

# Dae Hwan Kim

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/8410341/dae-hwan-kim-publications-by-citations.pdf>  
**Version:** 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.  
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

136 papers	2,153 citations	25 h-index	41 g-index
138 ext. papers	2,484 ext. citations	3.7 avg, IF	4.66 L-index

#	Paper	IF	Citations
136	Extraction of Subgap Density of States in Amorphous InGaZnO Thin-Film Transistors by Using Multifrequency Capacitance-Voltage Characteristics. <i>IEEE Electron Device Letters</i> , <b>2010</b> , 31, 231-233	4.4	127
135	Highly stable transparent amorphous oxide semiconductor thin-film transistors having double-stacked active layers. <i>Advanced Materials</i> , <b>2010</b> , 22, 5512-6	24	113
134	Transparent, Flexible Strain Sensor Based on a Solution-Processed Carbon Nanotube Network. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 26279-26285	9.5	97
133	Instability of amorphous oxide semiconductors via carrier-mediated structural transition between disorder and peroxide state. <i>Physica Status Solidi (B): Basic Research</i> , <b>2012</b> , 249, 1277-1281	1.3	97
132	Effect of channel thickness on density of states in amorphous InGaZnO thin film transistor. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 122105	3.4	89
131	Modeling of amorphous InGaZnO thin-film transistors based on the density of states extracted from the optical response of capacitance-voltage characteristics. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 182102	3.4	84
130	Study on the photoresponse of amorphous In-Ga-Zn-O and zinc oxynitride semiconductor devices by the extraction of sub-gap-state distribution and device simulation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 15570-7	9.5	65
129	Synaptic Plasticity Selectively Activated by Polarization-Dependent Energy-Efficient Ion Migration in an Ultrathin Ferroelectric Tunnel Junction. <i>Nano Letters</i> , <b>2017</b> , 17, 1949-1955	11.5	62
128	Impact of Oxygen Flow Rate on the Instability Under Positive Bias Stresses in DC-Sputtered Amorphous InGaZnO Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 62-64	4.4	57
127	Subgap Density-of-States-Based Amorphous Oxide Thin Film Transistor Simulator (DeAOTS). <i>IEEE Transactions on Electron Devices</i> , <b>2010</b> , 57, 2988-3000	2.9	55
126	Amorphous InGaZnO Thin-Film Transistors Part I: Complete Extraction of Density of States Over the Full Subband-Gap Energy Range. <i>IEEE Transactions on Electron Devices</i> , <b>2012</b> , 59, 2689-2698	2.9	49
125	Extraction of Density of States in Amorphous GaInZnO Thin-Film Transistors by Combining an Optical Charge Pumping and Capacitance-Voltage Characteristics. <i>IEEE Electron Device Letters</i> , <b>2008</b> , 29, 1292-1295	4.4	46
124	Cation composition effects on electronic structures of In-Sn-Zn-O amorphous semiconductors. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 183706	2.5	45
123	Density of states of amorphous In-Ga-Zn-O from electrical and optical characterization. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 154505	2.5	44
122	ZnO composite nanolayer with mobility edge quantization for multi-value logic transistors. <i>Nature Communications</i> , <b>2019</b> , 10, 1998	17.4	39
121	Differential Ideality Factor Technique for Extraction of Subgap Density of States in Amorphous InGaZnO Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 399-401	4.4	37
120	Origin of threshold voltage shift by interfacial trap density in amorphous InGaZnO thin film transistor under temperature induced stress. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 062108	3.4	36

