Jong-Hyun Ahn

List of Publications by Year
in descending order

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232	41,949	8755 75	2178 202
papers	citations	h-index	g-index

265	265	265	42647
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.	27.8	9,624
2	Roll-to-roll production of 30-inch graphene films for transparent electrodes. Nature Nanotechnology, 2010, 5, 574-578.	31.5	7,294
3	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. Nanoscale, 2015, 7, 4598-4810.	5.6	2,452
4	Stretchable and Foldable Silicon Integrated Circuits. Science, 2008, 320, 507-511.	12.6	1,474
5	Extremely efficient flexible organic light-emitting diodes with modified graphene anode. Nature Photonics, 2012, 6, 105-110.	31.4	1,272
6	Wafer-Scale Synthesis and Transfer of Graphene Films. Nano Letters, 2010, 10, 490-493.	9.1	1,062
7	Graphene for Controlled and Accelerated Osteogenic Differentiation of Human Mesenchymal Stem Cells. ACS Nano, 2011, 5, 4670-4678.	14.6	819
8	Highly conductive, printable and stretchable composite films of carbon nanotubes and silver. Nature Nanotechnology, 2010, 5, 853-857.	31.5	771
9	Highâ€Performance Perovskiteâ€“Graphene Hybrid Photodetector. Advanced Materials, 2015, 27, 41-46.	21.0	753
10	Graphene-based transparent strain sensor. Carbon, 2013, 51, 236-242.	10.3	711
11	Heterogeneous Three-Dimensional Electronics by Use of Printed Semiconductor Nanomaterials. Science, 2006, 314, 1754-1757.	12.6	632
12	Grapheneâ€Based Flexible and Stretchable Electronics. Advanced Materials, 2016, 28, 4184-4202.	21.0	537
13	Chemical Vapor Deposition-Grown Graphene: The Thinnest Solid Lubricant. ACS Nano, 2011, 5, 5107-5114.	14.6	462
14	High-Performance Graphene-Based Transparent Flexible Heaters. Nano Letters, 2011, 11, 5154-5158.	9.1	457
15	Theoretical and Experimental Studies of Bending of Inorganic Electronic Materials on Plastic Substrates. Advanced Functional Materials, 2008, 18, 2673-2684.	14.9	398
16	High-Performance Flexible Graphene Field Effect Transistors with Ion Gel Gate Dielectrics. Nano Letters, 2010, 10, 3464-3466.	9.1	390
17	Stretchable Graphene Transistors with Printed Dielectrics and Gate Electrodes. Nano Letters, 2011, 11, 4642-4646.	9.1	351
18	MoS₂â€Based Tactile Sensor for Electronic Skin Applications. Advanced Materials, 2016, 28, 2556-2562.	21.0	351

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19	Semiconductor Wires and Ribbons for Highâ€•Performance Flexible Electronics. Angewandte Chemie - International Edition, 2008, 47, 5524-5542.	13.8	279
20	Graphene-Based Three-Dimensional Capacitive Touch Sensor for Wearable Electronics. ACS Nano, 2017, 11, 7950-7957.	14.6	270
21	All Graphene-Based Thin Film Transistors on Flexible Plastic Substrates. Nano Letters, 2012, 12, 3472-3476.	9.1	225
22	Graphene-P(VDF-TrFE) Multilayer Film for Flexible Applications. ACS Nano, 2013, 7, 3130-3138.	14.6	220
23	Controlled crack propagation for atomic precision handling of wafer-scale two-dimensional materials. Science, 2018, 362, 665-670.	12.6	208
24	Bioinspired in-sensor visual adaptation for accurate perception. Nature Electronics, 2022, 5, 84-91.	26.0	204
25	Two-dimensional materials in functional three-dimensional architectures with applications in photodetection and imaging. Nature Communications, 2018, 9, 1417.	12.8	189
26	Giant spin Hall effect in graphene grown by chemical vapour deposition. Nature Communications, 2014, 5, 4748.	12.8	179
27	All MoS₂-Based Large Area, Skin-Attachable Active-Matrix Tactile Sensor. ACS Nano, 2019, 13, 3023-3030.	14.6	171
28	Synthesis of wafer-scale uniform molybdenum disulfide films with control over the layer number using a gas phase sulfur precursor. Nanoscale, 2014, 6, 2821.	5.6	166
29	Flexible active-matrix organic light-emitting diode display enabled by MoS ₂ thin-film transistor. Science Advances, 2018, 4, eaas8721.	10.3	163
30	Graphene-Based Bimorph Microactuators. Nano Letters, 2011, 11, 977-981.	9.1	159
31	Graphenes Converted from Polymers. Journal of Physical Chemistry Letters, 2011, 2, 493-497.	4.6	158
32	Bendable GaN high electron mobility transistors on plastic substrates. Journal of Applied Physics, 2006, 100, 124507.	2.5	157
33	A high performance PZT ribbon-based nanogenerator using graphene transparent electrodes. Energy and Environmental Science, 2012, 5, 8970.	30.8	157
34	CVD-grown monolayer MoS2 in bioabsorbable electronics and biosensors. Nature Communications, 2018, 9, 1690.	12.8	155
35	High-speed mechanically flexible single-crystal silicon thin-film transistors on plastic substrates. IEEE Electron Device Letters, 2006, 27, 460-462.	3.9	154
36	Conformal, graphene-based triboelectric nanogenerator for self-powered wearable electronics. Nano Energy, 2016, 27, 298-305.	16.0	152

