Kunji Chen

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4784926/publications.pdf

Version: 2024-02-01

162 papers	3,226 citations	136740 32 h-index	205818 48 g-index
164 all docs	164 docs citations	164 times ranked	3293 citing authors

#	Article	IF	Citations
1	Gate-tunable van der Waals heterostructure for reconfigurable neural network vision sensor. Science Advances, 2020, 6, eaba6173.	4.7	202
2	Ultrafast Solarâ€Blind Ultraviolet Detection by Inorganic Perovskite CsPbX₃ Quantum Dots Radial Junction Architecture. Advanced Materials, 2017, 29, 1700400.	11.1	129
3	Visible photoluminescence in crystallized amorphous Si:H/SiNx:H multiquantumâ€well structures. Applied Physics Letters, 1992, 61, 2069-2071.	1.5	128
4	Highly Connected Siliconâ€“Copper Alloy Mixture Nanotubes as Highâ€Rate and Durable Anode Materials for Lithiumâ€Ion Batteries. Advanced Functional Materials, 2016, 26, 524-531.	7.8	110
5	Networking retinomorphic sensor with memristive crossbar for brain-inspired visual perception. National Science Review, 2021, 8, nwaa172.	4.6	77
6	a-SiNx:H-based ultra-low power resistive random access memory with tunable Si dangling bond conduction paths. Scientific Reports, 2015, 5, 15762.	1.6	69
7	Resistive switching mechanism in silicon highly rich SiOx (xâ€‰<â€‰0.75) films based on silicon dangling bonds percolation model. Applied Physics Letters, 2013, 102, .	1.5	62
8	Observation of the size-dependent blueshifted electroluminescence from nanocrystalline Si fabricated by KrF excimer laser annealing of hydrogenated amorphous silicon/amorphous-SiNx:H superlattices. Applied Physics Letters, 1998, 72, 722-724.	1.5	59
9	Rapid, stable and self-powered perovskite detectors via a fast chemical vapor deposition process. RSC Advances, 2017, 7, 18224-18230.	1.7	57
10	Full color light emission from amorphous SiCx:H with organicâ€“inorganic structures. Journal of Applied Physics, 2000, 88, 6408-6412.	1.1	54
11	Photoluminescence characteristics from amorphous SiC thin films with various structures deposited at low temperature. Solid State Communications, 2005, 133, 565-568.	0.9	54
12	Phosphorus Doping in Si Nanocrystals/SiO2 Multilayers and Light Emission with Wavelength Compatible for Optical Telecommunication. Scientific Reports, 2016, 6, 22888.	1.6	52
13	Engineering island-chain silicon nanowires via a droplet mediated Plateau-Rayleigh transformation. Nature Communications, 2016, 7, 12836.	5.8	49
14	Cadmium-doped flexible perovskite solar cells with a low-cost and low-temperature-processed CdS electron transport layer. RSC Advances, 2017, 7, 19457-19463.	1.7	48
15	Omnidirectional and effective salt-rejecting absorber with rationally designed nanoarchitecture for efficient and durable solar vapour generation. Journal of Materials Chemistry A, 2018, 6, 22976-22986.	5.2	48
16	Solar-driven all-solid-state lithiumâ€“air batteries operating at extreme low temperatures. Energy and Environmental Science, 2020, 13, 1205-1211.	15.6	48
17	Size-dependent electroluminescence from Si quantum dots embedded in amorphous SiC matrix. Journal of Applied Physics, 2011, 110, .	1.1	45
18	Strong green-yellow electroluminescence from oxidized amorphous silicon nitride light-emitting devices. Applied Physics Letters, 2007, 90, 093515.	1.5	44

