Jong Min Kim

List of Publications by Year
in descending order

175	26,752	31902 53	5663 162
papers	citations	h-index	g-index

180	180	180	34429
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Large-scale pattern growth of graphene films for stretchable transparent electrodes. Nature, 2009, 457, 706-710.	13.7	9,624
2	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. Nanoscale, 2015, 7, 4598-4810.	2.8	2,452
3	Efficient Reduction of Graphite Oxide by Sodium Borohydride and Its Effect on Electrical Conductance. Advanced Functional Materials, 2009, 19, 1987-1992.	7.8	2,059
4	Full-colour quantum dot displays fabricated by transfer printing. Nature Photonics, 2011, 5, 176-182.	15.6	997
5	Fiber Supercapacitors Made of Nanowireâ€Fiber Hybrid Structures for Wearable/Flexible Energy Storage. Angewandte Chemie - International Edition, 2011, 50, 1683-1687.	7.2	796
6	Self-Sorted, Aligned Nanotube Networks for Thin-Film Transistors. Science, 2008, 321, 101-104.	6.0	571
7	A Hybrid Piezoelectric Structure for Wearable Nanogenerators. Advanced Materials, 2012, 24, 1759-1764.	11.1	555
8	High-performance crosslinked colloidal quantum-dot light-emitting diodes. Nature Photonics, 2009, 3, 341-345.	15.6	505
9	Mechanically Powered Transparent Flexible Chargeâ€Generating Nanodevices with Piezoelectric ZnO Nanorods. Advanced Materials, 2009, 21, 2185-2189.	11.1	411
10	Porous PVDF As Effective Sonic Wave Driven Nanogenerators. Nano Letters, 2011, 11, 5142-5147.	4.5	339
11	Selective dispersion of high purity semiconducting single-walled carbon nanotubes with regioregular poly(3-alkylthiophene)s. Nature Communications, 2011, 2, 541.	5.8	333
12	Fully inkjet-printed two-dimensional material field-effect heterojunctions for wearable and textile electronics. Nature Communications, 2017, 8, 1202.	5.8	324
13	Soundâ€Driven Piezoelectric Nanowireâ€Based Nanogenerators. Advanced Materials, 2010, 22, 4726-4730.	11.1	305
14	Fully Rollable Transparent Nanogenerators Based on Graphene Electrodes. Advanced Materials, 2010, 22, 2187-2192.	11.1	290
15	Recent Advances in Vanadiumâ€Based Aqueous Rechargeable Zincâ€Ion Batteries. Advanced Energy Materials, 2020, 10, 2000477.	10.2	265
16	Controlling the diameter, growth rate, and density of vertically aligned carbon nanotubes synthesized by microwave plasma-enhanced chemical vapor deposition. Applied Physics Letters, 2000, 76, 2367-2369.	1.5	258
17	Singleâ€Fiberâ€Based Hybridization of Energy Converters and Storage Units Using Graphene as Electrodes. Advanced Materials, 2011, 23, 3446-3449.	11.1	256
18	Control of Electronic Structure of Graphene by Various Dopants and Their Effects on a Nanogenerator. Journal of the American Chemical Society, 2010, 132, 15603-15609.	6.6	247

#	Article	IF	Citations
19	Synthesis of aligned carbon nanotubes using thermal chemical vapor deposition. Chemical Physics Letters, 1999, 312, 461-468.	1.2	243
20	Solution-processed, high-performance n-channel organic microwire transistors. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6065-6070.	3.3	218
21	Oneâ€Step Exfoliation Synthesis of Easily Soluble Graphite and Transparent Conducting Graphene Sheets. Advanced Materials, 2009, 21, 4383-4387.	11.1	209
22	Monolayer optical memory cells based on artificial trap-mediated charge storage and release. Nature Communications, 2017, 8, 14734.	5.8	184
23	Large Thermoelectric Figure-of-Merits from SiGe Nanowires by Simultaneously Measuring Electrical and Thermal Transport Properties. Nano Letters, 2012, 12, 2918-2923.	4.5	181
