# Peide D Ye

List of Publications by Year
in descending order



| 206 | 19,644 | 38660 50 | 11030 137 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 207 | 207 | 207 | 18218 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | First demonstration of robust tri-gate Î²-Ga<sub>2</sub>O<sub>3</sub> nano-membrane field-effect transistors. Nanotechnology, 2022, 33, 125201. | 1.3 | 11 |
| 2 | Positive Bias Temperature Instability and Hot Carrier Degradation of Back-End-of-Line, nm-Thick, In<sub>2</sub>O<sub>3</sub> Thin-Film Transistors. IEEE Electron Device Letters, 2022, 43, 232-235. | 2.2 | 10 |
| 3 | 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. | 1.6 | 5 |
| 4 | Ionic Control over Ferroelectricity in 2D Layered van der Waals Capacitors. ACS Applied Materials & Interfaces, 2022, 14, 3018-3026. | 4.0 | 16 |
| 5 | 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. | 1.6 | 14 |
| 6 | Enhancement of Thermal Transfer From Î²-Ga<sub>2</sub>O<sub>3</sub> Nano-Membrane Field-Effect Transistors to High Thermal Conductivity Substrate by Inserting an Interlayer. IEEE Transactions on Electron Devices, 2022, 69, 1186-1190. | 1.6 | 7 |
| 7 | Atomically Thin Indium-Tin-Oxide Transistors Enabled by Atomic Layer Deposition. IEEE Transactions on Electron Devices, 2022, 69, 231-236. | 1.6 | 20 |
| 8 | Scaled indium oxide transistors fabricated using atomic layer deposition. Nature Electronics, 2022, 5, 164-170. | 13.1 | 98 |
| 9 | The resurrection of tellurium as an elemental two-dimensional semiconductor. Npj 2D Materials and Applications, 2022, 6, . | 3.9 | 36 |
| 10 | BEOL-Compatible, ALD-grown In<sub>2</sub>O<sub>3</sub> 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 HfO2/In2O3 Gate Stack by C-V and Conductance Method. Frontiers in Materials, 2022, 9, . | 1.2 | 4 |
| 12 | Vertically stacked multilayer atomic-layer-deposited sub-1-nm In2O3 field-effect transistors with back-end-of-line compatibility. Applied Physics Letters, 2022, 120, . | 1.5 | 7 |
| 13 | Selenene and Tellurene. , 2022, , 197-224. | | 2 |
| 14 | 20â€³: Invited Paper: BEOLâ€Compatible Ferroelectric Fieldâ€Effect Transistors with Atomic Layer Deposition of Oxide Semiconductor Channel Toward Monolithic 3D Integration. Digest of Technical Papers SID International Symposium, 2022, 53, 221-224. | 0.1 | 0 |
| 15 | 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. | 1.6 | 19 |
| 16 | Enhancement-mode atomic-layer thin In2O3 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, . | 1.5 | 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. IEEE Electron Device Letters, 2021, 42, 184-187. | 2.2 | 48 |
| 18 | Asymmetric Metal/Î±-In<sub>2</sub>Se<sub>3</sub>/Si Crossbar Ferroelectric Semiconductor Junction. ACS Nano, 2021, 15, 5689-5695. | 7.3 | 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. | 1.6 | 36 |
| 20 | Quantitative Characterization of Ferroelectric/Dielectric Interface Traps by Pulse Measurements. IEEE Transactions on Electron Devices, 2021, 68, 1214-1220. | 1.6 | 14 |
| 21 | BEOL Compatible Indium-Tin-Oxide Transistors: Switching of Ultra-High-Density 2D Electron Gas over 0.8Ã—1014 /cm2 by Ferroelectric Polarization. , 2021, , . | | 0 |
| 22 | First Experimental Demonstration of Robust HZO/Î²-Gaâ„Oâ‚ƒ 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. | 1.6 | 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. | 1.2 | 3 |
| 24 | BEOL Compatible Indium-Tin-Oxide Transistors: Switching of Ultrahigh-Density 2-D Electron Gas Over 0.8 Ã— 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. | 1.6 | 20 |
| 25 | High-Performance Inâ„Oâ‚ƒ-Based 1T1R FET for BEOL Memory Application. IEEE Transactions on Electron Devices, 2021, 68, 3775-3779. | 1.6 | 3 |