#	Article	IF	Citations
19	A bottom-up synthetic hierarchical buffer structure of copper silicon nanowire hybrids as ultra-stable and high-rate lithium-ion battery anodes. Journal of Materials Chemistry A, 2018, 6, 7877-7886.	5.2	44
20	Structural and electronic properties of Si nanocrystals embedded in amorphous SiC matrix. Journal of Alloys and Compounds, 2011, 509, 3963-3966.	2.8	43
21	Planar Growth, Integration, and Applications of Semiconducting Nanowires. Advanced Materials, 2020, 32, e1903945.	11.1	42
22	Highly Sensitive Ammonia Gas Detection at Room Temperature by Integratable Silicon Nanowire Field-Effect Sensors. ACS Applied Materials & Interfaces, 2021, 13, 14377-14384.	4.0	42
23	Deterministic Line-Shape Programming of Silicon Nanowires for Extremely Stretchable Springs and Electronics. Nano Letters, 2017, 17, 7638-7646.	4.5	41
24	Oxygen induced strong green light emission from low-temperature grown amorphous silicon nitride films. Applied Physics Letters, 2006, 89, 221120.	1.5	40
25	Allâ€Inorganic Perovskite Quantum Dots/pâ€Si Heterojunction Lightâ€Emitting Diodes under DC and AC Driving Modes. Advanced Optical Materials, 2018, 6, 1700897.	3.6	39
26	High-conductive nanocrystalline silicon with phosphorous and boron doping. Applied Surface Science, 2010, 257, 1337-1341.	3.1	37
27	An electronic synaptic device based on HfO₂TiO_x bilayer structure memristor with self-compliance and deep-RESET characteristics. Nanotechnology, 2018, 29, 415205.	1.3	36
28	Inâ€Plane Selfâ€Turning and Twin Dynamics Renders Large Stretchability to Monoâ€Like Zigzag Silicon Nanowire Springs. Advanced Functional Materials, 2016, 26, 5352-5359.	7.8	34
29	Highly cross-linked Cu/a-Si coreâ€“shell nanowires for ultra-long cycle life and high rate lithium batteries. Nanoscale, 2016, 8, 2613-2619.	2.8	33
30	High performance transparent in-plane silicon nanowire Fin-TFTs via a robust nano-droplet-scanning crystallization dynamics. Nanoscale, 2017, 9, 10350-10357.	2.8	33
31	The Effect of Decomposed PbI2 on Microscopic Mechanisms of Scattering in CH3NH3PbI3 Films. Nanoscale Research Letters, 2019, 14, 208.	3.1	33
32	Enhanced electroluminescence efficiency of oxidized amorphous silicon nitride light-emitting devices by modulating Siâ•N ratio. Applied Physics Letters, 2007, 91, .	1.5	32
33	Light Trapping and Downâ€Shifting Effect of Periodically Nanopatterned Siâ€Quantumâ€Dotâ€Based Structures for Enhanced Photovoltaic Properties. Particle and Particle Systems Characterization, 2014, 31, 459-464.	1.2	32
34	Rational Energy Band Alignment and Au Nanoparticles in Surface Plasmon Enhanced Siâ€Based Perovskite Quantum Dot Lightâ€Emitting Diodes. Advanced Optical Materials, 2018, 6, 1800693.	3.6	32
35	Monolithic Integration of Silicon Nanowire Networks as a Soft Wafer for Highly Stretchable and Transparent Electronics. Nano Letters, 2019, 19, 6235-6243.	4.5	32
36	Nanocrystalline Si pathway induced unipolar resistive switching behavior from annealed Si-rich SiNx/SiNy multilayers. Journal of Applied Physics, 2014, 116, 123705.	1.1	31

#	Article	IF	Citations
37	In-Plane Epitaxial Growth of Silicon Nanowires and Junction Formation on Si(100) Substrates. Nano Letters, 2014, 14, 6469-6474.	4.5	31
38	Role of hydrogen surface coverage during anodic plasma deposition of hydrogenated nanocrystalline germanium. Journal of Applied Physics, 1998, 84, 3386-3391.	1.1	30
