

Sung-Jin Choi

List of Publications by Year in descending order

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| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | 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 |
| 2 | Cost-effective method for fabricating carbon nanotube network transistors by reusing a 99% semiconducting carbon nanotube solution. Nanotechnology, 2022, 33, 24LT01. | 2.6 | 0 |
| 3 | All-Solution-Processed Carbon Nanotube Floating Gate Memories. ACS Applied Nano Materials, 2022, 5, 7652-7657. | 5.0 | 1 |
| 4 | P ₃₀ : Thermally Activated and Field-Enhanced Diffusion of Dopants in a-InGaZnO TFTs Under Circuit Operations and Correlation to Device Stabilities. Digest of Technical Papers SID International Symposium, 2022, 53, 1149-1152. | 0.3 | 0 |
| 5 | Defect spectroscopy of sidewall interfaces in gate-all-around silicon nanosheet FET. Nanotechnology, 2021, 32, 165202. | 2.6 | 3 |
| 6 | Humidity Effects According to the Type of Carbon Nanotubes. IEEE Access, 2021, 9, 6810-6816. | 4.2 | 9 |
| 7 | Low-Power True Random Number Generator Based on Randomly Distributed Carbon Nanotube Networks. IEEE Access, 2021, 9, 91341-91346. | 4.2 | 4 |
| 8 | 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 |
| 9 | Multiplexed Silicon Nanowire Tunnel FET-Based Biosensors With Optimized Multi-Sensing Currents. IEEE Sensors Journal, 2021, 21, 8839-8846. | 4.7 | 12 |
| 10 | 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 |
| 11 | Observation of Divacancy Formation for ZnON Thin-Film Transistors With Excessive N Content. IEEE Electron Device Letters, 2021, 42, 1006-1009. | 3.9 | 1 |
| 12 | Characterization of Spatial Distribution of Trap Across the Substrate in Metal-Insulator-Semiconductor Structure with Band Bending Effect. Journal of Nanoscience and Nanotechnology, 2021, 21, 4315-4319. | 0.9 | 0 |
| 13 | 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 |
| 14 | Modeling and characterization of photovoltaic and photoconductive effects in insulated-gate field effect transistors under optical excitation. Solid-State Electronics, 2021, 186, 108139. | 1.4 | 1 |
| 15 | Threshold-Variation-Tolerant Coupling-Gate \pm -IGZO Synaptic Transistor for More Reliably Controllable Hardware Neuromorphic System. IEEE Access, 2021, 9, 59345-59352. | 4.2 | 10 |
| 16 | Parallel weight update protocol for a carbon nanotube synaptic transistor array for accelerating neuromorphic computing. Nanoscale, 2020, 12, 2040-2046. | 5.6 | 28 |
| 17 | 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 |
| 18 | Density-of-States-Based Physical Model for Ink-Jet Printed Thiophene Polymeric TFTs. IEEE Transactions on Electron Devices, 2020, 67, 283-288. | 3.0 | 1 |

