

Jae Woong Jung

List of Publications by Year in descending order

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papers

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136950

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docs citations

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times ranked

5744
citing authors

#	ARTICLE	IF	CITATIONS
1	Simultaneously enhanced efficiency and ambient stability of inorganic perovskite solar cells by employing tetramethylammonium chloride additive in CsPbI ₂ Br. <i>Journal of Materials Science and Technology</i> , 2022, 102, 224-231.	10.7	22
2	A cascade bilayer electron transport layer toward efficient and stable <scp>Ruddlesdenâ€Popper</scp> perovskite solar cells. <i>International Journal of Energy Research</i> , 2022, 46, 8229-8239.	4.5	9
3	On the role of carboxylated polythiophene in defect passivation of CsPbI ₂ Br surface for efficient and stable <scp>allâ€inorganic</scp> perovskite solar cells. <i>International Journal of Energy Research</i> , 2022, 46, 6012-6021.	4.5	13
4	Synthesis and Characterization of Diketopyrrolopyrrole-Based Aggregation-Induced Emission Nanoparticles for Bioimaging. <i>Molecules</i> , 2022, 27, 2984.	3.8	2
5	Efficient Inverted Solar Cells Using Benzotriazole-Based Small Molecule and Polymers. <i>Polymers</i> , 2021, 13, 393.	4.5	4
6	Facile Post Treatment of Ag Nanowire/Polymer Composites for Flexible Transparent Electrodes and Thin Film Heaters. <i>Polymers</i> , 2021, 13, 586.	4.5	20
7	Investigation of the Chemical Structure of Ultra-Thin Polyimide Substrate for the Xenon Flash Lamp Lift-off Technology. <i>Polymers</i> , 2021, 13, 546.	4.5	3
8	Effective Dark Current Suppression for High-Detectivity Organic Near-Infrared Photodetectors Using a Non-Fullerene Acceptor. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 11144-11150.	8.0	32
9	A Facile Solution Engineering of PEDOT:PSS-Coated Conductive Textiles for Wearable Heater Applications. <i>Polymers</i> , 2021, 13, 945.	4.5	9
10	Polyaniline/Reduced Graphene Oxide Composites for Hole Transporting Layer of High-Performance Inverted Perovskite Solar Cells. <i>Polymers</i> , 2021, 13, 1281.	4.5	23
11	Investigation of high-performance perovskite nanocrystals for inkjet-printed color conversion layers with superior color purity. <i>APL Photonics</i> , 2021, 6, .	5.7	25
12	Dual Passivation of SnO ₂ by Tetramethylammonium Chloride for High-Performance CsPbI ₂ Br-Based Inorganic Perovskite Solar Cells. <i>Chemistry of Materials</i> , 2021, 33, 5850-5858.	6.7	39
13	Binary-mixed organic electron transport layers for planar heterojunction perovskite solar cells with high efficiency and thermal reliability. <i>Chemical Engineering Journal</i> , 2021, 420, 129678.	12.7	15
14	CsCl-induced defect control of CsPbI ₂ Br thin films for achieving open-circuit voltage of 1.33V in all-inorganic perovskite solar cells. <i>Journal of Power Sources</i> , 2021, 512, 230481.	7.8	16
15	Synthesis and characterisation of dimeric triphenylmethane water-soluble dyes for high-speed inkjet printing. <i>Dyes and Pigments</i> , 2021, 196, 109737.	3.7	4
16	Green solvent engineering for environment-friendly fabrication of high-performance perovskite solar cells. <i>Chemical Engineering Journal</i> , 2021, 425, 131475.	12.7	12
17	Silverâ€Nanowireâ€Embedded Photopolymer Films for Transparent Film Heaters with Ultraâ€Flexibility, Quick Thermal Response, and Mechanical Reliability. <i>Advanced Electronic Materials</i> , 2021, 7, 2000698.	5.1	15
18	ZrSnO ₄ : A Solution-Processed Robust Electron Transport Layer of Efficient Planar-Heterojunction Perovskite Solar Cells. <i>Nanomaterials</i> , 2021, 11, 3090.	4.1	3

