54, 3198-3205.	3.8	19
72	Triazine-based Polyelectrolyte as an Efficient Cathode Interfacial Material for Polymer Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 24753-24762.	8.0	18

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73	Simultaneous improvements in self-cleaning and light-trapping abilities of polymer substrates for flexible organic solar cells. Journal of Materials Chemistry A, 2018, 6, 2379-2387.	10.3	18
74	Printable Free-Standing Hybrid Graphene/Dry-Spun Carbon Nanotube Films as Multifunctional Electrodes for Highly Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 54806-54814.	8.0	18
75	Synthesis of new near infrared absorption polymers based on thiadiazoloquinoxaline and their solar cell applications. Synthetic Metals, 2012, 162, 1184-1189.	3.9	17
76	Solution-processed silver nanowires as a transparent conducting electrode for air-stable inverted organic solar cells. Thin Solid Films, 2014, 573, 14-17.	1.8	17
77	Optical absorption and electrical properties of enhanced efficiency in organic solar cells as interfacial layer with Au NPs. Synthetic Metals, 2016, 217, 117-122.	3.9	17
78	Highly efficient solution-processed deep-red emitting heteroleptic thiophene-phenylquinoline based Ir(III) complexes for phosphorescent organic light-emitting diodes. Dyes and Pigments, 2017, 139, 779-787.	3.7	17
79	Gap Plasmon of Virusâ€Templated Biohybrid Nanostructures Uplifting the Performance of Organic Optoelectronic Devices. Advanced Optical Materials, 2020, 8, 1902080.	7.3	17
80	Development of liquid crystal embedded in polymer electrolytes composed of click polymers for dye-sensitized solar cell applications. Dyes and Pigments, 2010, 86, 259-265.	3.7	16
81	Solution-processed red iridium complexes based on carbazole-phenylquinoline main ligand: Synthesis, properties and their applications in phosphorescent organic light-emitting diodes. Journal of Organometallic Chemistry, 2011, 696, 2122-2128.	1.8	16
82	Dopant-Free Hydrogenated Amorphous Silicon Thin-Film Solar Cells Using Molybdenum Oxide and Lithium Fluoride. Journal of Physical Chemistry C, 2013, 117, 23459-23468.	3.1	16
83	Highly efficient solution-processed pure red phosphorescent organic light-emitting diodes using iridium complexes based on 2,3-diphenylquinoxaline ligand. Journal of Organometallic Chemistry, 2015, 794, 197-205.	1.8	16
84	Fabrication of Au-Decorated 3D ZnO Nanostructures as Recyclable SERS Substrates. IEEE Sensors Journal, 2016, 16, 3382-3386.	4.7	16
85	Enhanced device efficiency in organic light-emitting diodes by dual oxide buffer layer. Organic Electronics, 2018, 56, 254-259.	2.6	16
86	High performance solution-processed green phosphorescent organic light-emitting diodes with high current efficiency and long-term stability. Journal of Materials Chemistry C, 2019, 7, 11569-11580.	5.5	16
87	Fractional structured molybdenum oxide catalyst as counter electrodes of all-solid-state fiber dye-sensitized solar cells. Journal of Colloid and Interface Science, 2021, 584, 520-527.	9.4	16
88	Synthesis and characterization of red iridium(III) complexes containing phenothiazine-phenylquinoline based on main ligand for solution-processed phosphorescent organic light-emitting diodes. Synthetic Metals, 2011, 161, 213-218.	3.9	15
89	Synthesis and application of low band gap broad absorption oligomers based on 2,5-bis(2-thienyl)-N-arylpyrrole for bulk heterojunction solar cells. Current Applied Physics, 2012, 12, S124-S130.	2.4	15
90	High efficiency, solution-processed, red phosphorescent organic light-emitting diodes from a polymer doped with iridium complexes. Organic Electronics, 2009, 10, 1412-1415.	2.6	14

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91	Multiaxial wavy top-emission organic light-emitting diodes on thermally prestrained elastomeric substrates. Organic Electronics, 2017, 48, 314-322.	2.6	14