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| 19 | 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 |
| 20 | Understanding the signal amplification in dual-gate FET-based biosensors. Journal of Applied Physics, 2020, 128, . | 2.5 | 17 |
| 21 | 16-Bit Fixed-Point Number Multiplication With CNT Transistor Dot-Product Engine. IEEE Access, 2020, 8, 133597-133604. | 4.2 | 3 |
| 22 | Effect of Anion Composition on the Bias Stress Stability in Zn-O-N Thin-Film Transistors. IEEE Electron Device Letters, 2020, 41, 1376-1379. | 3.9 | 1 |
| 23 | One Transistorâ€“Two Memristor Based on Amorphous Indiumâ€“Galliumâ€“Zinc-Oxide for Neuromorphic Synaptic Devices. ACS Applied Electronic Materials, 2020, 2, 2837-2844. | 4.3 | 21 |
| 24 | 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 |
| 25 | Extraction Technique for Flat Band Voltage Using Multi-Frequency C â€“ V Characteristics in Amorphous InGaZnO Thin-Film-Transistors. IEEE Electron Device Letters, 2020, 41, 1778-1781. | 3.9 | 2 |
| 26 | Digital and Analog Switching Characteristics of InGaZnO Memristor Depending on Top Electrode Material for Neuromorphic System. IEEE Access, 2020, 8, 192304-192311. | 4.2 | 23 |
| 27 | Deep depletion capacitanceâ€“voltage technique for spatial distribution of traps across the substrate in MOS structures. Solid-State Electronics, 2020, 173, 107905. | 1.4 | 0 |
| 28 | A tactile sensor system with sensory neurons and a perceptual synaptic network based on semivolatile carbon nanotube transistors. NPC Asia Materials, 2020, 12, . | 7.9 | 12 |
| 29 | Directly drawn top-gate semiconducting carbon nanotube thin-film transistors and complementary inverters. Nanotechnology, 2020, 31, 32LT01. | 2.6 | 4 |
| 30 | 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 |
| 31 | Hybrid integration of carbon nanotube and amorphous IGZO thin-film transistors. AIP Advances, 2020, 10, . | 1.3 | 5 |
| 32 | Influence of Nitrogen Content on Persistent Photoconductivity in Zinc Oxynitride Thin Film Transistors. IEEE Electron Device Letters, 2020, 41, 561-564. | 3.9 | 4 |
| 33 | Design study of the gate-all-around silicon nanosheet MOSFETs. Semiconductor Science and Technology, 2020, 35, 03LT01. | 2.0 | 27 |
| 34 | Wafer-scale carbon nanotube network transistors. Nanotechnology, 2020, 31, 465303. | 2.6 | 6 |
| 35 | Characterization of Subgap Density-of-States by Sub-Bandgap Optical Charge Pumping in In_{0.53}Ga_{0.47}As Metal-Oxide-Semiconductor Field-Effect Transistors. Journal of Nanoscience and Nanotechnology, 2020, 20, 4287-4291. | 0.9 | 0 |
| 36 | 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 |

| # | ARTICLE | IF | CITATIONS |
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| 37 | Flexible carbon nanotube Schottky diode and its integrated circuit applications. RSC Advances, 2019, 9, 22124-22128. | 3.6 | 13 |
| 38 | 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. Sensors, 2019, 19, 4502. | 3.8 | 24 |
| 39 | Precision-extension technique for accurate vector-matrix multiplication with a CNT transistor crossbar array. Nanoscale, 2019, 11, 21449-21457. | 5.6 | 10 |
| 40 | Impact of Synaptic Device Variations on Classification Accuracy in a Binarized Neural Network. Scientific Reports, 2019, 9, 15237. | 3.3 | 20 |
| 41 | Effect of Oxygen Content on Current Stress-Induced Instability in Bottom-Gate Amorphous InGaZnO Thin-Film Transistors. Materials, 2019, 12, 3149. | 2.9 | 44 |
| 42 | Oxygen Content and Bias Influence on Amorphous InGaZnO TFT-Based Temperature Sensor Performance. IEEE Electron Device Letters, 2019, 40, 1666-1669. | 3.9 | 6 |
| 43 | Binarized Neural Network with Silicon Nanosheet Synaptic Transistors for Supervised Pattern Classification. Scientific Reports, 2019, 9, 11705. | 3.3 | 9 |
| 44 | 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 |
| 45 | 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 |
| 46 | 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 |
| 47 | 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 |
| 48 | Synaptic behavior of flexible IGZO TFTs with Al ₂ O ₃ gate insulator by low temperature ALD. , 2019, , . | | 2 |
| 49 | Carbon Nanotube Network Transistor for a Physical Unclonable Functions-based Security Device. , 2019, , . | | 2 |
| 50 | SPICE compact model of IGZO memristor based on non-quasi statically updated Schottky barrier height. , 2019, , . | | 2 |
| 51 | 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 |
| 52 | Three-Dimensionally Printed Micro-electromechanical Switches. ACS Applied Materials & Interfaces, 2018, 10, 15841-15846. | 8.0 | 15 |
| 53 | Impact of Synaptic Device Variations on Pattern Recognition Accuracy in a Hardware Neural Network. Scientific Reports, 2018, 8, 2638. | 3.3 | 63 |
| 54 | 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 |

