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List of Publications by Year in descending order

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18218
citing authors

#	ARTICLE	IF	CITATIONS
1	Phosphorene: An Unexplored 2D Semiconductor with a High Hole Mobility. ACS Nano, 2014, 8, 4033-4041.	14.6	5,474
2	Semiconducting black phosphorus: synthesis, transport properties and electronic applications. Chemical Society Reviews, 2015, 44, 2732-2743.	38.1	1,260
3	Black Phosphorusâ€“Monolayer MoS ₂ van der Waals Heterojunction pâ€“n Diode. ACS Nano, 2014, 8, 8292-8299.	14.6	1,125
4	Channel Length Scaling of MoS ₂ MOSFETs. ACS Nano, 2012, 6, 8563-8569.	14.6	688
5	Chloride Molecular Doping Technique on 2D Materials: WS ₂ and MoS ₂ . Nano Letters, 2014, 14, 6275-6280.	9.1	606
6	Field-effect transistors made from solution-grown two-dimensional tellurene. Nature Electronics, 2018, 1, 228-236.	26.0	591
7	Bandgap engineering of two-dimensional semiconductor materials. Npj 2D Materials and Applications, 2020, 4, .	7.9	528
8	Anisotropic in-plane thermal conductivity observed in few-layer black phosphorus. Nature Communications, 2015, 6, 8572.	12.8	520
9	Steep-slope hysteresis-free negative capacitance MoS ₂ transistors. Nature Nanotechnology, 2018, 13, 24-28.	31.5	422
10	Device Perspective for Black Phosphorus Field-Effect Transistors: Contact Resistance, Ambipolar Behavior, and Scaling. ACS Nano, 2014, 8, 10035-10042.	14.6	400
11	MoS ₂ Dual-Gate MOSFET With Atomic-Layer-Deposited Al ₂ O ₃ as Top-Gate Dielectric. IEEE Electron Device Letters, 2012, 33, 546-548.	3.9	380
12	A ferroelectric semiconductor field-effect transistor. Nature Electronics, 2019, 2, 580-586.	26.0	317
13	Contacts between Two- and Three-Dimensional Materials: Ohmic, Schottky, and p-n Heterojunctions. ACS Nano, 2016, 10, 4895-4919.	14.6	308
14	One-Dimensional van der Waals Material Tellurium: Raman Spectroscopy under Strain and Magneto-Transport. Nano Letters, 2017, 17, 3965-3973.	9.1	272
15	High-Performance Depletion/Enhancement-mode Ga ₂ O ₃ on Insulator (GOOI) Field-Effect Transistors With Record Drain Currents of 600/450 mA/mm. IEEE Electron Device Letters, 2017, 38, 103-106.	3.9	247
16	Ferroelectric Field-Effect Transistors Based on MoS ₂ and CuInP ₂ S ₆ Two-Dimensional van der Waals Heterostructure. ACS Nano, 2018, 12, 6700-6705.	14.6	246
17	Molecular Doping of Multilayer MoS ₂ Field-Effect Transistors: Reduction in Sheet and Contact Resistances. IEEE Electron Device Letters, 2013, 34, 1328-1330.	3.9	231
18	Switching Mechanism in Single-Layer Molybdenum Disulfide Transistors: An Insight into Current Flow across Schottky Barriers. ACS Nano, 2014, 8, 1031-1038.	14.6	224

#	ARTICLE	IF	CITATIONS
19	Tellurene: its physical properties, scalable nanomanufacturing, and device applications. <i>Chemical Society Reviews</i> , 2018, 47, 7203-7212.	38.1	214
20	Controlled Growth of a Large-Size 2D Selenium Nanosheet and Its Electronic and Optoelectronic Applications. <i>ACS Nano</i> , 2017, 11, 10222-10229.	14.6	189
21	Auxetic Black Phosphorus: A 2D Material with Negative Poisson's Ratio. <i>Nano Letters</i> , 2016, 16, 6701-6708.	9.1	184
22	Submicrometer Inversion-Type Enhancement-Mode InGaAs MOSFET With Atomic-Layer-Deposited Al_2O_3 as Gate Dielectric. <i>IEEE Electron Device Letters</i> , 2007, 28, 935-938.	3.9	176
23	In^{2+} -Ga 2O_3 on insulator field-effect transistors with drain currents exceeding 1.5 $\mu\text{A}/\text{mm}$ and their self-heating effect. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	170
24	Plasmonic Resonance Enhanced Polarization-Sensitive Photodetection by Black Phosphorus in Near Infrared. <i>ACS Nano</i> , 2018, 12, 4861-4867.	14.6	158
