Grigoris Kaltsas

List of Publications by Year in descending order

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65 papers	1,019 citations	471509 17 h-index	454955 30 g-index
67 all docs	67 docs citations	67 times ranked	753 citing authors

#	Article	IF	Citations
1	Novel C-MOS compatible monolithic silicon gas flow sensor with porous silicon thermal isolation. Sensors and Actuators A: Physical, 1999, 76, 133-138.	4.1	115
2	Frontside bulk silicon micromachining using porous-silicon technology. Sensors and Actuators A: Physical, 1998, 65, 175-179.	4.1	70
3	Characterization of a silicon thermal gas-flow sensor with porous silicon thermal isolation. IEEE Sensors Journal, 2002, 2, 463-475.	4.7	57
4	Multipurpose MEMS thermal sensor based on thermopiles. Sensors and Actuators A: Physical, 2008, 141, 404-413.	4.1	55
5	A Review on Humidity, Temperature and Strain Printed Sensorsâ€"Current Trends and Future Perspectives. Sensors, 2021, 21, 739.	3.8	54
6	Bulk silicon micromachining using porous silicon sacrificial layers. Microelectronic Engineering, 1997, 35, 397-400.	2.4	42
7	A novel microfluidic integration technology for PCB-based devices: Application to microflow sensing. Microelectronic Engineering, 2009, 86, 1382-1384.	2.4	40
8	Multi-parameter paper sensor fabricated by inkjet-printed silver nanoparticle ink and PEDOT:PSS. Microelectronic Engineering, 2020, 225, 111266.	2.4	39
9	Planar cmos compatible process for the fabrication of buried microchannels in silicon, using porous-silicon technology. Journal of Microelectromechanical Systems, 2003, 12, 863-872.	2.5	37
10	Flexible PCB-MEMS Flow Sensor. Procedia Engineering, 2012, 47, 236-239.	1.2	35
11	High throughput cellular biosensor for the ultra-sensitive, ultra-rapid detection of aflatoxin M1. Food Control, 2013, 29, 208-212.	5.5	35
12	Growth of erbium-silicide films on (100) silicon as characterised by electron microscopy and diffraction. Journal of Crystal Growth, 1997, 172, 175-182.	1.5	32
13	A Silicon Thermal Accelerometer Without Solid Proof Mass Using Porous Silicon Thermal Isolation. IEEE Sensors Journal, 2007, 7, 983-989.	4.7	31
14	Stress effect on suspended polycrystalline silicon membranes fabricated by micromachining of porous silicon. Sensors and Actuators A: Physical, 1998, 68, 429-434.	4.1	23
15	A flexible capacitive device for pressure and tactile sensing. Procedia Chemistry, 2009, 1, 867-870.	0.7	22
16	A novel microfabrication technology on organic substrates â€“ application to a thermal flow sensor. Journal of Physics: Conference Series, 2007, 92, 012046.	0.4	21
17	Gas flow meter for application in medical equipment for respiratory control: study of the housing. Sensors and Actuators A: Physical, 2004, 110, 413-422.	4.1	19
18	Erbium silicide films on (100) silicon, grown in high vacuum. Fabrication and properties. Thin Solid Films, 1996, 275, 87-90.	1.8	16

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19	A thermal convective accelerometer system based on a silicon sensorâ€"Study and packaging. Sensors and Actuators A: Physical, 2006, 132, 147-153.	4.1	16
20	A smart flow measurement system for flow evaluation with multiple signals in different operation modes. Measurement Science and Technology, 2007, 18, 3617-3624.	2.6	14
21	Extraction-less, rapid assay for the direct detection of 2,4,6-trichloroanisole (TCA) in cork samples. Talanta, 2014, 125, 336-340.	5.5	14
22	A disposable flexible humidity sensor directly printed on paper for medical applications. Journal of Physics: Conference Series, 2017, 931, 012003.	0.4	14
23	High crystalline quality erbium silicide films on (100) silicon, grown in high vacuum. Applied Surface Science, 1996, 102, 151-155.	6.1	13
24	Analytical modelling of thermopile based flow sensor and verification with experimental results. Microelectronic Engineering, 2009, 86, 1293-1296.	2.4	13
25	Porous Silicon of Variable Porosity under High Hydrostatic Pressure: Raman and Photoluminescence Studies. Physica Status Solidi A, 1998, 165, 43-48.	1.7	12
26	Interactions of Bacteriophages and Bacteria at the Airway Mucosa: New Insights Into the Pathophysiology of Asthma. Frontiers in Allergy, 2020, 1, 617240.	2.8	12
27	Evaluation of Inkjet-Printed Reduced and Functionalized Water-Dispersible Graphene Oxide and Graphene on Polymer Substrateâ€"Application to Printed Temperature Sensors. Nanomaterials, 2021, 11, 2025.	4.1	12
28	Study and Evaluation of a PCB-MEMS Liquid Microflow Sensor. Sensors, 2010, 10, 8981-9001.	3.8	11
29	A Disposable Inkjet-Printed Humidity and Temperature Sensor Fabricated on Paper. Proceedings (mdpi), 2018, 2, .	0.2	11
30	Flexible Inkjet-Printed Heaters Utilizing Graphene-Based Inks. Sensors, 2022, 22, 1173.	3.8	11
31	Novel microfluidic flow sensor based on a microchannel capped by porous silicon. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1474-1479.	1.8	10
32	A wireless sensor network for building structural health monitoring and seismic detection. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 3834-3838.	0.8	10
33	Study of flow and pressure field in microchannels with various cross-section areas. Microelectronic Engineering, 2010, 87, 827-829.	2.4	9
34	A screen-printed flexible flow sensor. Measurement Science and Technology, 2017, 28, 055105.	2.6	9
35	A thermal accelerometer directly integrated on organic substrate. Procedia Engineering, 2011, 25, 643-646.	1.2	7
36	New Erbium Silicide Superstructures: A Study by High Resolution Electron Microscopy. Physica Status Solidi A, 1996, 158, 107-116.	1.7	6

