Jea Woong Jo

List of Publications by Year
in descending order

63 papers	3,365 citations	201674 27 h-index	144013 57 g-index
64 all docs	64 docs citations	64 times ranked	5253 citing authors

#	Article	IF	Citations
1	Fluoroâ€Substituted nâ€Type Conjugated Polymers for Additiveâ€Free Allâ€Polymer Bulk Heterojunction Solar Cells with High Power Conversion Efficiency of 6.71%. Advanced Materials, 2015, 27, 3310-3317.	21.0	421
2	Metalâ€“Organic Frameworks Mediate Cu Coordination for Selective CO₂ Electroreduction. Journal of the American Chemical Society, 2018, 140, 11378-11386.	13.7	326
3	Fabrication of Highly Conductive and Transparent Thin Films from Single-Walled Carbon Nanotubes Using a New Non-ionic Surfactant <i>via</i> Spin Coating. ACS Nano, 2010, 4, 5382-5388.	14.6	215
4	Cascade surface modification of colloidal quantum dot inks enables efficient bulk homojunction photovoltaics. Nature Communications, 2020, 11, 103.	12.8	181
5	Fluorination on both D and A units in Dâ€“A type conjugated copolymers based on difluorobithiophene and benzothiadiazole for highly efficient polymer solar cells. Energy and Environmental Science, 2015, 8, 2427-2434.	30.8	168
6	Fluorination of Polythiophene Derivatives for High Performance Organic Photovoltaics. Chemistry of Materials, 2014, 26, 4214-4220.	6.7	142
7	Improving Performance and Stability of Flexible Planarâ€Heterojunction Perovskite Solar Cells Using Polymeric Holeâ€Transport Material. Advanced Functional Materials, 2016, 26, 4464-4471.	14.9	136
8	Degradation and stability of polymer-based solar cells. Journal of Materials Chemistry, 2012, 22, 24265.	6.7	134
9	Chloride Passivation of ZnO Electrodes Improves Charge Extraction in Colloidal Quantum Dot Photovoltaics. Advanced Materials, 2017, 29, 1702350.	21.0	126
10	Comparison of Two Dâ˜A Type Polymers with Each BeingÂFluorinated on D and A Unit for High Performance Solar Cells. Advanced Functional Materials, 2015, 25, 120-125.	14.9	108
11	Enhanced Performance and Air Stability of Polymer Solar Cells by Formation of a Selfâ€Assembled Buffer Layer from Fullereneâ€Endâ€Capped Poly(ethylene glycol). Advanced Materials, 2011, 23, 1782-1787.	21.0	106
12	Recent progress in high efficiency polymer solar cells by rational design and energy level tuning of low bandgap copolymers with various electron-withdrawing units. Organic Electronics, 2016, 31, 149-170.	2.6	103
13	A Facetâ€Specific Quantum Dot Passivation Strategy for Colloid Management and Efficient Infrared Photovoltaics. Advanced Materials, 2019, 31, e1805580.	21.0	87
14	Amideâ€Catalyzed Phaseâ€Selective Crystallization Reduces Defect Density in Wideâ€Bandgap Perovskites. Advanced Materials, 2018, 30, e1706275.	21.0	80
15	Butylamineâ€Catalyzed Synthesis of Nanocrystal Inks Enables Efficient Infrared CQD Solar Cells. Advanced Materials, 2018, 30, e1803830.	21.0	67
16	A low band-gap polymer based on unsubstituted benzo[1,2-b:4,5-bâ€²]dithiophene for high performance organic photovoltaics. Chemical Communications, 2012, 48, 6933.	4.1	66
17	Activated Electronâ€Transport Layers for Infrared Quantum Dot Optoelectronics. Advanced Materials, 2018, 30, e1801720.	21.0	57
18	Acid-Assisted Ligand Exchange Enhances Coupling in Colloidal Quantum Dot Solids. Nano Letters, 2018, 18, 4417-4423.	9.1	57

