

Sung-Yool Choi

List of Publications by Year in descending order

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papers

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38720

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173
times ranked

14187
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#	ARTICLE	IF	CITATIONS
1	Switching terahertz waves with gate-controlled active graphene metamaterials. <i>Nature Materials</i> , 2012, 11, 936-941.	13.3	777
2	Graphene Oxide Thin Films for Flexible Nonvolatile Memory Applications. <i>Nano Letters</i> , 2010, 10, 4381-4386.	4.5	554
3	Effective Liquid-Phase Exfoliation and Sodium Ion Battery Application of MoS ₂ Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 7084-7089.	4.0	443
4	Versatile Carbon Hybrid Films Composed of Vertical Carbon Nanotubes Grown on Mechanically Compliant Graphene Films. <i>Advanced Materials</i> , 2010, 22, 1247-1252.	11.1	307
5	Flexible room-temperature NO ₂ gas sensors based on carbon nanotubes/reduced graphene hybrid films. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	255
6	Flexible Memristive Memory Array on Plastic Substrates. <i>Nano Letters</i> , 2011, 11, 5438-5442.	4.5	250
7	Room-temperature semiconductor gas sensor based on nonstoichiometric tungsten oxide nanorod film. <i>Applied Physics Letters</i> , 2005, 86, 213105.	1.5	239
8	Nonvolatile Memories Based on Graphene and Related 2D Materials. <i>Advanced Materials</i> , 2019, 31, e1806663.	11.1	230
9	Patterned selective growth of carbon nanotubes and large field emission from vertically well-aligned carbon nanotube field emitter arrays. <i>Applied Physics Letters</i> , 2001, 78, 901-903.	1.5	212
10	Large-Area Single-Layer MoSe ₂ and Its van der Waals Heterostructures. <i>ACS Nano</i> , 2014, 8, 6655-6662.	7.3	206
11	Ambient Pressure Syntheses of Size-Controlled Corundum-type In ₂ O ₃ Nanocubes. <i>Journal of the American Chemical Society</i> , 2006, 128, 9326-9327.	6.6	185
12	An Electrochemically Reduced Graphene Oxide-Based Electrochemical Immunosensing Platform for Ultrasensitive Antigen Detection. <i>Analytical Chemistry</i> , 2012, 84, 1871-1878.	3.2	168
13	Interface-Engineered Amorphous TiO ₂ -Based Resistive Memory Devices. <i>Advanced Functional Materials</i> , 2010, 20, 3912-3917.	7.8	163
14	Synergetic electrode architecture for efficient graphene-based flexible organic light-emitting diodes. <i>Nature Communications</i> , 2016, 7, 11791.	5.8	163
15	Antibacterial Activities of Graphene Oxide-Molybdenum Disulfide Nanocomposite Films. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 7908-7917.	4.0	150
16	Flexible Resistive Switching Memory Device Based on Graphene Oxide. <i>IEEE Electron Device Letters</i> , 2010, 31, 1005-1007.	2.2	145
17	Graphene-based plasmonic waveguides for photonic integrated circuits. <i>Optics Express</i> , 2011, 19, 24557.	1.7	143
18	Flexible and Transparent Gas Molecule Sensor Integrated with Sensing and Heating Graphene Layers. <i>Small</i> , 2014, 10, 3685-3691.	5.2	142