119	Synaptic devices based on two-dimensional layered single-crystal chromium thiophosphate (CrPS4). <i>NPG Asia Materials</i> , <b>2018</b> , 10, 23-30	10.3	35
118	10.2: Invited Paper: Development of Oxide TFTs Structures. <i>Digest of Technical Papers SID International Symposium</i> , <b>2013</b> , 44, 89-92	0.5	34
117	Electrical stress-induced instability of amorphous indium-gallium-zinc oxide thin-film transistors under bipolar ac stress. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 132101	3.4	33
116	Systematic Decomposition of the Positive Bias Stress Instability in Self-Aligned Coplanar InGaZnO Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 580-583	4.4	30
115	Analytical Current and Capacitance Models for Amorphous Indium-Gallium-Zinc-Oxide Thin-Film Transistors. <i>IEEE Transactions on Electron Devices</i> , <b>2013</b> , 60, 3465-3473	2.9	27
114	Three-Dimensional Printed Poly(vinyl alcohol) Substrate with Controlled On-Demand Degradation for Transient Electronics. <i>ACS Nano</i> , <b>2018</b> , 12, 6006-6012	16.7	27
113	Low-frequency noise in amorphous indium-gallium-zinc oxide thin-film transistors from subthreshold to saturation. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 122104	3.4	26
112	Effect of Oxygen Content on Current Stress-Induced Instability in Bottom-Gate Amorphous InGaZnO Thin-Film Transistors. <i>Materials</i> , <b>2019</b> , 12,	3.5	25
111	Investigation on the negative bias illumination stress-induced instability of amorphous indium-tin-zinc-oxide thin film transistors. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 152108	3.4	24
110	High performance gallium-zinc oxynitride thin film transistors for next-generation display applications <b>2013</b> ,		23
109	Modified Conductance Method for Extraction of Subgap Density of States in a-IGZO Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 1138-1140	4.4	22
108	Extraction of Separated Source and Drain Resistances in Amorphous IndiumGalliumZinc Oxide TFTs Through $\Delta C/\Delta V$ Characterization. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 761-763	4.4	22
107	Complementary Silicon Nanowire Hydrogen Ion Sensor With High Sensitivity and Voltage Output. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 1768-1770	4.4	21
106	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> , <b>2017</b> , 25, 98-107	2.1	19
105	Origin of instability by positive bias stress in amorphous Si-In-Zn-O thin film transistor. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 172106	3.4	18
104	Unified Subthreshold Coupling Factor Technique for Surface Potential and Subgap Density-of-States in Amorphous Thin Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2013</b> , 34, 641-643	4.4	17
103	Production of $\beta$ -carotene by recombinant Escherichia coli with engineered whole mevalonate pathway in batch and fed-batch cultures. <i>Biotechnology and Bioprocess Engineering</i> , <b>2009</b> , 14, 559-564	3.1	17
102	7-4: Invited Paper: Internal Compensation Type OLED Display Using High Mobility Oxide TFT. <i>Digest of Technical Papers SID International Symposium</i> , <b>2017</b> , 48, 76-79	0.5	16

101	P-3: A Study on the Hot Carrier Effect in InGaZnO Thin Film Transistors. <i>Digest of Technical Papers SID International Symposium</i> , <b>2019</b> , 50, 1222-1225	0.5	16
100	Effect of direct current sputtering power on the behavior of amorphous indium-gallium-zinc-oxide thin-film transistors under negative bias illumination stress: A combination of experimental analyses and device simulation. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 123505	3.4	16
99	Effect of oxygen content of the LaAlO <sub>3</sub> layer on the synaptic behavior of Pt/LaAlO <sub>3</sub> /Nb-doped SrTiO <sub>3</sub> memristors for neuromorphic applications. <i>Solid-State Electronics</i> , <b>2018</b> , 140, 139-143	1.7	16
98	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> , <b>2019</b> , 19,	3.8	16
97	The Effect of Gate and Drain Fields on the Competition Between Donor-Like State Creation and Local Electron Trapping in InGaZnO Thin Film Transistors Under Current Stress. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 1336-1339	4.4	16
96	Dual-Sweep Combinational Transconductance Technique for Separate Extraction of Parasitic Resistances in Amorphous Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 144-146	4.4	15
95	Fabrication of InGaAs-on-Insulator Substrates Using Direct Wafer-Bonding and Epitaxial Lift-Off Techniques. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 3601-3608	2.9	15
94	Characterization of density-of-states and parasitic resistance in a-InGaZnO thin-film transistors after negative bias stress. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 143502	3.4	15
93	The Effect of the Active Layer Thickness on the Negative Bias Stress-Induced Instability in Amorphous InGaZnO Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 1388-1390	4.4	15
92	Comparative study of quasi-static and normal capacitance-voltage characteristics in amorphous Indium-Gallium-Zinc-Oxide thin film transistors. <i>Solid-State Electronics</i> , <b>2011</b> , 56, 95-99	1.7	14
91	Impact of Ground Plane Doping and Bottom-Gate Biasing on Electrical Properties in In <sub>0.53</sub> Ga <sub>0.47</sub> As-OI MOSFETs and Donor Wafer Reusability Toward Monolithic 3-D Integration With In <sub>0.53</sub> Ga <sub>0.47</sub> As Channel. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 1862-1868	2.9	13
90	Investigation of Carrier Transport Mechanism in High Mobility ZnON Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 1570-1573	4.4	13
89	SiNW-CMOS Hybrid Common-Source Amplifier as a Voltage-Readout Hydrogen Ion Sensor. <i>IEEE Electron Device Letters</i> , <b>2013</b> , 34, 135-137	4.4	13
88	Enhanced sensing of gas molecules by a 99.9% semiconducting carbon nanotube-based field-effect transistor sensor. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 022102	3.4	12
87	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. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 574-577	4.4	12
86	Hybrid complementary inverter based on carbon nanotube and IGZO thin-film transistors with controlled process conditions. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 762, 456-462	5.7	12
85	Semiconducting carbon nanotube network thin-film transistors with enhanced inkjet-printed source and drain contact interfaces. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 173108	3.4	11
84	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. <i>Electronics (Switzerland)</i> , <b>2019</b> , 8, 1087	2.6	11