25	A critical review of recent progress on negative capacitance field-effect transistors. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	157
26	The Effect of Dielectric Capping on Few-Layer Phosphorene Transistors: Tuning the Schottky Barrier Heights. <i>IEEE Electron Device Letters</i> , 2014, 35, 795-797.	3.9	154
27	Main determinants for mV metal-oxide-semiconductor field-effect transistors (invited). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008, 26, 697-704.	2.1	146
28	Raman response and transport properties of tellurium atomic chains encapsulated in nanotubes. <i>Nature Electronics</i> , 2020, 3, 141-147.	26.0	126
29	Surface chemistry of black phosphorus under a controlled oxidative environment. <i>Nanotechnology</i> , 2016, 27, 434002.	2.6	112
30	$\text{Al}_2\text{O}_3/\text{Ga}_2\text{O}_3(-201)$ Interface Improvement Through Piranha Pretreatment and Postdeposition Annealing. <i>IEEE Electron Device Letters</i> , 2016, 37, 1411-1414.	3.9	109
31	Simplified Surface Preparation for GaAs Passivation Using Atomic Layer-Deposited High- κ Dielectrics. <i>IEEE Transactions on Electron Devices</i> , 2007, 54, 1811-1817.	3.0	103
32	Why In_2O_3 Can Make 0.7 nm Atomic Layer Thin Transistors. <i>Nano Letters</i> , 2021, 21, 500-506.	9.1	99
33	MoS_2 Nanoribbon Transistors: Transition From Depletion Mode to Enhancement Mode by Channel-Width Trimming. <i>IEEE Electron Device Letters</i> , 2012, 33, 1273-1275.	3.9	98
34	Scaled indium oxide transistors fabricated using atomic layer deposition. <i>Nature Electronics</i> , 2022, 5, 164-170.	26.0	98
35	Steep-Slope WSe_2 Negative Capacitance Field-Effect Transistor. <i>Nano Letters</i> , 2018, 18, 3682-3687.	9.1	97
36	Magneto-transport in MoS_2 : Phase Coherence, Spin-Orbit Scattering, and the Hall Factor. <i>ACS Nano</i> , 2013, 7, 7077-7082.	14.6	88

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37	Al ₂ O ₃ 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
38	Thermoelectric Performance of 2D Tellurium with Accumulation Contacts. Nano Letters, 2019, 19, 1955-1962.	9.1	81
39	Observation of Optical and Electrical In-Plane Anisotropy in High-Mobility Few-Layer ZrTe ₅ . Nano Letters, 2016, 16, 7364-7369.	9.1	80
40	Ultrafast measurements of polarization switching dynamics on ferroelectric and anti-ferroelectric hafnium zirconium oxide. Applied Physics Letters, 2019, 115, .	3.3	77
41	Temporal and Thermal Stability of Al ₂ O ₃ -Passivated Phosphorene MOSFETs. IEEE Electron Device Letters, 2014, 35, 1314-1316.	3.9	76
42	Thermodynamic Studies of \hat{I}^2 -Ga ₂ O ₃ Nanomembrane Field-Effect Transistors on a Sapphire Substrate. ACS Omega, 2017, 2, 7723-7729.	3.5	75
43	Indium-Tin-Oxide Transistors with One Nanometer Thick Channel and Ferroelectric Gating. ACS Nano, 2020, 14, 11542-11547.	14.6	75
44	GaSb Inversion-Mode PMOSFETs With Atomic-Layer-Deposited Al_2O_3 as Gate Dielectric. IEEE Electron Device Letters, 2011, 32, 883-885.	3.9	73
45	Room-Temperature Electrocaloric Effect in Layered Ferroelectric CuInP ₂ S ₆ for Solid-State Refrigeration. ACS Nano, 2019, 13, 8760-8765.	14.6	69
46	Ferroelectric Polarization Switching of Hafnium Zirconium Oxide in a Ferroelectric/Dielectric Stack. ACS Applied Electronic Materials, 2019, 1, 745-751.	4.3	66
47	Quantum Hall effect of Weyl fermions in n-type semiconducting tellurene. Nature Nanotechnology, 2020, 15, 585-591.	31.5	63
48	Quantum Transport and Band Structure Evolution under High Magnetic Field in Few-Layer Tellurene. Nano Letters, 2018, 18, 5760-5767.	9.1	60
49	Performance Enhancement of Black Phosphorus Field-Effect Transistors by Chemical Doping. IEEE Electron Device Letters, 2016, 37, 429-432.	3.9	55
