

Jung-Chuan Chou

List of Publications by Year in descending order

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252
papers

3,996
citations

136950

32
h-index

175258

52
g-index

253
all docs

253
docs citations

253
times ranked

2701
citing authors

#	ARTICLE	IF	CITATIONS
1	Study on extended gate field effect transistor with tin oxide sensing membrane. <i>Materials Chemistry and Physics</i> , 2000, 63, 19-23.	4.0	172
2	Portable urea biosensor based on the extended-gate field effect transistor. <i>Sensors and Actuators B: Chemical</i> , 2003, 91, 180-186.	7.8	139
3	Study on the temperature effect, hysteresis and drift of pH-ISFET devices based on amorphous tungsten oxide. <i>Sensors and Actuators B: Chemical</i> , 2001, 76, 624-628.	7.8	128
4	Separate structure extended gate H ⁺ -ion sensitive field effect transistor on a glass substrate. <i>Sensors and Actuators B: Chemical</i> , 2000, 71, 106-111.	7.8	117
5	Study on pH at the point of zero charge of TiO ₂ pH ion-sensitive field effect transistor made by the sputtering method. <i>Thin Solid Films</i> , 2005, 476, 157-161.	1.8	114
6	Preparation and characteristics of ruthenium dioxide for pH array sensors with real-time measurement system. <i>Sensors and Actuators B: Chemical</i> , 2008, 128, 603-612.	7.8	111
7	Preparation and study on the drift and hysteresis properties of the tin oxide gate ISFET by the sol-gel method. <i>Sensors and Actuators B: Chemical</i> , 2002, 86, 58-62.	7.8	95
8	A novel pH sensitive ISFET with on chip temperature sensing using CMOS standard process. <i>Sensors and Actuators B: Chemical</i> , 2001, 76, 582-593.	7.8	87
9	Study of indium tin oxide thin film for separative extended gate ISFET. <i>Materials Chemistry and Physics</i> , 2001, 70, 12-16.	4.0	84
10	A novel SnO ₂ /Al discrete gate ISFET pH sensor with CMOS standard process. <i>Sensors and Actuators B: Chemical</i> , 2001, 75, 36-42.	7.8	82
11	Study on the sensing characteristics and hysteresis effect of the tin oxide pH electrode. <i>Sensors and Actuators B: Chemical</i> , 2005, 108, 877-882.	7.8	68
12	Preliminary investigations on a glucose biosensor based on the potentiometric principle. <i>Sensors and Actuators B: Chemical</i> , 2007, 123, 720-726.	7.8	64
13	Preparation and characterization of the titanium dioxide thin films used for pH electrode and procaine drug sensor by sol-gel method. <i>Materials Chemistry and Physics</i> , 2009, 114, 542-548.	4.0	64
14	Study of amorphous tin oxide thin films for ISFET applications. <i>Sensors and Actuators B: Chemical</i> , 1998, 50, 104-109.	7.8	63
15	Coaxial-structured ZnO/silicon nanowires extended-gate field-effect transistor as pH sensor. <i>Thin Solid Films</i> , 2013, 529, 173-176.	1.8	62
16	Glucose ENFET doped with MnO ₂ powder. <i>Sensors and Actuators B: Chemical</i> , 2001, 76, 187-192.	7.8	56
17	Sensitivity and hysteresis effect in Al ₂ O ₃ gate pH-ISFET. <i>Materials Chemistry and Physics</i> , 2001, 71, 120-124.	4.0	55
18	Study on separative structure of EnFET to detect acetylcholine. <i>Sensors and Actuators B: Chemical</i> , 2000, 71, 68-72.	7.8	52

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19	An Extended-Gate Field-Effect Transistor With Low-Temperature Hydrothermally Synthesized SnO_2 Nanorods as pH Sensor. IEEE Electron Device Letters, 2012, 33, 1495-1497.	3.9	52
20	Study on pHpzc and surface potential of tin oxide gate ISFET. Materials Chemistry and Physics, 1999, 59, 6-11.	4.0	49
21	Fabrication and Application of Ruthenium-Doped Titanium Dioxide Films as Electrode Material for Ion-Sensitive Extended-Gate FETs. IEEE Sensors Journal, 2009, 9, 277-284.	4.7	48
22	Preliminary Investigations on a New Disposable Potentiometric Biosensor for Uric Acid. IEEE Transactions on Biomedical Engineering, 2006, 53, 1401-1408.	4.2	42
23	Titanium Nitride Membrane Application to Extended Gate Field Effect Transistor pH Sensor Using VLSI Technology. Japanese Journal of Applied Physics, 2001, 40, 6311-6315.	1.5	41
24	A Novel pH Sensor of Extended-Gate Field-Effect Transistors With Laser-Irradiated Carbon-Nanotube Network. IEEE Electron Device Letters, 2012, 33, 1622-1624.	3.9	39
25	Simulation of Ta ₂ O ₅ -gate ISFET temperature characteristics. Sensors and Actuators B: Chemical, 2000, 71, 73-76.	7.8	36
26	Ion sensitive field effect transistor with amorphous tungsten trioxide gate for pH sensing. Sensors and Actuators B: Chemical, 2000, 62, 81-87.	7.8	36
27	Characteristics of silicon nitride after O_2 plasma surface treatment for pH-ISFET applications. IEEE Transactions on Biomedical Engineering, 2001, 48, 340-344.	4.2	36
28	Fabrication and Characterization of a Ruthenium Nitride Membrane for Electrochemical pH Sensors. Sensors, 2009, 9, 2478-2490.	3.8	35
29	Glucose biosensor of ruthenium-doped TiO ₂ sensing electrode by co-sputtering system. Microelectronics Reliability, 2010, 50, 753-756.	1.7	35
30	Development of the tin oxide pH electrode by the sputtering method. Sensors and Actuators B: Chemical, 2005, 108, 863-869.	7.8	33
31	Drift behavior of ISFETs with a-Si:H-SiO ₂ gate insulator. Materials Chemistry and Physics, 2000, 63, 270-273.	4.0	32
32	Study on the temperature effects of Al ₂ O ₃ gate pH-ISFET. Sensors and Actuators B: Chemical, 2002, 81, 152-157.	7.8	32
33	pH Sensing Characteristics of Extended-Gate Field-Effect Transistor Based on Al-Doped ZnO Nanostructures Hydrothermally Synthesized at Low Temperatures. IEEE Electron Device Letters, 2011, 32, 1603-1605.	3.9	32
34	Characterization of Flexible Arrayed pH Sensor Based on Nickel Oxide Films. IEEE Sensors Journal, 2018, 18, 605-612.	4.7	32
35	Using polypyrrole as the contrast pH detector to fabricate a whole solid-state ph sensing device. IEEE Sensors Journal, 2003, 3, 164-170.	4.7	31
36	pH and Procaine Sensing Characteristics of Extended-Gate Field-Effect Transistor Based on Indium Tin Oxide Glass. Japanese Journal of Applied Physics, 2005, 44, 4838-4842.	1.5	31