83	Experimental extraction of stern-layer capacitance in biosensor detection using silicon nanowire field-effect transistors. <i>Current Applied Physics</i> , <b>2020</b> , 20, 828-833	2.6	11
82	Highly transparent tactile sensor based on a percolated carbon nanotube network. <i>AIP Advances</i> , <b>2018</b> , 8, 065109	1.5	11
81	Digital and Analog Switching Characteristics of InGaZnO Memristor Depending on Top Electrode Material for Neuromorphic System. <i>IEEE Access</i> , <b>2020</b> , 8, 192304-192311	3.5	11
80	Ink-jet printed semiconducting carbon nanotube ambipolar transistors and inverters with chemical doping technique using polyethyleneimine. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 263103	3.4	11
79	Effect of Simultaneous Mechanical and Electrical Stress on the Electrical Performance of Flexible In-Ga-Zn-O Thin-Film Transistors. <i>Materials</i> , <b>2019</b> , 12,	3.5	10
78	Bias-Dependent Effective Channel Length for Extraction of Subgap DOS by Capacitance-Voltage Characteristics in Amorphous Semiconductor TFTs. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 2689-2694	2.9	10
77	Effect of interface states on the instability under temperature stress in amorphous SiInZnO thin film transistor. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 162101	3.4	10
76	A novel fabrication method for co-integrating ISFET with damage-free sensing oxide and threshold voltage-tunable CMOS read-out circuits. <i>Sensors and Actuators B: Chemical</i> , <b>2018</b> , 260, 627-634	8.5	9
75	A Study on the Degradation of In-GaZn-O Thin-Film Transistors Under Current Stress by Local Variations in Density of States and Trapped Charge Distribution. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 690-692	4.4	9
74	One Transistor-Two Memristor Based on Amorphous Indium-Gallium-Zinc-Oxide for Neuromorphic Synaptic Devices. <i>ACS Applied Electronic Materials</i> , <b>2020</b> , 2, 2837-2844	4	9
73	Drift-Free pH Detection With Silicon Nanowire Field-Effect Transistors. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 652-655	4.4	9
72	Effect of the Gate Dielectric Layer of Flexible InGaZnO Synaptic Thin-Film Transistors on Learning Behavior. <i>ACS Applied Electronic Materials</i> , <b>2021</b> , 3, 3972-3979	4	9
71	Implementing an artificial synapse and neuron using a Si nanowire ion-sensitive field-effect transistor and indium-gallium-zinc-oxide memristors. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 296, 126616	8.5	8
70	The Calculation of Negative Bias Illumination Stress-Induced Instability of Amorphous InGaZnO Thin-Film Transistors for Instability-Aware Design. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 1002-1008	2.9	8
69	The electron trap parameter extraction-based investigation of the relationship between charge trapping and activation energy in IGZO TFTs under positive bias temperature stress. <i>Solid-State Electronics</i> , <b>2018</b> , 140, 90-95	1.7	8
68	Modeling and Separate Extraction of Gate-Bias- and Channel-Length-Dependent Intrinsic and Extrinsic Source-Drain Resistances in MOSFETs. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 722-724	4.4	8
67	Pd/IGZO/p+-Si Synaptic Device with Self-Graded Oxygen Concentrations for Highly Linear Weight Adjustability and Improved Energy Efficiency. <i>ACS Applied Electronic Materials</i> , <b>2020</b> , 2, 2390-2397	4	8
66	Complementary Hybrid Semiconducting Superlattices with Multiple Channels and Mutual Stabilization. <i>Nano Letters</i> , <b>2020</b> , 20, 4864-4871	11.5	7