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19	V-Shaped Tin Oxide Nanostructures Featuring a Broad Photocurrent Signal: An Effective Visible-Light-Driven Photocatalyst. <i>Small</i> , 2006, 2, 1436-1439.	5.2	140
20	Polymer Analog Memristive Synapse with Atomic-Scale Conductive Filament for Flexible Neuromorphic Computing System. <i>Nano Letters</i> , 2019, 19, 839-849.	4.5	139
21	Ultrasensitive Phototransistor Based on WSe ₂ –MoS ₂ van der Waals Heterojunction. <i>Nano Letters</i> , 2020, 20, 5741-5748.	4.5	133
22	Surface Energy Modification by Spin-Cast, Large-Area Graphene Film for Block Copolymer Lithography. <i>ACS Nano</i> , 2010, 4, 5464-5470.	7.3	132
23	ZnO–CuO Core-Hollow Cube Nanostructures for Highly Sensitive Acetone Gas Sensors at the ppb Level. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 35688-35697.	4.0	126
24	First Demonstration of a Logic-Process Compatible Junctionless Ferroelectric FinFET Synapse for Neuromorphic Applications. <i>IEEE Electron Device Letters</i> , 2018, 39, 1445-1448.	2.2	121
25	A low-temperature-grown TiO ₂ -based device for the flexible stacked RRAM application. <i>Nanotechnology</i> , 2010, 21, 115203.	1.3	112
26	Microscopic origin of bipolar resistive switching of nanoscale titanium oxide thin films. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	104
27	Rapid Vapor-Phase Fabrication of Organic–Inorganic Hybrid Superlattices with Monolayer Precision. <i>Journal of the American Chemical Society</i> , 2007, 129, 16034-16041.	6.6	103
28	Effective shape-controlled growth of monolayer MoS ₂ flakes by powder-based chemical vapor deposition. <i>Nano Research</i> , 2017, 10, 255-262.	5.8	92
29	Structure Effects on Resistive Switching of $\text{Al/TiO}_x/\text{Al}$ Devices for RRAM Applications. <i>IEEE Electron Device Letters</i> , 2008, 29, 331-333.	2.2	86
30	Improved Optical Sintering Efficiency at the Contacts of Silver Nanowires Encapsulated by a Graphene Layer. <i>Small</i> , 2015, 11, 1293-1300.	5.2	76
31	DNA-Assisted Exfoliation of Tungsten Dichalcogenides and Their Antibacterial Effect. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 1943-1950.	4.0	76
32	Laser-induced phase separation of silicon carbide. <i>Nature Communications</i> , 2016, 7, 13562.	5.8	75
33	Multilevel resistive switching nonvolatile memory based on MoS ₂ nanosheet-embedded graphene oxide. <i>2D Materials</i> , 2016, 3, 034002.	2.0	69
34	Comprehensive modeling of resistive switching in the Al/TiO _x /TiO ₂ /Al heterostructure based on space-charge-limited conduction. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	67
35	Flexible and Transparent Graphene Electrode Architecture with Selective Defect Decoration for Organic Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2018, 28, 1704435.	7.8	67
36	Flexible Nonvolatile Polymer Memory Array on Plastic Substrate via Initiated Chemical Vapor Deposition. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 12951-12958.	4.0	66

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37	Characterization of Fe-catalyzed carbon nanotubes grown by thermal chemical vapor deposition. <i>Journal of Crystal Growth</i> , 2002, 244, 211-217.	0.7	62
38	V2O5 nanowire-based nanoelectronic devices for helium detection. <i>Applied Physics Letters</i> , 2005, 86, 253102.	1.5	62
39	Functional Circuitry on Commercial Fabric via Textile-Compatible Nanoscale Film Coating Process for Fibertronics. <i>Nano Letters</i> , 2017, 17, 6443-6452.	4.5	62
40	Direct Observation of Conducting Nanofilaments in Grapheneâ€Oxideâ€Resistive Switching Memory. <i>Advanced Functional Materials</i> , 2015, 25, 6710-6715.	7.8	60
41	Solutionâ€Processed Reduced Graphene Oxide Films as Electronic Contacts for Molecular Monolayer Junctions. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 108-112.	7.2	59
42	Siâ€MoS₂ Vertical Heterojunction for a Photodetector with High Responsivity and Low Noise Equivalent Power. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 7626-7634.	4.0	58
43	TFT Channel Materials for Display Applications: From Amorphous Silicon to Transition Metal Dichalcogenides. <i>Advanced Materials</i> , 2020, 32, e1907166.	11.1	58
44	Multilayered graphene anode for blue phosphorescent organic light emitting diodes. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	57
45	Metal-Etching-Free Direct Delamination and Transfer of Single-Layer Graphene with a High Degree of Freedom. <i>Small</i> , 2015, 11, 175-181.	5.2	57
46	Memristive Logicâ€inâ€Memory Integrated Circuits for Energyâ€Efficient Flexible Electronics. <i>Advanced Functional Materials</i> , 2018, 28, 1704725.	7.8	57
47	Bipolar resistive switching in amorphous titanium oxide thin film. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010, 4, 28-30.	1.2	55
48	Conductive Graphitic Channel in Graphene Oxideâ€Based Memristive Devices. <i>Advanced Functional Materials</i> , 2016, 26, 7406-7414.	7.8	54
49	Role of Interface Reaction on Resistive Switching of Metal/Amorphous TiO2/Al RRAM Devices. <i>Journal of the Electrochemical Society</i> , 2011, 158, H979.	1.3	53
50	A graphene oxide oxygen barrier film deposited via a self-assembly coating method. <i>Synthetic Metals</i> , 2012, 162, 710-714.	2.1	52
51	Sublithographic vertical gold nanogap for label-free electrical detection of protein-ligand binding. <i>Journal of Vacuum Science & Technology B</i> , 2007, 25, 443.	1.3	50
52	Large-scale synthesis of uniform hexagonal boron nitride films by plasma-enhanced atomic layer deposition. <i>Scientific Reports</i> , 2017, 7, 40091.	1.6	49
53	Laser-Induced Solid-Phase Doped Graphene. <i>ACS Nano</i> , 2014, 8, 7671-7677.	7.3	48
54	Healing Graphene Defects Using Selective Electrochemical Deposition: Toward Flexible and Stretchable Devices. <i>ACS Nano</i> , 2016, 10, 1539-1545.	7.3	47

