Jialong Duan

List of Publications by Year in Descending Order

106 papers	3,726 citations	34 h-index	57 g-index
112 ext. papers	4,765 ext. citations	10.5 avg, IF	6.3 L-index

#	Paper	IF	Citations
106	Understanding steric-charge-dependence of conjugated passivators on □Pb2+ bond strength for efficient all-inorganic perovskite solar cells. *Chemical Engineering Journal*, **2022**, 431, 134230	14.7	2
105	Healing soft interface for stable and high-efficiency all-inorganic CsPbIBr2 perovskite solar cells enabled by S-benzylisothiourea hydrochloride. *Chemical Engineering Journal*, **2022**, 430, 132781	14.7	6
104	Tailoring type-II all-in-one buried interface for 1.635V-voltage, all-inorganic CsPbBr3 perovskite solar cells. *Nano Energy*, **2022**, 96, 107138	17.1	3
103	Universal Dynamic Liquid Interface for Healing Perovskite Solar Cells.. *Advanced Materials*, **2022**, e2202302	24	12
102	p-Type Charge Transfer Doping of Graphene Oxide with (NiCo) Fe O for Air-Stable, All-Inorganic CsPbIBr Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2021**, 60, 10608-10613	16.4	43
101	p-Type Charge Transfer Doping of Graphene Oxide with (NiCo)1−□FeyOx for Air-Stable, All-Inorganic CsPbIBr2 Perovskite Solar Cells. *Angewandte Chemie*, **2021**, 133, 10702-10707	3.6	3
100	High-Efficiency All-Inorganic Perovskite Solar Cells Tailored by Scalable Rutile TiO Nanorod Arrays with Excellent Stability. *ACS Applied Materials & Interfaces*, **2021**, 13, 12091-12098	9.5	7
99	Boosting power conversion efficiency by hybrid triboelectric nanogenerator/silicon tandem solar cell toward rain energy harvesting. *Nano Energy*, **2021**, 82, 105773	17.1	31
98	Dielectric Hole Collector toward Boosting Charge Transfer of CsPbBr3 Hybrid Nanogenerator by Coupling Triboelectric and Photovoltaic Effects. *Advanced Functional Materials*, **2021**, 31, 2101348	15.6	7
97	Nodding Duck Structure Multi-track Directional Freestanding Triboelectric Nanogenerator toward Low-Frequency Ocean Wave Energy Harvesting. *ACS Nano*, **2021**, 15, 9412-9421	16.7	22
96	Crystal-Plane Controlled Spontaneous Polarization of Inorganic Perovskite toward Boosting Triboelectric Surface Charge Density. *ACS Applied Materials & Interfaces*, **2021**, 13, 26196-26203	9.5	5
95	Effect of Side-Group-Regulated Dipolar Passivating Molecules on CsPbBr3 Perovskite Solar Cells. *ACS Energy Letters*, **2021**, 6, 2336-2342	20.1	30
94	Tailoring organic bulk-heterojunction for charge extraction and spectral absorption in CsPbBr3 perovskite solar cells. *Science China Materials*, **2021**, 64, 798-807	7.1	6
93	Review on recent progress of lead-free halide perovskites in optoelectronic applications. *Nano Energy*, **2021**, 80, 105526	17.1	51
92	Flexible, All-Inorganic CsPbBr Perovskite Solar Cells Tailored by Heat-resistant Muscovite Substrates. *ChemSusChem*, **2021**, 14, 1512-1516	8.3	5
91	Tailored Lattice "Tape" to Confine Tensile Interface for 11.08%-Efficiency All-Inorganic CsPbBr Perovskite Solar Cell with an Ultrahigh Voltage of 1.702□V. *Advanced Science*, **2021**, 8, e2101418	13.6	46
90	Reducing defect of inorganic perovskite film by sulphur-containing Lewis base for robust photodetectors. *Journal of Energy Chemistry*, **2021**, 61, 163-169	12	4

89	Alkali chloride doped SnO2 electron-transporting layers for boosting charge transfer and passivating defects in all-inorganic CsPbBr3 perovskite solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 15003-15011	13	8
88	Phase Control of Cs-Pb-Br Derivatives to Suppress 0D Cs PbBr for High-Efficiency and Stable All-Inorganic CsPbBr Perovskite Solar Cells.. *Small*, **2021**, e2106323	11	5