24	Strain-Mediated Interlayer Coupling Effects on the Excitonic Behaviors in an Epitaxially Grown MoS₂/WS₂ van der Waals Heterobilayer. Nano Letters, 2017, 17, 5634-5640.	4.5	169
25	High photoresponsivity in an all-graphene pâ€“n vertical junction photodetector. Nature Communications, 2014, 5, 3249.	5.8	161
26	Nearly single-crystalline GaN light-emitting diodes on amorphous glass substrates. Nature Photonics, 2011, 5, 763-769.	15.6	156
27	Direct Growth of Semiconducting Single-Walled Carbon Nanotube Array. Journal of the American Chemical Society, 2009, 131, 14642-14643.	6.6	143
28	High-performance graphene-quantum-dot photodetectors. Scientific Reports, 2014, 4, 5603.	1.6	123
29	Engineering of efficiency limiting free carriers and an interfacial energy barrier for an enhancing piezoelectric generation. Energy and Environmental Science, 2013, 6, 97-104.	15.6	119
30	Thermodynamically Stable Synthesis of Largeâ€Scale and Highly Crystalline Transition Metal Dichalcogenide Monolayers and their Unipolar nâ€“n Heterojunction Devices. Advanced Materials, 2017, 29, 1702206.	11.1	116
31	Synthesis of uniformly distributed carbon nanotubes on a large area of Si substrates by thermal chemical vapor deposition. Applied Physics Letters, 1999, 75, 1721-1723.	1.5	115
32	Cap Formation Engineering: From Opened C₆₀ to Single-Walled Carbon Nanotubes. Nano Letters, 2010, 10, 3343-3349.	4.5	115
33	Fabrication and characterization of gated field emitter arrays with self-aligned carbon nanotubes grown by chemical vapor deposition. Applied Physics Letters, 2002, 81, 2070-2072.	1.5	103
34	Heterogeneous stacking of nanodot monolayers by dry pick-and-place transfer and its applications in quantum dot light-emitting diodes. Nature Communications, 2013, 4, 2637.	5.8	99
35	Recent Progress in Porous Graphene and Reduced Graphene Oxideâ€Based Nanomaterials for Electrochemical Energy Storage Devices. Advanced Materials Interfaces, 2018, 5, 1701212.	1.9	95
36	Design and evaluation of novel Zn doped mesoporous TiO2 based anode material for advanced lithium ion batteries. Journal of Materials Chemistry, 2012, 22, 17625.	6.7	90

#	Article	IF	Citations
37	Highly Monodispersed PbS Quantum Dots for Outstanding Cascaded-Junction Solar Cells. ACS Energy Letters, 2016, 1, 834-839.	8.8	90
38	Phosphorus Regulated Cobalt Oxide@Nitrogenâ€Doped Carbon Nanowires for Flexible Quasiâ€Solidâ€State Supercapacitors. Small, 2020, 16, e1906458.	5.2	90
39	Smart textile lighting/display system with multifunctional fibre devices for large scale smart home and IoT applications. Nature Communications, 2022, 13, 814.	5.8	80
40	High Performance PbS Quantum Dot/Graphene Hybrid Solar Cell with Efficient Charge Extraction. ACS Applied Materials & Interfaces, 2016, 8, 13902-13908.	4.0	72
41	Hierarchically assembled tubular shell-core-shell heterostructure of hybrid transition metal chalcogenides for high-performance supercapacitors with ultrahigh cyclability. Nano Energy, 2017, 37, 15-23.	8.2	72
42	Highly stable 3D porous heterostructures with hierarchically-coordinated octahedral transition metals for enhanced performance supercapacitors. Nano Energy, 2017, 39, 337-345.	8.2	72
43	Growth of carbon nanotubes by microwave plasma-enhanced chemical vapor deposition at low temperature. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 1864-1868.	0.9	70
44	Graphene transparent conductive electrodes doped with graphene quantum dots-mixed silver nanowires for highly-flexible organic solar cells. Journal of Alloys and Compounds, 2018, 744, 1-6.	2.8	68
45	In Situ Synthesis and Characterization of Ge Embedded Electrospun Carbon Nanostructures as High Performance Anode Material for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 7022-7029.	4.0	64