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| 55 | 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 |
| 56 | 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. Solid-State Electronics, 2018, 140, 139-143. | 1.4 | 26 |
| 57 | 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 |
| 58 | Semiconducting Carbon Nanotube Schottky Diode and Integrated Circuit Applications. , 2018, , . | | 0 |
| 59 | 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 |
| 60 | 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 |
| 61 | Three-Dimensional Printed Poly(vinyl alcohol) Substrate with Controlled On-Demand Degradation for Transient Electronics. ACS Nano, 2018, 12, 6006-6012. | 14.6 | 43 |
| 62 | Degradation on the Current Saturation of Output Characteristics in Amorphous InGaZnO Thin-Film Transistors. IEEE Transactions on Electron Devices, 2018, 65, 3243-3249. | 3.0 | 2 |
| 63 | Highly transparent tactile sensor based on a percolated carbon nanotube network. AIP Advances, 2018, 8, 065109. | 1.3 | 11 |
| 64 | Synaptic Device Network Architecture with Feature Extraction for Unsupervised Image Classification. Small, 2018, 14, e1800521. | 10.0 | 19 |
| 65 | 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 |
| 66 | 19â€³: <i>Late-News Paper</i>: Universal Method to Determine the Dynamic NBISâ€¢and PBSâ€¢induced Instabilities on Selfâ€¢aligned Coplanar InGaZnO Thinâ€¢film Transistors. Digest of Technical Papers SID International Symposium, 2018, 49, 232-235. | 0.3 | 2 |
| 67 | Pattern Recognition Using Carbon Nanotube Synaptic Transistors with an Adjustable Weight Update Protocol. ACS Nano, 2017, 11, 2814-2822. | 14.6 | 272 |
| 68 | 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. Journal of the Society for Information Display, 2017, 25, 98-107. | 2.1 | 25 |
| 69 | Analysis and Modeling on the pH-Dependent Current Drift of Si Nanowire Ion-Sensitive Field Effect Transistor (ISFET)-Based Biosensors. Journal of Nanoscience and Nanotechnology, 2017, 17, 3146-3150. | 0.9 | 1 |
| 70 | A SONOS device with a separated charge trapping layer for improvement of charge injection. AIP Advances, 2017, 7, . | 1.3 | 4 |
| 71 | 21â€³: <i>Distinguished Paper</i>: Experimental Decomposition of the Positive Bias Temperature Stressâ€¢induced Instability in Selfâ€¢aligned Coplanar InGaZnO Thinâ€¢film Transistors and its Modeling based on the Multiple Stretchedâ€¢exponential Functions. Digest of Technical Papers SID International Symposium, 2017, 48, 298-301. | 0.3 | 8 |
| 72 | Sampling Time and pH-Dependences of Silicon Nanowire Ion-Sensitive Field-Effect Transistor-Based Biosensors. Journal of Nanoscience and Nanotechnology, 2017, 17, 3257-3260. | 0.9 | 2 |

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| 73 | 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 |
| 74 | 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 |
| 75 | 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 |
| 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 | Charge and dielectric effects of biomolecules on electrical characteristics of nanowire FET biosensors. Applied Physics Letters, 2017, 111, . | 3.3 | 19 |
| 78 | Transparent, Flexible Strain Sensor Based on a Solution-Processed Carbon Nanotube Network. ACS Applied Materials & Interfaces, 2017, 9, 26279-26285. | 8.0 | 134 |
| 79 | Determination of individual contact interfaces in carbon nanotube network-based transistors. Scientific Reports, 2017, 7, 5453. | 3.3 | 7 |
| 80 | Enhanced sensing of gas molecules by a 99.9% semiconducting carbon nanotube-based field-effect transistor sensor. Applied Physics Letters, 2017, 111, . | 3.3 | 20 |
| 81 | Fabrication of InGaAs-on-Insulator Substrates Using Direct Wafer-Bonding and Epitaxial Lift-Off Techniques. IEEE Transactions on Electron Devices, 2017, 64, 3601-3608. | 3.0 | 20 |
| 82 | Flammable carbon nanotube transistors on a nitrocellulose paper substrate for transient electronics. Nano Research, 2017, 10, 87-96. | 10.4 | 37 |
| 83 | Compact Two-State-Variable Second-Order Memristor Model. Small, 2016, 12, 3320-3326. | 10.0 | 24 |
| 84 | Logic circuits composed of flexible carbon nanotube thin-film transistor and ultra-thin polymer gate dielectric. Scientific Reports, 2016, 6, 26121. | 3.3 | 29 |
| 85 | Comparative study of piezoresistance effect of semiconducting carbon nanotube-Polydimethylsiloxane nanocomposite strain sensor. , 2016, , . | | 3 |
| 86 | Ink-jet printed semiconducting carbon nanotube ambipolar transistors and inverters with chemical doping technique using polyethyleneimine. Applied Physics Letters, 2016, 109, . | 3.3 | 11 |
| 87 | Comprehensive evaluation of early retention (fast charge loss within a few seconds) characteristics in tube-type 3-D NAND flash memory. , 2016, , . | | 11 |
| 88 | Three-Dimensional Fin-Structured Semiconducting Carbon Nanotube Network Transistor. ACS Nano, 2016, 10, 10894-10900. | 14.6 | 16 |
| 89 | 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 |
| 90 | The γ -Fe ₂ O ₃ Nanoparticle Assembly-Based Memristor Ratioed Logic and Its Optical Tuning. IEEE Electron Device Letters, 2016, 37, 986-989. | 3.9 | 5 |