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19	Room-temperature synthesis of ZrSnO ₄ nanoparticles for electron transport layer in efficient planar heterojunction perovskite solar cells. <i>Journal of Materials Science and Technology</i> , 2020, 42, 38-45.	10.7	15
20	Methylammonium Iodide-Mediated Controlled Crystal Growth of CsPbI ₂ Br Films for Efficient and Stable All-Inorganic Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 36228-36236.	8.0	42
21	Reduced energy loss in SnO ₂ /ZnO bilayer electron transport layer-based perovskite solar cells for achieving high efficiencies in outdoor/indoor environments. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17163-17173.	10.3	72
22	Non-halogenated additive engineering for morphology optimization in environmental-friendly solvent processed non-fullerene organic solar cells. <i>Organic Electronics</i> , 2020, 86, 105893.	2.6	12
23	Enhanced moisture stability of mixed cation perovskite solar cells enabled by a room-temperature solution-processed organic-inorganic bilayer hole transport layer. <i>Journal of Alloys and Compounds</i> , 2020, 847, 156512.	5.5	16
24	Synthesis and characterization of donor-acceptor semiconducting polymers containing 4-(4-((2-ethylhexyl)oxy)phenyl)-4H-dithieno[3,2-b:2',3'-d]pyrrole for organic solar cells. <i>New Journal of Chemistry</i> , 2020, 44, 16900-16912.	2.8	8
25	The Investigation of the Silica-Reinforced Rubber Polymers with the Methoxy Type Silane Coupling Agents. <i>Polymers</i> , 2020, 12, 3058.	4.5	25
26	Ultra-flexible, stretchable, highly conductive and multi-functional textiles enabled by brush-painted PEDOT:PSS. <i>Smart Materials and Structures</i> , 2020, 29, 095002.	3.5	10
27	The development and investigation of highly stretchable conductive inks for 3-dimensional printed in-mold electronics. <i>Organic Electronics</i> , 2020, 85, 105881.	2.6	17
28	Reduced interface energy loss in non-fullerene organic solar cells using room temperature-synthesized SnO ₂ quantum dots. <i>Journal of Materials Science and Technology</i> , 2020, 52, 12-19.	10.7	17
29	Facile Surface Engineering of Nickel Oxide Thin Film for Enhanced Power Conversion Efficiency of Planar Heterojunction Perovskite Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 15495-15503.	6.7	23
30	Tailored electronic properties of Zr-doped SnO ₂ nanoparticles for efficient planar perovskite solar cells with marginal hysteresis. <i>Nano Energy</i> , 2019, 65, 104014.	16.0	74
31	Molecular doping of CuSCN for hole transporting layers in inverted-type planar perovskite solar cells. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 2158-2166.	6.0	31
32	High-Efficiency and Thermally Sustainable Perovskite Solar Cells with Sandpaper-Aided Flexible Haze/Antireflective Films. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 12981-12989.	6.7	11
33	A Solution-Processed Spinel CuCo ₂ O ₄ as an Effective Hole Transport Layer for Efficient Perovskite Solar Cells with Negligible Hysteresis. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 17661-17670.	6.7	40
34	Efficient perovskite solar cells with negligible hysteresis achieved by sol-gel-driven spinel nickel cobalt oxide thin films as the hole transport layer. <i>Journal of Materials Chemistry C</i> , 2019, 7, 7288-7298.	5.5	22
35	Easily Accessible Low Band Gap Polymer for Efficient Nonfullerene Polymer Solar Cells with a Low E_{loss} of 0.55 eV. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 5435-5440.	8.0	6
36	Enhanced efficiency and ambient stability of planar heterojunction perovskite solar cells by using organic-inorganic double layer electron transporting material. <i>Electrochimica Acta</i> , 2019, 294, 337-344.	5.2	23

