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	Composites of Graphene with Large Aromatic Molecules. Advanced Materials, 2009, 21, 3191-3195.	21.0	750
2	Graphene as Transparent Electrode Material for Organic Electronics. Advanced Materials, 2011, 23, 2779-2795.	21.0	708
3	NH₂CHâ•NH₂PbI₃: An Alternative Organolead Iodide Perovskite Sensitizer for Mesoscopic Solar Cells. Chemistry of Materials, 2014, 26, 1485-1491.	6.7	516
4	Direct Observation of Ferroelectric Domains in Solution-Processed CH₃NH₃PbI₃ Perovskite Thin Films. Journal of Physical Chemistry Letters, 2014, 5, 3335-3339.	4.6	411
5	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
6	One-Step Synthesis of Highly Luminescent Carbon Dots in Noncoordinating Solvents. Chemistry of Materials, 2010, 22, 4528-4530.	6.7	367
7	Patterned Graphene Electrodes from Solutionâ€Processed Graphite Oxide Films for Organic Fieldâ€Effect Transistors. Advanced Materials, 2009, 21, 3488-3491.	21.0	344
8	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
9	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
10	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
11	Heterojunctionâ€Depleted Leadâ€Free Perovskite Solar Cells with Coarseâ€Grained Bâ€Î³â€CsSnI₃ Thin Films. Advanced Energy Materials, 2016, 6, 1601130.	19.5	247
12	Additive-Modulated Evolution of HC(NH₂)₂PbI₃ Black Polymorph for Mesoscopic Perovskite Solar Cells. Chemistry of Materials, 2015, 27, 7149-7155.	6.7	197
13	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
14	Continuous Grain-Boundary Functionalization for High-Efficiency Perovskite Solar Cells with Exceptional Stability. CheM, 2018, 4, 1404-1415.	11.7	165
15	Doping and alloying for improved perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 17623-17635.	10.3	157
16	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
17	Interface engineering for high-performance perovskite hybrid solar cells. Journal of Materials Chemistry A, 2015, 3, 19205-19217.	10.3	145
18	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

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19	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
20	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
21	Vapour-based processing of hole-conductor-free CH₃NH₃PbI₃ perovskite/C₆₀ fullerene planar solar cells. RSC Advances, 2014, 4, 28964-28967.	3.6	127
22	A Scalable Methylamine Gas Healing Strategy for Highâ€Efficiency Inorganic Perovskite Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 5587-5591.	13.8	121
23	Chemical Composition and Phase Evolution in DMAI-Derived Inorganic Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 263-270.	17.4	114
24	Perovskite Solution Aging: What Happened and How to Inhibit?. CheM, 2020, 6, 1369-1378.	11.7	112
25	Hierarchically Designed Germanium Microcubes with High Initial Coulombic Efficiency toward Highly Reversible Lithium Storage. Chemistry of Materials, 2015, 27, 2189-2194.	6.7	108
26	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
27	Trash into Treasure: Î´â€FAPbI₃ Polymorph Stabilized MAPbI₃ Perovskite with Power Conversion Efficiency beyond 21%. Advanced Materials, 2018, 30, e1707143.	21.0	101
28	Crystal Morphologies of Organolead Trihalide in Mesoscopic/Planar Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 2292-2297.	4.6	93
29	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
30	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
31	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
32	The fabrication of formamidinium lead iodide perovskite thin films via organic cation exchange. Chemical Communications, 2016, 52, 3828-3831.	4.1	79
33	Synthesis of Polyaniline-Vanadium Oxide Nanocomposite Nanosheets. Macromolecular Rapid Communications, 2005, 26, 1262-1265.	3.9	78
34	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
35	Electrodeposition of nanostructured cobalt selenide films towards high performance counter electrodes in dye-sensitized solar cells. RSC Advances, 2013, 3, 16528.	3.6	71
36	Highly efficient CsPbI3/Cs1-xDMAxPbI3 bulk heterojunction perovskite solar cell. Joule, 2022, 6, 850-860.	24.0	70

