Takhee Lee

List of Publications by Year
in descending order

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363	16,518	14655	20358
papers	citations	66 h-index	116 g-index

384	384	384	18226
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular-Scale Electronics: From Concept to Function. Chemical Reviews, 2016, 116, 4318-4440.	47.7	1,014
2	Observation of molecular orbital gating. Nature, 2009, 462, 1039-1043.	27.8	712
3	Mechanism of electron conduction in self-assembled alkanethiol monolayer devices. Physical Review B, 2003, 68, .	3.2	566
4	Organic Resistive Memory Devices: Performance Enhancement, Integration, and Advanced Architectures. Advanced Functional Materials, 2011, 21, 2806-2829.	14.9	432
5	Single Molecule Electronic Devices. Advanced Materials, 2011, 23, 1583-1608.	21.0	426
6	Inelastic Electron Tunneling Spectroscopy of an Alkanedithiol Self-Assembled Monolayer. Nano Letters, 2004, 4, 643-646.	9.1	364
7	The application of graphene as electrodes in electrical and optical devices. Nanotechnology, 2012, 23, 112001.	2.6	329
8	Evolution of nanomorphology and anisotropic conductivity in solvent-modified PEDOT:PSS films for polymeric anodes of polymer solar cells. Journal of Materials Chemistry, 2009, 19, 9045.	6.7	282
9	Large-scale patterned multi-layer graphene films as transparent conducting electrodes for GaN light-emitting diodes. Nanotechnology, 2010, 21, 175201.	2.6	259
10	Tunable Electronic Transport Characteristics of Surface-Architecture-Controlled ZnO Nanowire Field Effect Transistors. Nano Letters, 2008, 8, 950-956.	9.1	235
11	Threeâ€Dimensional Integration of Organic Resistive Memory Devices. Advanced Materials, 2010, 22, 5048-5052.	21.0	213
12	Mechanically Controllable Break Junctions for Molecular Electronics. Advanced Materials, 2013, 25, 4845-4867.	21.0	192
13	Electric Stress-Induced Threshold Voltage Instability of Multilayer MoS₂ Field Effect Transistors. ACS Nano, 2013, 7, 7751-7758.	14.6	190
14	Recent Progress in Inkjetâ€Printed Thinâ€Film Transistors. Advanced Science, 2019, 6, 1801445.	11.2	187
15	Electrical and Optical Characterization of MoS₂ with Sulfur Vacancy Passivation by Treatment with Alkanethiol Molecules. ACS Nano, 2015, 9, 8044-8053.	14.6	185
16	Flexible Multilevel Resistive Memory with Controlled Charge Trap B- and N-Doped Carbon Nanotubes. Nano Letters, 2012, 12, 2217-2221.	9.1	177
17	Electronic skins for soft, compact, reversible assembly of wirelessly activated fully soft robots. Science Robotics, 2018, 3, .	17.6	176
18	Rewritable Switching of One Diodeâ€“One Resistor Nonvolatile Organic Memory Devices. Advanced Materials, 2010, 22, 1228-1232.	21.0	174

#	Article	IF	Citations
19	A New Approach for Molecular Electronic Junctions with a Multilayer Graphene Electrode. Advanced Materials, 2011, 23, 755-760.	21.0	171
20	High-performance compliant thermoelectric generators with magnetically self-assembled soft heat conductors for self-powered wearable electronics. Nature Communications, 2020, 11, 5948.	12.8	169
21	Flexible molecular-scale electronic devices. Nature Nanotechnology, 2012, 7, 438-442.	31.5	165
22	Stable Switching Characteristics of Organic Nonvolatile Memory on a Bent Flexible Substrate. Advanced Materials, 2010, 22, 3071-3075.	21.0	164
23	Oxygen environmental and passivation effects on molybdenum disulfide field effect transistors. Nanotechnology, 2013, 24, 095202.	2.6	160
