

Sung-Jin Choi

List of Publications by Year in descending order

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papers

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all docs

168
docs citations

168
times ranked

5059
citing authors

#	ARTICLE	IF	CITATIONS
1	A Polydimethylsiloxane (PDMS) Sponge for the Selective Absorption of Oil from Water. ACS Applied Materials & Interfaces, 2011, 3, 4552-4556.	8.0	606
2	Sensitivity of Threshold Voltage to Nanowire Width Variation in Junctionless Transistors. IEEE Electron Device Letters, 2011, 32, 125-127.	3.9	285
3	Pattern Recognition Using Carbon Nanotube Synaptic Transistors with an Adjustable Weight Update Protocol. ACS Nano, 2017, 11, 2814-2822.	14.6	272
4	Double-Gate Nanowire Field Effect Transistor for a Biosensor. Nano Letters, 2010, 10, 2934-2938.	9.1	162
5	Simple Analytical Bulk Current Model for Long-Channel Double-Gate Junctionless Transistors. IEEE Electron Device Letters, 2011, 32, 704-706.	3.9	160
6	A Full-Range Drain Current Model for Double-Gate Junctionless Transistors. IEEE Transactions on Electron Devices, 2011, 58, 4219-4225.	3.0	138
7	Transparent, Flexible Strain Sensor Based on a Solution-Processed Carbon Nanotube Network. ACS Applied Materials & Interfaces, 2017, 9, 26279-26285.	8.0	134
8	Carbon Nanotube Synaptic Transistor Network for Pattern Recognition. ACS Applied Materials & Interfaces, 2015, 7, 25479-25486.	8.0	120
9	Analytical Modeling of a Nanogap-Embedded FET for Application as a Biosensor. IEEE Transactions on Electron Devices, 2010, 57, 3477-3484.	3.0	115
10	Investigation of Silicon Nanowire Gate-All-Around Junctionless Transistors Built on a Bulk Substrate. IEEE Transactions on Electron Devices, 2013, 60, 1355-1360.	3.0	103
11	A Compact Model of Quantum Electron Density at the Subthreshold Region for Double-Gate Junctionless Transistors. IEEE Transactions on Electron Devices, 2012, 59, 1008-1012.	3.0	86
12	Short-Channel Transistors Constructed with Solution-Processed Carbon Nanotubes. ACS Nano, 2013, 7, 798-803.	14.6	83
13	Study on the Photoresponse of Amorphous InGaZnO and Zinc Oxynitride Semiconductor Devices by the Extraction of Sub-Gap-State Distribution and Device Simulation. ACS Applied Materials & Interfaces, 2015, 7, 15570-15577.	8.0	82
14	An Underlap Channel-Embedded Field-Effect Transistor for Biosensor Application in Watery and Dry Environment. IEEE Nanotechnology Magazine, 2012, 11, 390-394.	2.0	80
15	A transistor-based biosensor for the extraction of physical properties from biomolecules. Applied Physics Letters, 2012, 101, 073703.	3.3	71
16	Nonvolatile Memory by All-Around-Gate Junctionless Transistor Composed of Silicon Nanowire on Bulk Substrate. IEEE Electron Device Letters, 2011, 32, 602-604.	3.9	68
17	Impact of Synaptic Device Variations on Pattern Recognition Accuracy in a Hardware Neural Network. Scientific Reports, 2018, 8, 2638.	3.3	63
18	A Nonpiecewise Model for Long-Channel Junctionless Cylindrical Nanowire FETs. IEEE Electron Device Letters, 2012, 33, 155-157.	3.9	58

