Shu Kong So

List of Publications by Year
in descending order

106	4,876	76326	98798
papers	citations	40 h-index	67 g-index

109	109	109	5707
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fused Benzothiadiazole: A Building Block for nâ€Type Organic Acceptor to Achieve Highâ€Performance Organic Solar Cells. Advanced Materials, 2019, 31, e1807577.	21.0	297
2	Stable and low-photovoltage-loss perovskite solar cells by multifunctional passivation. Nature Photonics, 2021, 15, 681-689.	31.4	255
3	Stable and Efficient Organoâ€Metal Halide Hybrid Perovskite Solar Cells via Ï€â€Conjugated Lewis Base Polymer Induced Trap Passivation and Charge Extraction. Advanced Materials, 2018, 30, e1706126.	21.0	241
4	Surface preparation and characterization of indium tin oxide substrates for organic electroluminescent devices. Applied Physics A: Materials Science and Processing, 1999, 68, 447-450.	2.3	182
5	Polyfluorene Derivatives are Highâ€Performance Organic Holeâ€Transporting Materials for Inorganicâ^'Organic Hybrid Perovskite Solar Cells. Advanced Functional Materials, 2014, 24, 7357-7365.	14.9	172
6	High-Efficiency Indoor Organic Photovoltaics with a Band-Aligned Interlayer. Joule, 2020, 4, 1486-1500.	24.0	169
7	Zwitterionic-Surfactant-Assisted Room-Temperature Coating of Efficient Perovskite Solar Cells. Joule, 2020, 4, 2404-2425.	24.0	137
8	Regulating the vertical phase distribution by fullerene-derivative in high performance ternary organic solar cells. Nano Energy, 2018, 46, 81-90.	16.0	129
9	Designing a ternary photovoltaic cell for indoor light harvesting with a power conversion efficiency exceeding 20%. Journal of Materials Chemistry A, 2018, 6, 8579-8585.	10.3	124
10	Hole transports in molecularly doped triphenylamine derivative. Chemical Physics Letters, 2002, 353, 407-413.	2.6	117
11	Molecular design enabled reduction of interface trap density affords highly efficient and stable perovskite solar cells with over 83% fill factor. Nano Energy, 2018, 52, 300-306.	16.0	112
12	Device characteristics and material developments of indoor photovoltaic devices. Materials Science and Engineering Reports, 2020, 139, 100517.	31.8	108
13	Versatility of Carbon Enables All Carbon Based Perovskite Solar Cells to Achieve High Efficiency and High Stability. Advanced Materials, 2018, 30, e1706975.	21.0	95
14	Electrochemical degradation of 4-chlorophenol at nickelâ€"antimony doped tin oxide electrode. Chemosphere, 2006, 65, 1087-1093.	8.2	94
15	Impact of surface dipole in NiOx on the crystallization and photovoltaic performance of organometal halide perovskite solar cells. Nano Energy, 2019, 61, 496-504.	16.0	92
16	Efficiency enhancement by defect engineering in perovskite photovoltaic cells prepared using evaporated PbI₂/CH₃NH₃I multilayers. Journal of Materials Chemistry A, 2015, 3, 9223-9231.	10.3	82
17	From 33% to 57% â€" an elevated potential of efficiency limit for indoor photovoltaics. Journal of Materials Chemistry A, 2020, 8, 1717-1723.	10.3	77
18	Crystal Engineering for Low Defect Density and High Efficiency Hybrid Chemical Vapor Deposition Grown Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 32805-32814.	8.0	76

