

Jong-Ho Lee

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

196
papers

2,336
citations

22
h-index

40
g-index

216
ext. papers

3,010
ext. citations

3.9
avg, IF

5.26
L-index

#	Paper	IF	Citations
196	Effects of Channel Length Scaling on the Signal-to-Noise Ratio in FET-Type Gas sensor with Horizontal Floating-Gate. <i>IEEE Electron Device Letters</i> , 2022 , 1-1	4.4	3
195	Impact of interlayer insulator formation methods on HfOx ferroelectricity in the metal-ferroelectric-insulator-semiconductor stack. <i>Applied Physics Letters</i> , 2022 , 120, 012901	3.4	1
194	Effects of High-Pressure Annealing on the Low-Frequency Noise Characteristics in Ferroelectric FET. <i>IEEE Electron Device Letters</i> , 2022 , 43, 13-16	4.4	9
193	Comprehensive and accurate analysis of the working principle in ferroelectric tunnel junctions using low-frequency noise spectroscopy.. <i>Nanoscale</i> , 2022 ,	7.7	6
192	Variation-tolerant Capacitive Array for Binarized Neural Network. <i>IEEE Electron Device Letters</i> , 2022 , 1-1	4.4	1
191	Comprehensive TCAD-Based Validation of Interface Trap-Assisted Ferroelectric Polarization in Ferroelectric-Gate Field-Effect Transistor Memory. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-6	2.9	0
190	Optimization of channel structure and bias condition for signal-to-noise ratio improvement in Si-based FET-type gas sensor with horizontal floating-gate. <i>Sensors and Actuators B: Chemical</i> , 2022 , 357, 131398	8.5	5
189	Capacitor-Based Synaptic Devices for Hardware Spiking Neural Networks. <i>IEEE Electron Device Letters</i> , 2022 , 1-1	4.4	3
188	Neuron Circuits for Low-Power Spiking Neural Networks Using Time-To-First-Spike Encoding. <i>IEEE Access</i> , 2022 , 1-1	3.5	0
187	SiO2 Fin-Based Flash Synaptic Cells in AND Array Architecture for Binary Neural Networks. <i>IEEE Electron Device Letters</i> , 2022 , 43, 142-145	4.4	4
186	Ferroelectricity of pure HfOx in metal-ferroelectric-insulator-semiconductor stacks and its memory application. <i>Applied Surface Science</i> , 2022 , 573, 151566	6.7	5
185	On-Chip Trainable Spiking Neural Networks Using Time-To-First-Spike Encoding. <i>IEEE Access</i> , 2022 , 10, 31263-31272	3.5	
184	Novel Dual Liner Process for Side-Shielded Forksheet Device With Superior Design Margin. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-4	2.9	
183	Effects of Postdeposition Annealing Ambience on NO ₂ Gas Sensing Performance in Si-Based FET-Type Gas Sensor. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-7	2.9	3
182	Damage-induced ferroelectricity in HfOx-based thin film. <i>IEEE Electron Device Letters</i> , 2022 , 1-1	4.4	
181	Effects of Electrode Structure on H2S Sensing and Low-Frequency Noise Characteristics in In2O3-Based Resistor-Type Gas Sensors. <i>IEEE Sensors Journal</i> , 2022 , 22, 6311-6320	4	1
180	Investigation of Device Performance for Fin Angle Optimization in FinFET and Gate-All-Around FETs for 3 nm-Node and Beyond. <i>IEEE Transactions on Electron Devices</i> , 2022 , 69, 2088-2093	2.9	1

