Kai Wang

List of Publications by Year in Descending Order

43 papers	2,197 citations	26 h-index	44 g-index
44 ext. papers	2,555 ext. citations	12.5 avg, IF	4.87 L-index

#	Paper	IF	Citations
43	Photo-induced enhancement of lattice fluctuations in metal-halide perovskites.. *Nature Communications*, **2022**, 13, 1019	17.4	0
42	Recent Structural Engineering of Polymer Semiconductors Incorporating Hydrogen Bonds.. *Advanced Materials*, **2022**, e2110639	24	4
41	Impact of Photoluminescence Reabsorption in Metal-Halide Perovskite Solar Cells. *Solar Rrl*, **2021**, 5, 2100029	7.1	4
40	Wide and Tunable Bandgap MAPbBr3−xClx Hybrid Perovskites with Enhanced Phase Stability: In Situ Investigation and Photovoltaic Devices. *Solar Rrl*, **2021**, 5, 2000718	7.1	10
39	A synergy between the push-pull electronic effect and twisted conformation for high-contrast mechanochromic AIEgens. *Materials Horizons*, **2021**, 8, 630-638	14.4	17
38	Defect Passivation in Perovskite Solar Cells by Cyano-Based π-Conjugated Molecules for Improved Performance and Stability. *Advanced Functional Materials*, **2020**, 30, 2002861	15.6	43
37	Impact of Cesium/Rubidium Incorporation on the Photophysics of Multiple-Cation Lead Halide Perovskites. *Solar Rrl*, **2020**, 4, 2000072	7.1	8
36	Ambient blade coating of mixed cation, mixed halide perovskites without dripping: in situ investigation and highly efficient solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 1095-1104	13	49
35	Recent advances in organic pressure-responsive luminescent materials. *Chinese Chemical Letters*, **2019**, 30, 1883-1894	8.1	23
34	Impact of the Solvation State of Lead Iodide on Its Two-Step Conversion to MAPbI3: An In Situ Investigation. *Advanced Functional Materials*, **2019**, 29, 1807544	15.6	36
33	Kinetic Stabilization of the Sol-Gel State in Perovskites Enables Facile Processing of High-Efficiency Solar Cells. *Advanced Materials*, **2019**, 31, e1808357	24	57
32	Triarylphosphine Oxide as Cathode Interfacial Material for Inverted Perovskite Solar Cells. *Advanced Materials Interfaces*, **2019**, 6, 1900434	4.6	11
31	Polysilicon Passivating Contacts for Silicon Solar Cells: Interface Passivation and Carrier Transport Mechanism. *ACS Applied Energy Materials*, **2019**, 2, 4609-4617	6.1	23
30	Multi-cation Synergy Suppresses Phase Segregation in Mixed-Halide Perovskites. *Joule*, **2019**, 3, 1746-1764	37.8	118
29	Impact of Nonfullerene Acceptor Core Structure on the Photophysics and Efficiency of Polymer Solar Cells. *ACS Energy Letters*, **2018**, 3, 802-811	20.1	38
28	Solvent Vapor Annealing-Mediated Crystallization Directs Charge Generation, Recombination and Extraction in BHJ Solar Cells. *Chemistry of Materials*, **2018**, 30, 789-798	9.6	37
27	Additive-Morphology Interplay and Loss Channels in All-Small-Molecule Bulk-heterojunction (BHJ) Solar Cells with the Nonfullerene Acceptor IDTTBM. *Advanced Functional Materials*, **2018**, 28, 1705464	15.6	34

