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## List of Publications by Year in descending order

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206  
papers

19,644  
citations

38742

50  
h-index

11052

137  
g-index

207  
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207  
docs citations

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times ranked

18218  
citing authors

#	ARTICLE	IF	CITATIONS
1	First demonstration of robust tri-gate $\text{In}_2\text{Ga}_2\text{O}_3$ nano-membrane field-effect transistors. <i>Nanotechnology</i> , 2022, 33, 125201.	2.6	11
2	Positive Bias Temperature Instability and Hot Carrier Degradation of Back-End-of-Line, nm-Thick, $\text{In}_2\text{O}_3$ Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , 2022, 43, 232-235.	3.9	10
3	Controlling Threshold Voltage of CMOS SOI Nanowire FETs With Sub-1 nm Dipole Layers Formed by Atomic Layer Deposition. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 851-856.	3.0	5
4	Ionic Control over Ferroelectricity in 2D Layered van der Waals Capacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 3018-3026.	8.0	16
5	Realization of Maximum 2 A/mm Drain Current on Top-Gate Atomic-Layer-Thin Indium Oxide Transistors by Thermal Engineering. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 147-151.	3.0	14
6	Enhancement of Thermal Transfer From $\text{In}_2\text{Ga}_2\text{O}_3$ Nano-Membrane Field-Effect Transistors to High Thermal Conductivity Substrate by Inserting an Interlayer. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 1186-1190.	3.0	7
7	Atomically Thin Indium-Tin-Oxide Transistors Enabled by Atomic Layer Deposition. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 231-236.	3.0	20
8	Scaled indium oxide transistors fabricated using atomic layer deposition. <i>Nature Electronics</i> , 2022, 5, 164-170.	26.0	98
9	The resurrection of tellurium as an elemental two-dimensional semiconductor. <i>Npj 2D Materials and Applications</i> , 2022, 6, .	7.9	36
10	BEOL-Compatible, ALD-grown $\text{In}_2\text{O}_3$ Top-Gate FETs with Maximum Drain Current of 3 A/mm through Thermal Engineering and Pulse Measurement. , 2022, , .		2
11	Characterization of Interface and Bulk Traps in Ultrathin Atomic Layer-Deposited Oxide Semiconductor MOS Capacitors With $\text{HfO}_2/\text{In}_2\text{O}_3$ Gate Stack by C-V and Conductance Method. <i>Frontiers in Materials</i> , 2022, 9, .	2.4	4
12	Vertically stacked multilayer atomic-layer-deposited sub-1-nm $\text{In}_2\text{O}_3$ field-effect transistors with back-end-of-line compatibility. <i>Applied Physics Letters</i> , 2022, 120, .	3.3	7
13	Selenene and Tellurene. , 2022, , 197-224.		2
14	2023: <i>Invited Paper:</i> BEOL-Compatible Ferroelectric Field-Effect Transistors with Atomic Layer Deposition of Oxide Semiconductor Channel Toward Monolithic 3D Integration. <i>Digest of Technical Papers SID International Symposium</i> , 2022, 53, 221-224.	0.3	0
15	High-Performance Atomic-Layer-Deposited Indium Oxide 3-D Transistors and Integrated Circuits for Monolithic 3-D Integration. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 6605-6609.	3.0	19
16	Enhancement-mode atomic-layer thin $\text{In}_2\text{O}_3$ transistors with maximum current exceeding 2 A/mm at drain voltage of 0.7 V enabled by oxygen plasma treatment. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	27
17	Scaled Atomic-Layer-Deposited Indium Oxide Nanometer Transistors With Maximum Drain Current Exceeding 2 A/mm at Drain Voltage of 0.7 V. <i>IEEE Electron Device Letters</i> , 2021, 42, 184-187.	3.9	48
18	Asymmetric Metal/ $\text{In}_2\text{Se}_3/\text{Si}$ Crossbar Ferroelectric Semiconductor Junction. <i>ACS Nano</i> , 2021, 15, 5689-5695.	14.6	36