87	Triboelectric behaviors of inorganic Cs1−xAxPbBr3 halide perovskites toward enriching the triboelectric series. *Journal of Materials Chemistry A*, **2020**, 8, 25696-25705	13	5
86	Bulk Pt/CsPbBr3 Schottky junctions for charge boosting in robust triboelectric nanogenerators. *Journal of Materials Chemistry A*, **2020**, 8, 11966-11975	13	14
85	Lattice-tailored low-temperature processed electron transporting materials boost the open-circuit voltage of planar CsPbBr3 perovskite solar cells up to 1.654 V. *Journal of Materials Chemistry A*, **2020**, 8, 11859-11866	13	15
84	Halogen regulation of inorganic perovskites toward robust triboelectric nanogenerators and charging polarity series. *Journal of Materials Chemistry A*, **2020**, 8, 14299-14307	13	11
83	Boosted hole extraction in all-inorganic CsPbBr3 perovskite solar cells by interface engineering using MoO2/N-doped carbon nanospheres composite. *Solar Energy Materials and Solar Cells*, **2020**, 209, 110460	6.4	16
82	Tailoring all-inorganic cesium lead halide perovskites for robust triboelectric nanogenerators. *Nano Energy*, **2020**, 70, 104514	17.1	24
81	Interfacial electric field enhanced charge density for robust triboelectric nanogenerators by tailoring metal/perovskite Schottky junction. *Nano Energy*, **2020**, 73, 104747	17.1	20
80	Photoactivated transition metal dichalcogenides to boost electron extraction for all-inorganic tri-brominated planar perovskite solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 7784-7791	13	17
79	Charge boosting and storage by tailoring rhombus all-inorganic perovskite nanoarrays for robust triboelectric nanogenerators. *Nano Energy*, **2020**, 74, 104845	17.1	17
78	Enhanced energy level alignment and hole extraction of carbon electrode for air-stable hole-transporting material-free CsPbBr3 perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2020**, 205, 110267	6.4	26
77	Precise stress control of inorganic perovskite films for carbon-based solar cells with an ultrahigh voltage of 1.622 V. *Nano Energy*, **2020**, 67, 104286	17.1	70
76	Alkyl-Chain-Regulated Charge Transfer in Fluorescent Inorganic CsPbBr Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2020**, 59, 4391-4395	16.4	73
75	Alkyl-Chain-Regulated Charge Transfer in Fluorescent Inorganic CsPbBr3 Perovskite Solar Cells. *Angewandte Chemie*, **2020**, 132, 4421-4425	3.6	13
74	The unique dielectricity of inorganic perovskites toward high-performance triboelectric nanogenerators. *Nano Energy*, **2020**, 69, 104418	17.1	39
73	Unveiling the interfacial charge extraction kinetics in inorganic perovskite solar cells with formamidinium lead halide (FAPbX3) nanocrystals. *Solar Energy*, **2020**, 195, 644-650	6.8	12
72	Cluster effect of additives in precursors for inorganic perovskites solar cells. *Electrochimica Acta*, **2020**, 331, 135379	6.7	4

71	Alkali Metal Ion-Regulated Lead-free, All-Inorganic Double Perovskites for HTM-free, Carbon-Based Solar Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 47408-47415	9.5	21
70	Triboelectric charging behaviors and photoinduced enhancement of alkaline earth ions doped inorganic perovskite triboelectric nanogenerators. *Nano Energy*, **2020**, 77, 105280	17.1	14
69	Interfacial Strain Release from the WS2/CsPbBr3 van der Waals Heterostructure for 1.7 V Voltage All-Inorganic Perovskite Solar Cells. *Angewandte Chemie*, **2020**, 132, 22181-22185	3.6	29
68	Interfacial Strain Release from the WS /CsPbBr van der Waals Heterostructure for 1.7 V Voltage All-Inorganic Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2020**, 59, 21997-22001	16.4	65
