

Chao-Sung Lai

List of Publications by Year in descending order

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291
papers

5,917
citations

117571

34
h-index

98753

67
g-index

299
all docs

299
docs citations

299
times ranked

9021
citing authors

#	ARTICLE	IF	CITATIONS
1	Growth of Large-Area and Highly Crystalline MoS ₂ Thin Layers on Insulating Substrates. Nano Letters, 2012, 12, 1538-1544.	4.5	1,749
2	Fluorinated Graphene as High Performance Dielectric Materials and the Applications for Graphene Nanoelectronics. Scientific Reports, 2014, 4, 5893.	1.6	147
3	Bidirectional All-Optical Synapses Based on a 2D Bi ₂ O ₂ Se/Graphene Hybrid Structure for Multifunctional Optoelectronics. Advanced Functional Materials, 2020, 30, 2001598.	7.8	123
4	Highly sensitive palladium oxide thin film extended gate FETs as pH sensor. Sensors and Actuators B: Chemical, 2014, 205, 199-205.	4.0	122
5	Oriented Schwann cell growth on microgrooved surfaces. Biotechnology and Bioengineering, 2005, 92, 579-588.	1.7	80
6	pH Sensitivity Improvement on 8 nm Thick Hafnium Oxide by Post Deposition Annealing. Electrochemical and Solid-State Letters, 2006, 9, G90.	2.2	78
7	Programmable Synaptic Metaplasticity and below Femtojoule Spiking Energy Realized in Graphene-Based Neuromorphic Memristor. ACS Applied Materials & Interfaces, 2018, 10, 20237-20243.	4.0	71
8	Suppression of surface defects to achieve hysteresis-free inverted perovskite solar cells via quantum dot passivation. Journal of Materials Chemistry A, 2020, 8, 5263-5274.	5.2	67
9	Integrating solid-state sensor and microfluidic devices for glucose, urea and creatinine detection based on enzyme-carrying alginate microbeads. Biosensors and Bioelectronics, 2013, 43, 328-335.	5.3	59
10	One-Step Formation of a Single Atomic-Layer Transistor by the Selective Fluorination of a Graphene Film. Small, 2014, 10, 989-997.	5.2	59
11	Study of high-k Er ₂ O ₃ thin layers as ISFET sensitive insulator surface for pH detection. Sensors and Actuators B: Chemical, 2009, 138, 619-624.	4.0	58
12	An integrated microfluidic cell culture system for high-throughput perfusion three-dimensional cell culture-based assays: effect of cell culture model on the results of chemosensitivity assays. Lab on A Chip, 2013, 13, 1133.	3.1	55
13	Structural properties and sensing performance of high-k Sm ₂ O ₃ membrane-based electrolyte-insulator-semiconductor for pH and urea detection. Sensors and Actuators B: Chemical, 2009, 138, 221-227.	4.0	54
14	pH sensing reliability of flexible ITO/PET electrodes on EGFETs prepared by a roll-to-roll process. Microelectronics Reliability, 2012, 52, 1651-1654.	0.9	54
15	Facile synthesis of carbon/MoO ₃ nanocomposites as stable battery anodes. Journal of Power Sources, 2017, 348, 270-280.	4.0	54
16	Discrimination of Breast Cancer by Measuring Prostate-Specific Antigen Levels in Women's Serum. Analytical Chemistry, 2011, 83, 5324-5328.	3.2	51
17	Spin-coated Au-nanohole arrays engineered by nanosphere lithography for a Staphylococcus aureus 16S rRNA electrochemical sensor. Biosensors and Bioelectronics, 2016, 77, 1086-1094.	5.3	49
18	Bifacial Perovskite Solar Cells Featuring Semitransparent Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 32635-32642.	4.0	49

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19	Formation polarity dependent improved resistive switching memory characteristics using nanoscale (1.3 nm) core-shell IrOx nano-dots. <i>Nanoscale Research Letters</i> , 2012, 7, 194.	3.1	48
20	Layered perovskite materials: key solutions for highly efficient and stable perovskite solar cells. <i>Reports on Progress in Physics</i> , 2020, 83, 086502.	8.1	48
21	A Self-Aligned High-Mobility Graphene Transistor: Decoupling the Channel with Fluorographene to Reduce Scattering. <i>Advanced Materials</i> , 2015, 27, 6519-6525.	11.1	47
22	The Electrical and pH-Sensitive Characteristics of Thermal Gd ₂ O ₃ •SiO ₂ -Stacked Oxide Capacitors. <i>Journal of the Electrochemical Society</i> , 2006, 153, G330.	1.3	42
23	Development of high throughput microfluidic cell culture chip for perfusion 3-dimensional cell culture-based chemosensitivity assay. <i>Sensors and Actuators B: Chemical</i> , 2011, 155, 397-407.	4.0	39
24	Drift and Hysteresis Effects Improved by RTA Treatment on Hafnium Oxide in pH-Sensitive Applications. <i>Journal of the Electrochemical Society</i> , 2008, 155, J326.	1.3	38
25	Multi-analyte biosensors on a CF ₄ plasma treated Nb ₂ O ₅ -based membrane with an extended gate field effect transistor structure. <i>Sensors and Actuators B: Chemical</i> , 2014, 194, 419-426.	4.0	38
26	Solution-processable electron transport layer for efficient hybrid perovskite solar cells beyond fullerenes. <i>Solar Energy Materials and Solar Cells</i> , 2017, 169, 78-85.	3.0	38
27	Ultraviolet illumination effect on monolayer graphene-based resistive sensor for acetone detection. <i>Vacuum</i> , 2017, 140, 89-95.	1.6	38
28	Breath Ammonia Is a Useful Biomarker Predicting Kidney Function in Chronic Kidney Disease Patients. <i>Biomedicines</i> , 2020, 8, 468.	1.4	38
29	N-Doped Graphene with Low Intrinsic Defect Densities via a Solid Source Doping Technique. <i>Nanomaterials</i> , 2017, 7, 302.	1.9	37
30	GaN Thin Film Based Light Addressable Potentiometric Sensor for pH Sensing Application. <i>Applied Physics Express</i> , 2013, 6, 036601.	1.1	36
31	Enhanced acetone sensing properties of monolayer graphene at room temperature by electrode spacing effect and UV illumination. <i>Sensors and Actuators B: Chemical</i> , 2017, 253, 77-84.	4.0	36
32	Nanoparticle-Based LDI-MS Immunoassay for the Multiple Diagnosis of Viral Infections. <i>ACS Sensors</i> , 2019, 4, 1543-1551.	4.0	36
33	Characteristics of Gadolinium Oxide Nanocrystal Memory with Optimized Rapid Thermal Annealing. <i>Electrochemical and Solid-State Letters</i> , 2009, 12, H202.	2.2	34
34	Optimization of Urea-EnFET Based on Ta ₂ O ₅ Layer with Post Annealing. <i>Sensors</i> , 2011, 11, 4562-4571.	2.1	34
35	Bipolar resistive switching memory using bilayer TaOx/WOx films. <i>Solid-State Electronics</i> , 2012, 77, 35-40.	0.8	34
36	Total ionizing dose (TID) effects of ¹³⁷ I ₃ ray radiation on switching behaviors of Ag/AIO _x /Pt RRAM device. <i>Nanoscale Research Letters</i> , 2014, 9, 452.	3.1	34

