Junshuai Li

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1661665/publications.pdf

Version: 2024-02-01

		159525	189801
115	3,012	30	50
papers	citations	h-index	g-index

117	117	117	2884
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review of plasmaâ€“liquid interactions for nanomaterial synthesis. Journal Physics D: Applied Physics, 2015, 48, 424005.	1.3	250
2	Si nanopillar array optimization on Si thin films for solar energy harvesting. Applied Physics Letters, 2009, 95, .	1.5	245
3	Design guidelines of periodic Si nanowire arrays for solar cell application. Applied Physics Letters, 2009, 95, .	1.5	167
4	A Dual Carbonâ€Based Potassium Dual Ion Battery with Robust Comprehensive Performance. Small, 2018, 14, e1801836.	5.2	118
5	Exact two-particle S-matrix of quantum sine-Gordon solitons. Communications in Mathematical Physics, 1977, 55, 183-186.	1.0	105
6	MXenes for Solar Cells. Nano-Micro Letters, 2021, 13, 78.	14.4	90
7	Low aspect-ratio hemispherical nanopit surface texturing for enhancing light absorption in crystalline Si thin film-based solar cells. Applied Physics Letters, 2011, 98, .	1.5	68
8	Effect of rGO Coating on Interconnected Co3O4 Nanosheets and Improved Supercapacitive Behavior of Co3O4/rGO/NF Architecture. Nano-Micro Letters, 2017, 9, 38.	14.4	67
9	Hybrid Aqueous/Nonaqueous Waterâ€inâ€Bisalt Electrolyte Enables Safe Dual Ion Batteries. Small, 2020, 16, e1905838.	5.2	66
10	Optical absorption enhancement in nanopore textured-silicon thin film for photovoltaic application. Optics Letters, 2010, 35, 40.	1.7	64
11	Direct synthesis of hydrogen peroxide from plasma-water interactions. Scientific Reports, 2016, 6, 38454.	1.6	64
12	Periodically Aligned Si Nanopillar Arrays as Efficient Antireflection Layers for Solar Cell Applications. Nanoscale Research Letters, 2010, 5, 1721-1726.	3.1	60
13	High-performance free-standing capacitor electrodes of multilayered Co9S8 plates wrapped by carbonized poly(3,4-ethylenedioxythiophene):poly(styrene sulfonate)/reduced graphene oxide. Journal of Power Sources, 2018, 379, 167-173.	4.0	59
14	Novel Silicon Nanohemisphereâ€Array Solar Cells with Enhanced Performance. Small, 2011, 7, 3138-3143.	5.2	50
15	MoS2/Ni3S4 composite nanosheets on interconnected carbon shells as an excellent supercapacitor electrode architecture for long term cycling at high current densities. Applied Surface Science, 2018, 440, 741-747.	3.1	49
16	Solar energy harnessing in hexagonally arranged Si nanowire arrays and effects of array symmetry on optical characteristics. Nanotechnology, 2012, 23, 194010.	1.3	48
17	Design guideline of high efficiency crystalline Si thin film solar cell with nanohole array textured surface. Journal of Applied Physics, 2011, 109, .	1.1	47
18	Radial junction Si micro/nano-wire array photovoltaics: Recent progress from theoretical investigation to experimental realization. Nano Energy, 2014, 7, 10-24.	8.2	46