179	Analysis of Cr/Au contact reliability in embedded poly-Si micro-heater for FET-type gas sensor. <i>Sensors and Actuators B: Chemical</i> , 2022 , 360, 131673	8.5	1
178	Investigation of Low-Frequency Noise Characteristics of Ferroelectric Tunnel Junction: from Conduction Mechanism and Scaling Perspectives. <i>IEEE Electron Device Letters</i> , 2022 , 1-1	4.4	4
177	Effect of Program Error in Memristive Neural Network With Weight Quantization. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-7	2.9	2
176	Analog synaptic devices applied to spiking neural networks for reinforcement learning applications. <i>Semiconductor Science and Technology</i> , 2022 , 37, 075002	1.8	
175	Highly Efficient Self-Curing Method in MOSFET Using Parasitic Bipolar Junction Transistor. <i>IEEE Electron Device Letters</i> , 2022 , 1-1	4.4	1
174	Fully integrated FET-type gas sensor with optimized signal-to-noise ratio for H ₂ S gas detection. <i>Sensors and Actuators B: Chemical</i> , 2022 , 367, 132052	8.5	2
173	Branched Polyethylenimine Based Field Effect Transistor for Low Humidity Detection at Room Temperature. <i>IEEE Sensors Journal</i> , 2021 , 1-1	4	1
172	Ferroelectric-Metal Field-Effect Transistor with Recessed Channel for 1T-DRAM Application. <i>IEEE Journal of the Electron Devices Society</i> , 2021 , 1-1	2.3	0
171	CMOS-Compatible Low-Power Gated Diode Synaptic Device for Hardware-Based Neural Network. <i>IEEE Transactions on Electron Devices</i> , 2021 , 1-6	2.9	2
170	Utilization of Unsigned Inputs for NAND Flash-Based Parallel and High-Density Synaptic Architecture in Binary Neural Networks. <i>IEEE Journal of the Electron Devices Society</i> , 2021 , 1-1	2.3	
169	Effects of Process-Induced Defects on Polarization Switching in Ferroelectric Tunneling Junction Memory. <i>IEEE Electron Device Letters</i> , 2021 , 42, 323-326	4.4	9
168	Investigation of Low-Frequency Noise Characteristics in Gated Schottky Diodes. <i>IEEE Electron Device Letters</i> , 2021 , 42, 442-445	4.4	4
167	Variability of DRAM Peripheral Transistor at Liquid Nitrogen Temperature. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 1627-1632	2.9	
166	A low-power embedded poly-Si micro-heater for gas sensor platform based on a FET transducer and its application for NO ₂ sensing. <i>Sensors and Actuators B: Chemical</i> , 2021 , 334, 129642	8.5	17
165	Comparison of the characteristics of semiconductor gas sensors with different transducers fabricated on the same substrate. <i>Sensors and Actuators B: Chemical</i> , 2021 , 335, 129661	8.5	10
164	Physical Unclonable Functions Using Ferroelectric Tunnel Junctions. <i>IEEE Electron Device Letters</i> , 2021 , 42, 816-819	4.4	4
163	Gas sensing materials roadmap. <i>Journal of Physics Condensed Matter</i> , 2021 , 33,	1.8	15
162	Optimization of post-deposition annealing temperature for improved signal-to-noise ratio in In ₂ O ₃ gas sensor. <i>Semiconductor Science and Technology</i> , 2021 , 36, 075007	1.8	8