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19	Enhancement-Mode Atomic-Layer-Deposited In <sub>2</sub> O <sub>3</sub> Transistors With Maximum Drain Current of 2.2 A/mm at Drain Voltage of 0.7 V by Low-Temperature Annealing and Stability in Hydrogen Environment. IEEE Transactions on Electron Devices, 2021, 68, 1075-1080.	3.0	36
20	Quantitative Characterization of Ferroelectric/Dielectric Interface Traps by Pulse Measurements. IEEE Transactions on Electron Devices, 2021, 68, 1214-1220.	3.0	14
21	BEOL Compatible Indium-Tin-Oxide Transistors: Switching of Ultra-High-Density 2D Electron Gas over 0.8Å—10 <sup>14</sup> /cm <sup>2</sup> by Ferroelectric Polarization. , 2021, , .		0
22	First Experimental Demonstration of Robust HZO/Î <sup>2</sup> -Gaâ,,Oâ,f Ferroelectric Field-Effect Transistors as Synaptic Devices for Artificial Intelligence Applications in a High-Temperature Environment. IEEE Transactions on Electron Devices, 2021, 68, 2515-2521.	3.0	14
23	Ultrathin transparent Copper(I) oxide films grown by plasma-enhanced atomic layer deposition for Back-end-of-line p-Type transistors. Nano Express, 2021, 2, 020023.	2.4	3
24	BEOL Compatible Indium-Tin-Oxide Transistors: Switching of Ultrahigh-Density 2-D Electron Gas Over 0.8 Å— 10 <sup>14</sup> /cm <sup>2</sup> at Oxide/Oxide Interface by the Change of Ferroelectric Polarization. IEEE Transactions on Electron Devices, 2021, 68, 3195-3199.	3.0	20
25	High-Performance Inâ,,Oâ,f-Based 1T1R FET for BEOL Memory Application. IEEE Transactions on Electron Devices, 2021, 68, 3775-3779.	3.0	3
26	Polarization switching in Hf0.5Zr0.5O <sub>2</sub> -dielectric stack: The role of dielectric layer thickness. Applied Physics Letters, 2021, 119, .	3.3	8
27	Mechanical Anisotropy in Two-Dimensional Selenium Atomic Layers. Nano Letters, 2021, 21, 8043-8050.	9.1	12
28	Bilayer Quantum Hall States in an n-Type Wide Tellurium Quantum Well. Nano Letters, 2021, 21, 7527-7533.	9.1	6
29	The Critical Role of Charge Balance on the Memory Characteristics of Ferroelectric Field-Effect Transistors. IEEE Transactions on Electron Devices, 2021, 68, 5108-5113.	3.0	10
30	Current annealing to improve drain output performance of Î <sup>2</sup> -Ga <sub>2</sub> O <sub>3</sub> field-effect transistor. Solid-State Electronics, 2021, 185, 108134.	1.4	6
31	Why In <sub>2</sub> O <sub>3</sub> Can Make 0.7 nm Atomic Layer Thin Transistors. Nano Letters, 2021, 21, 500-506.	9.1	99
32	Ferroelectric FET Based Coupled-Oscillatory Network for Edge Detection. IEEE Electron Device Letters, 2021, 42, 1670-1673.	3.9	5
33	Overview and outlook of emerging non-volatile memories. MRS Bulletin, 2021, 46, 946-958.	3.5	22
34	Atomically thin In <sub>2</sub> O <sub>3</sub> field-effect transistors with 10 <sup>17</sup> current on/off ratio. Applied Physics Letters, 2021, 119, .	3.3	14
35	Anisotropic thermal conductivity in 2D tellurium. 2D Materials, 2020, 7, 015008.	4.4	39
36	Energy Transport by Radiation in Hyperbolic Material Comparable to Conduction. Advanced Functional Materials, 2020, 30, 1905830.	14.9	16

