Yongsheng Liu

List of Publications by Citations

74 papers	20,130 citations	44 h-index	77 g-index
77 ext. papers	21,878 ext. citations	14.3 avg, IF	6.74 L-index

#	Paper	IF	Citations
74	Photovoltaics. Interface engineering of highly efficient perovskite solar cells. *Science*, **2014**, 345, 542-6	33.3	5272
73	Planar heterojunction perovskite solar cells via vapor-assisted solution process. *Journal of the American Chemical Society*, **2014**, 136, 622-5	16.4	1921
72	Improved air stability of perovskite solar cells via solution-processed metal oxide transport layers. *Nature Nanotechnology*, **2016**, 11, 75-81	28.7	1614
71	Low-temperature solution-processed perovskite solar cells with high efficiency and flexibility. *ACS Nano*, **2014**, 8, 1674-80	16.7	1216
70	Controllable self-induced passivation of hybrid lead iodide perovskites toward high performance solar cells. *Nano Letters*, **2014**, 14, 4158-63	11.5	1143
69	Low-Bandgap Near-IR Conjugated Polymers/Molecules for Organic Electronics. *Chemical Reviews*, **2015**, 115, 12633-65	68.1	863
68	Solution-processed and high-performance organic solar cells using small molecules with a benzodithiophene unit. *Journal of the American Chemical Society*, **2013**, 135, 8484-7	16.4	644
67	Moisture assisted perovskite film growth for high performance solar cells. *Applied Physics Letters*, **2014**, 105, 183902	3.4	598
66	Small molecules based on benzo[1,2-b:4,5-b']dithiophene unit for high-performance solution-processed organic solar cells. *Journal of the American Chemical Society*, **2012**, 134, 16345-51	16.4	538
65	Solution-processed small-molecule solar cells: breaking the 10% power conversion efficiency. *Scientific Reports*, **2013**, 3, 3356	4.9	511
64	Multifunctional Fullerene Derivative for Interface Engineering in Perovskite Solar Cells. *Journal of the American Chemical Society*, **2015**, 137, 15540-7	16.4	433
63	Guanidinium: A Route to Enhanced Carrier Lifetime and Open-Circuit Voltage in Hybrid Perovskite Solar Cells. *Nano Letters*, **2016**, 16, 1009-16	11.5	400
62	The optoelectronic role of chlorine in CH3NH3PbI3(Cl)-based perovskite solar cells. *Nature Communications*, **2015**, 6, 7269	17.4	354
61	Perovskite solar cells: film formation and properties. *Journal of Materials Chemistry A*, **2015**, 3, 9032-9050	10.3	327
60	Solution Processable Rhodanine-Based Small Molecule Organic Photovoltaic Cells with a Power Conversion Efficiency of 6.1%. *Advanced Energy Materials*, **2012**, 2, 74-77	21.8	288
59	Two-Dimensional Ruddlesden-Popper Perovskite with Nanorod-like Morphology for Solar Cells with Efficiency Exceeding 15. *Journal of the American Chemical Society*, **2018**, 140, 11639-11646	16.4	282
58	Synthesis of 5H-Dithieno[3,2-b:2?,3?-d]pyran as an Electron-Rich Building Block for Donor–Acceptor Type Low-Bandgap Polymers. *Macromolecules*, **2013**, 46, 3384-3390	5.5	273