46	Low temperature synthesis of carbon nanotubes by microwave plasma-enhanced chemical vapor deposition. Synthetic Metals, 2000, 108, 159-163.	2.1	61
47	Graphene pâ€“n Vertical Tunneling Diodes. ACS Nano, 2013, 7, 5168-5174.	7.3	61
48	Enhanced energy harvesting based on surface morphology engineering of P(VDF-TrFE) film. Nano Energy, 2015, 16, 524-532.	8.2	60
49	Consecutive Junction-Induced Efficient Charge Separation Mechanisms for High-Performance MoS₂/Quantum Dot Phototransistors. ACS Applied Materials & Interfaces, 2018, 10, 38264-38271.	4.0	58
50	In situ diagnosis of chemical species for the growth of carbon nanotubes in microwave plasma-enhanced chemical vapor deposition. Diamond and Related Materials, 2002, 11, 59-66.	1.8	56
51	Nanoscale Networked Single-Walled Carbon-Nanotube Electrodes for Transparent Flexible Nanogenerators. Journal of Physical Chemistry C, 2010, 114, 1379-1384.	1.5	56
52	Rapid-thermal-annealing surface treatment for restoring the intrinsic properties of graphene field-effect transistors. Nanotechnology, 2013, 24, 405301.	1.3	56
53	Graphene/Siâ€Quantumâ€Dot Heterojunction Diodes Showing High Photosensitivity Compatible with Quantum Confinement Effect. Advanced Materials, 2015, 27, 2614-2620.	11.1	56
54	Lyotropic Liquidâ€Crystalline Solutions of Highâ€Concentration Dispersions of Singleâ€Walled Carbon Nanotubes with Conjugated Polymers. Small, 2009, 5, 1019-1024.	5.2	55

#	Article	IF	Citations
55	Resilient High Catalytic Performance of Platinum Nanocatalysts with Porous Graphene Envelope. ACS Nano, 2015, 9, 5947-5957.	7.3	55
56	A pseudo-capacitive chalcogenide-based electrode with dense 1-dimensional nanoarrays for enhanced energy density in asymmetric supercapacitors. Journal of Materials Chemistry A, 2016, 4, 10084-10090.	5.2	55
57	Direct Epitaxial Synthesis of Selective Two-Dimensional Lateral Heterostructures. ACS Nano, 2019, 13, 13047-13055.	7.3	52
58	Charge transport mechanisms in inkjet-printed thin-film transistors based on two-dimensional materials. Nature Electronics, 2021, 4, 893-905.	13.1	52
59	Control of naturally coupled piezoelectric and photovoltaic properties for multi-type energy scavengers. Energy and Environmental Science, 2011, 4, 4607.	15.6	51
60	Si-quantum-dot heterojunction solar cells with 16.2% efficiency achieved by employing doped-graphene transparent conductive electrodes. Nano Energy, 2018, 43, 124-129.	8.2	48
61	Inkjet Printed Circuits with 2D Semiconductor Inks for Highâ€Performance Electronics. Advanced Electronic Materials, 2021, 7, 2100112.	2.6	46
62	Surface functionalization-induced photoresponse characteristics of monolayer MoS₂ for fast flexible photodetectors. Nanoscale, 2019, 11, 4726-4734.	2.8	44
63	Piezoelectric touch-sensitive flexible hybrid energy harvesting nanoarchitectures. Nanotechnology, 2010, 21, 405503.	1.3	40
64	Multiphoton Absorption Stimulated Metal Chalcogenide Quantum Dot Solar Cells under Ambient and Concentrated Irradiance. Advanced Functional Materials, 2020, 30, 2004563.	7.8	40
65	Graphene/Carbon Nanotube Hybridâ€Based Transparent 2D Optical Array. Advanced Materials, 2011, 23, 3809-3814.	11.1	37
66	Solubility-Dependent NiMoO₄ Nanoarchitectures: Direct Correlation between Rationally Designed Structure and Electrochemical Pseudokinetics. ACS Applied Materials & Interfaces, 2016, 8, 35227-35234.	4.0	37
67	Balancing Charge Carrier Transport in a Quantum Dot Pâ€“N Junction toward Hysteresis-Free High-Performance Solar Cells. ACS Energy Letters, 2018, 3, 1036-1043.	8.8	37
