Sang Kyu Lee

List of Publications by Year
in descending order

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59 papers	1,631 citations	257450 24 h-index	302126 39 g-index
59 all docs	59 docs citations	59 times ranked	2195 citing authors

#	Article	IF	Citations
1	Synthesis and characterization of a thiazolo[5,4-d]thiazole-based copolymer for high performance polymer solar cells. Chemical Communications, 2011, 47, 1791-1793.	4.1	129
2	Synthesis and Characterization of New Selenophene-Based Donorâ€“Acceptor Low-Bandgap Polymers for Organic Photovoltaic Cells. Macromolecules, 2012, 45, 1303-1312.	4.8	90
3	Fluorene-based alternating polymers containing electron-withdrawing bithiazole units: Preparation and device applications. Journal of Polymer Science Part A, 2005, 43, 1845-1857.	2.3	88
4	Highly efficient and thermally stable fullerene-free organic solar cells based on a small molecule donor and acceptor. Journal of Materials Chemistry A, 2016, 4, 16335-16340.	10.3	88
5	Highâ€Performance Small Molecule via Tailoring Intermolecular Interactions and its Application in Largeâ€Area Organic Photovoltaic Modules. Advanced Energy Materials, 2016, 6, 1600228.	19.5	69
6	Synthesis of new polyfluorene copolymers with a comonomer containing triphenylamine units and their applications in white-light-emitting diodes. Journal of Polymer Science Part A, 2007, 45, 1199-1209.	2.3	65
7	Synthesis and Photovoltaic Properties of Quinoxaline-Based Alternating Copolymers for High-Efficiency Bulk-Heterojunction Polymer Solar Cells. Macromolecules, 2011, 44, 5994-6001.	4.8	63
8	Simple Bithiopheneâ€“Rhodanineâ€Based Small Molecule Acceptor for Use in Additiveâ€Free Nonfullerene OPVs with Low Energy Loss of 0.51 eV. Advanced Energy Materials, 2019, 9, 1804021.	19.5	58
9	Room Temperature Processed Highly Efficient Largeâ€Area Polymer Solar Cells Achieved with Molecular Engineering of Copolymers. Advanced Energy Materials, 2019, 9, 1900168.	19.5	50
10	Synthesis and Characterization of a Novel Naphthodithiophene-Based Copolymer for Use in Polymer Solar Cells. Macromolecules, 2012, 45, 6938-6945.	4.8	48
11	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
12	High-Performance CH₃NH₃PbI₃-Inverted Planar Perovskite Solar Cells with Fill Factor Over 83% via Excess Organic/Inorganic Halide. ACS Applied Materials & Interfaces, 2017, 9, 35871-35879.	8.0	40
13	Asymmetric Electron-Donating 4-Alkyl-8-alkoxybenzo[1,2-b:4,5-bâ€²]dithiophene Unit for Use in High-Efficiency Bulk Heterojunction Polymer Solar Cells. Macromolecules, 2015, 48, 3918-3927.	4.8	39
14	Non-halogenated solvent-processed ternary-blend solar cells via alkyl-side-chain engineering of a non-fullerene acceptor and their application in large-area devices. Journal of Materials Chemistry A, 2020, 8, 10318-10330.	10.3	39
15	Fluorene copolymers containing bithiophene/2,5- or 2,6-pyridine units: A study of their optical, electrochemical, and electroluminescence properties. Journal of Polymer Science Part A, 2006, 44, 4611-4620.	2.3	36
16	Effects on Photovoltaic Performance of Dialkyloxy-benzothiadiazole Copolymers by Varying the Thienoacene Donor. ACS Applied Materials & Interfaces, 2017, 9, 12617-12628.	8.0	35
17	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
18	Achieving a solar power conversion efficiency exceeding 9% by modifying the structure of a simple, inexpensive and highly scalable polymer. Journal of Materials Chemistry A, 2016, 4, 18585-18597.	10.3	32