24	All-Inkjet-Printed Organic Thin-Film Transistor Inverter on Flexible Plastic Substrate. IEEE Electron Device Letters, 2011, 32, 1134-1136.	3.9	156
25	Direct Observation of Ag Filamentary Paths in Organic Resistive Memory Devices. Advanced Functional Materials, 2011, 21, 3976-3981.	14.9	149
26	Electron tunnelling in self-assembled monolayers. Reports on Progress in Physics, 2005, 68, 523-544.	20.1	136
27	High-Yield Functional Molecular Electronic Devices. ACS Nano, 2017, 11, 6511-6548.	14.6	136
28	Flexible Organic Memory Devices with Multilayer Graphene Electrodes. ACS Nano, 2011, 5, 5995-6000.	14.6	131
29	Biogenic formation of photoactive arsenic-sulfide nanotubes by Shewanella sp. strain HN-41. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20410-20415.	7.1	127
30	Enhanced Charge Injection in Pentacene Fieldâ€Effect Transistors with Graphene Electrodes. Advanced Materials, 2011, 23, 100-105.	21.0	124
31	Comparison of Electronic Transport Characterization Methods for Alkanethiol Self-Assembled Monolayersâ€. Journal of Physical Chemistry B, 2004, 108, 8742-8750.	2.6	122
32	Flexible organic solar cells composed of P3HT:PCBM using chemically doped graphene electrodes. Nanotechnology, 2012, 23, 344013.	2.6	119
33	Photoelectron Spectroscopic Imaging and Device Applications of Large-Area Patternable Single-Layer MoS₂ Synthesized by Chemical Vapor Deposition. ACS Nano, 2014, 8, 4961-4968.	14.6	117
34	Conductance and Vibrational States of Single-Molecule Junctions Controlled by Mechanical Stretching and Material Variation. Physical Review Letters, 2011, 106, 196804.	7.8	116
35	Efficient bulk-heterojunction photovoltaic cells with transparent multi-layer graphene electrodes. Organic Electronics, 2010, 11, 1864-1869.	2.6	113
36	Statistical analysis of electronic properties of alkanethiols in metalâ€“moleculeâ€“metal junctions. Nanotechnology, 2007, 18, 315204.	2.6	111

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37	Elastic and Inelastic Electron Tunneling in Alkane Self-Assembled Monolayers. Journal of Physical Chemistry B, 2004, 108, 18398-18407.	2.6	108
38	Organic resistive nonvolatile memory materials. MRS Bulletin, 2012, 37, 144-149.	3.5	104
39	Three-Terminal Single-Molecule Junctions Formed by Mechanically Controllable Break Junctions with Side Gating. Nano Letters, 2013, 13, 2809-2813.	9.1	103
40	Enhancement of photodetection characteristics of MoS₂field effect transistors using surface treatment with copper phthalocyanine. Nanoscale, 2015, 7, 18780-18788.	5.6	101
41	One Transistorâ€“One Resistor Devices for Polymer Nonâ€Volatile Memory Applications. Advanced Materials, 2009, 21, 2497-2500.	21.0	100
42	Irradiation Effects of High-Energy Proton Beams on MoS₂ Field Effect Transistors. ACS Nano, 2014, 8, 2774-2781.	14.6	100
43	Highâ€Performance Solutionâ€Processed Organoâ€Metal Halide Perovskite Unipolar Resistive Memory Devices in a Crossâ€Bar Array Structure. Advanced Materials, 2019, 31, e1804841.	21.0	100
44	Morphology- and Orientation-Controlled Gallium Arsenide Nanowires on Silicon Substrates. Nano Letters, 2007, 7, 39-44.	9.1	99
45	Substrate thermal conductivity effect on heat dissipation and lifetime improvement of organic light-emitting diodes. Applied Physics Letters, 2009, 94, .	3.3	97
46	Inkjet-printed stretchable silver electrode on wave structured elastomeric substrate. Applied Physics Letters, 2011, 98, .	3.3	97
47	Novel Nonvolatile Memory with Multibit Storage Based on a ZnO Nanowire Transistor. Nano Letters, 2010, 10, 4316-4320.	9.1	96