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37	Ultra-low-edge-defect graphene nanoribbons patterned by neutral beam. Carbon, 2013, 61, 229-235.	5.4	33
38	A negative-pressure-driven microfluidic chip for the rapid detection of a bladder cancer biomarker in urine using bead-based enzyme-linked immunosorbent assay. Biomicrofluidics, 2013, 7, 24103.	1.2	33
39	Au-spotted zinc oxide nano-hexagonrods structure for plasmon-photoluminescence sensor. Sensors and Actuators B: Chemical, 2019, 290, 100-109.	4.0	32
40	Modulating Performance and Stability of Inorganic Lead-Free Perovskite Solar Cells via Lewis-Pair Mediation. ACS Applied Materials & Interfaces, 2020, 12, 32649-32657.	4.0	32
41	Suppression of interfacial reaction for HfO ₂ on silicon by pre-CF ₄ plasma treatment. Applied Physics Letters, 2006, 89, 072904.	1.5	31
42	Top Illuminated Hysteresis-Free Perovskite Solar Cells Incorporating Microcavity Structures on Metal Electrodes: A Combined Experimental and Theoretical Approach. ACS Applied Materials & Interfaces, 2018, 10, 17973-17984.	4.0	31
43	Characterization of CF ₄ -plasma fluorinated HfO ₂ gate dielectrics with TaN metal gate. Applied Physics Letters, 2005, 86, 222905.	1.5	30
44	Body effect minimization using single layer structure for pH-ISFET applications. Sensors and Actuators B: Chemical, 2010, 143, 494-499.	4.0	30
45	A Fluorographene-Based Synaptic Transistor. Advanced Materials Technologies, 2019, 4, 1900422.	3.0	30
46	Enhanced nanoscale resistive switching memory characteristics and switching mechanism using high-Ge-content Ge _{0.5} Se _{0.5} solid electrolyte. Nanoscale Research Letters, 2012, 7, 614.	3.1	29
47	Atmospheric pressure route to epitaxial nitrogen-doped trilayer graphene on 4H-SiC (0001) substrate. Applied Physics Letters, 2014, 105, .	1.5	29
48	Carrier Transportation Mechanism of the $\text{hbox{TaN}}/\text{hbox{HfO}}_2/\text{hbox{IL}}/\text{hbox{Si}}$ Structure With Silicon Surface Fluorine Implantation. IEEE Transactions on Electron Devices, 2008, 55, 1639-1646.	1.6	28
49	Structural properties and sensing performance of high-k Nd ₂ TiO ₅ thin layer-based electrolyte-insulator-semiconductor for pH detection and urea biosensing. Biosensors and Bioelectronics, 2009, 24, 2864-2870.	5.3	28
50	Low cost and flexible electrodes with NH ₃ plasma treatments in extended gate field effect transistors for urea detection. Sensors and Actuators B: Chemical, 2013, 187, 274-279.	4.0	28
51	Ultra-low-damage radical treatment for the highly controllable oxidation of large-scale graphene sheets. Carbon, 2014, 73, 244-251.	5.4	28
52	The characteristics of polysilicon oxide grown in pure N ₂ /O ₂ . IEEE Transactions on Electron Devices, 1996, 43, 326-331.	1.6	27
53	Thickness Effects on pH Response of HfO ₂ Sensing Dielectric Improved by Rapid Thermal Annealing. Japanese Journal of Applied Physics, 2006, 45, 3807-3810.	0.8	27
54	High-Performance HfO ₂ Gate Dielectrics Fluorinated by Postdeposition CF ₄ Plasma Treatment. Journal of the Electrochemical Society, 2007, 154, H561.	1.3	27

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55	A high-speed, flexible-scanning chemical imaging system using a light-addressable potentiometric sensor integrated with an analog micromirror. <i>Sensors and Actuators B: Chemical</i> , 2014, 198, 225-232.	4.0	27
56	Speckled ZnO Nanograss Electrochemical Sensor for <i>Staphylococcus epidermidis</i> Detection. <i>Journal of the Electrochemical Society</i> , 2017, 164, B205-B211.	1.3	27
57	Activity Monitoring with a Wrist-Worn, Accelerometer-Based Device. <i>Micromachines</i> , 2018, 9, 450.	1.4	26
58	Si-H Bond Breaking Induced Retention Degradation During Packaging Process of 256 Mbit DRAMs With Negative Wordline Bias. <i>IEEE Transactions on Electron Devices</i> , 2005, 52, 484-491.	1.6	25
59	Nanostructure band engineering of gadolinium oxide nanocrystal memory by CF ₄ plasma treatment. <i>Applied Physics Letters</i> , 2010, 97, 023513.	1.5	25
60	Miniaturized amorphous-silicon based chemical imaging sensor system using a mini-projector as a simplified light-addressable scanning source. <i>Sensors and Actuators B: Chemical</i> , 2014, 190, 664-672.	4.0	25
61	The utility of a high-throughput scanning biosensor in the detection of the pancreatic cancer marker ULBP2. <i>Biosensors and Bioelectronics</i> , 2013, 41, 232-237.	5.3	24
62	LAPS with nanoscaled and highly polarized HfO ₂ by CF ₄ plasma for NH ₄ ⁺ detection. <i>Sensors and Actuators B: Chemical</i> , 2013, 180, 71-76.	4.0	24
63	Impact of electrically formed interfacial layer and improved memory characteristics of IrO _x /high- κ /W structures containing AlO _x , GdO _x , HfO _x , and TaO _x switching materials. <i>Nanoscale Research Letters</i> , 2013, 8, 379.	3.1	23
64	Suppression of Row Hammer Effect by Doping Profile Modification in Saddle-Fin Array Devices for Sub-30-nm DRAM Technology. <i>IEEE Transactions on Device and Materials Reliability</i> , 2016, 16, 685-687.	1.5	23
65	Growth Mechanism for Low Temperature PVD Graphene Synthesis on Copper Using Amorphous Carbon. <i>Scientific Reports</i> , 2017, 7, 44112.	1.6	23
66	Integration of ammonia-plasma-functionalized graphene nanodiscs as charge trapping centers for nonvolatile memory applications. <i>Carbon</i> , 2017, 113, 318-324.	5.4	22
67	Characterization of gadolinium oxide thin films with CF ₄ plasma treatment for resistive switching memory applications. <i>Applied Surface Science</i> , 2013, 276, 497-501.	3.1	21
68	Device Size-Dependent Improved Resistive Switching Memory Performance. <i>IEEE Nanotechnology Magazine</i> , 2014, 13, 409-417.	1.1	21
69	The TEOS oxide deposited on phosphorus in-situ/POCl ₃ /doped polysilicon with rapid thermal annealing in N ₂ /O ₂ . <i>IEEE Transactions on Electron Devices</i> , 1998, 45, 1927-1933.	1.6	20
70	Non-ideal effects improvement of SF ₆ plasma treated hafnium oxide film based on electrolyte-insulator-semiconductor structure for pH-sensor application. <i>Microelectronics Reliability</i> , 2010, 50, 742-746.	0.9	20
71	IGZO Thin-Film Light-Addressable Potentiometric Sensor. <i>IEEE Electron Device Letters</i> , 2016, 37, 1481-1484.	2.2	20
72	A Colloidal Nanopatterning and Downscaling of a Highly Periodic Au Nanoporous EGFET Biosensor. <i>Journal of the Electrochemical Society</i> , 2018, 165, H3170-H3177.	1.3	20