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37	Enhanced photovoltaic conversion efficiency in dye-sensitized solar cells based on photoanode consisting of TiO ₂ /GO/Ag nanofibers. <i>Vacuum</i> , 2019, 167, 47-53.	3.5	30
38	Temperature effect of a-Si:H pH-ISFET. <i>Sensors and Actuators B: Chemical</i> , 2000, 62, 92-96.	7.8	29
39	SnO ₂ Separative Structure Extended Gate H ⁺ -Ion Sensitive Field Effect Transistor by the Sol-Gel Technology and the Readout Circuit Developed by Source Follower. <i>Japanese Journal of Applied Physics</i> , 2003, 42, 6790-6794.	1.5	28
40	Influence of electrodeposition potential and heat treatment on structural properties of CdTe films. <i>Thin Solid Films</i> , 2010, 518, 4197-4202.	1.8	28
41	Study of TiO ₂ Thin Films for Ion Sensitive Field Effect Transistor Application with RF Sputtering Deposition. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 61-65.	1.5	26
42	Fabrication of Arrayed Flexible Screen-Printed Glucose Biosensor Based on Microfluidic Framework. <i>IEEE Sensors Journal</i> , 2014, 14, 178-183.	4.7	26
43	Dynamic and Wireless Sensing Measurements of Potentiometric Glucose Biosensor Based on Graphene and Magnetic Beads. <i>IEEE Sensors Journal</i> , 2015, 15, 5718-5725.	4.7	26
44	pH-based potentiometrical flow injection biosensor for urea. <i>Sensors and Actuators B: Chemical</i> , 2003, 91, 5-10.	7.8	25
45	The hysteresis and drift effect of hydrogenated amorphous silicon for ISFET. <i>Sensors and Actuators B: Chemical</i> , 2000, 66, 181-183.	7.8	24
46	Study and simulation of the drift behaviour of hydrogenated amorphous silicon gate pH-ISFET. <i>Sensors and Actuators B: Chemical</i> , 2000, 62, 97-101.	7.8	24
47	Study on the optoelectronic properties of amorphous selenium-based xerographic photoreceptors for electrophotography. <i>Materials Chemistry and Physics</i> , 2003, 78, 666-669.	4.0	24
48	Study on the amorphous tungsten trioxide ion-sensitive field effect transistor. <i>Sensors and Actuators B: Chemical</i> , 2000, 66, 106-108.	7.8	23
49	Simulation and Experimental Study of the pH-Sensing Property for AlN Thin Films. <i>Japanese Journal of Applied Physics</i> , 2001, 40, 5900-5904.	1.5	23
50	Study on the disposable urea biosensors based on PVC-COOH membrane ammonium ion-selective electrodes. <i>IEEE Sensors Journal</i> , 2006, 6, 262-268.	4.7	22
51	Study on SnO ₂ /Al/SiO ₂ /Si ISFET with a metal light shield. <i>Materials Chemistry and Physics</i> , 2000, 63, 153-156.	4.0	21
52	Weighted Data Fusion Use for Ruthenium Dioxide Thin Film pH Array Electrodes. <i>IEEE Sensors Journal</i> , 2009, 9, 842-848.	4.7	21
53	Research of Non-Ideal Effect and Dynamic Measurement of the Flexible-Arrayed Chlorine Ion Sensor. <i>IEEE Sensors Journal</i> , 2016, 16, 4683-4690.	4.7	21
54	Fabrication and Characteristic Analysis for Enzymatic Glucose Biosensor Modified by Graphene Oxide and Magnetic Beads Based on Microfluidic Framework. <i>IEEE Sensors Journal</i> , 2017, 17, 1741-1748.	4.7	21