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55	Sonochemical synthesis of HKUST-1-based CuO decorated with Pt nanoparticles for formaldehyde gas-sensor applications. <i>Sensors and Actuators B: Chemical</i> , 2019, 292, 289-296.	4.0	47
56	Cointegration of single-transistor neurons and synapses by nanoscale CMOS fabrication for highly scalable neuromorphic hardware. <i>Science Advances</i> , 2021, 7, .	4.7	47
57	Conductive-bridging random-access memories for emerging neuromorphic computing. <i>Nanoscale</i> , 2020, 12, 14339-14368.	2.8	46
58	Chemically exfoliated 1T-phase transition metal dichalcogenide nanosheets for transparent antibacterial applications. <i>2D Materials</i> , 2019, 6, 025025.	2.0	45
59	Improved Electrical Contact Properties of MoS ₂ –Graphene Lateral Heterostructure. <i>Advanced Functional Materials</i> , 2019, 29, 1807550.	7.8	44
60	Low-Power Nonvolatile Charge Storage Memory Based on MoS ₂ and an Ultrathin Polymer Tunneling Dielectric. <i>Advanced Functional Materials</i> , 2017, 27, 1703545.	7.8	43
61	Gadolinium Oxide Nanoring and Nanoplate: Anisotropic Shape Control. <i>Crystal Growth and Design</i> , 2007, 7, 1378-1380.	1.4	42
62	Pyridinic-N-Doped Graphene Paper from Perforated Graphene Oxide for Efficient Oxygen Reduction. <i>ACS Omega</i> , 2018, 3, 5522-5530.	1.6	42
63	Flexible NO ₂ gas sensor using multilayer graphene films by chemical vapor deposition. <i>Carbon Letters</i> , 2013, 14, 186-189.	3.3	40
64	Zero-static-power nonvolatile logic-in-memory circuits for flexible electronics. <i>Nano Research</i> , 2017, 10, 2459-2470.	5.8	39
65	Large-Area CVD-Grown MoS ₂ Driver Circuit Array for Flexible Organic Light-Emitting Diode Display. <i>Advanced Electronic Materials</i> , 2018, 4, 1800251.	2.6	39
66	Tuning the catalytic functionality of transition metal dichalcogenides grown by chemical vapour deposition. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14950-14968.	5.2	38
67	Conduction and Low-Frequency Noise Analysis in $\text{Al}/\alpha\text{-TiO}_2/\text{Al}$ Bipolar Switching Resistance Random Access Memory Devices. <i>IEEE Electron Device Letters</i> , 2010, 31, 603-605.	2.2	37
68	Direct observation of microscopic change induced by oxygen vacancy drift in amorphous TiO ₂ thin films. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	37
69	Facile graphene n-doping by wet chemical treatment for electronic applications. <i>Nanoscale</i> , 2014, 6, 8503.	2.8	35
70	Low-Temperature and High-Quality Growth of Bi ₂ O ₂ Se Layered Semiconductors via Cracking Metal–Organic Chemical Vapor Deposition. <i>ACS Nano</i> , 2021, 15, 8715-8723.	7.3	35
71	Friction and conductance imaging of sp ² - and sp ³ -hybridized subdomains on single-layer graphene oxide. <i>Nanoscale</i> , 2016, 8, 4063-4069.	2.8	34
72	A Recoverable Synapse Device Using a Three-Dimensional Silicon Transistor. <i>Advanced Functional Materials</i> , 2018, 28, 1804844.	7.8	34