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73	Characterization of K ⁺ and Na ⁺ -Sensitive Membrane Fabricated by CF ₄ Plasma Treatment on Hafnium Oxide Thin Films on ISFET. <i>Journal of the Electrochemical Society</i> , 2011, 158, J91.	1.3	19
74	Enhanced resistive switching memory characteristics and mechanism using a Ti nanolayer at the W/TaO _x interface. <i>Nanoscale Research Letters</i> , 2014, 9, 125.	3.1	19
75	Tunable Plasmonic SERS "Hotspots" on Au-Film Over Nanosphere by Rapid Thermal Annealing. <i>IEEE Nanotechnology Magazine</i> , 2017, 16, 551-559.	1.1	19
76	Plasmonic nanomaterial structuring for SERS enhancement. <i>RSC Advances</i> , 2019, 9, 4982-4992.	1.7	19
77	Facile Bacterial Cellulose Nanofibrillation for the Development of a Plasmonic Paper Sensor. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 3122-3131.	2.6	19
78	The electrical characteristics of polysilicon oxide grown in pure N ₂ /O ₂ . <i>IEEE Electron Device Letters</i> , 1995, 16, 385-386.	2.2	18
79	Fluorine effects on the dipole structures of the Al ₂ O ₃ thin films and characterization by spectroscopic ellipsometry. <i>Applied Physics Letters</i> , 2007, 90, 172904.	1.5	18
80	New pH-sensitive TaO _x N _y membranes prepared by NH ₃ plasma surface treatment and nitrogen incorporated reactive sputtering. <i>Sensors and Actuators B: Chemical</i> , 2008, 130, 77-81.	4.0	18
81	The Investigation of the High- κ Gd ₂ O ₃ (Gadolinium Oxide) Interdielectrics Deposited on the Polycrystalline Silicon. <i>Journal of the Electrochemical Society</i> , 2010, 157, H915.	1.3	18
82	A novel polybenzimidazole-modified gold electrode for the analytical determination of hydrogen peroxide. <i>Talanta</i> , 2011, 85, 631-637.	2.9	18
83	Immobilization of enzyme and antibody on ALD-HfO ₂ -EIS structure by NH ₃ plasma treatment. <i>Nanoscale Research Letters</i> , 2012, 7, 179.	3.1	18
84	High-Performance Multilevel Resistive Switching Gadolinium Oxide Memristors With Hydrogen Plasma Immersion Ion Implantation Treatment. <i>IEEE Electron Device Letters</i> , 2014, 35, 452-454.	2.2	18
85	Magnetic-Composite-Modified Polycrystalline Silicon Nanowire Field-Effect Transistor for Vascular Endothelial Growth Factor Detection and Cancer Diagnosis. <i>Analytical Chemistry</i> , 2014, 86, 9443-9450.	3.2	18
86	UV- and NIR-Protective Semitransparent Smart Windows Based on Metal Halide Solar Cells. <i>ACS Applied Energy Materials</i> , 2018, 1, 632-637.	2.5	18
87	Surface plasmon resonance amplified efficient polarization-selective volatile organic compounds CdSe-CdS/Ag/PMMA sensing material. <i>Sensors and Actuators B: Chemical</i> , 2020, 309, 127760.	4.0	18
88	Bi ₂ O ₂ Se-Based True Random Number Generator for Security Applications. <i>ACS Nano</i> , 2022, 16, 6847-6857.	7.3	18
89	Improvement of polysilicon oxide by growing on polished polysilicon film. <i>IEEE Electron Device Letters</i> , 1997, 18, 270-271.	2.2	17
90	Effects of Post CF ₄ Plasma Treatment on the HfO ₂ Thin Film. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 2307-2310.	0.8	17

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91	P-I-N amorphous silicon for thin-film light-addressable potentiometric sensors. <i>Sensors and Actuators B: Chemical</i> , 2016, 236, 1005-1010.	4.0	17
92	Surface Acoustic Wave Sensor for C-Reactive Protein Detection. <i>Sensors</i> , 2020, 20, 6640.	2.1	17
93	Characterization of polysilicon oxides thermally grown and deposited on the polished polysilicon films. <i>IEEE Transactions on Electron Devices</i> , 1998, 45, 912-917.	1.6	16
94	Positive Bias Temperature Instability (PBTI) Characteristics of Contact-Etch-Stop-Layer-Induced Local-Tensile-Strained HfO_2 nMOSFET. <i>IEEE Electron Device Letters</i> , 2008, 29, 1340-1343.	2.2	16
95	Hysteresis effect on traps of Si_3N_4 sensing membranes for pH difference sensitivity. <i>Microelectronics Reliability</i> , 2010, 50, 738-741.	0.9	16
96	Gadolinium-based metal oxide for nonvolatile memory applications. <i>Microelectronics Reliability</i> , 2012, 52, 635-641.	0.9	16
97	ZnO-Nanorod processed PC-SET as the light-harvesting model for plasmontronic fluorescence Sensor. <i>Sensors and Actuators B: Chemical</i> , 2020, 307, 127597.	4.0	16
98	Bi_2O_3 -Se-Based Memristor-Aided Logic. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 15391-15398.	4.0	16
99	Impact of STI on the Reliability of Narrow-Width pMOSFETs With Advanced ALD N/O Gate Stack. <i>IEEE Transactions on Device and Materials Reliability</i> , 2006, 6, 95-101.	1.5	15
100	Work Function Adjustment by Nitrogen Incorporation in HfN_x Gate Electrode with Post Metal Annealing. <i>Electrochemical and Solid-State Letters</i> , 2006, 9, G239.	2.2	15
101	Oxide Grown on Polycrystal Silicon by Rapid Thermal Oxidation in N_2O . <i>Journal of the Electrochemical Society</i> , 2006, 153, G128.	1.3	15
102	Ti-doped Gd_2O_3 sensing membrane for electrolyte-insulator-semiconductor pH sensor. <i>Thin Solid Films</i> , 2012, 520, 3760-3763.	0.8	15
103	Analog micromirror-LAPS for chemical imaging and zoom-in application. <i>Vacuum</i> , 2015, 118, 161-166.	1.6	15
104	Hybrid aluminum and indium conducting filaments for nonpolar resistive switching of Al/ AlO_x /indium tin oxide flexible device. <i>Applied Physics Express</i> , 2014, 7, 024204.	1.1	14
105	Copper induced synthesis of graphene using amorphous carbon. <i>Microelectronics Reliability</i> , 2016, 61, 87-90.	0.9	14
106	Improvements on thermal stability of graphene and top gate graphene transistors by Ar annealing. <i>Vacuum</i> , 2017, 137, 8-13.	1.6	14
107	Achieving High-Performance Perovskite Photovoltaic by Morphology Engineering of Low-Temperature Processed Zn-Doped TiO_2 Electron Transport Layer. <i>Small</i> , 2020, 16, 2002201.	5.2	13
108	Flexible Layered-Graphene Charge Modulation for Highly Stable Triboelectric Nanogenerator. <i>Nanomaterials</i> , 2021, 11, 2276.	1.9	13

