Shuping Pang

List of Publications by Year
in descending order

107 papers	9,712 citations	44069 48 h-index	36028 97 g-index
109 all docs	109 docs citations	109 times ranked	13490 citing authors

#	Article	IF	Citations
1	Methylamine gas healing of perovskite films: a short review and perspective. Journal of Materials Chemistry C, 2022, 10, 2390-2399.	5.5	7
2	Atomically Resolved Electrically Active Intragrain Interfaces in Perovskite Semiconductors. Journal of the American Chemical Society, 2022, 144, 1910-1920.	13.7	37
3	Inhibiting Ion Migration by Guanidinium Cation Doping for Efficient Perovskite Solar Cells with Enhanced Operational Stability. Solar Rrl, 2022, 6, .	5.8	5
4	Highly efficient CsPbI3/Cs1-xDMAxPbI3 bulk heterojunction perovskite solar cell. Joule, 2022, 6, 850-860.	24.0	70
5	Pressure-Assisted Space-Confinement Strategy to Eliminate PbI₂ in Perovskite Layers toward Improved Operational Stability. ACS Applied Materials & Interfaces, 2022, 14, 12442-12449.	8.0	6
6	Chemical bath deposition of mesoporous SnO2 to improve interface adhesion and device operational stability. Chemical Engineering Journal, 2022, 443, 136308.	12.7	8
7	Polyacrylonitrileâ€Coordinated Perovskite Solar Cell with Openâ€Circuit Voltage Exceeding 1.23â€…V. Angewandte Chemie - International Edition, 2022, 61, .	13.8	63
8	Polyacrylonitrileâ€Coordinated Perovskite Solar Cell with Openâ€Circuit Voltage Exceeding 1.23â€…V. Angewandte Chemie, 2022, 134, .	2.0	18
9	Sulfonyl passivation through synergistic hydrogen bonding and coordination interactions for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2022, 10, 13048-13054.	10.3	18
10	Enhance Photothermal Stability of Hybrid Perovskite Materials by Inhibiting Intrinsic Ion Migration. Solar Rrl, 2022, 6, .	5.8	3
11	A Lowâ€Temperature Additiveâ€Involved Leaching Method for Highly Efficient Inorganic Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, .	19.5	32
12	Structural Properties and Stability of Inorganic CsPbI₃ Perovskites. Small Structures, 2021, 2, 2000089.	12.0	39
13	Nanoconfined Crystallization for Highâ€Efficiency Inorganic Perovskite Solar Cells. Small Science, 2021, 1, 2000054.	9.9	19
14	Formamidinium-incorporated Dion-Jacobson phase 2D perovskites for highly efficient and stable photovoltaics. Journal of Energy Chemistry, 2021, 57, 632-638.	12.9	18
15	Graphdiyne oxide doped SnO₂electron transport layer for high performance perovskite solar cells. Materials Chemistry Frontiers, 2021, 5, 6913-6922.	5.9	7
16	Stabilizing Formamidinium Lead Iodide Perovskite Precursor Solution with Phenylboric Acid. Solar Rrl, 2021, 5, 2000715.	5.8	11
17	Dual-Functional Additive to Simultaneously Modify the Interface and Grain Boundary for Highly Efficient and Hysteresis-Free Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 20043-20050.	8.0	21
18	Fabrication and Characterization of FA_{<i>x</i>}Cs_{1âˆ’<i>x</i>}PbI₃ Polycrystal Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100166.	5.8	8

#	ARTICLE	IF	CITATIONS
19	Reducing Defects Density and Enhancing Hole Extraction for Efficient Perovskite Solar Cells Enabled by Ï€â€Pb 2+ Interactions. Angewandte Chemie, 2021, 133, 17496-17501.	2.0	6
20	Carrier Diffusion and Recombination Anisotropy in the MAPbI₃ Single Crystal. ACS Applied Materials & Interfaces, 2021, 13, 29827-29834.	8.0	17
21	Reducing Defects Density and Enhancing Hole Extraction for Efficient Perovskite Solar Cells Enabled by Ï€â€Pb²⁺ Interactions. Angewandte Chemie - International Edition, 2021, 60, 17356-17361.	13.8	51