48	Intermolecular Chain-to-Chain Tunneling in Metalâ^'Alkanethiolâ^'Metal Junctions. Journal of the American Chemical Society, 2007, 129, 3806-3807.	13.7	94
49	Unipolar nonvolatile memory devices with composites of poly(9-vinylcarbazole) and titanium dioxide nanoparticles. Organic Electronics, 2009, 10, 473-477.	2.6	94
50	Passivation effects on ZnO nanowire field effect transistors under oxygen, ambient, and vacuum environments. Applied Physics Letters, 2008, 92, 263109.	3.3	93
51	Structural and Electrical Characterization of a Block Copolymerâ€Based Unipolar Nonvolatile Memory Device. Advanced Materials, 2012, 24, 385-390.	21.0	93
52	Tuning of a graphene-electrode work function to enhance the efficiency of organic bulk heterojunction photovoltaic cells with an inverted structure. Applied Physics Letters, 2010, 97, .	3.3	92
53	Piezoelectric Effect on the Electronic Transport Characteristics of ZnO Nanowire Fieldâ€Effect Transistors on Bent Flexible Substrates. Advanced Materials, 2008, 20, 4557-4562.	21.0	88
54	Surface relief gratings on poly(3-hexylthiophene) and fullerene blends for efficient organic solar cells. Applied Physics Letters, 2007, 91, .	3.3	85

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55	Hierarchical Porous Film with Layer-by-Layer Assembly of 2D Copper Nanosheets for Ultimate Electromagnetic Interference Shielding. ACS Nano, 2021, 15, 829-839.	14.6	85
56	Grapheneâ€Conducting Polymer Hybrid Transparent Electrodes for Efficient Organic Optoelectronic Devices. Advanced Functional Materials, 2014, 24, 1847-1856.	14.9	76
57	Enhancement of Field Emission Transport by Molecular Tilt Configuration in Metalâ^'Moleculeâ^'Metal Junctions. Journal of the American Chemical Society, 2009, 131, 5980-5985.	13.7	75
58	Mechanism of Electron Conduction in Self-Assembled Alkanethiol Monolayer Devices. Annals of the New York Academy of Sciences, 2003, 1006, 21-35.	3.8	73
59	Organic nonvolatile memory devices with charge trapping multilayer graphene film. Nanotechnology, 2012, 23, 105202.	2.6	72
60	Flexible Molecularâ€Scale Electronic Devices Composed of Diarylethene Photoswitching Molecules. Advanced Materials, 2014, 26, 3968-3973.	21.0	72
61	P-type CuO and Cu2O transistors derived from a solâ€“gel copper (II) acetate monohydrate precursor. Thin Solid Films, 2016, 600, 157-161.	1.8	72
62	Transparent Large-Area MoS₂ Phototransistors with Inkjet-Printed Components on Flexible Platforms. ACS Nano, 2017, 11, 10273-10280.	14.6	72
63	Recent Advances in Interface Engineering of Transition-Metal Dichalcogenides with Organic Molecules and Polymers. ACS Nano, 2019, 13, 9713-9734.	14.6	72
64	Fabrication of TiO2 nanotubes by using electrodeposited ZnO nanorod template and their application to hybrid solar cells. Electrochimica Acta, 2008, 53, 2560-2566.	5.2	70
65	Enhanced electron mobility in epitaxial (Ba,La)SnO3 films on BaSnO3(001) substrates. Applied Physics Letters, 2016, 108, .	3.3	69
66	Redoxâ€Induced Asymmetric Electrical Characteristics of Ferroceneâ€Alkanethiolate Molecular Devices on Rigid and Flexible Substrates. Advanced Functional Materials, 2014, 24, 2472-2480.	14.9	68
67	Influence of metal-molecule contacts on decay coefficients and specific contact resistances in molecular junctions. Physical Review B, 2007, 76, .	3.2	67
68	Reversible switching characteristics of polyfluorene-derivative single layer film for nonvolatile memory devices. Applied Physics Letters, 2008, 92, .	3.3	66