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19	Recent progress of all-polymer solar cells â€“ From chemical structure and device physics to photovoltaic performance. Materials Science and Engineering Reports, 2020, 140, 100542.	31.8	75
20	Origin of Enhanced Hole Injection in Inverted Organic Devices with Electron Accepting Interlayer. Advanced Functional Materials, 2012, 22, 3261-3266.	14.9	73
21	Angle dependent X-ray photoemission study on UV-ozone treatments of indium tin oxide. Applied Surface Science, 2001, 177, 158-164.	6.1	72
22	Batchâ€toâ€Batch Variation of Polymeric Photovoltaic Materials: its Origin and Impacts on Charge Carrier Transport and Device Performances. Advanced Energy Materials, 2014, 4, 1400768.	19.5	72
23	Porphyrin-based thick-film bulk-heterojunction solar cells for indoor light harvesting. Journal of Materials Chemistry C, 2018, 6, 9111-9118.	5.5	67
24	Suppressing Ion Migration across Perovskite Grain Boundaries by Polymer Additives. Advanced Functional Materials, 2021, 31, 2006802.	14.9	66
25	Using Ultralow Dosages of Electron Acceptor to Reveal the Early Stage Donorâ€“Acceptor Electronic Interactions in Bulk Heterojunction Blends. Advanced Energy Materials, 2017, 7, 1602360.	19.5	64
26	Investigation of high performance TiO₂nanorod array perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 15970-15980.	10.3	64
27	Effects of tertiary butyl substitution on the charge transporting properties of rubrene-based films. Chemical Physics, 2004, 298, 119-123.	1.9	60
28	Pinning Down the Anomalous Light Soaking Effect toward High-Performance and Fast-Response Perovskite Solar Cells: The Ion-Migration-Induced Charge Accumulation. Journal of Physical Chemistry Letters, 2017, 8, 5069-5076.	4.6	60
29	The detrimental effect of excess mobile ions in planar CH₃NH₃PbI₃ perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 12748-12755.	10.3	55
30	Approaching disorder-tolerant semiconducting polymers. Nature Communications, 2021, 12, 5723.	12.8	54
31	Synthesis and electroluminescence of thiophene-based bipolar small molecules with different arylamine moieties. Synthetic Metals, 2005, 155, 116-124.	3.9	52
32	Angular-dependent photoemission studies of indium tin oxide surfaces. Applied Physics A: Materials Science and Processing, 2001, 72, 361-365.	2.3	50
33	Balanced Electric Field Dependent Mobilities: A Key to Access High Fill Factors in Organic Bulk Heterojunction Solar Cells. Solar Rrl, 2018, 2, 1700239.	5.8	49
34	Donor Polymer Can Assist Electron Transport in Bulk Heterojunction Blends with Small Energetic Offsets. Advanced Materials, 2019, 31, e1903998.	21.0	49
35	A Cryogenic Process for Antisolventâ€Free Highâ€Performance Perovskite Solar Cells. Advanced Materials, 2018, 30, e1804402.	21.0	47
36	PEDOT:PSS polymeric conducting anode for admittance spectroscopy. Organic Electronics, 2006, 7, 474-479.	2.6	46

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37	Impact of Solvent Additive on Carrier Transport in Polymer:Fullerene Bulk Heterojunction Photovoltaic Cells. Advanced Materials Interfaces, 2015, 2, 1500166.	3.7	46
38	High performance low-bandgap perovskite solar cells based on a high-quality mixed Snâ€“Pb perovskite film prepared by vacuum-assisted thermal annealing. Journal of Materials Chemistry A, 2018, 6, 16347-16354.	10.3	44
39	Unraveling Urbach Tail Effects in High-Performance Organic Photovoltaics: Dynamic vs Static Disorder. ACS Energy Letters, 2022, 7, 1971-1979.	17.4	42
40	NO2 adsorption on graphite at 90 K. Chemical Physics Letters, 1990, 172, 125-130.	2.6	41
41	The role of charge-transfer integral in determining and engineering the carrier mobilities of 9,10-di(2-naphthyl)anthracene compounds. Chemical Physics Letters, 2006, 422, 354-357.	2.6	41
42	Charge injection and transport studies of poly(2,7-carbazole) copolymer PCDTBT and their relationship to solar cell performance. Organic Electronics, 2012, 13, 850-855.	2.6	41
43	Role of air exposure in the improvement of injection efficiency of transition metal oxide/organic contact. Organic Electronics, 2010, 11, 89-94.	2.6	40
44	Enhanced Electron Transport and Heat Transfer Boost Light Stability of Ternary Organic Photovoltaic Cells Incorporating Nonâ€Fullerene Small Molecule and Polymer Acceptors. Advanced Electronic Materials, 2019, 5, 1900497.	5.1	37
45	A disorder-free conformation boosts phonon and charge transfer in an electron-deficient-core-based non-fullerene acceptor. Journal of Materials Chemistry A, 2020, 8, 8566-8574.	10.3	37
46	Thickâ€Film Highâ€Performance Bulkâ€Heterojunction Solar Cells Retaining 90% PCEs of the Optimized Thin Film Cells. Advanced Electronic Materials, 2017, 3, 1700007.	5.1	33
47	Reducing Energy Disorder for Efficient and Stable Snâ^'Pb Alloyed Perovskite Solar Cells.. Angewandte Chemie - International Edition, 2022, 61, .	13.8	32
48	Strategies for high performance perovskite/crystalline silicon four-terminal tandem solar cells. Solar Energy Materials and Solar Cells, 2018, 179, 36-44.	6.2	31
49	Observing electron transport and percolation in selected bulk heterojunctions bearing fullerene derivatives, non-fullerene small molecules, and polymeric acceptors. Nano Energy, 2019, 64, 103950.	16.0	31
50	Surface Sulfuration of NiO Boosts the Performance of Inverted Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000270.	5.8	31
51	Understanding the Interplay of Binary Organic Spacer in Ruddlesdenâ€“Popper Perovskites toward Efficient and Stable Solar Cells. Advanced Functional Materials, 2020, 30, 1907759.	14.9	31
52	Highly Crystalline Near-Infrared Acceptor Enabling Simultaneous Efficiency and Photostability Boosting in High-Performance Ternary Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 48095-48102.	8.0	30
53	Highlyâ€Transparent and Trueâ€Colored Semitransparent Indoor Photovoltaic Cells. Small Methods, 2020, 4, 2000136.	8.6	28
54	Achieving time-of-flight mobilities for amorphous organic semiconductors in a thin film transistor configuration. Organic Electronics, 2013, 14, 1351-1358.	2.6	27

