

Chunyang Jia

List of Publications by Year in descending order

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107
papers

3,933
citations

94433

37
h-index

149698

56
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107
all docs

107
docs citations

107
times ranked

4670
citing authors

#	ARTICLE	IF	CITATIONS
1	Toward high-efficiency, hysteresis-less, stable perovskite solar cells: unusual doping of a hole-transporting material using a fluorine-containing hydrophobic Lewis acid. <i>Energy and Environmental Science</i> , 2018, 11, 2035-2045.	30.8	217
2	An Experimental and Computational Study on Intramolecular Charge Transfer: A Tetrathiafulvalene-Fused Dipyridophenazine Molecule. <i>Chemistry - A European Journal</i> , 2007, 13, 3804-3812.	3.3	172
3	A bilayer conducting polymer structure for planar perovskite solar cells with over 1,400% hours operational stability at elevated temperatures. <i>Nature Energy</i> , 2022, 7, 144-152.	39.5	123
4	Phenothiazine-triphenylamine based organic dyes containing various conjugated linkers for efficient dye-sensitized solar cells. <i>Journal of Materials Chemistry</i> , 2012, 22, 25140.	6.7	120
5	A three-dimensional flexible supercapacitor with enhanced performance based on lightweight, conductive graphene-cotton fabric electrode. <i>Journal of Power Sources</i> , 2015, 296, 186-196.	7.8	111
6	A flexible, electrochromic, rechargeable Zn-ion battery based on actinia-like self-doped polyaniline cathode. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12799-12809.	10.3	101
7	In situ growth of hierarchical NiS ₂ hollow microspheres as efficient counter electrode for dye-sensitized solar cell. <i>Nanoscale</i> , 2015, 7, 12737-12742.	5.6	84
8	Triphenylamine-based starburst dyes with carbazole and phenothiazine antennas for dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2012, 199, 426-431.	7.8	83
9	A high-performance electrochromic device assembled with hexagonal WO ₃ and NiO/PB composite nanosheet electrodes towards energy storage smart window. <i>Solar Energy Materials and Solar Cells</i> , 2020, 207, 110337.	6.2	78
10	The novel dopant for hole-transporting material opens a new processing route to efficiently reduce hysteresis and improve stability of planar perovskite solar cells. <i>Journal of Power Sources</i> , 2017, 342, 886-895.	7.8	76
11	A redox-active tri-star molecule: merging of TTF and HAT chemistry. <i>Chemical Communications</i> , 2006, , 1878.	4.1	69
12	Controlled swelling of graphene films towards hierarchical structures for supercapacitor electrodes. <i>Journal of Power Sources</i> , 2020, 453, 227851.	7.8	69
13	Directly grown high-performance WO ₃ films by a novel one-step hydrothermal method with significantly improved stability for electrochromic applications. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13956-13967.	10.3	67
14	Novel approach toward hole-transporting layer doped by hydrophobic Lewis acid through infiltrated diffusion doping for perovskite solar cells. <i>Nano Energy</i> , 2020, 70, 104509.	16.0	67
15	A knittable fiber-shaped supercapacitor based on natural cotton thread for wearable electronics. <i>Journal of Power Sources</i> , 2016, 327, 365-373.	7.8	66
16	Hybrid electrochromic film based on polyaniline and TiO ₂ nanorods array. <i>Organic Electronics</i> , 2014, 15, 2702-2709.	2.6	65
17	Enhanced Performance for Planar Perovskite Solar Cells with Samarium-Doped TiO ₂ Compact Electron Transport Layers. <i>Journal of Physical Chemistry C</i> , 2017, 121, 20150-20157.	3.1	64
18	Intelligent Biomimetic Chameleon Skin with Excellent Self-Healing and Electrochromic Properties. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 35533-35538.	8.0	63