#	Article	IF	Citations
19	Aligned Si nanowire-based solar cells. Nanoscale, 2011, 3, 4888.	2.8	44
20	Enhancing Open-Circuit Voltage of Solution-Processed Cu₂ZnSn(S,Se)₄ Solar Cells With Ag Substitution. IEEE Journal of Photovoltaics, 2017, 7, 874-881.	1.5	44
21	Interconnected Î´-MnO2 nanosheets anchored on activated carbon cloth as flexible electrode for high-performance aqueous asymmetric supercapacitors. Journal of Electroanalytical Chemistry, 2020, 877, 114656.	1.9	44
22	Si nanocone array optimization on crystalline Si thin films for solar energy harvesting. Journal Physics D: Applied Physics, 2010, 43, 255101.	1.3	43
23	Efficient light trapping in low aspect-ratio honeycomb nanobowl surface texturing for crystalline silicon solar cell applications. Applied Physics Letters, 2013, 103, .	1.5	43
24	Optimization of DMSO-based precursor solution by H2O additive for performance enhancement of kesterite photovoltaic devices. Solar Energy Materials and Solar Cells, 2018, 179, 427-434.	3.0	42
25	The formation pathways of aqueous hydrogen peroxide in a plasma-liquid system with liquid as the cathode. Plasma Sources Science and Technology, 2018, 27, 085010.	1.3	38
26	Design High-Efficiency Si Nanopillar-Array-Textured Thin-Film Solar Cell. IEEE Electron Device Letters, 2010, 31, 335-337.	2.2	36
27	Rapid activation and enhanced cycling stability of Co3O4 microspheres decorated by N-doped amorphous carbon shell for advanced LIBs. Electrochimica Acta, 2018, 283, 979-986.	2.6	36
28	Nanotube-like hard carbon as high-performance anode material for sodium ion hybrid capacitors. Science China Materials, 2018, 61, 285-295.	3.5	34
29	Effects of selenization conditions on microstructure evolution in solution processed Cu2ZnSn(S,Se)4 solar cells. Solar Energy Materials and Solar Cells, 2019, 195, 274-279.	3.0	33
30	Si Nanopillar Array Surface-Textured Thin-Film Solar Cell With Radial p-n Junction. IEEE Electron Device Letters, 2011, 32, 176-178.	2.2	32
31	Simultaneous quantification of aqueous peroxide, nitrate, and nitrite during the plasmaâ€“liquid interactions by derivative absorption spectrophotometry. Journal Physics D: Applied Physics, 2017, 50, 445207.	1.3	32
32	A Hierarchical Interconnected Nanosheet Structure of Porous Î´-MnO₂ on Graphite Paper as Cathode with a Broad Potential Window for NaNO₃ Aqueous Electrolyte Supercapacitors. ACS Applied Energy Materials, 2020, 3, 2614-2622.	2.5	32
33	Cracked bark-inspired ternary metallic sulfide (NiCoMnS4) nanostructure on carbon cloth for high-performance aqueous asymmetric supercapacitors. Science China Materials, 2021, 64, 1632-1641.	3.5	32
34	Deposition of controllable preferred orientation silicon films on glass by inductively coupled plasma chemical vapor deposition. Journal of Applied Physics, 2008, 103, 043505.	1.1	29
35	Facile embedding of SiO2 nanoparticles in organic solar cells for performance improvement. Organic Electronics, 2017, 50, 77-81.	1.4	25
36	The characterization of radio-frequency discharge using electrolyte solution as one electrode at atmospheric pressure. Journal Physics D: Applied Physics, 2008, 41, 175212.	1.3	24

#	Article	IF	Citations
37	Plasma electrochemical synthesis of cuprous oxide nanoparticles and their visible-light photocatalytic effect. Electrochimica Acta, 2016, 222, 1677-1681.	2.6	24
38	NiCo2O4 nanowire-supported NiCoMnS4 nanosheets on carbon cloth as a flexible cathode for high-performance aqueous supercapacitors. Electrochimica Acta, 2021, 398, 139324.	2.6	24
39	Vertical graphene nanosheets synthesized by thermal chemical vapor deposition and the field emission properties. Journal Physics D: Applied Physics, 2016, 49, 385301.	1.3	22
40	Boosting Short-Circuit Current With Rationally Designed Periodic Si Nanopillar Surface Texturing for Solar Cells. IEEE Transactions on Electron Devices, 2011, 58, 3224-3229.	1.6	21
41	Enhanced performance of polymer solar cells by adding SnO2 nanoparticles in the photoactive layer. Organic Electronics, 2019, 73, 7-12.	1.4	21
42	TiO₂ Nanoparticles In Situ Formed on Ti₃C₂ Nanosheets by a Oneâ€Step Ethanolâ€Thermal Method for Enhanced Reversible Lithiumâ€Ion Storage. ChemistrySelect, 2020, 5, 3124-3129.	0.7	21
43	High-Performance Black Multicrystalline Silicon Solar Cells by a Highly Simplified Metal-Catalyzed Chemical Etching Method. IEEE Journal of Photovoltaics, 2016, 6, 888-893.	1.5	20
44	Carbon nanotubes@Ni3V2O8@NiCo2S4 nanosheets on Ni foam as a cathode for high-performance aqueous supercapacitors. Journal of Energy Storage, 2021, 44, 103496.	3.9	20
45	Punching holes on paper-like electrodes: An effective strategy to enhance rate performance of supercapacitors. Energy Storage Materials, 2019, 19, 338-345.	9.5	19
46	High-performance nitrogen and sulfur co-doped nanotube-like carbon anodes for sodium ion hybrid capacitors. Chinese Chemical Letters, 2020, 31, 2219-2224.	4.8	19
47	Interconnected Vertical Î´-MnO₂ Nanoflakes Coated by a Dopamine-Derived Carbon Thin Shell as a High-Performance Self-Supporting Cathode for Aqueous Zinc Ion Batteries. Journal of the Electrochemical Society, 2021, 168, 030540.	1.3	19
48	Nanostructural optimization of silicon/PEDOT:PSS hybrid solar cells for performance improvement. Journal Physics D: Applied Physics, 2017, 50, 175105.	1.3	18
49	Direct patterned growth of intrinsic/doped vertical graphene nanosheets on stainless steel via heating solid precursor films for field emission application. Materials and Design, 2019, 162, 293-299.	3.3	18
50	Mildly reduced graphene oxide-Ag nanoparticle hybrid films for surface-enhanced Raman scattering. Nanoscale Research Letters, 2012, 7, 205.	3.1	17
51	One-step construction of Î´-MnO2 cathodes with an interconnected nanosheet structure on graphite paper for high-performance aqueous asymmetric supercapacitors. Journal of Energy Storage, 2021, 35, 102308.	3.9	17
52	Surface nanostructure optimization for solar energy harvesting in Si thin film based solar cells. , 2009, , .		16
53	Pseudocapacitive reaction enhanced porous Co0.85Se/N-doped carbon anodes for advanced sodium-ion battery with high rate and capacity. Electrochimica Acta, 2019, 321, 134643.	2.6	16
54	Bridging for Carriers by Embedding Metal Oxide Nanoparticles in the Photoactive Layer to Enhance Performance of Polymer Solar Cells. IEEE Journal of Photovoltaics, 2020, 10, 1353-1358.	1.5	16

