Li Yuan

List of Publications by Year
in descending order

55 papers	2,448 citations	218677 26 h-index	206112 48 g-index
59 all docs	59 docs citations	59 times ranked	2797 citing authors

#	Article	IF	Citations
1	Kinetically Blocked Stable Heptazethrene and Octazethrene: Closed-Shell or Open-Shell in the Ground State?. Journal of the American Chemical Society, 2012, 134, 14913-14922.	13.7	256
2	16% efficiency all-polymer organic solar cells enabled by a finely tuned morphology via the design of ternary blend. Joule, 2021, 5, 914-930.	24.0	228
3	D-A-Ï€-A-D-type Dopant-free Hole Transport Material for Low-Cost, Efficient, and Stable Perovskite Solar Cells. Joule, 2021, 5, 249-269.	24.0	203
4	Rational Anode Engineering Enables Progresses for Different Types of Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2100492.	19.5	108
5	Dopamine Semiquinone Radical Doped PEDOT:PSS: Enhanced Conductivity, Work Function and Performance in Organic Solar Cells. Advanced Energy Materials, 2020, 10, 2000743.	19.5	97
6	Efficient and Stable Perovskite Solar Cells via Dual Functionalization of Dopamine Semiquinone Radical with Improved Trap Passivation Capabilities. Advanced Functional Materials, 2018, 28, 1707444.	14.9	94
7	Improving the efficiency and stability of inverted perovskite solar cells with dopamine-copolymerized PEDOT:PSS as a hole extraction layer. Journal of Materials Chemistry A, 2017, 5, 13817-13822.	10.3	86
8	Aggregation-induced emission: the origin of lignin fluorescence. Polymer Chemistry, 2016, 7, 3502-3508.	3.9	72
9	An efficient hole transport material based on PEDOT dispersed with lignosulfonate: preparation, characterization and performance in polymer solar cells. Journal of Materials Chemistry A, 2015, 3, 21537-21544.	10.3	71
10	A kinetically blocked 1,14:11,12-dibenzopentacene: a persistent triplet diradical of a non-KekulÃ© polycyclic benzenoid hydrocarbon. Chemical Science, 2014, 5, 1908.	7.4	69
11	Highly Efficient Inverted Perovskite Solar Cells With Sulfonated Lignin Doped PEDOT as Hole Extract Layer. ACS Applied Materials & Interfaces, 2016, 8, 12377-12383.	8.0	69
12	Phenoxy Radicalâ€Induced Formation of Dualâ€Layered Protection Film for Highâ€Rate and Dendriteâ€Free Lithiumâ€Metal Anodes. Angewandte Chemie - International Edition, 2021, 60, 26718-26724.	13.8	69
13	Readily synthesized dopant-free hole transport materials with phenol core for stabilized mixed perovskite solar cells. Journal of Power Sources, 2017, 344, 160-169.	7.8	63
14	A Review on the Origin of Synthetic Metal Radical: Singlet Open-Shell Radical Ground State?. Journal of Physical Chemistry C, 2017, 121, 8579-8588.	3.1	60
15	A lignin-biochar with high oxygen-containing groups for adsorbing lead ion prepared by simultaneous oxidization and carbonization. Bioresource Technology, 2020, 307, 123165.	9.6	58
16	Ultrahigh molecular weight, lignosulfonate-based polymers: preparation, self-assembly behaviours and dispersion property in coalâ€“water slurry. RSC Advances, 2015, 5, 21588-21595.	3.6	50
17	Poly(3,4â€Ethylenedioxythiophene): Methylnaphthalene Sulfonate Formaldehyde Condensate: The Effect of Work Function and Structural Homogeneity on Hole Injection/Extraction Properties. Advanced Energy Materials, 2017, 7, 1601499.	19.5	50
18	Evolution of the electronic structure in open-shell donor-acceptor organic semiconductors. Nature Communications, 2021, 12, 5889.	12.8	47