57	High-performance solar cells using a solution-processed small molecule containing benzodithiophene unit. *Advanced Materials*, **2011**, 23, 5387-91	24	254
56	Spin-Coated Small Molecules for High Performance Solar Cells. *Advanced Energy Materials*, **2011**, 1, 771-775	21.8	221
55	Perovskite Solar Cells Employing Dopant-Free Organic Hole Transport Materials with Tunable Energy Levels. *Advanced Materials*, **2016**, 28, 440-6	24	217
54	A Planar Small Molecule with Dithienosilole Core for High Efficiency Solution-Processed Organic Photovoltaic Cells. *Chemistry of Materials*, **2011**, 23, 4666-4668	9.6	198
53	Synthesis, characterization and optical limiting property of covalently oligothiophene-functionalized graphene material. *Carbon*, **2009**, 47, 3113-3121	10.4	198
52	A dopant-free organic hole transport material for efficient planar heterojunction perovskite solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 11940-11947	13	182
51	Integrated perovskite/bulk-heterojunction toward efficient solar cells. *Nano Letters*, **2015**, 15, 662-8	11.5	129
50	Highly Efficient and Stable Solar Cells Based on Crystalline Oriented 2D/3D Hybrid Perovskite. *Advanced Materials*, **2019**, 31, e1901242	24	127
49	Active layer-incorporated, spectrally tuned Au/SiO2 core/shell nanorod-based light trapping for organic photovoltaics. *ACS Nano*, **2013**, 7, 3815-22	16.7	124
48	Direct light pattern integration of low-temperature solution-processed all-oxide flexible electronics. *ACS Nano*, **2014**, 8, 9680-6	16.7	106
47	Efficient solution processed bulk-heterojunction solar cells based a donor–acceptor oligothiophene. *Journal of Materials Chemistry*, **2010**, 20, 2464		102
46	Thiophene-Based Two-Dimensional Dion-Jacobson Perovskite Solar Cells with over 15% Efficiency. *Journal of the American Chemical Society*, **2020**, 142, 11114-11122	16.4	95
45	Solution-processed small molecules using different electron linkers for high-performance solar cells. *Advanced Materials*, **2013**, 25, 4657-62	24	92
44	Organic-Salt-Assisted Crystal Growth and Orientation of Quasi-2D Ruddlesden-Popper Perovskites for Solar Cells with Efficiency over 19. *Advanced Materials*, **2020**, 32, e2001470	24	83
43	Solution-processed bulk heterojunction organic solar cells based on an oligothiophene derivative. *Applied Physics Letters*, **2010**, 97, 023303	3.4	83
42	Extended Conjugation Length of Nonfullerene Acceptors with Improved Planarity via Noncovalent Interactions for High-Performance Organic Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1801618	21.8	79
41	Side-Chain Tunability via Triple Component Random Copolymerization for Better Photovoltaic Polymers. *Advanced Energy Materials*, **2014**, 4, 1300864	21.8	76
40	Interface control in organic electronics using mixed monolayers of carboranethiol isomers. *Nano Letters*, **2014**, 14, 2946-51	11.5	75

39	The study of solvent additive effects in efficient polymer photovoltaics via impedance spectroscopy. *Solar Energy Materials and Solar Cells*, **2014**, 130, 20-26	6.4	65
38	Impact of dye end groups on acceptor–donor–acceptor type molecules for solution-processed photovoltaic cells. *Journal of Materials Chemistry*, **2012**, 22, 9173		65
37	Synthesis and properties of acceptor–donor–acceptor molecules based on oligothiophenes with tunable and low band gap. *Tetrahedron*, **2009**, 65, 5209-5215	2.4	64
36	Unraveling the High Open Circuit Voltage and High Performance of Integrated Perovskite/Organic Bulk-Heterojunction Solar Cells. *Nano Letters*, **2017**, 17, 5140-5147	11.5	61
35	Phase Distribution and Carrier Dynamics in Multiple-Ring Aromatic Spacer-Based Two-Dimensional Ruddlesden-Popper Perovskite Solar Cells. *ACS Nano*, **2020**, 14, 4871-4881	16.7	60
34	Investigation of Quinquethiophene Derivatives with Different End Groups for High Open Circuit Voltage Solar Cells. *Advanced Energy Materials*, **2013**, 3, 639-646	21.8	60
33	Enhanced nonlinear optical properties of graphene-oligothiophene hybrid material. *Optics Express*, **2009**, 17, 23959-64	3.3	56
32	2-Thiopheneformamidinium-Based 2D Ruddlesden–Popper Perovskite Solar Cells with Efficiency of 16.72% and Negligible Hysteresis. *Advanced Energy Materials*, **2020**, 10, 2000694	21.8	54
31	Elucidating double aggregation mechanisms in the morphology optimization of diketopyrrolopyrrole-based narrow bandgap polymer solar cells. *Advanced Materials*, **2014**, 26, 3142-7	24	47
30	Integrated Perovskite/Bulk-Heterojunction Organic Solar Cells. *Advanced Materials*, **2020**, 32, e1805843	24	40
29	Spacer Engineering Using Aromatic Formamidinium in 2D/3D Hybrid Perovskites for Highly Efficient Solar Cells. *ACS Nano*, **2021**, 15, 7811-7820	16.7	39
28	Multifunctional Two-Dimensional Conjugated Materials for Dopant-Free Perovskite Solar Cells with Efficiency Exceeding 22%. *ACS Energy Letters*,1521-1532	20.1	37
27	Efficient hole transport layers with widely tunable work function for deep HOMO level organic solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 23955-23963	13	32
26	Improved efficiency of solution processed small molecules organic solar cells using thermal annealing. *Organic Electronics*, **2013**, 14, 1562-1569	3.5	23
25	Highly Efficient and Stable Dion-Jacobson Perovskite Solar Cells Enabled by Extended π-Conjugation of Organic Spacer. *Advanced Materials*, **2021**, e2105083	24	22
24	Recent progress of dopant-free organic hole-transporting materials in perovskite solar cells. *Journal of Semiconductors*, **2017**, 38, 011005	2.3	21
23	A mixed hole transport material employing a highly planar conjugated molecule for efficient and stable perovskite solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 5163-5170	13	21
22	An Arene–Mercury(II) N-Heterocyclic Carbene Complex. *Organometallics*, **2009**, 28, 5590-5592	3.8	21