161	Impacts of Program/Erase Cycling on the Low-Frequency Noise Characteristics of Reconfigurable Gated Schottky Diodes. <i>IEEE Electron Device Letters</i> , 2021 , 42, 863-866	4.4	6
160	Novel Method Enabling Forward and Backward Propagations in NAND Flash Memory for On-Chip Learning. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 3365-3370	2.9	1
159	FET-type gas sensors: A review. <i>Sensors and Actuators B: Chemical</i> , 2021 , 330, 129240	8.5	29
158	Improved signal-to-noise-ratio of FET-type gas sensors using body bias control and embedded micro-heater. <i>Sensors and Actuators B: Chemical</i> , 2021 , 329, 129166	8.5	13
157	Hardware-based spiking neural network architecture using simplified backpropagation algorithm and homeostasis functionality. <i>Neurocomputing</i> , 2021 , 428, 153-165	5.4	2
156	Low-power and reliable gas sensing system based on recurrent neural networks. <i>Sensors and Actuators B: Chemical</i> , 2021 , 340, 129258	8.5	7
155	Effect of charge storage engineering on the NO gas sensing properties of a WO FET-type gas sensor with a horizontal floating-gate. <i>Nanoscale</i> , 2021 , 13, 9009-9017	7.7	8
154	Integrate-and-Fire Neuron Circuit With Synaptic Off-Current Blocking Operation. <i>IEEE Access</i> , 2021 , 9, 127841-127851	3.5	
153	Double-Gated Ferroelectric-Gate Field-Effect-Transistor for Processing in Memory. <i>IEEE Electron Device Letters</i> , 2021 , 1-1	4.4	0
152	Hardware-Based Spiking Neural Network Using a TFT-Type AND Flash Memory Array Architecture Based on Direct Feedback Alignment. <i>IEEE Access</i> , 2021 , 9, 73121-73132	3.5	4
151	Spiking Neural Networks With Time-to-First-Spike Coding Using TFT-Type Synaptic Device Model. <i>IEEE Access</i> , 2021 , 9, 78098-78107	3.5	2
150	Suppression of Statistical Variability in Stacked Nanosheet Using Floating Fin Structure. <i>IEEE Electron Device Letters</i> , 2021 , 1-1	4.4	
149	On-chip trainable hardware-based deep Q-networks approximating a backpropagation algorithm. <i>Neural Computing and Applications</i> , 2021 , 33, 9391-9402	4.8	1
148	Response Comparison of Resistor- and Si FET-Type Gas Sensors on the Same Substrate. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 3552-3557	2.9	0
147	Direct Gradient Calculation: Simple and Variation-Tolerant On-Chip Training Method for Neural Networks. <i>Advanced Intelligent Systems</i> , 2021 , 3, 2100064	6	0
146	Effect of Lateral Charge Diffusion on Retention Characteristics of 3D NAND Flash Cells. <i>IEEE Electron Device Letters</i> , 2021 , 42, 1148-1151	4.4	0
145	3-D AND-Type Flash Memory Architecture With High- ϵ Gate Dielectric for High-Density Synaptic Devices. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 3801-3806	2.9	3
144	Hardware-Based Spiking Neural Networks Using Capacitor-Less Positive Feedback Neuron Devices. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 4766-4772	2.9	

143	Highly stable Si MOSFET-type humidity sensor with ink-jet printed graphene quantum dots sensing layer. <i>Sensors and Actuators B: Chemical</i> , 2021 , 343, 130134	8.5	1
142	A novel physical unclonable function (PUF) using 16nm ² 6 pure-HfO ₂ ferroelectric tunnel junction array for security applications. <i>Nanotechnology</i> , 2021 , 32,	3.4	2
141	Gate-First Negative Capacitance Field-Effect Transistor With Self-Aligned Nickel-Silicide Source and Drain. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 4754-4757	2.9	0
140	Interlayer engineering for enhanced ferroelectric tunnel junction operations in HfO ₂ -based metal-ferroelectric-insulator-semiconductor stack. <i>Nanotechnology</i> , 2021 , 32,	3.4	4
139	Efficient fusion of spiking neural networks and FET-type gas sensors for a fast and reliable artificial olfactory system. <i>Sensors and Actuators B: Chemical</i> , 2021 , 345, 130419	8.5	4
138	Effects of IGZO film thickness on H ₂ S gas sensing performance: Response, excessive recovery, low-frequency noise, and signal-to-noise ratio. <i>Sensors and Actuators B: Chemical</i> , 2021 , 344, 130148	8.5	6
137	Vertically-Stacked Si _{0.2} Ge _{0.8} Nanosheet Tunnel FET With 70 mV/Dec Average Subthreshold Swing. <i>IEEE Electron Device Letters</i> , 2021 , 1-1	4.4	2
136	Improvement of Resistive Switching Characteristics of Titanium Oxide Based Nanowedge RRAM Through Nickel Silicidation. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 438-442	2.9	1
135	Core-Shell Dual-Gate Nanowire Memory as a Synaptic Device for Neuromorphic Application. <i>IEEE Journal of the Electron Devices Society</i> , 2021 , 1-1	2.3	1
134	Ferroelectric-Gate Field-Effect Transistor Memory With Recessed Channel. <i>IEEE Electron Device Letters</i> , 2020 , 41, 1201-1204	4.4	13
133	Analysis on Reverse Drain-Induced Barrier Lowering and Negative Differential Resistance of Ferroelectric-Gate Field-Effect Transistor Memory. <i>IEEE Electron Device Letters</i> , 2020 , 41, 1197-1200	4.4	6
132	Investigation of Sidewall High-k Interfacial Layer Effect in Gate-All-Around Structure. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 1859-1863	2.9	7
131	Effect of Word-Line Bias on Linearity of Multi-Level Conductance Steps for Multi-Layer Neural Networks Based on NAND Flash Cells. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 4138-4142	1.3	2
130	Vertical Inner Gate Transistors for 4F2 DRAM Cell. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 944-948	2.9	3
129	Negative Capacitance Effect on MOS Structure: Influence of Electric Field Variation. <i>IEEE Nanotechnology Magazine</i> , 2020 , 19, 168-171	2.6	6
128	Design and Optimization of Triple-k Spacer Structure in Two-Stack Nanosheet FET From OFF-State Leakage Perspective. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 1317-1322	2.9	9
127	Investigation of Electrical Characteristic Behavior Induced by Channel-Release Process in Stacked Nanosheet Gate-All-Around MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 2648-2652	2.9	15
126	Implementation of Synaptic Device Using Various High- Gate Dielectric Stacks. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 4292-4297	1.3	3