| 26 | Polarization switching in Hf0.5Zr0.5O2-dielectric stack: The role of dielectric layer thickness. Applied Physics Letters, 2021, 119, . | 1.5 | 8 |
| 27 | Mechanical Anisotropy in Two-Dimensional Selenium Atomic Layers. Nano Letters, 2021, 21, 8043-8050. | 4.5 | 12 |
| 28 | Bilayer Quantum Hall States in an n-Type Wide Tellurium Quantum Well. Nano Letters, 2021, 21, 7527-7533. | 4.5 | 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. | 1.6 | 10 |
| 30 | Current annealing to improve drain output performance of Î²-Ga2O3 field-effect transistor. Solid-State Electronics, 2021, 185, 108134. | 0.8 | 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. | 4.5 | 99 |
| 32 | Ferroelectric FET Based Coupled-Oscillatory Network for Edge Detection. IEEE Electron Device Letters, 2021, 42, 1670-1673. | 2.2 | 5 |
| 33 | Overview and outlook of emerging non-volatile memories. MRS Bulletin, 2021, 46, 946-958. | 1.7 | 22 |
| 34 | Atomically thin In2O3 field-effect transistors with 1017 current on/off ratio. Applied Physics Letters, 2021, 119, . | 1.5 | 14 |
| 35 | Anisotropic thermal conductivity in 2D tellurium. 2D Materials, 2020, 7, 015008. | 2.0 | 39 |
| 36 | Energy Transport by Radiation in Hyperbolic Material Comparable to Conduction. Advanced Functional Materials, 2020, 30, 1905830. | 7.8 | 16 |

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| 37 | Anisotropic Signal Processing with Trigonal Selenium Nanosheet Synaptic Transistors. ACS Nano, 2020, 14, 10018-10026. | 7.3 | 43 |
| 38 | Ultrafast photoinduced band splitting and carrier dynamics in chiral tellurium nanosheets. Nature Communications, 2020, 11, 3991. | 5.8 | 39 |
| 39 | Indiumâ€“Tin-Oxide Transistors with One Nanometer Thick Channel and Ferroelectric Gating. ACS Nano, 2020, 14, 11542-11547. | 7.3 | 75 |
| 40 | Bandgap engineering of two-dimensional semiconductor materials. Npj 2D Materials and Applications, 2020, 4, . | 3.9 | 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. | 1.2 | 8 |
| 42 | Quantitative Characterization of Interface Traps in Ferroelectric/Dielectric Stack Using Conductance Method. IEEE Transactions on Electron Devices, 2020, 67, 5315-5321. | 1.6 | 23 |
| 43 |  Î± -In2Se3 based ferroelectric-semiconductor metal junction for non-volatile memories. Applied Physics Letters, 2020, 117, . | 1.5 | 22 |
| 44 | Gate-tunable strong spin-orbit interaction in two-dimensional tellurium probed by weak antilocalization. Physical Review B, 2020, 101, . | 1.1 | 29 |
| 45 | Alignment of Polarization against an Electric Field in van der Waals Ferroelectrics. Physical Review Applied, 2020, 13, . | 1.5 | 34 |
| 46 | Quantum Hall effect of Weyl fermions in n-type semiconducting tellurene. Nature Nanotechnology, 2020, 15, 585-591. | 15.6 | 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. | 13.1 | 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. | 1.6 | 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, . | 1.5 | 0 |
| 53 | Field-Effect Transistors 4. Springer Series in Materials Science, 2020, , 623-638. | 0.4 | 1 |
| 54 | Low-Frequency Noise in IIIâ€“V, 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, . | 1.5 | 77 |
| 56 | Room-Temperature Electrocaloric Effect in Layered Ferroelectric CuInP<sub>2</sub>S<sub>6</sub> for Solid-State Refrigeration. ACS Nano, 2019, 13, 8760-8765. | 7.3 | 69 |
| 57 | Experimental Extraction of Ballisticity in Germanium Nanowire nMOSFETs. IEEE Transactions on Electron Devices, 2019, 66, 3541-3548. | 1.6 | 4 |
| 58 | Electrothermal performance limit of Î²-Ga2O3 field-effect transistors. Applied Physics Letters, 2019, 115, . | 1.5 | 23 |
| 59 | Infrared ultrafast spectroscopy of solution-grown thin film tellurium. Physical Review B, 2019, 100, . | 1.1 | 13 |