39	Direct-Current and Alternating-Current Driving Si Quantum Dots-Based Light Emitting Device. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 206-211.	1.9	30
40	Green electro- and photoluminescence from nanocrystalline Si film prepared by continuous wave Ar+ laser annealing of heavily phosphorus doped hydrogenated amorphous silicon film. Applied Physics Letters, 1998, 73, 105-107.	1.5	29
41	Enhancement of solar vapor generation by a 3D hierarchical heat trapping structure. Journal of Materials Chemistry A, 2019, 7, 26496-26503.	5.2	28
42	Strong energy-transfer-induced enhancement of Er3+ luminescence in In2O3 nanocrystal codoped silica films. Applied Physics Letters, 2013, 103, 181906.	1.5	27
43	Contribution of multiple emitting centers to luminescence from Si/SiO2 multilayers with step by step thermal annealing. Solid State Communications, 2004, 131, 701-705.	0.9	26
44	Characteristics of multilevel storage and switching dynamics in resistive switching cell of Al₂O₃/HfO₂/Al₂O₃ sandwich structure. Journal Physics D: Applied Physics, 2018, 51, 025102.	1.3	26
45	Formation and charging effect of Si nanocrystals in a-SiNx/a-Si/a-SiNx structures. Journal of Applied Physics, 2004, 95, 640-645.	1.1	25
46	Enhanced broadband spectral response and energy conversion efficiency for hetero-junction solar cells with graded-sized Si quantum dots/SiC multilayers. Journal of Materials Chemistry C, 2015, 3, 12061-12067.	2.7	24
47	Enhanced photovoltaic property by forming p-i-n structures containing Si quantum dots/SiC multilayers. Nanoscale Research Letters, 2014, 9, 634.	3.1	23
48	Operating principles of in-plane silicon nanowires at simple step-edges. Nanoscale, 2015, 7, 5197-5202.	2.8	22
49	Hydrogen-induced recovery of photoluminescence from annealed aâ€Si:Hâ•aâ€SiO2 multilayers. Journal of Applied Physics, 2005, 98, 033532.	1.1	21
50	A comparative study on electrical transport properties of thin films of Ge1Sb2Te4 and Ge2Sb2Te5 phase-change materials. Journal of Applied Physics, 2011, 110, 013703.	1.1	21
51	Higher than 60% internal quantum efficiency of photoluminescence from amorphous silicon oxynitride thin films at wavelength of 470 nm. Applied Physics Letters, 2014, 105, .	1.5	20
52	Transition of Carrier Transport Behaviors with Temperature in Phosphorus-Doped Si Nanocrystals/SiO2 Multilayers. Nanoscale Research Letters, 2016, 11, 346.	3.1	19
53	Enhanced carrier mobility in Si nano-crystals via nanoscale phosphorus doping. Applied Surface Science, 2017, 425, 492-496.	3.1	19
54	Heteroepitaxial Writing of Silicon-on-Sapphire Nanowires. Nano Letters, 2016, 16, 7317-7324.	4.5	18

#	Article	IF	Citations
55	Reduced photo-instability of luminescence spectrum of core-shell CdSe/CdS nanocrystals. Journal of Materials Science, 2000, 35, 1375-1378.	1.7	17
56	Improved Efficiency of Silicon Nanoholes/Gold Nanoparticles/Organic Hybrid Solar Cells via Localized Surface Plasmon Resonance. Nanoscale Research Letters, 2016, 11, 160.	3.1	17
57	Enhanced up-conversion luminescence from NaYF₄:Yb,Er nanocrystals by Gd³⁺ ions induced phase transformation and plasmonic Au nanosphere arrays. RSC Advances, 2016, 6, 102869-102874.	1.7	17
58	Low Power Consumption Red Light-Emitting Diodes Based on Inorganic Perovskite Quantum Dots under an Alternating Current Driving Mode. Nanomaterials, 2018, 8, 974.	1.9	17
59	3D Sidewall Integration of Ultrahighâ€Density Silicon Nanowires for Stacked Channel Electronics. Advanced Electronic Materials, 2019, 5, 1800627.	2.6	17