65	Hybrid Open Drain Method and Fully Current-Based Characterization of Asymmetric Resistance Components in a Single MOSFET. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 4196-4200	2.9	7
64	Production of $\beta$ -carotene and acetate in recombinant <i>Escherichia coli</i> with or without mevalonate pathway at different culture temperature or pH. <i>Biotechnology and Bioprocess Engineering</i> , <b>2012</b> , 17, 1196-1204	3.1	7
63	Separate Extraction of Source, Drain, and Substrate Resistances in MOSFETs With Parasitic Junction Current Method. <i>IEEE Electron Device Letters</i> , <b>2010</b> ,	4.4	7
62	Observation of Hydrogen-Related Defect in Subgap Density of States and Its Effects Under Positive Bias Stress in Amorphous InGaZnO TFT. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 42, 708-711	4.4	7
61	. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 584-587	4.4	6
60	Flexible carbon nanotube Schottky diode and its integrated circuit applications.. <i>RSC Advances</i> , <b>2019</b> , 9, 22124-22128	3.7	6
59	A novel SiNW/CMOS hybrid biosensor for high sensitivity/low noise <b>2013</b> ,		6
58	Oxygen Content and Bias Influence on Amorphous InGaZnO TFT-Based Temperature Sensor Performance. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 1666-1669	4.4	5
57	Modeling and Separate Extraction Technique for Gate Bias-Dependent Parasitic Resistances and Overlap Length in MOSFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 1063-1067	2.9	5
56	Total Subgap Range Density of States-Based Analysis of the Effect of Oxygen Flow Rate on the Bias Stress Instabilities in a-IGZO TFTs. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 1-8	2.9	5
55	Humidity Effects According to the Type of Carbon Nanotubes. <i>IEEE Access</i> , <b>2021</b> , 9, 6810-6816	3.5	5
54	21-4: Distinguished Paper: 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>Digest of Technical Papers SID International Symposium</i> , <b>2017</b> , 48, 298-301	0.5	4
53	. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 40-43	4.4	4
52	Hybrid integration of carbon nanotube and amorphous IGZO thin-film transistors. <i>AIP Advances</i> , <b>2020</b> , 10, 025131	1.5	4
51	Effect of liquid gate bias rising time in pH sensors based on Si nanowire ion sensitive field effect transistors. <i>Solid-State Electronics</i> , <b>2018</b> , 140, 109-114	1.7	4
50	Comprehensive separate extraction of parasitic resistances in MOSFETs considering the gate bias-dependence and the asymmetric overlap length. <i>Microelectronics Reliability</i> , <b>2018</b> , 85, 66-70	1.2	4
49	. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 1431-1434	4.4	4
48	Extraction of the Channel Mobility in InGaZnO TFTs Using Multifrequency Capacitance-Voltage Method. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 815-817	4.4	4