92	The effect of irregularity from asymmetric random Ï€-conjugated polymers on the photovoltaic performance of fullerene-free organic solar cells. Polymer Chemistry, 2019, 10, 4407-4412.	3.9	14
93	6.16% Efficiency of Solid-State Fiber Dye-Sensitized Solar Cells Based on LiTFSI Electrolytes with Novel TEMPOL Derivatives. ACS Sustainable Chemistry and Engineering, 2020, 8, 15065-15071.	6.7	14
94	Highly efficient and stable solid-state fiber dye-sensitized solar cells with Ag-decorated SiO2 nanoparticles. Nano Research, 2021, 14, 2728-2734.	10.4	14
95	Synthesis and photovoltaic properties of 1-(2,6-diisopropylphenyl)-2,5-di(2-thienyl)pyrrole-based low-bandgap polymers. Polymer Bulletin, 2012, 69, 439-454.	3.3	13
96	Synthesis of new broad absorption low band gap random copolymers for bulk heterojunction solar cell applications. Macromolecular Research, 2013, 21, 406-413.	2.4	13
97	Property modulation of benzodithiophene-based polymers via the incorporation of a covalently bonded novel 2,1,3-benzothiadiazole-1,2,4-oxadiazole derivative in their main chain for polymer solar cells. Journal of Materials Chemistry C, 2014, 2, 8515-8524.	5.5	13
98	Phenylquinoline Derivatives as Efficient Interfacial Layer Materials for Highâ€Performance Organic Electronic Devices. Advanced Electronic Materials, 2016, 2, 1600086.	5.1	13
99	Blue Emitting Cationic Iridium Complexes Containing Two Substituted 2-Phenylpyridine and One 2,2'-Biimidazole for Solution-Processed Organic Light-Emitting Diodes (OLEDs). Bulletin of the Korean Chemical Society, 2012, 33, 3645-3650.	1.9	13
100	A rational design strategy for an extremely deep-blue fluorescent emitter with a small CIE y value for solution processable, high efficiency, organic light-emitting diodes. Dyes and Pigments, 2017, 145, 63-71.	3.7	12
101	Green phosphorescent light-emitting diodes from polymer doped with iridium complex. Applied Physics Letters, 2008, 92, 193312.	3.3	11
102	Poly(carbazole)â€Based Copolymers Containing Deepâ€Blue Chromophore for Polymer Lightâ€Emitting Diode Applications. Macromolecular Chemistry and Physics, 2009, 210, 1572-1578.	2.2	11
103	Efficient Hydrogenated Amorphous Silicon Thin-Film Solar Cells Using Zinc Oxide Deposited by Atomic Layer Deposition as a Protective Interfacial Layer. Journal of Physical Chemistry C, 2012, 116, 23231-23235.	3.1	11
104	Facile synthesis of 1-(2,6-diisopropylphenyl)-2,5-di(2-thienyl)pyrrole-based narrow band gap small molecules for solar cell applications. Synthetic Metals, 2013, 176, 96-103.	3.9	11
105	Improved charge balance in phosphorescent organic light-emitting diodes by different ultraviolet ozone treatments on indium tin oxide. Organic Electronics, 2018, 61, 343-350.	2.6	11
106	Self-powered and flexible integrated solid-state fiber-shaped energy conversion and storage based on CNT Yarn with efficiency of 5.5%. Nano Energy, 2022, 96, 107054.	16.0	11
107	Sky-blue phosphorescent iridium(III) complexes with two substituted 2-phenylpyridine derivatives and one picolinic acid for organic light-emitting diodes. Journal of Organometallic Chemistry, 2013, 724, 244-250.	1.8	10
108	Formation of Recombination Zone in Blue Phosphorescent Organic Light-Emitting Diodes with Different Electron Transport Layers and Its Effects on Device Performance. ECS Journal of Solid State Science and Technology, 2014, 3, R164-R167.	1.8	10

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109	Organic solar cells with surface-treated graphene thin film as interfacial layer. Synthetic Metals, 2015, 205, 1-5.	3.9	10
110	Synthesis and characterization of alkoxyphenylthiophene substituted benzodithiophene-based 2D conjugated polymers for organic electronics applications. Dyes and Pigments, 2015, 123, 100-111.	3.7	10
111	An Efficient Amphiphilicâ€Type Triphenylamineâ€Based Organic Hole Transport Material for Highâ€Performance and Ambientâ€Stable Dopantâ€Free Perovskite and Organic Solar Cells. Chemistry - A European Journal, 2018, 24, 6426-6431.	3.3	10