68	Fibre electronics: towards scaled-up manufacturing of integrated e-textile systems. Nanoscale, 2021, 13, 12818-12847.	2.8	37
69	Thermal Conversion of Electronic and Electrical Properties of AuCl₃-Doped Single-Walled Carbon Nanotubes. ACS Nano, 2011, 5, 1353-1359.	7.3	36
70	Carbon nanotube field emitter arrays having an electron beam focusing structure. Applied Physics Letters, 2004, 84, 1022-1024.	1.5	35
71	Double-gated field emitter array with carbon nanotubes grown by chemical vapor deposition. Applied Physics Letters, 2006, 88, 263504.	1.5	35
72	Annealing effects on the characteristics of AuCl3-doped graphene. Journal of Applied Physics, 2013, 113, .	1.1	35

#	Article	IF	Citations
73	Surface energy-mediated construction of anisotropic semiconductor wires with selective crystallographic polarity. Scientific Reports, 2014, 4, 5680.	1.6	35
74	Enhanced Ferroelectric Property of P(VDFâ€TrFEâ€CTFE) Film Using Roomâ€Temperature Crystallization for Highâ€Performance Ferroelectric Device Applications. Advanced Electronic Materials, 2016, 2, 1600225.	2.6	34
75	Hygroscopic Effects on AuCl₃-Doped Carbon Nanotubes. Journal of Physical Chemistry C, 2010, 114, 11618-11622.	1.5	33
76	Inorganic-ligand exchanging time effect in PbS quantum dot solar cell. Applied Physics Letters, 2016, 109, .	1.5	33
77	Sustainable hybrid energy harvester based on air stable quantum dot solar cells and triboelectric nanogenerator. Journal of Materials Chemistry A, 2018, 6, 12440-12446.	5.2	33
78	Energy transfer from an individual silica nanoparticle to graphene quantum dots and resulting enhancement of photodetector responsivity. Scientific Reports, 2016, 6, 27145.	1.6	32
79	Enhancement of efficiency in graphene/porous silicon solar cells by co-doping graphene with gold nanoparticles and bis(trifluoromethanesulfonyl)-amide. Journal of Materials Chemistry C, 2017, 5, 9005-9011.	2.7	32
80	Technology progress on quantum dot light-emitting diodes for next-generation displays. Nanoscale Horizons, 2021, 6, 68-77.	4.1	32
81	A low temperature process for phosphorous doped ZnO nanorods via a combination of hydrothermal and spin-on dopant methods. Nanoscale, 2014, 6, 2046-2051.	2.8	31
82	Charge Transport Modulation of a Flexible Quantum Dot Solar Cell Using a Piezoelectric Effect. Advanced Energy Materials, 2018, 8, 1700809.	10.2	30
83	Design of a Polymerâ€“Carbon Nanohybrid Junction by Interface Modeling for Efficient Printed Transistors. ACS Nano, 2012, 6, 662-670.	7.3	29
84	Enhanced charge carrier transport properties in colloidal quantum dot solar cells via organic and inorganic hybrid surface passivation. Journal of Materials Chemistry A, 2016, 4, 18769-18775.	5.2	29
85	Electrically focus-tuneable ultrathin lens for high-resolution square subpixels. Light: Science and Applications, 2020, 9, 98.	7.7	29
86	Grow Single-Walled Carbon Nanotubes Cross-Bar in One Batch. Journal of Physical Chemistry C, 2009, 113, 5341-5344.	1.5	27
87	Vertical Alignment of Carbon Nanotubes Using the Magneto-Evaporation Method. Journal of the American Chemical Society, 2009, 131, 742-748.	6.6	27
88	Size-dependent radiative decay processes in graphene quantum dots. Applied Physics Letters, 2012, 101, .	1.5	27
89	Graphene synthesis by C implantation into Cu foils. Carbon, 2014, 66, 267-271.	5.4	27
90	Quantum Dots Based Photocatalytic Hydrogen Evolution. Israel Journal of Chemistry, 2019, 59, 762-773.	1.0	27

#	Article	IF	Citations
91	Thin film transistors using preferentially grown semiconducting single-walled carbon nanotube networks by water-assisted plasma-enhanced chemical vapor deposition. Nanotechnology, 2009, 20, 295201.	1.3	25