22	â€˜Vâ€™ Shape Aâ€"Dâ€"Aâ€Type Designed Small Hole Conductors for Efficient Indoor and Outdoor Staging from Solid Dyeâ€Sensitized Solar Cells and Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100206.	5.8	10
23	Healing the Buried Cavities and Defects in Quasi-2D Perovskite Films by Self-Generated Methylamine Gas. ACS Energy Letters, 2021, 6, 3634-3642.	17.4	24
24	Highly efficient inverted hole-transport-layer-free perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 503-512.	10.3	43
25	Chemical Composition and Phase Evolution in DMAI-Derived Inorganic Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 263-270.	17.4	114
26	The Possible Side Reaction in the Annealing Process of Perovskite Layers. ACS Applied Materials & Interfaces, 2020, 12, 35043-35048.	8.0	10
27	A temperature gradient-induced directional growth of a perovskite film. Journal of Materials Chemistry A, 2020, 8, 17019-17024.	10.3	7
28	Simultaneous hole transport and defect passivation enabled by a dopant-free single polymer for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 21036-21043.	10.3	23
29	Organic Ionic Plastic Crystals as Hole Transporting Layer for Stable and Efficient Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2001460.	14.9	27
30	Cs₄PbI₆â€Mediated Synthesis of Thermodynamically Stable FA_{0.15}Cs_{0.85}PbI₃ Perovskite Solar Cells. Advanced Materials, 2020, 32, e2001054.	21.0	41
31	Interaction engineering in organicâ€"inorganic hybrid perovskite solar cells. Materials Horizons, 2020, 7, 2208-2236.	12.2	35
32	Perovskite Solution Aging: What Happened and How to Inhibit?. CheM, 2020, 6, 1369-1378.	11.7	112
33	UV degradation of the interface between perovskites and the electron transport layer. RSC Advances, 2020, 10, 11551-11556.	3.6	24
34	Accurately Stoichiometric Regulating Oxidation States in Hole Transporting Material to Enhance the Hole Mobility of Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000127.	5.8	5
35	A polar-hydrophobic ionic liquid induces grain growth and stabilization in halide perovskites. Chemical Communications, 2019, 55, 11059-11062.	4.1	35
36	Review of Stability Enhancement for Formamidiniumâ€Based Perovskites. Solar Rrl, 2019, 3, 1900215.	5.8	60

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37	Spontaneous Interface Ion Exchange: Passivating Surface Defects of Perovskite Solar Cells with Enhanced Photovoltage. Advanced Energy Materials, 2019, 9, 1902142.	19.5	63
38	Photoâ€Supercapacitors Based on Thirdâ€Generation Solar Cells. ChemSusChem, 2019, 12, 3431-3447.	6.8	33
39	A Scalable Methylamine Gas Healing Strategy for Highâ€Efficiency Inorganic Perovskite Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 5587-5591.	13.8	121
40	A Scalable Methylamine Gas Healing Strategy for Highâ€Efficiency Inorganic Perovskite Solar Cells. Angewandte Chemie, 2019, 131, 5643-5647.	2.0	19
41	Trash into Treasure: Î´â€FAPbI₃ Polymorph Stabilized MAPbI₃ Perovskite with Power Conversion Efficiency beyond 21%. Advanced Materials, 2018, 30, e1707143.	21.0	101
42	Continuous Grain-Boundary Functionalization for High-Efficiency Perovskite Solar Cells with Exceptional Stability. CheM, 2018, 4, 1404-1415.	11.7	165
43	Controlled surface decomposition derived passivation and energy-level alignment behaviors for high performance perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 9397-9401.	10.3	20
44	MAPbCl₃-Mediated Decomposition Process to Tune Cl/PbI₂ Distribution in MAPbI₃ Films. ACS Energy Letters, 2018, 3, 1801-1807.	17.4	18
45	CH₃NH₂ gas induced (110) preferred cesium-containing perovskite films with reduced PbI₆ octahedron distortion and enhanced moisture stability. Journal of Materials Chemistry A, 2017, 5, 4803-4808.	10.3	33