69	Electrical Properties of Synthesized Large-Area MoS2 Field-Effect Transistors Fabricated with Inkjet-Printed Contacts. ACS Nano, 2016, 10, 2819-2826.	14.6	64
70	Coherent Tunneling Transport in Molecular Junctions. Journal of Physical Chemistry C, 2010, 114, 20431-20435.	3.1	63
71	Tuning of the Electronic Characteristics of ZnO Nanowire Field Effect Transistors by Proton Irradiation. ACS Nano, 2010, 4, 811-818.	14.6	62
72	A robust, gravure-printed, silver nanowire/metal oxide hybrid electrode for high-throughput patterned transparent conductors. Journal of Materials Chemistry C, 2016, 4, 3248-3255.	5.5	60

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73	Enhanced Charge Injection Properties of Organic Fieldâ€Effect Transistor by Molecular Implantation Doping. Advanced Materials, 2019, 31, e1806697.	21.0	60
74	Solutionâ€Processed Reduced Graphene Oxide Films as Electronic Contacts for Molecular Monolayer Junctions. Angewandte Chemie - International Edition, 2012, 51, 108-112.	13.8	59
75	Inkjet-printed stretchable single-walled carbon nanotube electrodes with excellent mechanical properties. Applied Physics Letters, 2014, 104, .	3.3	58
76	Contactâ€Engineered Electrical Properties of MoS₂ Fieldâ€Effect Transistors via Selectively Deposited Thiolâ€Molecules. Advanced Materials, 2018, 30, e1705540.	21.0	56
77	Transient reverse current phenomenon in a p-n heterojunction comprised of poly(3,4-ethylene-dioxythiophene):poly(styrene-sulfonate) and ZnO nanowall. Applied Physics Letters, 2008, 93, .	3.3	55
78	Effects of Metalâ^'Molecule Contact and Molecular Structure on Molecular Electronic Conduction in Nonresonant Tunneling Regime: Alkyl versus Conjugated Molecules. Journal of Physical Chemistry C, 2008, 112, 13010-13016.	3.1	55
79	Radiation hardness of the electrical properties of carbon nanotube network field effect transistors under high-energy proton irradiation. Nanotechnology, 2006, 17, 5675-5680.	2.6	54
80	Flexible Highâ€Performance Allâ€Inkjetâ€Printed Inverters: Organoâ€Compatible and Stable Interface Engineering. Advanced Materials, 2013, 25, 4773-4777.	21.0	54
81	Trap-mediated electronic transport properties of gate-tunable pentacene/MoS2 p-n heterojunction diodes. Scientific Reports, 2016, 6, 36775.	3.3	54
82	Hydrogen-Induced Morphotropic Phase Transformation of Single-Crystalline Vanadium Dioxide Nanobeams. Nano Letters, 2013, 13, 1822-1828.	9.1	53
83	Enhancement of the light output of GaN-based ultraviolet light-emitting diodes by a one-dimensional nanopatterning process. Applied Physics Letters, 2006, 88, 103505.	3.3	52
84	Realization of highly reproducible ZnO nanowire field effect transistors with n-channel depletion and enhancement modes. Applied Physics Letters, 2007, 90, 243103.	3.3	52
85	Enhancement in the photodetection of ZnO nanowires by introducing surface-roughness-induced traps. Nanotechnology, 2011, 22, 205204.	2.6	52
86	Thermal stability of multilayer graphene films synthesized by chemical vapor deposition and stained by metallic impurities. Nanotechnology, 2012, 23, 075702.	2.6	52
87	Low frequency noise characterizations of ZnO nanowire field effect transistors. Journal of Applied Physics, 2007, 101, 044313.	2.5	51
88	Enhancement of the light output of GaN-based light-emitting diodes with surface-patterned ITO electrodes by maskless wet-etching. Solid-State Electronics, 2007, 51, 793-796.	1.4	51
89	Electrical transport characteristics through molecular layers. Journal of Materials Chemistry, 2011, 21, 18117.	6.7	48
