

# Jichun Ye

## List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	Large-Area Nanosphere Self-Assembly by a Micro-Propulsive Injection Method for High Throughput Periodic Surface Nanotexturing. <i>Nano Letters</i> , 2015, 15, 4591-4598.	4.5	191
2	Dry sliding friction and wear properties of B4C particulate-reinforced Al-5083 matrix composites. <i>Wear</i> , 2008, 264, 555-561.	1.5	145
3	Unambiguously Enhanced Ultraviolet Luminescence of AlGaIn Wavy Quantum Well Structures Grown on Large Misoriented Sapphire Substrate. <i>Advanced Functional Materials</i> , 2019, 29, 1905445.	7.8	128
4	Silicon/Organic Hybrid Solar Cells with 16.2% Efficiency and Improved Stability by Formation of Conformal Heterojunction Coating and Moisture-Resistant Capping Layer. <i>Advanced Materials</i> , 2017, 29, 1606321.	11.1	126
5	Realization of 13.6% Efficiency on 20 $\mu$ m Thick Si/Organic Hybrid Heterojunction Solar Cells via Advanced Nanotexturing and Surface Recombination Suppression. <i>ACS Nano</i> , 2015, 9, 6522-6531.	7.3	124
6	Improvement of the SiO <sub>2</sub> Passivation Layer for High-Efficiency Si/PEDOT:PSS Heterojunction Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 16027-16034.	4.0	114
7	Dopant-Free and Carrier-Selective Heterocontacts for Silicon Solar Cells: Recent Advances and Perspectives. <i>Advanced Science</i> , 2018, 5, 1700547.	5.6	96
8	Phosphate-Passivated SnO <sub>2</sub> Electron Transport Layer for High-Performance Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 36727-36734.	4.0	84
9	High-Efficiency Silicon/Organic Heterojunction Solar Cells with Improved Junction Quality and Interface Passivation. <i>ACS Nano</i> , 2016, 10, 11525-11531.	7.3	80
10	Enhanced Electro-Optical Properties of Nanocone/Nanopillar Dual-Structured Arrays for Ultrathin Silicon/Organic Hybrid Solar Cell Applications. <i>Advanced Energy Materials</i> , 2016, 6, 1501793.	10.2	75
11	Tuning of the Contact Properties for High-Efficiency Si/PEDOT:PSS Heterojunction Solar Cells. <i>ACS Energy Letters</i> , 2017, 2, 556-562.	8.8	75
12	Heterojunction solar cells with asymmetrically carrier-selective contact structure of molybdenum-oxide/silicon/magnesium-oxide. <i>Solar Energy</i> , 2018, 159, 704-709.	2.9	75
13	Pseudocapacitance Induced Uniform Plating/Stripping of Li Metal Anode in Vertical Graphene Nanowalls. <i>Advanced Functional Materials</i> , 2018, 28, 1805638.	7.8	65
14	An industrially viable TOPCon structure with both ultra-thin SiO <sub>x</sub> and n <sup>+</sup> -poly-Si processed by PECVD for p-type c-Si solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2019, 200, 109926.	3.0	62
15	Theoretical exploration towards high-efficiency tunnel oxide passivated carrier-selective contacts (TOPCon) solar cells. <i>Solar Energy</i> , 2017, 155, 654-660.	2.9	60
16	Engineering of hole-selective contact for high-performance perovskite solar cell featuring silver back-electrode. <i>Journal of Materials Science</i> , 2019, 54, 7789-7797.	1.7	60
17	Optimizing ultrathin Ag films for high performance oxide-metal-oxide flexible transparent electrodes through surface energy modulation and template-stripping procedures. <i>Scientific Reports</i> , 2017, 7, 44576.	1.6	59
18	Over 16.7% Efficiency Organic-Silicon Heterojunction Solar Cells with Solution-Processed Dopant-Free Contacts for Both Polarities. <i>Advanced Functional Materials</i> , 2018, 28, 1802192.	7.8	58

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19	Device physics of back-contact perovskite solar cells. <i>Energy and Environmental Science</i> , 2020, 13, 1753-1765.	15.6	58
20	Junction Quality of SnO <sub>2</sub> -Based Perovskite Solar Cells Investigated by Nanometer-Scale Electrical Potential Profiling. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 38373-38380.	4.0	56
21	Flexible Proton-Gated Oxide Synaptic Transistors on Si Membrane. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 21770-21775.	4.0	55