46	Methylammoniumâ€Mediated Evolution of Mixedâ€Organicâ€Cation Perovskite Thin Films: A Dynamic Compositionâ€Tuning Process. Angewandte Chemie, 2017, 129, 7782-7786.	2.0	12
47	Methylammoniumâ€Mediated Evolution of Mixedâ€Organicâ€Cation Perovskite Thin Films: A Dynamic Compositionâ€Tuning Process. Angewandte Chemie - International Edition, 2017, 56, 7674-7678.	13.8	59
48	Blended additive manipulated morphology and crystallinity transformation toward high performance perovskite solar cells. RSC Advances, 2017, 7, 51944-51949.	3.6	11
49	Simultaneous Evolution of Uniaxially Oriented Grains and Ultralow-Density Grain-Boundary Network in CH₃NH₃PbI₃ Perovskite Thin Films Mediated by Precursor Phase Metastability. ACS Energy Letters, 2017, 2, 2727-2733.	17.4	82
50	Methylamine Gas Based Synthesis and Healing Process Toward Upscaling of Perovskite Solar Cells: Progress and Perspective. Solar Rrl, 2017, 1, 1700076.	5.8	40
51	Iodine and Chlorine Element Evolution in CH₃NH₃PbI_{3â€“<i>x</i>}Cl_{<i>x</i>} Thin Films for Highly Efficient Planar Heterojunction Perovskite Solar Cells. Chemistry of Materials, 2016, 28, 2742-2749.	6.7	48
52	Exceptional Morphology-Preserving Evolution of Formamidinium Lead Triiodide Perovskite Thin Films via Organic-Cation Displacement. Journal of the American Chemical Society, 2016, 138, 5535-5538.	13.7	178
53	Observation of phase-retention behavior of the HC(NH₂)₂PbI₃ black perovskite polymorph upon mesoporous TiO₂ scaffolds. Chemical Communications, 2016, 52, 7273-7275.	4.1	50
54	Insight into the effect of ion source for the solution processing of perovskite films. RSC Advances, 2016, 6, 85026-85029.	3.6	9

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55	Heterojunctionâ€Depleted Leadâ€Free Perovskite Solar Cells with Coarseâ€Grained Bâ€Î³â€CsSnI₃ Thin Films. Advanced Energy Materials, 2016, 6, 1601130.	19.5	247
56	A balanced cation exchange reaction toward highly uniform and pure phase FA_{1âˆ’x}MA_xPbI₃ perovskite films. Journal of Materials Chemistry A, 2016, 4, 14437-14443.	10.3	64
57	Doping and alloying for improved perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 17623-17635.	10.3	157
58	Thinâ€Film Transformation of NH₄PbI₃ to CH₃NH₃PbI₃ Perovskite: A Methylamineâ€Induced Conversionâ€“Healing Process. Angewandte Chemie - International Edition, 2016, 55, 14723-14727.	13.8	83
59	Thinâ€Film Transformation of NH₄PbI₃ to CH₃NH₃PbI₃ Perovskite: A Methylamineâ€Induced Conversionâ€“Healing Process. Angewandte Chemie, 2016, 128, 14943-14947.	2.0	17
60	Preparation and characterization of bio-based hybrid film containing chitosan and silver nanowires. Carbohydrate Polymers, 2016, 137, 732-738.	10.2	55
61	The fabrication of formamidinium lead iodide perovskite thin films via organic cation exchange. Chemical Communications, 2016, 52, 3828-3831.	4.1	79
62	Transformative Evolution of Organolead Triiodide Perovskite Thin Films from Strong Room-Temperature Solidâ€“Gas Interaction between HPbI₃-CH₃NH₂ Precursor Pair. Journal of the American Chemical Society, 2016, 138, 750-753.	13.7	156
63	Intercalation crystallization of phase-pure Î±-HC(NH₂)₂PbI₃upon microstructurally engineered PbI₂thin films for planar perovskite solar cells. Nanoscale, 2016, 8, 6265-6270.	5.6	41
64	Methylamineâ€Gasâ€Induced Defectâ€Healing Behavior of CH₃NH₃PbI₃ Thin Films for Perovskite Solar Cells. Angewandte Chemie - International Edition, 2015, 54, 9705-9709.	13.8	377
65	Crystal Morphologies of Organolead Trihalide in Mesoscopic/Planar Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 2292-2297.	4.6	93