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37	Anisotropic Signal Processing with Trigonal Selenium Nanosheet Synaptic Transistors. ACS Nano, 2020, 14, 10018-10026.	14.6	43
38	Ultrafast photoinduced band splitting and carrier dynamics in chiral tellurium nanosheets. Nature Communications, 2020, 11, 3991.	12.8	39
39	Indium-Tin-Oxide Transistors with One Nanometer Thick Channel and Ferroelectric Gating. ACS Nano, 2020, 14, 11542-11547.	14.6	75
40	Bandgap engineering of two-dimensional semiconductor materials. Npj 2D Materials and Applications, 2020, 4, .	7.9	528
41	The Impact of Channel Semiconductor on the Memory Characteristics of Ferroelectric Field-Effect Transistors. IEEE Journal of the Electron Devices Society, 2020, 8, 846-849.	2.1	8
42	Quantitative Characterization of Interface Traps in Ferroelectric/Dielectric Stack Using Conductance Method. IEEE Transactions on Electron Devices, 2020, 67, 5315-5321.	3.0	23
43	$\text{In}_2\text{Se}_3$ based ferroelectric-semiconductor metal junction for non-volatile memories. Applied Physics Letters, 2020, 117, .	3.3	22
44	Gate-tunable strong spin-orbit interaction in two-dimensional tellurium probed by weak antilocalization. Physical Review B, 2020, 101, .	3.2	29
45	Alignment of Polarization against an Electric Field in van der Waals Ferroelectrics. Physical Review Applied, 2020, 13, .	3.8	34
46	Quantum Hall effect of Weyl fermions in n-type semiconducting tellurene. Nature Nanotechnology, 2020, 15, 585-591.	31.5	63
47	Record Fast Polarization Switching Observed in Ferroelectric Hafnium Oxide Crossbar Arrays. , 2020, , .		8
48	Raman response and transport properties of tellurium atomic chains encapsulated in nanotubes. Nature Electronics, 2020, 3, 141-147.	26.0	126
49	Single Pulse Charge Pumping Measurements on GaN MOS-HEMTs: Fast and Reliable Extraction of Interface Traps Density. IEEE Transactions on Electron Devices, 2020, 67, 444-448.	3.0	11
50	(Invited) 2D NC-FET, FE-FET and FeS-FET. ECS Meeting Abstracts, 2020, MA2020-01, 1370-1370.	0.0	0
51	Fundamental Properties of Ferroelectric and Anti-Ferroelectric Hafnium Zirconium Oxides: Scaling Limit, Switching Speed and Polarization Density. , 2020, , .		1
52	Microscopic origin of inhomogeneous transport in four-terminal tellurene devices. Applied Physics Letters, 2020, 117, .	3.3	0
53	Field-Effect Transistors 4. Springer Series in Materials Science, 2020, , 623-638.	0.6	1
54	Low-Frequency Noise in $\text{In}_2\text{Se}_3$ , Ge, and 2D Transistors. , 2020, , 335-357.		0

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55	Ultrafast measurements of polarization switching dynamics on ferroelectric and anti-ferroelectric hafnium zirconium oxide. Applied Physics Letters, 2019, 115, .	3.3	77
56	Room-Temperature Electrocaloric Effect in Layered Ferroelectric $\text{CuInP}_{2}\text{S}_{6}$ for Solid-State Refrigeration. ACS Nano, 2019, 13, 8760-8765.	14.6	69
57	Experimental Extraction of Ballisticity in Germanium Nanowire nMOSFETs. IEEE Transactions on Electron Devices, 2019, 66, 3541-3548.	3.0	4
58	Electrothermal performance limit of $\text{In}^{2}\text{-Ga}_{2}\text{O}_{3}$ field-effect transistors. Applied Physics Letters, 2019, 115, .	3.3	23
59	Infrared ultrafast spectroscopy of solution-grown thin film tellurium. Physical Review B, 2019, 100, .	3.2	13
60	High Performance $\eta\text{-Ga}_{2}\text{O}_{3}$ Nano-Membrane Field Effect Transistors on a High Thermal Conductivity Diamond Substrate. IEEE Journal of the Electron Devices Society, 2019, 7, 914-918.	2.1	42
61	Imaging Carrier Inhomogeneities in Ambipolar Tellurene Field Effect Transistors. Nano Letters, 2019, 19, 1289-1294.	9.1	31
62	Ferroelectric Polarization Switching of Hafnium Zirconium Oxide in a Ferroelectric/Dielectric Stack. ACS Applied Electronic Materials, 2019, 1, 745-751.	4.3	66
63	Nanoscale electronic devices based on transition metal dichalcogenides. 2D Materials, 2019, 6, 032004.	4.4	51
64	A critical review of recent progress on negative capacitance field-effect transistors. Applied Physics Letters, 2019, 114, .	3.3	157
65	Thermoelectric Performance of 2D Tellurium with Accumulation Contacts. Nano Letters, 2019, 19, 1955-1962.	9.1	81
66	Modeling of Leakage-Assist-Switching in Ferroelectric/Dielectric Stack. , 2019, , .		0
67	Solar-Blind UV Photodetector Based on Atomic Layer-Deposited $\text{Cu}_{2}\text{O}$ and Nanomembrane $\text{In}^{2}\text{-Ga}_{2}\text{O}_{3}$ pn Oxide Heterojunction. ACS Omega, 2019, 4, 20756-20761.	3.5	35
68	A ferroelectric semiconductor field-effect transistor. Nature Electronics, 2019, 2, 580-586.	26.0	317
69	Hybrid dual-channel phototransistor based on 1D t-Se and 2D ReS <sub>2</sub> mixed-dimensional heterostructures. Nano Research, 2019, 12, 669-674.	10.4	34
70	Data-driven and probabilistic learning of the process-structure-property relationship in solution-grown tellurene for optimized nanomanufacturing of high-performance nanoelectronics. Nano Energy, 2019, 57, 480-491.	16.0	44
71	(Invited) Raman Thermography of $\text{In}^{2}\text{-Ga}_{2}\text{O}_{3}$ Nanomembrane FETs on Diamond. ECS Meeting Abstracts, 2019, , .	0.0	0
72	(Invited) A Ferroelectric Semiconductor Field-Effect Transistor. ECS Meeting Abstracts, 2019, , .	0.0	0