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37	Selfâ€Healing Reduced Graphene Oxide Films by Supersonic Kinetic Spraying. Advanced Functional Materials, 2014, 24, 4986-4995.	14.9	151
38	Graphene for displays that bend. Nature Nanotechnology, 2014, 9, 737-738.	31.5	150
39	Stretchable electronics: materials, architectures and integrations. Journal Physics D: Applied Physics, 2012, 45, 103001.	2.8	145
40	A graphene-based transparent electrode for use in flexible optoelectronic devices. Journal of Materials Chemistry C, 2014, 2, 2646-2656.	5.5	145
41	Selfâ€Junctioned Copper Nanofiber Transparent Flexible Conducting Film via Electrospinning and Electroplating. Advanced Materials, 2016, 28, 7149-7154.	21.0	141
42	Effect of PEDOT Nanofibril Networks on the Conductivity, Flexibility, and Coatability of PEDOT:PSS Films. ACS Applied Materials & Interfaces, 2014, 6, 6954-6961.	8.0	140
43	Graphene for flexible and wearable device applications. Carbon, 2017, 120, 244-257.	10.3	137
44	Graphene-based flexible and stretchable thin film transistors. Nanoscale, 2012, 4, 4870.	5.6	135
45	Stretchable, Transparent Zinc Oxide Thin Film Transistors. Advanced Functional Materials, 2010, 20, 3577-3582.	14.9	133
46	Flexible and Platinumâ€Free Dyeâ€Sensitized Solar Cells with Conductingâ€Polymerâ€Coated Graphene Counter Electrodes. ChemSusChem, 2012, 5, 379-382.	6.8	133
47	Graphene as a flexible electronic material: mechanical limitations by defect formation and efforts to overcome. Materials Today, 2015, 18, 336-344.	14.2	133
48	Graphene-based stretchable/wearable self-powered touch sensor. Nano Energy, 2019, 62, 259-267.	16.0	132
49	Towards industrial applications of graphene electrodes. Physica Scripta, 2012, T146, 014024.	2.5	131
50	Quasi-Periodic Nanoripples in Graphene Grown by Chemical Vapor Deposition and Its Impact on Charge Transport. ACS Nano, 2012, 6, 1158-1164.	14.6	129
51	Stretchable Active Matrix Inorganic Lightâ€Emitting Diode Display Enabled by Overlayâ€Aligned Rollâ€Transfer Printing. Advanced Functional Materials, 2017, 27, 1606005.	14.9	124
52	2â€‰Î¼m solid-state laser mode-locked by single-layer graphene. Applied Physics Letters, 2013, 102, 013113.	3.3	120
53	Epitaxial Growth of Thin Ferroelectric Polymer Films on Graphene Layer for Fully Transparent and Flexible Nonvolatile Memory. Nano Letters, 2016, 16, 334-340.	9.1	117
54	Enhanced Raman Scattering of Rhodamine 6G Films on Two-Dimensional Transition Metal Dichalcogenides Correlated to Photoinduced Charge Transfer. Chemistry of Materials, 2016, 28, 180-187.	6.7	112