60	High Performance Si Nanowire TFTs With Ultrahigh on/off Current Ratio and Steep Subthreshold Swing. IEEE Electron Device Letters, 2020, 41, 46-49.	2.2	17
61	Unprecedented Uniform 3D Growth Integration of 10-Layer Stacked Si Nanowires on Tightly Confined Sidewall Grooves. Nano Letters, 2020, 20, 7489-7497.	4.5	17
62	Flexible and Robust 3D aâ€SiGe Radial Junction Nearâ€Infrared Photodetectors for Rapid Sphygmic Signal Monitoring. Advanced Functional Materials, 2022, 32, 2107040.	7.8	17
63	Highly Stretchable Highâ€Performance Silicon Nanowire Field Effect Transistors Integrated on Elastomer Substrates. Advanced Science, 2022, 9, e2105623.	5.6	17
64	Size dependence of optical eigenmodes in photonic quantum dots prepared by conformal deposition method. Applied Physics Letters, 2007, 90, 174101.	1.5	16
65	Nanoscale quantification of charge injection and transportation process in Si-nanocrystal based sandwiched structure. Nanoscale, 2013, 5, 9971.	2.8	16
66	Nanodroplet Hydrodynamic Transformation of Uniform Amorphous Bilayer into Highly Modulated Ge/Si Island-Chains. Nano Letters, 2018, 18, 6931-6940.	4.5	16
67	Cylindrical Line-Feeding Growth of Free-Standing Silicon Nanohelices as Elastic Springs and Resonators. Nano Letters, 2020, 20, 5072-5080.	4.5	16
68	Luminescence and resonant energy transfer of two sizes of CdTe quantum dots embedded in gelatin films. Journal of Materials Science, 2007, 42, 9696-9699.	1.7	15
69	Dynamics of high quantum efficiency photoluminescence from N-Si-O bonding states in oxygenated amorphous silicon nitride films. Applied Physics Letters, 2016, 108, .	1.5	15
70	Biomimetic Radial Tandem Junction Photodetector with Natural RGB Color Discrimination Capability. Advanced Optical Materials, 2017, 5, 1700390.	3.6	15
71	Ab Initio Design, Shaping, and Assembly of Free-Standing Silicon Nanoprobes. Nano Letters, 2021, 21, 2773-2779.	4.5	15
72	Strong blue photoluminescence from as-fabricated amorphous-Si:Hâ•SiO2 multilayers. Applied Physics Letters, 2004, 85, 516-518.	1.5	14

#	Article	IF	Citations
73	The Change of Electronic Transport Behaviors by P and B Doping in Nano-Crystalline Silicon Films with Very High Conductivities. Nanomaterials, 2016, 6, 233.	1.9	14
74	Fabrication of Anti-reflecting Si Nano-structures with Low Aspect Ratio by Nano-sphere Lithography Technique. Nano-Micro Letters, 2013, 5, 18-25.	14.4	13
75	Light Harvesting and Enhanced Performance of Si Quantum Dot/Si Nanowire Heterojunction Solar Cells. Particle and Particle Systems Characterization, 2016, 33, 38-43.	1.2	13
76	Formation of high conductive nano-crystalline silicon embedded in amorphous silicon-carbide films with large optical band gap. AIP Advances, 2016, 6, .	0.6	13
77	Comparative study on P and B doped nano-crystalline Si multilayers. Applied Surface Science, 2020, 529, 146971.	3.1	13
78	Annealing effect on optical and electronic properties of silicon rich amorphous silicon-carbide films. Frontiers of Optoelectronics, 2012, 5, 107-111.	1.9	12
79	Doping effect in Si nanocrystals. Journal Physics D: Applied Physics, 2018, 51, 233002.	1.3	12
80	HfO2/TiOx bilayer structure memristor with linear conductance tuning for high density memory and neuromorphic computing. Journal of Applied Physics, 2020, 128, .	1.1	12
