Sang Kyu Lee

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6017137/publications.pdf

Version: 2024-02-01

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	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
2	Cyclohexyl-substituted non-fullerene small-molecule acceptors for organic solar cells. New Journal of Chemistry, 2021, 45, 10373-10382.	2.8	2
3	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
4	Alkoxy substituted wide bandgap conjugated polymer for non-fullerene polymer solar cells. Molecular Crystals and Liquid Crystals, 2021, 729, 6-13.	0.9	1
5	Efficiency enhancement of a fluorinated wide-bandgap polymer for ternary nonfullerene organic solar cells. Polymer, 2020, 188, 122131.	3.8	10
6	Structure engineering of small molecules for organic solar cells. Molecular Crystals and Liquid Crystals, 2020, 705, 35-40.	0.9	3
7	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
8	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
9	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
10	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
11	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
12	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
13	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
14	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
15	Amine-Based Interfacial Engineering in Solution-Processed Organic and Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 16785-16794.	8.0	12
16	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
17	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
18	Performance data of CH3NH3PbI3 inverted planar perovskite solar cells via ammonium halide additives. Data in Brief, 2019, 27, 104817.	1.0	6

#	Article	IF	Citations
19	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
20	The effect of periodontal and prosthodontic therapy on glycemic control in patients with diabetes. Journal of Advanced Prosthodontics, 2019, 11, 247.	2.6	3
21	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
22	Enhanced photostability in polymer solar cells achieved with modified electron transport layer. Thin Solid Films, 2019, 669, 42-48.	1.8	14
23	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
24	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
25	Thiophene-benzothiadiazole based Dâ€“A₁â€“Dâ€“A₂ type alternating copolymers for polymer solar cells. Polymer Chemistry, 2017, 8, 3622-3631.	3.9	30
26	Effects on Photovoltaic Performance of Dialkyloxy-benzothiadiazole Copolymers by Varying the Thienoacene Donor. ACS Applied Materials & Interfaces, 2017, 9, 12617-12628.	8.0	35
27	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
28	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
29	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
30	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
31	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
32	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
33	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
34	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
35	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
36	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

#	Article	IF	Citations
37	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
38	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
39	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
40	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
41	Effect of backbone structures on photovoltaic properties in naphthodithiopheneâ€based copolymers. Journal of Polymer Science Part A, 2014, 52, 305-312.	2.3	5
42	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
43	Photovoltaic performance enhancement using fluoreneâ€based copolymers containing pyrene units. Journal of Polymer Science Part A, 2013, 51, 1512-1519.	2.3	11
44	Synthesis and characterization of regioregular poly(3â€dodecyltellurophene). Journal of Polymer Science Part A, 2013, 51, 2753-2758.	2.3	21
45	Synthesis and Characterization of New Selenophene-Based Donorâ€“Acceptor Low-Bandgap Polymers for Organic Photovoltaic Cells. Macromolecules, 2012, 45, 1303-1312.	4.8	90
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	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
48	Effect of side chain position on solar cell performance in cyclopentadithiophene-based copolymers. Thin Solid Films, 2012, 520, 5438-5441.	1.8	8
49	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
50	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
51	Effects of substituted side-chain position on donor-acceptor conjugated copolymers. Journal of Polymer Science Part A, 2011, 49, 1821-1829.	2.3	31
52	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
53	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
54	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

#	Article	IF	Citations
55	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
56	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
57	White electroluminescence from a single polyfluorene containing bis-DCM units. Journal of Polymer Science Part A, 2007, 45, 3380-3390.	2.3	31
58	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
59	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