Song Yi Park

List of Publications by Year
in descending order

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Version: 2024-02-01

56 papers	1,770 citations	257450 24 h-index	276875 41 g-index
56 all docs	56 docs citations	56 times ranked	2630 citing authors

#	Article	IF	Citations
1	Interplay of Intramolecular Noncovalent Coulomb Interactions for Semicrystalline Photovoltaic Polymers. Chemistry of Materials, 2015, 27, 5997-6007.	6.7	150
2	Recent progress in indoor organic photovoltaics. Nanoscale, 2020, 12, 5792-5804.	5.6	126
3	Fluorine Functionalized Graphene Nano Platelets for Highly Stable Inverted Perovskite Solar Cells. Nano Letters, 2017, 17, 6385-6390.	9.1	106
4	Single Component Organic Solar Cells Based on Oligothiopheneâ€Fullerene Conjugate. Advanced Functional Materials, 2017, 27, 1702474.	14.9	91
5	Synthesis of PCDTBT-Based Fluorinated Polymers for High Open-Circuit Voltage in Organic Photovoltaics: Towards an Understanding of Relationships between Polymer Energy Levels Engineering and Ideal Morphology Control. ACS Applied Materials & Interfaces, 2014, 6, 7523-7534.	8.0	88
6	Investigation of Charge Carrier Behavior in High Performance Ternary Blend Polymer Solar Cells. Advanced Energy Materials, 2016, 6, 1600637.	19.5	85
7	High-efficiency photovoltaic cells with wide optical band gap polymers based on fluorinated phenylene-alkoxybenzothiadiazole. Energy and Environmental Science, 2017, 10, 1443-1455.	30.8	84
8	Reversible, Full-Color Luminescence by Post-treatment of Perovskite Nanocrystals. Joule, 2018, 2, 2105-2116.	24.0	61
9	Vivid and Fully Saturated Blue Light-Emitting Diodes Based on Ligand-Modified Halide Perovskite Nanocrystals. ACS Applied Materials & Interfaces, 2019, 11, 23401-23409.	8.0	60
10	A universal processing additive for high-performance polymer solar cells. RSC Advances, 2017, 7, 7476-7482.	3.6	58
11	Conjugated Polyelectrolytes as Efficient Hole Transport Layers in Perovskite Light-Emitting Diodes. ACS Nano, 2018, 12, 5826-5833.	14.6	56
12	Alkoxybenzothiadiazole-Based Fullerene and Nonfullerene Polymer Solar Cells with High Shunt Resistance for Indoor Photovoltaic Applications. ACS Applied Materials & Interfaces, 2018, 10, 3885-3894.	8.0	52
13	Efficient Exciton Diffusion in Organic Bilayer Heterojunctions with Nonfullerene Small Molecular Acceptors. ACS Energy Letters, 2020, 5, 1628-1635.	17.4	52
14	Quinoxalineâ€“thiophene based thick photovoltaic devices with an efficiency of â¼48%. Journal of Materials Chemistry A, 2016, 4, 9967-9976.	10.3	49
15	Dithienogermoleâ€Containing Smallâ€Molecule Solar Cells with 7.3% Efficiency: Inâ€Depth Study on the Effects of Heteroatom Substitution of Si with Ge. Advanced Energy Materials, 2015, 5, 1402044.	19.5	40
16	Organic Bilayer Photovoltaics for Efficient Indoor Light Harvesting. Advanced Energy Materials, 2022, 12, .	19.5	35
17	Photophysical pathways in efficient bilayer organic solar cells: The importance of interlayer energy transfer. Nano Energy, 2021, 84, 105924.	16.0	33
18	High-yield synthesis of single-crystal silicon nanoparticles as anode materials of lithium ion batteries via photosensitizer-assisted laser pyrolysis. Journal of Materials Chemistry A, 2014, 2, 18070-18075.	10.3	32