81	Doping-Free Titanium Nitride Carrier Selective Contacts for Efficient Organicâ€“Inorganic Hybrid Solar Cells. ACS Applied Energy Materials, 2020, 3, 9208-9215.	2.5	12
82	Enhanced Nearâ€Infrared Perovskite Lightâ€Emitting Devices by Introducing Choline Chloride Layer. Advanced Optical Materials, 2021, 9, 2100636.	3.6	12
83	The evolution investigation of photoluminescence from a-Si:H/SiO2 to nc-Si/SiO2 multilayers. Journal of Applied Physics, 2004, 95, 2448-2451.	1.1	11
84	Energy transfer process between Eu3+ and wide-band-gap SnO2 nanocrystals in silica films studied by photoluminescence excitation and time-resolved photoluminescence techniques. Science Bulletin, 2014, 59, 1285-1290.	1.7	11
85	The role of N-Si-O bonding configurations in tunable photoluminescence of oxygenated amorphous silicon nitride films. Applied Physics Letters, 2015, 106, .	1.5	11
86	Meandering growth of in-plane silicon nanowire springs. Applied Physics Letters, 2019, 114, .	1.5	11
87	Enhanced Broadband Plasmonic Absorbers with Tunable Light Management on Flexible Tapered Metasurface. ACS Applied Materials & Interfaces, 2020, 12, 56178-56185.	4.0	11
88	Achieving a Record Openâ€Circuit Voltage for Organic/Si Hybrid Solar Cells by Improving Junction Quality. Solar Rrl, 2021, 5, 2100255.	3.1	11
89	Improved power efficiency in phosphorus doped n-a-SiNxOy/p-Si heterojunction light emitting diode. Applied Physics Letters, 2017, 110, 081109.	1.5	10
90	Facile 3D integration of Si nanowires on Bosch-etched sidewalls for stacked channel transistors. Nanoscale, 2020, 12, 2787-2792.	2.8	10

#	Article	IF	Citations
91	Low power consumption light emitting device containing TiO₂:Er³⁺ thin film prepared by sol-gel method. Optics Express, 2020, 28, 6064.	1.7	10
92	A new luminescent defect state in low temperature grown amorphous SiN_xO_y thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 828-831.	0.8	9
93	On-chip silicon-based active photonic molecules by complete photonic bandgap light confinement. Applied Physics Letters, 2011, 99, 034105.	1.5	9
94	Strong blue light emission from a-SiNx:O films via localized surface plasmon enhancement. Applied Physics Letters, 2012, 101, .	1.5	9
95	Controllable photoluminescence enhancement of CdTe/CdS quantum dots thin films incorporation with Au nanoparticles. Nanoscale Research Letters, 2015, 10, 128.	3.1	9
96	Tungsten-Coated Silicon Nanopillars as Ultra-Broadband and Thermally Robust Solar Harvesting Materials. ACS Applied Nano Materials, 2020, 3, 2430-2437.	2.4	9
97	Superfast Growth Dynamics of High-Quality Silicon Nanowires on Polymer Films via Self-Selected Laser-Droplet-Heating. Nano Letters, 2021, 21, 569-576.	4.5	9
98	Highâ€Efficiency Airâ€Processed Siâ€Based Perovskite Lightâ€Emitting Devices via PMMAâ€TBAPF₆ Coâ€Doping. Advanced Optical Materials, 2022, 10, .	3.6	9
99	Carrier transport of doped nanocrystalline Si formed by annealing of amorphous Si films at various temperatures. Solid State Communications, 2011, 151, 697-700.	0.9	8
100	Charge transfer of single laser crystallized intrinsic and phosphorus-doped Si-nanocrystals visualized by Kelvin probe force microscopy. Journal of Applied Physics, 2014, 116, 134309.	1.1	8
101	Simulation and Experimental Study on Anti-reflection Characteristics of Nano-patterned Si Structures for Si Quantum Dot-Based Light-Emitting Devices. Nanoscale Research Letters, 2016, 11, 317.	3.1	8