22	Artificial Tactile Perceptual Neuron with Nociceptive and Pressure Decoding Abilities. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 26258-26266.	4.0	55
23	15% Efficiency Ultrathin Silicon Solar Cells with Fluorine-Doped Titanium Oxide and Chemically Tailored Poly(3,4-ethylenedioxythiophene):Poly(styrenesulfonate) as Asymmetric Heterocontact. <i>ACS Nano</i> , 2019, 13, 6356-6362.	7.3	53
24	NiO <sub>x</sub> -Seeded Self-Assembled Monolayers as Highly Hole-Selective Passivating Contacts for Efficient Inverted Perovskite Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2100663.	3.1	53
25	Lateral-Polarity Structure of AlGa <sub>N</sub> Quantum Wells: A Promising Approach to Enhancing the Ultraviolet Luminescence. <i>Advanced Functional Materials</i> , 2018, 28, 1802395.	7.8	51
26	Improving Li anode performance by a porous 3D carbon paper host with plasma assisted sponge carbon coating. <i>Energy Storage Materials</i> , 2018, 11, 47-56.	9.5	49
27	Dual Functional Electron-Selective Contacts Based on Silicon Oxide/Magnesium: Tailoring Heterointerface Band Structures while Maintaining Surface Passivation. <i>Advanced Energy Materials</i> , 2018, 8, 1702921.	10.2	48
28	Efficient light trapping in low aspect-ratio honeycomb nanobowl surface texturing for crystalline silicon solar cell applications. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	48
29	SnO <sub>2</sub> surface defects tuned by (NH <sub>4</sub> ) <sub>2</sub> S for high-efficiency perovskite solar cells. <i>Solar Energy</i> , 2019, 194, 541-547.	2.9	43
30	An Expanded Cox and Strack Method for Precise Extraction of Specific Contact Resistance of Transition Metal Oxide/n-Silicon Heterojunction. <i>IEEE Journal of Photovoltaics</i> , 2019, 9, 1113-1120.	1.5	42
31	Tunable THz Multiband Frequency-Selective Surface Based on Hybrid Metal-Graphene Structures. <i>IEEE Nanotechnology Magazine</i> , 2017, 16, 1132-1137.	1.1	41
32	16% efficient silicon/organic heterojunction solar cells using narrow band-gap conjugated polyelectrolytes based low resistance electron-selective contacts. <i>Nano Energy</i> , 2018, 43, 117-123.	8.2	39
33	Scattering effect of the high-index dielectric nanospheres for high performance hydrogenated amorphous silicon thin-film solar cells. <i>Scientific Reports</i> , 2016, 6, 30503.	1.6	36
34	Ideal rear contact formed via employing a conjugated polymer for Si/PEDOT:PSS hybrid solar cells. <i>RSC Advances</i> , 2016, 6, 16010-16017.	1.7	35
35	Temperature and Humidity Stable Alkali/Alkaline-Earth Metal Carbonates as Electron Heterocontacts for Silicon Photovoltaics. <i>Advanced Energy Materials</i> , 2018, 8, 1800743.	10.2	35
36	Activating and optimizing evaporation-processed magnesium oxide passivating contact for silicon solar cells. <i>Nano Energy</i> , 2019, 62, 181-188.	8.2	35

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37	Efficient and controllable growth of vertically oriented graphene nanosheets by mesoplasma chemical vapor deposition. <i>Carbon</i> , 2019, 147, 341-347.	5.4	35
38	Modulation-doped ZnO as high performance electron-selective layer for efficient silicon heterojunction solar cells. <i>Nano Energy</i> , 2018, 54, 99-105.	8.2	34
39	Improvement of Surface Passivation of Tunnel Oxide Passivated Contact Structure by Thermal Annealing in Mixture of Water Vapor and Nitrogen Environment. <i>Solar Rrl</i> , 2019, 3, 1900105.	3.1	33
40	Heterojunction Hybrid Solar Cells by Formation of Conformal Contacts between PEDOT:PSS and Periodic Silicon Nanopyramid Arrays. <i>Small</i> , 2018, 14, e1704493.	5.2	32
41	High-efficiency photon capturing in ultrathin silicon solar cells with front nanobowl texture and truncated-nanopyramid reflector. <i>Optics Letters</i> , 2015, 40, 1077.	1.7	31
42	On the passivation mechanism of poly-silicon and thin silicon oxide on crystal silicon wafers. <i>Solar Energy</i> , 2019, 194, 18-26.	2.9	31