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37	A solution-processed cobalt-doped nickel oxide for high efficiency inverted type perovskite solar cells. <i>Journal of Power Sources</i> , 2019, 412, 425-432.	7.8	55
38	Boosting Light Harvesting in Perovskite Solar Cells by Biomimetic Inverted Hemispherical Architected Polymer Layer with High Haze Factor as an Antireflective Layer. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 13113-13123.	8.0	52
39	Improved light harvesting efficiency of semitransparent organic solar cells enabled by broadband/omnidirectional subwavelength antireflective architectures. <i>Journal of Materials Chemistry A</i> , 2018, 6, 14769-14779.	10.3	37
40	Efficient planar heterojunction perovskite solar cells employing a solution-processed Zn-doped NiOX hole transport layer. <i>Electrochimica Acta</i> , 2018, 284, 253-259.	5.2	37
41	A wide band gap polymer based on indacenodithieno[3,2-b]thiophene for high-performance bulk heterojunction polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 712-719.	10.3	16
42	Effect of Molecular Orientation of Donor Polymers on Charge Generation and Photovoltaic Properties in Bulk Heterojunction All-Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2017, 7, 1601365.	19.5	51
43	Flexible and highly efficient perovskite solar cells with a large active area incorporating cobalt-doped poly(3-hexylthiophene) for enhanced open-circuit voltage. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12158-12167.	10.3	54
44	Development of Self-Doped Conjugated Polyelectrolytes with Controlled Work Functions and Application to Hole Transport Layer Materials for High-Performance Organic Solar Cells. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500703.	3.7	41
45	High-Performance Non-Fullerene Organic Solar Cells Based on a Pair of Medium Band Gap Polymer Donor and Perylene Bisimide Derivative Acceptor. <i>Macromolecular Chemistry and Physics</i> , 2016, 217, 2647-2653.	2.2	11
46	High performance polymer solar cells employing a low-temperature solution-processed organic-inorganic hybrid electron transport layer. <i>Journal of Materials Chemistry A</i> , 2016, 4, 16612-16618.	10.3	12
47	High-Performance Semitransparent Perovskite Solar Cells with 10% Power Conversion Efficiency and 25% Average Visible Transmittance Based on Transparent CuSCN as the Hole-Transporting Material. <i>Advanced Energy Materials</i> , 2015, 5, 1500486.	19.5	221
48	A Low-Temperature, Solution-Processable, Cu-Doped Nickel Oxide Hole-Transporting Layer via the Combustion Method for High-Performance Thin-Film Perovskite Solar Cells. <i>Advanced Materials</i> , 2015, 27, 7874-7880.	21.0	405
49	Medium Bandgap Conjugated Polymer for High Performance Polymer Solar Cells Exceeding 9% Power Conversion Efficiency. <i>Advanced Materials</i> , 2015, 27, 7462-7468.	21.0	82
50	Highly Crystalline Low Band Gap Polymer Based on Thieno[3,4-c]pyrrole-4,6-dione for High-Performance Polymer Solar Cells with a >400 nm Thick Active Layer. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 13666-13674.	8.0	44
51	Fluorination on both D and A units in D-A type conjugated copolymers based on difluorobithiophene and benzothiadiazole for highly efficient polymer solar cells. <i>Energy and Environmental Science</i> , 2015, 8, 2427-2434.	30.8	168
52	A Small Molecule Composed of Dithienopyran and Diketopyrrolopyrrole as Versatile Electron Donor Compatible with Both Fullerene and Nonfullerene Electron Acceptors for High Performance Organic Solar Cells. <i>Chemistry of Materials</i> , 2015, 27, 4865-4870.	6.7	70
53	Fluoro-Substituted n-Type Conjugated Polymers for Additive-Free All-Polymer Bulk Heterojunction Solar Cells with High Power Conversion Efficiency of 6.71%. <i>Advanced Materials</i> , 2015, 27, 3310-3317.	21.0	421
54	A low band-gap copolymer composed of thienyl substituted anthracene and diketopyrrolopyrrole compatible with multiple electron acceptors for high efficiency polymer solar cells. <i>Polymer Chemistry</i> , 2015, 6, 4013-4019.	3.9	26