47	Excessive Oxygen Peroxide Model-Based Analysis of Positive-Bias-Stress and Negative-Bias-Illumination-Stress Instabilities in Self-Aligned Top-Gate Coplanar InGaZnO Thin-Film Transistors. <i>Advanced Electronic Materials</i> , 2019, 9, 2101062	6.4	4
46	Universal model of bias-stress-induced instability in inkjet-printed carbon nanotube networks field-effect transistors. <i>Solid-State Electronics</i> , 2018, 140, 80-85	1.7	3
45	Extraction of Propagation Delay-Related Mobility and Its Verification for Amorphous InGaZnO Thin-Film Transistor-Based Inverters. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 1504-1510	2.9	3
44	Design of Noncoplanar Diagonal Electrode Structure for Oxide Thin-Film Transistor. <i>IEEE Electron Device Letters</i> , 2011, 32, 39-41	4.4	3
43	Sub-1-V-Output CMOS bandgap reference circuit with small area and low power consumption. <i>IEICE Electronics Express</i> , 2009, 6, 161-166	0.5	3
42	Hydrophobic Polymer Encapsulation Effects on Subgap Density of States in Multilayered Molybdenum Disulfide Field-Effect Transistors. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020, 14, 1900492	2.5	3
41	Positive Bias Stress Instability of InGaZnO TFTs With Self-Aligned Top-Gate Structure in the Threshold-Voltage Compensated Pixel. <i>IEEE Electron Device Letters</i> , 2020, 41, 50-53	4.4	3
40	Analysis of Threshold Voltage Shift for Full V <sub>D</sub> /V <sub>G</sub> /Oxygen-Content Span under Positive Bias Stress in Bottom-Gate Amorphous InGaZnO Thin-Film Transistors. <i>Micromachines</i> , 2021, 12,	3.3	3
39	Threshold-Variation-Tolerant Coupling-Gate HfO <sub>2</sub> /SiO <sub>2</sub> Synaptic Transistor for More Reliably Controllable Hardware Neuromorphic System. <i>IEEE Access</i> , 2021, 9, 59345-59352	3.5	3
38	Band-Bending Effect in the Characterization of Subgap Density-of-States in Amorphous TFTs Through Fully Electrical Techniques. <i>IEEE Electron Device Letters</i> , 2017, 38, 199-202	4.4	2
37	Spectroscopic Influence of Virtual Reality and Augmented Reality Display Devices on the Human Nonvisual Characteristics and Melatonin Suppression Response. <i>IEEE Photonics Journal</i> , 2018, 1-1	1.8	2
36	Extraction of the interface trap density through the differential subthreshold ideality factor technique in normally-off AlGaIn/GaN MOSFETs. <i>Journal of the Korean Physical Society</i> , 2015, 66, 1291-1294	0.6	2
35	P-205L: Late-News Poster: Comparison between a-InGaZnO and a-InHfZnO TFTs in Perspective of Subgap Density of States (DOS) in Active Film. <i>Digest of Technical Papers SID International Symposium</i> , 2010, 41, 1389	0.5	2
34	Channel width dependence of hot electron injection program/hot hole erase cycling behavior in silicon-oxide-nitride-oxide-silicon (SONOS) memories. <i>Solid-State Electronics</i> , 2008, 52, 844-848	1.7	2
33	Influence of Al <sub>2</sub> O <sub>3</sub> layer on InGaZnO memristor crossbar array for neuromorphic applications. <i>Chaos, Solitons and Fractals</i> , 2022, 156, 111813	9.3	2
32	Alternating Current-Based Technique for Separate Extraction of Parasitic Resistances in MISFETs With or Without the Body Contact. <i>IEEE Electron Device Letters</i> , 2020, 41, 1528-1531	4.4	2
31	Multiplexed Silicon Nanowire Tunnel FET-Based Biosensors With Optimized Multi-Sensing Currents. <i>IEEE Sensors Journal</i> , 2021, 21, 8839-8846	4	2
30	Reliability-Aware SPICE Compatible Compact Modeling of IGZO Inverters on a Flexible Substrate. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4838	2.6	2