43	A low-temperature TiO <sub>2</sub> /SnO <sub>2</sub> electron transport layer for high-performance planar perovskite solar cells. <i>Science China Materials</i> , 2020, 63, 207-215.	3.5	31
44	Dual-functional carbon-doped polysilicon films for passivating contact solar cells: regulating physical contacts while promoting photoelectrical properties. <i>Energy and Environmental Science</i> , 2021, 14, 6406-6418.	15.6	31
45	Unlocking Voltage Potentials of Mixed-Halide Perovskite Solar Cells via Phase Segregation Suppression. <i>Advanced Functional Materials</i> , 2022, 32, 2110698.	7.8	30
46	Fully Coupled Multiphysics Simulation of Crosstalk Effect in Bipolar Resistive Random Access Memory. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 3647-3653.	1.6	29
47	Improved optical absorption in visible wavelength range for silicon solar cells via texturing with nanopyramid arrays. <i>Optics Express</i> , 2017, 25, 10464.	1.7	29
48	Principles of dopant-free electron-selective contacts based on tunnel oxide/low work-function metal stacks and their applications in heterojunction solar cells. <i>Nano Energy</i> , 2018, 46, 133-140.	8.2	29
49	Optical design and optimization for back-contact perovskite solar cells. <i>Solar Energy</i> , 2020, 201, 84-91.	2.9	29
50	Comparison of different types of interfacial oxides on hole-selective p+-poly-Si passivated contacts for high-efficiency c-Si solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2020, 210, 110487.	3.0	29
51	Charge-transfer induced multifunctional BCP:Ag complexes for semi-transparent perovskite solar cells with a record fill factor of 80.1%. <i>Journal of Materials Chemistry A</i> , 2021, 9, 12009-12018.	5.2	29
52	Ultrasensitive micro/nanocrack-based graphene nanowall strain sensors derived from the substrate's Poisson's ratio effect. <i>Journal of Materials Chemistry A</i> , 2020, 8, 10310-10317.	5.2	28
53	Wafer-Scale Integration of Inverted Nanopyramid Arrays for Advanced Light Trapping in Crystalline Silicon Thin Film Solar Cells. <i>Nanoscale Research Letters</i> , 2016, 11, 194.	3.1	27
54	Titanium Nitride Electron-Conductive Contact for Silicon Solar Cells By Radio Frequency Sputtering from a TiN Target. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 26177-26183.	4.0	27

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55	Tuning back contact property via artificial interface dipoles in Si/organic hybrid solar cells. Applied Physics Letters, 2016, 109, .	1.5	26
56	Broadband and wide-angle light harvesting by ultra-thin silicon solar cells with partially embedded dielectric spheres. Optics Letters, 2016, 41, 1329.	1.7	26
57	Excellent Passivation of Silicon Surfaces by Thin Films of Electron-Beam-Processed Titanium Dioxide. IEEE Journal of Photovoltaics, 2017, 7, 1551-1555.	1.5	24
58	Achieving a Record Fill Factor for Silicon-Organic Hybrid Heterojunction Solar Cells by Using a Full-Area Metal Polymer Nanocomposite Top Electrode. Advanced Functional Materials, 2018, 28, 1705425.	7.8	24
59	Fast-Response Amorphous Ga <sub>2</sub> O <sub>3</sub> Solar-Blind Ultraviolet Photodetectors Tuned by a Polar AlN Template. IEEE Electron Device Letters, 2022, 43, 68-71.	2.2	24
60	Optoelectronic Evaluation and Loss Analysis of PEDOT:PSS/Si Hybrid Heterojunction Solar Cells. Nanoscale Research Letters, 2017, 12, 26.	3.1	22
61	Realization of interdigitated back contact silicon solar cells by using dopant-free heterocontacts for both polarities. Nano Energy, 2018, 50, 777-784.	8.2	22
62	Opto-electric investigation for Si/organic heterojunction single-nanowire solar cells. Scientific Reports, 2017, 7, 14575.	1.6	21
63	ZnO-Modified Anode for High-Performance SnO <sub>2</sub> -Based Planar Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 7062-7069.	2.5	21
64	Defect engineering of oxygen vacancies in SnO <sub>x</sub> electron transporting layer for perovskite solar cells. Materials Today Energy, 2019, 12, 389-397.	2.5	21