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19	An underlap field-effect transistor for electrical detection of influenza. Applied Physics Letters, 2010, 96, .	3.3	57
20	A Highly Responsive Silicon Nanowire/Amplifier MOSFET Hybrid Biosensor. Scientific Reports, 2015, 5, 12286.	3.3	55
21	A pH sensor with a double-gate silicon nanowire field-effect transistor. Applied Physics Letters, 2013, 102, .	3.3	46
22	Systematic Decomposition of the Positive Bias Stress Instability in Self-Aligned Coplanar InGaZnO Thin-Film Transistors. IEEE Electron Device Letters, 2017, 38, 580-583.	3.9	44
23	Effect of Oxygen Content on Current Stress-Induced Instability in Bottom-Gate Amorphous InGaZnO Thin-Film Transistors. Materials, 2019, 12, 3149.	2.9	44
24	Three-Dimensional Printed Poly(vinyl alcohol) Substrate with Controlled On-Demand Degradation for Transient Electronics. ACS Nano, 2018, 12, 6006-6012.	14.6	43
25	Single-Scan Monochromatic Photonic Capacitance-Voltage Technique for Extraction of Subgap DOS Over the Bandgap in Amorphous Semiconductor TFTs. IEEE Electron Device Letters, 2013, 34, 1524-1526.	3.9	42
26	Silicon Nanowire All-Around Gate MOSFETs Built on a Bulk Substrate by All Plasma-Etching Routes. IEEE Electron Device Letters, 2011, 32, 452-454.	3.9	39
27	Flammable carbon nanotube transistors on a nitrocellulose paper substrate for transient electronics. Nano Research, 2017, 10, 87-96.	10.4	37
28	Analysis of Transconductance (g_m) in Schottky-Barrier MOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 427-432.	3.0	32
29	Comparative study of solution-processed carbon nanotube network transistors. Applied Physics Letters, 2012, 101, 112104.	3.3	30
30	Bio-Inspired Complementary Photoconductor by Porphyrin-Coated Silicon Nanowires. Advanced Materials, 2011, 23, 3979-3983.	21.0	29
31	Logic circuits composed of flexible carbon nanotube thin-film transistor and ultra-thin polymer gate dielectric. Scientific Reports, 2016, 6, 26121.	3.3	29
32	Numerical study of read scheme in one-selector one-resistor crossbar array. Solid-State Electronics, 2015, 114, 80-86.	1.4	28
33	Parallel weight update protocol for a carbon nanotube synaptic transistor array for accelerating neuromorphic computing. Nanoscale, 2020, 12, 2040-2046.	5.6	28
34	Design study of the gate-all-around silicon nanosheet MOSFETs. Semiconductor Science and Technology, 2020, 35, 03LT01.	2.0	27
35	Investigation on the negative bias illumination stress-induced instability of amorphous indium-tin-zinc-oxide thin film transistors. Applied Physics Letters, 2014, 105, .	3.3	26
36	TCAD-Based Simulation Method for the Electrolyte-Insulator-Semiconductor Field-Effect Transistor. IEEE Transactions on Electron Devices, 2015, 62, 1072-1075.	3.0	26

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37	Effect of oxygen content of the LaAlO ₃ layer on the synaptic behavior of Pt/LaAlO ₃ /Nb-doped SrTiO ₃ memristors for neuromorphic applications. <i>Solid-State Electronics</i> , 2018, 140, 139-143.	1.4	26
38	Experimental decomposition of the positive bias temperature stress-induced instability in self-aligned coplanar InGaZnO thin-film transistors and its modeling based on the multiple stretched-exponential functions. <i>Journal of the Society for Information Display</i> , 2017, 25, 98-107.	2.1	25
39	Investigation of Size Dependence on Sensitivity for Nanowire FET Biosensors. <i>IEEE Nanotechnology Magazine</i> , 2011, 10, 1405-1411.	2.0	24
40	High performance gallium-zinc oxynitride thin film transistors for next-generation display applications. , 2013, , .		24
41	Compact Two-State-Variable Second-Order Memristor Model. <i>Small</i> , 2016, 12, 3320-3326.	10.0	24
42	Intrinsic threshold switching responses in AsTeSi thin film. <i>Journal of Alloys and Compounds</i> , 2016, 667, 91-95.	5.5	24
43	Ultrasensitive Electrical Detection of Hemagglutinin for Point-of-Care Detection of Influenza Virus Based on a CMP-NANA Probe and Top-Down Processed Silicon Nanowire Field-Effect Transistors. <i>Sensors</i> , 2019, 19, 4502.	3.8	24
44	A Bulk FinFET Unified-RAM (URAM) Cell for Multifunctioning NVM and Capacitorless 1T-DRAM. <i>IEEE Electron Device Letters</i> , 2008, 29, 632-634.	3.9	23
45	High-performance thin-film transistors produced from highly separated solution-processed carbon nanotubes. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	23
46	Digital and Analog Switching Characteristics of InGaZnO Memristor Depending on Top Electrode Material for Neuromorphic System. <i>IEEE Access</i> , 2020, 8, 192304-192311.	4.2	23
47	Enhancement of Program Speed in Dopant-Segregated Schottky-Barrier (DSSB) FinFET SONOS for <emphasistype="smcaps">NAND</emphasis>-Type Flash Memory. <i>IEEE Electron Device Letters</i> , 2009, 30, 78-81.	3.9	21
48	Latch-up based bidirectional npn selector for bipolar resistance-change memory. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	21
49	The Effect of Gate and Drain Fields on the Competition Between Donor-Like State Creation and Local Electron Trapping in In"Ga"Zn"O Thin Film Transistors Under Current Stress. <i>IEEE Electron Device Letters</i> , 2015, 36, 1336-1339.	3.9	21
50	One Transistor"Two Memristor Based on Amorphous Indium"Gallium"Zinc-Oxide for Neuromorphic Synaptic Devices. <i>ACS Applied Electronic Materials</i> , 2020, 2, 2837-2844.	4.3	21
51	Gate-Induced Drain-Leakage (GIDL) Programming Method for Soft-Programming-Free Operation in Unified RAM (URAM). <i>IEEE Electron Device Letters</i> , 2009, 30, 189-191.	3.9	20
52	Enhanced sensing of gas molecules by a 99.9% semiconducting carbon nanotube-based field-effect transistor sensor. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	20
53	Fabrication of InGaAs-on-Insulator Substrates Using Direct Wafer-Bonding and Epitaxial Lift-Off Techniques. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 3601-3608.	3.0	20
54	Impact of Synaptic Device Variations on Classification Accuracy in a Binarized Neural Network. <i>Scientific Reports</i> , 2019, 9, 15237.	3.3	20