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73	Vertical-Tunnel Field-Effect Transistor Based on a Silicon ¹¹ MoS ₂ Three-Dimensional ¹² Two-Dimensional Heterostructure. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 40212-40218.	4.0	34
74	Multilayer Graphene with a Rippled Structure as a Spacer for Improving Plasmonic Coupling. <i>Advanced Functional Materials</i> , 2016, 26, 5093-5101.	7.8	33
75	Bioinspired Polydopamine ¹³ Based Resistive ¹⁴ Switching Memory on Cotton Fabric for Wearable Neuromorphic Device Applications. <i>Advanced Materials Technologies</i> , 2019, 4, 1900151.	3.0	33
76	Graphene transparent electrode for enhanced optical power and thermal stability in GaN light-emitting diodes. <i>Nanotechnology</i> , 2013, 24, 075202.	1.3	31
77	Functionalized Graphene as an Ultrathin Seed Layer for the Atomic Layer Deposition of Conformal High-k Dielectrics on Graphene. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 11515-11519.	4.0	31
78	Carrier injection efficiencies and energy level alignments of multilayer graphene anodes for organic light-emitting diodes with different hole injection layers. <i>Carbon</i> , 2014, 79, 623-630.	5.4	30
79	Photoconductivity Switching in MoTe ₂ /Graphene Heterostructure by Trap-Assisted Photogating. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 38563-38569.	4.0	30
80	Bipolar resistive switching characteristics of poly(3,4-ethylene-dioxythiophene): Poly(styrenesulfonate) thin film. <i>Current Applied Physics</i> , 2010, 10, e46-e49.	1.1	29
81	A Low ¹⁵ Voltage Organic Complementary Inverter with High Operation Stability and Flexibility Using an Ultrathin iCVD Polymer Dielectric and a Hybrid Encapsulation Layer. <i>Advanced Electronic Materials</i> , 2016, 2, 1500385.	2.6	29
82	Flexible and Transparent Thin-Film Transistors Based on Two-Dimensional Materials for Active-Matrix Display. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 4749-4754.	4.0	29
83	Effects of oxygen concentration on the electrical properties of ZnO films. <i>Ceramics International</i> , 2008, 34, 1097-1101.	2.3	27
84	Impact of amorphous titanium oxide film on the device stability of Al/TiO ₂ /Al resistive memory. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 102, 967-972.	1.1	27
85	Self-Supplied Nano-Fusing and Transferring Metal Nanostructures via Surface Oxide Reduction. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 1112-1119.	4.0	27
86	Vertical-tunneling field-effect transistor based on MoTe ₂ /MoS ₂ 2D ¹⁶ 2D heterojunction. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 475101.	1.3	26
87	Ultrasensitive WSe ₂ /In ₂ Se ₃ NIR Photodetector Based on Ferroelectric Gating Effect. <i>Advanced Materials Technologies</i> , 2021, 6, 2100494.	3.0	26
88	Enhanced Triboelectric Nanogenerator Based on Tungsten Disulfide via Thiolated Ligand Conjugation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 21299-21309.	4.0	25
89	Large field emission current density from well-aligned carbon nanotube field emitter arrays. <i>Current Applied Physics</i> , 2001, 1, 61-65.	1.1	23
90	Stretchable thin-film transistors with molybdenum disulfide channels and graphene electrodes. <i>Nanoscale</i> , 2018, 10, 16069-16078.	2.8	23