92	Optical Arrays: Graphene/Carbon Nanotube Hybrid-Based Transparent 2D Optical Array (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	11.1	25
93	Use of AuCl3-doped graphene as a protecting layer for enhancing the stabilities of inverted perovskite solar cells. Applied Surface Science, 2018, 455, 1131-1136.	3.1	25
94	Growth characteristics of carbon nanotubes using platinum catalyst by plasma enhanced chemical vapor deposition. Diamond and Related Materials, 2003, 12, 878-883.	1.8	24
95	Optimization of Electron Beam Focusing for Gated Carbon Nanotube Field Emitter Arrays. IEEE Transactions on Electron Devices, 2005, 52, 2584-2590.	1.6	24
96	Ag-nanowires-doped graphene/Si Schottky-junction solar cells encapsulated with another graphene layer. Current Applied Physics, 2017, 17, 1136-1141.	1.1	23
97	Red green blue emissive lead sulfide quantum dots: heterogeneous synthesis and applications. Journal of Materials Chemistry C, 2017, 5, 3692-3698.	2.7	23
98	Waterproof Flexible InP@ZnSeS Quantum Dot Lightâ€Emitting Diode. Advanced Optical Materials, 2020, 8, 1901362.	3.6	23
99	Effect of Al and catalyst thicknesses on the growth of carbon nanotubes and application to gated field emitter arrays. Chemical Physics Letters, 2004, 400, 139-144.	1.2	22
100	Intrinsic high-frequency characteristics of graphene layers. New Journal of Physics, 2010, 12, 113031.	1.2	22
101	Synergistic Effects of a Multifunctional Graphene Based Interlayer on Electrochemical Behavior and Structural Stability. ACS Applied Materials & Interfaces, 2016, 8, 17651-17658.	4.0	22
102	Effect of layer number and metal-chloride dopant on multiple layers of graphene/porous Si solar cells. Journal of Applied Physics, 2018, 123, 123101.	1.1	22
103	Effects of rapid thermal annealing on the optical properties of 1.3 Î¼m InGaAlAs multiquantum wells grown by digital-alloy molecular-beam epitaxy. Applied Physics Letters, 2002, 80, 4650-4652.	1.5	21
104	High-Performance n-i-p-Type Perovskite Photodetectors Employing Graphene-Transparent Conductive Electrodes N-Type Doped with Amine Group Molecules. ACS Sustainable Chemistry and Engineering, 2019, 7, 734-739.	3.2	21
105	Swelling behavior of thermosensitiveN-isopropylacrylamide-ethylN-acryloylglycine submicron-sized copolymer gel particles. Journal of Applied Polymer Science, 1998, 69, 799-806.	1.3	20
106	Enhancement of efficiency and long-term stability in graphene/Si-quantum-dot heterojunction photodetectors by employing bis(trifluoromethanesulfonyl)-amide as a dopant for graphene. Journal of Materials Chemistry C, 2017, 5, 12737-12743.	2.7	20
107	Chemically encoded self-organized quantum chain supracrystals with exceptional charge and ion transport properties. Nano Energy, 2019, 62, 764-771.	8.2	20
108	Light-induced negative differential resistance in graphene/Si-quantum-dot tunneling diodes. Scientific Reports, 2016, 6, 30669.	1.6	19

#	Article	IF	Citations
109	Precise and selective sensing of DNA-DNA hybridization by graphene/Si-nanowires diode-type biosensors. Scientific Reports, 2016, 6, 31984.	1.6	19
110	Chalcogenide solution-mediated activation protocol for scalable and ultrafast synthesis of single-crystalline 1-D copper sulfide for supercapacitors. Journal of Materials Chemistry A, 2019, 7, 2529-2535.	5.2	19
111	Controlling Performance of Organicâ€“Inorganic Hybrid Perovskite Triboelectric Nanogenerators via Chemical Composition Modulation and Electric Fieldâ€Induced Ion Migration. Advanced Energy Materials, 2020, 10, 2002470.	10.2	19