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55	Naphthalene diimide-difluorobenzene-based polymer acceptors for all-polymer solar cells. Chemical Communications, 2017, 53, 3249-3252.	4.1	27
56	Design of wide-bandgap polymers with deeper ionization potential enables efficient ternary non-fullerene polymer solar cells with 13% efficiency. Journal of Materials Chemistry A, 2019, 7, 14153-14162.	10.3	27
57	Deciphering the Role of Fluorination: Morphological Manipulation Prompts Charge Separation and Reduces Carrier Recombination in Allâ€Smallâ€Molecule Photovoltaics. Solar Rrl, 2020, 4, 1900528.	5.8	27
58	On the understanding of energetic disorder, charge recombination and voltage losses in all-polymer solar cells. Journal of Materials Chemistry C, 2018, 6, 7855-7863.	5.5	26
59	Correlating the Molecular Structure of Aâ€DAâ€²Dâ€A Type Nonâ€Fullerene Acceptors to Its Heat Transfer and Charge Transport Properties in Organic Solar Cells. Advanced Functional Materials, 2021, 31, 2101627.	14.9	25
60	Transport and luminescence in naphthyl phenylamine model compounds. Synthetic Metals, 2004, 147, 199-203.	3.9	24
61	Thickâ€Film Low Drivingâ€Force Indoor Light Harvesters. Solar Rrl, 2020, 4, 2000291.	5.8	24
62	Rationalizing device performance of perylenediimide derivatives as acceptors for bulk-heterojunction organic solar cells. Organic Electronics, 2019, 65, 156-161.	2.6	23
63	High-Mobility Hole-Transporting Polymers for Electroluminescence Applications. Japanese Journal of Applied Physics, 2005, 44, 543-545.	1.5	21
64	Resolving the Mechanisms of Photocurrent Improvement in Ternary Organic Solar Cells. Journal of Physical Chemistry C, 2019, 123, 18294-18302.	3.1	21
65	Passivation engineering for hysteresis-free mixed perovskite solar cells. Solar Energy Materials and Solar Cells, 2020, 215, 110648.	6.2	21
66	Study of lithium fluoride/tris(8-hydroxyquinolino)-aluminum interfacial chemistry using XPS and ToF-SIMS. Applied Surface Science, 2004, 228, 373-377.	6.1	18
67	Bulk-heterojunction solar cells with enriched polymer contents. Organic Electronics, 2017, 40, 1-7.	2.6	18
68	Organic polymer thick film light emitting diodes (PTF-OLED). Displays, 2000, 21, 199-201.	3.7	17
69	Synthesis of 2-phenylquinoline-based ambipolar molecules containing multiple 1,3,4-oxadiazole spacer groups. Synthetic Metals, 2006, 156, 270-275.	3.9	17
70	Can an organic phosphorescent dye act as a charge transporter?. Organic Electronics, 2010, 11, 872-875.	2.6	17
71	Role of electron blocking and trapping layers in transport characterization of a photovoltaic polymer poly(3-hexylthiophene). Organic Electronics, 2012, 13, 541-544.	2.6	17
72	Over 13% Efficient Organic Solar Cells Based on Lowâ€Cost Pentacyclic Aâ€DAâ€²Dâ€Aâ€Type Nonfullerene Acceptor. Solar Rrl, 2021, 5, 2100281.	5.8	17

