Pantelis Georgiou

List of Publications by Year
in descending order

250 papers	5,172 citations	134610 34 h-index	156644 58 g-index
260 all docs	260 docs citations	260 times ranked	4570 citing authors

#	Article	IF	Citations
1	Personalized Blood Glucose Prediction for Type 1 Diabetes Using Evidential Deep Learning and Meta-Learning. IEEE Transactions on Biomedical Engineering, 2023, 70, 193-204.	2.5	19
2	A Multitask Learning Approach to Personalized Blood Glucose Prediction. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 436-445.	3.9	19
3	A Deep Learning Framework for Automatic Meal Detection and Estimation in Artificial Pancreas Systems. Sensors, 2022, 22, 466.	2.1	15
4	Applied machine learning for the risk-stratification and clinical decision support of hospitalised patients with dengue in Vietnam. , 2022, 1, e0000005.		7
5	Identifying Continuous Glucose Monitoring Data Using Machine Learning. Diabetes Technology and Therapeutics, 2022, 24, 403-408.	2.4	5
6	Ultra‐thin ISFET‐based sensing systems. Electrochemical Science Advances, 2022, 2, .	1.2	10
7	The Diagnosis of Dengue in Patients Presenting With Acute Febrile Illness Using Supervised Machine Learning and Impact of Seasonality. Frontiers in Digital Health, 2022, 4, 849641.	1.5	5
8	Rapid Detection of Actinobacillus pleuropneumoniae From Clinical Samples Using Recombinase Polymerase Amplification. Frontiers in Veterinary Science, 2022, 9, 805382.	0.9	3
9	Single-channel digital LAMP multiplexing using amplification curve analysis. Sensors & Diagnostics, 2022, 1, 465-468.	1.9	7
10	Lab-on-chip assay of tumour markers and human papilloma virus for cervical cancer detection at the point-of-care. Scientific Reports, 2022, 12, .	1.6	11
11	A LoC Ion Imaging Platform for Spatio-Temporal Characterisation of Ion-Selective Membranes. IEEE Transactions on Biomedical Circuits and Systems, 2022, 16, 545-556.	2.7	2
12	Enhancing self-management in type 1 diabetes with wearables and deep learning. Npj Digital Medicine, 2022, 5, .	5.7	23
13	Deep Learning for Diabetes: A Systematic Review. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 2744-2757.	3.9	89
14	A Real-world Evaluation of a Case-based Reasoning Algorithm to Support Antimicrobial Prescribing Decisions in Acute Care. Clinical Infectious Diseases, 2021, 72, 2103-2111.	2.9	25
15	Real-Time Forecasting of sEMG Features for Trunk Muscle Fatigue Using Machine Learning. IEEE Transactions on Biomedical Engineering, 2021, 68, 718-727.	2.5	27
16	Robust Determination of the Optimal Continuous Glucose Monitoring Length of Intervention to Evaluate Long-Term Glycemic Control. Diabetes Technology and Therapeutics, 2021, 23, 314-319.	2.4	32
17	Basal Glucose Control in Type 1 Diabetes Using Deep Reinforcement Learning: An *In Silico* Validation. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 1223-1232.	3.9	51
18	Reduced Drift of CMOS ISFET pH Sensors Using Graphene Sheets. IEEE Sensors Journal, 2021, 21, 14609-14618.	2.4	9