112	Nano-to-Microporous Networks via Inkjet Printing of ZnO Nanoparticles/Graphene Hybrid for Ultraviolet Photodetectors. ACS Applied Nano Materials, 2020, 3, 4454-4464.	2.4	19
113	Modelling charge transport and electro-optical characteristics of quantum dot light-emitting diodes. Npj Computational Materials, 2021, 7, .	3.5	19
114	Sn/SnOx-loaded uniform-sized hollow carbon spheres on graphene nanosheets as an anode for lithium-ion batteries. Journal of Alloys and Compounds, 2018, 736, 42-50.	2.8	18
115	Modeling Electrical Percolation to optimize the Electromechanical Properties of CNT/Polymer Composites in Highly Stretchable Fiber Strain Sensors. Scientific Reports, 2019, 9, 20376.	1.6	18
116	Molecular Beam Epitaxial Growth of High-Quality InP/InGaAs/InP Heterostructure with Polycrystalline GaAs and GaP Decomposition Sources. Japanese Journal of Applied Physics, 2000, 39, L347-L350.	0.8	16
117	Toward Controlled Electrical Stimulation for Wound Healing Based on a Precision Layered Skin Model. ACS Applied Bio Materials, 2020, 3, 8901-8910.	2.3	16
118	Cyclic production of biocompatible few-layer graphene ink with in-line shear-mixing for inkjet-printed electrodes and Li-ion energy storage. Npj 2D Materials and Applications, 2022, 6, .	3.9	15
119	ZnO nanostructures with controlled morphologies on a glass substrate. Nanotechnology, 2010, 21, 265603.	1.3	14
120	Selective formation of GaN-based nanorod heterostructures on soda-lime glass substrates by a local heating method. Nanotechnology, 2011, 22, 205602.	1.3	14
121	Emerging Applications of Liquid Crystals Based on Nanotechnology. Materials, 2014, 7, 2044-2061.	1.3	13
122	Tunable threshold voltage of an n-type Si nanowire ferroelectric-gate field effect transistor for high-performance nonvolatile memory applications. Nanotechnology, 2014, 25, 205201.	1.3	13
123	Highly-flexible perovskite photodiodes employing doped multilayer-graphene transparent conductive electrodes. Nanotechnology, 2018, 29, 425203.	1.3	13
124	Synergistic effects of engineered spinel hetero-metallic cobaltites on electrochemical pseudo-capacitive behaviors. Journal of Materials Chemistry A, 2018, 6, 15033-15039.	5.2	13
125	Perspectives on Nanotechnology for RF and Terahertz Electronics. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 2709-2718.	2.9	12
126	Synergistic incorporation of hybrid heterobimetalâ€“nitrogen atoms into carbon structures for superior oxygen electroreduction performance. Catalysis Science and Technology, 2016, 6, 2085-2091.	2.1	12

#	Article	IF	Citations
127	Synthesis of hybrid multiwall carbon nanotubes and their enhanced field emission properties. Chemical Physics Letters, 2004, 396, 6-9.	1.2	11
128	Field effect transistors and phototransistors based upon p-type solution-processed PbS nanowires. Nanotechnology, 2018, 29, 075202.	1.3	11
129	Biomass-Derived Nickel Phosphide Nanoparticles as a Robust Catalyst for Hydrogen Production by Catalytic Decomposition of C₂H₂ or Dry Reforming of CH₄. ACS Applied Energy Materials, 2019, 2, 8649-8658.	2.5	11
130	Programmable ZnO nanowire transistors using switchable polarization of ferroelectric liquid crystal. Applied Physics Letters, 2013, 102, .	1.5	10
131	Field emission and growth characteristics of carbon nanotubes with optical emission spectroscopy analysis in C[sub 3]H[sub 4] and CO deposition systems. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 1720.	1.6	9
132	A High-Density Array of Size-Controlled Silicon Nanodots in a Silicon Oxide Nanowire by Electron-Stimulated Oxygen Expulsion. Nano Letters, 2009, 9, 1780-1786.	4.5	9