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19	Multibandgap quantum dot ensembles for solar-matched infrared energy harvesting. Nature Communications, 2018, 9, 4003.	12.8	56
20	Effect of Molecular Orientation of Donor Polymers on Charge Generation and Photovoltaic Properties in Bulk Heterojunction Allâ€Polymer Solar Cells. Advanced Energy Materials, 2017, 7, 1601365.	19.5	51
21	Efficiency enhancement of P3HT/PCBM bulk heterojunction solar cells by attaching zinc phthalocyanine to the chain-end of P3HT. Journal of Materials Chemistry, 2011, 21, 17209.	6.7	49
22	Enhanced Openâ€Circuit Voltage in Colloidal Quantum Dot Photovoltaics via Reactivityâ€Controlled Solutionâ€Phase Ligand Exchange. Advanced Materials, 2017, 29, 1703627.	21.0	49
23	Nanoimprint-Transfer-Patterned Solids Enhance Light Absorption in Colloidal Quantum Dot Solar Cells. Nano Letters, 2017, 17, 2349-2353.	9.1	46
24	Development of Selfâ€Doped Conjugated Polyelectrolytes with Controlled Work Functions and Application to Hole Transport Layer Materials for Highâ€Performance Organic Solar Cells. Advanced Materials Interfaces, 2016, 3, 1500703.	3.7	41
25	Highâ€Performance and Uniform 1 cm² Polymer Solar Cells with D₁â€Aâ€D₂â€Aâ€Type Random Terpolymers. Advanced Energy Materials, 2018, 8, 1701405.	19.5	39
26	Graphene-based electrodes for flexible electronics. Polymer International, 2015, 64, 1676-1684.	3.1	33
27	A fluorinated polythiophene hole-transport material for efficient and stable perovskite solar cells. Dyes and Pigments, 2019, 164, 1-6.	3.7	31
28	In-situ preparation of graphene/poly(styrenesulfonic acid-graft-polyaniline) nanocomposite via direct exfoliation of graphite for supercapacitor application. Carbon, 2016, 105, 191-198.	10.3	27
29	A tailored graft-type polymer as a dopant-free hole transport material in indoor perovskite photovoltaics. Journal of Materials Chemistry A, 2021, 9, 15294-15300.	10.3	27
30	Non-hydrolytic sol-gel route to synthesize TiO2 nanoparticles under ambient condition for highly efficient and stable perovskite solar cells. Solar Energy, 2019, 185, 307-314.	6.1	25
31	Development of organic-inorganic double hole-transporting material for high performance perovskite solar cells. Journal of Power Sources, 2018, 378, 98-104.	7.8	24
32	Infrared Cavity-Enhanced Colloidal Quantum Dot Photovoltaics Employing Asymmetric Multilayer Electrodes. ACS Energy Letters, 2018, 3, 2908-2913.	17.4	20
33	Isoindigo-based conjugated polymer for high-performance organic solar cell with a high VOC of 1.06â€V as processed from non-halogenated solvent. Dyes and Pigments, 2019, 161, 113-118.	3.7	20
34	Controlling the Morphology of Organicâ€"Inorganic Hybrid Perovskites through Dual Additive-Mediated Crystallization for Solar Cell Applications. ACS Applied Materials & Interfaces, 2019, 11, 17452-17458.	8.0	19
35	Synthesis of thieno[3,4-d]thiazole-based conjugated polymers and HOMO level tuning for high VOC photovoltaic cell. Organic Electronics, 2012, 13, 1322-1328.	2.6	18
36	Synthesis of a low bandgap polymer based on a thiadiazolo-indolo[3,2-b]carbazole derivative for enhancement of open circuit voltage of polymer solar cells. Polymer Chemistry, 2012, 3, 2928.	3.9	17