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91	Large-scale, Low-power Nonvolatile Memory Based on Few-layer MoS ₂ and Ultrathin Polymer Dielectrics. <i>Advanced Electronic Materials</i> , 2019, 5, 1800688.	2.6	23
92	Interface engineering for high performance graphene electronic devices. <i>Nano Convergence</i> , 2015, 2, .	6.3	22
93	Atomic-scale etching of hexagonal boron nitride for device integration based on two-dimensional materials. <i>Nanoscale</i> , 2018, 10, 15205-15212.	2.8	22
94	Vertical-tunneling Field-effect Transistor Based on WSe ₂ /MoS ₂ Heterostructure with Ion Gel Dielectric. <i>Advanced Electronic Materials</i> , 2020, 6, 2000091.	2.6	22
95	Ultra-low power, highly uniform polymer memory by inserted multilayer graphene electrode. <i>2D Materials</i> , 2015, 2, 044013.	2.0	21
96	Order-of-Magnitude, Broadband-Enhanced Light Emission from Quantum Dots Assembled in Multiscale Phase-Separated Block Copolymers. <i>Nano Letters</i> , 2019, 19, 6827-6838.	4.5	21
97	Probing temperature-dependent interlayer coupling in a MoS ₂ /h-BN heterostructure. <i>Nano Research</i> , 2020, 13, 576-582.	5.8	21
98	Cross-sectional transmission electron microscopy of carbon nanotubes-catalyst-substrate heterostructure using a novel method for specimen preparation. <i>Thin Solid Films</i> , 2002, 415, 78-82.	0.8	20
99	High performance graphene field effect transistors on an aluminum nitride substrate with high surface phonon energy. <i>Applied Physics Letters</i> , 2014, 104, 193112.	1.5	18
100	Selective protein transport through ultra-thin suspended reduced graphene oxide nanopores. <i>Nanoscale</i> , 2017, 9, 13457-13464.	2.8	17
101	High-Performance Field-Effect Transistor and Logic Gates Based on GaS/MoS ₂ van der Waals Heterostructure. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 5106-5112.	4.0	17
102	Abnormal electrical characteristics of multi-layered MoS ₂ FETs attributed to bulk traps. <i>2D Materials</i> , 2016, 3, 015007.	2.0	16
103	Synthesis and Characterization of Monomeric, Oligomeric, and Polymeric Aluminum 8-Hydroxyquinolines. <i>Inorganic Chemistry</i> , 2005, 44, 7911-7917.	1.9	15
104	Graphene-based photonic devices for soft hybrid optoelectronic systems. <i>Nanotechnology</i> , 2012, 23, 344005.	1.3	15
105	Synthesis of Ultrathin Metal Nanowires with Chemically Exfoliated Tungsten Disulfide Nanosheets. <i>Nano Letters</i> , 2020, 20, 3740-3746.	4.5	15
106	Adsorption behavior of binary mixed alkanethiol molecules on Au: Scanning tunneling microscope and linear-scan voltammetry investigation. <i>Applied Surface Science</i> , 2006, 252, 4951-4956.	3.1	14
107	Polymer-free graphene transfer for enhanced reliability of graphene field-effect transistors. <i>2D Materials</i> , 2016, 3, 021003.	2.0	14
108	Graphene electrode with tunable charge transport in thin-film transistors. <i>Nano Research</i> , 2018, 11, 274-286.	5.8	14