67	Tri-functionalized TiO Cl4-2 accessory layer to boost efficiency of hole-free, all-inorganic perovskite solar cells. *Journal of Energy Chemistry*, **2020**, 50, 1-8	12	13
66	Hole-Boosted Cu(Cr,M)O2 Nanocrystals for All-Inorganic CsPbBr3 Perovskite Solar Cells. *Angewandte Chemie*, **2019**, 131, 16293-16297	3.6	19
65	Hole-Boosted Cu(Cr,M)O Nanocrystals for All-Inorganic CsPbBr Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2019**, 58, 16147-16151	16.4	77
64	Inorganic perovskite solar cells: an emerging member of the photovoltaic community. *Journal of Materials Chemistry A*, **2019**, 7, 21036-21068	13	93
63	Photo-induced charge boosting of liquid□solid electrokinetic generators for efficient wave energy harvesting. *Journal of Materials Chemistry A*, **2019**, 7, 5373-5380	13	9
62	A revolution of photovoltaics: persistent electricity generation beyond solar irradiation. *Dalton Transactions*, **2019**, 48, 799-805	4.3	10
61	Toward efficient and air-stable carbon-based all-inorganic perovskite solar cells through substituting CsPbBr3 films with transition metal ions. *Chemical Engineering Journal*, **2019**, 375, 121930	14.7	53
60	Poly(3-hexylthiophene)/zinc phthalocyanine composites for advanced interface engineering of 10.03%-efficiency CsPbBr3 perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 12635-12644	13	63
59	Using SnO2 QDs and CsMBr3 (M = Sn, Bi, Cu) QDs as Charge-Transporting Materials for 10.6%-Efficiency All-Inorganic CsPbBr3 Perovskite Solar Cells with an Ultrahigh Open-Circuit Voltage of 1.610 V (Solar RRL 3□2019). *Solar Rrl*, **2019**, 3, 1970035	7.1	1
58	Co/Se and Ni/Se nanocomposite films prepared by magnetron sputtering as counter electrodes for dye-sensitized solar cells. *Solar Energy*, **2019**, 180, 85-91	6.8	23
57	Well-aligned NiPt alloy counter electrodes for high-efficiency dye-sensitized solar cell applications. *Journal of Energy Chemistry*, **2019**, 30, 49-56	12	16
56	Enhanced charge extraction in carbon-based all-inorganic CsPbBr3 perovskite solar cells by dual-function interface engineering. *Electrochimica Acta*, **2019**, 328, 135102	6.7	22
55	10.34%-efficient integrated CsPbBr3/bulk-heterojunction solar cells. *Journal of Power Sources*, **2019**, 440, 227151	8.9	25
54	Advanced Modification of Perovskite Surfaces for Defect Passivation and Efficient Charge Extraction in Air-Stable CsPbBr3 Perovskite Solar Cells. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 19286-19294	8.3	29

53	Divalent hard Lewis acid doped CsPbBr3 films for 9.63%-efficiency and ultra-stable all-inorganic perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 6877-6882	13	68
52	Sonochemistry-assisted black/red phosphorus hybrid quantum dots for dye-sensitized solar cells. *Journal of Power Sources*, **2019**, 410-411, 53-58	8.9	21
51	Using SnO2 QDs and CsMBr3 (M = Sn, Bi, Cu) QDs as Charge-Transporting Materials for 10.6%-Efficiency All-Inorganic CsPbBr3 Perovskite Solar Cells with an Ultrahigh Open-Circuit Voltage of 1.610 V. *Solar Rrl*, **2019**, 3, 1800284	7.1	65
50	Self-powered flexible monoelectrodes from graphene/reduced graphene oxide composite films to harvest rain energy. *Journal of Alloys and Compounds*, **2019**, 776, 31-35	5.7	7
49	Simplified Perovskite Solar Cell with 4.1% Efficiency Employing Inorganic CsPbBr as Light Absorber. *Small*, **2018**, 14, e1704443	11	91
48	Carbon-Electrode-Tailored All-Inorganic Perovskite Solar Cells To Harvest Solar and Water-Vapor Energy. *Angewandte Chemie - International Edition*, **2018**, 57, 5746-5749	16.4	95
47	High-Purity Inorganic Perovskite Films for Solar Cells with 9.72 % Efficiency. *Angewandte Chemie - International Edition*, **2018**, 57, 3787-3791	16.4	318