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73	(Invited) High-Performance 2D Tellurium Transistors Towards CMOS Logic Applications. ECS Meeting Abstracts, 2019, , .	0.0	0
74	A Closed Form Analytical Model of Back-Gated 2-D Semiconductor Negative Capacitance Field Effect Transistors. IEEE Journal of the Electron Devices Society, 2018, 6, 189-194.	2.1	35
75	Carrier Mobility Enhancement by Applying Back-Gate Bias in Ge-on-Insulator MOSFETs. IEEE Electron Device Letters, 2018, 39, 176-179.	3.9	9
76	Plasmonic Resonance Enhanced Polarization-Sensitive Photodetection by Black Phosphorus in Near Infrared. ACS Nano, 2018, 12, 4861-4867.	14.6	158
77	Mobility Fluctuation-Induced Low-Frequency Noise in Ultrascaled Ge Nanowire nMOSFETs With Near-Ballistic Transport. IEEE Transactions on Electron Devices, 2018, 65, 2573-2577.	3.0	5
78	Field-effect transistors made from solution-grown two-dimensional tellurene. Nature Electronics, 2018, 1, 228-236.	26.0	591
79	Ultrafast Laser-Induced Confined Metaphase Transformation for Direct Writing of Black Phosphorus Thin Films. Advanced Materials, 2018, 30, 1704405.	21.0	17
80	Steep-slope hysteresis-free negative capacitance MoS <sub>2</sub> transistors. Nature Nanotechnology, 2018, 13, 24-28.	31.5	422
81	Total-Ionizing-Dose Responses of GaN-Based HEMTs With Different Channel Thicknesses and MOSHEMTs With Epitaxial MgCaO as Gate Dielectric. IEEE Transactions on Nuclear Science, 2018, 65, 46-52.	2.0	12
82	Performance Potential of Ge CMOS Technology From a Material-Device-Circuit Perspective. IEEE Transactions on Electron Devices, 2018, 65, 1679-1684.	3.0	15
83	High-Performance Few-Layer Tellurium CMOS Devices Enabled by Atomic Layer Deposited Dielectric Doping Technique. , 2018, , .		16
84	First Demonstration of Ge Ferroelectric Nanowire FET as Synaptic Device for Online Learning in Neural Network with High Number of Conductance State and $G_{\max}/G_{\min}$ . , 2018, , .		28
85	A metasurface optical modulator using voltage-controlled population of quantum well states. Applied Physics Letters, 2018, 113, 201101.	3.3	10
86	First Direct Experimental Studies of $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$ Ferroelectric Polarization Switching Down to 100-picosecond in Sub-60mV/dec Germanium Ferroelectric Nanowire FETs. , 2018, , .		7
87	The Impact of Substrates on the Performance of Top-Gate p-Ga <sub>2</sub> O <sub>3</sub> Field-Effect Transistors: Record High Drain Current of 980 mA/mm on Diamond. , 2018, , .		8
88	Steep-Slope Hysteresis-Free Negative-Capacitance 2D Transistors. , 2018, , .		1
89	Time Response of Polarization Switching in Ge Hafnium Zirconium Oxide Nanowire Ferroelectric Field-effect Transistors. , 2018, , .		1
90	Ultraviolet Light-Based Current-Voltage Method for Simultaneous Extraction of Donor- and Acceptor-Like Interface Traps in $\text{Ga}_2\text{O}_3$ FETs. IEEE Electron Device Letters, 2018, 39, 1708-1711.	3.9	14

