

Byoung Hun Lee

List of Publications by Year in descending order

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274
papers

9,482
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50276

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docs citations

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times ranked

11265
citing authors

#	ARTICLE	IF	CITATIONS
1	High-performance near-infrared photodetectors based on gate-controlled graphene-germanium Schottky junction with split active junction. <i>Nanophotonics</i> , 2022, 11, 1041-1049.	6.0	6
2	Performance enhancement of graphene/Ge near-infrared photodetector by modulating the doping level of graphene. <i>APL Photonics</i> , 2022, 7, .	5.7	11
3	Performance Evaluation of Scaled ZnO Stacked Nanosheet Channel Ternary Field Effect Transistor. <i>IEEE Electron Device Letters</i> , 2022, 43, 323-326.	3.9	3
4	Perovskite multifunctional logic gates via bipolar photoresponse of single photodetector. <i>Nature Communications</i> , 2022, 13, 720.	12.8	53
5	Effects of DC and AC stress on the VT shift of AlGaIn/GaN MIS-HEMTs. <i>Current Applied Physics</i> , 2022, 39, 128-132.	2.4	0
6	Demonstration of Anti-ambipolar Switch and Its Applications for Extremely Low Power Ternary Logic Circuits. <i>ACS Nano</i> , 2022, 16, 10994-11003.	14.6	11
7	Impact of Post-Metal Annealing With Deuterium or Nitrogen for Curing a Gate Dielectric Using Joule Heat Driven by Punch-Through Current. <i>IEEE Electron Device Letters</i> , 2021, 42, 276-279.	3.9	5
8	High-responsivity PtSe ₂ photodetector enhanced by photogating effect. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	25
9	Modulation of the Electronic Properties of MXene (Ti ₃ C ₂ T _x) via Surface-Covalent Functionalization with Diazonium. <i>ACS Nano</i> , 2021, 15, 1388-1396.	14.6	100
10	Highly responsive near-infrared photodetector with low dark current using graphene/germanium Schottky junction with Al ₂ O ₃ interfacial layer. <i>Nanophotonics</i> , 2021, 10, 1573-1579.	6.0	39
11	High Gain and Broadband Absorption Graphene Photodetector Decorated with Bi ₂ Te ₃ Nanowires. <i>Nanomaterials</i> , 2021, 11, 755.	4.1	15
12	Copper-graphene heterostructure for back-end-of-line compatible high-performance interconnects. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	7.9	13
13	Bias-controlled multi-functional transport properties of InSe/BP van der Waals heterostructures. <i>Scientific Reports</i> , 2021, 11, 7843.	3.3	4
14	Direct Measurement of Transient Charging and Dipole Alignment Speed in Ferroelectric Hf _{0.5} Zr _{0.5} O ₂ Gate Dielectric Using Graphene FETs. <i>Advanced Electronic Materials</i> , 2021, 7, 2100145.	5.1	5
15	Operation Principles of ZnO/Al ₂ O ₃ ∕DMP/ZnO Stacked∕Channel Ternary Thin∕Film Transistor. <i>Advanced Electronic Materials</i> , 2021, 7, 2100247.	5.1	9
16	Demonstration of programmable ternary graphene field-effect transistor using ferroelectric polymer doping. <i>Organic Electronics</i> , 2021, 93, 106157.	2.6	4
17	A Facile Method for Improving Detectivity of Graphene/p∕Type Silicon Heterojunction Photodetector. <i>Laser and Photonics Reviews</i> , 2021, 15, 2000557.	8.7	24
18	Non-destructive defect level analysis of graphene using amplitude-modulated discharge current analysis. <i>Carbon</i> , 2021, 179, 627-632.	10.3	4