90	Au nanoparticle-decorated graphene electrodes for GaN-based optoelectronic devices. Applied Physics Letters, 2012, 101, .	3.3	48

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91	Electrical properties of ZnO nanowire field effect transistors by surface passivation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 313-314, 378-382.	4.7	47
92	Resistive switching characteristics of polymer non-volatile memory devices in a scalable via-hole structure. Nanotechnology, 2009, 20, 025201.	2.6	47
93	The effect of excimer laser annealing on ZnO nanowires and their field effect transistors. Nanotechnology, 2009, 20, 095203.	2.6	47
94	Investigation of the Transition Voltage Spectra of Molecular Junctions Considering Frontier Molecular Orbitals and the Asymmetric Coupling Effect. Journal of Physical Chemistry C, 2011, 115, 17979-17985.	3.1	47
95	Influence of surface structure on the phonon-assisted emission process in the ZnO nanowires grown on homoepitaxial films. Applied Physics Letters, 2009, 94, .	3.3	46
96	Diameter-Engineered SnO₂ Nanowires over Contact-Printed Gold Nanodots Using Size-Controlled Carbon Nanopost Array Stamps. ACS Nano, 2010, 4, 1829-1836.	14.6	46
97	Graphene/Pentacene Barristor with Ion-Gel Gate Dielectric: Flexible Ambipolar Transistor with High Mobility and On/Off Ratio. ACS Nano, 2015, 9, 7515-7522.	14.6	46
98	Electrical Properties of Surface-Tailored ZnO Nanowire Field-Effect Transistors. IEEE Transactions on Electron Devices, 2008, 55, 3020-3029.	3.0	44
99	Layer-by-Layer Structural Identification of 2D Ruddlesdenâ€“Popper Hybrid Lead Iodide Perovskites by Solid-State NMR Spectroscopy. Chemistry of Materials, 2021, 33, 370-377.	6.7	44
100	Electronic transport in self-assembled alkanethiol monolayers. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 117-125.	2.7	43
101	Single-Atom Switches and Single-Atom Gaps Using Stretched Metal Nanowires. ACS Nano, 2016, 10, 9695-9702.	14.6	43
102	Two-Dimensional Thickness-Dependent Avalanche Breakdown Phenomena in MoS₂ Field-Effect Transistors under High Electric Fields. ACS Nano, 2018, 12, 7109-7116.	14.6	43
103	Intrinsic Optoelectronic Characteristics of MoS₂ Phototransistors via a Fully Transparent van der Waals Heterostructure. ACS Nano, 2019, 13, 9638-9646.	14.6	43
104	Title is missing!. Journal of Nanoparticle Research, 2000, 2, 345-362.	1.9	42
105	Electrical characterization of organic resistive memory with interfacial oxide layers formed by O2 plasma treatment. Applied Physics Letters, 2010, 97, .	3.3	42
106	Noise Characteristics of Charge Tunneling via Localized States in Metalâ^'Moleculeâ^'Metal Junctions. ACS Nano, 2010, 4, 4426-4430.	14.6	42
107	Gate-bias stress-dependent photoconductive characteristics of multi-layer MoS₂ field-effect transistors. Nanotechnology, 2014, 25, 155201.	2.6	42
108	Electrical Characterization of Unipolar Organic Resistive Memory Devices Scaled Down by a Direct Metalâ€Transfer Method. Advanced Materials, 2011, 23, 2104-2107.	21.0	41

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109	Nonvolatile Memory Functionality of ZnO Nanowire Transistors Controlled by Mobile Protons. ACS Nano, 2011, 5, 558-564.	14.6	40
110	Reversible Switching Phenomenon in Diarylethene Molecular Devices with Reduced Graphene Oxide Electrodes on Flexible Substrates. Advanced Functional Materials, 2015, 25, 5918-5923.	14.9	39