125	A Highly Sensitive FET-Type Humidity Sensor with Inkjet-Printed Pt-InO Nanoparticles at Room Temperature. <i>Nanoscale Research Letters</i> , 2020 , 15, 198	5	7
124	Suppression of reverse drain induced barrier lowering in negative capacitance FDSOI field effect transistor using oxide charge trapping layer. <i>Semiconductor Science and Technology</i> , 2020 , 35, 125003	1.8	3
123	Neuromorphic Computing Using NAND Flash Memory Architecture With Pulse Width Modulation Scheme. <i>Frontiers in Neuroscience</i> , 2020 , 14, 571292	5.1	16
122	Efficient precise weight tuning protocol considering variation of the synaptic devices and target accuracy. <i>Neurocomputing</i> , 2020 , 378, 189-196	5.4	6
121	3-D Synapse Array Architecture Based on Charge-Trap Flash Memory for Neuromorphic Application. <i>Electronics (Switzerland)</i> , 2020 , 9, 57	2.6	13
120	Field Effect Transistor-Type Devices Using High- κ Gate Insulator Stacks for Neuromorphic Applications. <i>ACS Applied Electronic Materials</i> , 2020 , 2, 323-328	4	4
119	Initial synaptic weight distribution for fast learning speed and high recognition rate in STDP-based spiking neural network. <i>Solid-State Electronics</i> , 2020 , 165, 107742	1.7	1
118	SO ₂ gas sensing characteristics of FET- and resistor-type gas sensors having WO ₃ as sensing material. <i>Solid-State Electronics</i> , 2020 , 165, 107747	1.7	25
117	Implementation of homeostasis functionality in neuron circuit using double-gate device for spiking neural network. <i>Solid-State Electronics</i> , 2020 , 165, 107741	1.7	7
116	Surface Ge-rich p-type SiGe channel tunnel field-effect transistor fabricated by local condensation technique. <i>Solid-State Electronics</i> , 2020 , 164, 107701	1.7	11
115	Pruning for Hardware-Based Deep Spiking Neural Networks Using Gated Schottky Diode as Synaptic Devices. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 6603-6608	1.3	1
114	NAND Flash Based Novel Synaptic Architecture for Highly Robust and High-Density Quantized Neural Networks With Binary Neuron Activation of (1, 0). <i>IEEE Access</i> , 2020 , 8, 114330-114339	3.5	6
113	On-Chip Training Spiking Neural Networks Using Approximated Backpropagation With Analog Synaptic Devices. <i>Frontiers in Neuroscience</i> , 2020 , 14, 423	5.1	20
112	Vertically Stacked Gate-All-Around Structured Tunneling-Based Ternary-CMOS. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 3889-3893	2.9	5
111	A Novel High Schottky Barrier Based Bilateral Gate and Assistant Gate Controlled Bidirectional Tunnel Field Effect Transistor. <i>IEEE Journal of the Electron Devices Society</i> , 2020 , 8, 976-980	2.3	2
110	AND Flash Array Based on Charge Trap Flash for Implementation of Convolutional Neural Networks. <i>IEEE Electron Device Letters</i> , 2020 , 41, 1653-1656	4.4	18
109	Low-Power Binary Neuron Circuit With Adjustable Threshold for Binary Neural Networks Using NAND Flash Memory. <i>IEEE Access</i> , 2020 , 8, 153334-153340	3.5	3
108	3D AND-Type Stacked Array for Neuromorphic Systems. <i>Micromachines</i> , 2020 , 11,	3.3	2