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19	Facile and Efficient Synthesis of Silver Nanoparticles Based on Biorefinery Wood Lignin and Its Application as the Optical Sensor. ACS Sustainable Chemistry and Engineering, 2018, 6, 7695-7703.	6.7	44
20	Unexpected fluorescent emission of graft sulfonated-acetoneâ€“formaldehyde lignin and its application as a dopant of PEDOT for high performance photovoltaic and light-emitting devices. Journal of Materials Chemistry C, 2016, 4, 5297-5306.	5.5	42
21	Interface Engineering of a Compatible PEDOT Derivative Bilayer for Highâ€Performance Inverted Perovskite Solar Cells. Advanced Materials Interfaces, 2017, 4, 1600948.	3.7	40
22	Fluorescent pH-Sensing Probe Based on Biorefinery Wood Lignosulfonate and Its Application in Human Cancer Cell Bioimaging. Journal of Agricultural and Food Chemistry, 2016, 64, 9592-9600.	5.2	36
23	Interface materials for perovskite solar cells. Rare Metals, 2021, 40, 2993-3018.	7.1	36
24	N-Type Self-Doped Water/Alcohol-Soluble Conjugated Polymers with Tailored Energy Levels for High-Performance Polymer Solar Cells. Macromolecules, 2018, 51, 2195-2202.	4.8	33
25	Preparation of avermectin microcapsules with anti-photodegradation and slow-release by the assembly of lignin derivatives. New Journal of Chemistry, 2017, 41, 3190-3195.	2.8	32
26	Effect of ultraviolet absorptivity and waterproofness of poly(3,4-ethylenedioxythiophene) with extremely weak acidity, high conductivity on enhanced stability of perovskite solar cells. Journal of Power Sources, 2017, 358, 29-38.	7.8	30
27	Enhancing the performance of planar heterojunction perovskite solar cells using stable semiquinone and amine radical modified hole transport layer. Journal of Power Sources, 2018, 390, 134-141.	7.8	25
28	Semiconductive Polymer-Doped PEDOT with High Work Function, Conductivity, Reversible Dispersion, and Application in Organic Solar Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 8206-8214.	6.7	25
29	Design of Photothermal Covalent Organic Frameworks by Radical Immobilization. CCS Chemistry, 2022, 4, 2842-2853.	7.8	25
30	Aggregation-Induced Radical of Donorâ€“Acceptor Organic Semiconductors. Journal of Physical Chemistry Letters, 2021, 12, 9783-9790.	4.6	24
31	PEDOT Dispersed With Sulfobutylated Phenol Formaldehyde Resin: A Highlyâ€Efficient Hole Transport Material in Polymer Solar Cells. Macromolecular Materials and Engineering, 2016, 301, 133-140.	3.6	22
32	A Rational Design and Synthesis of Cross-Conjugated Small Molecule Acceptors Approaching High-Performance Fullerene-Free Polymer Solar Cells. Chemistry of Materials, 2018, 30, 4331-4342.	6.7	22
33	Highly Improved Efficiency of Deep-Blue Fluorescent Polymer Light-Emitting Device Based on a Novel Hole Interface Modifier with 1,3,5-Triazine Core. ACS Applied Materials & Interfaces, 2015, 7, 26405-26413.	8.0	21
34	Aromatic inorganic acid radical. Science China Chemistry, 2019, 62, 1656-1665.	8.2	20
35	Accessing Highly Efficient Photothermal Conversion with Stable Openâ€Shell Aromatic Nitric Acid Radicals. Angewandte Chemie - International Edition, 2022, 61, .	13.8	18
36	General design of self-doped small molecules as efficient hole extraction materials for polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 3780-3785.	10.3	17