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19	A new route of synthesizing atomically thin 2D materials embedded in bulk oxides. Journal of Applied Physics, 2021, 130, 035302.	2.5	0
20	Direct Defect-Level Analysis of Metal-Insulator-Metal Capacitor Using Internal Photoemission Spectroscopy. IEEE Journal of the Electron Devices Society, 2021, 9, 424-428.	2.1	2
21	Unveiling the Role of Al ₂ O ₃ Interlayer in Indium-Gallium-Zinc Oxide Transistors. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000621.	1.8	4
22	Deep-Ultraviolet (DUV)-Induced Doping in Single Channel Graphene for Pn-Junction. Nanomaterials, 2021, 11, 3003.	4.1	1
23	High-quality nitrogen-doped graphene films synthesized from pyridine via two-step chemical vapor deposition. Carbon, 2020, 159, 579-585.	10.3	40
24	A negative electrocaloric effect in an antiferroelectric zirconium dioxide thin film. Nanoscale, 2020, 12, 3894-3901.	5.6	18
25	Quantitative Analysis of High-Pressure Deuterium Annealing Effects on Vertically Stacked Gate-All-Around SONOS Memory. IEEE Transactions on Electron Devices, 2020, 67, 3903-3907.	3.0	15
26	Direct writing of graphite thin film by laser-assisted chemical vapor deposition. Carbon, 2020, 169, 163-171.	10.3	5
27	Dynamic band alignment modulation of ultrathin WO _x /ZnO stack for high on/off ratio field-effect switching applications. Nanoscale, 2020, 12, 16755-16761.	5.6	1
28	Al ₂ O ₃ -Induced Sub-Gap Doping on the IGZO Channel for the Detection of Infrared Light. ACS Applied Electronic Materials, 2020, 2, 1478-1483.	4.3	19
29	Performance Degradation in Graphene-ZnO Barristors Due to Graphene Edge Contact. ACS Applied Materials & Interfaces, 2020, 12, 28768-28774.	8.0	0
30	Channel Defect Profiling and Passivation for ZnO Thin-Film Transistors. Nanomaterials, 2020, 10, 1186.	4.1	1
31	Gate-Modulated Ultrasensitive Visible and Near-Infrared Photodetection of Oxygen Plasma-Treated WSe ₂ Lateral pn-Homojunctions. ACS Applied Materials & Interfaces, 2020, 12, 23261-23271.	8.0	41
32	MXenes for future nanophotonic device applications. Nanophotonics, 2020, 9, 1831-1853.	6.0	31
33	Quantitative defect density extraction method for metal-insulator-metal capacitor. Semiconductor Science and Technology, 2020, 35, 115025.	2.0	5
34	Extreme Low Power Technology using Ternary Arithmetic Logic Circuits via Drastic Interconnect Length Reduction. , 2020, , .		8
35	Avalanche Carrier Multiplication in Multilayer Black Phosphorus and Avalanche Photodetector. Small, 2019, 15, e1805352.	10.0	25
36	Enhanced Photo-Response of Mos 2 Photodetectors by a Laterally Aligned SiO 2 Nanoribbon Array Substrate. ChemNanoMat, 2019, 5, 1272-1279.	2.8	2

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37	Demonstration of ternary devices and circuits using dual channel graphene barristors. , 2019, , .		7
38	CMOS technology on another level. Nature Electronics, 2019, 2, 272-273.	26.0	1
39	Plasmonic Transition Metal Carbide Electrodes for High-Performance InSe Photodetectors. ACS Nano, 2019, 13, 8804-8810.	14.6	69
40	Transition-Metal-Carbide (Mo_2C) Multiperiod Gratings for Realization of High-Sensitivity and Broad-Spectrum Photodetection. Advanced Functional Materials, 2019, 29, 1905384.	14.9	57
41	Hot-Carrier Degradation Estimation of a Silicon-on-Insulator Tunneling FET Using Ambipolar Characteristics. IEEE Electron Device Letters, 2019, 40, 1716-1719.	3.9	7
42	ZnO composite nanolayer with mobility edge quantization for multi-value logic transistors. Nature Communications, 2019, 10, 1998.	12.8	67
43	Interface state degradation during AC positive bias temperature instability stress. Solid-State Electronics, 2019, 158, 46-50.	1.4	3
44	Enhancement of Ferroelectric Properties of Superlattice-Based Epitaxial BiFeO_3 Thin Films via Substitutional Doping Effect. Journal of Physical Chemistry C, 2019, 123, 11564-11571.	3.1	5
45	Threshold Voltage Modulation of a Graphene-ZnO Barristor Using a Polymer Doping Process. Advanced Electronic Materials, 2019, 5, 1800805.	5.1	17
46	Advantages of a buried-gate structure for graphene field-effect transistor. Semiconductor Science and Technology, 2019, 34, 055010.	2.0	12
47	High-Responsivity Near-Infrared Photodetector Using Gate-Modulated Graphene/Germanium Schottky Junction. Advanced Electronic Materials, 2019, 5, 1800957.	5.1	54
48	Piezoelectrically modulated touch pressure sensor using a graphene barristor. Japanese Journal of Applied Physics, 2019, 58, SBBH03.	1.5	6
49	Chemically doped graphene based ternary field effect transistors. Japanese Journal of Applied Physics, 2019, 58, SBBH04.	1.5	8
50	Low-Power Complementary Logic Circuit Using Polymer-Electrolyte-Gated Graphene Switching Devices. ACS Applied Materials & Interfaces, 2019, 11, 47247-47252.	8.0	8
51	Scalable Two-Dimensional Lateral Metal/Semiconductor Junction Fabricated with Selective Synthetic Integration of Transition-Metal-Carbide (Mo_2C)/-Dichalcogenide (MoS_2). ACS Applied Materials & Interfaces, 2019, 11, 47190-47196.	8.0	19
52	Tunable AC/DC converter using graphene-germanium barristor based half-wave rectifier. AIP Advances, 2019, 9, 095009.	1.3	0
53	Contact Resistance Reduction of WS_2 FETs Using High-Pressure Hydrogen Annealing. IEEE Journal of the Electron Devices Society, 2018, 6, 164-168.	2.1	25
54	Chemically induced Fermi level pinning effects of high-k dielectrics on graphene. Scientific Reports, 2018, 8, 2992.	3.3	5