107	Proposition of deposition and bias conditions for optimal signal-to-noise-ratio in resistor- and FET-type gas sensors. <i>Nanoscale</i> , 2020 , 12, 19768-19775	7.7	19
106	. <i>IEEE Access</i> , 2020 , 8, 202639-202647	3.5	6
105	Double-Gated Asymmetric Floating-Gate-Based Synaptic Device for Effective Performance Enhancement Through Online Learning. <i>IEEE Access</i> , 2020 , 8, 217735-217743	3.5	
104	A new sensing mechanism of Si FET-based gas sensor using pre-bias. <i>Sensors and Actuators B: Chemical</i> , 2020 , 302, 127147	8.5	3
103	Low frequency noise characteristics of resistor- and Si MOSFET-type gas sensors fabricated on the same Si wafer with In ₂ O ₃ sensing layer. <i>Sensors and Actuators B: Chemical</i> , 2020 , 318, 128087	8.5	25
102	A Spiking Neural Network with a Global Self-Controller for Unsupervised Learning Based on Spike-Timing-Dependent Plasticity Using Flash Memory Synaptic Devices 2019 ,		5
101	Operation Scheme of Multi-Layer Neural Networks Using NAND Flash Memory as High-Density Synaptic Devices. <i>IEEE Journal of the Electron Devices Society</i> , 2019 , 7, 1085-1093	2.3	16
100	Investigation of Neural Networks Using Synapse Arrays Based on Gated Schottky Diodes 2019 ,		2
99	Characterization of a Capacitorless DRAM Cell for Cryogenic Memory Applications. <i>IEEE Electron Device Letters</i> , 2019 , 40, 1614-1617	4.4	5
98	Improved CO gas detection of Si MOSFET gas sensor with catalytic Pt decoration and pre-bias effect. <i>Sensors and Actuators B: Chemical</i> , 2019 , 300, 127040	8.5	18
97	Si-Based FET-Type Synaptic Device With Short-Term and Long-Term Plasticity Using High- κ Gate-Stack. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 917-923	2.9	9
96	Highly Reliable Inference System of Neural Networks Using Gated Schottky Diodes. <i>IEEE Journal of the Electron Devices Society</i> , 2019 , 7, 522-528	2.3	9
95	Effect of Nitrogen Content in Tunneling Dielectric on Cell Properties of 3-D NAND Flash Cells. <i>IEEE Electron Device Letters</i> , 2019 , 40, 702-705	4.4	5
94	Near-Linear Potentiation Mechanism of Gated Schottky Diode as a Synaptic Device. <i>IEEE Journal of the Electron Devices Society</i> , 2019 , 7, 335-343	2.3	4
93	Synaptic device using a floating fin-body MOSFET with memory functionality for neural network. <i>Solid-State Electronics</i> , 2019 , 156, 23-27	1.7	3
92	Fabrication and Characterization of a Thin-Body Poly-Si 1T DRAM With Charge-Trap Effect. <i>IEEE Electron Device Letters</i> , 2019 , 40, 566-569	4.4	15
91	Adaptive learning rule for hardware-based deep neural networks using electronic synapse devices. <i>Neural Computing and Applications</i> , 2019 , 31, 8101-8116	4.8	29
90	Analysis on New Read Disturbance Induced by Hot Carrier Injections in 3-D Channel-Stacked NAND Flash Memory. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 3326-3330	2.9	3