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37	Synergistic effects of solvent and polymer additives on solar cell performance and stability of small molecule bulk heterojunction solar cells. Journal of Materials Chemistry A, 2016, 4, 18383-18391.	10.3	17
38	Low-Temperature Processable Charge Transporting Materials for the Flexible Perovskite Solar Cells. Electronic Materials Letters, 2018, 14, 657-668.	2.2	17
39	Configurationally Random Polythiophene for Improved Polymer Ordering and Charge-Transporting Ability. ACS Applied Materials & Interfaces, 2020, 12, 40599-40606.	8.0	16
40	Effect of fluorine substitution on photovoltaic performance of DPP-based copolymer. Organic Electronics, 2015, 20, 125-131.	2.6	12
41	Development of Novel Conjugated Polyelectrolytes as Water-Processable Interlayer Materials for High-Performance Organic Photodiodes. ACS Photonics, 2017, 4, 703-709.	6.6	12
42	Enhanced photovoltaic performance of solution-processed Sb2Se3 thin film solar cells by optimizing device structure. Current Applied Physics, 2020, 20, 282-287.	2.4	11
43	Solidâ€State Electrolyte Dielectrics Based on Exceptional Highâ€<i>k</i> P(VDFâ€TrFEâ€CTFE) Terpolymer for Highâ€Performance Fieldâ€Effect Transistors. Advanced Materials Interfaces, 2020, 7, 2000842.	3.7	10
44	Inclusion of triphenylamine unit in dopant-free hole transport material for enhanced interfacial interaction in perovskite photovoltaics. Dyes and Pigments, 2022, 200, 110162.	3.7	10
45	<scp>Structurallyâ€tuned</scp> benzo[1,2â€b:4,5:b']<scp>dithiopheneâ€based</scp> polymer as a <scp>dopantâ€free</scp> hole transport material for perovskite solar cells. Journal of Polymer Science, 2022, 60, 985-991.	3.8	9
46	Isoindigo-based fluorinated low band gap polymers for environmentally stable field effect transistor. Dyes and Pigments, 2016, 133, 333-338.	3.7	8
47	Development of a conjugated donor-acceptor polyelectrolyte with high work function and conductivity for organic solar cells. Organic Electronics, 2017, 50, 1-6.	2.6	8
48	Understanding Effects of Ion Diffusion on Charge Carrier Mobility of Electrolyteâ€Gated Organic Transistor Using Ionic Liquidâ€Embedded Poly(3â€hexylthiophene). Advanced Functional Materials, 2022, 32, 2108215.	14.9	8
49	Improved Electron Transport in Ambipolar Organic Field-Effect Transistors with PMMA/Polyurethane Blend Dielectrics. Macromolecular Research, 2020, 28, 1248-1252.	2.4	6
50	Concentrated perovskite photovoltaics enable minimization of energy loss below 0.5 eV under artificial lightâ€emitting diode illumination. International Journal of Energy Research, 0, , .	4.5	6
51	Surface-Passivated CsPbBr3 for Developing Efficient and Stable Perovskite Photovoltaics. Crystals, 2021, 11, 1588.	2.2	6
52	Development of intrinsically fullerene-compatible polymers: Strategy for developing high performance organic solar cells using a non-halogenated solvent. Dyes and Pigments, 2016, 132, 103-109.	3.7	5
53	Random copolymerization of polythiophene for simultaneous enhancement of inâ€plane and outâ€ofâ€plane charge transport for organic transistors and perovskite solar cells. International Journal of Energy Research, 2021, 45, 7998-8007.	4.5	5
54	Ionic liquid-mediated reconstruction of perovskite surface for highly efficient photovoltaics. Chemical Engineering Journal, 2022, 446, 137351.	12.7	5

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55	Exploring low-k dielectrics as structuring polymers for solid-state electrolyte-gated transistors. Organic Electronics, 2019, 75, 105434.	2.6	3
56	High-mobility amorphous PTB7 organic transistors enabled by high-capacitance electrolyte dielectric. Applied Physics Letters, 2021, 119, .	3.3	3
57	Perovskite Photovoltaics for Artificial Light Harvesting. Chemistry - A European Journal, 2022, 28, .	3.3	3
58	Highâ€purity synthesis of allâ€inorganic <scp> CsPbBr ₃ </scp> perovskite powder assisted by solubilizing organic ligand and its application to perovskite solar cells. International Journal of Energy Research, 0, , .	4.5	3
59	Flexible Electronics: Improving Performance and Stability of Flexible Planarâ€Heterojunction Perovskite Solar Cells Using Polymeric Holeâ€Transport Material (Adv. Funct. Mater. 25/2016). Advanced Functional Materials, 2016, 26, 4426-4426.	14.9	2
60	Stable electrolyte dielectric engineered bottom-gate poly(3-hexylthiophene) transistors with enhanced mobility. Organic Electronics, 2022, 102, 106430.	2.6	2
61	Random copolymerization of regiorandom polythiophene to improve planarity, aggregation and hole-transport. Dyes and Pigments, 2021, 185, 108943.	3.7	1
62	Modulation of energy levels and vertical charge transport in polythiophene through copolymerization of non-fluorinated and fluorinated units for organic indoor photovoltaics. Dyes and Pigments, 2021, 190, 109292.	3.7	1
63	Frontispiece: Perovskite Photovoltaics for Artificial Light Harvesting. Chemistry - A European Journal, 2022, 28, .	3.3	0