46	High-Purity Inorganic Perovskite Films for Solar Cells with 9.72 % Efficiency. *Angewandte Chemie*, **2018**, 130, 3849-3853	3.6	76
45	Self-Powered Low-Platinum Nanorod Alloy Monoelectrodes for Rain Energy Harvest. *Energy Technology*, **2018**, 6, 1606-1609	3.5	1
44	A series of conducting gel electrolytes for quasi-solid-state quantum dot-sensitized solar cells with boosted electron transfer processes. *Journal of Energy Chemistry*, **2018**, 27, 335-341	12	10
43	S-doped CQDs tailored transparent counter electrodes for high-efficiency bifacial dye-sensitized solar cells. *Electrochimica Acta*, **2018**, 261, 588-595	6.7	22
42	Carbon-Electrode-Tailored All-Inorganic Perovskite Solar Cells To Harvest Solar and Water-Vapor Energy. *Angewandte Chemie*, **2018**, 130, 5848-5851	3.6	17
41	Generators to harvest ocean wave energy through electrokinetic principle. *Nano Energy*, **2018**, 48, 128-133	17.1	34
40	Alloy-Controlled Work Function for Enhanced Charge Extraction in All-Inorganic CsPbBr Perovskite Solar Cells. *ChemSusChem*, **2018**, 11, 1432-1437	8.3	45
39	Film-type rain energy converters from conductive polymer/PtCo hybrids. *Applied Energy*, **2018**, 218, 317-324	8.4	7
38	Bifunctional polyaniline electrode tailored hybridized solar cells for energy harvesting from sun and rain. *Journal of Energy Chemistry*, **2018**, 27, 742-747	12	10
37	9.13%-Efficiency and stable inorganic CsPbBr3 solar cells. Lead-free CsSnBr3-xIx quantum dots promote charge extraction. *Journal of Power Sources*, **2018**, 399, 76-82	8.9	79
36	CdZnSe@ZnSe colloidal alloy quantum dots for high-efficiency all-inorganic perovskite solar cells. *Chemical Communications*, **2018**, 54, 9575-9578	5.8	38

35	Lattice Modulation of Alkali Metal Cations Doped Cs1−RxPbBr3 Halides for Inorganic Perovskite Solar Cells. *Solar Rrl*, **2018**, 2, 1800164	7.1	119
34	Toward charge extraction in all-inorganic perovskite solar cells by interfacial engineering. *Journal of Materials Chemistry A*, **2018**, 6, 21999-22004	13	54
33	A ceramic NiO/ZrO2 separator for high-temperature supercapacitor up to 140 °C. *Journal of Power Sources*, **2018**, 400, 126-134	8.9	18
32	Rain-responsive polypyrrole-graphene/PtCo electrodes for energy harvest. *Electrochimica Acta*, **2018**, 285, 139-148	6.7	4
31	All-inorganic CsPbBr3 perovskite solar cell with 10.26% efficiency by spectra engineering. *Journal of Materials Chemistry A*, **2018**, 6, 24324-24329	13	133
30	Organic hole-transporting materials for 9.32%-efficiency and stable CsPbBr3 perovskite solar cells. *Materials Chemistry Frontiers*, **2018**, 2, 2239-2244	7.8	30
29	Lanthanide Ions Doped CsPbBr3 Halides for HTM-Free 10.14%-Efficiency Inorganic Perovskite Solar Cell with an Ultrahigh Open-Circuit Voltage of 1.594 V. *Advanced Energy Materials*, **2018**, 8, 1802346	21.8	281
28	Metal and Alloy for CE Catalysts in Dye-Sensitized Solar Cells **2018**, 47-69		2
27	Enhanced charge extraction with all-carbon electrodes for inorganic CsPbBr perovskite solar cells. *Dalton Transactions*, **2018**, 47, 15283-15287	4.3	26
26	Spray-assisted deposition of CsPbBr3 films in ambient air for large-area inorganic perovskite solar cells. *Materials Today Energy*, **2018**, 10, 146-152	7	45
25	Enhanced charge extraction by setting intermediate energy levels in all-inorganic CsPbBr3 perovskite solar cells. *Electrochimica Acta*, **2018**, 279, 84-90	6.7	38
24	Hybridized dye-sensitized solar cells for persistent power generation free of sun illumination. *Electrochimica Acta*, **2018**, 280, 181-190	6.7	6
23	Self-powered monoelectrodes made from graphene composite films to harvest rain energy. *Energy*, **2018**, 158, 555-563	7.9	11