102	Plasmon-enhanced upconversion luminescence in pyrochlore phase Yb x Er2-x Ti2O7 thin film. Nanotechnology, 2019, 30, 085701.	1.3	8
103	High efficiency organicâ€“Si hybrid solar cells with a one-dimensional CdS interlayer. Nanoscale, 2021, 13, 4206-4212.	2.8	8
104	Designable Integration of Silicide Nanowire Springs as Ultraâ€Compact and Stretchable Electronic Interconnections. Small, 2022, 18, e2104690.	5.2	8
105	Air-processed stable near-infrared Si-based perovskite light-emitting devices with efficiency exceeding 7.5%. Journal of Materials Chemistry C, 2022, 10, 1276-1281.	2.7	8
106	THE SIZE CONTROL OF UNIFORM NANOCRYSTALLINE Si GRAINS BY CONSTRAINED GROWTH MODEL. International Journal of Modern Physics B, 2005, 19, 2751-2756.	1.0	7
107	Luminescence Mechanism in Amorphous Silicon Oxynitride Films: Band Tail Model or N-Si-O Bond Defects Model. Frontiers in Physics, 2019, 7, .	1.0	7
108	Tunable Narrowband Silicon-Based Thermal Emitter with Excellent High-Temperature Stability Fabricated by Lithography-Free Methods. Nanomaterials, 2021, 11, 1814.	1.9	7

#	Article	IF	Citations
109	Artificial synapse arrays based on SiOx/TiOx memristive crossbar with high uniformity for neuromorphic computing. Applied Physics Letters, 2022, 120, .	1.5	7
110	Artificial Neurons and Synapses Based on Al/a-SiNxOy:H/P+-Si Device with Tunable Resistive Switching from Threshold to Memory. Nanomaterials, 2022, 12, 311.	1.9	7
111	Silicon-based spectrally selective emitters with good high-temperature stability on stepped metasurfaces. Nanoscale, 2022, 14, 10816-10822.	2.8	7
112	Dynamical process of KrF pulsed excimer laser crystallization of ultrathin amorphous silicon films to form Si nano-dots. Journal of Applied Physics, 2012, 111, 094320.	1.1	6
113	Improved photovoltaic properties of Si quantum dots/SiC multilayers-based heterojunction solar cells by reducing tunneling barrier thickness. Frontiers of Optoelectronics, 2013, 6, 228-233.	1.9	6
114	The role of N_xâ€“Siâ€“O_y bonding configuration in acquiring strong blue to red photoluminescence from amorphous SiN_xO_y film. Canadian Journal of Physics, 2014, 92, 602-605.	0.4	6
115	Microstructure and carrierâ€transport behaviors of nanocrystalline silicon thin films annealed at various temperatures. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1675-1679.	0.8	6
116	Tunable Si Dangling Bond Pathway Induced Forming-Free Hydrogenated Silicon Carbide Resistive Switching Memory Device. Journal of Physical Chemistry Letters, 2020, 11, 8451-8458.	2.1	6
117	Multiple channels to enhance near-infrared emission from SiO₂â€“SnO₂:Er³⁺ films by Ba²⁺ ion doping. Physical Chemistry Chemical Physics, 2021, 23, 23711-23717.	1.3	6
118	Enhanced Electroluminescence From Sn/Er Co-Doped SiO₂ Thin Film by Controlling Sn Content. IEEE Photonics Technology Letters, 2021, 33, 1359-1362.	1.3	6
119	Interface confinement and local structure in nc-Si/a-SiNxmultilayers (ncâ‰¡nanocrystalline,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.7	5
120	Electronic properties and charge storage effect of amorphous SiN passivated nanocrystalline silicon. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, .	0.6	5
121	The Role of Nâ€“Siâ€“O Defect States in Optical Gain from an aâ€SiN_x/SiO₂ Waveguide and in Light Emission from an nâ€aâ€SiN_xO_y/pâ€Si Heterojunction LED. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700750.	0.8	5