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91	Epitaxial Growth of 1D Atomic Chain Based Se Nanoplates on Monolayer ReS <sub>2</sub> for High-Performance Photodetectors. <i>Advanced Functional Materials</i> , 2018, 28, 1806254.	14.9	52
92	Steep-Slope Hysteresis-Free Negative-Capacitance 2D Transistors. , 2018, , .		0
93	Low frequency noise in MOS <sub>2</sub> negative capacitance field-effect transistor. , 2018, , .		0
94	Ferroelectric Field-Effect Transistors Based on MoS <sub>2</sub> and CuInP <sub>2</sub> S <sub>6</sub> Two-Dimensional van der Waals Heterostructure. <i>ACS Nano</i> , 2018, 12, 6700-6705.	14.6	246
95	Steep slope 2D negative capacitance CMOS devices: MoS <sub>2</sub> and WSe <sub>2</sub> . , 2018, , .		0
96	Steep-Slope WSe <sub>2</sub> Negative Capacitance Field-Effect Transistor. <i>Nano Letters</i> , 2018, 18, 3682-3687.	9.1	97
97	Tellurene: its physical properties, scalable nanomanufacturing, and device applications. <i>Chemical Society Reviews</i> , 2018, 47, 7203-7212.	38.1	214
98	2D Ferroelectric $\text{CuInP}_2\text{S}_6$ : Synthesis, ReRAM, and FeRAM. , 2018, , .		0
99	Alleviation of Short Channel Effects in Ge Negative Capacitance pFinFETs. , 2018, , .		4
100	Quantum Transport and Band Structure Evolution under High Magnetic Field in Few-Layer Tellurene. <i>Nano Letters</i> , 2018, 18, 5760-5767.	9.1	60
101	Charge Trapping in Al <sub>2</sub> O <sub>3</sub> /Ga <sub>2</sub> O <sub>3</sub> -Based MOS Capacitors. <i>IEEE Electron Device Letters</i> , 2018, 39, 1022-1025.	3.9	50
102	Total Ionizing Dose (TID) Effects in GaAs MOSFETs With La-Based Epitaxial Gate Dielectrics. <i>IEEE Transactions on Nuclear Science</i> , 2017, 64, 164-169.	2.0	4
103	Fin-Width Effects on Characteristics of InGaAs-Based Independent Double-Gate FinFETs. <i>IEEE Electron Device Letters</i> , 2017, 38, 441-444.	3.9	11
104	Experimental Investigation of Ballistic Carrier Transport for Sub-100-nm Ge n-MOSFETs. <i>IEEE Electron Device Letters</i> , 2017, 38, 434-437.	3.9	7
105	Chemical Exfoliation of Black Phosphorus for Nanoelectronics Applications. <i>MRS Advances</i> , 2017, 2, 3697-3702.	0.9	0
106	One-Dimensional van der Waals Material Tellurium: Raman Spectroscopy under Strain and Magneto-Transport. <i>Nano Letters</i> , 2017, 17, 3965-3973.	9.1	272
107	Mid-infrared ultrafast carrier dynamics in thin film black phosphorus. <i>2D Materials</i> , 2017, 4, 021032.	4.4	35
108	High-Performance Depletion/Enhancement-mode Ga <sub>2</sub> O <sub>3</sub> on Insulator (GOOI) Field-Effect Transistors With Record Drain Currents of 600/450 mA/mm. <i>IEEE Electron Device Letters</i> , 2017, 38, 103-106.	3.9	247