66	Microstructures of Organometal Trihalide Perovskites for Solar Cells: Their Evolution from Solutions and Characterization. Journal of Physical Chemistry Letters, 2015, 6, 4827-4839.	4.6	344
67	Growth control of compact CH₃NH₃PbI₃ thin films via enhanced solid-state precursor reaction for efficient planar perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 9249-9256.	10.3	128
68	Interface engineering for high-performance perovskite hybrid solar cells. Journal of Materials Chemistry A, 2015, 3, 19205-19217.	10.3	145
69	Hierarchically Designed Germanium Microcubes with High Initial Coulombic Efficiency toward Highly Reversible Lithium Storage. Chemistry of Materials, 2015, 27, 2189-2194.	6.7	108
70	Additive-Modulated Evolution of HC(NH₂)₂PbI₃ Black Polymorph for Mesoscopic Perovskite Solar Cells. Chemistry of Materials, 2015, 27, 7149-7155.	6.7	197
71	Lithium storage in a highly conductive Cu₃Ge boosted Ge/graphene aerogel. Journal of Materials Chemistry A, 2015, 3, 22552-22556.	10.3	26
72	Low-cost, flexible graphene/polyaniline nanocomposite paper as binder-free high-performance supercapacitor electrode. Functional Materials Letters, 2014, 07, 1440010.	1.2	5

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73	Reproducible One-Step Fabrication of Compact MAPbI_{3â€“<i>x</i>}Cl_{<i>x</i>} Thin Films Derived from Mixed-Lead-Halide Precursors. Chemistry of Materials, 2014, 26, 7145-7150.	6.7	81
74	NH₂CHâ•NH₂PbI₃: An Alternative Organolead Iodide Perovskite Sensitizer for Mesoscopic Solar Cells. Chemistry of Materials, 2014, 26, 1485-1491.	6.7	516
75	Nitrogen-doped carbon and iron carbide nanocomposites as cost-effective counter electrodes of dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 4676-4681.	10.3	50
76	Highâ€Performance Cobalt Selenide and Nickel Selenide Nanocomposite Counter Electrode for Both Iodide/Triiodide and Cobalt(II/III) Redox Couples in Dyeâ€Sensitized Solar Cells. Chinese Journal of Chemistry, 2014, 32, 491-497.	4.9	31
77	Direct Observation of Ferroelectric Domains in Solution-Processed CH₃NH₃PbI₃ Perovskite Thin Films. Journal of Physical Chemistry Letters, 2014, 5, 3335-3339.	4.6	411
78	One-step, solution-processed formamidinium lead trihalide (FAPbI_(3âˆ'x)Cl_x) for mesoscopic perovskiteâ€“polymer solar cells. Physical Chemistry Chemical Physics, 2014, 16, 19206-19211.	2.8	130
79	Vapour-based processing of hole-conductor-free CH₃NH₃PbI₃ perovskite/C₆₀ fullerene planar solar cells. RSC Advances, 2014, 4, 28964-28967.	3.6	127
80	Carbon nanotubes/carbon paper composite electrode for sensitive detection of catechol in the presence of hydroquinone. Electrochemistry Communications, 2013, 34, 356-359.	4.7	41
81	Nitridated mesoporous Li4Ti5O12 spheres for high-rate lithium-ion batteries anode material. Journal of Solid State Electrochemistry, 2013, 17, 1479-1485.	2.5	28
82	Electrodeposition of nanostructured cobalt selenide films towards high performance counter electrodes in dye-sensitized solar cells. RSC Advances, 2013, 3, 16528.	3.6	71
83	An elastic germaniumâ€“carbon nanotubesâ€“copper foam monolith as an anode for rechargeable lithium batteries. RSC Advances, 2013, 3, 1336-1340.	3.6	38
84	An insight into the effect of nitrogen doping on the performance of a reduced graphene oxide counter electrode for dye-sensitized solar cells. RSC Advances, 2013, 3, 9005.	3.6	18
85	Graphene decorated with molybdenum dioxide nanoparticles for use in high energy lithium ion capacitors with an organic electrolyte. Journal of Materials Chemistry A, 2013, 1, 5949.	10.3	66