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55	Vertically Integrated Unidirectional Biristor. IEEE Electron Device Letters, 2011, 32, 1483-1485.	3.9	19
56	Charge and dielectric effects of biomolecules on electrical characteristics of nanowire FET biosensors. Applied Physics Letters, 2017, 111, .	3.3	19
57	Synaptic Device Network Architecture with Feature Extraction for Unsupervised Image Classification. Small, 2018, 14, e1800521.	10.0	19
58	Control of the Boundary between the Gradual and Abrupt Modulation of Resistance in the Schottky Barrier Tunneling-Modulated Amorphous Indium-Gallium-Zinc-Oxide Memristors for Neuromorphic Computing. Electronics (Switzerland), 2019, 8, 1087.	3.1	18
59	Highly uniform carbon nanotube nanomesh network transistors. Nano Research, 2015, 8, 1320-1326.	10.4	17
60	Dual-Sweep Combinational Transconductance Technique for Separate Extraction of Parasitic Resistances in Amorphous Thin-Film Transistors. IEEE Electron Device Letters, 2015, 36, 144-146.	3.9	17
61	Fabrication and characterization of Pt/Al ₂ O ₃ /Y ₂ O ₃ /In _{0.53} Ga _{0.47} As MOSFETs with low interface trap density. Applied Physics Letters, 2017, 110, .	3.3	17
62	Effect of Simultaneous Mechanical and Electrical Stress on the Electrical Performance of Flexible In-Ga-Zn-O Thin-Film Transistors. Materials, 2019, 12, 3248.	2.9	17
63	Understanding the signal amplification in dual-gate FET-based biosensors. Journal of Applied Physics, 2020, 128, .	2.5	17
64	Pd/IGZO/p ⁺ -Si Synaptic Device with Self-Graded Oxygen Concentrations for Highly Linear Weight Adjustability and Improved Energy Efficiency. ACS Applied Electronic Materials, 2020, 2, 2390-2397.	4.3	17
65	Transformable Functional Nanoscale Building Blocks with Wafer-Scale Silicon Nanowires. Nano Letters, 2011, 11, 854-859.	9.1	16
66	Three-Dimensional Fin-Structured Semiconducting Carbon Nanotube Network Transistor. ACS Nano, 2016, 10, 10894-10900.	14.6	16
67	Analysis and Evaluation of a BJT-Based 1T-DRAM. IEEE Electron Device Letters, 2010, 31, 393-395.	3.9	15
68	Fin-Width Dependence of BJT-Based 1T-DRAM Implemented on FinFET. IEEE Electron Device Letters, 2010, 31, 909-911.	3.9	15
69	Characterization of density-of-states and parasitic resistance in a-InGaZnO thin-film transistors after negative bias stress. Applied Physics Letters, 2013, 102, 143502.	3.3	15
70	Three-Dimensionally Printed Micro-electromechanical Switches. ACS Applied Materials & Interfaces, 2018, 10, 15841-15846.	8.0	15
71	Effects of structure and oxygen flow rate on the photo-response of amorphous IGZO-based photodetector devices. Solid-State Electronics, 2018, 140, 115-121.	1.4	15
72	Method to Extract Interface and Bulk Trap Separately Over the Full Sub-Gap Range in Amorphous InGaZnO Thin-Film Transistors by Using Various Channel Thicknesses. IEEE Electron Device Letters, 2019, 40, 574-577.	3.9	15