65	The electrochemical self-assembly of hierarchical dendritic Bi <sub>2</sub> Se <sub>3</sub> nanostructures. CrystEngComm, 2014, 16, 2823.	1.3	20
66	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
67	Illumination-Induced Hole Doping for Performance Improvement of Graphene/Silicon Solar Cells with P3HT Interlayer. Advanced Electronic Materials, 2017, 3, 1600516.	2.6	20
68	Double-Layered PEDOT:PSS Films Inducing Strong Inversion Layers in Organic/Silicon Hybrid Heterojunction Solar Cells. ACS Applied Energy Materials, 2018, 1, 2874-2881.	2.5	20
69	Deep UV Laser at 249 nm Based on GaN Quantum Wells. ACS Photonics, 2019, 6, 2387-2391.	3.2	20
70	Suppression of surface and Auger recombination by formation and control of radial junction in silicon microwire solar cells. Nano Energy, 2019, 58, 817-824.	8.2	20
71	Self-powered ultraviolet MSM photodetectors with high responsivity enabled by a lateral n <sup>+</sup> /n <sup>+</sup> homojunction from opposite polarity domains. Optics Letters, 2021, 46, 3203.	1.7	20
72	Computational analysis of a high-efficiency tunnel oxide passivated contact (TOPCon) solar cell with a low-work-function electron-selective-collection layer. Solar Energy, 2018, 170, 780-787.	2.9	19

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73	Room-Temperature Sputtered Aluminum-Doped Zinc Oxide for Semitransparent Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 9610-9617.	2.5	19
74	In-situ phosphorus-doped polysilicon prepared using rapid-thermal anneal (RTA) and its application for polysilicon passivated-contact solar cells. Solar Energy Materials and Solar Cells, 2020, 210, 110518.	3.0	19
75	TiO <sub>2</sub> Films from the Low-Temperature Oxidation of Ti as Passivating Contact Layers for Si Heterojunction Solar Cells. Solar Rrl, 2017, 1, 1700154.	3.1	18
76	Tuning photonic crystal fabrication by nanosphere lithography and surface treatment of AlGaIn-based ultraviolet light-emitting diodes. Materials and Design, 2018, 160, 661-670.	3.3	18
77	Numerical exploration for structure design and free-energy loss analysis of the high-efficiency polysilicon passivated-contact p-type silicon solar cell. Solar Energy, 2019, 178, 249-256.	2.9	18
78	Charge-carrier dynamics for silicon oxide tunneling junctions mediated by local pinholes. Cell Reports Physical Science, 2021, 2, 100667.	2.8	18
79	Enhancing light coupling and emission efficiencies of AlGaIn thin film and AlGaIn/GaN multiple quantum wells with periodicity-wavelength matched nanostructure array. Nanoscale, 2017, 9, 15477-15483.	2.8	16
80	Annihilation and Regeneration of Defects in (112̄) Semipolar AlN via High-Temperature Annealing and MOVPE Regrowth. Crystal Growth and Design, 2021, 21, 2911-2919.	1.4	16
81	Si/PEDOT:PSS Hybrid Solar Cells with Advanced Antireflection and Back Surface Field Designs. Nanoscale Research Letters, 2016, 11, 356.	3.1	15
82	Electron-Selective Scandium Tunnel Oxide Passivated Contact for n-Type Silicon Solar Cells. Solar Rrl, 2018, 2, 1800071.	3.1	15
83	Self-sacrifice alkali acetate seed layer for efficient four-terminal perovskite/silicon tandem solar cells. Nano Energy, 2022, 100, 107529.	8.2	15
84	The role of front-surface charges in interdigitated back contact silicon heterojunction solar cells. Nano Energy, 2019, 61, 221-227.	8.2	14
85	Light-Promoted Electrostatic Adsorption of High-Density Lewis Base Monolayers as Passivating Electron-Selective Contacts. Advanced Science, 2021, 8, 2003245.	5.6	14
86	Polarity control and fabrication of lateral polarity structures of III-nitride thin films and devices: progress and prospects. Journal Physics D: Applied Physics, 2020, 53, 483002.	1.3	14
87	Photoinduced Field-Effect Passivation from Negative Carrier Accumulation for High-Efficiency Silicon/Organic Heterojunction Solar Cells. ACS Nano, 2017, 11, 12687-12695.	7.3	13