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55	An Investigation on the Photovoltaic Properties of Dye-Sensitized Solar Cells Based on Fe ₃ O ₄ –TiO ₂ Compositated Photoelectrode. IEEE Journal of the Electron Devices Society, 2017, 5, 32-39.	2.1	21
56	A Facile Fabrication of a Potentiometric Arrayed Glucose Biosensor Based on Nafion-GOx/GO/AZO. Sensors, 2020, 20, 964.	3.8	21
57	Drift and Hysteresis Effects on AlN/SiO ₂ Gate pH Ion-Sensitive Field-Effect Transistor. Japanese Journal of Applied Physics, 2003, 42, 4973-4977.	1.5	20
58	Development of the real-time pH sensing system for array sensors. Sensors and Actuators B: Chemical, 2005, 108, 870-876.	7.8	20
59	Sensing Characteristics of Ruthenium Films Fabricated by Radio Frequency Sputtering. Japanese Journal of Applied Physics, 2005, 44, 1403-1408.	1.5	20
60	Development of a Disposable All-Solid-State Ascorbic Acid Biosensor and Miniaturized Reference Electrode Fabricated on Single Substrate. IEEE Sensors Journal, 2008, 8, 1571-1577.	4.7	20
61	Fabrication of the array chlorine ion sensor based on microfluidic device framework. Solid-State Electronics, 2012, 77, 87-92.	1.4	20
62	The Flexible Urea Biosensor Using Magnetic Nanoparticles. IEEE Nanotechnology Magazine, 2019, 18, 484-490.	2.0	20
63	Wireless Sensing System for Flexible Arrayed Potentiometric Sensor Based on XBee Module. IEEE Sensors Journal, 2016, 16, 5588-5595.	4.7	19
64	Application of Microfluidic Device for Lactic Biosensor. IEEE Sensors Journal, 2013, 13, 1363-1370.	4.7	18
65	A Sensitive Potentiometric Biosensor Using MBs-AO/GO/ZnO Membranes-Based Arrayed Screen-Printed Electrodes for AA Detection and Remote Monitoring. IEEE Access, 2019, 7, 105962-105972.	4.2	18
66	Study of How Photoelectrodes Modified by TiO ₂ /Ag Nanofibers in Various Structures Enhance the Efficiency of Dye-Sensitized Solar Cells under Low Illumination. Energies, 2020, 13, 2248.	3.1	18
67	Multi-structure ion sensitive field effect transistor with a metal light shield. Sensors and Actuators B: Chemical, 1999, 61, 1-5.	7.8	17
68	Temperature Effect on AlN/SiO ₂ Gate pH-Ion-Sensitive Field-Effect Transistor Devices. Japanese Journal of Applied Physics, 2002, 41, 541-545.	1.5	17
69	Study on a Multi-Ions Sensing System for Monitoring of Blood Electrolytes With Wireless Home-Care System. IEEE Sensors Journal, 2012, 12, 967-977.	4.7	17
70	Data Fusion and Fault Diagnosis for Flexible Arrayed pH Sensor Measurement System Based on LabVIEW. IEEE Sensors Journal, 2014, 14, 1405-1411.	4.7	17
71	Fabrication and Photovoltaic Properties of Dye-Sensitized Solar Cells Modified by Graphene Oxide and Magnetic Bead. IEEE Electron Device Letters, 2015, 36, 711-713.	3.9	17
72	Temperature and optical characteristics of tin oxide membrane gate ISFET. IEEE Transactions on Electron Devices, 1999, 46, 2278-2281.	3.0	16

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73	Simulation of time-dependent effects of pH-ISFETs. <i>Sensors and Actuators B: Chemical</i> , 2000, 62, 88-91.	7.8	16
74	Temperature Characteristics of a-Si:H Gate ISFET. <i>Materials Chemistry and Physics</i> , 2001, 70, 107-111.	4.0	16
75	Application of a Fringe Capacitive Sensor to Small-Distance Measurement. <i>Japanese Journal of Applied Physics</i> , 2003, 42, 5816-5820.	1.5	16
76	Measurement and comparison of potentiometric selectivity coefficients of urea biosensors based on ammonium ion-selective electrodes. <i>IEEE Sensors Journal</i> , 2005, 5, 1362-1368.	4.7	16
77	The Characteristic Analysis of IGZO/Al pH Sensor and Glucose Biosensor in Static and Dynamic Measurements. <i>IEEE Sensors Journal</i> , 2016, , 1-1.	4.7	16
78	The Analysis of the Urea Biosensors Using Different Sensing Matrices via Wireless Measurement System & Microfluidic Measurement System. <i>Sensors</i> , 2019, 19, 3004.	3.8	16
79	Effect of Mg ²⁺ -dopant on the characteristics of lead titanate sensing membrane for ion-sensitive field-effect transistors. <i>Sensors and Actuators B: Chemical</i> , 2005, 108, 883-887.	7.8	15
80	All Solid-State Potentiometric Biosensors for Creatinine Determination Based on pH and Ammonium Electrodes. <i>IEEE Sensors Journal</i> , 2009, 9, 665-672.	4.7	15
81	Potentiometric Multisensor Based on Ruthenium Dioxide Thin Film With a Bluetooth Wireless and Web-Based Remote Measurement System. <i>IEEE Sensors Journal</i> , 2009, 9, 1887-1894.	4.7	15
82	Remote Detection for Glucose and Lactate Based on Flexible Sensor Array. <i>IEEE Sensors Journal</i> , 2018, 18, 3467-3474.	4.7	15
83	Investigation of Sensitivities and Drift Effects of the Arrayed Flexible Chloride Sensor Based on RuO ₂ /GO at Different Temperatures. <i>Sensors</i> , 2018, 18, 632.	3.8	15
84	Solid-state urea biosensor based on the differential method. <i>IEEE Sensors Journal</i> , 2006, 6, 269-275.	4.7	14
85	Effect of Different Graphene Oxide Contents on Dye-Sensitized Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2015, 5, 1106-1112.	2.5	14
86	Fabrication and Electrochemical Impedance Analysis of Dye-Sensitized Solar Cells With Titanium Dioxide Compact Layer and Graphene Oxide Dye Absorption Layer. <i>IEEE Nanotechnology Magazine</i> , 2019, 18, 461-466.	2.0	14
87	Temperature effects on the characteristics of hydrogen ion-sensitive field-effect transistors with sol-gel-derived lead titanate gates. <i>Analytica Chimica Acta</i> , 2004, 516, 43-48.	5.4	13
88	Fabrication of Flexible Arrayed Lactate Biosensor Based on Immobilizing LDH-NAD ⁺ on NiO Film Modified by GO and MBs. <i>Sensors</i> , 2017, 17, 1618.	3.8	13
89	Enzymatic Urea Sensor Based on Graphene Oxide/Titanium Dioxide Films Modified by Urease-Magnetic Beads. <i>IEEE Nanotechnology Magazine</i> , 2019, 18, 336-344.	2.0	13
90	The Analysis of Potentiometric Flexible Arrayed Urea Biosensor Modified by Graphene Oxide and Fe ₃ O ₄ Nanoparticles. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 5104-5110.	3.0	13