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109	Few-layer fluorine-functionalized graphene hole-selective contacts for efficient inverted perovskite solar cells. <i>Chemical Engineering Journal</i> , 2022, 430, 132831.	6.6	13
110	The TEOS CVD oxide deposited on phosphorus in situ doped polysilicon with rapid thermal annealing. <i>IEEE Electron Device Letters</i> , 1997, 18, 526-528.	2.2	12
111	pH-Sensitive Gd ₂ O ₃ ·SiO ₂ Stacked Capacitors Prepared By Pure Water Anodic Oxidation. <i>Journal of the Electrochemical Society</i> , 2007, 154, J150.	1.3	12
112	Highly Reliable Multilevel and 2-bit/cell Operation of Wrapped Select Gate (WSG) SONOS Memory. <i>IEEE Electron Device Letters</i> , 2007, 28, 214-216.	2.2	12
113	Rapid detection of urinary polyomavirus BK by heterodyne-based surface plasmon resonance biosensor. <i>Journal of Biomedical Optics</i> , 2013, 19, 011013.	1.4	12
114	Enhancement of the Au/ZnO-NA Plasmonic SERS Signal Using Principal Component Analysis as a Machine Learning Approach. <i>IEEE Photonics Journal</i> , 2020, 12, 1-11.	1.0	12
115	Enhanced Plasmonic Biosensor Utilizing Paired Antibody and Label-Free Fe ₃ O ₄ Nanoparticles for Highly Sensitive and Selective Detection of Parkinson's α -Synuclein in Serum. <i>Biosensors</i> , 2021, 11, 402.	2.3	12
116	Hydrogen ion sensing characteristics of IGZO/Si electrode in EGFET. <i>International Journal of Nanotechnology</i> , 2014, 11, 15.	0.1	11
117	Fabrication of multianalyte CeO ₂ nanograin electrolyte-insulator-semiconductor biosensors by using CF ₄ plasma treatment. <i>Sensing and Bio-Sensing Research</i> , 2015, 5, 71-77.	2.2	11
118	Sensing performance of fibronectin-functionalized Au-EGFET on the detection of <i>S. epidermidis</i> biofilm and 16S rRNA of infection-related bacteria in peritoneal dialysis. <i>Sensors and Actuators B: Chemical</i> , 2015, 217, 92-99.	4.0	11
119	Robust sandwiched fluorinated graphene for highly reliable flexible electronics. <i>Applied Surface Science</i> , 2020, 499, 143839.	3.1	11
120	Element Code from Pseudopotential as Efficient Descriptors for a Machine Learning Model to Explore Potential Lead-Free Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8914-8921.	2.1	11
121	Flexible Textile-Based Pressure Sensing System Applied in the Operating Room for Pressure Injury Monitoring of Cardiac Operation Patients. <i>Sensors</i> , 2020, 20, 4619.	2.1	11
122	Charge trapping with Fe ₂ O ₃ nanoparticles accompanied by human hair towards an enriched triboelectric series and a sustainable circular bioeconomy. <i>Materials Horizons</i> , 2021, 8, 3149-3162.	6.4	11
123	A real-time mirror-LAPS mini system for dynamic chemical imaging and cell acidification monitoring. <i>Sensors and Actuators B: Chemical</i> , 2021, 341, 130003.	4.0	11
124	Nitridation of the stacked poly-Si gate to suppress the boron penetration in pMOS. <i>IEEE Electron Device Letters</i> , 1995, 16, 248-249.	2.2	10
125	Light Addressable Potentiometric Sensor with Fluorine-Terminated Hafnium Oxide Layer for Sodium Detection. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 04DL05.	0.8	10
126	Microstructural effect of gadolinium oxide nanocrystals upon annealing on electrical properties of memory devices. <i>Thin Solid Films</i> , 2012, 520, 5579-5583.	0.8	10

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127	Detection of KRAS mutation by combination of polymerase chain reaction (PCR) and EIS sensor with new amino group functionalization. <i>Sensors and Actuators B: Chemical</i> , 2013, 186, 374-379.	4.0	10
128	A revised manuscript submitted to <i>sensors and actuators B: Chemical</i> illumination modification from an LED to a laser to improve the spatial resolution of IGZO thin film light-addressable potentiometric sensors in pH detections. <i>Sensors and Actuators B: Chemical</i> , 2021, 329, 128953.	4.0	10
129	Sensing Alzheimer's Disease Utilizing Au Electrode by Controlling Nanorestructuring. <i>Chemosensors</i> , 2022, 10, 94.	1.8	10
130	Characteristics of Fluorine Implantation for HfO ₂ Gate Dielectrics with High-Temperature Postdeposition Annealing. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 2893-2897.	0.8	9
131	Current Transport Mechanism for HfO ₂ Gate Dielectrics with Fluorine Incorporation. <i>Electrochemical and Solid-State Letters</i> , 2008, 11, H15.	2.2	9
132	Characteristics of gadolinium oxide resistive switching memory with Pt-Al alloy top electrode and post-metallization annealing. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 275103.	1.3	9
133	Microgrooved Surface Modulates Neuron Differentiation in Human Embryonic Stem Cells. <i>Methods in Molecular Biology</i> , 2014, 1307, 281-287.	0.4	9
134	A highly flexible platform for nanowire sensor assembly using a combination of optically induced and conventional dielectrophoresis. <i>Optics Express</i> , 2014, 22, 13811.	1.7	9
135	Hybrid anion and cation ion sensors with samarium oxide sensing membrane treated by nitrogen plasma immersion ion implantation. <i>Sensors and Actuators B: Chemical</i> , 2014, 191, 666-672.	4.0	9
136	Dimensionally anisotropic graphene with high mobility and a high on/off ratio in a three-terminal RRAM device. <i>Materials Chemistry Frontiers</i> , 2020, 4, 1756-1763.	3.2	9
137	ZnO-Polystyrene Composite as Efficient Energy Harvest for Self-Powered Triboelectric Nanogenerator. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 115019.	0.9	9
138	Zero Dipole Formation at HfGdO/SiO ₂ Interface by Hf/Gd Dual-Sputtered Method. <i>Journal of the Electrochemical Society</i> , 2011, 158, H502.	1.3	8
139	Superior Improvements in GIDL and Retention by Fluorine Implantation in Saddle-Fin Array Devices for Sub-40-nm DRAM Technology. <i>IEEE Electron Device Letters</i> , 2013, 34, 1124-1126.	2.2	8
140	Characterization on pH sensing performance and structural properties of gadolinium oxide post-treated by nitrogen rapid thermal annealing. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2014, 32, 03D113.	0.6	8
141	A Surface Acoustic Wave Sensor with a Microfluidic Channel for Detecting C-Reactive Protein. <i>Chemosensors</i> , 2021, 9, 106.	1.8	8
142	Enhanced resistive switching memory characteristics and mechanism using a Ti nanolayer at the W/TaOx interface. <i>Nanoscale Research Letters</i> , 2013, 8, 288.	3.1	8
143	Nitridization of the stacked poly-Si gate to suppress the boron penetration in pMOS. <i>IEEE Transactions on Electron Devices</i> , 1996, 43, 1161-1165.	1.6	7
144	A novel vertical bottom-gate polysilicon thin film transistor with self-aligned offset. <i>IEEE Electron Device Letters</i> , 1996, 17, 199-201.	2.2	7