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55	Tunable graphene doping by modulating the nanopore geometry on a SiO ₂ /Si substrate. RSC Advances, 2018, 8, 9031-9037.	3.6	8
56	Graphene/ZnO:N barristor on a polyethylene naphthalate substrate. AIP Advances, 2018, 8, .	1.3	5
57	Flexible Transparent Nanogenerators Utilizing Shape-Modulated ZnO Nanorod Arrays on Graphene Electrodes. Advanced Materials Technologies, 2018, 3, 1700355.	5.8	10
58	Generalized Scheme for High Performing Photodetectors with a p-Type 2D Channel Layer and n-Type Nanoparticles. Small, 2018, 14, 1703065.	10.0	18
59	Epitaxial Synthesis of Molybdenum Carbide and Formation of a Mo ₂ C/MoS ₂ Hybrid Structure <i>via</i> Chemical Conversion of Molybdenum Disulfide. ACS Nano, 2018, 12, 338-346.	14.6	148
60	Quantitative Analysis of Deuterium Annealing Effect on Poly-Si TFTs by Low Frequency Noise and DC I_{DS} vs V_{GS} Characterization. IEEE Transactions on Electron Devices, 2018, 65, 1640-1644.	3.0	15
61	Unique reliability characteristics of fully depleted silicon-on-insulator tunneling FET. Japanese Journal of Applied Physics, 2018, 57, 04FB02.	1.5	1
62	Charge transfer in graphene/polymer interfaces for CO ₂ detection. Nano Research, 2018, 11, 3529-3536.	10.4	34
63	High-pressure oxygen annealing of Al ₂ O ₃ passivation layer for performance enhancement of graphene field-effect transistors. Nanotechnology, 2018, 29, 055202.	2.6	7
64	Zero-Bias Operation of CVD Graphene Photodetector with Asymmetric Metal Contacts. ACS Photonics, 2018, 5, 365-370.	6.6	28
65	Facile process to clean PMMA residue on graphene using KrF laser annealing. AIP Advances, 2018, 8, .	1.3	10
66	Ternary Full Adder Using Multi-Threshold Voltage Graphene Barristors. IEEE Electron Device Letters, 2018, 39, 1948-1951.	3.9	46
67	HfO ₂ /HfS ₂ hybrid heterostructure fabricated <i>via</i> controllable chemical conversion of two-dimensional HfS ₂ . Nanoscale, 2018, 10, 18758-18766.	5.6	48
68	Very-Low-Temperature Integrated Complementary Graphene-Based Inverter for Thin-Film Transistor Applications. Annalen Der Physik, 2018, 530, 1800224.	2.4	5
69	Operation Mechanism of a MoS ₂ /BP Heterojunction FET. Nanomaterials, 2018, 8, 797.	4.1	11
70	Contact resistance reduction of ZnO thin film transistors (TFTs) with saw-shaped electrode. Nanotechnology, 2018, 29, 325202.	2.6	7
71	Tailoring Crystallographic Orientations to Substantially Enhance Charge Separation Efficiency in Anisotropic BiVO ₄ Photoanodes. ACS Catalysis, 2018, 8, 5952-5962.	11.2	85
72	Effect of ribbon width on electrical transport properties of graphene nanoribbons. Nano Convergence, 2018, 5, 7.	12.1	14