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19	Supervised machine learning to support the diagnosis of bacterial infection in the context of COVID-19. JAC-Antimicrobial Resistance, 2021, 3, dlab002.	0.9	9
20	CMOS ISFET Arrays for Integrated Electrochemical Sensing and Imaging Applications: A Tutorial. IEEE Sensors Journal, 2021, 21, 22155-22169.	2.4	13
21	Concurrent Potentiometric and Amperometric Sensing With Shared Reference Electrodes. IEEE Sensors Journal, 2021, 21, 5720-5727.	2.4	8
22	Translation of a Host Blood RNA Signature Distinguishing Bacterial From Viral Infection Into a Platform Suitable for Development as a Point-of-Care Test. JAMA Pediatrics, 2021, 175, 417.	3.3	32
23	A USB 3.0 High Speed Digital Readout System with Dynamic Frame Rate Processing for ISFET Lab-on-Chip Platforms. , 2021, , .		2
24	A Digital ISFET Sensor with In-Pixel ADC. , 2021, , .		5
25	A 4-Channel sEMG ASIC with Real-Time Muscle Fatigue Feature Extraction. , 2021, , .		2
26	SPACEMan: Wireless SoC for Concurrent Potentiometry and Amperometry. , 2021, , .		1
27	A Multi-Sensing ISFET Array for Simultaneous In-Pixel Detection of Light, Temperature, Moisture and Ions. , 2021, , .		2
28	A Dual-Sensing CMOS Array for Combined Impedance-pH Detection of DNA with Integrated Electric Field Manipulation. , 2021, , .		3
29	Blood Glucose Prediction in Type 1 Diabetes Using Deep Learning on the Edge. , 2021, , .		18
30	A 1000fps Programmable Gain CMOS ISFET SoC with Array-Level Offset Compensation for Real Time Ion Imaging. , 2021, , .		3
31	Detection of Multiple Breast Cancer *ESR1* Mutations on an ISFET Based Lab-on-Chip Platform. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 380-389.	2.7	29
32	Design of Low-Power Highly Accurate CMOS Potentiostat Using the g_m/I_D Methodology. , 2021, , .		4
33	Optimizing antimicrobial use: challenges, advances and opportunities. Nature Reviews Microbiology, 2021, 19, 747-758.	13.6	51
34	An Ultra-High Frame Rate Ion Imaging Platform Using ISFET Arrays With Real-Time Compression. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 820-833.	2.7	6
35	Optimising antimicrobial use in humans â€" review of current evidence and an interdisciplinary consensus on key priorities for research. Lancet Regional Health - Europe, The, 2021, 7, 100161.	3.0	46
36	Discovery and validation of a three-gene signature to distinguish COVID-19 and other viral infections in emergency infectious disease presentations: a case-control and observational cohort study. Lancet Microbe, The, 2021, 2, e594-e603.	3.4	17

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37	Handheld Point-of-Care System for Rapid Detection of SARS-CoV-2 Extracted RNA in under 20 min. ACS Central Science, 2021, 7, 307-317.	5.3	106
38	Resistance Trend Estimation Using Regression Analysis to Enhance Antimicrobial Surveillance: A Multi-Centre Study in London 2009â€"2016. Antibiotics, 2021, 10, 1267.	1.5	5
39	Loop-Mediated Isothermal Amplification Assay for Detecting Tumor Markers and Human Papillomavirus: Accuracy and Supplemental Diagnostic Value to Endovaginal MRI in Cervical Cancer. Frontiers in Oncology, 2021, 11, 747614.	1.3	3
40	Personalized Dual-Hormone Control for Type 1 Diabetes Using Deep Reinforcement Learning. Studies in Computational Intelligence, 2021, , 45-53.	0.7	6
41	Coupling Machine Learning and High Throughput Multiplex Digital PCR Enables Accurate Detection of Carbapenem-Resistant Genes in Clinical Isolates. Frontiers in Molecular Biosciences, 2021, 8, 775299.	1.6	16
42	An In Silico Head-to-Head Comparison of the Do-It-Yourself Artificial Pancreas Loop and Bio-Inspired Artificial Pancreas Control Algorithms. Journal of Diabetes Science and Technology, 2021, , 193229682110600.	1.3	3
43	Multiple Ion-channel ISFET Neuron for Lab-on-chip applications. , 2021, , .		5
44	Live Demonstration: Real-Time and High-Speed Ion Imaging Using CMOS ISFET Arrays. , 2021, , .		3
45	Detection of MGMT methylation status using a Lab-on-Chip compatible isothermal amplification method. , 2021, 2021, 7385-7389.		1
46	A Modular Safety System for an Insulin Dose Recommender: A Feasibility Study. Journal of Diabetes Science and Technology, 2020, 14, 87-96.	1.3	18
47	Convolutional Recurrent Neural Networks for Glucose Prediction. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 603-613.	3.9	156
48	Predicting Quality of Overnight Glycaemic Control in Type 1 Diabetes Using Binary Classifiers. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1439-1446.	3.9	29
49	GluNet: A Deep Learning Framework for Accurate Glucose Forecasting. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 414-423.	3.9	98
50	In-Silico Automated Allele-Specific Primer Design for Loop-Mediated Isothermal Amplification. , 2020, , .		2
51	DAPPER: A Low Power, Dual Amperometric and Potentiometric Single-Channel Front End. , 2020, , .		12
52	Detection of Breast Cancer ESR1 p.E380Q Mutation on an ISFET Lab-on-Chip Platform. , 2020, , .		9
53	A Combined ISFET-Electric Field Actuation System for Enhanced Detection of DNA: A Proof-of-Concept. , 2020, , .		1
54	ISFET-Based Sensing and Electric Field Actuation of DNA for On-Chip Detection: A Review. IEEE Sensors Journal, 2020, 20, 11044-11065.	2.4	36