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91	Investigation of Flexible Arrayed Urea Biosensor Based on Graphene Oxide/Nickel Oxide Films Modified by Au Nanoparticles. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	13
92	Characteristics and Stability of a Flexible Arrayed Uric Acid Biosensor Based on NiO Film Modified by Graphene and Magnetic Beads. IEEE Sensors Journal, 2021, 21, 7218-7225.	4.7	13
93	Novel Potentiometric Non-Enzymatic Ascorbic Acid Sensor Based on Molybdenum Oxide Film and Copper Nanoparticles. IEEE Sensors Journal, 2022, 22, 50-60.	4.7	13
94	The Influence of Electrophoretic Deposition for Fabricating Dye-Sensitized Solar Cell. Journal of Nanomaterials, 2014, 2014, 1-7.	2.7	12
95	Photovoltaic Analysis of Platinum Counter Electrode Modified by Graphene Oxide and Magnetic Beads for Dye-Sensitized Solar Cell. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 270-275.	1.7	12
96	Investigation of Dye-Sensitized Solar Cell With Photoanode Modified by TiO ₂ -ZnO Nanofibers. IEEE Transactions on Semiconductor Manufacturing, 2020, 33, 295-301.	1.7	12
97	All-Solid-State Separated Potassium Electrode Based on SnO ₂ /ITO Glass. Journal of the Electrochemical Society, 2007, 154, J369.	2.9	11
98	Drift and Hysteresis Characteristics of Drug Sensors Based on Ruthenium Dioxide Membrane. Sensors, 2008, 8, 5386-5396.	3.8	11
99	Investigation of Flexible Arrayed Lactate Biosensor Based on Copper Doped Zinc Oxide Films Modified by Iron-Platinum Nanoparticles. Polymers, 2021, 13, 2062.	4.5	11
100	The influence of isothermal annealing on tin oxide thin film for pH-ISFET sensor. Sensors and Actuators B: Chemical, 2000, 65, 23-25.	7.8	10
101	Research of Titanium Dioxide Compact Layer Applied to Dye-Sensitized Solar Cell with Different Substrates. Journal of the Electrochemical Society, 2011, 159, A145-A151.	2.9	10
102	Fabrication and Characteristic Analysis of a Remote Real-Time Monitoring Applied to Glucose Sensor System Based on Microfluidic Framework. IEEE Sensors Journal, 2015, 15, 3234-3240.	4.7	10
103	Effect of different contents of magnetic beads on enzymatic IGZO glucose biosensor. Materials Letters, 2016, 175, 241-243.	2.6	10
104	Photovoltaic Performance Analysis of Dye-Sensitized Solar Cell With ZnO Compact Layer and TiO ₂ /Graphene Oxide Composite Photoanode. IEEE Journal of the Electron Devices Society, 2016, 4, 402-409.	2.1	10
105	Flexible Arrayed Enzymatic L-Ascorbic Acid Biosensor Based on IGZO/Al Membrane Modified by Graphene Oxide. IEEE Nanotechnology Magazine, 2018, 17, 452-459.	2.0	10
106	Sensing Characteristic of Arrayed Flexible Indium Gallium Zinc Oxide Lactate Biosensor Modified by GO and Magnetic Beads. IEEE Nanotechnology Magazine, 2018, 17, 147-153.	2.0	10
107	Reaction of NiO film on flexible substrates with buffer solutions and application to flexible arrayed lactate biosensor. Microelectronics Reliability, 2018, 83, 249-253.	1.7	10
108	Fabrication and Characterization of an Efficient Inverted Perovskite Solar Cells with POSS Passivating Hole Transport Layer. Nanomaterials, 2021, 11, 974.	4.1	10

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109	Preparation and Properties of Lead Titanate Gate Ion-Sensitive Field-Effect Transistors by the Sol-gel Method. Japanese Journal of Applied Physics, 2002, 41, 942-948.	1.5	9
110	Characteristics of the hydrogen ion-sensitive field effect transistors with sol-gel-derived lead titanate gate. Analytica Chimica Acta, 2002, 469, 205-216.	5.4	9
111	Preparation and properties of hydrogen ion-sensitive field effect transistors with sol-gel-derived Mg-modified lead titanate gate. Journal of Non-Crystalline Solids, 2003, 332, 11-19.	3.1	9
112	All-Solid-State Conductive Polymer Miniaturized Reference Electrode. Japanese Journal of Applied Physics, 2009, 48, 111501.	1.5	9
113	Fabrication of flexible dye-sensitized solar cells with titanium dioxide thin films based on screen-printing technique. Micro and Nano Letters, 2012, 7, 1162-1165.	1.3	9
114	Electrochemical Analysis of Photoelectrochromic Device Combined Dye-Sensitized Solar Cell. IEEE Nanotechnology Magazine, 2014, 13, 954-962.	2.0	9
115	Research of sensing characteristic and dynamic measurement of graphene oxides modified flexible arrayed RuO ₂ chlorine ion sensor. Materials Research Bulletin, 2018, 101, 155-161.	5.2	9
116	Dye-Sensitized Solar Cells Using Aluminum-Doped Zinc Oxide/Titanium Dioxide Photoanodes in Parallel. Energies, 2019, 12, 3469.	3.1	9
117	Improving the Properties of L-Ascorbic Acid Biosensor Based on GO/IGZO/Al Using Magnetic Beads. IEEE Transactions on Electron Devices, 2019, 66, 1924-1929.	3.0	9
118	Integrating a Plastic Glucose Biosensor Based on Arrayed Screen-Printed Electrodes Utilizing Magnetic Beads with a Microfluidic Device. IEEE Journal of the Electron Devices Society, 2019, 7, 1151-1160.	2.1	9
119	Study of the Glucose Sensor Based on Potentiometric Non-Enzymatic Nafion/CZO Thin Film. IEEE Sensors Journal, 2021, 21, 15926-15934.	4.7	9
120	Sensing Properties and Stability Analysis of Miniaturized Dual-Mode Uric Acid Biosensor Based on TiO ₂ /SiO ₂ Extended Gate Field Effect Transistor. Sensor Letters, 2008, 6, 929-932.	0.4	9
121	Study on All-Solid-State Chloride Sensor Based on Tin Oxide/Indium Tin Oxide Glass. Japanese Journal of Applied Physics, 2011, 50, 037001.	1.5	9
122	Nonideal Factors of Ion-Sensitive Field-Effect Transistors with Lead Titanate Gate. Japanese Journal of Applied Physics, 2002, 41, 6297-6301.	1.5	8
123	Study on Light and Temperature Properties of AlN pH-Ion-Sensitive Field-Effect Transistor Devices. Japanese Journal of Applied Physics, 2005, 44, 4831-4837.	1.5	8
124	Fabrication and Investigation of Arrayed Glucose Biosensor Based on Microfluidic Framework. IEEE Sensors Journal, 2013, 13, 4180-4187.	4.7	8
125	Fabrication of Potentiometric Enzymatic Glucose Biosensor Based on Graphene and Magnetic Beads. IEEE Sensors Journal, 2015, 15, 5278-5284.	4.7	8
126	Electrochromic Characteristics of Polyaniline and Poly(3-Methylthiophene) Thin Films for Display. Journal of Display Technology, 2015, 11, 443-449.	1.2	8