133	Metal-Insulator Phase Transition in Quasi-One-Dimensional VO₂Structures. Journal of Nanomaterials, 2015, 2015, 1-15.	1.5	9
134	Annealing of InGaAlAs digital alloy studied with scanning-tunneling microscopy and filled-states topography. Applied Physics Letters, 2003, 82, 1191-1193.	1.5	8
135	Field-emission characteristics of carbon nanotube paste layers. Journal of Applied Physics, 2005, 98, 084313.	1.1	8
136	Selective Formation of Carbon Nanotubes and Its Application to Field-Emitter Arrays. IEEE Electron Device Letters, 2009, 30, 709-711.	2.2	8
137	Observation of orientation-dependent photovoltaic behaviors in aligned organic nanowires. Applied Physics Letters, 2013, 103, .	1.5	8
138	Carbon out-diffusion mechanism for direct graphene growth on a silicon surface. Acta Materialia, 2015, 96, 18-23.	3.8	8
139	Hybrid Passivation for Foldable Indium Gallium Zinc Oxide Thinâ€Film Transistors Mediated by Lowâ€Temperature and Lowâ€Damage Paryleneâ€C/Atomic Layer Depositionâ€AlO_x Coating. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900832.	0.8	8
140	Coexistence of Contact Electrification and Dynamic pâ€“n Junction Modulation Effects in Triboelectrification. ACS Applied Materials & Interfaces, 2022, 14, 30410-30419.	4.0	8
141	Fabrication of Surface Plasmonâ€Coupled Si Nanodots in Auâ€Embedded Silicon Oxide Nanowires. Advanced Materials, 2010, 22, 2421-2425.	11.1	7
142	Nearly Perfect Polycrystalline, Large-Grained Silicon Arrays Formed at Low-Temperature Ambient by Local Pyrolysis. Crystal Growth and Design, 2012, 12, 2472-2477.	1.4	7
143	Interplay between temperature effects and surface recombination process in UV photoresponse of ZnO nanowires. Applied Surface Science, 2015, 324, 512-516.	3.1	7
144	Highly Stable and Scalable Blue QDâ€LED via an Evaporated TiO₂ Thin Film as an Electron Transport Layer. Advanced Optical Materials, 2020, 8, 2001172.	3.6	7

#	Article	IF	Citations
145	Synthesis of Highly Crystalline Multiwalled Carbon Nanotubes by Thermal Chemical Vapor Deposition Using Buffer Gases. Japanese Journal of Applied Physics, 2004, 43, 3631-3635.	0.8	6
146	Low-Temperature Fabrication of Zinc Oxide Micropatterns Using Selective Electroless Deposition. Electrochemical and Solid-State Letters, 2005, 8, H75.	2.2	6
147	Preparation of uniformly dispersed iron-acetate nanoparticles using freeze-drying method for the growth of carbon nanotubes. Diamond and Related Materials, 2005, 14, 810-814.	1.8	6
148	Selective Electroless Deposition Using Photoinduced Oxidation of Sn(II) Compounds on Surface-Modified Polyimide Layers. Electrochemical and Solid-State Letters, 2006, 9, H118.	2.2	6
149	Charge conversion effects of carbon nanotube network transistors by temperature for Al2O3 gate dielectric formation. Applied Physics Letters, 2010, 97, 032117.	1.5	6
150	Ultrafast and low temperature laser annealing for crystalline TiO2 nanostructures patterned by electro-hydrodynamic lithography. Applied Physics Letters, 2013, 103, .	1.5	6
151	High Performance Electrocatalysts Based on Pt Nanoarchitecture for Fuel Cell Applications. Journal of Nanomaterials, 2015, 2015, 1-20.	1.5	6
152	Si heterojunction solar cells employing graphene transparent conductive electrodes co-doped with gold chlorides and silver nanowires. Journal of Alloys and Compounds, 2017, 726, 1047-1052.	2.8	6
153	Flexible Solar Cells: Charge Transport Modulation of a Flexible Quantum Dot Solar Cell Using a Piezoelectric Effect (Adv. Energy Mater. 3/2018). Advanced Energy Materials, 2018, 8, 1870012.	10.2	6
154	Growth of quantum dot coated core-shell anisotropic nanowires for improved thermal and electronic transport. Applied Physics Letters, 2019, 114, 243104.	1.5	6