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19	Electrochemical and electrochromic properties of novel nanoporous NiO/V ₂ O ₅ hybrid film. <i>Solar Energy Materials and Solar Cells</i> , 2015, 132, 467-475.	6.2	60
20	Co-sensitization of Dithiafulvenyl-Phenothiazine Based Organic Dyes with N719 for Efficient Dye-Sensitized Solar Cells. <i>Electrochimica Acta</i> , 2016, 211, 364-374.	5.2	60
21	Novel hybrid nanocomposite based on poly(3,4-ethylenedioxythiophene)/multiwalled carbon nanotubes/graphene as electrode material for supercapacitor. <i>Synthetic Metals</i> , 2014, 189, 69-76.	3.9	56
22	Asymmetric 3D Hole-Transporting Materials Based on Triphenylethylene for Perovskite Solar Cells. <i>Chemistry of Materials</i> , 2019, 31, 5431-5441.	6.7	53
23	A Knittable Fibriform Supercapacitor Based on Natural Cotton Thread Coated with Graphene and Carbon Nanoparticles. <i>Electrochimica Acta</i> , 2016, 206, 155-164.	5.2	48
24	Producing large-area, foldable graphene paper from graphite oxide suspensions by in-situ chemical reduction process. <i>Carbon</i> , 2017, 114, 424-434.	10.3	45
25	Infrared electrochromic materials, devices and applications. <i>Applied Materials Today</i> , 2021, 24, 101073.	4.3	45
26	A rapid heat pressing strategy to prepare fluffy reduced graphene oxide films with meso/macropores for high-performance supercapacitors. <i>Chemical Engineering Journal</i> , 2019, 361, 1437-1450.	12.7	44
27	Toward Easy-to-Assemble, Large-Area Smart Windows: All-in-One Cross-Linked Electrochromic Material and Device. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 27526-27536.	8.0	44
28	Vertical Phase Separated Cesium Fluoride Doping Organic Electron Transport Layer: A Facile and Efficient π - π Bridge-Linked Heterojunction for Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2020, 30, 2001418.	14.9	44
29	Influence of the antennas in starburst triphenylamine-based organic dye-sensitized solar cells: phenothiazine versus carbazole. <i>RSC Advances</i> , 2012, 2, 4507.	3.6	43
30	Effects of different acceptors in phenothiazine-triphenylamine dyes on the optical, electrochemical, and photovoltaic properties. <i>Dyes and Pigments</i> , 2012, 94, 150-155.	3.7	43
31	Three-dimensional ordered macroporous NiFe ₂ O ₄ coated carbon yarn for knittable fibriform supercapacitor. <i>Electrochimica Acta</i> , 2018, 281, 717-724.	5.2	43
32	Influence of different arylamine electron donors in organic sensitizers for dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2012, 95, 41-46.	3.7	41
33	The preparation and electrochemical properties of MnO ₂ /poly(3,4-ethylenedioxythiophene)/multiwalled carbon nanotubes hybrid nanocomposite and its application in a novel flexible micro-supercapacitor. <i>Electrochimica Acta</i> , 2014, 121, 49-56.	5.2	40
34	In-situ chemical reduction produced graphene paper for flexible supercapacitors with impressive capacitive performance. <i>Journal of Power Sources</i> , 2017, 360, 48-58.	7.8	40
35	Electrodeposition of V ₂ O ₅ on TiO ₂ nanorod arrays and their electrochromic properties. <i>RSC Advances</i> , 2016, 6, 68997-69006.	3.6	38
36	Tailoring electric dipole of hole-transporting material p-dopants for perovskite solar cells. <i>Joule</i> , 2022, 6, 1689-1709.	24.0	38