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55	Ultrafast and widely tuneable vertical-external-cavity surface-emitting laser, mode-locked by a graphene-integrated distributed Bragg reflector. Optics Express, 2013, 21, 31548.	3.4	111
56	Coplanar-Gate Transparent Graphene Transistors and Inverters on Plastic. ACS Nano, 2012, 6, 8646-8651.	14.6	110
57	Wafer-scale monolithic integration of full-colour micro-LED display using MoS2 transistor. Nature Nanotechnology, 2022, 17, 500-506.	31.5	104
58	Supramolecular barrels from amphiphilic rigidâ€“flexible macrocycles. Nature Materials, 2005, 4, 399-402.	27.5	101
59	Graphene induced tunability of the surface plasmon resonance. Applied Physics Letters, 2012, 100, .	3.3	97
60	Local Strain Induced Band Gap Modulation and Photoluminescence Enhancement of Multilayer Transition Metal Dichalcogenides. Chemistry of Materials, 2017, 29, 5124-5133.	6.7	97
61	Reduced Water Vapor Transmission Rate of Graphene Gas Barrier Films for Flexible Organic Field-Effect Transistors. ACS Nano, 2015, 9, 5818-5824.	14.6	93
62	Kinetically controlled, adhesiveless transfer printing using microstructured stamps. Applied Physics Letters, 2009, 94, .	3.3	92
63	Ultrathin Organic Solar Cells with Graphene Doped by Ferroelectric Polarization. ACS Applied Materials & Interfaces, 2014, 6, 3299-3304.	8.0	91
64	Full-color active-matrix organic light-emitting diode display on human skin based on a large-area MoS ₂ backplane. Science Advances, 2020, 6, eabb5898.	10.3	91
65	Stacking-controllable interlayer coupling and symmetric configuration of multilayered MoS2. NPG Asia Materials, 2018, 10, e468-e468.	7.9	90
66	Tuning Optical Conductivity of Largeâ€Scale CVD Graphene by Strain Engineering. Advanced Materials, 2014, 26, 1081-1086.	21.0	86
67	Graphene-Based Conformal Devices. ACS Nano, 2014, 8, 7655-7662.	14.6	86
68	Complementary Logic Gates and Ring Oscillators on Plastic Substrates by Use of Printed Ribbons of Single-Crystalline Silicon. IEEE Electron Device Letters, 2008, 29, 73-76.	3.9	85
69	Graphene based field effect transistors: Efforts made towards flexible electronics. Solid-State Electronics, 2013, 89, 177-188.	1.4	85
70	Graphene/liquid crystal based terahertz phase shifters. Optics Express, 2013, 21, 21395.	3.4	84
71	Fabrication of Metallic Nanomesh: Pt Nano-Mesh as a Proof of Concept for Stretchable and Transparent Electrodes. Chemistry of Materials, 2013, 25, 3535-3538.	6.7	83
72	Organic solar cells using CVD-grown graphene electrodes. Nanotechnology, 2014, 25, 014012.	2.6	81

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73	Atomic layer etching of graphene for full graphene device fabrication. Carbon, 2012, 50, 429-435.	10.3	80
74	The mechanical responses of tilted and non-tilted grain boundaries in graphene. Carbon, 2012, 50, 3708-3716.	10.3	79
75	Bendable integrated circuits on plastic substrates by use of printed ribbons of single-crystalline silicon. Applied Physics Letters, 2007, 90, 213501.	3.3	78
76	Loadâ€Controlled Roll Transfer of Oxide Transistors for Stretchable Electronics. Advanced Functional Materials, 2013, 23, 2024-2032.	14.9	78
77	Double-layer CVD graphene as stretchable transparent electrodes. Nanoscale, 2014, 6, 6057-6064.	5.6	77
78	Ultra-high modulation depth exceeding 2,400% in optically controlled topological surface plasmons. Nature Communications, 2015, 6, 8814.	12.8	76
79	Graphene-based flexible and wearable electronics. Journal of Semiconductors, 2018, 39, 011007.	3.7	76
80	Wafer-scale graphene/ferroelectric hybrid devices for low-voltage electronics. Europhysics Letters, 2011, 93, 17002.	2.0	74
81	Self-Limiting Layer Synthesis of Transition Metal Dichalcogenides. Scientific Reports, 2016, 6, 18754.	3.3	74
82	Fracture Characteristics of Monolayer CVD-Graphene. Scientific Reports, 2014, 4, 4439.	3.3	73
83	Flexible, transparent single-walled carbon nanotube transistors with graphene electrodes. Nanotechnology, 2010, 21, 425201.	2.6	70
84	Highly Sensitive, Gate-Tunable, Room-Temperature Mid-Infrared Photodetection Based on Grapheneâ€“Bi₂Se₃ Heterostructure. ACS Photonics, 2017, 4, 482-488.	6.6	70
85	Stretchable Electroluminescent Display Enabled by Graphene-Based Hybrid Electrode. ACS Applied Materials & Interfaces, 2019, 11, 14222-14228.	8.0	69
86	Structure of Shear-Induced Perforated Layer Phase in Styreneâ^'Isoprene Diblock Copolymer Melts. Macromolecules, 2000, 33, 641-644.	4.8	68
87	Lithography-free plasma-induced patterned growth of MoS₂and its heterojunction with graphene. Nanoscale, 2016, 8, 15181-15188.	5.6	68
88	Hybrid structures of organic dye and graphene for ultrahigh gain photodetectors. Carbon, 2015, 88, 165-172.	10.3	67
89	Recent Advances in Tactile Sensing Technology. Micromachines, 2018, 9, 321.	2.9	67
90	Surfaceâ€Functionalizationâ€Mediated Direct Transfer of Molybdenum Disulfide for Largeâ€Area Flexible Devices. Advanced Functional Materials, 2018, 28, 1706231.	14.9	66