50	Epitaxial Growth of 1D Atomic Chain Based Se Nanoplates on Monolayer ReS ₂ for High-Performance Photodetectors. Advanced Functional Materials, 2018, 28, 1806254.	14.9	52
51	Nanoscale electronic devices based on transition metal dichalcogenides. 2D Materials, 2019, 6, 032004.	4.4	51
52	Charge Trapping in Al ₂ O ₃ /Ga ₂ O ₃ -Based MOS Capacitors. IEEE Electron Device Letters, 2018, 39, 1022-1025.	3.9	50
53	Size-Dependent-Transport Study of $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ Gate-All-Around Nanowire MOSFETs: Impact of Quantum Confinement and Volume Inversion. IEEE Electron Device Letters, 2012, 33, 967-969.	3.9	49
54	Two-Dimensional TaSe ₂ Metallic Crystals: Spin-Orbit Scattering Length and Breakdown Current Density. ACS Nano, 2014, 8, 9137-9142.	14.6	49

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55	Scaled Atomic-Layer-Deposited Indium Oxide Nanometer Transistors With Maximum Drain Current Exceeding 2 A/mm at Drain Voltage of 0.7 V. IEEE Electron Device Letters, 2021, 42, 184-187.	3.9	48
56	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
57	High-Performance InAlN/GaN MOSHEMTs Enabled by Atomic Layer Epitaxy MgCaO as Gate Dielectric. IEEE Electron Device Letters, 2016, 37, 556-559.	3.9	46
58	Hysteresis-free negative capacitance germanium CMOS FinFETs with Bi-directional Sub-60 mV/dec. , 2017, , .		44
59	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
60	Anisotropic Signal Processing with Trigonal Selenium Nanosheet Synaptic Transistors. ACS Nano, 2020, 14, 10018-10026.	14.6	43
61	High Performance η -Ga ₂ 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
62	$\hat{\Gamma}$ -Ga ₂ 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
63	Low-Frequency Noise and Random Telegraph Noise on Near-Ballistic III-V MOSFETs. IEEE Transactions on Electron Devices, 2015, 62, 3508-3515.	3.0	40
64	Heteroepitaxy of single-crystal LaLuO ₃ on GaAs(111)A by atomic layer deposition. Applied Physics Letters, 2010, 97, 162910.	3.3	39
65	Anisotropic thermal conductivity in 2D tellurium. 2D Materials, 2020, 7, 015008.	4.4	39
66	Ultrafast photoinduced band splitting and carrier dynamics in chiral tellurium nanosheets. Nature Communications, 2020, 11, 3991.	12.8	39
67	Analysis of Electron Mobility in Inversion-Mode $\text{Al}_2\text{O}_3/\text{In}_x\text{Ga}_{1-x}\text{As}$ MOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 1972-1978.	3.0	37
68	Asymmetric Metal/ $\hat{\Gamma}$ -In ₂ Se ₃ /Si Crossbar Ferroelectric Semiconductor Junction. ACS Nano, 2021, 15, 5689-5695.	14.6	36
69	Enhancement-Mode Atomic-Layer-Deposited In ₂ O ₃ 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
70	The resurrection of tellurium as an elemental two-dimensional semiconductor. Npj 2D Materials and Applications, 2022, 6, .	7.9	36
71	Mid-infrared ultrafast carrier dynamics in thin film black phosphorus. 2D Materials, 2017, 4, 021032.	4.4	35
72	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

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73	Solar-Blind UV Photodetector Based on Atomic Layer-Deposited Cu_2O and Nanomembrane $\text{In}_2\text{Ga}_3\text{O}_3$ pn Oxide Heterojunction. ACS Omega, 2019, 4, 20756-20761.	3.5	35
74	First experimental demonstration of Ge CMOS circuits. , 2014, , .		34
75	First demonstration of Ge nanowire CMOS circuits: Lowest SS of 64 mV/dec, highest g_{max} of $1057 \text{ } \mu\text{S}/\mu\text{m}$ in Ge nFETs and highest maximum voltage gain of 54 V/V in Ge CMOS inverters. , 2015, , .		34
76	Hybrid dual-channel phototransistor based on 1D t-Se and 2D ReS ₂ mixed-dimensional heterostructures. Nano Research, 2019, 12, 669-674.	10.4	34
77	Alignment of Polarization against an Electric Field in van der Waals Ferroelectrics. Physical Review Applied, 2020, 13, .	3.8	34