| 60 | High Performance ${eta}$ -Ga<sub>2</sub>O<sub>3</sub> Nano-Membrane Field Effect Transistors on a High Thermal Conductivity Diamond Substrate. IEEE Journal of the Electron Devices Society, 2019, 7, 914-918. | 1.2 | 42 |
| 61 | Imaging Carrier Inhomogeneities in Ambipolar Tellurene Field Effect Transistors. Nano Letters, 2019, 19, 1289-1294. | 4.5 | 31 |
| 62 | Ferroelectric Polarization Switching of Hafnium Zirconium Oxide in a Ferroelectric/Dielectric Stack. ACS Applied Electronic Materials, 2019, 1, 745-751. | 2.0 | 66 |
| 63 | Nanoscale electronic devices based on transition metal dichalcogenides. 2D Materials, 2019, 6, 032004. | 2.0 | 51 |
| 64 | A critical review of recent progress on negative capacitance field-effect transistors. Applied Physics Letters, 2019, 114, . | 1.5 | 157 |
| 65 | Thermoelectric Performance of 2D Tellurium with Accumulation Contacts. Nano Letters, 2019, 19, 1955-1962. | 4.5 | 81 |
| 66 | Modeling of Leakage-Assist-Switching in Ferroelectric/Dielectric Stack. , 2019, , . | | 0 |
| 67 | Solar-Blind UV Photodetector Based on Atomic Layer-Deposited Cu<sub>2</sub>O and Nanomembrane Î²-Ga<sub>2</sub>O<sub>3</sub> pn Oxide Heterojunction. ACS Omega, 2019, 4, 20756-20761. | 1.6 | 35 |
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| 69 | Hybrid dual-channel phototransistor based on 1D t-Se and 2D ReS2 mixed-dimensional heterostructures. Nano Research, 2019, 12, 669-674. | 5.8 | 34 |
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| 71 | (Invited) Raman Thermography of Î²-Ga2ÂO3 Nanomembrane FETs on Diamond. 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. | 1.2 | 35 |
| 75 | Carrier Mobility Enhancement by Applying Back-Gate Bias in Ge-on-Insulator MOSFETs. IEEE Electron Device Letters, 2018, 39, 176-179. | 2.2 | 9 |
| 76 | Plasmonic Resonance Enhanced Polarization-Sensitive Photodetection by Black Phosphorus in Near Infrared. ACS Nano, 2018, 12, 4861-4867. | 7.3 | 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. | 1.6 | 5 |
| 78 | Field-effect transistors made from solution-grown two-dimensional tellurene. Nature Electronics, 2018, 1, 228-236. | 13.1 | 591 |
| 79 | Ultrafast Laserâ€Shockâ€Induced Confined Metaphase Transformation for Direct Writing of Black Phosphorus Thin Films. Advanced Materials, 2018, 30, 1704405. | 11.1 | 17 |
| 80 | Steep-slope hysteresis-free negative capacitance MoS2 transistors. Nature Nanotechnology, 2018, 13, 24-28. | 15.6 | 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. | 1.2 | 12 |
| 82 | Performance Potential of Ge CMOS Technology From a Material-Device-Circuit Perspective. IEEE Transactions on Electron Devices, 2018, 65, 1679-1684. | 1.6 | 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<inf>max</inf>/G<inf>min</inf>. , 2018, , . | | 28 |
| 85 | A metasurface optical modulator using voltage-controlled population of quantum well states. Applied Physics Letters, 2018, 113, 201101. | 1.5 | 10 |
| 86 | First Direct Experimental Studies of Hf<inf>0.5</inf>Zr<inf>0.5</inf>O<inf>2</inf> 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-Ga203 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 Currentâ€“Voltage Method for Simultaneous Extraction of Donor- and Acceptor-Like Interface Traps in <inline-formula> <tex-math notation="LaTeX">$eta$ </tex-math> </inline-formula>-Ga<sub>2</sub>O<sub>3</sub> FETs. IEEE Electron Device Letters, 2018, 39, 1708-1711. | 2.2 | 14 |

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| 91 | Epitaxial Growth of 1D Atomic Chain Based Se Nanoplates on Monolayer ReS<sub>2</sub> for Highâ€Performance Photodetectors. Advanced Functional Materials, 2018, 28, 1806254. | 7.8 | 52 |