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73	Dielectric Dispersion and High Field Response of Multilayer Hexagonal Boron Nitride. <i>Advanced Functional Materials</i> , 2018, 28, 1804235.	14.9	38
74	Reliability characteristics of MIM capacitor studied with ^{13}C -F characteristics. , 2018, , .		3
75	Gate-Controlled Graphene-Silicon Schottky Junction Photodetector. <i>Small</i> , 2018, 14, e1801182.	10.0	53
76	Growth of Centimeter-Scale Monolayer and Few-Layer WSe_2 Thin Films on SiO_2/Si Substrate via Pulsed Laser Deposition. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800524.	3.7	23
77	A graphene barristor using nitrogen profile controlled ZnO Schottky contacts. <i>Nanoscale</i> , 2017, 9, 2442-2448.	5.6	22
78	Multifunctional Homogeneous Lateral Black Phosphorus Junction Devices. <i>Chemistry of Materials</i> , 2017, 29, 3143-3151.	6.7	23
79	Sulfur vacancy-induced reversible doping of transition metal disulfides via hydrazine treatment. <i>Nanoscale</i> , 2017, 9, 9333-9339.	5.6	66
80	Wafer-Scale Integration of Highly Uniform and Scalable MoS_2 Transistors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 37146-37153.	8.0	32
81	Pulsed KrF laser-assisted direct deposition of graphitic capping layer for Cu interconnect. <i>Carbon</i> , 2017, 123, 307-310.	10.3	8
82	Template-engineered epitaxial BiVO_4 photoanodes for efficient solar water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18831-18838.	10.3	42
83	Time Domain Reflectometry Analysis of the Dispersion of Metal-Insulator-Metal Capacitance. <i>IEEE Electron Device Letters</i> , 2017, 38, 521-524.	3.9	4
84	Fermi level modulation at the interface of graphene and metal. , 2017, , .		0
85	Two-Dimensional Atomic-Layered Alloy Junctions for High-Performance Wearable Chemical Sensor. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 19635-19642.	8.0	83
86	Demonstration of Complementary Ternary Graphene Field-Effect Transistors. <i>Scientific Reports</i> , 2016, 6, 39353.	3.3	42
87	Ultra-thin SiO_2 dielectric characteristics using E-beam evaporated system on HOPG and CVD graphene. , 2016, , .		2
88	A robust method for extracting the mechanical properties of thin films with rough surfaces by nanoindentation. <i>Journal of Materials Research</i> , 2016, 31, 3777-3785.	2.6	5
89	Highly Bendable In-Ga-ZnO Thin Film Transistors by Using a Thermally Stable Organic Dielectric Layer. <i>Scientific Reports</i> , 2016, 6, 37764.	3.3	35
90	Monolayer MoS_2 metal insulator transition based memcapacitor modeling with extension to a ternary device. <i>AIP Advances</i> , 2016, 6, .	1.3	15