#	Article	IF	Citations
55	Flexible lithium metal capacitors enabled by an in situ prepared gel polymer electrolyte. Chinese Chemical Letters, 2021, 32, 3496-3500.	4.8	16
56	Mn(OH)2-coated Ni3S2 nanosheets on Ni foam as a cathode for high-performance aqueous asymmetric supercapacitors. Journal of Energy Storage, 2022, 51, 104513.	3.9	16
57	One-step electrodeposited Co and Mn layered double hydroxides on Ni foam for high-performance aqueous asymmetric supercapacitors. Journal of Energy Storage, 2022, 50, 104667.	3.9	16
58	Maskless fabrication of large scale Si nanohole array via laser annealed metal nanoparticles catalytic etching for photovoltaic application. Journal of Applied Physics, 2010, 108, .	1.1	14
59	Wedge-shaped semiconductor nanowall arrays with excellent light management. Optics Letters, 2017, 42, 3928.	1.7	14
60	On the quantification of the dissolved hydroxyl radicals in the plasma-liquid system using the molecular probe method. Journal Physics D: Applied Physics, 2018, 51, 155205.	1.3	13
61	Improved comprehensive performance of CsPbI2Br perovskite solar cells by modifying the photoactive layers with carbon nanodots. Journal of Materiomics, 2022, 8, 358-365.	2.8	13
62	Periodic silicon nanocone arrays with controllable dimensions prepared by two-step etching using nanosphere lithography and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mstyle mathvariant="normal"><mml:mi>NH</mml:mi></mml:mstyle></mml:mrow><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:m mathvariant="normal"><mml:mi>OH</mml:mi></mml:mstyle><mml:mo>/</mml:mo><mml:msub><mml:mrow><mml:mstyle mathvariant="norma. Solid State Communications, 2011, 151, 127-129.	0.9	12
63	The formation mechanism of aqueous hydrogen peroxide in a plasma-liquid system with liquid as the anode. European Physical Journal D, 2020, 74, 1.	0.6	12
64	Highly crystallized silicon films grown on glass without amorphous incubation layers by inductively coupled plasma chemical vapor deposition. Journal of Crystal Growth, 2008, 310, 4340-4344.	0.7	11
65	Nanostructured semiconductor solar absorbers with near 100% absorption and related light management picture. Journal Physics D: Applied Physics, 2016, 49, 215104.	1.3	11
66	What Are the Effective Reactants in the Plasma-Induced Wastewater Treatment?. Journal of the Electrochemical Society, 2018, 165, E454-E459.	1.3	11
67	High-performance aqueous asymmetric supercapacitors based on the cathode of one-step electrodeposited cracked bark-shaped nickel manganese sulfides on activated carbon cloth. Science China Technological Sciences, 2022, 65, 293-301.	2.0	11
68	Poly(3,4-ethylenedioxythiophene)â€“Polystyrenesulfonate-Added Layered Vanadium Oxide Cathode for High-Performance Zinc-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 14582-14589.	2.5	11
69	Facile synthesis of cuprous oxide nanoparticles by plasma electrochemistry. Journal Physics D: Applied Physics, 2016, 49, 275201.	1.3	10
70	A simple and efficient device configuration applicable in high-performance solar cells with limited material requirements. Journal Physics D: Applied Physics, 2019, 52, 435501.	1.3	10
71	æº¶æ¶²æ³•å^¶å‡ç¡…/SnCl2å„‚ç‡šã€Ti3C2TxMXeneè‚–ç‰¹åŸºç»“ åªé˜³ç”µæ±. Science China Materials, 2022, 65, 896-903.	8.6	10
72	Enhanced performance and the related mechanisms of organic solar cells using Li-doped SnO2 as the electron transport layer. Materials Chemistry and Physics, 2020, 254, 123536.	2.0	9