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73	Total Subgap Range Density of States-Based Analysis of the Effect of Oxygen Flow Rate on the Bias Stress Instabilities in a-IGZO TFTs. IEEE Transactions on Electron Devices, 2022, 69, 166-173.	3.0	15
74	Fully Depleted Polysilicon TFTs for Capacitorless 1T-DRAM. IEEE Electron Device Letters, 2009, 30, 742-744.	3.9	14
75	High-Performance Polycrystalline Silicon TFT on the Structure of a Dopant-Segregated Schottky-Barrier Source/Drain. IEEE Electron Device Letters, 2010, 31, 228-230.	3.9	14
76	Semiconducting carbon nanotube network thin-film transistors with enhanced inkjet-printed source and drain contact interfaces. Applied Physics Letters, 2017, 111, 173108.	3.3	14
77	Impact of Ground Plane Doping and Bottom-Gate Biasing on Electrical Properties in In _{0.53} Ga _{0.47} As-OI MOSFETs and Donor Wafer Reusability Toward Monolithic 3-D Integration With In _{0.53} Ga _{0.47} As Channel. IEEE Transactions on Electron Devices, 2018, 65, 1862-1868.	3.0	14
78	Observation of Hydrogen-Related Defect in Subgap Density of States and Its Effects Under Positive Bias Stress in Amorphous InGaZnO TFT. IEEE Electron Device Letters, 2021, 42, 708-711.	3.9	14
79	Hybrid complementary inverter based on carbon nanotube and IGZO thin-film transistors with controlled process conditions. Journal of Alloys and Compounds, 2018, 762, 456-462.	5.5	13
80	Flexible carbon nanotube Schottky diode and its integrated circuit applications. RSC Advances, 2019, 9, 22124-22128.	3.6	13
81	Gate-to-Source/Drain Nonoverlap Device for Soft-Program Immune Unified RAM (URAM). IEEE Electron Device Letters, 2009, 30, 544-546.	3.9	12
82	Terahertz time-domain spectroscopy of anisotropic complex conductivity tensors in silicon nanowire films. Applied Physics Letters, 2012, 100, 211102.	3.3	12
83	The electron trap parameter extraction-based investigation of the relationship between charge trapping and activation energy in IGZO TFTs under positive bias temperature stress. Solid-State Electronics, 2018, 140, 90-95.	1.4	12
84	A tactile sensor system with sensory neurons and a perceptual synaptic network based on semivolatile carbon nanotube transistors. NPG Asia Materials, 2020, 12, .	7.9	12
85	Experimental extraction of stern-layer capacitance in biosensor detection using silicon nanowire field-effect transistors. Current Applied Physics, 2020, 20, 828-833.	2.4	12
86	Multiplexed Silicon Nanowire Tunnel FET-Based Biosensors With Optimized Multi-Sensing Currents. IEEE Sensors Journal, 2021, 21, 8839-8846.	4.7	12
87	High Injection Efficiency and Low-Voltage Programming in a Dopant-Segregated Schottky Barrier (DSSB) FinFET SONOS for nor-type Flash Memory. IEEE Electron Device Letters, 2009, 30, 265-268.	3.9	11
88	Physical Observation of a Thermo-Morphic Transition in a Silicon Nanowire. ACS Nano, 2012, 6, 2378-2384.	14.6	11
89	Nonvolatile memory with graphene oxide as a charge storage node in nanowire field-effect transistors. Applied Physics Letters, 2012, 100, .	3.3	11
90	Investigation of optimal hydrogen sensing performance in semiconducting carbon nanotube network transistors with palladium electrodes. Applied Physics Letters, 2015, 107, .	3.3	11