78	Imaging Carrier Inhomogeneities in Ambipolar Tellurene Field Effect Transistors. Nano Letters, 2019, 19, 1289-1294.	9.1	31
79	Epitaxial Growth of MgCaO on GaN by Atomic Layer Deposition. Nano Letters, 2016, 16, 7650-7654.	9.1	30
80	$0.2\text{-}\mu\text{m}$ AlGaIn/GaN High Electron-Mobility Transistors With Atomic Layer Deposition Al_2O_3 Passivation. IEEE Electron Device Letters, 2013, 34, 744-746.	3.9	29
81	Nanomanufacturing of 2D Transition Metal Dichalcogenide Materials Using Self-Assembled DNA Nanotubes. Small, 2015, 11, 5520-5527.	10.0	29
82	$0.1\text{-}\mu\text{m}$ Al ₂ O ₃ Atomic Layer Deposition Passivated InAlN/GaN High Electron-Mobility Transistors for E-Band Power Amplifiers. IEEE Electron Device Letters, 2015, 36, 442-444.	3.9	29
83	Gate-tunable strong spin-orbit interaction in two-dimensional tellurium probed by weak antilocalization. Physical Review B, 2020, 101, .	3.2	29
84	Measurement of In-Plane Thermal Conductivity of Ultrathin Films Using Micro-Raman Spectroscopy. Nanoscale and Microscale Thermophysical Engineering, 2014, 18, 183-193.	2.6	28
85	Theoretical Study on the Oxidation Mechanism and Dynamics of the Zigzag Graphene Nanoribbon Edge by Oxygen and Ozone. Journal of Physical Chemistry C, 2014, 118, 10400-10407.	3.1	28
86	First Demonstration of Ge Ferroelectric Nanowire FET as Synaptic Device for Online Learning in Neural Network with High Number of Conductance State and $G_{\text{max}}/G_{\text{min}}$. , 2018, , .		28
87	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
88	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
89	Enhancement-mode atomic-layer thin In ₂ O ₃ transistors with maximum current exceeding 2 A/mm at drain voltage of 0.7 V enabled by oxygen plasma treatment. Applied Physics Letters, 2021, 118, .	3.3	27
90	First experimental demonstration of Ge 3D FinFET CMOS circuits. , 2015, , .		26

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91	Experimental Investigation of Border Trap Generation in InGaAs nMOSFETs With Al_2O_3 Gate Dielectric Under PBTI Stress. IEEE Transactions on Electron Devices, 2012, 59, 1661-1667.	3.0	24
92	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
93	Effects of forming gas anneal on ultrathin InGaAs nanowire metal-oxide-semiconductor field-effect transistors. Applied Physics Letters, 2013, 102, 093505.	3.3	23
94	Electrothermal performance limit of $\text{In}^2\text{-Ga}_2\text{O}_3$ field-effect transistors. Applied Physics Letters, 2019, 115, .	3.3	23
95	Quantitative Characterization of Interface Traps in Ferroelectric/Dielectric Stack Using Conductance Method. IEEE Transactions on Electron Devices, 2020, 67, 5315-5321.	3.0	23
96	Fully Depleted Ge CMOS Devices and Logic Circuits on Si. IEEE Transactions on Electron Devices, 2016, 63, 3028-3035.	3.0	22
97	In_2Se_3 based ferroelectric-semiconductor metal junction for non-volatile memories. Applied Physics Letters, 2020, 117, .	3.3	22
98	Overview and outlook of emerging non-volatile memories. MRS Bulletin, 2021, 46, 946-958.	3.5	22
99	A Distributive-Transconductance Model for Border Traps in $\text{V}/\text{High-k}$ MOS Capacitors. IEEE Electron Device Letters, 2013, 34, 735-737.	3.9	20
100	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
101	BEOL Compatible Indium-Tin-Oxide Transistors: Switching of Ultrahigh-Density 2-D Electron Gas Over $0.8 \text{ \AA} - 10 \text{ cm}^2$ at Oxide/Oxide Interface by the Change of Ferroelectric Polarization. IEEE Transactions on Electron Devices, 2021, 68, 3195-3199.	3.0	20
102	Atomically Thin Indium-Tin-Oxide Transistors Enabled by Atomic Layer Deposition. IEEE Transactions on Electron Devices, 2022, 69, 231-236.	3.0	20