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| 91 | Intrinsic threshold switching responses in AsTeSi thin film. Journal of Alloys and Compounds, 2016, 667, 91-95. | 5.5 | 24 |
| 92 | Investigation of optimal hydrogen sensing performance in semiconducting carbon nanotube network transistors with palladium electrodes. Applied Physics Letters, 2015, 107, . | 3.3 | 11 |
| 93 | A Study on the Degradation of In-Ga ⁺ 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 |
| 94 | 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 |
| 95 | 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. IEEE Electron Device Letters, 2015, 36, 1336-1339. | 3.9 | 21 |
| 96 | 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 |
| 97 | TCAD-Based Simulation Method for the Electrolyte ⁺ Insulator ⁺ Semiconductor Field-Effect Transistor. IEEE Transactions on Electron Devices, 2015, 62, 1072-1075. | 3.0 | 26 |
| 98 | A Highly Responsive Silicon Nanowire/Amplifier MOSFET Hybrid Biosensor. Scientific Reports, 2015, 5, 12286. | 3.3 | 55 |
| 99 | 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. ACS Applied Materials & Interfaces, 2015, 7, 15570-15577. | 8.0 | 82 |
| 100 | Bias-Dependent Effective Channel Length for Extraction of Subgap DOS by Capacitance ⁺ Voltage Characteristics in Amorphous Semiconductor TFTs. IEEE Transactions on Electron Devices, 2015, 62, 2689-2694. | 3.0 | 10 |
| 101 | Highly uniform carbon nanotube nanomesh network transistors. Nano Research, 2015, 8, 1320-1326. | 10.4 | 17 |
| 102 | Carbon Nanotube Synaptic Transistor Network for Pattern Recognition. ACS Applied Materials & Interfaces, 2015, 7, 25479-25486. | 8.0 | 120 |
| 103 | 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 |
| 104 | Numerical study of read scheme in one-selector one-resistor crossbar array. Solid-State Electronics, 2015, 114, 80-86. | 1.4 | 28 |
| 105 | Physical Origins and Analysis of Negative-Bias Stress Instability Mechanism in Polymer-Based Thin-Film Transistors. IEEE Electron Device Letters, 2014, 35, 396-398. | 3.9 | 2 |
| 106 | High-performance thin-film transistors produced from highly separated solution-processed carbon nanotubes. Applied Physics Letters, 2014, 104, . | 3.3 | 23 |
| 107 | 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 |
| 108 | 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 |

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| 109 | 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 |
| 110 | Short-Channel Transistors Constructed with Solution-Processed Carbon Nanotubes. ACS Nano, 2013, 7, 798-803. | 14.6 | 83 |
| 111 | Inkjet printed polymer SRAM-cell design for flexible FPGA with physical parameter-based TFT model. , 2013, , . | | 3 |
| 112 | A novel SiNW/CMOS hybrid biosensor for high sensitivity/low noise. , 2013, , . | | 10 |
| 113 | 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 |
| 114 | A pH sensor with a double-gate silicon nanowire field-effect transistor. Applied Physics Letters, 2013, 102, . | 3.3 | 46 |
| 115 | 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 |
| 116 | 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 |
| 117 | P.14: <i>Distinguished Poster Paper</i>: 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. Digest of Technical Papers SID International Symposium, 2013, 44, 1033-1036. | 0.3 | 1 |
| 118 | Latch-up based bidirectional npn selector for bipolar resistance-change memory. Applied Physics Letters, 2013, 103, . | 3.3 | 21 |
| 119 | High performance gallium-zinc oxynitride thin film transistors for next-generation display applications. , 2013, , . | | 24 |
| 120 | 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 |
| 121 | Terahertz time-domain spectroscopy of anisotropic complex conductivity tensors in silicon nanowire films. Applied Physics Letters, 2012, 100, 211102. | 3.3 | 12 |
| 122 | Comparative study of solution-processed carbon nanotube network transistors. Applied Physics Letters, 2012, 101, 112104. | 3.3 | 30 |
| 123 | Addressable Nanowire Field-Effect-Transistor Biosensors With Local Backgates. IEEE Transactions on Electron Devices, 2012, 59, 2507-2511. | 3.0 | 7 |
| 124 | Physical Observation of a Thermo-Morphic Transition in a Silicon Nanowire. ACS Nano, 2012, 6, 2378-2384. | 14.6 | 11 |
| 125 | A Nonpiecewise Model for Long-Channel Junctionless Cylindrical Nanowire FETs. IEEE Electron Device Letters, 2012, 33, 155-157. | 3.9 | 58 |
| 126 | Nonvolatile memory with graphene oxide as a charge storage node in nanowire field-effect transistors. Applied Physics Letters, 2012, 100, . | 3.3 | 11 |