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91	Design of Ratioless Ternary Inverter Using Graphene Barristor. , 2016, , .		6
92	Reduction of low-frequency noise in multilayer MoS ₂ FETs using a Fermi-level depinning layer. Physica Status Solidi - Rapid Research Letters, 2016, 10, 634-638.	2.4	14
93	Alloyed 2D Metal-Semiconductor Heterojunctions: Origin of Interface States Reduction and Schottky Barrier Lowering. Nano Letters, 2016, 16, 5928-5933.	9.1	57
94	Robust and stretchable indium gallium zinc oxide-based electronic textiles formed by cilia-assisted transfer printing. Nature Communications, 2016, 7, 11477.	12.8	73
95	Origin of the channel width dependent field effect mobility of graphene field effect transistors. Microelectronic Engineering, 2016, 163, 55-59.	2.4	4
96	Barrier height reconfiguration of graphene/ZnO:N barristor using ferroelectric polymer. , 2016, , .		0
97	Complementary Unipolar WS ₂ Field-Effect Transistors Using Fermi-Level Depinning Layers. Advanced Electronic Materials, 2016, 2, 1500278.	5.1	28
98	Alloyed 2D Metal-Semiconductor Atomic Layer Junctions. Nano Letters, 2016, 16, 1890-1895.	9.1	77
99	Hot-Carrier Instability of nMOSFETs Under Pseudorandom Bit Sequence Stress. IEEE Electron Device Letters, 2016, 37, 366-368.	3.9	7
100	Shear stress-induced enhancement of the piezoelectric properties of PVDF-TrFE thin films. Organic Electronics, 2016, 28, 67-72.	2.6	29
101	Study on future electronic device using graphene. Vacuum Magazine, 2016, 3, 22-31.	0.0	0
102	Low-temperature-grown continuous graphene films from benzene by chemical vapor deposition at ambient pressure. Scientific Reports, 2015, 5, 17955.	3.3	108
103	Metal Decoration Effects on the Gas-Sensing Properties of 2D Hybrid-Structures on Flexible Substrates. Sensors, 2015, 15, 24903-24913.	3.8	41
104	Patterned catalyst arrays of Pd/SnO ₂ core-shell nanowires for electrooxidations of biomass-derived alcohols. Journal of Materials Chemistry A, 2015, 3, 13492-13499.	10.3	13
105	Graphene transfer in vacuum yielding a high quality graphene. Carbon, 2015, 93, 286-294.	10.3	33
106	Oxide based nanoscale analog synapse device for neural signal recognition system. , 2015, , .		30
107	The variation of the enhanced PL efficiency of Y ₂ O ₃ :Eu ³⁺ phosphor films with the height to the ZrO ₂ nanoparticle-assisted 2D PCL by reverse nano-imprint lithography. Microelectronic Engineering, 2015, 136, 48-50.	2.4	3
108	A facile process to achieve hysteresis-free and fully stabilized graphene field-effect transistors. Nanoscale, 2015, 7, 4013-4019.	5.6	25

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109	Bifunctional Sensing Characteristics of Chemical Vapor Deposition Synthesized Atomic-Layered MoS ₂ . ACS Applied Materials & Interfaces, 2015, 7, 2952-2959.	8.0	162
110	Extraction of the Interface State Density of Top-Gate Graphene Field-Effect Transistors. IEEE Electron Device Letters, 2015, 36, 408-410.	3.9	16
111	Charge-transfer-based Gas Sensing Using Atomic-layer MoS ₂ . Scientific Reports, 2015, 5, 8052.	3.3	489
112	Extraction of Effective Mobility from nMOSFETs With Leaky Gate Dielectric Using Time Domain Reflectometry. IEEE Transactions on Electron Devices, 2015, 62, 1092-1097.	3.0	1
113	Chemical Sensing of 2D Graphene/MoS ₂ Heterostructure device. ACS Applied Materials & Interfaces, 2015, 7, 16775-16780.	8.0	375
114	Electronic system with memristive synapses for pattern recognition. Scientific Reports, 2015, 5, 10123.	3.3	133
115	Contact resistance improvement by the modulation of peripheral length to area ratio of graphene contact pattern. Applied Physics Letters, 2015, 106, .	3.3	11
116	Neuromorphic Hardware System for Visual Pattern Recognition With Memristor Array and CMOS Neuron. IEEE Transactions on Industrial Electronics, 2015, 62, 2410-2419.	7.9	231
117	Quantitatively estimating defects in graphene devices using discharge current analysis method. Scientific Reports, 2015, 4, 4886.	3.3	15
118	Leakage current limit of time domain reflectometry in ultrathin dielectric characterization. Japanese Journal of Applied Physics, 2014, 53, 08LC02.	1.5	2
119	Towards three-dimensional integration of two-dimensional active logic circuits using low temperature multilayer stacking of GFETs. , 2014, , .		0
120	Performance prospect of graphene barristor with high on-off ratio (∼10 ⁷), , 2014, , .		1
121	Optimized integration processes to achieve highly stable CVD graphene FETs. , 2014, , .		1
122	Ultraviolet emission from a multi-layer graphene/MgZnO/ZnO light-emitting diode. Applied Physics Letters, 2014, 104, 051120.	3.3	18
123	A nitrogen-treated memristive device for tunable electronic synapses. Semiconductor Science and Technology, 2014, 29, 104006.	2.0	10
124	Highly sensitive wide bandwidth photodetectors using chemical vapor deposited graphene. Applied Physics Letters, 2014, 104, .	3.3	20
125	Rigid substrate process to achieve high mobility in graphene field-effect transistors on a flexible substrate. Carbon, 2014, 68, 791-797.	10.3	23
126	Triangular-Pulse Measurement for Hysteresis of High-Performance and Flexible Graphene Field-Effect Transistors. IEEE Electron Device Letters, 2014, 35, 277-279.	3.9	1