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145	Fluorinated HfO ₂ gate dielectrics engineering for CMOS by pre- and post-CF ₄ plasma passivation. , 2008, , .		7
146	Improvements on Interface Reliability and Capacitance Dispersion of Fluorinated ALD-Al ₂ O ₃ Gate Dielectrics by CF ₄ Plasma Treatment. Journal of the Electrochemical Society, 2008, 155, G51.	1.3	7
147	Characterization of laser carved micro channel polycrystalline silicon solar cell. Solid-State Electronics, 2011, 61, 23-28.	0.8	7
148	Improvement of Uniformity of Resistive Switching Parameters by Selecting the Electroformation Polarity in IrO _x /TaO _x /WO _x /W Structure. Japanese Journal of Applied Physics, 2012, 51, 04DD06.	0.8	7
149	High Polarization and Low-Repulsion $\{m \text{ HfO}_2\}$ Thin Film for Alkali Metal Ion Detections by Plasma System With a Complementary Filter. IEEE Sensors Journal, 2013, 13, 2459-2465.	2.4	7
150	Light-Immune pH Sensor with SiC-Based Electrolyte-Insulator-Semiconductor Structure. Applied Physics Express, 2013, 6, 127002.	1.1	7
151	Effects of bottom electrode on resistive switching of silver programmable metallization cells with Gd x O y /Al x O y solid electrolytes. Vacuum, 2017, 140, 30-34.	1.6	7
152	Ultrasensitive Detection of Volatile Organic Compounds by a Freestanding Aligned Ag/CdSe-CdS/PMMA Texture with Double-Side UV-Ozone Treatment. ACS Applied Materials & Interfaces, 2019, 11, 34454-34462.	4.0	7
153	Effects of CF ₄ Plasma Treatment on pH and pNa Sensing Properties of Light-Addressable Potentiometric Sensor with a 2-nm-Thick Sensitive HfO ₂ Layer Grown by Atomic Layer Deposition. Japanese Journal of Applied Physics, 2011, 50, 04DL06.	0.8	7
154	A Novel Trench Capacitor Enhancement Approach by Selective Liquid-Phase Deposition. IEEE Transactions on Semiconductor Manufacturing, 2005, 18, 644-648.	1.4	6
155	Electrical and Reliability Improvement in Polyoxide by Fluorine Implantation. Journal of the Electrochemical Society, 2007, 154, H259.	1.3	6
156	Ge nanocrystal charge trapping devices fabricated by one-step oxidation on poly-SiGe. Applied Surface Science, 2008, 255, 2512-2516.	3.1	6
157	Improved characteristics of Gd ₂ O ₃ nanocrystal memory with substrate high-low junction. Solid-State Electronics, 2010, 54, 1493-1496.	0.8	6
158	Effects of CF ₄ Plasma Treatment on pH and pNa Sensing Properties of Light-Addressable Potentiometric Sensor with a 2-nm-Thick Sensitive HfO ₂ Layer Grown by Atomic Layer Deposition. Japanese Journal of Applied Physics, 2011, 50, 04DL06.	0.8	6
159	Tunable bandgap energy of fluorinated nanocrystals for flash memory applications produced by low-damage plasma treatment. Nanotechnology, 2012, 23, 475201.	1.3	6
160	Gold Nanoframe Array Electrode for Straightforward Detection of Hydrogen Peroxide. Chemosensors, 2021, 9, 37.	1.8	6
161	Performance and reliability improvements in thin-film transistors with rapid thermal N ₂ O annealing. Semiconductor Science and Technology, 2008, 23, 025020.	1.0	5
162	Optimization of a PVC Membrane for Reference Field Effect Transistors. Sensors, 2009, 9, 2076-2087.	2.1	5

#	ARTICLE	IF	CITATIONS
163	Gate-Induced Drain Leakage (GIDL) Improvement for Millisecond Flash Anneal (MFLA) in DRAM Application. IEEE Transactions on Electron Devices, 2009, 56, 1608-1617.	1.6	5
164	Characteristics of pH sensors fabricated by using protein-mediated CdSe/ZnS quantum dots. Microelectronics Reliability, 2010, 50, 747-752.	0.9	5
165	Fluorine Incorporation and Thermal Treatment on Single and Stacked Si ₃ N ₄ Membranes for ISFET/REFET Application. Journal of the Electrochemical Society, 2010, 157, J8.	1.3	5
166	Sensitive detection of unlabeled oligonucleotides using a paired surface plasma waves biosensor. Biosensors and Bioelectronics, 2012, 35, 342-348.	5.3	5
167	Nano-IGZO layer for EGFET in pH sensing characteristics. , 2013, , .		5
168	Low-damage NH ₃ plasma treatment on SiO ₂ tunneling oxide of chemically-synthesized gold nanoparticle nonvolatile memory. Current Applied Physics, 2016, 16, 605-610.	1.1	5
169	The Effect of Monolayer Graphene on the UV Assisted NO ₂ Sensing and Recovery at Room Temperature. Proceedings (mdpi), 2017, 1, .	0.2	5
170	Prediction of 30-Day Readmission for COPD Patients Using Accelerometer-Based Activity Monitoring. Sensors, 2020, 20, 217.	2.1	5
171	Preparation and Characterization of Au/NiPc/Anti-p53/BSA Electrode for Application as a p53 Antigen Sensor. Chemosensors, 2021, 9, 17.	1.8	5
172	Sensitivity of Trapping Effect on Si ₃ N ₄ Sensing Membrane for Ion Sensitive Field Effect Transistor/Reference Field Effect Transistor Pair Application. Sensor Letters, 2010, 8, 725-729.	0.4	5
173	High reliability polyoxide fabricated by using TEOS oxide deposited on disilane polysilicon film. IEEE Transactions on Electron Devices, 2001, 48, 743-749.	1.6	4
174	Polarity Asymmetry of Polyoxide Grown on Phosphorus In Situ Doped Polysilicon. Journal of the Electrochemical Society, 2006, 153, G860.	1.3	4
175	Optimized ONO thickness for multi-level and 2-bit/cell operation for wrapped-select-gate (WSG) SONOS memory. Semiconductor Science and Technology, 2008, 23, 015004.	1.0	4
176	Sodium and potassium ion sensing properties of EIS and ISFET structures with fluorinated hafnium oxide sensing film. , 2009, , .		4
177	The characteristics of fluorinated polycrystalline silicon oxides and thin film transistors by CF ₄ plasma treatment. Thin Solid Films, 2010, 519, 919-922.	0.8	4
178	Dual-sputtered process sensitivity of HfGdO charge-trapping layer in SONOS-type nonvolatile memory. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2011, 29, 011009.	0.6	4
179	Investigation of surface pretreatments on GaAs and memory characteristics of MOS capacitors embedded with Au nano-particles. Microelectronics Reliability, 2012, 52, 2592-2596.	0.9	4
180	Retention behavior of graphene oxide resistive switching memory on flexible substrate. , 2013, , .		4