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55	Amplification Curve Analysis: Data-Driven Multiplexing Using Real-Time Digital PCR. Analytical Chemistry, 2020, 92, 13134-13143.	3.2	35
56	High-Level Multiplexing in Digital PCR with Intercalating Dyes by Coupling Real-Time Kinetics and Melting Curve Analysis. Analytical Chemistry, 2020, 92, 14181-14188.	3.2	16
57	Rapid Detection of Azole-Resistant Aspergillus fumigatus in Clinical and Environmental Isolates by Use of a Lab-on-a-Chip Diagnostic System. Journal of Clinical Microbiology, 2020, 58, .	1.8	18
58	An Insulin Bolus Advisor for Type 1 Diabetes Using Deep Reinforcement Learning. Sensors, 2020, 20, 5058.	2.1	35
59	A Cluster-Based Neuromorphic ISFET Architecture with Integrated Calibration. , 2020, , .		4
60	An ISFET Array for Ion Multiplexing with an Integrated Sensor Learning Algorithm. , 2020, , .		5
61	An Ion-to-Frequency ISFET Architecture for Ultra-Low Power Applications. , 2020, , .		2
62	High-Throughput Digital Readout System for Real-Time Ion Imaging using CMOS ISFET Arrays. , 2020, , .		2
63	A Multi-Sensing Pixel for Integrated Opto-Chemical Sensing with Temperature Compensation. , 2020, , .		2
64	Closed-loop bioelectronic medicine for diabetes management. Bioelectronic Medicine, 2020, 6, 11.	1.0	18
65	Continuous physiological monitoring using wearable technology to inform individual management of infectious diseases, public health and outbreak responses. International Journal of Infectious Diseases, 2020, 96, 648-654.	1.5	35
66	Complementary Metal–Oxide–Semiconductor Potentiometric Field-Effect Transistor Array Platform Using Sensor Learning for Multi-ion Imaging. Analytical Chemistry, 2020, 92, 5276-5285.	3.2	34
67	A Dual-Sensing Thermo-Chemical ISFET Array for DNA-Based Diagnostics. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 477-489.	2.7	27
68	Calibrating for Trapped Charge in Large-Scale ISFET Arrays. IEEE Sensors Journal, 2020, 20, 5110-5118.	2.4	9
69	A novel hotspot specific isothermal amplification method for detection of the common PIK3CA p.H1047R breast cancer mutation. Scientific Reports, 2020, 10, 4553.	1.6	35
70	Assessment of Glucose Control Metrics by Discriminant Ratio. Diabetes Technology and Therapeutics, 2020, 22, 719-726.	2.4	22
71	A High-Performance Raspberry Pi-Based Interface for Ion Imaging Using ISFET Arrays. IEEE Sensors Journal, 2020, 20, 12837-12847.	2.4	4
72	A 128 × 128 Current-Mode Ultra-High Frame Rate ISFET Array With In-Pixel Calibration for Real-Time Ion Imaging. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 359-372.	2.7	25

