

Nicolas Moser

List of Publications by Year in descending order

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42
papers

902
citations

759233

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888059

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44
all docs

44
docs citations

44
times ranked

788
citing authors

#	ARTICLE	IF	CITATIONS
1	ISFETs in CMOS and Emergent Trends in Instrumentation: A Review. IEEE Sensors Journal, 2016, 16, 6496-6514.	4.7	184
2	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.	11.3	106
3	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.	4.0	101
4	Quantitative and rapid Plasmodium falciparum malaria diagnosis and artemisinin-resistance detection using a CMOS Lab-on-Chip platform. Biosensors and Bioelectronics, 2019, 145, 111678.	10.1	74
5	A 32 \times 32 ISFET Chemical Sensing Array With Integrated Trapped Charge and Gain Compensation. IEEE Sensors Journal, 2017, 17, 5276-5284.	4.7	47
6	ISFET-Based Sensing and Electric Field Actuation of DNA for On-Chip Detection: A Review. IEEE Sensors Journal, 2020, 20, 11044-11065.	4.7	36
7	Amplification Curve Analysis: Data-Driven Multiplexing Using Real-Time Digital PCR. Analytical Chemistry, 2020, 92, 13134-13143.	6.5	35
8	Complementary Metal-Oxide-Semiconductor Potentiometric Field-Effect Transistor Array Platform Using Sensor Learning for Multi-ion Imaging. Analytical Chemistry, 2020, 92, 5276-5285.	6.5	34
9	Rapid Detection of Mobilized Colistin Resistance using a Nucleic Acid Based Lab-on-a-Chip Diagnostic System. Scientific Reports, 2020, 10, 8448.	3.3	33
10	Detection of Multiple Breast Cancer <i>ESR1</i> Mutations on an ISFET Based Lab-on-Chip Platform. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 380-389.	4.0	29
11	An ion imaging ISFET array for Potassium and Sodium detection. , 2016, , .		21
12	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, .	3.9	18
13	Mechanisms for enhancement of sensing performance in CMOS ISFET arrays using reactive ion etching. Sensors and Actuators B: Chemical, 2019, 292, 297-307.	7.8	17
14	A novel pH-to-time ISFET pixel architecture with offset compensation. , 2015, , .		15
15	ISFET Arrays for Lab-on-Chip Technology: A Review. , 2019, , .		13
16	CMOS ISFET Arrays for Integrated Electrochemical Sensing and Imaging Applications: A Tutorial. IEEE Sensors Journal, 2021, 21, 22155-22169.	4.7	13
17	Live demonstration: A CMOS-based ISFET array for rapid diagnosis of the Zika virus. , 2017, , .		12
18	Live Demonstration: A Mobile Diagnostic System for Rapid Detection and Tracking of Infectious Diseases. , 2018, , .		12

#	ARTICLE	IF	CITATIONS
19	Lab-on-chip assay of tumour markers and human papilloma virus for cervical cancer detection at the point-of-care. Scientific Reports, 2022, 12, .	3.3	11
20	A CMOS Bio-Chip combining pH Sensing, Temperature Regulation and Electric Field Generation for DNA Detection and Manipulation. , 2018, , .		10
21	Detection of Breast Cancer ESR1 p.E380Q Mutation on an ISFET Lab-on-Chip Platform. , 2020, , .		9
22	A robust ISFET array with in-pixel quantisation and automatic offset calibration. , 2016, , .		8
23	Programmable Ion-Sensing Using Oscillator-Based ISFET Architectures. IEEE Sensors Journal, 2019, 19, 8563-8575.	4.7	8
24	Scaling ISFET instrumentation with in-pixel quantisation to deep submicron technologies. , 2016, , .		6
25	An ISFET Pixel with Integrated Trapped Charge Compensation using Temperature Feedback. , 2018, , .		5
26	A Neuron-Based ISFET Array Architecture with Spatial Sensor Compensation. , 2019, , .		5
27	An ISFET Array for Ion Multiplexing with an Integrated Sensor Learning Algorithm. , 2020, , .		5
28	Multiple Ion-channel ISFET Neuron for Lab-on-chip applications. , 2021, , .		5
29	A Cluster-Based Neuromorphic ISFET Architecture with Integrated Calibration. , 2020, , .		4
30	A Dual-Sensing CMOS Array for Combined Impedance-pH Detection of DNA with Integrated Electric Field Manipulation. , 2021, , .		3
31	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.	2.8	3
32	Bio-inspired pH sensing using ion sensitive field effect transistors. , 2016, , .		2
33	Rapid detection of Klebsiella pneumoniae using an auto-calibrated ISFET-array Lab-on-Chip platform. , 2019, , .		2
34	A Multi-Sensing Pixel for Integrated Opto-Chemical Sensing with Temperature Compensation. , 2020, , .		2
35	A LoC Ion Imaging Platform for Spatio-Temporal Characterisation of Ion-Selective Membranes. IEEE Transactions on Biomedical Circuits and Systems, 2022, 16, 545-556.	4.0	2
36	A CMOS ISFET array for wearable thermoelectrically powered perspiration analysis. , 2016, , .		1

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37	Improving the pH sensitivity of ISFET arrays with reactive ion etching. , 2017, , .		1
38	Live demonstration: Real-time chemical imaging of ionic solutions using an ISFET array. , 2017, , .		1
39	A Combined ISFET-Electric Field Actuation System for Enhanced Detection of DNA: A Proof-of-Concept. , 2020, , .		1
40	Detection of MGMT methylation status using a Lab-on-Chip compatible isothermal amplification method. , 2021, 2021, 7385-7389.		1
41	Live Demonstration : A Portable Multi-Ion Platform with Integrated Microfluidics. , 2019, , .		0
42	ProtonDx: Accurate, Rapid and Lab-Free Detection of SARS-CoV-2 and Other Respiratory Pathogens [Society News]. IEEE Circuits and Systems Magazine, 2021, 21, 84-88.	2.3	0