112	A linear Dâ€“Ïâ€“A based hole transport material for high performance rigid and flexible planar organicâ€“inorganic hybrid perovskite solar cells. Journal of Materials Chemistry C, 2019, 7, 13440-13446.	5.5	10
113	Replacement of n-type layers with a non-toxic APTES interfacial layer to improve the performance of amorphous Si thin-film solar cells. RSC Advances, 2019, 9, 7536-7542.	3.6	10
114	Improved stability of silver nanowire (AgNW) electrode for high temperature applications using selective photoresist passivation. Microelectronic Engineering, 2019, 206, 6-11.	2.4	10
115	Intramolecular charge transfer-based spirobifluorene-coupled heteroaromatic moieties as efficient hole transport layer and host in phosphorescent organic light-emitting diodes. Organic Electronics, 2020, 85, 105825.	2.6	10
116	Highly efficient and bendable organic solar cells using a three-dimensional transparent conducting electrode. Nanoscale, 2014, 6, 6911-6924.	5.6	9
117	The effect of with/without resonance-mediated interactions on the organic solar cell performance of new 2D Ï€-conjugated polymers. Polymer Chemistry, 2015, 6, 7149-7159.	3.9	9
118	Correlation between interlayer thickness and device performance in blue phosphorescent organic light emitting diodes with a quantum well structure. Organic Electronics, 2017, 42, 343-347.	2.6	9
119	Substituent position engineering of phosphine oxide functionalized triazine-based cathode interfacial materials for flexible organic and perovskite solar cells. Organic Electronics, 2018, 54, 54-63.	2.6	9
120	High quantum efficiency and stability of biohybrid quantum dots nanojunctions in bacteriophage-constructed perovskite. Materials Today Nano, 2021, 13, 100099.	4.6	9
121	Simple one-pot synthesis and high-resolution patterning of perovskite quantum dots using a photocurable ligand. Chemical Communications, 2021, 57, 12824-12827.	4.1	9
122	Synthesis and characterization of poly(N-alkyloxyarylcarbazolyl-2,7-vinylene) derivatives and their applications in bulk-heterojunction solar cells. Organic Electronics, 2010, 11, 969-978.	2.6	8
123	Linkage position influences of anthracene and tricyanovinyl groups on the opto-electrical and photovoltaic properties of anthracene-based organic small molecules. Tetrahedron, 2014, 70, 1176-1186.	1.9	8
124	Non-halogenated solvent-processed highly efficient green Ir(iii) complexes with an external quantum efficiency exceeding 23% for phosphorescent organic light-emitting diodes. Journal of Materials Chemistry C, 2020, 8, 12959-12967.	5.5	8
125	Introducing an Organic Hole Transporting Material as a Bilayer to Improve the Efficiency and Stability of Perovskite Solar Cells. Macromolecular Research, 2021, 29, 149-156.	2.4	8
126	Development of efficient solution-processed red phosphorescent organic light-emitting diodes using carrier transport materials. Synthetic Metals, 2010, 160, 1623-1626.	3.9	7

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127	New benzodithiopheneâ€•and benzooxadiazole/benzothiadiazoleâ€•based donorâ€“acceptor Ï€â€•conjugated polymers for organic photovoltaics. Journal of Polymer Science Part A, 2016, 54, 2668-2679.	2.3	7
128	Improved hydrogenated amorphous silicon thin-film solar cells realized by replacing n-type Si layer with PFN interfacial layer. Synthetic Metals, 2017, 228, 91-98.	3.9	7
129	Synthesis of spirodithienogermole with triphenylamine units as a dopant-free hole-transporting material for perovskite solar cells. Journal of Materials Chemistry C, 2021, 9, 2001-2007.	5.5	7
130	High-Efficiency Photon-Capturing Capability of Two-Dimensional SnS Nanosheets for Photoelectrochemical Cells. Catalysts, 2021, 11, 236.	3.5	7
131	Synthesis and Characterization of New Dihydroindolo[3,2-b]indole and 5,6-Bis(octyloxy)-4,7-di(thiophen-2-yl)benzo[c][1,2,5]thiadiazole-Based Polymer for Bulk Heterojunction Polymer Solar Cells. Bulletin of the Korean Chemical Society, 2014, 35, 1485-1490.	1.9	7