155	Lattice marginal reconstruction-enabled high ambient-tolerance perovskite quantum dot phototransistors. Journal of Materials Chemistry C, 2020, 8, 16001-16009.	2.7	6
156	Formation of 10-Î¼m-level patterned organic thin film using microthermal evaporation. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 021016.	0.6	5
157	Air stable eco-friendly quantum dots with a light-mediated photoinitiator for an inkjet printed flexible light emitting diode. Journal of Materials Chemistry C, 2022, 10, 10708-10718.	2.7	5
158	In-situ monitoring of AuCl3-doping and -dedoping behaviors in graphene. Journal of the Korean Physical Society, 2014, 64, 1327-1330.	0.3	4
159	Strong enhancement of emission efficiency in GaN light-emitting diodes by plasmon-coupled light amplification of graphene. Nanotechnology, 2018, 29, 055201.	1.3	4
160	Inorganic Quantum Dot Materials and their Applications in â€œOrganicâ€•Hybrid Solar Cells. Israel Journal of Chemistry, 2019, 59, 720-728.	1.0	4
161	Barium titanate-enhanced hexagonal boron nitride inks for printable high-performance dielectrics. Nanotechnology, 2022, 33, 215704.	1.3	4
162	Inkjetâ€printed multiâ€color arrays based on ecoâ€friendly quantum dot light emitting diodes with tailored hole transport layer. Journal of the Society for Information Display, 2022, 30, 748-757.	0.8	4

#	Article	IF	Citations
163	Uniform growth of high-quality 2-in diameter In0.53Ga0.47As/In0.52Al0.48As/InP and In0.2Ga0.8As/GaAs/AlGaAs multi-quantum well wafers by MBE with GaP and GaAs decomposition sources. Journal of Crystal Growth, 2002, 237-239, 1504-1509.	0.7	3
164	Clear manifestation of phonon anomaly in single-layer graphene by chemical p-type doping. Journal Physics D: Applied Physics, 2015, 48, 015304.	1.3	3
165	36â€3: Novel and Simple Patterning process of Quantum Dots via Transfer Printing for Active Matrix QDâ€LED. Digest of Technical Papers SID International Symposium, 2020, 51, 512-515.	0.1	3
166	Modification of electrical and piezoelectric properties of ZnO nanorods based on arsenic incorporation via low temperature spin-on-dopant method. Journal of the Korean Physical Society, 2015, 67, 930-935.	0.3	2
167	Robust In-Zn-O Thin-Film Transistors with a Bilayer Heterostructure Design and a Low-Temperature Fabrication Process Using Vacuum and Solution Deposited Layers. ACS Omega, 2020, 5, 21593-21601.	1.6	2
168	Dipole-assisted carrier transport in bis(trifluoromethane) sulfonamide-treated O-ReS2 field-effect transistor. Nano Research, 2021, 14, 2207-2214.	5.8	2
169	Color controllable smart white lighting based on various device architectures of electrically driven quantum-dot light-emitting diodes. Journal of Materials Chemistry C, 2022, 10, 10728-10741.	2.7	2
170	21.1: Invited Paper: FullColor Quantum Dot Display. Digest of Technical Papers SID International Symposium, 2010, 41, 297-300.	0.1	1
171	The Perspective of Nanotechnology and Its Convergence with Future Information Technology. ECS Transactions, 2011, 35, 5-11.	0.3	1
172	Fabrication of vertically aligned ZnO nanocone arrays by wet chemical etching on various substrates and enhanced photoluminescence emission from nanocone arrays compared to nanowire arrays. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2662-2667.	0.8	1
173	Development of carbon nanotube field emitters in the backlight for liquid crystal display. , 2009, , .		0
174	Graphene composite using easy soluble expanded graphite: Synthesis and emission parameters. , 2009, , .		0
175	Band-level control for high-performance colloidal quantum-dot LED. , 2010, , .		0