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127	Analysis of Different Series-Parallel Connection Modules for Dye-Sensitized Solar Cell by Electrochemical Impedance Spectroscopy. International Journal of Photoenergy, 2016, 2016, 1-8.	2.5	8
128	The Fabrication and Sensing Characteristics of Arrayed Flexible IGZO/Al Urea Biosensor Modified by Graphene Oxide. IEEE Nanotechnology Magazine, 2017, 16, 958-964.	2.0	8
129	Poly(3,3-dibenzyl-3,4-dihydro-2H-thieno[3,4-b][1,4]dioxepine)/Platinum Composite Films as Potential Counter Electrodes for Dye-Sensitized Solar Cells. Polymers, 2017, 9, 271.	4.5	8
130	Fabrication of Dye-Sensitized Solar Cells Using Zinc Oxide Nanorod-Modified Titanium Dioxide Photoanode. IEEE Nanotechnology Magazine, 2019, 18, 553-561.	2.0	8
131	The Flexible Arrayed Non-Enzymatic CZO Glucose Sensor Utilizing Silver Nanowires and Nafion. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	4.7	8
132	Electron Conduction Channel of Silver Nanowire Modified TiO ₂ , Photoanode for Improvement of Interface Impedance of Dye-Sensitized Solar Cell. IEEE Journal of the Electron Devices Society, 2021, 9, 250-256.	2.1	8
133	Comparison of Polypyrrole-Conducting Polymer and Ag/AgCl Reference Electrodes Used for Ruthenium Dioxide pH Electrode. Journal of the Electrochemical Society, 2008, 155, J257.	2.9	7
134	pH Sensing of Ba _{0.7} Sr _{0.3} TiO ₃ •SiO ₂ Film for Metal-Oxide-Semiconductor and Ion-Sensitive Field-Effect Transistor Devices. Journal of the Electrochemical Society, 2009, 156, G59.	2.9	7
135	Integration of Dual-Mode Glucose Biosensor and pH Sensor via a SnO ₂ /Carbon Electrode and Dual-Mode Circuit. Journal of the Electrochemical Society, 2009, 156, J21.	2.9	7
136	The Influence of Different Annealing Temperatures on Graphene-Modified TiO ₂ for Dye-Sensitized Solar Cell. IEEE Nanotechnology Magazine, 2016, 15, 164-170.	2.0	7
137	A Barrier Structure for Photoelectrode of Dye-Sensitized Solar Cell for Enhancing Efficiency. IEEE Photonics Technology Letters, 2018, 30, 521-524.	2.5	7
138	IGZO/TiO ₂ Compositing Film as a Photoelectrode With Reduced Graphene Oxide/Pt Counter Electrode for a Dye-Sensitized Solar Cell. IEEE Journal of Photovoltaics, 2018, , 1-8.	2.5	7
139	The Retardation Structure for Improvement of Photovoltaic Performances of Dye-Sensitized Solar Cell Under Low Illumination. IEEE Journal of Photovoltaics, 2019, 9, 926-933.	2.5	7
140	Analysis of Chloride Ion Sensor Modified by Graphene Oxide Under Microfluid Flow. IEEE Sensors Journal, 2019, 19, 3217-3223.	4.7	7
141	Study on Potentiometric Glucose Biosensor Based on Separative Extended Gate Field Effect Transistor. Sensor Letters, 2011, 9, 143-146.	0.4	7
142	Study on All-Solid-State Chloride Sensor Based on Tin Oxide/Indium Tin Oxide Glass. Japanese Journal of Applied Physics, 2011, 50, 037001.	1.5	6
143	The pH Sensing Characteristics of the Extended-Gate Field-Effect Transistors of Multi-Walled Carbon-Nanotube Thin Film Using Low-Temperature Ultrasonic Spray Method. Journal of Nanoscience and Nanotechnology, 2012, 12, 5423-5428.	0.9	6
144	Investigation on the sensitivity of TiO ₂ :Ru pH sensor by Taguchi design of experiment. Solid-State Electronics, 2012, 77, 82-86.	1.4	6