88	Strain modulated nanostructure patterned AlGaIn-based deep ultraviolet multiple-quantum-wells for polarization control and light extraction efficiency enhancement. Nanotechnology, 2019, 30, 435202.	1.3	13
89	Passivating Contact with Phosphorus-Doped Polycrystalline Silicon Nitride with an Excellent Implied Open-Circuit Voltage of 745 mV and Its Application in 23.88% Efficiency TOPCon Solar Cells. Solar Rrl, 2021, 5, 2100644.	3.1	13
90	Three-dimensional band diagram in lateral polarity junction III-nitride heterostructures. Optica, 2019, 6, 1058.	4.8	13

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91	Enhanced Photoelectrical Response of Hydrogenated Amorphous Silicon Single-Nanowire Solar Cells by Front-Opening Crescent Design. <i>Nanoscale Research Letters</i> , 2016, 11, 233.	3.1	12
92	Polarity Control of GaN and Realization of GaN Schottky Barrier Diode Based on Lateral Polarity Structure. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 4424-4429.	1.6	12
93	Thickness-modulated passivation properties of PEDOT:PSS layers over crystalline silicon wafers in back junction organic/silicon solar cells. <i>Nanotechnology</i> , 2019, 30, 195401.	1.3	12
94	Single peak deep ultraviolet emission and high internal quantum efficiency in AlGaIn quantum wells grown on large miscut sapphire substrates. <i>Superlattices and Microstructures</i> , 2019, 129, 20-27.	1.4	12
95	Enhanced perovskite crystallization by the polyvinylpyrrolidone additive for high efficiency solar cells. <i>Sustainable Energy and Fuels</i> , 2019, 3, 3448-3454.	2.5	12
96	Light Trapping Enhancement in a Thin Film with 2D Conformal Periodic Hexagonal Arrays. <i>Nanoscale Research Letters</i> , 2015, 10, 988.	3.1	11
97	Large-scale nanostructured low-temperature solar selective absorber. <i>Optics Letters</i> , 2017, 42, 1891.	1.7	11
98	Hard mask processing of 20% efficiency back-contacted silicon solar cells with dopant-free heterojunctions. <i>Nano Energy</i> , 2019, 66, 104116.	8.2	11
99	Highly improved passivation of PECVD p-type TOPCon by suppressing plasma-oxidation ion-bombardment-induced damages. <i>Solar Energy</i> , 2022, 242, 1-9.	2.9	11
100	Design Principles of Silicon Heterojunction Solar Cells with Dopant-Free Interdigitated Back Contacts. <i>Solar Rrl</i> , 2019, 3, 1970104.	3.1	10
101	Polarity Control and Nanoscale Optical Characterization of AlGaIn-Based Multiple-Quantum-Wells for Ultraviolet C Emitters. <i>ACS Applied Nano Materials</i> , 2020, 3, 5335-5342.	2.4	10
102	Omnidirectional whispering-gallery-mode lasing in GaN microdisk obtained by selective area growth on sapphire substrate. <i>Optics Express</i> , 2019, 27, 16195.	1.7	10
103	Emitter formation with boron diffusion from PECVD deposited boron-doped silicon oxide for high-efficiency TOPCon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2022, 240, 111713.	3.0	10
104	24.4% industrial tunnel oxide passivated contact solar cells with ozone-gas oxidation Nano SiO <sub>x</sub> and tube PECVD prepared in-situ doped polysilicon. <i>Solar Energy Materials and Solar Cells</i> , 2022, 243, 111803.	3.0	10
105	TiO <sub>2</sub> hierarchical sub-wavelength microspheres for high efficiency dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 32293-32301.	1.3	9
106	Numerical and experimental exploration towards a 26% efficiency rear-junction n-type silicon solar cell with front local-area and rear full-area polysilicon passivated contacts. <i>Solar Energy</i> , 2021, 221, 1-9.	2.9	9
107	In situ annealing and high-rate silicon epitaxy on porous silicon by mesoplasma process. <i>Applied Physics Express</i> , 2016, 9, 055506.	1.1	8
108	High-Performance Organic-Silicon Heterojunction Solar Cells by Using Al-Doped ZnO as Cathode Interlayer. <i>Solar Rrl</i> , 2018, 2, 1700223.	3.1	8

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109	Performance enhancement of ultraviolet light emitting diode incorporating Al nanohole arrays. <i>Nanotechnology</i> , 2018, 29, 45LT01.	1.3	8