103	High-Performance Atomic-Layer-Deposited Indium Oxide 3-D Transistors and Integrated Circuits for Monolithic 3-D Integration. IEEE Transactions on Electron Devices, 2021, 68, 6605-6609.	3.0	19
104	Ultrafast Laser-Induced Confined Metaphase Transformation for Direct Writing of Black Phosphorus Thin Films. Advanced Materials, 2018, 30, 1704405.	21.0	17
105	Germanium-doped Metallic Ohmic Contacts in Black Phosphorus Field-Effect Transistors with Ultra-low Contact Resistance. Scientific Reports, 2017, 7, 16857.	3.3	16
106	High-Performance Few-Layer Tellurium CMOS Devices Enabled by Atomic Layer Deposited Dielectric Doping Technique. , 2018, , .		16
107	Energy Transport by Radiation in Hyperbolic Material Comparable to Conduction. Advanced Functional Materials, 2020, 30, 1905830.	14.9	16
108	Ionic Control over Ferroelectricity in 2D Layered van der Waals Capacitors. ACS Applied Materials & Interfaces, 2022, 14, 3018-3026.	8.0	16

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109	New insights in the passivation of high-k/ <i>i</i> /InP through interface characterization and metal-oxide-semiconductor field effect transistor demonstration: Impact of crystal orientation. Journal of Applied Physics, 2013, 113, .	2.5	15
110	Performance and Variability Studies of InGaAs Gate-all-Around Nanowire MOSFETs. IEEE Transactions on Device and Materials Reliability, 2013, 13, 489-496.	2.0	15
111	Reliability of High-Mobility InGaAs Channel n-MOSFETs Under BTI Stress. IEEE Transactions on Device and Materials Reliability, 2013, 13, 515-523.	2.0	15
112	Demonstration of Ge Nanowire CMOS Devices and Circuits for Ultimate Scaling. IEEE Transactions on Electron Devices, 2016, , 1-9.	3.0	15
113	Performance Potential of Ge CMOS Technology From a Material-Device-Circuit Perspective. IEEE Transactions on Electron Devices, 2018, 65, 1679-1684.	3.0	15
114	Variability Improvement by Interface Passivation and EOT Scaling of InGaAs Nanowire MOSFETs. IEEE Electron Device Letters, 2013, 34, 608-610.	3.9	14
115	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
116	Quantitative Characterization of Ferroelectric/Dielectric Interface Traps by Pulse Measurements. IEEE Transactions on Electron Devices, 2021, 68, 1214-1220.	3.0	14
117	First Experimental Demonstration of Robust HfO_{2} - $\text{Ga}_{2}\text{O}_{3}$ 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
118	Realization of Maximum 2 A/mm Drain Current on Top-Gate Atomic-Layer-Thin Indium Oxide Transistors by Thermal Engineering. IEEE Transactions on Electron Devices, 2022, 69, 147-151.	3.0	14
119	Atomically thin $\text{In}_{2}\text{O}_{3}$ field-effect transistors with 1017 current on/off ratio. Applied Physics Letters, 2021, 119, .	3.3	14
120	Deep sub-100 nm Ge CMOS devices on Si with the recessed S/D and channel. , 2014, , .		13
121	Infrared ultrafast spectroscopy of solution-grown thin film tellurium. Physical Review B, 2019, 100, .	3.2	13
122	High-performance MoS_{2} field-effect transistors enabled by chloride doping: Record low contact resistance (0.5 $\text{k}\Omega$) and record high drain current (460 A/m). , 2014, , .		12
123	Transport studies in 2D transition metal dichalcogenides and black phosphorus. Journal of Physics Condensed Matter, 2016, 28, 263002.	1.8	12
124	0.1- μm InAlN/GaN High Electron-Mobility Transistors for Power Amplifiers Operating at 71-86 GHz: Impact of Passivation and Gate Recess. IEEE Transactions on Electron Devices, 2016, 63, 3076-3083.	3.0	12
125	Black phosphorus field-effect transistor with record drain current exceeding 1 A/mm. , 2017, , .		12
126	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

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127	Mechanical Anisotropy in Two-Dimensional Selenium Atomic Layers. Nano Letters, 2021, 21, 8043-8050.	9.1	12