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127	A Correlation Between Oxygen Vacancies and Reliability Characteristics in a Single Zirconium Oxide Metal-Insulator-Metal Capacitor. IEEE Transactions on Electron Devices, 2014, 61, 2619-2627.	3.0	11
128	Quantitative analysis of interfacial reactions at a graphene/SiO ₂ interface using the discharge current analysis method. Applied Physics Letters, 2014, 104, 151604.	3.3	6
129	Neuromorphic speech systems using advanced ReRAM-based synapse. , 2013, , .		118
130	Quantitative analysis of hysteretic reactions at the interface of graphene and SiO ₂ using the short pulse μ V method. Carbon, 2013, 60, 453-460.	10.3	51
131	Mechanism of the effects of low temperature Al ₂ O ₃ passivation on graphene field effect transistors. Carbon, 2013, 53, 182-187.	10.3	53
132	Characteristics of a pressure sensitive touch sensor using a piezoelectric PVDF-TrFE/MoS ₂ stack. Nanotechnology, 2013, 24, 475501.	2.6	39
133	Novel multi-bit memory device using metal/PVDF-TrFE/graphene stack. Microelectronic Engineering, 2013, 109, 87-89.	2.4	11
134	Correlation between the hysteresis and the initial defect density of graphene. Applied Physics Letters, 2013, 103, 083110.	3.3	14
135	Sub-10 nm Graphene Nanoribbon Array Field-Effect Transistors Fabricated by Block Copolymer Lithography. Advanced Materials, 2013, 25, 4723-4728.	21.0	150
136	Intrinsic photocurrent characteristics of graphene photodetectors passivated with Al ₂ O ₃ . Optics Express, 2013, 21, 23391.	3.4	28
137	Development of a Semiempirical Compact Model for DC/AC Cell Operation of HfO_2 -Based ReRAMs. IEEE Electron Device Letters, 2013, 34, 1133-1135.	3.9	14
138	Comprehensive study for RF interference limited 3D TSV optimization. , 2013, , .		3
139	Highly Flexible and Transparent Multilayer MoS ₂ Transistors with Graphene Electrodes. Small, 2013, 9, 3295-3300.	10.0	189
140	Influence of extrinsic factors on accuracy of mobility extraction in graphene metal-oxide-semiconductor field effect transistors. Applied Physics Letters, 2013, 102, .	3.3	16
141	Effects of multi-layer graphene capping on Cu interconnects. Nanotechnology, 2013, 24, 115707.	2.6	66
142	Ferroelectric polymer-gated graphene memory with high speed conductivity modulation. Nanotechnology, 2013, 24, 175202.	2.6	30
143	Nanoscale RRAM-based synaptic electronics: toward a neuromorphic computing device. Nanotechnology, 2013, 24, 384009.	2.6	103
144	Intrinsic Time Zero Dielectric Breakdown Characteristics of HfAlO Alloys. IEEE Transactions on Electron Devices, 2013, 60, 3683-3689.	3.0	11