86	Renewable and Superior Thermal-Resistant Cellulose-Based Composite Nonwoven as Lithium-Ion Battery Separator. ACS Applied Materials & Interfaces, 2013, 5, 128-134.	8.0	317
87	Transition-metal nitride nanoparticles embedded in N-doped reduced graphene oxide: superior synergistic electrocatalytic materials for the counter electrodes of dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 3340.	10.3	60
88	A Heat-Resistant Silica Nanoparticle Enhanced Polysulfonamide Nonwoven Separator for High-Performance Lithium Ion Battery. Journal of the Electrochemical Society, 2013, 160, A769-A774.	2.9	46
89	Hierarchical micro/nano-structured titanium nitride spheres as a high-performance counter electrode for a dye-sensitized solar cell. Journal of Materials Chemistry, 2012, 22, 6067.	6.7	64
90	CuInS₂ Nanocrystals/PEDOT:PSS Composite Counter Electrode for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2012, 4, 6242-6246.	8.0	56

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91	Nanostructured Titanium Nitride/PEDOT:PSS Composite Films As Counter Electrodes of Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2012, 4, 1087-1092.	8.0	105
92	Coplanar Asymmetrical Reduced Graphene Oxideâ€"Titanium Electrodes for Polymer Photodetectors. Advanced Materials, 2012, 24, 1566-1570.	21.0	24
93	Layer-by-Layer Assembly and UV Photoreduction of Grapheneâ€"Polyoxometalate Composite Films for Electronics. Journal of the American Chemical Society, 2011, 133, 9423-9429.	13.7	304
94	Microribbon Field-Effect Transistors Based on Dithieno[2,3-d;2,3â€²-dâ€²]benzo[1,2-b;4,5-bâ€²]dithiophene Processed by Solvent Vapor Diffusion. Chemistry of Materials, 2011, 23, 4960-4964.	6.7	27
95	Graphene as Transparent Electrode Material for Organic Electronics. Advanced Materials, 2011, 23, 2779-2795.	21.0	708
96	Extrinsic Corrugationâ€Assisted Mechanical Exfoliation of Monolayer Graphene. Advanced Materials, 2010, 22, 5374-5377.	21.0	55
97	One-Step Synthesis of Highly Luminescent Carbon Dots in Noncoordinating Solvents. Chemistry of Materials, 2010, 22, 4528-4530.	6.7	367
98	Composites of Graphene with Large Aromatic Molecules. Advanced Materials, 2009, 21, 3191-3195.	21.0	750
99	Patterned Graphene Electrodes from Solutionâ€Processed Graphite Oxide Films for Organic Fieldâ€Effect Transistors. Advanced Materials, 2009, 21, 3488-3491.	21.0	344
100	Growth of (WO₃)<i>_n</i> Rectangular Structures through a LMOâˆ'Organic Precursor Route. Inorganic Chemistry, 2008, 47, 344-348.	4.0	13
101	Environmentally Friendly Chemical Route to Vanadium Oxide Single-Crystalline Nanobelts as a Cathode Material for Lithium-Ion Batteries. Journal of Physical Chemistry B, 2006, 110, 9383-9386.	2.6	141
102	Molybdenum Trioxide Nanostructures:Â The Evolution from Helical Nanosheets to Crosslike Nanoflowers to Nanobelts. Journal of Physical Chemistry B, 2006, 110, 24472-24475.	2.6	75
103	Synthesis of radially aligned polyaniline dendrites. Polymer, 2006, 47, 1456-1459.	3.8	50
104	Synthesis of Ba1+xV6O16Â·nH2O single-crystalline nanobelts and seamless ring-like structures. Journal of Crystal Growth, 2006, 293, 423-427.	1.5	4
105	Synthesis of Polyaniline Submicrometer-Sized Tubes with Controllable Morphology. Journal of Nanoparticle Research, 2006, 8, 1039-1044.	1.9	16
106	Synthesis of Polyaniline-Vanadium Oxide Nanocomposite Nanosheets. Macromolecular Rapid Communications, 2005, 26, 1262-1265.	3.9	78
107	Templateless and surfactantless route to the synthesis of polyaniline nanofibers. Journal of Polymer Science Part A, 2005, 43, 4012-4015.	2.3	37