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37	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
38	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
39	A balanced cation exchange reaction toward highly uniform and pure phase FA_{1â^'x}MA_xPbI₃ perovskite films. Journal of Materials Chemistry A, 2016, 4, 14437-14443.	10.3	64
40	Spontaneous Interface Ion Exchange: Passivating Surface Defects of Perovskite Solar Cells with Enhanced Photovoltage. Advanced Energy Materials, 2019, 9, 1902142.	19.5	63
41	Polyacrylonitrileâ€Coordinated Perovskite Solar Cell with Openâ€Circuit Voltage Exceeding 1.23â€…V. Angewandte Chemie - International Edition, 2022, 61, .	13.8	63
42	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
43	Review of Stability Enhancement for Formamidiniumâ€Based Perovskites. Solar Rrl, 2019, 3, 1900215.	5.8	60
44	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
45	CuInS₂ Nanocrystals/PEDOT:PSS Composite Counter Electrode for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2012, 4, 6242-6246.	8.0	56
46	Extrinsic Corrugationâ€Assisted Mechanical Exfoliation of Monolayer Graphene. Advanced Materials, 2010, 22, 5374-5377.	21.0	55
47	Preparation and characterization of bio-based hybrid film containing chitosan and silver nanowires. Carbohydrate Polymers, 2016, 137, 732-738.	10.2	55
48	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
49	Synthesis of radially aligned polyaniline dendrites. Polymer, 2006, 47, 1456-1459.	3.8	50
50	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
51	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
52	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
53	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
54	Highly efficient inverted hole-transport-layer-free perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 503-512.	10.3	43

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55	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
56	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
57	Cs₄PbI₆â€Mediated Synthesis of Thermodynamically Stable FA_{0.15}Cs_{0.85}PbI₃ Perovskite Solar Cells. Advanced Materials, 2020, 32, e2001054.	21.0	41
58	Methylamine Gas Based Synthesis and Healing Process Toward Upscaling of Perovskite Solar Cells: Progress and Perspective. Solar Rrl, 2017, 1, 1700076.	5.8	40
59	Structural Properties and Stability of Inorganic CsPbI₃ Perovskites. Small Structures, 2021, 2, 2000089.	12.0	39
60	An elastic germaniumâ€“carbon nanotubesâ€“copper foam monolith as an anode for rechargeable lithium batteries. RSC Advances, 2013, 3, 1336-1340.	3.6	38
61	Templateless and surfactantless route to the synthesis of polyaniline nanofibers. Journal of Polymer Science Part A, 2005, 43, 4012-4015.	2.3	37
62	Atomically Resolved Electrically Active Intragrain Interfaces in Perovskite Semiconductors. Journal of the American Chemical Society, 2022, 144, 1910-1920.	13.7	37
63	A polar-hydrophobic ionic liquid induces grain growth and stabilization in halide perovskites. Chemical Communications, 2019, 55, 11059-11062.	4.1	35
64	Interaction engineering in organicâ€“inorganic hybrid perovskite solar cells. Materials Horizons, 2020, 7, 2208-2236.	12.2	35
65	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
66	Photoâ€Supercapacitors Based on Thirdâ€Generation Solar Cells. ChemSusChem, 2019, 12, 3431-3447.	6.8	33
67	A Lowâ€Temperature Additiveâ€Involved Leaching Method for Highly Efficient Inorganic Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, .	19.5	32
68	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
69	Nitridated mesoporous Li4Ti5O12 spheres for high-rate lithium-ion batteries anode material. Journal of Solid State Electrochemistry, 2013, 17, 1479-1485.	2.5	28
70	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
71	Organic Ionic Plastic Crystals as Hole Transporting Layer for Stable and Efficient Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2001460.	14.9	27
72	Lithium storage in a highly conductive Cu₃Ge boosted Ge/graphene aerogel. Journal of Materials Chemistry A, 2015, 3, 22552-22556.	10.3	26