#	ARTICLE	IF	CITATIONS
181	Electrical probing of multi-ions solution by using graphene-based sensor. , 2013, , .		4
182	Interface Modification of Bernal- and Rhombohedral-Stacked Trilayer-Graphene/Metal Electrode on Resistive Switching of Silver Electrochemical Metallization Cells. ACS Applied Materials & Interfaces, 2017, 9, 37031-37040.	4.0	4
183	Using aligned poly(3-hexylthiophene)/poly(methyl methacrylate) blend fibers to detect volatile organic compounds. Japanese Journal of Applied Physics, 2018, 57, 04FM06.	0.8	4
184	Graphene/fluorographene heterostructure for nano ribbon transistor channel. Semiconductor Science and Technology, 2020, 35, 015005.	1.0	4
185	Integration of fluorographene trapping medium in MoS ₂ -based nonvolatile memory device. Journal of Applied Physics, 2020, 127, 245106.	1.1	4
186	Effects of Thickness Effect and Rapid Thermal Annealing on pH Sensing Characteristics of Thin HfO ₂ Films Formed by Atomic Layer Deposition. Japanese Journal of Applied Physics, 2011, 50, 10PG03.	0.8	4
187	High Efficiency Quasi-2D/3D Pb-Ba Perovskite Solar Cells via Phenethylammonium Chloride Addition. Solar Rrl, 2022, 6, .	3.1	4
188	Post-polysilicon gate-proces-induced degradation on thin gate oxide. IEEE Electron Device Letters, 1995, 16, 470-472.	2.2	3
189	Performance and Interface Characterization for Contact Etch Stop Layer-Strained nMOSFET with HfO ₂ Gate Dielectrics under Pulsed-IV Measurement. Electrochemical and Solid-State Letters, 2008, 11, H230.	2.2	3
190	Characterizations of Hf _x Mo _y N _z Alloys as Gate Electrodes for n- and p-Channel Metal Oxide Semiconductor Field Effect Transistors. Japanese Journal of Applied Physics, 2008, 47, 2442-2445.	0.8	3
191	Characteristics optimization of N ₂ O annealing on tungsten nanocrystal with W/Si dual-sputtered method for nonvolatile memory application. Microelectronics Reliability, 2010, 50, 639-642.	0.9	3
192	Effects of Thickness Effect and Rapid Thermal Annealing on pH Sensing Characteristics of Thin HfO ₂ Films Formed by Atomic Layer Deposition. Japanese Journal of Applied Physics, 2011, 50, 10PG03.	0.8	3
193	VERTICAL SILICON NANOWIRES WITH ATOMIC LAYER DEPOSITION WITH HfO ₂ MEMBRANE FOR pH SENSING APPLICATION. Journal of Mechanics in Medicine and Biology, 2011, 11, 959-966.	0.3	3
194	DRAM Data Retention and Cell Transistor Threshold Voltage Reliability Improved by Passivation Annealing Prior to the Deposition of Plasma Nitride Layer. IEEE Transactions on Device and Materials Reliability, 2012, 12, 406-412.	1.5	3
195	Charge storage and data retention characteristics of forming gas-annealed Gd ₂ O ₃ -nanocrystal nonvolatile memory cell. Microelectronics Reliability, 2012, 52, 1627-1631.	0.9	3
196	Retention behaviour of graphene oxide resistive switching memory. International Journal of Nanotechnology, 2014, 11, 106.	0.1	3
197	P-I-N Amorphous Silicon Light-Addressable Potentiometric Sensors for High-photovoltage Chemical Image. Procedia Engineering, 2015, 120, 1015-1018.	1.2	3
198	Capacitive Sweat Sensor Constructed by Gui Diatomaceous Earth. Procedia Engineering, 2016, 168, 181-184.	1.2	3

#	ARTICLE	IF	CITATIONS
199	Programming a nonvolatile memory-like sensor for KRAS gene sensing and signal enhancement. <i>Biosensors and Bioelectronics</i> , 2016, 79, 63-70.	5.3	3
200	Scanning Spreading Resistance Microscopy for Doping Profile in Saddle-Fin Devices. <i>IEEE Nanotechnology Magazine</i> , 2017, 16, 999-1003.	1.1	3
201	pH Sensing Characterization of Programmable Sm ₂ O ₃ /Si ₃ N ₄ /SiO ₂ /Si Electrolyte-Insulator-Semiconductor Sensor with Rapid Thermal Annealing. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 10PG04.	0.8	3
202	Assessing Plasma Levels of β -Synuclein and Neurofilament Light Chain by Different Blood Preparation Methods. <i>Frontiers in Aging Neuroscience</i> , 2021, 13, 759182.	1.7	3
203	β -Fe ₂ O ₃ Nanoparticles Aided-Dual Conversion for Self-Powered Bio-Based Photodetector. <i>Nanomaterials</i> , 2022, 12, 1147.	1.9	3
204	SiGe Nanocrystals Fabricated by One-Step Thermal Oxidation and Rapid Thermal Annealing. <i>Electrochemical and Solid-State Letters</i> , 2008, 11, K44.	2.2	2
205	Negative Bias Temperature Instability of p-Channel Metal Oxide Semiconductor Field Effect Transistor with Novel Hf _x MoyNzMetal Gate Electrodes. <i>Japanese Journal of Applied Physics</i> , 2009, 48, 04C013.	0.8	2
206	Differential Light Addressable Potentiometric Sensor with Poly(vinyl chloride) and HfO ₂ Membranes for pH Sensors. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 04DL10.	0.8	2
207	Dynamic Charge Centroid on Data Retention of Double-Nanostructure Nonvolatile Memory. <i>Applied Physics Express</i> , 2012, 5, 044201.	1.1	2
208	Ultra-high scanning speed chemical image sensor based on light addressable potentiometric sensor with analog micro-mirror. , 2013, , .		2
209	Systematic Root Cause Analysis for GaP Green Light LED Degradation. <i>IEEE Transactions on Device and Materials Reliability</i> , 2013, 13, 156-160.	1.5	2
210	The impact of interface/border defect on performance and reliability of high-k/metal-gate CMOSFET. <i>Microelectronics Reliability</i> , 2013, 53, 265-269.	0.9	2
211	Hybrid polarity and carrier injection of gold and gadolinium oxide bi-nanocrystals structure. <i>Applied Physics Letters</i> , 2013, 102, 083507.	1.5	2
212	Output Properties of Transparent Submount Packaged FlipChip Light-Emitting Diode Modules. <i>Applied Sciences (Switzerland)</i> , 2016, 6, 179.	1.3	2
213	Reprint of: Improvements on thermal stability of graphene and top gate graphene transistors by Ar annealing. <i>Vacuum</i> , 2017, 140, 149-154.	1.6	2
214	RGB-Stack Light Emitting Diode Modules with Transparent Glass Circuit Board and Oil Encapsulation. <i>Materials</i> , 2018, 11, 365.	1.3	2
215	Damage-Free ALD Blocking Oxide Layer on Functionalized Graphene Nanosheets as Nonvolatile Memories. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 1113-1117.	1.6	2
216	Effects of precursors' purity on graphene quality: Synthesis and thermoelectric effect. <i>AIP Advances</i> , 2020, 10, .	0.6	2