128	Fin-Width Effects on Characteristics of InGaAs-Based Independent Double-Gate FinFETs. IEEE Electron Device Letters, 2017, 38, 441-444.	3.9	11
129	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
130	First demonstration of robust tri-gate $\hat{I}^2\text{-Ga}_{\text{2}}\text{O}_{\text{3}}$ nano-membrane field-effect transistors. Nanotechnology, 2022, 33, 125201.	2.6	11
131	Extraction of Channel Electron Effective Mobility in InGaAs/Al O_{2} S_{3} n-FinFETs. IEEE Nanotechnology Magazine, 2013, 12, 806-809.	2.0	10
132	Ge CMOS: Breakthroughs of nFETs ($I_{\text{on}}/I_{\text{off}}=714 \text{ mA/mm}$), Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td ($I_{\text{on}}/I_{\text{off}}=10$)		10
133	Charge Collection Mechanisms in GaAs MOSFETs. IEEE Transactions on Nuclear Science, 2015, 62, 2752-2759.	2.0	10
134	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
135	A metasurface optical modulator using voltage-controlled population of quantum well states. Applied Physics Letters, 2018, 113, 201101.	3.3	10
136	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
137	Positive Bias Temperature Instability and Hot Carrier Degradation of Back-End-of-Line, nm-Thick, $\text{In}_{\text{2}}\text{O}_{\text{3}}$ Thin-Film Transistors. IEEE Electron Device Letters, 2022, 43, 232-235.	3.9	10
138	Carrier Mobility Enhancement by Applying Back-Gate Bias in Ge-on-Insulator MOSFETs. IEEE Electron Device Letters, 2018, 39, 176-179.	3.9	9
139	The Impact of Substrates on the Performance of Top-Gate p-Ga ₂ O ₃ Field-Effect Transistors: Record High Drain Current of 980 mA/mm on Diamond. , 2018, , .		8
140	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
141	Record Fast Polarization Switching Observed in Ferroelectric Hafnium Oxide Crossbar Arrays. , 2020, , .		8
142	Polarization switching in Hf _{0.5} Zr _{0.5} O ₂ -dielectric stack: The role of dielectric layer thickness. Applied Physics Letters, 2021, 119, .	3.3	8
143	Electron spin magnetism of zigzag graphene nanoribbon edge states. Applied Physics Letters, 2014, 104, .	3.3	7
144	Large, Tunable Magnetoresistance in Nonmagnetic III-V Nanowires. Nano Letters, 2015, 15, 8026-8031.	9.1	7

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145	Experimental Investigation of Ballistic Carrier Transport for Sub-100-nm Ge n-MOSFETs. IEEE Electron Device Letters, 2017, 38, 434-437.	3.9	7
146	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
147	Enhancement of Thermal Transfer From In_2O_3 Nano-Membrane Field-Effect Transistors to High Thermal Conductivity Substrate by Inserting an Interlayer. IEEE Transactions on Electron Devices, 2022, 69, 1186-1190.	3.0	7
148	Vertically stacked multilayer atomic-layer-deposited sub-1-nm In_2O_3 field-effect transistors with back-end-of-line compatibility. Applied Physics Letters, 2022, 120, .	3.3	7
149	Bilayer Quantum Hall States in an n-Type Wide Tellurium Quantum Well. Nano Letters, 2021, 21, 7527-7533.	9.1	6
150	Current annealing to improve drain output performance of $\text{In}_2\text{Ga}_2\text{O}_3$ field-effect transistor. Solid-State Electronics, 2021, 185, 108134.	1.4	6
151	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
152	Ferroelectric FET Based Coupled-Oscillatory Network for Edge Detection. IEEE Electron Device Letters, 2021, 42, 1670-1673.	3.9	5
153	Controlling Threshold Voltage of CMOS SOI Nanowire FETs With Sub-1 nm Dipole Layers Formed by Atomic Layer Deposition. IEEE Transactions on Electron Devices, 2022, 69, 851-856.	3.0	5
154	Ambipolar phosphorene field-effect transistors with dielectric capping. , 2014, , .		4
155	Demonstration of Ge CMOS inverter and ring oscillator with 10 nm ultra-thin channel. , 2015, , .		4
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