111	Vibrational spectra of metal-molecule-metal junctions in electromigrated nanogap electrodes by inelastic electron tunneling. Applied Physics Letters, 2009, 94, 103110.	3.3	38
112	InGaN-Based pâ€“iâ€“n Solar Cells with Graphene Electrodes. Applied Physics Express, 2011, 4, 052302.	2.4	36
113	Graphene Films Show Stable Cell Attachment and Biocompatibility with Electrogenic Primary Cardiac Cells. Molecules and Cells, 2013, 36, 577-582.	2.6	36
114	Fabrication, structural and electrical characterization of VO2 nanowires. Materials Research Bulletin, 2008, 43, 1649-1656.	5.2	34
115	Nanoscale Resistive Switching of a Copperâ€“Carbon-Mixed Layer for Nonvolatile Memory Applications. IEEE Electron Device Letters, 2009, 30, 302-304.	3.9	34
116	One-Step Interface Engineering for All-Inkjet-Printed, All-Organic Components in Transparent, Flexible Transistors and Inverters: Polymer Binding. ACS Applied Materials & Interfaces, 2017, 9, 8819-8829.	8.0	34
117	Investigation of Timeâ€“Dependent Resistive Switching Behaviors of Unipolar Nonvolatile Organic Memory Devices. Advanced Functional Materials, 2018, 28, 1801162.	14.9	34
118	Ultrasensitive Photodetection in MoS₂ Avalanche Phototransistors. Advanced Science, 2021, 8, e2102437.	11.2	34
119	Resistive Switching Characteristics of Solution-Processed Transparent TiO[sub x] for Nonvolatile Memory Application. Journal of the Electrochemical Society, 2010, 157, H1042.	2.9	33
120	Nanotechnology-based flexible electronics. Nanotechnology, 2012, 23, 340201-340201.	2.6	33
121	A self-assembled Ag nanoparticle agglomeration process on graphene for enhanced light output in GaN-based LEDs. Nanotechnology, 2012, 23, 255201.	2.6	33
122	Origin of discrete current fluctuations in a single molecule junction. Nanoscale, 2014, 6, 13396-13401.	5.6	33
123	Structural and electrical characterization of intrinsic n-type In2O3 nanowires. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 313-314, 308-311.	4.7	32
124	Logic inverters composed of controlled depletion-mode and enhancement-mode ZnO nanowire transistors. Applied Physics Letters, 2009, 94, 173118.	3.3	32
125	Effect of PEDOT:PSSâ€“molecule interface on the charge transport characteristics of the large-area molecular electronic junctions. Organic Electronics, 2012, 13, 771-777.	2.6	32
126	Highly Reliable Superhydrophobic Protection for Organic Field-Effect Transistors by Fluoroalkylsilane-Coated TiO₂ Nanoparticles. ACS Nano, 2018, 12, 11062-11069.	14.6	32

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127	Effect of gate bias sweep rate on the electronic properties of ZnO nanowire field-effect transistors under different environments. Applied Physics Letters, 2008, 92, .	3.3	31
128	Controlled assembly of In_2O_3 nanowires on electronic circuits using scanning optical tweezers. Optics Express, 2009, 17, 17491.	3.4	31
129	Random telegraph signals in n-type ZnO nanowire field effect transistors at low temperature. Applied Physics Letters, 2007, 91, .	3.3	30
130	Hybrid Complementary Logic Circuits of Oneâ€Ðimensional Nanomaterials with Adjustment of Operation Voltage. Advanced Materials, 2009, 21, 2156-2160.	21.0	30
131	Contact Resistance of Inkjet-Printed Silver Sourceâ€“Drain Electrodes in Bottom-Contact OTFTs. Journal of Display Technology, 2012, 8, 48-53.	1.2	30
132	Highly Stable Contact Doping in Organic Field Effect Transistors by Dopantâ€Blockade Method. Advanced Functional Materials, 2020, 30, 2000058.	14.9	30
133	Improved photoswitching response times of MoS2 field-effect transistors by stacking p-type copper phthalocyanine layer. Applied Physics Letters, 2016, 109, .	3.3	29