#	Article	IF	Citations
73	Deposition and field emission properties of highly crystallized silicon films on aluminum-coated polyethylene napthalate. Journal of Crystal Growth, 2007, 306, 1-5.	0.7	8
74	Study on the initial growth process of crystalline silicon films on aluminum-coated polyethylene napthalate by Raman spectroscopy. Journal of Crystal Growth, 2007, 308, 330-333.	0.7	8
75	Recent advances towards aqueous hydrogen peroxide formation in a direct current plasmaâ€“liquid system. High Voltage, 2022, 7, 405-419.	2.7	8
76	Indium tin oxide films prepared by atmospheric plasma annealing and their semiconductorâ€“metal conductivity transition around room temperature. Journal Physics D: Applied Physics, 2009, 42, 105303.	1.3	7
77	Columnar growth of crystalline silicon films on aluminium-coated glass by inductively coupled plasma CVD at room temperature. Chinese Physics B, 2009, 18, 773-777.	0.7	7
78	Design and mechanism of cost-effective and highly efficient ultrathin (< 0.5 Î¼m) GaAs solar cells employing nano/micro-hemisphere surface texturing. AIP Advances, 2013, 3, .	0.6	7
79	Influence of the pH value on the degradation of an azo dye of methyl orange by air discharge plasma. Plasma Processes and Polymers, 2019, 16, 1800152.	1.6	7
80	Boosting short circuit current with rationally designed periodic Si nanopillar surface texturing for thin film solar cell. , 2010, , .		6
81	Excellent Light Confinement of Hemiellipsoid- and Inverted Hemiellipsoid-Modified Semiconductor Nanowire Arrays. Nanoscale Research Letters, 2018, 13, 236.	3.1	6
82	NaBr-Modified CsPbI₂Br Improves the Comprehensive Performance of the Solar Cells. IEEE Journal of Photovoltaics, 2022, 12, 948-953.	1.5	6
83	SnCl₄-Treated Ti₃C₂T_x MXene Nanosheets for Schottky Junction Solar Cells with Improved Performance. ACS Applied Nano Materials, 2022, 5, 10064-10072.	2.4	6
84	Abnormal Crystallization of Silicon Thin Films Deposited by ICP-CVD. Chinese Physics Letters, 2005, 22, 3130-3132.	1.3	5
85	Optical simulation of low aspect ratio hemisphere array surface texturing for crystalline Si film solar cells. Energy Procedia, 2011, 8, 180-184.	1.8	5
86	Ethanol-controlled peroxidation in liquid-anode discharges. Journal Physics D: Applied Physics, 2019, 52, 425205.	1.3	5
87	Nitrogen-doped nanodiamond films grown just by heating solid precursor thin layers for field emission application. Journal Physics D: Applied Physics, 2020, 53, 015101.	1.3	5
88	Improvement of the Optoelectrical Properties of a Transparent Conductive Polymer via the Introduction of ITO Nanoparticles and Its Application in Crystalline Silicon/Organic Heterojunction Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 31171-31179.	4.0	5
89	Effect of sulfurization process on the properties of solution-processed Cu2SnS3 thin film solar cells. Journal of Materials Science: Materials in Electronics, 2019, 30, 17947-17955.	1.1	5
90	High-efficiency crystalline si thin film solar cells with Si nanopillar array textured surfaces. , 2010, , .		4