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37	Effect of imidazole derivatives in triphenylamine-based organic dyes for dye-sensitized solar cells. <i>Organic Electronics</i> , 2013, 14, 1755-1762.	2.6	37
38	Facile preparation of CoNi ₂ S ₄ @NiSe nano arrays on compressed nickel foam for high performance flexible supercapacitors. <i>RSC Advances</i> , 2016, 6, 112307-112316.	3.6	37
39	Bifunctional electron transporting layer/perovskite interface linker for highly efficient perovskite solar cells. <i>Electrochimica Acta</i> , 2019, 296, 75-81.	5.2	37
40	Theoretical study of carbazole-triphenylamine-based dyes for dye-sensitized solar cells. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2012, 86, 387-391.	3.9	36
41	A novel electrochromic and broad infrared emissivity modulation film based on the copolymer of aniline and o-anisidine. <i>Electrochimica Acta</i> , 2013, 88, 322-329.	5.2	36
42	A pressure process for efficient and stable perovskite solar cells. <i>Nano Energy</i> , 2020, 77, 105063.	16.0	35
43	Tetraphenylbutadiene-Based Symmetric 3D Hole-Transporting Materials for Perovskite Solar Cells: A Trial Trade-off between Charge Mobility and Film Morphology. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 21088-21099.	8.0	35
44	An efficient and hydrophobic molecular doping in perovskite solar cells. <i>Nano Energy</i> , 2021, 82, 105751.	16.0	35
45	Triphenylamine-based organic dyes containing benzimidazole derivatives for dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2012, 95, 743-750.	3.7	34
46	Enhanced electrochemical performance of laser scribed graphene films decorated with manganese dioxide nanoparticles. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 2564-2573.	2.2	34
47	Cesium Iodide Interface Modification for High Efficiency, High Stability and Low Hysteresis Perovskite Solar Cells. <i>Electrochimica Acta</i> , 2017, 236, 122-130.	5.2	34
48	Dissolution-recrystallization method for high efficiency perovskite solar cells. <i>Applied Surface Science</i> , 2017, 408, 34-37.	6.1	33
49	Novel organic dye employing dithiafulvenyl-substituted arylamine hybrid donor unit for dye-sensitized solar cells. <i>Organic Electronics</i> , 2013, 14, 2132-2138.	2.6	32
50	A Strategy To Boost the Efficiency of Rhodanine Electron Acceptor for Organic Dye: From Nonconjugation to Conjugation. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 25225-25231.	8.0	32
51	Flexible Solid-State Supercapacitors with High Areal Performance Enabled by Chlorine-Doped Graphene Films with Commercial-Level Mass Loading. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 18844-18853.	6.7	32
52	Dipole evoked hole-transporting material p-doping by utilizing organic salt for perovskite solar cells. <i>Nano Energy</i> , 2021, 85, 106018.	16.0	32
53	Organic dyes with imidazole derivatives as auxiliary donors for dye-sensitized solar cells: Experimental and theoretical investigation. <i>Dyes and Pigments</i> , 2014, 104, 48-56.	3.7	31
54	Ionic selective contact controls the charge accumulation for efficient and intrinsic stable planar homo-junction perovskite solar cells. <i>Nano Energy</i> , 2019, 66, 104098.	16.0	31

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55	Significant improvement of phenothiazine organic dye-sensitized solar cell performance using dithiafulvenyl unit as additional donor. <i>Organic Electronics</i> , 2015, 27, 107-113.	2.6	30
56	Novel organic sensitizers containing dithiafulvenyl units as additional donors for efficient dye-sensitized solar cells. <i>RSC Advances</i> , 2014, 4, 34896.	3.6	29
57	Synthesis and electrochromic properties of a novel conducting polymer film based on dithiafulvenyl-triphenylamine-di(N-carbazole). <i>Electrochimica Acta</i> , 2016, 190, 1015-1024.	5.2	29
58	Self-healing dynamically cross linked versatile polymer electrolyte: A novel approach towards high performance, flexible electrochromic devices. <i>Electrochimica Acta</i> , 2019, 320, 134489.	5.2	28
59	Dithiafulvenyl-triphenylamine organic dyes with alkyl chains for efficient coadsorbent-free dye-sensitized solar cells. <i>RSC Advances</i> , 2015, 5, 50813-50820.	3.6	26
60	Towards ultra-wide operation range and high sensitivity: Graphene film based pressure sensors for fingertips. <i>Biosensors and Bioelectronics</i> , 2019, 139, 111296.	10.1	26
61	Sponge Graphene Aerogel Pressure Sensors with an Extremely Wide Operation Range for Human Recognition and Motion Detection. <i>ACS Applied Electronic Materials</i> , 2021, 3, 1301-1310.	4.3	26
62	Theoretical investigation of phenothiazine-triphenylamine-based organic dyes with different π spacers for dye-sensitized solar cells. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 123, 282-289.	3.9	25
63	A novel tri-layered photoanode of hierarchical ZnO microspheres on 1D ZnO nanowire arrays for dye-sensitized solar cells. <i>RSC Advances</i> , 2015, 5, 16678-16683.	3.6	25
64	Iodine-steam doped graphene films for high-performance electrochemical capacitive energy storage. <i>Journal of Power Sources</i> , 2018, 400, 605-612.	7.8	25
65	A bifunctional triphenylamine-based electrochromic polymer with excellent self-healing performance. <i>Electrochimica Acta</i> , 2018, 286, 296-303.	5.2	25
66	A functional sulfonic additive for high efficiency and low hysteresis perovskite solar cells. <i>Journal of Power Sources</i> , 2017, 359, 577-584.	7.8	24
67	A novel self-healing electrochromic film based on a triphenylamine cross-linked polymer. <i>Polymer Chemistry</i> , 2017, 8, 6981-6988.	3.9	22
68	Toward high-rate supercapacitor: Preparation of hierarchical porous carbon binder-free electrode with controllable texture. <i>Applied Surface Science</i> , 2019, 470, 573-580.	6.1	21
69	Free-standing graphene films prepared via foam film method for great capacitive flexible supercapacitors. <i>Applied Surface Science</i> , 2017, 422, 975-984.	6.1	20
70	Redox-active sodium 3,4-dihydroxy anthraquinone-2-sulfonate anchored on reduced graphene oxide for high-performance Zn-ion hybrid capacitors. <i>Journal of Materials Chemistry A</i> , 2022, 10, 12532-12543.	10.3	20
71	Graphene Hydrogel Film Adsorbed with Redox-Active Molecule Toward Energy Storage Device with Improved Energy Density and Unfading Superior Rate Capability. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 9896-9905.	6.7	19
72	Highly conjugated donor-acceptor dyad based on tetrathiafulvalene covalently attached to porphyrin unit. <i>Dyes and Pigments</i> , 2012, 93, 1456-1462.	3.7	18