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19	White electroluminescence from a single polyfluorene containing bis-DCM units. Journal of Polymer Science Part A, 2007, 45, 3380-3390.	2.3	31
20	Effects of substituted side-chain position on donor-acceptor conjugated copolymers. Journal of Polymer Science Part A, 2011, 49, 1821-1829.	2.3	31
21	Thiophene-benzothiadiazole based Dâ€“A₁â€“Dâ€“A₂ type alternating copolymers for polymer solar cells. Polymer Chemistry, 2017, 8, 3622-3631.	3.9	30
22	Enhanced efficiency and stability of PTB7-Th-based multi-non-fullerene solar cells enabled by the working mechanism of the coexisting alloy-like structure and energy transfer model. Journal of Materials Chemistry A, 2019, 7, 22044-22053.	10.3	26
23	Alternating fluorene copolymers containing isothianaphthene derivatives: A study of their aggregation properties and small band gap. Journal of Polymer Science Part A, 2008, 46, 3573-3590.	2.3	25
24	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
25	Simple and Versatile Non-Fullerene Acceptor Based on Benzothiadiazole and Rhodanine for Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 30098-30107.	8.0	24
26	Concentration-Dependent Pyrene-Driven Self-Assembly in Benzo[1,2-b:4,5-bâ€²]dithiophene (BDT)â€“Thienothiophene (TT)â€“Pyrene Copolymers. Macromolecules, 2015, 48, 3509-3515.	4.8	23
27	Synthesis and characterization of thiazolothiazoleâ€based polymers and their applications in polymer solar cells. Journal of Polymer Science Part A, 2011, 49, 3129-3137.	2.3	22
28	Effects of Electron-Donating and Electron-Accepting Substitution on Photovoltaic Performance in Benzothiadiazole-Based Aâ€“Dâ€“Aâ€²â€“Dâ€“A-Type Small-Molecule Acceptor Solar Cells. ACS Applied Energy Materials, 2020, 3, 12327-12337.	5.1	22
29	Bulk heterojunction polymer solar cells based on binary and ternary blend systems. Journal of Polymer Science Part A, 2011, 49, 4416-4424.	2.3	21
30	Synthesis and characterization of regioregular poly(3â€dodecyltellurophene). Journal of Polymer Science Part A, 2013, 51, 2753-2758.	2.3	21
31	High-efficiency non-halogenated solvent processable polymer/PCBM solar cells via fluorination-enabled optimized nanoscale morphology. Journal of Materials Chemistry A, 2019, 7, 24992-25002.	10.3	21
32	A thermally and mechanically stable solar cell made of a small-molecule donor and a polymer acceptor. Journal of Materials Chemistry A, 2017, 5, 15923-15931.	10.3	20
33	Alkyl side-chain dependent self-organization of small molecule and its application in high-performance organic and perovskite solar cells. Nano Energy, 2020, 72, 104708.	16.0	20
34	Rational design of Ï€-bridges for ambipolar DPP-RH-based small molecules in organic photovoltaic cells. Journal of Industrial and Engineering Chemistry, 2017, 45, 338-348.	5.8	19
35	High-performance CH3NH3PbI3 inverted planar perovskite solar cells via ammonium halide additives. Journal of Industrial and Engineering Chemistry, 2019, 80, 265-272.	5.8	19
36	Effects of morphology evolution on solution-processed small molecule photovoltaics via a solvent additive. Journal of Materials Chemistry C, 2017, 5, 7837-7844.	5.5	16