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19	Functionalized PFN-X (X = Cl, Br, or I) for Balanced Charge Carriers of Highly Efficient Blue Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2020, 12, 35740-35747.	8.0	31
20	Light-intensity-dependent photoresponse time of organic photodetectors and its molecular origin. Nature Communications, 2022, 13, .	12.8	31
21	Naphthalene diimide-based small molecule acceptors for fullerene-free organic solar cells. Solar Energy, 2017, 150, 90-95.	6.1	30
22	Thermally Durable Nonfullerene Acceptor with Nonplanar Conjugated Backbone for Highâ€Performance Organic Solar Cells. Advanced Energy Materials, 2020, 10, 1903585.	19.5	30
23	Straight chain Dâ€“A copolymers based on thienothiophene and benzothiadiazole for efficient polymer field effect transistors and photovoltaic cells. Polymer Chemistry, 2016, 7, 4638-4646.	3.9	29
24	Aesthetic and colorful: Dichroic polymer solar cells using high-performance Fabry-PÃ©rot etalon electrodes with a unique Sb2O3 cavity. Nano Energy, 2020, 77, 105146.	16.0	25
25	High colloidal stability ZnO nanoparticles independent on solvent polarity and their application in polymer solar cells. Scientific Reports, 2020, 10, 18055.	3.3	25
26	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
27	Size tailoring of aqueous germanium nanoparticle dispersions. Nanoscale, 2014, 6, 10156-10160.	5.6	21
28	Dithienogermole-Based Nonfullerene Acceptors: Roles of the Side-Chainsâ€™ Direction and Development of Green-Tinted Efficient Semitransparent Organic Solar Cells. ACS Applied Energy Materials, 2020, 3, 7689-7698.	5.1	21
29	Conjugated polymers containing 6-(2-thienyl)-4H-thieno[3,2-b]indole (TTI) and isoindigo for organic photovoltaics. Polymer, 2016, 95, 36-44.	3.8	18
30	Implementation of Lowâ€Power Electronic Devices Using Solutionâ€Processed Tantalum Pentoxide Dielectric. Advanced Functional Materials, 2018, 28, 1704215.	14.9	17
31	Synthesis and properties of low band gap polymers based on thienyl thienoindole as a new electron-rich unit for organic photovoltaics. Polymer Chemistry, 2015, 6, 6011-6020.	3.9	16
32	Effect of Heterocyclic Anchoring Sequence on the Properties of Dithienogermole-Based Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 7091-7099.	8.0	16
33	Dichroic Sb 2 O 3 /Ag/Sb 2 O 3 Electrodes for Colorful Semitransparent Organic Solar Cells. Solar Rrl, 2020, 4, 2000201.	5.8	15
34	Effects on Photovoltaic Characteristics by Organic Bilayer- and Bulk-Heterojunctions: Energy Losses, Carrier Recombination and Generation. ACS Applied Materials & Interfaces, 2020, 12, 55945-55953.	8.0	14
35	Capacity retention behavior and morphology evolution of Si_xGe_{1â^'x}nanoparticles as lithium-ion battery anode. Nanotechnology, 2015, 26, 255702.	2.6	13
36	Effect of Substituents of Thienyleneâ€“Vinyleneâ€“Thienylene-Based Conjugated Polymer Donors on the Performance of Fullerene and Nonfullerene Solar Cells. Journal of Physical Chemistry C, 2018, 122, 16613-16623.	3.1	13