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73	Dilated Recurrent Neural Networks for Glucose Forecasting in Type 1 Diabetes. Journal of Healthcare Informatics Research, 2020, 4, 308-324.	5.3	58
74	Rapid Detection of Mobilized Colistin Resistance using a Nucleic Acid Based Lab-on-a-Chip Diagnostic System. Scientific Reports, 2020, 10, 8448.	1.6	33
75	Leapfrogging laboratories: the promise and pitfalls of high-tech solutions for antimicrobial resistance surveillance in low-income settings. BMJ Global Health, 2020, 5, e003622.	2.0	30
76	A 0.55 V Bandgap Reference with a 59 ppm/°C Temperature Coefficient. Journal of Circuits, Systems and Computers, 2019, 28, 1950120.	1.0	22
77	A High Value, Linear and Tunable CMOS Pseudo-Resistor for Biomedical Applications. Journal of Circuits, Systems and Computers, 2019, 28, 1950096.	1.0	17
78	Public acceptability of computer-controlled antibiotic management: An exploration of automated dosing and opportunities for implementation. Journal of Infection, 2019, 78, 75-86.	1.7	10
79	Live Demonstration: A Portable High-Speed Ion-Imaging Platform using a Raspberry Pi. , 2019, , .		3
80	Current-Mode ISFET Array with Row-Parallel ADCs for Ultra-High Speed Ion Imaging. , 2019, , .		8
81	Coordinated dual-hormone artificial pancreas with parallel control structure. Computers and Chemical Engineering, 2019, 128, 322-328.	2.0	7
82	Classification of Postprandial Glycemic Status with Application to Insulin Dosing in Type 1 Diabetes—An In Silico Proof-of-Concept. Sensors, 2019, 19, 3168.	2.1	16
83	Long-Term Glucose Forecasting Using a Physiological Model and Deconvolution of the Continuous Glucose Monitoring Signal. Sensors, 2019, 19, 4338.	2.1	22
84	The Bio-inspired Artificial Pancreas for Type 1 Diabetes Control in the Home: System Architecture and Preliminary Results. Journal of Diabetes Science and Technology, 2019, 13, 1017-1025.	1.3	9
85	Ultrafast Large-Scale Chemical Sensing With CMOS ISFETs: A Level-Crossing Time-Domain Approach. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 1201-1213.	2.7	19
86	Mismatch Compensation in ISFET Arrays using a Parasitic Programmable Gate. , 2019, , .		6
87	A Programmable, Highly Linear and PVT-Insensitive ISFET Array for PoC Diagnosis. , 2019, , .		9
88	A Novel Glucose Controller using Insulin Sensitivity Modulation for Management of Type 1 Diabetes. , 2019, , .		5
89	Programmable Ion-Sensing Using Oscillator-Based ISFET Architectures. IEEE Sensors Journal, 2019, 19, 8563-8575.	2.4	8
90	Quantitative and rapid Plasmodium falciparum malaria diagnosis and artemisinin-resistance detection using a CMOS Lab-on-Chip platform. Biosensors and Bioelectronics, 2019, 145, 111678.	5.3	74

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91	Microneedle biosensors for real-time, minimally invasive drug monitoring of phenoxymethylpenicillin: a first-in-human evaluation in healthy volunteers. The Lancet Digital Health, 2019, 1, e335-e343.	5.9	96
92	Modeling the effect of the cephalic phase of insulin secretion on glucose metabolism. Medical and Biological Engineering and Computing, 2019, 57, 1173-1186.	1.6	8
93	Mechanisms for enhancement of sensing performance in CMOS ISFET arrays using reactive ion etching. Sensors and Actuators B: Chemical, 2019, 292, 297-307.	4.0	17
94	A 32Ã—32 ISFET Array with In-Pixel Digitisation and Column-Wise TDC for Ultra-Fast Chemical Sensing. , 2019, , .		3
95	A Neuron-Based ISFET Array Architecture with Spatial Sensor Compensation. , 2019, , .		5
96	Framework for DNA Quantification and Outlier Detection Using Multidimensional Standard Curves. Analytical Chemistry, 2019, 91, 7426-7434.	3.2	21
97	Artificial intelligence can improve decision-making in infection management. Nature Human Behaviour, 2019, 3, 543-545.	6.2	41
98	Real-Time Forecasting and Classification of Trunk Muscle Fatigue Using Surface Electromyography. , 2019, , .		4
99	ISFET Arrays for Lab-on-Chip Technology: A Review. , 2019, , .		13
100	Live Demonstration : A Portable Multi-Ion Platform with Integrated Microfluidics. , 2019, , .		0
101	A Time-Domain Current-Mode MAC Engine for Analogue Neural Networks in Flexible Electronics. , 2019, , .		8
102	Live Demonstration: A Portable ISFET Platform for PoC Diagnosis Powered by Solar Energy. , 2019, , .		1
103	A Data-Driven Detection System for Predicting Stress Levels from Autonomic Signals. , 2019, , .		1
104	Rapid detection of Klebsiella pneumoniae using an auto-calibrated ISFET-array Lab-on-Chip platform. , 2019, , .		2
105	Simultaneous Single-Channel Multiplexing and Quantification of Carbapenem-Resistant Genes Using Multidimensional Standard Curves. Analytical Chemistry, 2019, 91, 2013-2020.	3.2	19
106	Rapid and Sensitive Detection of Azole-Resistant Aspergillus fumigatus by Tandem Repeat Loop-Mediated Isothermal Amplification. Journal of Molecular Diagnostics, 2019, 21, 286-295.	1.2	20
107	ISFET Arrays in CMOS: A Head-to-Head Comparison Between Voltage and Current Mode. IEEE Sensors Journal, 2019, 19, 1224-1238.	2.4	30
108	Connectivity of rapid-testing diagnostics and surveillance of infectious diseases. Bulletin of the World Health Organization, 2019, 97, 242-244.	1.5	16