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37	High-efficiency single and tandem fullerene solar cells with asymmetric monofluorinated diketopyrrolopyrrole-based polymer. Journal of Energy Chemistry, 2022, 64, 236-245.	12.9	15
38	Enhanced photostability in polymer solar cells achieved with modified electron transport layer. Thin Solid Films, 2019, 669, 42-48.	1.8	14
39	Strategic Halogen Substitution to Enable Highâ€Performance Smallâ€Moleculeâ€Based Tandem Solar Cell with over 15% Efficiency. Advanced Energy Materials, 2020, 10, 1903846.	19.5	14
40	Effective Molecular Engineering Approach for Employing a Halogen-Free Solvent for the Fabrication of Solution-Processed Small-Molecule Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 39107-39115.	8.0	13
41	Amine-Based Interfacial Engineering in Solution-Processed Organic and Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 16785-16794.	8.0	12
42	Photovoltaic performance enhancement using fluoreneâ€based copolymers containing pyrene units. Journal of Polymer Science Part A, 2013, 51, 1512-1519.	2.3	11
43	High-Efficiency Nonfullerene Polymer Solar Cells with Band gap and Absorption Tunable Donor/Acceptor Random Copolymers. ACS Applied Materials & Interfaces, 2019, 11, 2189-2196.	8.0	11
44	Alkyl-Side-Chain Engineering of Nonfused Nonfullerene Acceptors with Simultaneously Improved Material Solubility and Device Performance for Organic Solar Cells. ACS Omega, 2021, 6, 4562-4573.	3.5	11
45	Low band gap diketopyrrolopyrrole-based small molecule bulk heterojunction solar cells: influence of terminal side chain on morphology and photovoltaic performance. RSC Advances, 2016, 6, 28658-28665.	3.6	10
46	Efficiency enhancement of a fluorinated wide-bandgap polymer for ternary nonfullerene organic solar cells. Polymer, 2020, 188, 122131.	3.8	10
47	Band gap tunable benzodithiophene-based donor-rich semi-random Dâ€“A copolymers with active layer thickness tolerance for organic solar cells. Solar Energy Materials and Solar Cells, 2015, 134, 148-156.	6.2	9
48	Stable P3HT: amorphous non-fullerene solar cells with a high open-circuit voltage of 1 V and efficiency of 4%. RSC Advances, 2019, 9, 20733-20741.	3.6	9
49	Effect of side chain position on solar cell performance in cyclopentadithiophene-based copolymers. Thin Solid Films, 2012, 520, 5438-5441.	1.8	8
50	Performance data of CH3NH3PbI3 inverted planar perovskite solar cells via ammonium halide additives. Data in Brief, 2019, 27, 104817.	1.0	6
51	Effect of backbone structures on photovoltaic properties in naphthodithiopheneâ€based copolymers. Journal of Polymer Science Part A, 2014, 52, 305-312.	2.3	5
52	Microwave assisted synthesis of bithiophene based donor-acceptor-donor oligomers and their optoelectronic performances. Journal of Molecular Structure, 2017, 1139, 125-129.	3.6	4
53	The effect of periodontal and prosthodontic therapy on glycemic control in patients with diabetes. Journal of Advanced Prosthodontics, 2019, 11, 247.	2.6	3
54	Structure engineering of small molecules for organic solar cells. Molecular Crystals and Liquid Crystals, 2020, 705, 35-40.	0.9	3

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55	Cyclohexyl-substituted non-fullerene small-molecule acceptors for organic solar cells. New Journal of Chemistry, 2021, 45, 10373-10382.	2.8	2
56	Synthesis and characterization of thieno[3,4-c]pyrrole-4,6-dione-based copolymers for polymer solar cells. Journal of the Korean Physical Society, 2015, 67, 1023-1027.	0.7	1
57	Alkoxy substituted wide bandgap conjugated polymer for non-fullerene polymer solar cells. Molecular Crystals and Liquid Crystals, 2021, 729, 6-13.	0.9	1
58	Synthesis and characterization of benzo[1,2-b:4,5-bâ€™]dithiophene-based copolymers for polymer solar cells. Journal of the Korean Physical Society, 2015, 67, 1018-1022.	0.7	0
59	Editorial: Special issue on the KJF International Conference on Organic Materials for Electronics and Photonics 2015. Polymer Bulletin, 2016, 73, 2391-2391.	3.3	0