89	Synaptic Devices Based on 3-D AND Flash Memory Architecture for Neuromorphic Computing 2019 ,		7
88	Unsupervised online learning of temporal information in spiking neural network using thin-film transistor-type NOR flash memory devices. <i>Nanotechnology</i> , 2019 , 30, 435206	3.4	8
87	Unsupervised Online Learning With Multiple Postsynaptic Neurons Based on Spike-Timing-Dependent Plasticity Using a Thin-Film Transistor-Type NOR Flash Memory Array. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 6050-6054	1.3	7
86	Reconfigurable Field-Effect Transistor as a Synaptic Device for XNOR Binary Neural Network. <i>IEEE Electron Device Letters</i> , 2019 , 40, 624-627	4.4	13
85	High-Density and Highly-Reliable Binary Neural Networks Using NAND Flash Memory Cells as Synaptic Devices 2019 ,		20
84	Investigation on Ambipolar Current Suppression Using a Stacked Gate in an L-shaped Tunnel Field-Effect Transistor. <i>Micromachines</i> , 2019 , 10,	3.3	3
83	Review of candidate devices for neuromorphic applications 2019 ,		1
82	Gas sensing characteristics of the FET-type gas sensor having inkjet-printed WS ₂ sensing layer. <i>Solid-State Electronics</i> , 2019 , 153, 27-32	1.7	22
81	Emerging memory technologies for neuromorphic computing. <i>Nanotechnology</i> , 2019 , 30, 032001	3.4	40
80	Adaptive Weight Quantization Method for Nonlinear Synaptic Devices. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 395-401	2.9	18
79	3-D Stacked Synapse Array Based on Charge-Trap Flash Memory for Implementation of Deep Neural Networks. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 420-427	2.9	22
78	Novel Boosting Scheme Using Asymmetric Pass Voltage for Reducing Program Disturbance in 3-Dimensional NAND Flash Memory. <i>IEEE Journal of the Electron Devices Society</i> , 2018 , 1-1	2.3	3
77	An FET-type gas sensor with a sodium ion conducting solid electrolyte for CO ₂ detection. <i>Sensors and Actuators B: Chemical</i> , 2018 , 259, 1058-1065	8.5	16
76	Demonstration of Unsupervised Learning With Spike-Timing-Dependent Plasticity Using a TFT-Type NOR Flash Memory Array. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 1774-1780	2.9	40
75	Spiking Neural Network Using Synaptic Transistors and Neuron Circuits for Pattern Recognition With Noisy Images. <i>IEEE Electron Device Letters</i> , 2018 , 39, 630-633	4.4	42
74	Investigation of silicide-induced-dopant-activation for steep tunnel junction in tunnel field effect transistor (TFET). <i>Solid-State Electronics</i> , 2018 , 140, 41-45	1.7	3
73	A Novel Analysis of $\{L\}_{\text{gd}}$ Dependent-1/ $\{f\}$ Noise in In _{0.08} Al _{0.92} N/GaN. <i>IEEE Electron Device Letters</i> , 2018 , 39, 1552-1555	4.4	3
72	Hardware-based Neural Networks using a Gated Schottky Diode as a Synapse Device 2018 ,		9