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145	Characteristics of light-induced electron transport from P3HT to ZnO-nanowire field-effect transistors. Applied Physics Letters, 2013, 103, 223305.	3.3	9
146	Indicators of mobility extraction error in bottom gate CdS metal-oxide-semiconductor field-effect transistors. Applied Physics Letters, 2012, 101, .	3.3	4
147	Capacitance Analysis of Highly Leaky Al_2O_3 MIM Capacitors Using Time Domain Reflectometry. IEEE Electron Device Letters, 2012, 33, 1303-1305.	3.9	3
148	Self-formed Schottky barrier induced selectorless RRAM for crosspoint memory applications. Physica Status Solidi - Rapid Research Letters, 2012, 6, 454-456.	2.4	31
149	RRAM-based synapse for neuromorphic system with pattern recognition function. , 2012, , .		108
150	Effects of gate process on NBTI characteristics of TiN gate FinFET. , 2012, , .		2
151	Flexible organic solar cells composed of P3HT:PCBM using chemically doped graphene electrodes. Nanotechnology, 2012, 23, 344013.	2.6	119
152	Process-Dependent N/PBTI Characteristics of TiN Gate FinFETs. IEEE Electron Device Letters, 2012, 33, 937-939.	3.9	17
153	Au nanoparticle-decorated graphene electrodes for GaN-based optoelectronic devices. Applied Physics Letters, 2012, 101, .	3.3	48
154	Correlation of low frequency noise characteristics with the interfacial charge exchange reaction at graphene devices. Carbon, 2012, 50, 4046-4051.	10.3	13
155	Variability and feasibility of CVD graphene interconnect. , 2011, , .		5
156	Enhanced Current Drivability of CVD Graphene Interconnect in Oxygen-Deficient Environment. IEEE Electron Device Letters, 2011, 32, 1591-1593.	3.9	24
157	Feasibility Study of $\text{Mo/SiO}_x/\text{Pt}$ Resistive Random Access Memory in an Inverter Circuit for FPGA Applications. IEEE Electron Device Letters, 2011, 32, 1665-1667.	3.9	4
158	Fast transient charging at the graphene/SiO ₂ interface causing hysteretic device characteristics. Applied Physics Letters, 2011, 98, .	3.3	122
159	Selected Peer-Reviewed Articles from 2010 International Conference on Nanoscience and Nanotechnology (ICNST 2010). Journal of Nanoscience and Nanotechnology, 2011, 11, 7050-7052.	0.9	0
160	A comparative study of depth profiling of interface states using charge pumping and low frequency noise measurement in SiO ₂ /HfO ₂ gate stack nMOSFETs. Microelectronic Engineering, 2011, 88, 3411-3414.	2.4	0
161	Excellent resistive switching in nitrogen-doped Ge ₂ Sb ₂ Te ₅ devices for field-programmable gate array configurations. Applied Physics Letters, 2011, 99, 192110.	3.3	21
162	Electrical characteristics of wrinkle-free graphene formed by laser graphitization of 4H-SiC. Applied Physics Letters, 2011, 99, 082111.	3.3	13

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163	Nano-Electromechanical Switch-CMOS Hybrid Technology and Its Applications. Journal of Nanoscience and Nanotechnology, 2011, 11, 256-261.	0.9	1
164	Enhanced characteristics of pentacene field-effect transistors with graphene electrodes and substrate treatments. Applied Physics Letters, 2011, 99, 083306.	3.3	24
165	Investigation of Random Telegraph Noise in Gate-Induced Drain Leakage and Gate Edge Direct Tunneling Currents of High- k MOSFETs. IEEE Transactions on Electron Devices, 2010, 57, 913-918.	3.0	21
166	Comparison of Low-Frequency Noise in Channel and Gate-Induced Drain Leakage Currents of High- k nFETs. IEEE Electron Device Letters, 2010, 31, 1086-1088.	3.9	8
167	New Hot-Carrier Injection Mechanism at Source Side in Nanoscale Floating-Body MOSFETs. IEEE Electron Device Letters, 2009, 30, 54-56.	3.9	1
168	Effective Carrier Mobility Extraction Based on RF Modeling for Highly Leaky MOSFET Devices with Short Channel Length and Small Area. , 2009, , .		1
169	Performance and reliability improvement of HfSiON gate dielectrics using chlorine plasma treatment. Applied Physics Letters, 2009, 94, 042911.	3.3	2
170	Unified TDDDB model for stacked high- k dielectrics. , 2009, , .		4
171	Hot carrier degradation in HfSiON/TiN fin shaped field effect transistor with different substrate orientations. Journal of Vacuum Science & Technology B, 2009, 27, 468.	1.3	19
172	Pulsed I_{d} vs V_{g} Methodology and Its Application to Electron-Trapping Characterization and Defect Density Profiling. IEEE Transactions on Electron Devices, 2009, 56, 1322-1329.	3.0	65
173	Comparison of La-based high- k dielectrics: HfLaSiON and HfLaON. Microelectronic Engineering, 2009, 86, 268-271.	2.4	3
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