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145	The Investigation of ZnO Nanowires/ITO/Glass Substrate on Electrochromic Properties for PMeT Thin Film. Journal of Display Technology, 2015, 11, 430-437.	1.2	6
146	The Incorporation of Graphene and Magnetic Beads Into Dye-Sensitized Solar Cells and Application With Electrochemical Capacitor. IEEE Journal of Photovoltaics, 2016, 6, 223-229.	2.5	6
147	Fabrication and Photovoltaic Properties of Dye-Sensitized Solar Cells Based on Graphene/TiO ₂ Composite Photoelectrode With ZnO Nanowires. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 531-538.	1.7	6
148	Sensing Characteristic of Arrayed Flexible Indium Gallium Zinc Oxide Lactate Biosensor Modified by Magnetic Beads. IEEE Sensors Journal, 2017, 17, 5920-5926.	4.7	6
149	Silver Nanowires Modified Flexible Dye-Sensitive Solar Cells and Application With the Internet of Things Under Low Illumination. IEEE Journal of Photovoltaics, 2021, 11, 1243-1250.	2.5	6
150	Sensitivity and hysteresis properties of WO ₃ /Ta ₂ O ₅ and WO ₃ /Si:H gate ion-sensitive field-effect transistors. Optical Engineering, 2002, 41, 2032.	1.0	5
151	Effects of Tin Oxide Sputtered on a Carbon Electrode for Fabricating Glucose Biosensor. Journal of the Electrochemical Society, 2008, 155, J181.	2.9	5
152	Fabrication of the enzymatic glucose biosensor based on indium gallium zinc oxide sensing electrode. Materials Letters, 2016, 176, 94-96.	2.6	5
153	Determination of L-Ascorbic Acid Using MBs-AOX/GO/IGZO/Al by Wireless Sensing System and Microfluidic Framework. IEEE Access, 2019, 7, 45872-45880.	4.2	5
154	AgNWs@TiO ₂ and AgNPs@TiO ₂ Double-Layer Photoanode Film Improving Light Capture and Application under Low Illumination. Chemosensors, 2021, 9, 36.	3.6	5
155	Study of the Nonenzymatic CZO Lactic Acid Sensor Modified by Graphitic Carbon Nitride and Iron-Platinum Nanoparticles. IEEE Transactions on Electron Devices, 2021, 68, 5142-5148.	3.0	5
156	Study of the phase transformation and crystallization model of hydrogenated amorphous silicon thin films. Journal of Non-Crystalline Solids, 1988, 99, 23-31.	3.1	4
157	Sensing characteristics of ISFET based on AlN thin film. , 2000, 4078, 689.		4
158	Letter to the Editor on "Simulation of Ta ₂ O ₅ gate ISFET temperature characteristics" by J.C. Chou, Y.S. Li, J.L. Chiang. Sensors and Actuators B: Chemical, 2001, 80, 290-291.	7.8	4
159	Characteristics of Cost-Effective Ultrathin HfTiO _x Film as Sensitive Membrane in ISFET Fabricated by Anodization. Journal of the Electrochemical Society, 2009, 156, H225.	2.9	4
160	STUDY ON THE POTENTIOMETRIC GLUCOSE BIOSENSOR BASED ON THE SnO ₂ /ITO/PET. Biomedical Engineering - Applications, Basis and Communications, 2009, 21, 411-414.	0.6	4
161	Study of Novel Dye-Sensitized Solar Cells With Modified Photoelectrode by ZrO ₂ and rGO Doped TiO ₂ Composite Nanofibers. IEEE Transactions on Electron Devices, 2020, 67, 3660-3666.	3.0	4
162	Preparation and Characterization of the Dye-Sensitized Solar Cell With Modified Photoanode by FePt/TiO ₂ Nanofibers. IEEE Nanotechnology Magazine, 2021, 20, 507-511.	2.0	4

#	ARTICLE	IF	CITATIONS
163	Improving the Drift Effect and Hysteresis Effect of Urea Biosensor Based on Graphene Oxide/Nickel Oxide Sensing Film Modified Either by Au Nanoparticles or Fe_3O_4 Nanoparticles Using Back-End Calibration Circuit. IEEE Journal of the Electron Devices Society, 2021, 9, 242-249.	2.1	4
164	Fabrication of a Screen-Printing Reference Electrode for Potentiometric Measurement. Sensor Letters, 2008, 6, 860-863.	0.4	4
165	Fabrication and Stability Analysis for the Sodium Ion Sensor. Sensor Letters, 2008, 6, 920-923.	0.4	4
166	Material Analysis of Ruthenium-Doped Titanium Dioxide Sensing Film and Applied as Calcium Ion Sensor. Sensor Letters, 2008, 6, 983-986.	0.4	4
167	Defect Generation for a Hydrated Layer and Thermal Stability Based on $\text{Ba}_{0.7}\text{Sr}_{0.3}\text{TiO}_3/\text{SiO}_2$ as H^+ -Sensitive Layer in Ion-Sensitive Field-Effect Transistor Devices. Japanese Journal of Applied Physics, 2009, 48, 045501.	1.5	3
168	New Calibration Methods to Eliminate the Non-Ideal Effect of Drift and Hysteresis in All-Solid-State Potassium Electrode. IEEE Sensors Journal, 2011, 11, 1263-1273.	4.7	3
169	Photoelectric Characteristics and Equivalent Circuit Analysis of Flexible Tungsten Oxide Electrochromic Thin Film. Journal of Display Technology, 2014, 10, 821-826.	1.2	3
170	Investigation on Iodine Concentration of Electrolyte for Dye-Sensitized Solar Cell With Platinum Counter Electrode Modified by Graphene Oxide and Magnetic Beads. IEEE Nanotechnology Magazine, 2018, 17, 133-139.	2.0	3
171	Photovoltaic Properties of an rGO/Pt Counter Electrode With AZO Photoanode for Dye-Sensitized Solar Cells Under Low Light Intensity. IEEE Transactions on Semiconductor Manufacturing, 2020, 33, 121-127.	1.7	3
172	Investigation on Photoanode Modified With $\text{TiO}_2@\text{ZnO}@\text{Ag}$ Nanofibers in Dye-Sensitized Solar Cell Under Different Intensities of Illuminations. IEEE Transactions on Electron Devices, 2020, 67, 4983-4989.	3.0	3
173	The Characterization of Dye-Sensitized Solar Cell Modified by Reduced Graphene Oxide- and ZrO_2 -Doped TiO_2 Nanofibers at Low Light Intensities. IEEE Transactions on Electron Devices, 2021, 68, 1155-1161.	3.0	3
174	Photoanode Modified by PbTiO_3 or $\text{PbTiO}_3/\text{TiO}_2$ Nanofibers in Dye-Sensitized Solar Cell. IEEE Transactions on Electron Devices, 2022, 69, 1137-1142.	3.0	3
175	Optimization and Application of TiO_2 Hollow Microsphere Modified Scattering Layer for the Photovoltaic Conversion Efficiency of Dye-Sensitized Solar Cell. IEEE Transactions on Semiconductor Manufacturing, 2022, 35, 363-371.	1.7	3
176	Increasing the Photovoltaic Performance of Dye-Sensitized Solar Cells by Zinc Oxide Film as a Recombination Blocking Layer. IEEE Transactions on Electron Devices, 2022, 69, 5004-5011.	3.0	3
177	Characterization of a-Si:H Phase Transformation and Crystallization by Isothermal Annealing. Japanese Journal of Applied Physics, 1987, 26, 1971-1977.	1.5	2
178	Study on the optoelectronic properties of amorphous selenium-based photoreceptors. Optical and Quantum Electronics, 2000, 32, 249-261.	3.3	2
179	Hysteresis effect of pH-ISFET based on Beckman Mq110 (Si_3N_4 gate pH-ISFET)., 2000, 4078, 793.		2
180	Sensitivity and hysteresis behavior of the commercial Sentron 1090 Al_2O_3 gate pH-ISFET. , 2000, 4078, 801.		2