132	Synthesis and characterization of polymer electrolytes containing phenothiazine-based click polymers for dye-sensitized solar cell applications. Macromolecular Research, 2011, 19, 654-659.	2.4	6
133	Air-Stable Inverted Organic Solar Cells with an Ultrathin Electron-Transport Layer Made by Atomic Layer Deposition. ECS Solid State Letters, 2012, 1, Q1-Q3.	1.4	6
134	Comparison of organic light emitting diode performance using the spectroradiometer and the integrating sphere measurements. AIP Advances, 2020, 10, .	1.3	6
135	Catalytic flower-shaped Î±-MoO3 lamellar structure for solid-state fiber-dye-sensitized solar cells. Journal of Power Sources, 2021, 512, 230496.	7.8	6
136	Synthesis and characterization of poly(carbazolyl-2,7-vinylene) derivatives for organic light-emitting diode applications. Macromolecular Research, 2010, 18, 1088-1095.	2.4	5
137	Hydrogenated Amorphous Silicon Thin Film Solar Cells Using a Hybrid Buffer Layer of Gold Nanoparticle and Tungsten Oxide Thin Film. ECS Solid State Letters, 2012, 1, Q42-Q44.	1.4	5
138	Organic Solar Cells: Highly Efficient and Bendable Organic Solar Cells with Solutionâ€Processed Silver Nanowire Electrodes (Adv. Funct. Mater. 34/2013). Advanced Functional Materials, 2013, 23, 4272-4272.	14.9	5
139	Improved design of highly efficient microsized lithium-ion batteries for stretchable electronics. Journal of Micromechanics and Microengineering, 2019, 29, 075008.	2.6	5
140	Green Ir(III) complexes with multifunctional ancillary ligands for highly efficient solution-processed phosphorescence organic light-emitting diodes with high current efficiency. Organic Electronics, 2021, 88, 106023.	2.6	5
141	Synthesis and Characterization of Thiophene-Based Copolymers Containing Urethane and Alkyl Functional Side Chains for Hybrid Bulk Heterojunction Photovoltaic Cell Applications. Bulletin of the Korean Chemical Society, 2011, 32, 559-565.	1.9	5
142	A Novel Donor-Acceptor-Acceptor-Acceptor Polymer Containing Benzodithiophene and Benzimidazole-Benzothiadiazole-Benzimidazole for PSCs. Bulletin of the Korean Chemical Society, 2014, 35, 1098-1104.	1.9	5
143	Synthesis and Characterization of Highly Branched Poly(p-phenylenevinylene) Derivatives for Polymer Light-Emitting Diode Applications. Macromolecules, 2008, 41, 6696-6702.	4.8	4
144	Synthesis and Characterization of Phenylpyridine-Based Iridium(III) Complex for Solution-Processed Phosphorescent Organic Light-Emitting Diode. Journal of Nanoscience and Nanotechnology, 2014, 14, 5495-5500.	0.9	4

#	Article	IF	Citations
145	Effects of Doping Concentration and Emission Layer Thickness on Recombination Zone and Exciton Density Control in Blue Phosphorescent Organic Light-Emitting Diodes. ECS Journal of Solid State Science and Technology, 2017, 6, R170-R174.	1.8	4
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147	Influence of the Electron Acceptor Group on the Backbone of N-(2,6-Diisopropylphenyl)-2,5-di(2-thienyl)pyrrole-Based Polymer. Bulletin of the Korean Chemical Society, 2012, 33, 3845-3848.	1.9	4
148	Efficient and Stable Fiber Dye-Sensitized Solar Cells Based on Solid-State Li-TFSI Electrolytes with 4-Oxo-TEMPO Derivatives. Nanomaterials, 2022, 12, 2309.	4.1	4
149	Synthesis and Electro-Optical Properties of Fluorene-Based Copolymer for Organic Photovoltaic Device Application. Molecular Crystals and Liquid Crystals, 2011, 538, 223-231.	0.9	3
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157	Efficiency improvement of solution processed red phosphorescent organic light-emitting diodes using optimized hole transport material. Optical Materials, 2013, 35, 685-689.	3.6	2
158	Phosphine oxide and Amino N -oxide functionalized phenylquinoline-based small molecules: New cathode interfacial layers for high-performance inverted organic solar cells. Organic Electronics, 2018, 58, 111-118.	2.6	2
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