#	ARTICLE	IF	CITATIONS
217	A Systematic Study and Potential Limitations of Proton-ELISA Platform for $\hat{I}\pm$ -Synuclein Antigen Detection. <i>Chemosensors</i> , 2022, 10, 5.	1.8	2
218	The characterization of stacked $\hat{I}\pm$ -Si/SiGe/ $\hat{I}\pm$ -Si sensing membrane. <i>Microelectronic Engineering</i> , 2005, 80, 46-49.	1.1	1
219	Reoxidation after NH ₃ Plasma Nitridation for Multiple-Thickness Oxynitrides. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 5964-5969.	0.8	1
220	Chemical Sensing Properties of Electrolyte/SiGe/SiO ₂ /Si Structure. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 6192-6195.	0.8	1
221	The polarity dependence of ONO thickness for wrapped-select-gate (WSG) SONOS memory. <i>Memory Technology, Design and Testing (MTDT), IEEE International Workshop on</i> , 2007, , .	0.0	1
222	Threshold Voltage Tunability of p-Channel Metal Oxide Semiconductor Field-Effect Transistor with Ternary Hf _x MoyNzMetal Gate and Gd ₂ O ₃ High-kGate Dielectric. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 04DA15.	0.8	1
223	A novel light-addressable potentiometric sensors set-up with LCD projector as scanning light source. , 2011, , .		1
224	Residual Clamping Force and Dynamic Random Access Memory Data Retention Improved by Gate Tungsten Etch Dechucking Condition in a Bipolar Electrostatic Chuck. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 086502.	0.8	1
225	Capacitance meaurment in fF range. , 2012, , .		1
226	Dependence of DRAM Device Performance on Passivation Annealing Position in Trench and Stack Structures for Manufacturing Optimization. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2012, 25, 657-663.	1.4	1
227	Characteristics of plasma immersion ion implantation treatment on tungsten nanocrystal nonvolatile memory. <i>Solid-State Electronics</i> , 2012, 77, 31-34.	0.8	1
228	Yield improvement of gadolinium oxide resistive switching memory with oxygen post-metallization annealing. , 2013, , .		1
229	Oxygen plasma immersion ion implantation treatment to enhance data retention of tungsten nanocrystal nonvolatile memory. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014, 32, 02B112.	0.9	1
230	Characterization of body effect of Au-EGFET for KRAS gene detection. , 2014, , .		1
231	Characterization of N-doped multilayer graphene grown on 4H-SiC (0001). , 2015, , .		1
232	Real-time 2D pH images by fast scanning light-addressable Potentiometrie sensor system controlled by LabVIEW program. , 2015, , .		1
233	Tunable plasmonic Au-film over nanosphere SERS substrate by rapid thermal annealing. , 2016, , .		1
234	Design of experiments for determination of key factors for graphene synthesis on copper using amorphous carbon "A statistical approach. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
235	Characterization on pH Sensing and Corrosion-Resistant of HfTaO Membrane with Post RTA Treatment for Food Industry. Sensor Letters, 2010, 8, 720-724.	0.4	1
236	Reference Electrodeâ€“Insulatorâ€“Nitrideâ€“Oxideâ€“Semiconductor Structure with Sm ₂ O ₃ Sensing Membrane for pH-Sensor Application. Japanese Journal of Applied Physics, 2011, 50, 04DL09.	0.8	1
237	Easy and Rapid Approach to Obtaining the Binding Affinity of Biomolecular Interactions Based on the Deep Learning Boost. Analytical Chemistry, 2022, 94, 10427-10434.	3.2	1
238	Low Temperature (850 Â°C) Two-Step N ₂ O Annealed Thin Gate Oxides. Materials Research Society Symposia Proceedings, 1996, 428, 405.	0.1	0
239	The surface site dehydration mechanism for Si/ ₃ N/ ₄ sensing membrane by post-baking treatment. , 2004, , .		0
240	Nitrogen effects on the sensitivity of tantalum nitride (Ta/ _x N) for ion sensing devices. , 2004, , .		0
241	Packaging process induced retention degradation of 256 Mbit DRAM with negative wordline bias. , 0, , .		0
242	Ion sensing improvements of hafnium oxide by nitrogen incorporation. , 2004, , .		0
243	Fluorinated ALD Al/ ₂ O/ ₃ Gate Dielectrics by CF/ ₄ Plasma. , 0, , .		0
244	The Electrical Characteristics of Thin Gadolinium Oxide Films on Silicon Substrate by DC Reactive RF-sputtering. , 0, , .		0
245	Localization of NBT hot carrier-induced oxide damage in SOI pMOSFET's. , 0, , .		0
246	Nitrogen Effects on the Integrity of Silicon Dioxide Grown on Polycrystalline Silicon. Journal of the Electrochemical Society, 2007, 154, H883.	1.3	0
247	A Highly Reliable Multi-level and 2-bit/cell Operation of Wrapped-Select-Gate (WSG) SONOS Memory with Optimized ONO Thickness. , 2007, , .		0
248	Dimensional dependences of the dynamic-NBTI with 1.2 nm N ₂ O-ISSG oxynitrides. , 2007, , .		0
249	Performance Enhancement for Strained HfO ₂ nMOSFET with Contact Etch Stop Layer (CESL) under Pulsed-IV Measurement. , 2007, , .		0
250	Improvement of Charge Programming and Retention by NH ₃ Plasma Treatment on Tunnel Oxide for SiO ₂ /Si _x Ge _{1-x} /SiO ₂ Tri-layer Memory Devices. , 2007, , .		0
251	Integration of Millisecond Flash Anneal on CMOS Devices for DRAM Manufacturing. International Power Modulator Symposium and High-Voltage Workshop, 2008, , .	0.0	0
252	Programming Speed Enhancement by NH ₃ Plasma Nitridation of Tunneling Oxide for Ge Nanocrystals Memory. Journal of the Electrochemical Society, 2008, 155, H889.	1.3	0