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91	A Study on the Degradation of In-Ga ^δ Zn-O Thin-Film Transistors Under Current Stress by Local Variations in Density of States and Trapped Charge Distribution. IEEE Electron Device Letters, 2015, 36, 690-692.	3.9	11
92	Ink-jet printed semiconducting carbon nanotube ambipolar transistors and inverters with chemical doping technique using polyethyleneimine. Applied Physics Letters, 2016, 109, .	3.3	11
93	Comprehensive evaluation of early retention (fast charge loss within a few seconds) characteristics in tube-type 3-D NAND flash memory. , 2016, , .		11
94	Highly transparent tactile sensor based on a percolated carbon nanotube network. AIP Advances, 2018, 8, 065109.	1.3	11
95	Analysis of Threshold Voltage Shift for Full VGS/VDS/Oxygen-Content Span under Positive Bias Stress in Bottom-Gate Amorphous InGaZnO Thin-Film Transistors. Micromachines, 2021, 12, 327.	2.9	11
96	A novel SiNW/CMOS hybrid biosensor for high sensitivity/low noise. , 2013, , .		10
97	Bias-Dependent Effective Channel Length for Extraction of Subgap DOS by Capacitance ^δ Voltage Characteristics in Amorphous Semiconductor TFTs. IEEE Transactions on Electron Devices, 2015, 62, 2689-2694.	3.0	10
98	Precision-extension technique for accurate vector ^δ matrix multiplication with a CNT transistor crossbar array. Nanoscale, 2019, 11, 21449-21457.	5.6	10
99	Positive Bias Stress Instability of InGaZnO TFTs With Self-Aligned Top-Gate Structure in the Threshold-Voltage Compensated Pixel. IEEE Electron Device Letters, 2020, 41, 50-53.	3.9	10
100	Threshold-Variation-Tolerant Coupling-Gate $\hat{\pm}$ IGZO Synaptic Transistor for More Reliably Controllable Hardware Neuromorphic System. IEEE Access, 2021, 9, 59345-59352.	4.2	10
101	Binarized Neural Network with Silicon Nanosheet Synaptic Transistors for Supervised Pattern Classification. Scientific Reports, 2019, 9, 11705.	3.3	9
102	Humidity Effects According to the Type of Carbon Nanotubes. IEEE Access, 2021, 9, 6810-6816.	4.2	9
103	Dopant-Segregated Schottky Source/Drain FinFET With a NiSi FUSI Gate and Reduced Leakage Current. IEEE Transactions on Electron Devices, 2010, 57, 2902-2906.	3.0	8
104	21 ^δ 4: <i><i>Distinguished Paper</i></i> : Experimental Decomposition of the Positive Bias Temperature Stress ^δ Induced Instability in Self ^δ Aligned Coplanar InGaZnO Thin ^δ film Transistors and its Modeling based on the Multiple Stretched ^δ Exponential Functions. Digest of Technical Papers SID International Symposium, 2017, 48, 298-301.	0.3	8
105	The Calculation of Negative Bias Illumination Stress-Induced Instability of Amorphous InGaZnO Thin-Film Transistors for Instability-Aware Design. IEEE Transactions on Electron Devices, 2018, 65, 1002-1008.	3.0	8
106	The Influence of Anion Composition on Subgap Density of States and Electrical Characteristics in ZnON Thin-Film Transistors. IEEE Electron Device Letters, 2019, 40, 40-43.	3.9	8
107	An Extraction Method of the Energy Distribution of Interface Traps by an Optically Assisted Charge Pumping Technique. IEEE Transactions on Electron Devices, 2011, 58, 3667-3673.	3.0	7
108	Addressable Nanowire Field-Effect-Transistor Biosensors With Local Backgates. IEEE Transactions on Electron Devices, 2012, 59, 2507-2511.	3.0	7