122	Improved device performance of Si-based heterojunction solar cells by using phosphorus doped Si nanocrystals embedded in SiC host matrix. AIP Advances, 2019, 9, .	0.6	5
123	Innovative all-silicon based a-SiNx:O/c-Si heterostructure solar-blind photodetector with both high responsivity and fast response speed. APL Photonics, 2022, 7, .	3.0	5
124	Response to â€˜â€˜Comment on â€˜Visible photoluminescence in crystallized amorphous Si:H/SiNx:H multiquantumâ€well structuresâ€™â€‰â€™ [Appl. Phys. Lett. 61, 2069 (1992)]. Applied Physics Letters, 1995, 66, 249-250.	1.5	4
125	Conformal coverage for two-dimensional arrays of microcavites with quasi-three dimensional confinement by distributed Bragg reflectors. Applied Surface Science, 2007, 253, 4254-4259.	3.1	4
126	Charge storage and light emission properties of three dimension controllable Si nanostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 721-727.	0.8	4

#	Article	IF	Citations
127	Conductive Atomic Force Microscopy (C-AFM) observation of conducting nanofilaments formation in GeSbTe phase change materials. Applied Physics A: Materials Science and Processing, 2013, 112, 663-667.	1.1	4
128	Ostwald ripening in segregated Si_xN/Si_yN multilayers. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1878-1884.	0.8	4
129	Near-infrared light absorption enhancement in Ge nanostructures prepared by nanosphere lithography. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, .	0.6	4
130	Terrace-confined guided growth of high-density ultrathin silicon nanowire array for large area electronics. Nanotechnology, 2021, 32, 265602.	1.3	4
131	Precise morphology control of in-plane silicon nanowires via a simple plasma pre-treatment. Applied Surface Science, 2022, 593, 153435.	3.1	4
132	Observation of Coulomb Blockade Effect in Silicon Nanocrystallites at room Temperature. Materials Research Society Symposia Proceedings, 1997, 467, 367.	0.1	3
133	Bismuth-catalyzed n-type doping and growth evolution of planar silicon nanowires. Applied Physics Letters, 2020, 117, .	1.5	3
134	3D NAND Flash Memory Based on Double-Layer NC-Si Floating Gate with High Density of Multilevel Storage. Nanomaterials, 2022, 12, 2459.	1.9	3
135	Microstructures of Luminescent nc-Si by Excimer Laser Annealing of a-Si:H. Materials Research Society Symposia Proceedings, 1996, 452, 803.	0.1	2
136	Formation of high quality nano-crystallized Ge films on quartz substrates at moderate temperature. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 051201.	0.6	2
137	Unexpected phosphorus doping routine of planar silicon nanowires for integrating CMOS logics. Nanoscale, 2021, 13, 15031-15037.	2.8	2
138	Artificial Synapse Consisted of TiSbTe/SiCx:H Memristor with Ultra-high Uniformity for Neuromorphic Computing. Nanomaterials, 2022, 12, 2110.	1.9	2
139	Self-Assembly of Semiconductor CdSe Nanocrystals by Bifunctional Linker Molecules. Molecular Crystals and Liquid Crystals, 1999, 337, 177-180.	0.3	1
140	Enhancement of Photoluminescence from Organic and Inorganic Surface Passivated ZnS Quantum Dots. Materials Research Society Symposia Proceedings, 2001, 667, 1.	0.1	1
141	FULL-COLOR PHOTO- AND ELECTRO-LUMINESCENCE FROM HYDROGENATED AMORPHOUS SILICON CARBIDE FILMS PREPARED BY USING ORGANIC SOURCE. International Journal of Modern Physics B, 2002, 16, 1057-1061.	1.0	1