22	All-inorganic bifacial CsPbBr perovskite solar cells with a 98.5%-bifacial factor. *Chemical Communications*, **2018**, 54, 8237-8240	5.8	21
21	Transparent ternary alloy counter electrodes for high-efficiency bifacial dye-sensitized solar cells. *Solar Energy*, **2018**, 170, 762-768	6.8	16
20	Controllable synthesis of organic-inorganic hybrid halide perovskite quantum dots for quasi-solid-state solar cells. *Electrochimica Acta*, **2018**, 282, 263-269	6.7	14
19	Toward fast charge extraction in all-inorganic CsPbBr3 perovskite solar cells by setting intermediate energy levels. *Solar Energy*, **2018**, 171, 279-285	6.8	54
18	Long persistence phosphor assisted all-weather solar cells. Electricity generation beyond sunny days. *Chemical Communications*, **2017**, 53, 3209-3212	5.8	16

17	Efficiency enhancement of hybridized solar cells through co-sensitization and fast charge extraction by up-converted polyethylene glycol modified carbon quantum dots. *Journal of Power Sources*, **2017**, 367, 158-166	8.9	11
16	Self-powered PEDOT and derivate monoelectrodes to harvest rain energy. *Nano Energy*, **2017**, 41, 293-300	17.1	22
15	Hollow optical fiber induced solar cells with optical energy storage and conversion. *Chemical Communications*, **2017**, 53, 12233-12235	5.8	5
14	Carbon quantum dot tailored counter electrode for 7.01%-rear efficiency in a bifacial dye-sensitized solar cell. *Chemical Communications*, **2017**, 53, 9894-9897	5.8	30
13	Interfacial engineering of hybridized solar cells for simultaneously harvesting solar and rain energies. *Journal of Materials Chemistry A*, **2017**, 5, 18551-18560	13	8
12	Extra-high short-circuit current for bifacial solar cells in sunny and dark-light conditions. *Chemical Communications*, **2017**, 53, 10046-10049	5.8	7
11	Ternary platinum alloy counter electrodes for high-efficiency dye-sensitized solar cells. *Electrochimica Acta*, **2016**, 190, 85-91	6.7	40
10	Counter electrode electrocatalysts from one-dimensional coaxial alloy nanowires for efficient dye-sensitized solar cells. *Journal of Power Sources*, **2016**, 302, 361-368	8.9	33
9	Recent advances in critical materials for quantum dot-sensitized solar cells: a review. *Journal of Materials Chemistry A*, **2015**, 3, 17497-17510	13	143
8	Multifunctional graphene incorporated polyacrylamide conducting gel electrolytes for efficient quasi-solid-state quantum dot-sensitized solar cells. *Journal of Power Sources*, **2015**, 284, 369-376	8.9	34
7	All-solid-state quantum dot-sensitized solar cell from plastic crystal electrolyte. *RSC Advances*, **2015** , 5, 33463-33467	3.7	17
6	Recent advances in alloy counter electrodes for dye-sensitized solar cells. A critical review. *Electrochimica Acta*, **2015**, 178, 886-899	6.7	99
5	Solid-state electrolytes from polysulfide integrated polyvinylpyrrolidone for quantum dot-sensitized solar cells. *RSC Advances*, **2014**, 4, 60478-60483	3.7	15
4	Efficient In2S3 Quantum dot□ensitized Solar Cells: A Promising Power Conversion Efficiency of 1.30%. *Electrochimica Acta*, **2014**, 139, 381-385	6.7	34
3	Efficient quasi-solid-state dye-sensitized solar cells from graphene incorporated conducting gel electrolytes. *Journal of Materials Chemistry A*, **2014**, 2, 2814	13	58
2	Self-powered seesaw structured spherical buoys based on a hybrid triboelectric□electromagnetic nanogenerator for sea surface wireless positioning. *Energy and Environmental Science*,	35.4	10
1	Suppressing Interfacial Shunt Loss via Functional Polymer for Performance Improvement of Lead-Free Cs2AgBiBr6 Double Perovskite Solar Cells. *Solar Rrl*,2100791	7.1	3