26	Ratiometric Piezochromism of Electrospun Polymer Films: Intermolecular Interactions for Enhanced Sensitivity and Color Difference. *ChemPlusChem*, **2018**, 83, 132-139	2.8	9
25	Fluorination Triggered New Small Molecule Donor Materials for Efficient As-Cast Organic Solar Cells. *Small*, **2018**, 14, e1801542	11	20
24	Piezochromic luminescence of AIE-active molecular co-crystals: tunable multiple hydrogen bonding and molecular packing. *Journal of Materials Chemistry C*, **2018**, 6, 9660-9666	7.1	34
23	A Universal Double-Side Passivation for High Open-Circuit Voltage in Perovskite Solar Cells: Role of Carbonyl Groups in Poly(methyl methacrylate). *Advanced Energy Materials*, **2018**, 8, 1801208	21.8	268
22	Dual fluorescence polymorphs: Wide-range emission from blue to red regulated by TICT and their dynamic electron state behavior under external pressure. *Dyes and Pigments*, **2017**, 145, 294-300	4.6	15
21	Benzo[1,2-b:4,5-b?]Dithiophene□,7-Difluoroquinoxaline Small Molecule Donors with >8% BHJ Solar Cell Efficiency. *Advanced Energy Materials*, **2017**, 7, 1602804	21.8	11
20	Donor and Acceptor Unit Sequences Influence Material Performance in Benzo[1,2-b:4,5-b?]dithiophene□,7-Difluoroquinoxaline Small Molecule Donors for BHJ Solar Cells. *Advanced Functional Materials*, **2016**, 26, 7103-7114	15.6	20
19	Solvent Annealing Effects in Dithieno[3,2-b:2?,3?-d]pyrrole□,6-Difluorobenzo[c][1,2,5]thiadiazole Small Molecule Donors for Bulk-Heterojunction Solar Cells. *Chemistry of Materials*, **2016**, 28, 5415-5425	9.6	26
18	Benzo[1,2-b:4,5-b?]dithiophene□Pyrido[3,4-b]pyrazine Small-Molecule Donors for Bulk Heterojunction Solar Cells. *Chemistry of Materials*, **2016**, 28, 2058-2066	9.6	36
17	□Bridge-Independent 2-(Benzo[c][1,2,5]thiadiazol-4-ylmethylene)malononitrile-Substituted Nonfullerene Acceptors for Efficient Bulk Heterojunction Solar Cells. *Chemistry of Materials*, **2016**, 28, 2200-2208	9.6	86
16	The facile realization of luminescence based on one yellow emissive four-coordinate organoboron material. *Chemical Communications*, **2015**, 51, 7701-4	5.8	39
15	Luminescent chromism of boron diketonate crystals: distinct responses to different stresses. *Advanced Materials*, **2015**, 27, 2918-22	24	195
14	Structurally simple phenanthroimidazole-based bipolar hosts for high-performance green and red electroluminescent devices. *RSC Advances*, **2015**, 5, 73926-73934	3.7	13
13	Organic Crystals with Near-Infrared Amplified Spontaneous Emissions Based on 2'-Hydroxychalcone Derivatives: Subtle Structure Modification but Great Property Change. *Angewandte Chemie - International Edition*, **2015**, 54, 8369-73	16.4	118
12	Organic Crystals with Near-Infrared Amplified Spontaneous Emissions Based on 2?-Hydroxychalcone Derivatives: Subtle Structure Modification but Great Property Change. *Angewandte Chemie*, **2015**, 127, 8489-8493	3.6	34
11	Polymorphic crystals and their luminescence switching of triphenylacrylonitrile derivatives upon solvent vapour, mechanical, and thermal stimuli. *Journal of Materials Chemistry C*, **2015**, 3, 3049-3054	7.1	70
10	Crystallization-induced red emission of a facilely synthesized biodegradable indigo derivative. *Chemical Communications*, **2015**, 51, 3375-8	5.8	38
9	Organic polymorphs: one-compound-based crystals with molecular-conformation- and packing-dependent luminescent properties. *Advanced Materials*, **2014**, 26, 6168-73	24	224

8	High-Performance Red, Green, and Blue Electroluminescent Devices Based on Blue Emitters with Small Singlet□Triplet Splitting and Ambipolar Transport Property. *Advanced Functional Materials*, **2013**, 23, 2672-2680	15.6	127
7	Constructing high-performance blue, yellow and red electroluminescent devices based on a class of multifunctional organic materials. *Journal of Materials Chemistry C*, **2013**, 1, 6594	7.1	32
6	Pentaphenylphenyl substituted quinacridone exhibiting intensive emission in both solution and solid state. *Journal of Materials Chemistry C*, **2013**, 1, 410-413	7.1	29
5	Multicolor fluorescence and electroluminescence of an ICT-type organic solid tuned by modulating the accepting nature of the central core. *Chemical Science*, **2013**, 4, 3288	9.4	95
4	Active modulation of wavelength and radiation direction of fluorescence via liquid crystal-tuned surface plasmons. *Applied Physics Letters*, **2013**, 102, 051107	3.4	9
3	Luminescent Dendrimers Composed of Quinacridone Core and Carbazole Dendrons: Structure, Electrochemical, and Photophysical Properties. *Journal of Physical Chemistry C*, **2012**, 116, 17796-17806	3.8	33
2	Brightly fluorescent red organic solids bearing boron-bridged □onjugated skeletons. *Journal of Materials Chemistry*, **2011**, 21, 15298		65
1	Ligand-bridged charge extraction and enhanced quantum efficiency enable efficient n□p perovskite/silicon tandem solar cells. *Energy and Environmental Science*,	35.4	26