142	Quantum Dots: Ultrafast Solarâ€Blind Ultraviolet Detection by Inorganic Perovskite CsPbX₃ Quantum Dots Radial Junction Architecture (Adv. Mater. 23/2017). Advanced Materials, 2017, 29, .	11.1	1
143	Resistive Switching Characteristics of HfO_x/Al₂O₃ Nano-multilayers Structure Memristor Fabricated by Atomic Layer Deposition. , 2021, , .		1
144	Improved resonant energy transfer and light emission from SnO₂ nanocrystals and Er³⁺ embedded in silica films via Yb³⁺ co-doping. Optical Materials Express, 2022, 12, 3101.	1.6	1

#	Article	IF	Citations
145	KrF Laser-Induced Nanometer Si Crystallites Formation and Tem Observation. Materials Research Society Symposia Proceedings, 1995, 397, 375.	0.1	0
146	Microstructures and visible photoluminescence of excimer laser crystallized a-Si:H/a-SiN/sub x/:H multi-quantum wells. , 0, , .		0
147	Raman and Ftâ€Ir Study on Structure and Its Stability of Hydrogenated Amorphous Germaniumâ€Nitrogen Alloys. Materials Research Society Symposia Proceedings, 1996, 446, 419.	0.1	0
148	Structure and Photoluminescence of Hydrogenated Amorphous Carbon Films Produced by Using Aromatic Hydrocarbon Source. Materials Research Society Symposia Proceedings, 1999, 593, 353.	0.1	0
149	The Enhancement of Band Edge Emission from ZnS/Zn(OH)2 Quantum Dots. Materials Research Society Symposia Proceedings, 2000, 642, 3181.	0.1	0
150	AFM and HREM Observation of the Pulse Laser Interference Crystallized a--Si:H/a-SiNx:H Multilayers. Materials Research Society Symposia Proceedings, 2000, 609, 2511.	0.1	0
151	Hyper-Rayleigh Scattering and Fluorescence of CdS-ZnS Nanoparticle Composites. Materials Research Society Symposia Proceedings, 2002, 737, 150.	0.1	0
152	Patterned Structures of Silicon Nanocrystals Prepared by Pulsed Laser Interference Crystallization of Ultra-Thin A-Si:H Single-Layer. Materials Research Society Symposia Proceedings, 2002, 737, 426.	0.1	0
153	Charging and Coulomb blockade effects in nanocrystalline Si dots embedded in SiO/sub 2/ matrix. , 0, , .		0
154	Photonic quantum dots based on Bragg reflectors grown by conformal deposition on patterned substrates. Applied Surface Science, 2008, 254, 4211-4215.	3.1	0
155	Silicon based photonic quantum dots. , 2008, , .		0
156	Intense green light emission from low temperature grown SiNO complex system. , 2008, , .		0
157	Low turn-on and high efficient oxidized amorphous silicon nitride light-emitting devices induced by high density amorphous silicon nanoparticles. Thin Solid Films, 2010, 518, 3938-3941.	0.8	0
158	Si-based photonic quantum dots with the self-similar distributed Bragg reflectors. Thin Solid Films, 2011, 519, 3295-3300.	0.8	0
159	On-chip mode-control in active silicon-based photonic molecule by complete photon confinement. , 2011, , .		0
160	CuO nanowires-based Radial hetero-junction thin film silicon solar cells with a high open-circuit voltage. , 2017, , .		0
161	Dual Management of Electrons and Photons to Get Highâ€Performance Light Emitting Devices Based on Si Nanowires and Si Quantum Dots with Al 2 O 3 â€Ag Hybrid Nanostructures. Particle and Particle Systems Characterization, 2018, 35, 1800289.	1.2	0
162	Corrections to â€œHigh Performance Si Nanowire TFTs With Ultrahigh On/Off Current Ratio and Steep Subthreshold Swingâ€•[Jan 20 46-49]. IEEE Electron Device Letters, 2020, 41, 1604-1604.	2.2	0