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73	Using transistor technique to study the effects of transition metal oxide dopants on organic charge transporters. Organic Electronics, 2011, 12, 1454-1458.	2.6	15
74	Boosting the photovoltaic thermal stability of fullerene bulk heterojunction solar cells through charge transfer interactions. Journal of Materials Chemistry A, 2017, 5, 23662-23670.	10.3	15
75	Photodesorption of NO on Ag(111) at 80 K. Vacuum, 1990, 41, 284-286.	3.5	14
76	Heterojunction OLEDs fabricated by Eu ternary complexes with conducting secondary ligands. Optical Materials, 2006, 28, 709-713.	3.6	13
77	Organic soluble indigoids derived from 3-hydroxybenzaldehyde for N-type organic field-effect transistor (OFET) applications. Organic Electronics, 2016, 32, 258-266.	2.6	12
78	High temperature carrier mobility as an intrinsic transport parameter of an organic semiconductor. Organic Electronics, 2009, 10, 661-665.	2.6	11
79	Isobenzofulvene-fullerene mono-adducts for organic photovoltaic applications. Journal of Materials Chemistry C, 2015, 3, 977-980.	5.5	11
80	Novel fluorine-containing X-branched oligophenylenes: structureâ€“hole blocking property relationships. Journal of Materials Chemistry, 2006, 16, 765-772.	6.7	10
81	A facile and robust approach to prepare fluorinated polymer dielectrics for probing the intrinsic transport behavior of organic semiconductors. Materials Advances, 2020, 1, 891-898.	5.4	9
82	Organic indoor light harvesters achieving recorded output power over 500% enhancement under thermal radiated illuminances. Science Bulletin, 2021, 66, 1641-1641.	9.0	9
83	Highly Semitransparent Indoor Nonfullerene Organic Solar Cells Based on Benzodithiopheneâ€Bridged Porphyrin Dimers. Energy Technology, 2022, 10, .	3.8	9
84	Palladium(II) and Platinum(II) Porphyrin Donors for Organic Photovoltaics. ACS Applied Energy Materials, 2022, 5, 4916-4925.	5.1	9
85	Tuning electronic properties of molecular acceptor-Ï€-porphyrin-Ï€-acceptor donors via Ï€-linkage structural engineering. Organic Electronics, 2019, 73, 146-151.	2.6	8
86	High throughput screening of novel tribromide perovskite materials for high-photovoltage solar cells. Journal of Materials Chemistry A, 2021, 9, 25502-25512.	10.3	8
87	Chromaticity manipulation of indoor photovoltaic cells. Applied Physics Letters, 2021, 118, .	3.3	7
88	Theoretical investigation of a blue hydroxyquinaldine-based aluminum(III) complex. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 321, 194-198.	2.1	6
89	Probing Bulk Transport, Interfacial Disorders, and Molecular Orientations of Amorphous Semiconductors in a Thinâ€Film Transistor Configuration. Advanced Electronic Materials, 2016, 2, 1500273.	5.1	6
90	Effects of additives in polymer thick film-organic light emitting diodes (PTF-OLED). Displays, 2002, 23, 171-175.	3.7	5

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91	Boosting charge and thermal transport â€“ role of insulators in stable and efficient n-type polymer transistors. Journal of Materials Chemistry C, 2021, 9, 12281-12290.	5.5	5
92	Photothermal deflection spectroscopy and transmission measurements of a-C:H films. Journal of Non-Crystalline Solids, 1999, 254, 151-155.	3.1	4
93	Heat transfer in photovoltaic polymers and bulkâ€heterojunctions investigated by scanning photothermal deflection technique. Nano Select, 2021, 2, 768-778.	3.7	4
94	Thiopheneâ€“Perylenediimide Bridged Dimeric Porphyrin Donors Based on the Donorâ€“Acceptorâ€“Donor Structure for Organic Photovoltaics. ACS Applied Energy Materials, 2022, 5, 7287-7296.	5.1	4
95	Reducing Energy Disorder for Efficient and Stable Snâ^'Pb Alloyed Perovskite Solar Cells.. Angewandte Chemie, 2022, 134, .	2.0	3
96	Organic Semiconductorâ€“Insulator Blends for Organic Fieldâ€Effect Transistors. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	2.4	2
97	Heat transfer in binary and ternary bulk heterojunction solar cells. Applied Physics Letters, 2022, 120, 143301.	3.3	1
98	Heat Transfer Enhancement of n-Type Organic Semiconductors by an Insulator Blend Approach. ACS Applied Materials & Interfaces, 0, , .	8.0	1
99	Polymeric organic light emitting diodes (OLED). , 0, , .		0
100	Charge motion and trapping in molecularly doped hole transporters. Materials Research Society Symposia Proceedings, 2002, 725, 1.	0.1	0
101	Active textured metallic microcavity. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 446-448.	2.7	0
102	Active medium inside photonic band structured microcavity. , 0, , .		0
103	Charge trapping and scattering by extrinsic gas dopants in tris(8-hydroxyquinoline) aluminum (Alq3). Materials Research Society Symposia Proceedings, 2004, 814, 42.	0.1	0
104	Oxadiazole-Triphenylamine derivatives for OLEDs. , 2005, , .		0
105	Pâ€220: NPBâ€Based RGB Singleâ€Layer OLEDs. Digest of Technical Papers SID International Symposium, 2008, 39, 2032-2035.	0.3	0
106	Effects of oxyten annealing on the performance of perovskite solar cells. , 2015, , .		0