| 92 | Steep-Slope Hysteresis-Free Negative-Capacitance 2D Transistors. , 2018, , . | | 0 |
| 93 | Low frequency noise in MOS<inf>2</inf> 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. ACS Nano, 2018, 12, 6700-6705. | 7.3 | 246 |
| 95 | Steep slope 2D negative capacitance CMOS devices: MoS<inf>2</inf> and WSe<inf>2</inf>. , 2018, , . | | 0 |
| 96 | Steep-Slope WSe<sub>2</sub> Negative Capacitance Field-Effect Transistor. Nano Letters, 2018, 18, 3682-3687. | 4.5 | 97 |
| 97 | Tellurene: its physical properties, scalable nanomanufacturing, and device applications. Chemical Society Reviews, 2018, 47, 7203-7212. | 18.7 | 214 |
| 98 | 2D Ferroelectric $pmb{mathrm{CuInP}_{2}mathrm{S}_{6}}$: 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. Nano Letters, 2018, 18, 5760-5767. | 4.5 | 60 |
| 101 | Charge Trapping in Al<sub>2</sub>O<sub>3</sub>/$eta$ -Ga<sub>2</sub>O<sub>3</sub>-Based MOS Capacitors. IEEE Electron Device Letters, 2018, 39, 1022-1025. | 2.2 | 50 |
| 102 | Total Ionizing Dose (TID) Effects in GaAs MOSFETs With La-Based Epitaxial Gate Dielectrics. IEEE Transactions on Nuclear Science, 2017, 64, 164-169. | 1.2 | 4 |
| 103 | Fin-Width Effects on Characteristics of InGaAs-Based Independent Double-Gate FinFETs. IEEE Electron Device Letters, 2017, 38, 441-444. | 2.2 | 11 |
| 104 | Experimental Investigation of Ballistic Carrier Transport for Sub-100-nm Ge n-MOSFETs. IEEE Electron Device Letters, 2017, 38, 434-437. | 2.2 | 7 |
| 105 | Chemical Exfoliation of Black Phosphorus for Nanoelectronics Applications. MRS Advances, 2017, 2, 3697-3702. | 0.5 | 0 |
| 106 | One-Dimensional van der Waals Material Tellurium: Raman Spectroscopy under Strain and Magneto-Transport. Nano Letters, 2017, 17, 3965-3973. | 4.5 | 272 |
| 107 | Mid-infrared ultrafast carrier dynamics in thin film black phosphorus. 2D Materials, 2017, 4, 021032. | 2.0 | 35 |
| 108 | High-Performance Depletion/Enhancement-ode $eta$ -Ga2O3 on Insulator (GOOI) Field-Effect Transistors With Record Drain Currents of 600/450 mA/mm. IEEE Electron Device Letters, 2017, 38, 103-106. | 2.2 | 247 |

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| 109 | Î²-Ga<sub>2</sub>O<sub>3</sub> Nanomembrane Negative Capacitance Field-Effect Transistors with Steep Subthreshold Slope for Wide Band Gap Logic Applications. ACS Omega, 2017, 2, 7136-7140. | 1.6 | 41 |
| 110 | Controlled Growth of a Large-Size 2D Selenium Nanosheet and Its Electronic and Optoelectronic Applications. ACS Nano, 2017, 11, 10222-10229. | 7.3 | 189 |
| 111 | Î²-Ga2O3 on insulator field-effect transistors with drain currents exceeding 1.5â€‰A/mm and their self-heating effect. Applied Physics Letters, 2017, 111, . | 1.5 | 170 |
| 112 | How Important Is the Metalâ€“Semiconductor Contact for Schottky Barrier Transistors: A Case Study on Few-Layer Black Phosphorus?. ACS Omega, 2017, 2, 4173-4179. | 1.6 | 24 |
| 113 | Depletion/enhancement-mode Î²-Ga<inf>2</inf>O<inf>3</inf> on insulator field-effect transistors with drain currents exceeding 1.5/1.0 A/mm. , 2017, , . | | 1 |
| 114 | Enhancement-Mode AlGaN/GaN Fin-MOSHEMTs on Si Substrate With Atomic Layer Epitaxy MgCaO. IEEE Electron Device Letters, 2017, 38, 1294-1297. | 2.2 | 20 |
| 115 | Germanium-doped Metallic Ohmic Contacts in Black Phosphorus Field-Effect Transistors with Ultra-low Contact Resistance. Scientific Reports, 2017, 7, 16857. | 1.6 | 16 |
| 116 | Thermodynamic Studies of Î²-Ga<sub>2</sub>O<sub>3</sub> Nanomembrane Field-Effect Transistors on a Sapphire Substrate. ACS Omega, 2017, 2, 7723-7729. | 1.6 | 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. | 1.2 | 10 |
| 119 | Black phosphorus field-effect transistor with record drain current exceeding 1 A/mm. , 2017, , . | | 12 |