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| 127 | A transistor-based biosensor for the extraction of physical properties from biomolecules. Applied Physics Letters, 2012, 101, 073703. | 3.3 | 71 |
| 128 | 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 |
| 129 | A New Charge-Pumping Technique for a Double-Gated SOI MOSFET Using Pulsed Drain Current Transients. IEEE Transactions on Electron Devices, 2012, 59, 241-246. | 3.0 | 2 |
| 130 | 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 |
| 131 | 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 |
| 132 | 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 |
| 133 | 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 |
| 134 | Investigation of Size Dependence on Sensitivity for Nanowire FET Biosensors. IEEE Nanotechnology Magazine, 2011, 10, 1405-1411. | 2.0 | 24 |
| 135 | Simple Analytical Bulk Current Model for Long-Channel Double-Gate Junctionless Transistors. IEEE Electron Device Letters, 2011, 32, 704-706. | 3.9 | 160 |
| 136 | Transformable Functional Nanoscale Building Blocks with Wafer-Scale Silicon Nanowires. Nano Letters, 2011, 11, 854-859. | 9.1 | 16 |
| 137 | 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 |
| 138 | Sensitivity of Threshold Voltage to Nanowire Width Variation in Junctionless Transistors. IEEE Electron Device Letters, 2011, 32, 125-127. | 3.9 | 285 |
| 139 | A Polydimethylsiloxane (PDMS) Sponge for the Selective Absorption of Oil from Water. ACS Applied Materials & Interfaces, 2011, 3, 4552-4556. | 8.0 | 606 |
| 140 | Vertically Integrated Unidirectional Biristor. IEEE Electron Device Letters, 2011, 32, 1483-1485. | 3.9 | 19 |
| 141 | Analysis of Transconductance (g_m) in Schottky-Barrier MOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 427-432. | 3.0 | 32 |
| 142 | Detection of a Nanoscale Hot Spot by Hot Carriers in a Poly-Si TFT Using Polydiacetylene-Based Thermoresponsive Fluorometry. IEEE Transactions on Electron Devices, 2011, 58, 1570-1574. | 3.0 | 2 |
| 143 | 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 |
| 144 | A Full-Range Drain Current Model for Double-Gate Junctionless Transistors. IEEE Transactions on Electron Devices, 2011, 58, 4219-4225. | 3.0 | 138 |

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| 145 | Bio-Inspired Complementary Photoconductor by Porphyrin-Coated Silicon Nanowires. <i>Advanced Materials</i> , 2011, 23, 3979-3983. | 21.0 | 29 |
| 146 | An Optically Assisted Program Method for Capacitorless 1T-DRAM. <i>IEEE Transactions on Electron Devices</i> , 2010, 57, 1714-1718. | 3.0 | 6 |
| 147 | P-Channel Nonvolatile Flash Memory With a Dopant-Segregated Schottky-Barrier Source/Drain. <i>IEEE Transactions on Electron Devices</i> , 2010, 57, 1737-1742. | 3.0 | 4 |
| 148 | Dopant-Segregated Schottky Source/Drain FinFET With a NiSi FUSI Gate and Reduced Leakage Current. <i>IEEE Transactions on Electron Devices</i> , 2010, 57, 2902-2906. | 3.0 | 8 |
| 149 | Analytical Modeling of a Nanogap-Embedded FET for Application as a Biosensor. <i>IEEE Transactions on Electron Devices</i> , 2010, 57, 3477-3484. | 3.0 | 115 |
| 150 | Optically Assisted Charge Pumping on Floating-Body FETs. <i>IEEE Electron Device Letters</i> , 2010, 31, 1365-1367. | 3.9 | 4 |
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