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73	Coplanar Asymmetrical Reduced Graphene Oxideâ€"Titanium Electrodes for Polymer Photodetectors. Advanced Materials, 2012, 24, 1566-1570.	21.0	24
74	UV degradation of the interface between perovskites and the electron transport layer. RSC Advances, 2020, 10, 11551-11556.	3.6	24
75	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
76	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
77	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
78	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
79	A Scalable Methylamine Gas Healing Strategy for Highâ€Efficiency Inorganic Perovskite Solar Cells. Angewandte Chemie, 2019, 131, 5643-5647.	2.0	19
80	Nanoconfined Crystallization for Highâ€Efficiency Inorganic Perovskite Solar Cells. Small Science, 2021, 1, 2000054.	9.9	19
81	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
82	MAPbCl₃-Mediated Decomposition Process to Tune Cl/PbI₂ Distribution in MAPbI₃ Films. ACS Energy Letters, 2018, 3, 1801-1807.	17.4	18
83	Formamidinium-incorporated Dion-Jacobson phase 2D perovskites for highly efficient and stable photovoltaics. Journal of Energy Chemistry, 2021, 57, 632-638.	12.9	18
84	Polyacrylonitrileâ€Coordinated Perovskite Solar Cell with Openâ€Circuit Voltage Exceeding 1.23â€…V. Angewandte Chemie, 2022, 134, .	2.0	18
85	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
86	Thinâ€Film Transformation of NH₄PbI₃ to CH₃NH₃PbI₃ Perovskite: A Methylamineâ€Induced Conversionâ€"Healing Process. Angewandte Chemie, 2016, 128, 14943-14947.	2.0	17
87	Carrier Diffusion and Recombination Anisotropy in the MAPbI₃ Single Crystal. ACS Applied Materials & Interfaces, 2021, 13, 29827-29834.	8.0	17
88	Synthesis of Polyaniline Submicrometer-Sized Tubes with Controllable Morphology. Journal of Nanoparticle Research, 2006, 8, 1039-1044.	1.9	16
89	Growth of (WO₃)<i>_n</i> Rectangular Structures through a LMOâˆ'Organic Precursor Route. Inorganic Chemistry, 2008, 47, 344-348.	4.0	13
90	Methylammoniumâ€Mediated Evolution of Mixedâ€Organicâ€Cation Perovskite Thin Films: A Dynamic Compositionâ€Tuning Process. Angewandte Chemie, 2017, 129, 7782-7786.	2.0	12

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91	Blended additive manipulated morphology and crystallinity transformation toward high performance perovskite solar cells. RSC Advances, 2017, 7, 51944-51949.	3.6	11
92	Stabilizing Formamidinium Lead Iodide Perovskite Precursor Solution with Phenylboric Acid. Solar Rrl, 2021, 5, 2000715.	5.8	11
93	The Possible Side Reaction in the Annealing Process of Perovskite Layers. ACS Applied Materials & Interfaces, 2020, 12, 35043-35048.	8.0	10
94	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
95	Insight into the effect of ion source for the solution processing of perovskite films. RSC Advances, 2016, 6, 85026-85029.	3.6	9
96	Fabrication and Characterization of FA_{<i>x</i>}Cs_{1â^’<i>x</i>}PbI₃ Polycrystal Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100166.	5.8	8
97	Chemical bath deposition of mesoporous SnO2 to improve interface adhesion and device operational stability. Chemical Engineering Journal, 2022, 443, 136308.	12.7	8
98	A temperature gradient-induced directional growth of a perovskite film. Journal of Materials Chemistry A, 2020, 8, 17019-17024.	10.3	7
99	Graphdiyne oxide doped SnO₂electron transport layer for high performance perovskite solar cells. Materials Chemistry Frontiers, 2021, 5, 6913-6922.	5.9	7
100	Methylamine gas healing of perovskite films: a short review and perspective. Journal of Materials Chemistry C, 2022, 10, 2390-2399.	5.5	7
101	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
102	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
103	Low-cost, flexible graphene/polyaniline nanocomposite paper as binder-free high-performance supercapacitor electrode. Functional Materials Letters, 2014, 07, 1440010.	1.2	5
104	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
105	Inhibiting Ion Migration by Guanidinium Cation Doping for Efficient Perovskite Solar Cells with Enhanced Operational Stability. Solar Rrl, 2022, 6, .	5.8	5
106	Synthesis of Ba1+xV6O16Â·nH2O single-crystalline nanobelts and seamless ring-like structures. Journal of Crystal Growth, 2006, 293, 423-427.	1.5	4
107	Enhance Photothermal Stability of Hybrid Perovskite Materials by Inhibiting Intrinsic Ion Migration. Solar Rrl, 2022, 6, .	5.8	3