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109	$\text{In}_2\text{Ga}_2\text{O}_3$ Nanomembrane Negative Capacitance Field-Effect Transistors with Steep Subthreshold Slope for Wide Band Gap Logic Applications. ACS Omega, 2017, 2, 7136-7140.	3.5	41
110	Controlled Growth of a Large-Size 2D Selenium Nanosheet and Its Electronic and Optoelectronic Applications. ACS Nano, 2017, 11, 10222-10229.	14.6	189
111	$\text{In}_2\text{Ga}_2\text{O}_3$ on insulator field-effect transistors with drain currents exceeding 1.5 A/mm and their self-heating effect. Applied Physics Letters, 2017, 111, .	3.3	170
112	How Important Is the Metal-Semiconductor Contact for Schottky Barrier Transistors: A Case Study on Few-Layer Black Phosphorus?. ACS Omega, 2017, 2, 4173-4179.	3.5	24
113	Depletion/enhancement-mode $\text{In}_2\text{Ga}_2\text{O}_3$ on insulator field-effect transistors with drain currents exceeding 1.5/1.0 A/mm. , 2017, , .		1
114	Enhancement-Mode AlGaIn/GaN Fin-MOSHEMTs on Si Substrate With Atomic Layer Epitaxy MgCaO. IEEE Electron Device Letters, 2017, 38, 1294-1297.	3.9	20
115	Germanium-doped Metallic Ohmic Contacts in Black Phosphorus Field-Effect Transistors with Ultra-low Contact Resistance. Scientific Reports, 2017, 7, 16857.	3.3	16
116	Thermodynamic Studies of $\text{In}_2\text{Ga}_2\text{O}_3$ Nanomembrane Field-Effect Transistors on a Sapphire Substrate. ACS Omega, 2017, 2, 7723-7729.	3.5	75
117	Anomalous bias temperature instability on accumulation-mode Ge and III-V MOSFETs. , 2017, , .		0
118	Total Ionizing Dose (TID) Effects in Ultra-Thin Body Ge-on-Insulator (GOI) Junctionless CMOSFETs With Recessed Source/Drain and Channel. IEEE Transactions on Nuclear Science, 2017, 64, 176-180.	2.0	10
119	Black phosphorus field-effect transistor with record drain current exceeding 1 A/mm. , 2017, , .		12
120	DC and RF Performance of AlGaIn/GaN/SiC MOSHEMTs With Deep Sub-Micron T-Gates and Atomic Layer Epitaxy MgCaO as Gate Dielectric. IEEE Electron Device Letters, 2017, 38, 1409-1412.	3.9	27
121	Non-diffusive heat transport in twin nanoheater lines on silicon. , 2017, , .		0
122	Hysteresis-free negative capacitance germanium CMOS FinFETs with Bi-directional Sub-60 mV/dec. , 2017, , .		44
123	Experimental demonstration of electrically-tunable bandgap on 2D black phosphorus by quantum confined stark effect. , 2017, , .		1
124	Fully Depleted Ge CMOS Devices and Logic Circuits on Si. IEEE Transactions on Electron Devices, 2016, 63, 3028-3035.	3.0	22
125	Epitaxial Growth of MgCaO on GaN by Atomic Layer Deposition. Nano Letters, 2016, 16, 7650-7654.	9.1	30
126	Observation of Optical and Electrical In-Plane Anisotropy in High-Mobility Few-Layer $\text{ZrTe}_5$ . Nano Letters, 2016, 16, 7364-7369.	9.1	80