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37	Conjugated Polyelectrolytes Bearing Various Ion Densities: Spontaneous Dipole Generation, Polingâ€Induced Dipole Alignment, and Interfacial Energy Barrier Control for Optoelectronic Device Applications. Advanced Materials, 2018, 30, e1706034.	21.0	12
38	High-efficiency, hybrid Si/C60 heterojunction solar cells. Journal of Materials Chemistry A, 2016, 4, 16410-16417.	10.3	11
39	Formamidinium-based planar heterojunction perovskite solar cells with alkali carbonate-doped zinc oxide layer. RSC Advances, 2018, 8, 24110-24115.	3.6	10
40	Strong Intermolecular Interactions Induced by High Quadrupole Moments Enable Excellent Photostability of Nonâ€Fullerene Acceptors for Organic Photovoltaics. Advanced Energy Materials, 2022, 12, .	19.5	10
41	Production of pristine, sulfur-coated and silicon-alloyed germanium nanoparticles via laser pyrolysis. Nanotechnology, 2015, 26, 305703.	2.6	9
42	Silicon Nanocanyon: One-Step Bottom-Up Fabrication of Black Silicon via in-Lasing Hydrophobic Self-Clustering of Silicon Nanocrystals for Sustainable Optoelectronics. ACS Applied Materials & Interfaces, 2018, 10, 36523-36530.	8.0	8
43	Elimination of Charge Transfer Energy Loss by Introducing a Small-Molecule Secondary Donor into Fullerene-Based Polymer Solar Cells. ACS Applied Energy Materials, 2020, 3, 8375-8382.	5.1	8
44	Planar Organic Bilayer Heterojunctions Fabricated on Water with Ultrafast Donorâ€toâ€Acceptor Charge Transfer. Solar Rrl, 2021, 5, 2100326.	5.8	8
45	Designing a naphthyridinedione-based conjugated polymer for thickness-tolerant high efficiency polymer solar cells. Journal of Materials Chemistry A, 2021, 9, 10846-10854.	10.3	7
46	ZnO decorated germanium nanoparticles as anode materials in Li-ion batteries. Nanotechnology, 2017, 28, 095402.	2.6	6
47	Non-halogenated diphenyl-chalcogenide solvent processing additives for high-performance polymer bulk-heterojunction solar cells. RSC Advances, 2018, 8, 39777-39783.	3.6	6
48	Synergistic combination of amorphous indium oxide with tantalum pentoxide for efficient electron transport in low-power electronics. Journal of Materials Chemistry C, 2019, 7, 4559-4566.	5.5	6
49	Syntheses of PCDTBT containing tetrafluorobenzene as electron-withdrawing group with deep HOMO energy level andÂapplications for photovoltaics. Polymer, 2016, 102, 84-91.	3.8	4
50	2D Starâ€Shaped Nonâ€Fullerene Electron Acceptors with Modulation of Jâ€/Hâ€Type Aggregations: Molecular Designâ€“Morphologyâ€“Electrical Property Correlation. Advanced Materials Technologies, 2020, 5, 2000174.	5.8	4
51	Regioisomeric Polythiophene Derivatives: Synthesis and Structure-Property Relationships for Organic Electronic Devices. Macromolecular Research, 2020, 28, 772-781.	2.4	4
52	Syntheses and solar cell applications of conjugated copolymers consisting of 3,3â€²-dicarboximide and benzodithiophene units with thiophene and bithiophene linkage. Solar Energy Materials and Solar Cells, 2015, 141, 24-31.	6.2	3
53	Semi-crystalline photovoltaic polymers with siloxane-terminated hybrid side-chains. Science China Chemistry, 2017, 60, 528-536.	8.2	3
54	Thiophene and Naphtho[1,2-c:5,6-c]bis[1,2,5]thiadiazole Based Alternating Copolymers for Polymer Solar Cells. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2016, 29, 553-559.	0.3	2

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55	Synthesis and TFT Properties of Fluorenyl Cored Conjugated Compound for Organic Thin Film Transistors. Journal of Nanoscience and Nanotechnology, 2016, 16, 2979-2982.	0.9	2
56	Solar Cells: Investigation of Charge Carrier Behavior in High Performance Ternary Blend Polymer Solar Cells (Adv. Energy Mater. 19/2016). Advanced Energy Materials, 2016, 6, .	19.5	0