| 120 | DC and RF Performance of AlGaN/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. | 2.2 | 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. | 1.6 | 22 |
| 125 | Epitaxial Growth of Mg<sub>x</sub>Ca<sub>1â€“x</sub>O on GaN by Atomic Layer Deposition. Nano Letters, 2016, 16, 7650-7654. | 4.5 | 30 |
| 126 | Observation of Optical and Electrical In-Plane Anisotropy in High-Mobility Few-Layer ZrTe<sub>5</sub>. Nano Letters, 2016, 16, 7364-7369. | 4.5 | 80 |

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| 129 | Performance Enhancement of Black Phosphorus Field-Effect Transistors by Chemical Doping. IEEE Electron Device Letters, 2016, 37, 429-432. | 2.2 | 55 |
| 130 | Contacts between Two- and Three-Dimensional Materials: Ohmic, Schottky, and pâ€“n Heterojunctions. ACS Nano, 2016, 10, 4895-4919. | 7.3 | 308 |
| 131 | Al2O3/ $eta $ -Ga2O3(-201) Interface Improvement Through Piranha Pretreatment and Postdeposition Annealing. IEEE Electron Device Letters, 2016, 37, 1411-1414. | 2.2 | 109 |
| 132 | Surface chemistry of black phosphorus under a controlled oxidative environment. Nanotechnology, 2016, 27, 434002. | 1.3 | 112 |
| 133 | Auxetic Black Phosphorus: A 2D Material with Negative Poissonâ€™s Ratio. Nano Letters, 2016, 16, 6701-6708. | 4.5 | 184 |
| 134 | P-type surface charge transfer doping of black phosphorus field-effect transistors. , 2016, , . | | 2 |
| 135 | 0.1-<inline-formula> <tex-math notation="LaTeX">$mu ext{m}$ </tex-math> </inline-formula> InAlN/GaN High Electron-Mobility Transistors for Power Amplifiers Operating at 71â€“76 and 81â€“86 GHz: Impact of Passivation and Gate Recess. IEEE Transactions on Electron Devices, 2016, 63, 3076-3083. | 1.6 | 12 |
| 136 | Demonstration of Ge Nanowire CMOS Devices and Circuits for Ultimate Scaling. IEEE Transactions on Electron Devices, 2016, , 1-9. | 1.6 | 15 |
| 137 | RTN and low frequency noise on ultra-scaled near-ballistic Ge nanowire nMOSFETs. , 2016, , . | | 1 |
| 138 | High-Performance InAlN/GaN MOSHEMTs Enabled by Atomic Layer Epitaxy MgCaO as Gate Dielectric. IEEE Electron Device Letters, 2016, 37, 556-559. | 2.2 | 46 |
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| 140 | Low-Frequency Noise and Random Telegraph Noise on Near-Ballistic III-V MOSFETs. IEEE Transactions on Electron Devices, 2015, 62, 3508-3515. | 1.6 | 40 |
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| 143 | Large, Tunable Magnetoresistance in Nonmagnetic IIIâ€“V Nanowires. Nano Letters, 2015, 15, 8026-8031. | 4.5 | 7 |
| 144 | Charge Collection Mechanisms in GaAs MOSFETs. IEEE Transactions on Nuclear Science, 2015, 62, 2752-2759. | 1.2 | 10 |

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| 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. | 1.6 | 27 |
| 147 | 0.1-<inline-formula> <tex-math notation="LaTeX">$mu ext{m}$ </tex-math></inline-formula> Atomic Layer Deposition Al<sub>2</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. | 2.2 | 29 |
| 148 | InAlN/GaN MOSHEMTs with high drain current of 2.3 A/mm high on/off ratio of 10<sup>12</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. | 5.8 | 520 |
| 152 | Phosphorene as a new 2D material for device applications. , 2015, , . | | 1 |
| 153 | Direct Observation of Self-Heating in IIIâ€“V Gate-All-Around Nanowire MOSFETs. IEEE Transactions on Electron Devices, 2015, 62, 3516-3523. | 1.6 | 46 |
| 154 | Semiconducting black phosphorus: synthesis, transport properties and electronic applications. Chemical Society Reviews, 2015, 44, 2732-2743. | 18.7 | 1,260 |
| 155 | Ge CMOS: Breakthroughs of nFETs (I<inf>max</inf>=714 mA/mm,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 342 Td (& | | 10 |
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