#	ARTICLE	IF	CITATIONS
181	Temperature Dependence of Surface Potential in a-Si:H pH-Ion Sensitive Field Effect Transistor. Japanese Journal of Applied Physics, 2001, 40, 3975-3978.	1.5	2
182	Ionic Electrodeposition Simulation of CdTe Thin Films. Journal of Electronic Materials, 2008, 37, 1821-1827.	2.2	2
183	Study on a pCO ₂ Sensor Based on a SnO ₂ /Carbon Electrode. Journal of the Electrochemical Society, 2009, 156, J62.	2.9	2
184	Design and Fabrication of pH Detecting System Using Lead Titanate Series Gate Ion-Sensitive Field Effect Transistors. Ferroelectrics, 2009, 383, 111-118.	0.6	2
185	Comparison of pH Data Measured with a pH Sensor Array Using Different Data Fusion Methods. Sensors, 2012, 12, 12098-12109.	3.8	2
186	Development of Microcontroller Applied to Chlorine Ion Measurement System. IEEE Sensors Journal, 2012, 12, 2215-2221.	4.7	2
187	Reliability of Measured Data for pH Sensor Arrays with Fault Diagnosis and Data Fusion Based on LabVIEW. Sensors, 2013, 13, 17281-17291.	3.8	2
188	Investigation of Sensing Characteristic of Flexible Arrayed RuO ₂ Chlorine Ion Sensor Modified by Graphene Oxide. IEEE Transactions on Semiconductor Manufacturing, 2018, 31, 295-301.	1.7	2
189	Improving DSSC Performance Using Enhanced Double Layers Based on Magnetic Beads and Reduced Graphene Oxide. IEEE Nanotechnology Magazine, 2020, 19, 375-381.	2.0	2
190	Investigation of the Amperometric/Potentiometric Dual Mode Glucose Biosensor. Sensor Letters, 2008, 6, 836-839.	0.4	2
191	Combination of the Microfluidic System and NiO Uric Acid Biosensor Modified by Ag Nanomaterials. IEEE Access, 2021, 9, 161407-161415.	4.2	2
192	Application of the Non-Enzymatic Glucose Sensor Combined with Microfluidic System and Calibration Readout Circuit. Chemosensors, 2021, 9, 351.	3.6	2
193	Single-mode SiON/SiO ₂ /Si optical waveguides prepared by plasma-enhanced chemical vapor deposition. Fiber and Integrated Optics, 1995, 14, 133-139.	2.5	1
194	<title>Novel CMOS readout techniques for uncooled pyroelectric IR FPA</title>. , 1998, , .		1
195	New design structure of a direct-injection input circuit with adaptive gain control techniques. , 1998, , .		1
196	<title>pH response of a-Si:H ISFET</title>. , 1999, 3897, 758.		1
197	<title>Separative structure ISFETs on a glass substrate</title>. , 1999, , .		1
198	<title>pH sensitivity and hysteresis of A-WO ₃ gate ISFET compared with different membranes</title>. , 1999, 3897, 605.		1

#	ARTICLE	IF	CITATIONS
199	Modeling of Drift and Hysteretic Sensing Phenomena of the Ba _{0.7} Sr _{0.3} TiO ₃ pH-Ion-Sensitive Field-Effect Transistor. Japanese Journal of Applied Physics, 2008, 47, 8525.	1.5	1
200	WEIGHTED DATA FUSION FOR FLEXIBLE pH SENSORS ARRAY. Biomedical Engineering - Applications, Basis and Communications, 2009, 21, 365-369.	0.6	1
201	REALIZATION OF PLATFORM FOR ION CONCENTRATION MEASUREMENT. Biomedical Engineering - Applications, Basis and Communications, 2009, 21, 385-388.	0.6	1
202	Fabrication of photoelectrochromic cell on flexible substrate by screen printing technique. , 2011, , .		1
203	Fabrication and Characteristic Analysis of Arrayed Electrochromic Display Based on Tertiary Colors. Journal of Display Technology, 2014, 10, 853-861.	1.2	1
204	A Study on Electrochemical and Optical Characteristics of WO _{1-x} Electrochromic Thin Film Prepared by Different Constant Potentials and Deposition Time. Journal of Display Technology, 2015, , 1-1.	1.2	1
205	Investigation of properties for dye-sensitized solar cells in series-parallel connection modules. , 2018, , .		1
206	A Study on Selectivity and Temperature Coefficients of the Chloride Ion Sensors With RuO _x Thin Film. IEEE Journal of the Electron Devices Society, 2019, 7, 140-149.	2.1	1
207	Fabrication of a Sensitive and Stable NiO Uric Acid Biosensor Using Ag Nanowires and Reduced Graphene Oxide. Energies, 2021, 14, 4696.	3.1	1
208	Development of the Potentiometric Lactate Biosensor Based on SnO ₂ /ITO Glass Electrode. Sensor Letters, 2008, 6, 855-859.	0.4	1
209	Numerical Simulations and Controllable Stoichiometry on Cadmium Telluride Compound by Electrochemical Deposition. Sensor Letters, 2008, 6, 992-995.	0.4	1
210	An Equivalent Circuit Model for Simulating the Separative Extended Gate Field Effect Transistor. Sensor Letters, 2008, 6, 924-928.	0.4	1
211	High-performance-readout integrated circuit for surface-micromachined bolometer arrays. , 1999, , .		0
212	<title>Simulation and study on the temperature effect of the a-Ta ₂ O ₅ ISFET</title>. , 1999, 3897, 750.		0
213	Optoelectronic properties of new amorphous silicon photoreceptor. , 1999, , .		0
214	Temperature dependence of the hysteresis for the a-Si:H gate pH-ISFET. , 2000, 4078, 809.		0
215	Study on the Optoelectronic Properties of Al/a-Si:H/a-As ₂ Se ₃ Photoreceptor for Electrophotography. Japanese Journal of Applied Physics, 2000, 39, 5128-5131.	1.5	0
216	<title>Preparation of the SnO ₂ gate pH-ISFET by sol gel technology</title>. , 2001, , .		0