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109	Investigation of Sensor Performance in Accumulation- and Inversion-Mode Silicon Nanowire pH Sensors. IEEE Transactions on Electron Devices, 2014, 61, 1607-1610.	3.0	7
110	Hybrid Open Drain Method and Fully Current-Based Characterization of Asymmetric Resistance Components in a Single MOSFET. IEEE Transactions on Electron Devices, 2016, 63, 4196-4200.	3.0	7
111	Determination of individual contact interfaces in carbon nanotube network-based transistors. Scientific Reports, 2017, 7, 5453.	3.3	7
112	Comprehensive separate extraction of parasitic resistances in MOSFETs considering the gate bias-dependence and the asymmetric overlap length. Microelectronics Reliability, 2018, 85, 66-70.	1.7	7
113	Influence of the Gate/Drain Voltage Configuration on the Current Stress Instability in Amorphous Indium-Zinc-Oxide Thin-Film Transistors With Self-Aligned Top-Gate Structure. IEEE Electron Device Letters, 2019, 40, 1431-1434.	3.9	7
114	An Optically Assisted Program Method for Capacitorless 1T-DRAM. IEEE Transactions on Electron Devices, 2010, 57, 1714-1718.	3.0	6
115	Fin Width $(W_{m\text{ fin}})$ Dependence of Programming Characteristics on a Dopant-Segregated Schottky-Barrier (DSSB) FinFET SONOS Device for a NOR-Type Flash Memory Device. IEEE Electron Device Letters, 2010, 31, 71-73.	3.9	6
116	Characterization and Capacitive Modeling of Target Concentration-Dependent Subthreshold Swing in Silicon Nanoribbon Biosensors. IEEE Electron Device Letters, 2014, 35, 587-589.	3.9	6
117	Effect of charge trap layer thickness on the charge spreading behavior within a few seconds in 3D charge trap flash memory. Semiconductor Science and Technology, 2018, 33, 10LT01.	2.0	6
118	Oxygen Content and Bias Influence on Amorphous InGaZnO TFT-Based Temperature Sensor Performance. IEEE Electron Device Letters, 2019, 40, 1666-1669.	3.9	6
119	Wafer-scale carbon nanotube network transistors. Nanotechnology, 2020, 31, 465303.	2.6	6
120	Refinement of Unified Random Access Memory. IEEE Transactions on Electron Devices, 2009, 56, 601-608.	3.0	5
121	Interface-Trap Analysis by an Optically Assisted Charge-Pumping Technique in a Floating-Body Device. IEEE Electron Device Letters, 2011, 32, 84-86.	3.9	5
122	Fully Transfer Characteristic-Based Technique for Surface Potential and Subgap Density of States in p-Channel Polymer-Based TFTs. IEEE Electron Device Letters, 2013, 34, 1521-1523.	3.9	5
123	Modeling and Separate Extraction Technique for Gate Bias-Dependent Parasitic Resistances and Overlap Length in MOSFETs. IEEE Transactions on Electron Devices, 2015, 62, 1063-1067.	3.0	5
124	The γ Fe_2O_3 Nanoparticle Assembly-Based Memristor Ratioed Logic and Its Optical Tuning. IEEE Electron Device Letters, 2016, 37, 986-989.	3.9	5
125	Hybrid integration of carbon nanotube and amorphous IGZO thin-film transistors. AIP Advances, 2020, 10, .	1.3	5
126	Investigation of the source-side injection characteristic of a dopant-segregated Schottky barrier metal-oxide-semiconductor field-effect-transistor. Applied Physics Letters, 2009, 95, 063508.	3.3	4