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37	Polystyrenesulfonate Dispersed Dopamine with Unexpected Stable Semiquinone Radical and Electrochemical Behavior: A Potential Alternative to PEDOT:PSS. ACS Sustainable Chemistry and Engineering, 2017, 5, 460-468.	6.7	17
38	High-performance inverted polymer solar cells without an electron extraction layer <i>via</i> a one-step coating of cathode buffer and active layer. Journal of Materials Chemistry A, 2019, 7, 1429-1434.	10.3	16
39	Highly Efficient Nonfullerene Organic Solar Cells with a Selfâ€Doped Waterâ€Soluble Neutral Polyaniline as Hole Transport Layer. Solar Rrl, 2021, 5, 2000625.	5.8	16
40	Sulfobutylated Lignosulfonate with Ultrahigh Sulfonation Degree and Its Dispersion Property in Low-Rank Coal-Water Slurry. Journal of Dispersion Science and Technology, 2016, 37, 472-478.	2.4	15
41	Phenoxy Radicalâ€Induced Formation of Dualâ€Layered Protection Film for Highâ€Rate and Dendriteâ€Free Lithiumâ€Metal Anodes. Angewandte Chemie, 2021, 133, 26922-26928.	2.0	15
42	Poly(3,4-ethylenedioxythiophene):sulfonated acetone-formaldehyde: preparation, characterization and performance as a hole injection material. Journal of Materials Chemistry C, 2016, 4, 8077-8085.	5.5	14
43	Manipulating Grain Boundary Defects in Ï€â€Conjugated Covalent Organic Frameworks Enabling Intrinsic Radical Generation for Photothermal Conversion. Solar Rrl, 2021, 5, 2100762.	5.8	13
44	Enhancing Efficiency and Durability of Inverted Perovskite Solar Cells with Phenol/Unsaturated Carbonâ€"Carbon Double Bond Dual-Functionalized Poly(3,4-ethylenedioxythiophene) Hole Extraction Layer. ACS Sustainable Chemistry and Engineering, 2019, 7, 961-968.	6.7	12
45	Synergistic effect of two hydrochlorides resulting in significantly enhanced performance of tin-based perovskite solar cells with 3D to quasi-2D structural transition. Journal of Materials Chemistry A, 2022, 10, 14441-14450.	10.3	10
46	1,3,5â€triazine crosslinked 2,5â€dibromohydroquinone as new holeâ€transport material in polymer lightâ€emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 429-435.	1.8	9
47	Simultaneously enhanced performance and stability of inverted perovskite solar cells via a rational design of hole transport layer. Organic Electronics, 2019, 73, 69-75.	2.6	9
48	Molecular engineering of narrow bandgap porphyrin derivatives for highly efficient photothermal conversion. Dyes and Pigments, 2021, 192, 109460.	3.7	9
49	Naphthalenediimide-based n-type polymer acceptors with pendant twisted perylenediimide units for all-polymer solar cells. Polymer, 2018, 158, 183-189.	3.8	8
50	Fused nonacyclic electron acceptors with additional alkyl side chains for efficient polymer solar cells. Organic Electronics, 2019, 68, 151-158.	2.6	8
51	Accessing Highly Efficient Photothermal Conversion with Stable Openâ€Shell Aromatic Nitric Acid Radicals. Angewandte Chemie, 0, , .	2.0	5
52	A Study on the Origin of the Radical in Fullerene and Graphene. Journal of Physical Chemistry C, 2018, 122, 8780-8787.	3.1	4
53	Perovskite Solar Cells: Poly(3,4â€Ethylenedioxythiophene): Methylnaphthalene Sulfonate Formaldehyde Condensate: The Effect of Work Function and Structural Homogeneity on Hole Injection/Extraction Properties (Adv. Energy Mater. 6/2017). Advanced Energy Materials, 2017, 7, .	19.5	3
54	Stable Openâ€Shell ICâ€Fused Fluorenyl Enabling Efficient Photothermal Conversion. Solar Rrl, 0, , 2200400.	5.8	2

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55	Stable dinitrile end-capped closed-shell non-quinodimethane as a donor, an acceptor and an additive for organic solar cells. Materials Advances, 2022, 3, 1759-1766.	5.4	1