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91	Graphene Films for Flexible Organic and Energy Storage Devices. Journal of Physical Chemistry Letters, 2013, 4, 831-841.	4.6	65
92	Path-programmable water droplet manipulations on an adhesion controlled superhydrophobic surface. Scientific Reports, 2015, 5, 12326.	3.3	65
93	Flexible grapheneâ€"PZT ferroelectric nonvolatile memory. Nanotechnology, 2013, 24, 475202.	2.6	62
94	Detection of graphene domains and defects using liquid crystals. Nature Communications, 2014, 5, 3484.	12.8	62
95	Mechanical and Environmental Stability of Polymer Thin-Film-Coated Graphene. ACS Nano, 2012, 6, 2096-2103.	14.6	61
96	Flexible MgO Barrier Magnetic Tunnel Junctions. Advanced Materials, 2016, 28, 4983-4990.	21.0	59
97	Liquid-Crystalline Assembly from Rigid Wedge-Flexible Coil Diblock Molecules. Angewandte Chemie - International Edition, 2005, 44, 328-332.	13.8	57
98	Impact of 2Dâ€"3D Heterointerface on Remote Epitaxial Interaction through Graphene. ACS Nano, 2021, 15, 10587-10596.	14.6	57
99	Photo-patternable ion gel-gated graphene transistors and inverters on plastic. Nanotechnology, 2014, 25, 014002.	2.6	56
100	MoS₂/Graphene Photodetector Array with Strain-Modulated Photoresponse up to the Near-Infrared Regime. ACS Nano, 2021, 15, 12836-12846.	14.6	56
101	Approaching ultimate flexible organic light-emitting diodes using a graphene anode. NPG Asia Materials, 2016, 8, e303-e303.	7.9	55
102	Highly Conductive Freestanding Graphene Films as Anode Current Collectors for Flexible Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2014, 6, 11158-11166.	8.0	54
103	Biomimetic Tactile Sensors Based on Nanomaterials. ACS Nano, 2020, 14, 1220-1226.	14.6	53
104	GRAPHENE-BASED TRANSPARENT CONDUCTIVE FILMS. Nano, 2013, 08, 1330001.	1.0	52
105	Atomicâ€Level Customization of 4 in. Transition Metal Dichalcogenide Multilayer Alloys for Industrial Applications. Advanced Materials, 2019, 31, e1901405.	21.0	52
106	2D Materials for Skinâ€Mountable Electronic Devices. Advanced Materials, 2021, 33, e2005858.	21.0	51
107	Quantum Confinement Effects in Transferrable Silicon Nanomembranes and Their Applications on Unusual Substrates. Nano Letters, 2013, 13, 5600-5607.	9.1	49
108	Three-Dimensional Writing of Highly Stretchable Organic Nanowires. ACS Macro Letters, 2012, 1, 375-379.	4.8	47