134	Channel-length and gate-bias dependence of contact resistance and mobility for In2O3 nanowire field effect transistors. Journal of Applied Physics, 2007, 102, 084508.	2.5	28
135	Effects of surface roughness on the electrical characteristics of ZnO nanowire field effect transistors. Applied Surface Science, 2008, 254, 7559-7564.	6.1	28
136	Electrical conduction through self-assembled monolayers in molecular junctions: Au/molecules/Au versus Au/molecule/PEDOT:PSS/Au. Thin Solid Films, 2009, 518, 824-828.	1.8	28
137	Shaping the Atomicâ€Scale Geometries of Electrodes to Control Optical and Electrical Performance of Molecular Devices. Small, 2018, 14, e1703815.	10.0	28
138	Effects of channel-length scaling on In2O3 nanowire field effect transistors studied by conducting atomic force microscopy. Applied Physics Letters, 2007, 90, 173106.	3.3	27
139	Electrical properties of ZnO nanowire field effect transistors with varying high-kâ€Al2O3 dielectric thickness. Journal of Applied Physics, 2010, 107, .	2.5	27
140	A study of graphene films synthesized on nickel substrates: existence and origin of small-base-area peaks. Nanotechnology, 2011, 22, 045706.	2.6	27
141	Twistable nonvolatile organic resistive memory devices. Organic Electronics, 2013, 14, 2087-2092.	2.6	27
142	Molecular Orbital Gating Surface-Enhanced Raman Scattering. ACS Nano, 2018, 12, 11229-11235.	14.6	27
143	Integration of multiple electronic components on a microfibre towards an emerging electronic textile platform. Nature Communications, 2022, 13, .	12.8	27
144	Resistive switching characteristics of solution-processed TiOx for next-generation non-volatile memory application; transparency, flexibility, and nano-scale memory feasibility. Microelectronic Engineering, 2011, 88, 1143-1147.	2.4	26

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145	Large scale MoS ₂ nanosheet logic circuits integrated by photolithography on glass. 2D Materials, 2016, 3, 044001.	4.4	26
146	Fabrication of a MoS₂/Graphene Nanoribbon Heterojunction Network for Improved Thermoelectric Properties. Advanced Materials Interfaces, 2019, 6, 1901333.	3.7	26
147	Atomic switches of metallic point contacts by plasmonic heating. Light: Science and Applications, 2019, 8, 34.	16.6	26
148	All-Inkjet-Printed Organic Thin-Film Transistors with Silver Gate, Source/Drain Electrodes. Japanese Journal of Applied Physics, 2011, 50, 03CB05.	1.5	26
149	An ohmic nanocontact to GaAs. Applied Physics Letters, 1999, 74, 2869-2871.	3.3	25
150	Electronic Transport in Molecular Self-Assembled Monolayer Devices. Proceedings of the IEEE, 2005, 93, 1815-1824.	21.3	25
151	High-performance organic charge trap flash memory devices based on ink-jet printed 6,13-bis(triisopropylsilylethynyl) pentacene transistors. Applied Physics Letters, 2010, 96, 213107.	3.3	25
152	Electronic properties associated with conformational changes in azobenzene-derivative molecular junctions. Organic Electronics, 2011, 12, 2144-2150.	2.6	25
153	Highâ€Fidelity Formation of a Molecularâ€Junction Device Using a Thicknessâ€Controlled Bilayer Architecture. Small, 2008, 4, 1399-1405.	10.0	24
154	Transient drain current characteristics of ZnO nanowire field effect transistors. Applied Physics Letters, 2009, 95, 123101.	3.3	24
155	Enhanced characteristics of pentacene field-effect transistors with graphene electrodes and substrate treatments. Applied Physics Letters, 2011, 99, 083306.	3.3	24