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73	Efficient Sb ₂ Se ₃ sensitized solar cells prepared through a facile SILAR process and improved performance by interface modification. <i>Applied Surface Science</i> , 2018, 450, 228-235.	6.1	18
74	Effect of functional group position change of pyridinesulfonic acid as interface-modified layer on perovskite solar cell. <i>Applied Surface Science</i> , 2018, 462, 517-525.	6.1	18
75	Fully integrated pressure-controlled electrochromic E-skins. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9134-9144.	10.3	18
76	Enhanced photovoltaic performances of dye-sensitized solar cells sensitized with D-D- ϵ -A phenothiazine-based dyes. <i>Synthetic Metals</i> , 2016, 221, 95-102.	3.9	17
77	Constructing molecules supported holey graphene sheets framework in compact graphene film to achieve synergistic effect for ion transport and high gravimetric/volumetric capacitances. <i>Journal of Power Sources</i> , 2019, 441, 227167.	7.8	17
78	Study on poly-O-anisidine film with the properties of electrochromism and infrared emissivity modulation. <i>Synthetic Metals</i> , 2011, 161, 2045-2048.	3.9	16
79	Molecular Doping of a Hole-Transporting Material for Efficient and Stable Perovskite Solar Cells. <i>Chemistry of Materials</i> , 2022, 34, 1499-1508.	6.7	16
80	Structure-Performance Relationships of Hole-Transporting Materials in Perovskite Solar Cells: Minor Structural Discrepancy Effects on the Efficiency. <i>Electrochimica Acta</i> , 2017, 257, 380-387.	5.2	15
81	Conjugated molecule functionalized graphene films for energy storage devices with high energy density. <i>Electrochimica Acta</i> , 2020, 340, 135804.	5.2	15
82	Planar Mg _x Zn _{1-x} O-based perovskite solar cell with superior ultraviolet light stability. <i>Solar Energy Materials and Solar Cells</i> , 2020, 208, 110417.	6.2	15
83	Synthesis, physical properties and self-assembly of conjugated donor-acceptor system based on tetrathiafulvalene and functionalized with binding sites. <i>Dyes and Pigments</i> , 2012, 94, 403-409.	3.7	14
84	A new strategy for constructing a dispiro-based dopant-free hole-transporting material: spatial configuration of spiro-bifluorene changes from a perpendicular to parallel arrangement. <i>Chemical Science</i> , 2021, 12, 8548-8555.	7.4	14
85	Comparative study on photovoltaic properties of imidazole-based dyes containing varying electron acceptors in dye-sensitized solar cells. <i>Synthetic Metals</i> , 2014, 196, 193-198.	3.9	13
86	Toward high capacitance and rate capability supercapacitor: Three dimensional graphene network fabricated by electric field-assisted assembly method. <i>Applied Surface Science</i> , 2019, 467-468, 949-953.	6.1	13
87	Cooperative effects of Dopant-Free Hole-Transporting materials and polycarbonate film for sustainable perovskite solar cells. <i>Chemical Engineering Journal</i> , 2022, 437, 135197.	12.7	13
88	Boosting capacitive energy density of conjugated molecule modified porous graphene film as high-performance electrode materials. <i>Electrochimica Acta</i> , 2022, 419, 140404.	5.2	13
89	Electrosynthesis and characterization of a novel electrochromic film based on poly(4,4'-di(N-carbazolyl)triphenylamine). <i>Synthetic Metals</i> , 2014, 188, 104-110.	3.9	12
90	Effects of different solvent baths on the performances of dye-sensitized solar cells: Experimental and theoretical investigation. <i>Organic Electronics</i> , 2014, 15, 2240-2249.	2.6	12