#	ARTICLE	IF	CITATIONS
253	Sensitivity improvements of Hf _x W _y O _z sensing membranes for pK sensors based on electrolyte-insulator-semiconductor structure. , 2009, , .		0
254	High-kHf _x Gd _y O _z Charge Trapping Layer in Siliconâ€“Oxideâ€“Nitrideâ€“Silicon Type Nonvolatile Memory byIn situRadio Frequency Dual-Sputtering Method. Japanese Journal of Applied Physics, 2009, 48, 05DF01.	0.8	0
255	Single Si ₃ N ₄ layer on dual substrate for pH sensing micro sensor. , 2009, , .		0
256	Improvements of Fermi-level pinning and NBTI by fluorinated HfO ₂ . , 2010, , .		0
257	Fluorinated CMOS HfO ₂ for high performance (HP) and low stand-by power (LSTP) application by pre- and post-CF ₄ plasma passivation. , 2010, , .		0
258	Novel flash ion sensitive field effect transistor for chemical sensor applications. , 2011, , .		0
259	pH Sensing Characterization of Programmable Sm ₂ O ₃ /Si ₃ N ₄ /SiO ₂ /Si Electrolyteâ€“Insulatorâ€“Semiconductor Sensor with Rapid Thermal Annealing. Japanese Journal of Applied Physics, 2011, 50, 10PG04.	0.8	0
260	Reference Electrodeâ€“Insulatorâ€“Nitrideâ€“Oxideâ€“Semiconductor Structure with Sm ₂ O ₃ Sensing Membrane for pH-Sensor Application. Japanese Journal of Applied Physics, 2011, 50, 04DL09.	0.8	0
261	Functionalization of nanoscaled 2 nm-thick ALD-HfO ₂ layer by rapid thermal annealing and CF ₄ plasma for LAPS NH ₄ ⁺ detection. , 2011, , .		0
262	Effects of a HfMoN Metal Gate and Self-Aligned Fluorine-Ion Implantation on the Negative-Bias Temperature Instability of pMOSFETs With Gd_2O_3 Gate Dielectrics. IEEE Electron Device Letters, 2011, 32, 1017-1019.	2.2	0
263	Improvement in Junction Breakdown and GIDL using MFLA in DRAM Product. Journal of the Electrochemical Society, 2011, 158, H363.	1.3	0
264	Effects of HfO ₂ trapping layer in Gd ₂ O ₃ nanocrystal nonvolatile memory with multi-tunneling layers. , 2011, , .		0
265	Highly sensitivity of potassium ion detection realized on fluorinated-HfO ₂ by fluorine implantation on EIS. , 2011, , .		0
266	Energy-band engineering and characterization improvements by fluorine incorporation on Gd ₂ O ₃ nanocrystal memory. , 2012, , .		0
267	Detection of glucose-induced scattering change in turbid medium. Proceedings of SPIE, 2012, , .	0.8	0
268	Gold nanoparticles enhanced fluorescence in organic lighting emission diodes. , 2012, , .		0
269	One-step formation of atomic-layered transistor by selective fluorination of graphene film. , 2013, , .		0
270	Sensitivity enhancement of ion sensors by charge trapping on Extended Gate Field Effect Transistors. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
271	High sensing performance of fluorinated HfO ₂ membrane by low damage CF ₄ plasma treatment for K ⁺ detections. , 2013, , .		0
272	Robust nitrogen plasma immersion ion implantation treatment on gadolinium oxide resistive switching random access memory. , 2013, , .		0
273	Multilevel ultra-fast and disturb-free flash memory with double embedded Au and Gd ₂ O ₃ nanocrystals. , 2013, , .		0
274	In-Line Supermapping of Storage Capacitor for Advanced Stack DRAM Reliability. IEEE Transactions on Device and Materials Reliability, 2013, 13, 66-72.	1.5	0
275	Negative Bias Temperature Instability for Sputtering Modification in a TiN Diffusion Barrier of p+ Polysilicon Gate Stack in 50-nm DRAM Technology. IEEE Transactions on Device and Materials Reliability, 2013, 13, 81-86.	1.5	0
276	Influence of trapped charge on the sensitivity of Ionic-Sensitive Field Effect Transistor. , 2014, , .		0
277	Extended titanium nitride gate field-effect transistor with PVC selective membrane for hydrogen and potassium ion detection. , 2014, , .		0
278	High photocurrent and operation frequency for light-addressable potentiometric sensor by thinner Si substrate. , 2014, , .		0
279	High photocurrent and high frequency response of light-addressable potentiometric sensor with thin Si substrate and surface roughness. , 2015, , .		0
280	Analysis of current compliance on resistive switching of silver programmable metallization cells with stacked SiO ₂ /SiO ₂ /SiO ₂ solid electrolytes. , 2015, , .		0
281	Au-nanoarray by nanosphere lithography sensors for Staphylococcus aureus 16S rRNA. , 2016, , .		0
282	Graphene as a buffer layer for high quality GaN deposition on substrates in electronics. , 2016, , .		0
283	Thickness effect of IGZO layer in light-addressable potentiometric sensor. , 2016, , .		0
284	Determination of key factors for low temperature graphene synthesis using design of experiments approach. , 2016, , .		0
285	Monolayer MoS ₂ for nonvolatile memory applications. , 2016, , .		0
286	Graphene nanodots with high-k dielectrics for flash memory applications. , 2017, , .		0
287	Top gate graphene field effect transistor on flexible substrate by using one-step fluorinated graphene as dielectrics. , 2017, , .		0
288	C3A Epithelium Cells Directly Cultured on High-Dielectric Constant Material for Light-Addressable Potentiometric Sensor. Proceedings (mdpi), 2018, 2, 1021.	0.2	0

#	ARTICLE	IF	CITATIONS
289	A Multi-Well Thin-Si LAPS and All-in-One Readout System for Ion Activity Monitor of Epithelium Cells. Proceedings (mdpi), 2018, 2, .	0.2	0
290	Spatially Mapping Work Function Changes and Defect Evolution in the Fluorination of Graphene. , 2019, , .		0
291	Effects of fluorination of carbon film and annealing conditions on side leakage current and current breakdown time of SiO2/graphene/Cu/Ti/SiO2/Si specimens. Vacuum, 2020, 172, 109037.	1.6	0