156	Near-ultraviolet light-emitting diodes with transparent conducting layer of gold-doped multi-layer graphene. Journal of Applied Physics, 2013, 113, .	2.5	24
157	1/f Noise Scaling Analysis in Unipolar-Type Organic Nanocomposite Resistive Memory. ACS Nano, 2015, 9, 7697-7703.	14.6	24
158	The influence of surface chemical dynamics on electrical and optical properties of ZnO nanowire field effect transistors. Nanotechnology, 2009, 20, 505202.	2.6	23
159	High-Performance Inkjet-Printed Four-Terminal Microelectromechanical Relays and Inverters. Nano Letters, 2015, 15, 3261-3266.	9.1	23
160	Unidirectional Real-Time Photoswitching of Diarylethene Molecular Monolayer Junctions with Multilayer Graphene Electrodes. ACS Applied Materials & Interfaces, 2019, 11, 11645-11653.	8.0	23
161	Effect of metal ions on the switching performance of polyfluorene-based organic non-volatile memory devices. Organic Electronics, 2010, 11, 109-114.	2.6	22
162	Electrical and structural properties of antimony-doped p-type ZnO nanorods with self-corrugated surfaces. Nanotechnology, 2012, 23, 495712.	2.6	22

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163	Characterization of PI:PCBM organic nonvolatile resistive memory devices under thermal stress. Organic Electronics, 2016, 33, 48-54.	2.6	22
164	Removal of Cetyltrimethylammonium Bromide to Enhance the Biocompatibility of Au Nanorods Synthesized by a Modified Seed Mediated Growth Process. Journal of Nanoscience and Nanotechnology, 2008, 8, 4670-4674.	0.9	21
165	A direct metal transfer method for cross-bar type polymer non-volatile memory applications. Nanotechnology, 2008, 19, 405201.	2.6	21
166	Tuning of operation mode of ZnO nanowire field effect transistors by solvent-driven surface treatment. Nanotechnology, 2009, 20, 475702.	2.6	21
167	Templated assembly of metal nanoparticles in nanoimprinted patterns for metal nanowire fabrication. Nanotechnology, 2009, 20, 355302.	2.6	21
168	Origin of multi-level switching and telegraphic noise in organic nanocomposite memory devices. Scientific Reports, 2016, 6, 33967.	3.3	21
169	A statistical method for determining intrinsic electronic transport properties of self-assembled alkanethiol monolayer devices. Applied Physics Letters, 2007, 91, 253116.	3.3	20
170	Intrinsic charge transport of conjugated organic molecules in electromigrated nanogap junctions. Journal of Applied Physics, 2011, 109, 102419.	2.5	20
171	Largeâ€Area Fabrication of Periodic Subâ€15 nmâ€Width Singleâ€Layer Graphene Nanorings. Advanced Materials, 2013, 25, 199-204.	21.0	20
172	The application of orthogonal photolithography to micro-scale organic field effect transistors and complementary inverters on flexible substrate. Applied Physics Letters, 2014, 104, 053301.	3.3	20
173	Catalyst-free bottom-up growth of graphene nanofeatures along with molecular templates on dielectric substrates. Nanoscale, 2016, 8, 17022-17029.	5.6	20
174	An In-Depth Study of Redox-Induced Conformational Changes in Charge Transport Characteristics of a Ferrocene-Alkanethiolate Molecular Electronic Junction: Temperature-Dependent Transition Voltage Spectroscopy Analysis. Journal of Physical Chemistry C, 2016, 120, 3564-3572.	3.1	20
175	Molecular Dopantâ€Dependent Charge Transport in Surfaceâ€Chargeâ€Transferâ€Doped Tungsten Diselenide Field Effect Transistors. Advanced Materials, 2021, 33, e2101598.	21.0	20
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