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109	Automatic Adaptation of Basal Insulin Using Sensor-Augmented Pump Therapy. Journal of Diabetes Science and Technology, 2018, 12, 282-294.	1.3	18
110	Exploring the Use of C-Reactive Protein to Estimate the Pharmacodynamics of Vancomycin. Therapeutic Drug Monitoring, 2018, 40, 315-321.	1.0	11
111	Association between spectral characteristics of paraspinal muscles and functional disability in patients with low back pain: a cohort study. BMJ Open, 2018, 8, e017091.	0.8	6
112	Performance improvement of commercial ISFET sensors using reactive ion etching. Microelectronic Engineering, 2018, 192, 61-65.	1.1	7
113	A Scalable ISFET Sensing and Memory Array With Sensor Auto-Calibration for On-Chip Real-Time DNA Detection. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 390-401.	2.7	101
114	Study of Electrochemical Impedance of a Continuous Glucose Monitoring Sensor and its Correlation With Sensor Performance. , 2018, 2, 1-4.		19
115	Development of a patient-centred intervention to improve knowledge and understanding of antibiotic therapy in secondary care. Antimicrobial Resistance and Infection Control, 2018, 7, 43.	1.5	16
116	Vital Sign Monitoring Through the Back Using an UWB Impulse Radar With Body Coupled Antennas. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 292-302.	2.7	90
117	A pilot study in humans of microneedle sensor arrays for continuous glucose monitoring. Analytical Methods, 2018, 10, 2088-2095.	1.3	89
118	Closed-Loop Control for Precision Antimicrobial Delivery: An <italic>In Silico</italic> Proof-of-Concept. IEEE Transactions on Biomedical Engineering, 2018, 65, 2231-2236.	2.5	9
119	Microelectronics for Muscle Fatigue Monitoring Through Surface EMG. , 2018, , 133-162.		1
120	Trapped charge cancellation for CMOS ISFET sensors via Direct Tunnelling. , 2018, , .		5
121	Thermally Controlled Lab-on-PCB for Biomedical Applications. , 2018, , .		2
122	An Asynchronous Auto-biasing Circuit for Wearable Electrochemical Sensors. , 2018, , .		1
123	A fully-digital ISFET front-end with In-Pixel Î£Î" Modulation. , 2018, , .		0
124	Adapting ISFETs for Epigenetics: An Overview. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1186-1201.	2.7	19
125	Allele-Specific Isothermal Amplification Method Using Unmodified Self-Stabilizing Competitive Primers. Analytical Chemistry, 2018, 90, 11972-11980.	3.2	22
126	Guest Editorial Special Issue on Selected Papers From the IEEE Sensors 2017 Conference. IEEE Sensors Journal, 2018, 18, 7764-7764.	2.4	0