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109	Direct Synthesis of a Selfâ€Assembled WSe₂/MoS₂ Heterostructure Array and its Optoelectrical Properties. Advanced Materials, 2019, 31, e1904194.	21.0	47
110	Additive-free thick graphene film as an anode material for flexible lithium-ion batteries. Nanoscale, 2015, 7, 7065-7071.	5.6	46
111	Highly Flexible Hybrid CMOS Inverter Based on Si Nanomembrane and Molybdenum Disulfide. Small, 2016, 12, 5720-5727.	10.0	46
112	Onâ€Fabrication Solidâ€State Nâ€Doping of Graphene by an Electronâ€Transporting Metal Oxide Layer for Efficient Inverted Organic Solar Cells. Advanced Energy Materials, 2016, 6, 1600172.	19.5	46
113	High-quality Si_3N_4 circuits as a platform for graphene-based nanophotonic devices. Optics Express, 2013, 21, 31678.	3.4	45
114	A composite layer of atomic-layer-deposited Al2O3 and graphene for flexible moisture barrier. Carbon, 2017, 116, 553-561.	10.3	45
115	A 6.5-Î¼W 10-kHz BW 80.4-dB SNDR G_m-C-Based CT âˆ†Î£ Modulator With a Feedback-Assisted G_m Linearization for Artifact-Tolerant Neural Recording. IEEE Journal of Solid-State Circuits, 2020, 55, 2889-2901.	5.4	45
116	Large-area synthesis of transition metal dichalcogenides via CVD and solution-based approaches and their device applications. Nanoscale, 2021, 13, 615-633.	5.6	44
117	Shifting of surface plasmon resonance due to electromagnetic coupling between graphene and Au nanoparticles. Optics Express, 2012, 20, 19690.	3.4	43
118	Dynamic spin injection into chemical vapor deposited graphene. Applied Physics Letters, 2012, 101, .	3.3	43
119	Nucleation and Growth of the HfO₂ Dielectric Layer for Graphene-Based Devices. Chemistry of Materials, 2015, 27, 5868-5877.	6.7	43
120	Flexible and Stretchable Oxide Electronics. Advanced Electronic Materials, 2016, 2, 1600105.	5.1	42
121	Damage mitigation in roll-to-roll transfer of CVD-graphene to flexible substrates. 2D Materials, 2017, 4, 024002.	4.4	42
122	$hbox{PbZr}_{x}hbox{Ti}_{1 - x}hbox{O}_{3}$ Ferroelectric Thin-Film Capacitors for Flexible Nonvolatile Memory Applications. IEEE Electron Device Letters, 2010, 31, 1017-1019.	3.9	41
123	Controllable Pâ€and Nâ€Type Conversion of MoTe₂ via Oxide Interfacial Layer for Logic Circuits. Small, 2019, 15, e1901772.	10.0	41
124	Boosting ion dynamics through superwettable leaf-like film based on porous g-C3N4 nanosheets for ionogel supercapacitors. NPG Asia Materials, 2019, 11, .	7.9	40
125	Complementary metal oxide silicon integrated circuits incorporating monolithically integrated stretchable wavy interconnects. Applied Physics Letters, 2008, 93, 044102.	3.3	39
126	Monatomic Chemical-Vapor-Deposited Graphene Membranes Bridge a Half-Millimeter-Scale Gap. ACS Nano, 2014, 8, 2336-2344.	14.6	37