110	Grain Boundary Defects Passivated with <i>tert</i> -Butyl Methacrylate for High-Efficiency Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2021, 4, 11298-11305.	2.5	8
111	Self-powered ultraviolet photodiode based on lateral polarity structure GaN films. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2021, 39, .	0.6	8
112	Design and simulation of perovskite solar cells with Gaussian structured gradient-index optics. <i>Optics Letters</i> , 2019, 44, 4865.	1.7	8
113	Development of in-situ high-voltage and high-temperature stressing capability on atomic force microscopy platform. <i>Solar Energy</i> , 2017, 158, 746-752.	2.9	7
114	Fabrication of highly ordered 2D metallic arrays with disc-in-hole binary nanostructures via a newly developed nanosphere lithography. <i>Nanotechnology</i> , 2017, 28, 474001.	1.3	7
115	Comparative study on luminescence extraction strategies of LED by large-scale fabrication of nanopillar and nanohole structures. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 24LT01.	1.3	7
116	Design Principles of Silicon Heterojunction Solar Cells with Dopant-Free Interdigitated Back Contacts. <i>Solar Rrl</i> , 2019, 3, 1900230.	3.1	7
117	Solution-processed and annealing-free zirconium acetylacetonate electron-selective contacts for efficient crystalline silicon solar cells. <i>Solar Energy</i> , 2021, 215, 410-415.	2.9	7
118	Significantly boosted external quantum efficiency of AlGaIn-based DUV-LED utilizing thermal annealed Ni/Al reflective electrodes. <i>Applied Physics Express</i> , 2021, 14, 072005.	1.1	7
119	Blistering-free polycrystalline silicon carbide films for double-sided passivating contact solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2022, 238, 111586.	3.0	7
120	Optical management for back-contact perovskite solar cells with diverse structure designs. <i>Solar Energy</i> , 2022, 236, 100-106.	2.9	7
121	Approaching 23% efficient n-type crystalline silicon solar cells with a silicon oxide-based highly transparent passivating contact. <i>Nano Energy</i> , 2022, 98, 107319.	8.2	7
122	Tunnel Oxide Magnesium as Electron-Selective Passivated Contact for n-type Silicon Solar Cell. <i>Solar Rrl</i> , 2018, 2, 1800241.	3.1	6
123	Back-contact structures for optoelectronic devices: Applications and perspectives. <i>Nano Energy</i> , 2020, 78, 105362.	8.2	6
124	Optical management of spacer layer of high-performance four-terminal perovskite/silicon tandem solar cells. <i>Solar Energy</i> , 2021, 228, 226-234.	2.9	6
125	Optimization of Tunnel Junction for Perovskite/Tunnel Oxide Passivated Contact (TOPCon) Tandem Solar Cells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2100562.	0.8	6
126	Structural and optical properties of AlN sputtering deposited on sapphire substrates with various orientations. <i>Journal of Semiconductors</i> , 2022, 43, 022801.	2.0	6



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127	Polarization modulation of 2DEG toward plasma-damage-free GaN HEMT isolation. Applied Physics Letters, 2022, 121, 012104.	1.5	6
128	Rear-Sided Passivation by SiNx:H Dielectric Layer for Improved Si/PEDOT:PSS Hybrid Heterojunction Solar Cells. Nanoscale Research Letters, 2016, 11, 310.	3.1	5
129	Synergistic effect of TiO <sub>2</sub> hierarchical microspheres for high performance dye-sensitized solar cells. Science China Chemistry, 2017, 60, 822-828.	4.2	5
130	Epitaxial Growth and Stoichiometry Control of Ultrawide Bandgap ZnGa <sub>2</sub> O <sub>4</sub> Films by Pulsed Laser Deposition. Coatings, 2021, 11, 782.	1.2	5
131	Colloidal transfer printing method for periodically textured thin films in flexible media with greatly enhanced solar energy harvesting. Materials Research Express, 2015, 2, 106402.	0.8	4
132	Rapid crystallization of amorphous silicon films utilizing Ar-H <sub>2</sub> mesoplasma annealing. Journal of Crystal Growth, 2018, 486, 142-147.	0.7	4