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127	Review of the role of the nervous system in glucose homoeostasis and future perspectives towards the management of diabetes. Bioelectronic Medicine, 2018, 4, 9.	1.0	47
128	An ISFET Pixel with Integrated Trapped Charge Compensation using Temperature Feedback. , 2018, , .		5
129	A Portable Low-Power Platform for Ambulatory Closed Loop Control of Blood Glucose in Type 1 Diabetes. , 2018, , .		4
130	A 12.8 k Current-Mode Velocity-Saturation ISFET Array for On-Chip Real-Time DNA Detection. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1202-1214.	2.7	51
131	A 96-channel ASIC for sEMG Fatigue Monitoring with Compressed Sensing for Data Reduction. , 2018, , .		3
132	Improving Dengue Diagnostics and Management Through Innovative Technology. Current Infectious Disease Reports, 2018, 20, 25.	1.3	20
133	A CMOS Bio-Chip combining pH Sensing, Temperature Regulation and Electric Field Generation for DNA Detection and Manipulation. , 2018, , .		10
134	Live Demonstration: A Mobile Diagnostic System for Rapid Detection and Tracking of Infectious Diseases. , 2018, , .		12
135	A 128Ã—128 Current-Mode Ultra-High Frame Rate ISFET Array for Ion Imaging. , 2018, , .		17
136	Case-Based Reasoning for Insulin Bolus Advice. Journal of Diabetes Science and Technology, 2017, 11, 37-42.	1.3	25
137	A systematic review of clinical decision support systems for antimicrobial management: are we failing to investigate these interventions appropriately?. Clinical Microbiology and Infection, 2017, 23, 524-532.	2.8	129
138	Enhancing automatic closed-loop glucose control in type 1 diabetes with an adaptive meal bolus calculator â€“ in silico evaluation under intra-day variability. Computer Methods and Programs in Biomedicine, 2017, 146, 125-131.	2.6	51
139	Vancomycin therapy in secondary care; investigating factors that impact therapeutic target attainment. Journal of Infection, 2017, 74, 320-324.	1.7	1
140	Occlusion dose monitoring in amblyopia therapy: status, insights, and future directions. Journal of AAPOS, 2017, 21, 402-406.	0.2	21
141	A novel ISFET sensor architecture using through-Silicon vias for DNA sequencing. , 2017, , .		2
142	A Thermally Powered ISFET Array for On-Body pH Measurement. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 1324-1334.	2.7	40
143	A Differential Electrochemical Readout ASIC With Heterogeneous Integration of Bio-Nano Sensors for Amperometric Sensing. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 1148-1159.	2.7	47
144	A coordinated control strategy for insulin and glucagon delivery in type 1 diabetes. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 1474-1482.	0.9	24

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145	Towards a minimally invasive device for beta-lactam monitoring in humans. Electrochemistry Communications, 2017, 82, 1-5.	2.3	36
146	A 32 $\times$ 32 ISFET Chemical Sensing Array With Integrated Trapped Charge and Gain Compensation. IEEE Sensors Journal, 2017, 17, 5276-5284.	2.4	47
147	Temperature compensation for ISFETs using a floating gate current mirror. , 2017, , .		2
148	Live demonstration: A batteryless CMOS ISFET array powered by body heat for real-time monitoring of bio-fluids. , 2017, , .		0
149	Improving the pH sensitivity of ISFET arrays with reactive ion etching. , 2017, , .		1
150	CMOS body dust â€" Towards drinkable diagnostics. , 2017, , .		3
151	Live demonstration: Real-time chemical imaging of ionic solutions using an ISFET array. , 2017, , .		1
152	Live demonstration: A CMOS-based ISFET array for rapid diagnosis of the Zika virus. , 2017, , .		12
153	Live demonstration: An NFC based batteryless CMOS ISFET array for real-time pH measurements of bio-fluids. , 2017, , .		2
154	Supervised learning for infection risk inference using pathology data. BMC Medical Informatics and Decision Making, 2017, 17, 168.	1.5	31
155	Data-driven Web-based Intelligent Decision Support System for Infection Management at Point-Of-Care: Case-Based Reasoning Benefits and Limitations. , 2017, , .		3
156	An Advanced Insulin Bolus Calculator for Type 1 Diabetes. , 2017, , 241-260.		0
157	Live demonstration: A portable multi-channel potentiostat for real-time amperometric measurement of multi-electrode sensor arrays. , 2016, , .		2
158	A Muscle Fibre Conduction Velocity Tracking ASIC for Local Fatigue Monitoring. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 1119-1128.	2.7	19
159	ISFETs in CMOS and Emergent Trends in Instrumentation: A Review. IEEE Sensors Journal, 2016, 16, 6496-6514.	2.4	184
160	Clinical Safety and Feasibility of the Advanced Bolus Calculator for Type 1 Diabetes Based on Case-Based Reasoning: A 6-Week Nonrandomized Single-Arm Pilot Study. Diabetes Technology and Therapeutics, 2016, 18, 487-493.	2.4	56
161	An ISFET-based switched current DNA integrator. , 2016, , .		1
162	A CMOS ISFET array for wearable thermoelectrically powered perspiration analysis. , 2016, , .		1