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127	Resistive-Memory Embedded Unified RAM (R-URAM). IEEE Transactions on Electron Devices, 2009, 56, 2670-2674.	3.0	4
128	P-Channel Nonvolatile Flash Memory With a Dopant-Segregated Schottky-Barrier Source/Drain. IEEE Transactions on Electron Devices, 2010, 57, 1737-1742.	3.0	4
129	Optically Assisted Charge Pumping on Floating-Body FETs. IEEE Electron Device Letters, 2010, 31, 1365-1367.	3.9	4
130	Extraction of Propagation Delay-Related Mobility and Its Verification for Amorphous InGaZnO Thin-Film Transistor-Based Inverters. IEEE Transactions on Electron Devices, 2015, 62, 1504-1510.	3.0	4
131	A SONOS device with a separated charge trapping layer for improvement of charge injection. AIP Advances, 2017, 7, .	1.3	4
132	Directly drawn top-gate semiconducting carbon nanotube thin-film transistors and complementary inverters. Nanotechnology, 2020, 31, 32LT01.	2.6	4
133	Influence of Nitrogen Content on Persistent Photoconductivity in Zinc Oxynitride Thin Film Transistors. IEEE Electron Device Letters, 2020, 41, 561-564.	3.9	4
134	Low-Power True Random Number Generator Based on Randomly Distributed Carbon Nanotube Networks. IEEE Access, 2021, 9, 91341-91346.	4.2	4
135	Improvement of the Sensing Window on a Capacitorless 1T-DRAM of a FinFET-Based Unified RAM. IEEE Transactions on Electron Devices, 2009, 56, 3228-3231.	3.0	3
136	High performance platinum-silicided p-type Schottky barrier metal-oxide-semiconductor field-effect transistors scaled down to 30 nm. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, .	1.2	3
137	Inkjet printed polymer SRAM-cell design for flexible FPGA with physical parameter-based TFT model. , 2013, , .		3
138	Comparative study of piezoresistance effect of semiconducting carbon nanotube-Polydimethylsiloxane nanocomposite strain sensor. , 2016, , .		3
139	Band-Bending Effect in the Characterization of Subgap Density-of-States in Amorphous TFTs Through Fully Electrical Techniques. IEEE Electron Device Letters, 2017, 38, 199-202.	3.9	3
140	Alternating Current-Based Technique for Separate Extraction of Parasitic Resistances in MISFETs With or Without the Body Contact. IEEE Electron Device Letters, 2020, 41, 1528-1531.	3.9	3
141	16-Bit Fixed-Point Number Multiplication With CNT Transistor Dot-Product Engine. IEEE Access, 2020, 8, 133597-133604.	4.2	3
142	Defect spectroscopy of sidewall interfaces in gate-all-around silicon nanosheet FET. Nanotechnology, 2021, 32, 165202.	2.6	3
143	Current-to-transconductance ratio technique for simultaneous extraction of threshold voltage and parasitic resistances in MOSFETs. Solid-State Electronics, 2021, 183, 108133.	1.4	3
144	Energy-Band-Engineered Unified-RAM (URAM) Cell on Buried $\text{Si}_{1-y}\text{C}_y$ Substrate for Multifunctioning Flash Memory and 1T-DRAM. IEEE Transactions on Electron Devices, 2009, 56, 641-647.	3.0	2

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145	Detection of a Nanoscale Hot Spot by Hot Carriers in a Poly-Si TFT Using Polydiacetylene-Based Thermoresponsive Fluorometry. <i>IEEE Transactions on Electron Devices</i> , 2011, 58, 1570-1574.	3.0	2
146	A New Charge-Pumping Technique for a Double-Gated SOI MOSFET Using Pulsed Drain Current Transients. <i>IEEE Transactions on Electron Devices</i> , 2012, 59, 241-246.	3.0	2
147	Physical Origins and Analysis of Negative-Bias Stress Instability Mechanism in Polymer-Based Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , 2014, 35, 396-398.	3.9	2
148	Sampling Time and pH-Dependences of Silicon Nanowire Ion-Sensitive Field-Effect Transistor-Based Biosensors. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 3257-3260.	0.9	2
149	Degradation on the Current Saturation of Output Characteristics in Amorphous InGaZnO Thin-Film Transistors. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 3243-3249.	3.0	2
150	Universal Method to Determine the Dynamic NBIS- and PBS-Induced Instabilities on Self-Aligned Coplanar InGaZnO Thin-Film Transistors. <i>Digest of Technical Papers SID International Symposium</i> , 2018, 49, 232-235.	0.3	2
151	Synaptic behavior of flexible IGZO TFTs with Al ₂ O ₃ gate insulator by low temperature ALD. , 2019, , .		2
152	Carbon Nanotube Network Transistor for a Physical Unclonable Functions-based Security Device. , 2019, , .		2
153	SPICE compact model of IGZO memristor based on non-quasi statically updated Schottky barrier height. , 2019, , .		2
154	Extraction Technique for Flat Band Voltage Using Multi-Frequency C _{ac} V Characteristics in Amorphous InGaZnO Thin-Film-Transistors. <i>IEEE Electron Device Letters</i> , 2020, 41, 1778-1781.	3.9	2
155	P.14: Distinguished Poster Paper: Separate Extraction Technique for Intrinsic Donor- and Acceptor-like Density-of-States over Full-Energy Range Sub-Bandgap in Amorphous Oxide Semiconductor Thin Film Transistors by Using One-Shot Monochromatic Photonic Capacitance-Voltage Characteristics. <i>Digest of Technical Papers SID International Symposium</i> , 2013, 44, 1033-1036.	0.3	1
156	Analysis and Modeling on the pH-Dependent Current Drift of Si Nanowire Ion-Sensitive Field Effect Transistor (ISFET)-Based Biosensors. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 3146-3150.	0.9	1
157	Density-of-States-Based Physical Model for Ink-Jet Printed Thiophene Polymeric TFTs. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 283-288.	3.0	1
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