21	Lattice reconstruction of La-incorporated CsPbI2Br with suppressed phase transition for air-processed all-inorganic perovskite solar cells. *Journal of Materials Chemistry C*, **2020**, 8, 3351-3358	7.1	19
20	Cesium Halides-Assisted Crystal Growth of Perovskite Films for Efficient Planar Heterojunction Solar Cells. *Chemistry of Materials*, **2018**, 30, 5264-5271	9.6	18
19	Fluorinated Aromatic Formamidinium Spacers Boost Efficiency of Layered Ruddlesden–Popper Perovskite Solar Cells. *ACS Energy Letters*, **2021**, 6, 2072-2080	20.1	18
18	Ultra-narrow bandgap non-fullerene acceptors for organic solar cells with low energy loss. *Materials Chemistry Frontiers*, **2019**, 3, 2157-2163	7.8	16
17	Impact of fluorinated end groups on the properties of acceptor–donor–acceptor type oligothiophenes for solution-processed photovoltaic cells. *Journal of Materials Chemistry C*, **2014**, 2, 1337-1345	7.1	16
16	Fused or unfused? Two-dimensional non-fullerene acceptors for efficient organic solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 2319-2324	13	16
15	Multiple-Noncovalent-Interaction-Stabilized Layered Dion-Jacobson Perovskite for Efficient Solar Cells. *Nano Letters*, **2021**, 21, 5788-5797	11.5	15
14	A solution-processed nanoscale COF-like material towards optoelectronic applications. *Science China Chemistry*, **2021**, 64, 82-91	7.9	15
13	Multifunctional Two-Dimensional Polymers for Perovskite Solar Cells with Efficiency Exceeding 24%. *ACS Energy Letters*, **2022**, 7, 1128-1136	20.1	11
12	Crystal Growth Regulation of 2D/3D Perovskite Films for Solar Cells with Both High Efficiency and Stability.. *Advanced Materials*, **2022**, e2200705	24	11
11	Synthesis and Photovoltaic Properties of a Poly(2,7-carbazole) Derivative Based on Dithienosilole and Benzothiadiazole. *Macromolecular Chemistry and Physics*, **2011**, 212, 1109-1114	2.6	10
10	Organic radicals based on phenalenyl and verdazyl units. *Tetrahedron Letters*, **2011**, 52, 3670-3673	2	9
9	Coplanar phenanthro[9,10-d]imidazole based hole-transporting material enabling over 19%/21% efficiency in inverted/regular perovskite solar cells. *Chemical Engineering Journal*, **2021**, 421, 129823	14.7	8
8	Isothianaphthene-Based Conjugated Polymers for Organic Photovoltaic Cells. *Macromolecular Chemistry and Physics*, **2012**, 213, 1596-1603	2.6	6
7	Synthesis of New Conjugated CNPPV Derivatives Containing Different Lengths of Oligothiophene Units for Organic Solar Cells. *Macromolecular Chemistry and Physics*, **2010**, 211, 2503-2509	2.6	6
6	Central-Core Engineering of Dopant-Free Hole Transport Materials for Efficient n-i-p Structured Perovskite Solar Cells. *Solar Rrl*, **2021**, 5, 2100184	7.1	5
5	Bromination of Isothianaphthene Derivatives towards the Application in Organic Electronics. *Chinese Journal of Chemistry*, **2013**, 31, 1391-1396	4.9	4
4	Integrated Quasi-2D Perovskite/Organic Solar Cells with Efficiency over 19% Promoted by Interface Passivation. *Advanced Functional Materials*,2107129	15.6	4

3	9,10-Bis[3-(2-pyridylmethyl)imidazolium-1-ylmethyl]anthracene bis(hexafluorophosphate). *Acta Crystallographica Section E: Structure Reports Online*, **2005**, 61, o2930-o2931		2
2	Synthesis and properties of copolymers based on 5,6-dinitrobenzothiadiazole with low band gap and broad absorption spectra. *Science China Chemistry*, **2011**, 54, 617-624	7.9	1
1	Integrated Optoelectronics: Integrated Perovskite/Bulk-Heterojunction Organic Solar Cells (Adv. Mater. 3/2020). *Advanced Materials*, **2020**, 32, 2070020	24	