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127	(S)TEM Characterization of Chemically Exfoliated Black Phosphorus. <i>Microscopy and Microanalysis</i> , 2016, 22, 1544-1545.	0.4	0
128	Transport studies in 2D transition metal dichalcogenides and black phosphorus. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 263002.	1.8	12
129	Performance Enhancement of Black Phosphorus Field-Effect Transistors by Chemical Doping. <i>IEEE Electron Device Letters</i> , 2016, 37, 429-432.	3.9	55
130	Contacts between Two- and Three-Dimensional Materials: Ohmic, Schottky, and $\text{p-n}$ Heterojunctions. <i>ACS Nano</i> , 2016, 10, 4895-4919.	14.6	308
131	$\text{Al}_2\text{O}_3/\text{Ga}_2\text{O}_3(-201)$ Interface Improvement Through Piranha Pretreatment and Postdeposition Annealing. <i>IEEE Electron Device Letters</i> , 2016, 37, 1411-1414.	3.9	109
132	Surface chemistry of black phosphorus under a controlled oxidative environment. <i>Nanotechnology</i> , 2016, 27, 434002.	2.6	112
133	Auxetic Black Phosphorus: A 2D Material with Negative Poisson's Ratio. <i>Nano Letters</i> , 2016, 16, 6701-6708.	9.1	184
134	P-type surface charge transfer doping of black phosphorus field-effect transistors. , 2016, , .		2
135	$0.1\text{-}\mu\text{m}$ $\text{InAlN}/\text{GaN}$ High Electron-Mobility Transistors for Power Amplifiers Operating at $71\text{-}81\text{ GHz}$ : Impact of Passivation and Gate Recess. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 3076-3083.	3.0	12
136	Demonstration of Ge Nanowire CMOS Devices and Circuits for Ultimate Scaling. <i>IEEE Transactions on Electron Devices</i> , 2016, , 1-9.	3.0	15
137	RTN and low frequency noise on ultra-scaled near-ballistic Ge nanowire nMOSFETs. , 2016, , .		1
138	High-Performance $\text{InAlN}/\text{GaN}$ MOSHEMTs Enabled by Atomic Layer Epitaxy $\text{MgCaO}$ as Gate Dielectric. <i>IEEE Electron Device Letters</i> , 2016, 37, 556-559.	3.9	46
139	Nanomanufacturing of 2D Transition Metal Dichalcogenide Materials Using Self-Assembled DNA Nanotubes. <i>Small</i> , 2015, 11, 5520-5527.	10.0	29
140	Low-Frequency Noise and Random Telegraph Noise on Near-Ballistic III-V MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 3508-3515.	3.0	40
141	Demonstration of Ge CMOS inverter and ring oscillator with 10 nm ultra-thin channel. , 2015, , .		4
142	First demonstration of Ge nanowire CMOS circuits: Lowest SS of 64 mV/dec, highest $g_{\text{max}}$ of $1057\text{ S}/\mu\text{m}$ in Ge nFETs and highest maximum voltage gain of 54 V/V in Ge CMOS inverters. , 2015, , .		34
143	Large, Tunable Magnetoresistance in Nonmagnetic $\text{InV}$ Nanowires. <i>Nano Letters</i> , 2015, 15, 8026-8031.	9.1	7
144	Charge Collection Mechanisms in GaAs MOSFETs. <i>IEEE Transactions on Nuclear Science</i> , 2015, 62, 2752-2759.	2.0	10

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145	Al <sub>2</sub> O <sub>3</sub> on Black Phosphorus by Atomic Layer Deposition: An <i>in Situ</i> Interface Study. ACS Applied Materials & Interfaces, 2015, 7, 13038-13043.	8.0	81
146	Germanium nMOSFETs With Recessed Channel and S/D: Contact, Scalability, Interface, and Drain Current Exceeding 1 A/mm. IEEE Transactions on Electron Devices, 2015, 62, 1419-1426.	3.0	27
147	0.1- $\mu\text{m}$ $\mu\text{m}$ Atomic Layer Deposition Al <sub>2</sub> O <sub>3</sub> /O <sub>3</sub> /Passivated InAlN/GaN High Electron-Mobility Transistors for E-Band Power Amplifiers. IEEE Electron Device Letters, 2015, 36, 442-444.	3.9	29
148	InAlN/GaN MOSHEMTs with high drain current of 2.3 A/mm high on/off ratio of 10 <sup>8</sup> /12 <sup>8</sup> and low SS of 64 mV/dec enabled by atomic-layer-epitaxial MgCaO as gate dielectric. , 2015, , .		1
149	Device perspective on 2D materials (invited). , 2015, , .		0
150	First experimental demonstration of Ge 3D FinFET CMOS circuits. , 2015, , .		26
151	Anisotropic in-plane thermal conductivity observed in few-layer black phosphorus. Nature Communications, 2015, 6, 8572.	12.8	520
152	Phosphorene as a new 2D material for device applications. , 2015, , .		1
153	Direct Observation of Self-Heating in III-V Gate-All-Around Nanowire MOSFETs. IEEE Transactions on Electron Devices, 2015, 62, 3516-3523.	3.0	46
154	Semiconducting black phosphorus: synthesis, transport properties and electronic applications. Chemical Society Reviews, 2015, 44, 2732-2743.	38.1	1,260
155	Ge CMOS: Breakthroughs of nFETs ( $I_{\text{max}}=714 \text{ mA/mm}$ ), $T_j$ EQq1 1 0.784314 $\text{rgBT}$ /Overlock 10 Tf 50 342 Td (g&		10
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