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109	Multilevel conductance switching for a monolayer of redox-active metal complexes through various metallic contacts. <i>Journal of Materials Chemistry</i> , 2012, 22, 1868-1875.	6.7	13
110	Doping suppression and mobility enhancement of graphene transistors fabricated using an adhesion promoting dry transfer process. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	13
111	Scanning transmission X-ray microscopy probe for in-situ mechanism study of graphene-oxide-based resistive random access memory. <i>Journal of Synchrotron Radiation</i> , 2014, 21, 170-176.	1.0	13
112	Technical issues in graphene anode organic light emitting diodes. <i>Diamond and Related Materials</i> , 2015, 57, 68-73.	1.8	13
113	Observation of Wavelength-Dependent Quantum Plasmon Tunneling with Varying the Thickness of Graphene Spacer. <i>Scientific Reports</i> , 2019, 9, 1199.	1.6	13
114	Nanoscale contacts between semiconducting nanowires and metallic graphenes. <i>Applied Physics Letters</i> , 2012, 101, 063122.	1.5	12
115	Varying electronic coupling at graphene-copper interfaces probed with Raman spectroscopy. <i>2D Materials</i> , 2020, 7, 025006.	2.0	12
116	Low-thermal-budget Doping of 2D Materials in Ambient Air Exemplified by Synthesis of Boron-Doped Reduced Graphene Oxide. <i>Advanced Science</i> , 2020, 7, 1903318.	5.6	12
117	Current flow through different phases of dodecanethiol self-assembled monolayer. <i>Surface Science</i> , 2005, 583, 88-93.	0.8	11
118	Blue fluorescent organic light emitting diodes with multilayered graphene anode. <i>Materials Research Bulletin</i> , 2012, 47, 2796-2799.	2.7	11
119	Characterization of chemical vapor deposition-grown graphene films with various etchants. <i>Carbon Letters</i> , 2012, 13, 44-47.	3.3	11
120	Wafer-Scale Uniform Growth of an Atomically Thin MoS ₂ Film with Controlled Layer Numbers by Metal-Organic Chemical Vapor Deposition. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 50497-50504.	4.0	11
121	Critical role of top interface layer on the bipolar resistive switching of Al/PEDOT:PSS/Al memory device. <i>Current Applied Physics</i> , 2011, 11, e35-e39.	1.1	9
122	Fabrication of poly-Si/Au nano-gaps using atomic-layer-deposited Al ₂ O ₃ as a sacrificial layer. <i>Nanotechnology</i> , 2005, 16, 361-364.	1.3	8
123	Electrochemically active, anti-biofouling polymer adlayers on indium-tin-oxide electrodes. <i>Chemical Communications</i> , 2008, , 3543.	2.2	8
124	Hybrid nanowire-multilayer graphene film light-emitting sources. <i>Nanotechnology</i> , 2010, 21, 425203.	1.3	8
125	Scaling behavior at the onset of chaos in the logistic map driven by colored noise. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1995, 205, 173-178.	0.9	7
126	Use of 1,3-dithiane combined with aryldiazonium cation for immobilization of biomolecules based on electrochemical addressing. <i>Chemical Communications</i> , 2009, , 4865.	2.2	7