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163	A neuromorphic based median frequency tracker for muscle fatigue monitoring. , 2016, , .		3
164	A robust ISFET array with in-pixel quantisation and automatic offset calibration. , 2016, , .		8
165	Linear current-mode ISFET arrays. , 2016, , .		9
166	A linear programmable-gate ISFET array operating in velocity saturation. , 2016, , .		6
167	Scaling ISFET instrumentation with in-pixel quantisation to deep submicron technologies. , 2016, , .		6
168	A weak inversion ISFET current mirror for differential bio-sensing. , 2016, , .		4
169	Metabolic Control With the Bio-inspired Artificial Pancreas in Adults With Type 1 Diabetes. Journal of Diabetes Science and Technology, 2016, 10, 405-413.	1.3	34
170	A portable multi-channel potentiostat for real-time amperometric measurement of multi-electrode sensor arrays. , 2016, , .		4
171	An Automatic Gain Control System for ISFET Array Compensation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 1511-1520.	3.5	5
172	Live demonstrator: Challenging the Bio-inspired Artificial Pancreas with a mixed-meal model library. , 2016, , .		0
173	Bio-inspired pH sensing using ion sensitive field effect transistors. , 2016, , .		2
174	An ion imaging ISFET array for Potassium and Sodium detection. , 2016, , .		21
175	Live demonstration: Smartwatch implementation of an advanced insulin bolus calculator for diabetes. , 2016, , .		1
176	Comparison of sEMG bit-stream modulators for cross-correlation based muscle fatigue estimation. , 2016, , .		2
177	An integrated platform for differential electrochemical and ISFET sensing. , 2016, , .		5
178	Patient engagement with infection management in secondary care: a qualitative investigation of current experiences. BMJ Open, 2016, 6, e011040.	0.8	15
179	Mapping the decision pathways of acute infection management in secondary care among UK medical physicians: a qualitative study. BMC Medicine, 2016, 14, 208.	2.3	37
180	Robust setâ€membership parameter estimation of the glucose minimal model. International Journal of Adaptive Control and Signal Processing, 2016, 30, 173-185.	2.3	6

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181	A Sub- $${100,\hbox {ppm}}/{{^{\circ }\hbox {C}}}$$ 100 ppm / â˜ C Temperature-Compensated High-Frequency CMOS Relaxation Oscillator. Circuits, Systems, and Signal Processing, 2016, 35, 29-42.	1.2	0
182	Guest Editorial Biomedical and Health Informatics for Diabetes. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 3-3.	3.9	4
183	Glycemic Variability and Its Impact on Quality of Life in Adults With Type 1 Diabetes. Journal of Diabetes Science and Technology, 2016, 10, 60-66.	1.3	19
184	An Advanced Bolus Calculator for Type 1 Diabetes: System Architecture and Usability Results. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 11-17.	3.9	45
185	A Real-Time <italic>de novo</italic> DNA Sequencing Assembly Platform Based on an FPGA Implementation. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2016, 13, 291-300.	1.9	2
186	Live demonstration: Wearable device for remote EMG and muscle fatigue monitoring. , 2015, , .		8
187	The â€œWear and Measureâ€•Approach: Linking Joint Stability Measurements from a Smart Clothing System to Optical Tracking. Journal of Sensors, 2015, 2015, 1-8.	0.6	0
188	Guest Editorialâ€"Special Issue on Selected Papers From IEEE BioCAS 2014. IEEE Transactions on Biomedical Circuits and Systems, 2015, 9, 605-606.	2.7	0
189	A novel pH-to-time ISFET pixel architecture with offset compensation. , 2015, , .		15
190	Impact of Technology Scaling on ISFET Performance for Genetic Sequencing. IEEE Sensors Journal, 2015, 15, 2219-2226.	2.4	26
191	Method for automatic adjustment of an insulin bolus calculator: In silico robustness evaluation under intra-day variability. Computer Methods and Programs in Biomedicine, 2015, 119, 1-8.	2.6	33
192	Smart Sensing System for Combined Activity Classification and Estimation of Knee Range of Motion. IEEE Sensors Journal, 2015, 15, 5535-5544.	2.4	16
193	Live demonstration: A handheld Bio-inspired Artificial pancreas for treatment of diabetes. , 2014, , .		3
194	Advanced Insulin Bolus Advisor based on Run-To-Run Control and Case-Based Reasoning. IEEE Journal of Biomedical and Health Informatics, 2014, 19, 1-1.	3.9	56
195	3â€‑T ISFET frontâ€‑end utilising parasitic device capacitance. Electronics Letters, 2014, 50, 1507-1509.	0.5	9
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