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37	A novel system for displacement sensing, integrated on a plastic substrate. Microelectronics Journal, 2009, 40, 1387-1392.	2.0	6
38	A pumping actuator implemented on a PCB substrate by employing water electrolysis. Microelectronic Engineering, 2012, 95, 65-70.	2.4	6
39	Design and Evaluation of a Multidirectional Thermal Flow Sensor on Flexible Substrate. Journal of Sensors, 2019, 2019, 1-10.	1.1	6
40	Implantation masking technology for selective porous silicon formation. Physica Status Solidi A, 2003, 197, 241-245.	1.7	5
41	Impedance Study of Dopamine Effects after Application on 2D and 3D Neuroblastoma Cell Cultures Developed on a 3D-Printed Well. Chemosensors, 2019, 7, 6.	3.6	5
42	Bioelectrical Analysis of Various Cancer Cell Types Immobilized in 3D Matrix and Cultured in 3D-Printed Well. Biosensors, 2019, 9, 136.	4.7	5
43	A fully printed flexible multidirectional thermal flow sensor. Flexible and Printed Electronics, 2020, 5, 035005.	2.7	5
44	Resistivity study of inkjet-printed structures and electrical interfacing on flexible substrates. Micro and Nano Engineering, 2022, 15, 100129.	2.9	5
45	A CMOS compatible thermal accelerometer without solid proof mass, based on porous silicon thermal isolation. , 0, , .		4
46	A Bioelectronic System to Measure the Glycolytic Metabolism of Activated CD4+ T Cells. Biosensors, 2019, 9, 10.	4.7	4
47	Evaluation of Cancer Cell Lines by Four-Point Probe Technique, by Impedance Measurements in Various Frequencies. Biosensors, 2021, 11, 345.	4.7	4
48	Modelling and evaluation of a thermal microfluidic sensor fabricated on plastic substrate. Microsystem Technologies, 2012, 18, 359-364.	2.0	3
49	A PCB Based Engine Air Intake Sensor â€“ Application to a Typical Low Power Engine. Procedia Engineering, 2016, 168, 59-62.	1.2	3
50	A thermal flow sensor with a 3D printed housing for spirometry applications. Microelectronic Engineering, 2020, 226, 111286.	2.4	3
51	A thermal vacuum sensor fabricated on plastic substrate â€“ Study in various operation modes. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2639-2642.	1.8	2
52	Simulation and Experimental Evaluation of Gas Mass Flow Transfer Rate in Microchannels. Procedia Engineering, 2011, 25, 447-450.	1.2	1
53	A multi-range PCB-MEMS microfluidic flow sensor with adjustable sensitivity. Procedia Engineering, 2011, 25, 799-802.	1.2	1
54	Gas-mass-flow transfer-rate simulation and experimental evaluation in microchannels. Microsystem Technologies, 2013, 19, 1919-1925.	2.0	1

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55	Thermal Flow Measurements by a Flexible Sensor, Implemented on the External Surface of the Flow Channel. Procedia Engineering, 2014, 87, 1366-1369.	1.2	1
56	Study of the dopamine effect into cell solutions by impedance analysis. Journal of Physics: Conference Series, 2017, 931, 012010.	0.4	1
57	A Novel Engine Air Intake Sensor based on 3D Printing and PCB technology. , 2021, , .		1
58	Evaluation of a gas flow sensor implemented on organic substrate. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 3839-3842.	0.8	0
59	Modelling and evaluation of a thermal microfluidic sensor fabricated on plastic substrate. Procedia Engineering, 2010, 5, 1328-1331.	1.2	0
60	A PCB integrated actuator employing water electrolysis for use in microfluidic systems. Procedia Engineering, 2011, 25, 467-470.	1.2	0
61	Flow reattachment point detection via thermal sensors - PIVevaluation. Procedia Engineering, 2011, 25, 487-490.	1.2	0
62	A Portable Control and Measurement System for Thermal Sensors Interfacing. Procedia Engineering, 2016, 168, 1702-1705.	1.2	0
63	Enhancement Of PEDOT:PSS Seebek Coefficient Using Carbon-Quantum-Dot-Based Nanocomposite Materials: Application To Inkjet Printing On Flexible Substrate. , 2019, , .		0
64	Application of the Boltzmann Transport Equation in the Thickness Determination of Thin Films. , 1996, , 349-353.		0
65	Design of a Mass Air Flow Sensor Employing Additive Manufacturing and Standard Airfoil Geometry. Applied Sciences (Switzerland), 2021, 11, 11579.	2.5	0