#	Article	IF	Citations
91	Solutionâ€Processed Organic/pâ€Type Silicon Hybrid Heterojunction Solar Cells. Physica Status Solidi - Rapid Research Letters, 0, , 2000560.	1.2	4
92	Solution-Processed Back-Contact PEDOT:PSS/n-Si Heterojunction Solar Cells. ACS Applied Energy Materials, 2022, 5, 5502-5507.	2.5	4
93	Low-temperature deposition of highly crystallized silicon films on Al-coated polyethylene napthalate by inductively coupled plasma CVD. Journal of Alloys and Compounds, 2009, 481, 278-282.	2.8	2
94	The pH value control in air plasmaâ€“liquid system by sodium bicarbonate. European Physical Journal D, 2019, 73, 1.	0.6	2
95	Enhancing Light Absorption for Organic Solar Cells Using a Front ITO Nanograting and Back Ultrathin Al layer. Chinese Physics B, 0, , .	0.7	2
96	Deposition and Growth Mechanism of Low-Temperature Crystalline Silicon Films on Inexpensive Substrates. Journal of the Korean Physical Society, 2009, 55, 2671-2676.	0.3	2
97	Synergetic effects of a front ITO nanocylinder array and a back square Al array to enhance light absorption for organic solar cells. Applied Optics, 2022, 61, 1726.	0.9	2
98	Electron field emission from nano-crystalline Si films deposited by inductively coupled plasma CVD at room temperature. Science Bulletin, 2006, 51, 510-514.	1.7	1
99	Al-Induced Crystallization Growth of Si Films by Inductively Coupled Plasma Chemical Vapour Deposition. Chinese Physics Letters, 2006, 23, 3338-3340.	1.3	1
100	A high efficiency and cost effective Si thin film solar cell with novel periodic nanohole textured surface. , 2010, , .		1
101	Novel low aspect-ratio Si nano-hemisphere array surface texture application to ultrathin film solar cells. , 2011, , .		1
102	Surface plasmon enhanced light absorption for thin film poly-silicon solar cell with hybrid structure and metal alloy nano-particles. , 2011, , .		1
103	Texturing of crystalline Si thin film solar cells via nanostructure to boost efficiency. International Journal of Nanoparticles, 2011, 4, 284.	0.1	1
104	Effects of the distance between the inductance coil and substrates on the microstructure and optical properties of silicon films deposited by ICP-CVD. Physics Procedia, 2011, 18, 128-135.	1.2	1
105	Selfâ€Support Surface Enhanced Raman Scattering Substrates with the Function of Enriching Analytes. Advanced Materials Interfaces, 2018, 5, 1800559.	1.9	1
106	Structure and Optical Properties of Si Films Deposited by Inductively Coupled Plasma CVD at Room Temperature. Key Engineering Materials, 2007, 336-338, 2228-2231.	0.4	0
107	Optimization of periodic nanopore surface texturing for silicon thin film photovoltaic application. , 2010, , .		0
108	Periodic silicon nanocones arrays with controllable dimensions prepared by two-step etching using nanosphere lithography and NH<inf>4</inf>OH/H<inf>2</inf>O<inf>2</inf> solution. , 2010, , .		0

#	Article	IF	Citations
109	Surface nanostructured high efficiency vertical wire-based solar cell. , 2010, , .		0
110	A novel low aspect-ratio Si nano-hemisphere surface texturing scheme for ultrathin film solar cells. , 2011, , .		0
111	Enhancement of Si-Based Solar Cell Efficiency via Nanostructure Integration. Green Energy and Technology, 2011, , 3-55.	0.4	0
112	Solar Cells: Novel Silicon Nanohemisphere-Array Solar Cells with Enhanced Performance (Small) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	5.2	0
113	Low temperature polycrystalline silicon film formation by metal induced crystallization with nickel salt derived by ultrasonic spray pyrolysis. Crystal Research and Technology, 2011, 46, 935-938.	0.6	0
114	Observation of Positive Self-Bias in Radio Frequency Atmospheric Pressure Microplasmas. IEEE Transactions on Plasma Science, 2013, 41, 826-828.	0.6	0
115	Remarkable roomâ€temperature magnetoresistance in silicon strip devices. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1600253.	1.2	0