#	ARTICLE	IF	CITATIONS
217	<title>Sensitivity of the a-C:H gate pH-ISFET</title>. , 2001, , .		0
218	Temperature effect of the a-C:H gate pH-ISFET. , 2001, , .		0
219	Temperature effect of the pH-ISFET based on the sol-gel prepared SnO ₂ membrane. , 2001, , .		0
220	Preparation of the SnO ₂ Gate pH-Sensitive Ion Sensitive Field-Effect Transistor by the Sol-Gel Technology and Its Temperature Effect. Japanese Journal of Applied Physics, 2002, 41, 5941-5944.	1.5	0
221	Design of a low-voltage instrumentation amplifier for enzyme-extended-gate field effect transistor based urea sensor application. , 0, , .		0
222	Study the characteristics of uricase biosensor based on the extended gate field effect transistor. , 0, , .		0
223	Differential Structure Solid-State Array Biosensors for Creatinine Detection. , 2007, , .		0
224	VIRTUAL INSTRUMENT APPLIED TO MULTIELECTRODE DETECTION. Biomedical Engineering - Applications, Basis and Communications, 2009, 21, 375-379.	0.6	0
225	PREPARATION AND CHARACTERISTICS OF SCREEN-PRINTED CALCIUM ION SENSOR. Biomedical Engineering - Applications, Basis and Communications, 2009, 21, 381-384.	0.6	0
226	STUDY ON TIME-CONSTANT MODELS OF SnO ₂ pH SENSOR. Biomedical Engineering - Applications, Basis and Communications, 2009, 21, 449-452.	0.6	0
227	Cost-Effective Anodization Technique for Fabricating Ion-Sensitive Field-Effect Transistor Device Sensitive Membrane. Japanese Journal of Applied Physics, 2009, 48, 046502.	1.5	0
228	Chloride ion selective electrode for detection of low chloride ion concentration. , 2011, , .		0
229	Investigation on the sensitivity of TiO ₂ : Ru pH sensor by Taguchi design of experiment. , 2011, , .		0
230	Potentiometric nano-grained TiO ₂ : Ru-based nafion/uric acid biosensor. , 2011, , .		0
231	Fabrication of the flexible biosensor based on microfluidic device framework. , 2011, , .		0
232	Study on a multi-ion sensing system with wireless homecare system. , 2011, , .		0
233	Development of signal readout and real time monitor system for biosensor. , 2012, , .		0
234	Investigation of characteristics of tungsten oxide with different work pressures in photoelectrochromic cell. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
235	The investigation of surface roughness of substrate on electrochromic characteristics for PMeT thin film. , 2013, , .		0
236	Fabrication and research of flexible arrayed glucose biosensor combined with the magnetic beads. , 2013, , .		0
237	Analysis of mutual electrolyte structure applied in arrayed flexible dye-sensitized solar cells. , 2013, , .		0
238	A novel and high performance potentiometric arrayed flexible glucose biosensor based on microfluidic device. , 2013, , .		0
239	A study of drift characteristic in arrayed flexible chlorine ion sensors with differential reference electrodes. , 2015, , .		0
240	Characteristic of arrayed flexible glucose biosensor integrated with the microfluidic device. , 2015, , .		0
241	The analysis of dye-sensitized solar cells modified by different contents of graphene via electrophoretic deposition. , 2015, , .		0
242	The research of the differential reference electrode arrayed flexible IGZO pH sensor for different Ar/O²/O²/inf ratios. , 2015, , .		0
243	Analysis of different dye-sensitized solar cell models by electrochemical impedance spectroscopy. , 2015, , .		0
244	Analysis of non-ideal effects and electrochemical impedance spectroscopy of arrayed flexible NiO-based pH sensor. , 2016, , .		0
245	The research of differential reference electrode arrayed flexible IGZO glucose biosensor based on microfluidic framework. AIP Conference Proceedings, 2017, , .	0.4	0
246	The influence of flexible dye-sensitized solar cell modified by different magnetic bead contents. AIP Conference Proceedings, 2017, , .	0.4	0
247	An investigation on the photovoltaic properties of dye-sensitized solar cell based on titanium dioxide "Reduced graphene oxide composite photoelectrode under low illumination. , 2018, , .		0
248	Improving Photovoltaic Performance of Dye-Sensitized Solar Cell by Modification of Photoanode With g-C3N4/TiO2 Nanofibers. IEEE Transactions on Electron Devices, 2021, 68, 4982-4988.	3.0	0
249	Flexible SnO₂/SUB>> Substrate-Based Potentiometric Thick-Film Solid-State Urea Biosensor. Sensor Letters, 2008, 6, 831-835.	0.4	0
250	Material Analysis on Different Processing Parameters of the Ruthenium-Doped TiO₂/sub> Sensing Film by Taguchi Method. Sensor Letters, 2011, 9, 338-342.	0.4	0
251	The Photovoltaic Performance of the DSSC With the Photoanode Modified by Î³-Fe₂/sub>O₃/sub>/TiO₂/sub> Nanofibers Under Low Illumination. IEEE Journal of Photovoltaics, 2022, 12, 618-624.	2.5	0
252	Dye-Sensitized Solar Cell Using TiO2/ AgNWs Film: Application under Low Illumination. , 2020, , .		0