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127	Nanofabrication approaches for functional three-dimensional architectures. Nano Today, 2020, 30, 100825.	11.9	37
128	Value-added Synthesis of Graphene: Recycling Industrial Carbon Waste into Electrodes for High-Performance Electronic Devices. Scientific Reports, 2015, 5, 16710.	3.3	36
129	Degradation behaviors and mechanisms of MoS2 crystals relevant to bioabsorbable electronics. NPG Asia Materials, 2018, 10, 810-820.	7.9	36
130	Breaking the absorption limit of Si toward SWIR wavelength range via strain engineering. Science Advances, 2020, 6, eabb0576.	10.3	36
131	Graphene-Based Heat Spreader for Flexible Electronic Devices. IEEE Transactions on Electron Devices, 2014, 61, 4171-4175.	3.0	35
132	Shape-Persistent Macromolecular Disks from Reactive Supramolecular Rod Bundles. Journal of the American Chemical Society, 2004, 126, 12208-12209.	13.7	34
133	Synthesis and applications of graphene electrodes. Carbon Letters, 2012, 13, 1-16.	5.9	33
134	Self-assembled nanodielectrics and silicon nanomembranes for low voltage, flexible transistors, and logic gates on plastic substrates. Applied Physics Letters, 2009, 95, .	3.3	32
135	Conductance modulation in topological insulator Bi2Se3 thin films with ionic liquid gating. Applied Physics Letters, 2013, 103, .	3.3	32
136	Efficient Direct Reduction of Graphene Oxide by Silicon Substrate. Scientific Reports, 2015, 5, 12306.	3.3	32
137	Biologically Plausible Artificial Synaptic Array: Replicating Ebbinghausâ€™ Memory Curve with Selective Attention. Advanced Materials, 2021, 33, e2007782.	21.0	32
138	Influence of nonionic surfactant-modified PEDOT:PSS on graphene. Carbon, 2015, 85, 261-268.	10.3	31
139	Thermal stability of metal Ohmic contacts in indium gallium zinc oxide transistors using a graphene barrier layer. Applied Physics Letters, 2013, 102, .	3.3	30
140	Dryingâ€Mediated Selfâ€Assembled Growth of Transition Metal Dichalcogenide Wires and their Heterostructures. Advanced Materials, 2015, 27, 4142-4149.	21.0	30
141	Electronic Structure of Nonionic Surfactant-Modified PEDOT:PSS and Its Application in Perovskite Solar Cells with Reduced Interface Recombination. ACS Applied Materials & Interfaces, 2019, 11, 17028-17034.	8.0	30
142	Biodegradable and bioabsorbable sensors based on two-dimensional materials. Journal of Materials Chemistry B, 2020, 8, 1082-1092.	5.8	30
143	Rational design of high-performance wearable tactile sensors utilizing bioinspired structures/functions, natural biopolymers, and biomimetic strategies. Materials Science and Engineering Reports, 2022, 148, 100672.	31.8	30
144	Assembly of Foldable 3D Microstructures Using Graphene Hinges. Advanced Materials, 2020, 32, e2001303.	21.0	29

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145	Low-temperature growth and direct transfer of grapheneâ€“graphitic carbon films on flexible plastic substrates. Nanotechnology, 2012, 23, 344016.	2.6	28
146	Si membrane based tactile sensor with active matrix circuitry for artificial skin applications. Applied Physics Letters, 2015, 106, .	3.3	28
147	Epitaxial Growth of Wafer-Scale Molybdenum Disulfide/Graphene Heterostructures by Metalâ€“Organic Vapor-Phase Epitaxy and Their Application in Photodetectors. ACS Applied Materials & Interfaces, 2020, 12, 44335-44344.	8.0	28
148	Grapheneâ€Based Nanomaterials for Flexible and Stretchable Batteries. Small, 2021, 17, e2006262.	10.0	28
149	MECHANICAL FLEXIBILITY OF ZINC OXIDE THIN-FILM TRANSISTORS PREPARED BY TRANSFER PRINTING METHOD. Modern Physics Letters B, 2012, 26, 1250077.	1.9	27
150	Unconventional Transport through Graphene on SrTiO3: A Plausible Effect of SrTiO3 Phase-Transitions. Scientific Reports, 2014, 4, 6173.	3.3	27
151	Low-temperature, high-growth-rate ALD of SiO2 using aminodisilane precursor. Applied Surface Science, 2019, 485, 381-390.	6.1	27
152	3D motion tracking display enabled by magneto-interactive electroluminescence. Nature Communications, 2020, 11, 6072.	12.8	27
153	Wireless graphene-based thermal patch for obtaining temperature distribution and performing thermography. Science Advances, 2022, 8, eabm6693.	10.3	27
154	Graphene Based Nanogenerator for Energy Harvesting. Japanese Journal of Applied Physics, 2013, 52, 06GA02.	1.5	26
155	Additive-free synthesis of Li₄Ti₅O₁₂ nanowire arrays on freestanding ultrathin graphite as a hybrid anode for flexible lithium ion batteries. Journal of Materials Chemistry A, 2016, 4, 19197-19206.	10.3	26
156	Structural inversion in 3-D hexagonal organization of coilâ€“rodâ€“coil molecule. Chemical Communications, 2005, , 1197-1199.	4.1	25
157	Synthesis of two-dimensional MoS2/graphene heterostructure by atomic layer deposition using MoF6 precursor. Applied Surface Science, 2019, 494, 591-599.	6.1	25
158	Orientation-dependent optical characterization of atomically thin transition metal ditellurides. Nanoscale, 2018, 10, 21978-21984.	5.6	24
159	Probing the upper band gap of atomic rhenium disulfide layers. Light: Science and Applications, 2018, 7, 98.	16.6	24
160	Development of electronic devices based on two-dimensional materials. FlatChem, 2017, 3, 43-63.	5.6	23
161	Transient SHG Imaging on Ultrafast Carrier Dynamics of MoS₂ Nanosheets. Advanced Materials, 2018, 30, e1705190.	21.0	23
162	Mechanism of morphological transition from lamellar/perforated layer to gyroid phases. Macromolecular Research, 2003, 11, 152-156.	2.4	21