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55	Anthracene-Based Medium Bandgap Conjugated Polymers for High Performance Polymer Solar Cells Exceeding 8% PCE Without Additive and Annealing Process. <i>Advanced Energy Materials</i> , 2015, 5, 1500065.	19.5	57
56	Low-Bandgap Small Molecules as Non-Fullerene Electron Acceptors Composed of Benzothiadiazole and Diketopyrrolopyrrole for All Organic Solar Cells. <i>Chemistry of Materials</i> , 2015, 27, 6038-6043.	6.7	107
57	Three-dimensional molecular donors combined with polymeric acceptors for high performance fullerene-free organic photovoltaic devices. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22162-22169.	10.3	33
58	Low-temperature processed high-performance flexible perovskite solar cells via rationally optimized solvent washing treatments. <i>RSC Advances</i> , 2014, 4, 62971-62977.	3.6	182
59	Enhanced performance of polymer solar cells with PSSA-g-PANI/Graphene oxide composite as hole transport layer. <i>Solar Energy Materials and Solar Cells</i> , 2014, 130, 599-604.	6.2	32
60	Semi-crystalline random conjugated copolymers with panchromatic absorption for highly efficient polymer solar cells. <i>Energy and Environmental Science</i> , 2013, 6, 3301.	30.8	165
61	Synthesis of pyridine-capped diketopyrrolopyrrole and its use as a building block of low band-gap polymers for efficient polymer solar cells. <i>Chemical Communications</i> , 2013, 49, 8495.	4.1	67
62	Densification, Crystallization, and Dielectric Properties of AlN, BN, and Si ₃ N ₄ Filler-Containing LTCC Materials. <i>International Journal of Applied Ceramic Technology</i> , 2013, 10, E25.	2.1	8
63	Degradation and stability of polymer-based solar cells. <i>Journal of Materials Chemistry</i> , 2012, 22, 24265.	6.7	134
64	A low band-gap polymer based on unsubstituted benzo[1,2-b:4,5-b']dithiophene for high performance organic photovoltaics. <i>Chemical Communications</i> , 2012, 48, 6933.	4.1	66
65	A high mobility conjugated polymer based on dithienothiophene and diketopyrrolopyrrole for organic photovoltaics. <i>Energy and Environmental Science</i> , 2012, 5, 6857.	30.8	171
66	On the morphology of polymer-based photovoltaics. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 1018-1044.	2.1	297
67	Chemically Driven Zero Shrinkage Dielectric Ceramics. <i>Journal of the American Ceramic Society</i> , 2012, 95, 1796-1798.	3.8	5
68	Enhanced Performance and Air Stability of Polymer Solar Cells by Formation of a Self-Assembled Buffer Layer from Fullerene-Capped Poly(ethylene glycol). <i>Advanced Materials</i> , 2011, 23, 1782-1787.	21.0	106
69	Annealing-Free High Efficiency and Large Area Polymer Solar Cells Fabricated by a Roller Painting Process. <i>Advanced Functional Materials</i> , 2010, 20, 2355-2363.	14.9	73
70	High-Efficiency Polymer Solar Cells with Water-Soluble and Self-Doped Conducting Polyaniline Graft Copolymer as Hole Transport Layer. <i>Journal of Physical Chemistry C</i> , 2010, 114, 633-637.	3.1	91
71	Synthesis of C60-end capped P3HT and its application for high performance of P3HT/PCBM bulk heterojunction solar cells. <i>Journal of Materials Chemistry</i> , 2010, 20, 3287.	6.7	116