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127	Flexible Electronics: Flexible and Transparent Gas Molecule Sensor Integrated with Sensing and Heating Graphene Layers (Small 18/2014). Small, 2014, 10, 3812-3812.	5.2	7
128	Improved electromigration-resistance of Cu interconnects by graphene-based capping layer. , 2015, , .		7
129	A Separate Extraction Method for Asymmetric Source and Drain Resistances Using Frequency-Dispersive C-V Characteristics in Exfoliated MoS ₂ FET. IEEE Electron Device Letters, 2016, 37, 231-233.	2.2	7
130	Two-dimensional sheet resistance model for polycrystalline graphene with overlapped grain boundaries. FlatChem, 2018, 7, 19-25.	2.8	7
131	The fabrication technique and electrical properties of a free-standing GaN nanowire. Applied Physics A: Materials Science and Processing, 2005, 81, 245-247.	1.1	6
132	Comprehensive Study on the Relation Between Low-Frequency Noise and Asymmetric Parasitic Resistances in a Vertical Pillar-Type FET. IEEE Electron Device Letters, 2017, 38, 1008-1011.	2.2	6
133	Gap-Mode Plasmon-Induced Photovoltaic Effect in a Vertical Multilayer Graphene Homojunction. Advanced Optical Materials, 2020, 8, 1901519.	3.6	6
134	Metastable quantum dot for photoelectric devices via flash-induced one-step sequential self-formation. Nano Energy, 2021, 84, 105889.	8.2	6
135	Atomically thin Schottky junction with a gap-mode plasmon for enhanced photoresponsivity in MoS ₂ -based photodetectors. Journal Physics D: Applied Physics, 2021, 54, 145301.	1.3	6
136	A Vertical Silicon Nanowire Based Single Transistor Neuron with Excitatory, Inhibitory, and Myelination Functions for Highly Scalable Neuromorphic Hardware. Small, 2021, 17, e2103775.	5.2	6
137	Atomically thin heterostructure with gap-mode plasmon for overcoming trade-off between photoresponsivity and response time. Nano Research, 2021, 14, 1305-1310.	5.8	5
138	Orientations of Polycrystalline ZnO at the Buried Interface of Oxide Thin Film Transistors (TFTs): A Grazing Incidence X-ray Diffraction Study. Bulletin of the Korean Chemical Society, 2008, 29, 727-728.	1.0	5
139	Impedimetric Hg ²⁺ -Detection on Multilayered Reduced Graphene Oxide-Modified Electrode. Bulletin of the Korean Chemical Society, 2012, 33, 4219-4222.	1.0	5
140	Enhanced surface evolution induced by the molecular desorption in dodecanethiol self-assembled monolayer on Au(111). Surface Science, 2006, 600, 625-631.	0.8	4
141	Aligned Circular-Type Nanowire Transistors Grown on Multilayer Graphene Film. Journal of Physical Chemistry C, 2011, 115, 22163-22167.	1.5	4
142	Experimental study on quantum mechanical effect for insensitivity of threshold voltage against temperature variation in strained SOI MOSFETs. , 2015, , .		4
143	A highly smart MEMS acetone gas sensors in array for diet-monitoring applications. Micro and Nano Systems Letters, 2021, 9, .	1.7	4
144	Enhanced Electrical Properties of Metal-Organic Chemical Vapor Deposition-Grown MoS ₂ Thin Films through Oxygen-Assisted Defect Control. Advanced Electronic Materials, 2022, 8, .	2.6	4

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145	Highly Reliable Synaptic Cell Array Based on Organic-Inorganic Hybrid Bilayer Stack toward Precise Offline Learning. Advanced Intelligent Systems, 2022, 4, .	3.3	4
146	Passivation layer effect on the positive bias temperature instability of molybdenum disulfide thin film transistors. Journal of Information Display, 2021, 22, 13-19.	2.1	3
147	Hybrid Gate Dielectric of MoS ₂ Transistors for Enhanced Photo-Electronic Stability. Advanced Materials Interfaces, 2021, 8, 2100599.	1.9	3
148	LOW TEMPERATURE FABRICATION AND PHYSICAL PROPERTIES OF 5 at.% Ga-DOPED ZnO FILMS FOR TRANSPARENT ELECTRODE APPLICATIONS. Functional Materials Letters, 2010, 03, 101-105.	0.7	2
149	Fabrication of TiO ₂ Memristive Arrays by Step and Flash Imprint Lithography. Journal of Nanoscience and Nanotechnology, 2011, 11, 696-700.	0.9	2
150	Large area organic light emitting diodes with multilayered graphene anodes. Proceedings of SPIE, 2012, , .	0.8	2
151	Valley-engineered ultra-thin silicon for high-performance junctionless transistors. Scientific Reports, 2016, 6, 29354.	1.6	2
152	Floating gate memory based on MoS ₂ channel and iCVD polymer tunneling dielectric. , 2016, , .		2
153	60Å: High-Performance MoS ₂ Thin-Film Transistors for Flexible OLED display. Digest of Technical Papers SID International Symposium, 2018, 49, 797-799.	0.1	2
154	Spatially isolated neutral excitons via clusters on trilayer MoS ₂ . Nanoscale, 2022, 14, 4304-4311.	2.8	2
155	Fabrication of Nano-Gap Electrode Pairs Using Atomic-Layer-Deposited Sacrificial Layer and Shadow Deposition. Japanese Journal of Applied Physics, 2006, 45, 4293-4295.	0.8	1
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