29	SPICE compact model of IGZO memristor based on non-quasi statically updated Schottky barrier height <b>2019</b> ,		2
28	. <i>IEEE Access</i> , <b>2021</b> , 9, 73090-73102	3.5	2
27	Effect of Hydrogen Migration in SiO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> Stacked Gate Insulator of InGaZnO Thin-Film Transistors. <i>Crystals</i> , <b>2022</b> , 12, 594	2.3	2
26	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> , <b>2017</b> , 17, 3146-3150	1.3	1
25	Influence of Nitrogen Content on Persistent Photoconductivity in Zinc Oxynitride Thin Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 561-564	4.4	1
24	Novel Fabrication Method for Forming Damage-Free Sensing Oxide and Threshold Voltage-Tunable Complementary Metal-Oxide Semiconductor in a pH Sensor-CMOS Hybrid System. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2017</b> , 17, 8265-8270	1.3	1
23	19-3: Late-News Paper: 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> , <b>2018</b> , 49, 232-235	0.5	1
22	P-202L: Late-News Poster: Density-of-States Based Analysis on the Effect of Active Thin-film Thickness on Current Stress-induced Instability in Amorphous InGaZnO AMOLED Driver TFTs. <i>Digest of Technical Papers SID International Symposium</i> , <b>2011</b> , 42, 1223-1226	0.5	1
21	Wafer-scale carbon nanotube network transistors. <i>Nanotechnology</i> , <b>2020</b> , 31, 465303	3.4	1
20	Impact Ionization and Hot-Carrier Degradation in Saddle-Fin and Buried-Gate Transistor of Dynamic Random Access Memory at Cryogenic Temperature. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 42, 653-656	4.4	1
19	Current-to-transconductance ratio technique for simultaneous extraction of threshold voltage and parasitic resistances in MOSFETs. <i>Solid-State Electronics</i> , <b>2021</b> , 183, 108133	1.7	1
18	Estimation of melatonin level and core body temperature: heart rate and heart rate variability as circadian rhythm markers. <i>Biological Rhythm Research</i> , 1-18	0.8	0
17	Temperature and gate-bias-dependent charge transport in inkjet-printed polymer field-effect transistor. <i>Journal of the Korean Physical Society</i> , <b>2021</b> , 79, 1063-1068	0.6	0
16	Density-of-States-Based Physical Model for Ink-Jet Printed Thiophene Polymeric TFTs. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 283-288	2.9	0
15	A highly reliable physics-based SPICE compact model of IGZO memristor considering the dependence on electrode metals and deposition sequence. <i>Solid-State Electronics</i> , <b>2020</b> , 166, 107764	1.7	0
14	Effect of Anion Composition on the Bias Stress Stability in Zn-O-N Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 1376-1379	4.4	0
13	Extraction Technique for Flat Band Voltage Using Multi-Frequency C <sub>IV</sub> Characteristics in Amorphous InGaZnO Thin-Film-Transistors. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 1778-1781	4.4	0
12	Observation of Divacancy Formation for ZnON Thin-Film Transistors With Excessive N Content. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 42, 1006-1009	4.4	0



11	. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 3243-3249	2.9	o
10	Fabrication of Circadian Light Meter with Non-Periodic Optical Filters to Evaluate the Non-Visual Effects of Light on Humans. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 8283	2.6	o
9	All-Solution-Processed Carbon Nanotube Floating Gate Memories. <i>ACS Applied Nano Materials</i> ,	5.6	o
8	Electrode-dependent electrical switching characteristics of InGaZnO memristor. <i>Chaos, Solitons and Fractals</i> , <b>2022</b> , 158, 112106	9.3	o
7	New Type of Ion-Sensitive Field-Effect Transistor with Sensing Region Separate from Gate-Controlled Region. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2017</b> , 17, 8280-8284	1.3	
6	Investigation of Low-Frequency Noise Properties in High-Mobility ZnON Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 1-1	4.4	
5	9.4L: Late-News Paper: Microscopic Mechanism of the Negative Bias and Illumination Stress Instability of Amorphous Oxide TFTs. <i>Digest of Technical Papers SID International Symposium</i> , <b>2012</b> , 43, 95-97	0.5	
4	P-203L: Late-News Poster: Analysis on AC Stress-Induced Degradation Mechanism of Amorphous Indium-Gallium-Zinc-Oxide Thin Film Transistor Inverters. <i>Digest of Technical Papers SID International Symposium</i> , <b>2010</b> , 41, 1380	0.5	
3	73-3: Invited Paper: Influences of Circadian Illuminances from Lighting and TV on the Human Locomotor Activity, Sleep Disorder, EEG, HRV, and Melatonin Secretion. <i>Digest of Technical Papers SID International Symposium</i> , <b>2020</b> , 51, 1094-1097	0.5	
2	Deep depletion capacitance-voltage technique for spatial distribution of traps across the substrate in MOS structures. <i>Solid-State Electronics</i> , <b>2020</b> , 173, 107905	1.7	
1	Modeling and characterization of photovoltaic and photoconductive effects in insulated-gate field effect transistors under optical excitation. <i>Solid-State Electronics</i> , <b>2021</b> , 186, 108139	1.7	