133	Direct demonstration of carrier distribution and recombination within step-bunched UV-LEDs. Photonics Research, 2021, 9, 764.	3.4	4
134	Highly sensitive flexible tactile perceptual interactive platform with functions of Braille code recognition. Journal Physics D: Applied Physics, 2021, 54, 375102.	1.3	4
135	Hybrid Solar Cells: Enhanced Electro-Optical Properties of Nanocone/Nanopillar Dual-Structured Arrays for Ultrathin Silicon/Organic Hybrid Solar Cell Applications (Adv. Energy Mater. 8/2016). Advanced Energy Materials, 2016, 6, .	10.2	3
136	Carrier Dynamics of Nanopillar Textured Ultrathin Si Film/PEDOT:PSS Heterojunction Solar Cell. IEEE Journal of Photovoltaics, 2018, 8, 757-762.	1.5	3
137	The role of transition region charges between dopant-free asymmetric heterocontacts in interdigitated back contact silicon heterojunction solar cells. Solar Energy, 2019, 188, 1201-1208.	2.9	3
138	Evidence of Carrier Localization in AlGaIn/GaN-Based UV Multiple Quantum Wells with Opposite Polarity Domains Provided by Nanoscale Imaging. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100035.	1.2	3
139	ITO/SnO <sub>2</sub> Interface Defect Passivation via Atomic Layer Deposited Al <sub>2</sub> O <sub>3</sub> for High-Efficiency Perovskite Solar Cells. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100406.	0.8	3
140	Demonstration of ohmic contact using $\text{MoO}_x/\text{Al}$ on p-GaN and the proposal of a reflective electrode for AlGaIn-based DUV-LEDs. Optics Letters, 2020, 45, 2427.	1.7	3
141	50-Åm thick flexible dopant-free interdigitated-back-contact silicon heterojunction solar cells with front MoO <sub>x</sub> coatings for efficient antireflection and passivation. Optics Express, 2022, 30, 21309.	1.7	3
142	GaN based UV-LEDs with Ni/Au Nanomeshes as Transparent p-type Electrodes. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800684.	0.8	2
143	Low-Temperature Oxidation-Processed Titanium Oxides as Dual-Functional Electron-Selective Passivation Contacts. Solar Rrl, 2020, 4, 1900490.	3.1	2
144	Revealing the surface electronic structures of AlGaIn deep-ultraviolet multiple quantum wells with lateral polarity domains. Photonics Research, 2020, 8, 812.	3.4	2

#	ARTICLE	IF	CITATIONS
145	Excellent passivation with implied open-circuit voltage of 710 mV for p-type multi-crystalline black silicon using PECVD grown a-Si:H passivation layer. <i>Solar Energy</i> , 2020, 211, 753-758.	2.9	1
146	Efficient Carrier Recombination in InGaN Pyramidal $\mu$ -LEDs Obtained through Selective Area Growth. <i>Photonics</i> , 2021, 8, 157.	0.9	1
147	Rapid Thermal Annealing Induced Passivation Degradation and Recovery of Polysilicon Passivated Contact with Czochralski and Cast Multicrystalline Silicon Substrates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2100344.	0.8	1
148	Characterization of tunnel oxide passivated contact with n-type poly-Si on p-type c-Si wafer substrate. <i>Current Applied Physics</i> , 2019, 19, 811-816.	1.1	0
149	Improved carrier confinement and stimulated recombination rate in GaN-based vertical-cavity surface-emitting lasers with buried p-AlGaIn inversion layer. <i>Superlattices and Microstructures</i> , 2020, 146, 106654.	1.4	0
150	On the Luminescence Properties and Surface Passivation Mechanism of III- and N-Polar Nanopillar Ultraviolet Multiple-Quantum-Well Light Emitting Diodes. <i>Micromachines</i> , 2020, 11, 572.	1.4	0
151	Carrier localization and defect-insensitive optical behaviors of ultraviolet multiple quantum wells grown on patterned AlN nucleation layer. <i>Journal of Alloys and Compounds</i> , 2021, 861, 157589.	2.8	0
152	Scalable growth of vertically oriented graphene nanosheets with high rate by a high-flux mesoplasma chemical vapor deposition. <i>Carbon Trends</i> , 2021, 4, 100069.	1.4	0
153	Coupled Investigation of Contact Potential and Microstructure Evolution of Ultra-Thin AlOx for Crystalline Si Passivation. <i>Nanomaterials</i> , 2021, 11, 1803.	1.9	0