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91	Novel electrochromic and infrared emissivity modulation films based on poly(carbazoyltriphenylamine) and poly(carbazoyltriphenylamine-thiophene). <i>Organic Electronics</i> , 2017, 51, 190-199.	2.6	11
92	Improving the performance of Sb ₂ Se ₃ sensitized solar cells with a versatile CdSe layer modification. <i>Applied Materials Today</i> , 2018, 12, 191-197.	4.3	10
93	Novel hole transporting material based on tetrathiafulvalene derivative: A step towards dopant free, ambient stable and efficient perovskite solar cells. <i>Solar Energy</i> , 2020, 201, 658-665.	6.1	9
94	Similar "relay race" capacitance behaviors of folded graphene films based high-performance supercapacitors. <i>Journal of Power Sources</i> , 2020, 460, 228108.	7.8	9
95	Structure-property relationships in conjugated donor-acceptor systems functionalized with tetrathiafulvalene. <i>New Journal of Chemistry</i> , 2011, 35, 1876.	2.8	8
96	Origin of increased efficiency and decreased hysteresis of perovskite solar cells by using 4-tert-butyl pyridine as interfacial modifier for TiO ₂ . <i>Journal of Power Sources</i> , 2019, 415, 197-206.	7.8	7
97	Simple molecular structure but high efficiency: Achieving over 9% efficiency in dye-sensitized solar cells using simple triphenylamine sensitizer. <i>Journal of Power Sources</i> , 2021, 506, 230214.	7.8	7
98	Iodine-steam functionalized reduced graphene oxide/oxidized carbon yarn electrodes for knittable fibriform supercapacitor. <i>Journal of Power Sources</i> , 2019, 442, 227188.	7.8	6
99	Simple hybrid dithiafulvenes-triphenylamine systems as dopant-free hole-transporting materials for efficient perovskite solar cells. <i>Journal of Energy Chemistry</i> , 2022, 68, 293-299.	12.9	6
100	Interface induced in-situ vertical phase separation from MAPbI ₃ :Spiro-OMeTAD precursors for perovskite solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2020, 216, 110689.	6.2	5
101	Achieved RGBY Four Colors Changeable Electrochromic Pixel by Coelectrodeposition of Iron Hexacyanoferrate and Molybdate Hexacyanoferrate. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 29432-29442.	8.0	5
102	A Novel Conjugated Donor-Acceptor System Based on Tetrathiafulvalene Merging Pyrene Unit: Synthesis, Physical Properties and Theoretical Calculations. <i>Heterocycles</i> , 2011, 83, 1527.	0.7	4
103	Langmuir-Blodgett (LB) films of novel tetrathiafulvalene derivative containing diamino group. <i>Synthetic Metals</i> , 2012, 162, 54-57.	3.9	4
104	Self-Assembled Hydrophobic Molecule-Based Surface Modification: A Strategy to Improve Efficiency and Stability of Perovskite Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , 0, , .	6.7	2
105	Improving Performance of Fibriform Supercapacitor Based on Cotton Thread by Uncoiling Dip-Coating Procedure. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 677, 052009.	0.6	0
106	A Novel Strategy of One Device Achieves Two Functions: Energy Storage and Temperature Sense Multi-functions Device Based on Graphene Planar-Structure Supercapacitor. <i>MRS Advances</i> , 2019, 4, 1321-1326.	0.9	0
107	Redox Molecule Adsorbed Graphene Films with Compact Structure for Electrochemical Energy Storage. <i>IOP Conference Series: Earth and Environmental Science</i> , 2021, 714, 032003.	0.3	0