71	A Si FET-type Gas Sensor with Pulse-driven Localized Micro-heater for Low Power Consumption 2018,		5
70	Space Program Scheme for 3-D NAND Flash Memory Specialized for the TLC Design 2018,		8
69	A Split-Gate Positive Feedback Device With an Integrate-and-Fire Capability for a High-Density Low-Power Neuron Circuit. <i>Frontiers in Neuroscience</i> , 2018 , 12, 704	5.1	10
68	Neuromorphic Technology Based on Charge Storage Memory Devices 2018,		7
67	Observation of physisorption in a high-performance FET-type oxygen gas sensor operating at room temperature. <i>Nanoscale</i> , 2018 , 10, 18019-18027	7.7	28
66	1/f-Noise in AlGa _N /Ga _N Nanowire Omega-FinFETs. <i>IEEE Electron Device Letters</i> , 2017 , 38, 252-254	4.4	17
65	Effect of a pre-bias on the adsorption and desorption of oxidizing gases in FET-type sensor. <i>Sensors and Actuators B: Chemical</i> , 2017 , 245, 122-128	8.5	11
64	High-Density Reconfigurable Devices With Programmable Bottom-Gate Array. <i>IEEE Electron Device Letters</i> , 2017 , 38, 564-567	4.4	8
63	Effects of Localized Body Doping on Switching Characteristics of Tunnel FET Inverters With Vertical Structures. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 1799-1805	2.9	20
62	Gas-Sensing Characteristics of Exfoliated WSe ₂ Field-Effect Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 3151-3154	1.3	24
61	Pulse Biasing Scheme for the Fast Recovery of FET-Type Gas Sensors for Reducing Gases. <i>IEEE Electron Device Letters</i> , 2017 , 38, 971-974	4.4	8
60	Effect of Low Temperature Annealing on ITO-on-Si Schottky Junction. <i>IEEE Electron Device Letters</i> , 2017 , 38, 426-429	4.4	5
59	Analysis of Clockwise and Counter-Clockwise Hysteresis Characteristics in 3-D NAND Flash Memory Cells. <i>IEEE Electron Device Letters</i> , 2017 , 38, 867-870	4.4	2
58	High-Density and Near-Linear Synaptic Device Based on a Reconfigurable Gated Schottky Diode. <i>IEEE Electron Device Letters</i> , 2017 , 38, 1153-1156	4.4	38
57	A 650 V Super-Junction MOSFET With Novel Hexagonal Structure for Superior Static Performance and High BV Resilience to Charge Imbalance: A TCAD Simulation Study. <i>IEEE Electron Device Letters</i> , 2017 , 38, 111-114	4.4	18
56	Method to Eliminate Gate and Drain Bias Stresses in Transfer Curves of WSe ₂ Field Effect Transistors with Single Channel Pulsed I_{IV} Measurement. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 3382-3385	1.3	
55	A Wide Detection Range Mercury Ion Sensor Using Si MOSFET Having Single-Walled Carbon Nanotubes as a Sensing Layer. <i>IEEE Electron Device Letters</i> , 2017 , 38, 959-962	4.4	5
54	Design Consideration of Diode-Type NAND Flash Memory Cell String Having Super-Steep Switching Slope. <i>IEEE Journal of the Electron Devices Society</i> , 2016 , 4, 328-334	2.3	2

53	Accurate extraction of WSe ₂ FETs parameters by using pulsed I-V method at various temperatures. <i>Nano Convergence</i> , 2016 , 3, 31	9.2	4
52	Layer Selection by Multi-Level Permutation in 3-D Stacked NAND Flash Memory. <i>IEEE Electron Device Letters</i> , 2016 , 37, 866-869	4.4	3
51	Analysis on Program Disturbance in Channel-Stacked NAND Flash Memory With Layer Selection by Multilevel Operation. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 1041-1046	2.9	11
50	. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 1533-1538	2.9	9
49	Silicon-Based Floating-Body Synaptic Transistor With Frequency-Dependent Short- and Long-Term Memories. <i>IEEE Electron Device Letters</i> , 2016 , 37, 249-252	4.4	52
48	Novel Program Method of String Select Transistors for Layer Selection in Channel-Stacked NAND Flash Memory. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 3521-3526	2.9	2
47	Analysis on temperature dependent current mechanism of tunnel field-effect transistors. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 06GG03	1.4	6
46	Highly improved response and recovery characteristics of Si FET-type gas sensor using pre-bias 2016 ,		6
45	Highly selective ZnO gas sensor based on MOSFET having a horizontal floating-gate. <i>Sensors and Actuators B: Chemical</i> , 2016 , 232, 653-659	8.5	49
44	1/f Noise Characteristics of AlGa _N /Ga _N FinFETs with and without TMAH surface treatment. <i>Microelectronic Engineering</i> , 2015 , 147, 134-136	2.5	9
43	Implementation of Short-Term Plasticity and Long-Term Potentiation in a Synapse Using Si-Based Type of Charge-Trap Memory. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 569-573	2.9	21
42	GIDL Characteristics in Gated-Diode Memory String and Its Application to Current-Steering Digital-to-Analog Conversion. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 3272-3277	2.9	4
41	Comprehensive analysis of retention characteristics in 3-D NAND flash memory cells with tube-type poly-Si channel structure 2015 ,		40
40	. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 2738-2744	2.9	3
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