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163	Morphable 3D structure for stretchable display. Materials Today, 2022, 53, 51-57.	14.2	21
164	Damage-free transfer mechanics of 2-dimensional materials: competition between adhesion instability and tensile strain. NPG Asia Materials, 2021, 13, .	7.9	20
165	Polypyrrole-coated copper nanowire-threaded silver nanoflowers for wearable strain sensors with high sensing performance. Chemical Engineering Journal, 2021, 417, 127966.	12.7	20
166	Additive-free electrode fabrication with reduced graphene oxide using supersonic kinetic spray for flexible lithium-ion batteries. Carbon, 2018, 139, 195-204.	10.3	19
167	Crypto primitive of MOCVD MoS2 transistors for highly secured physical unclonable functions. Nano Research, 2021, 14, 1784-1788.	10.4	19
168	Mechanically flexible thin film transistors and logic gates on plastic substrates by use of single-crystal silicon wires from bulk wafers. Applied Physics Letters, 2010, 96, .	3.3	18
169	Slippery and Wear-Resistant Surfaces Enabled by Interface Engineered Graphene. Nano Letters, 2020, 20, 905-917.	9.1	18
170	Improvement of work function and hole injection efficiency of graphene anode using CHF ₃ plasma treatment. 2D Materials, 2015, 2, 014002.	4.4	17
171	Universality of strain-induced anisotropic friction domains on 2D materials. NPG Asia Materials, 2018, 10, 1069-1075.	7.9	17
172	Stretchable Si Logic Devices with Graphene Interconnects. Small, 2015, 11, 6272-6277.	10.0	15
173	A facile method for the selective decoration of graphene defects based on a galvanic displacement reaction. NPG Asia Materials, 2016, 8, e262-e262.	7.9	15
174	Thickness-Dependent Phonon Renormalization and Enhanced Raman Scattering in Ultrathin Silicon Nanomembranes. Nano Letters, 2017, 17, 7744-7750.	9.1	15
175	Ultrasoft silicon nanomembranes: thickness-dependent effective elastic modulus. Nanoscale, 2019, 11, 15184-15194.	5.6	15
176	Pressure-induced chemical enhancement in Raman scattering from grapheneâ€“Rhodamine 6Gâ€“graphene sandwich structures. Carbon, 2015, 89, 318-327.	10.3	14
177	Mobility enhancement of strained Si transistors by transfer printing on plastic substrates. NPG Asia Materials, 2016, 8, e256-e256.	7.9	14
178	Epidural Electrotherapy for Epilepsy. Small, 2018, 14, e1801732.	10.0	14
179	Residue-free photolithographic patterning of graphene. Chemical Engineering Journal, 2022, 429, 132504.	12.7	14
180	Effect of Polyisoprene Molecular Weight on Morphological Transition in Binary Blends of Styreneâ^'Isoprene Diblock Copolymer and Polyisoprene. Macromolecules, 2002, 35, 10238-10240.	4.8	13

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181	Vertical field effect tunneling transistor based on graphene-ultrathin Si nanomembrane heterostructures. 2D Materials, 2015, 2, 044006.	4.4	12
182	3Dâ€Structured Photodetectors Based on 2D Transitionâ€Metal Dichalcogenide. Small Structures, 2022, 3, .	12.0	12
183	Observation of the Inverse Giant Piezoresistance Effect in Silicon Nanomembranes Probed by Ultrafast Terahertz Spectroscopy. Nano Letters, 2014, 14, 6942-6948.	9.1	11
184	Flexible graphene based microwave attenuators. Nanotechnology, 2015, 26, 055201.	2.6	11
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