List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7091625/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Current-induced light emission from a porous silicon device. IEEE Electron Device Letters, 1991, 12, 691-692.	3.9	316
2	Spatial temperature profiling by semi-passive RFID loggers for perishable food transportation. Computers and Electronics in Agriculture, 2009, 65, 145-154.	7.7	204
3	Active control of combustion instability. Combustion and Flame, 1987, 70, 281-289.	5.2	195
4	Micromachining applications of porous silicon. Thin Solid Films, 1995, 255, 52-58.	1.8	176
5	Thermal flow sensor for liquids and gases based on combinations of two principles. Sensors and Actuators A: Physical, 1999, 73, 7-13.	4.1	166
6	Lightâ€emitting porous silicon diode with an increased electroluminescence quantum efficiency. Applied Physics Letters, 1993, 62, 2700-2702.	3.3	164
7	Applying autonomous sensor systems in logistics—Combining sensor networks, RFIDs and software agents. Sensors and Actuators A: Physical, 2006, 132, 370-375.	4.1	163
8	Reducing food losses by intelligent food logistics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130302.	3.4	160
9	Silicon microstructuring technology. Materials Science and Engineering Reports, 1996, 17, 1-55.	31.8	157
10	Suppression of combustion instabilities by active control. Journal of Propulsion and Power, 1989, 5, 14-20.	2.2	112
11	Decoupled microgyros and the design principle DAVED. Sensors and Actuators A: Physical, 2002, 95, 239-249.	4.1	96
12	A high-temperature thermopile fabrication process for thermal flow sensors. Sensors and Actuators A: Physical, 2006, 130-131, 262-266.	4.1	91
13	Spatially resolved Raman measurements at electroluminescent porousnâ€silicon. Journal of Applied Physics, 1992, 72, 5401-5408.	2.5	88
14	Micromachined inclinometer with high sensitivity and very good stability. Sensors and Actuators A: Physical, 2002, 97-98, 125-130.	4.1	88
15	The "Intelligent Containerâ€â€"A Cognitive Sensor Network for Transport Management. IEEE Sensors Journal, 2011, 11, 688-698.	4.7	88
16	Absorbing layers for thermal infrared detectors. Sensors and Actuators A: Physical, 1992, 34, 243-248.	4.1	86
17	PEDOT: PSS coating on gold microelectrodes with excellent stability and high charge injection capacity for chronic neural interfaces. Sensors and Actuators B: Chemical, 2018, 275, 382-393.	7.8	81
18	Thermal stability of vapor phase deposited self-assembled monolayers for MEMS anti-stiction. Journal of Micromechanics and Microengineering, 2006, 16, 2259-2264.	2.6	79

#	Article	IF	CITATIONS
19	Ethylene detection in fruit supply chains. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130311.	3.4	79
20	Vapor-Phase Self-Assembled Monolayers for Anti-Stiction Applications in MEMS. Journal of Microelectromechanical Systems, 2007, 16, 1451-1460.	2.5	77
21	A thermoelectric converter for energy supply. Sensors and Actuators A: Physical, 1999, 74, 246-250.	4.1	74
22	Porous silicon electroluminescent devices. Journal of Luminescence, 1993, 57, 341-349.	3.1	69
23	Porous silicon: A novel material for microsystems. Sensors and Actuators A: Physical, 1995, 51, 31-36.	4.1	69
24	A Temperature Compensation Circuit for Thermal Flow Sensors Operated in Constant-Temperature-Difference Mode. IEEE Transactions on Instrumentation and Measurement, 2010, 59, 1715-1721.	4.7	58
25	Sea transport of bananas in containers – Parameter identification for a temperature model. Journal of Food Engineering, 2013, 115, 330-338.	5.2	57
26	From embedded sensors to sensorial materials—The road to function scale integration. Sensors and Actuators A: Physical, 2011, 171, 3-11.	4.1	56
27	Design, fabrication and embedding of microscale interdigital sensors for real-time cure monitoring during composite manufacturing. Sensors and Actuators A: Physical, 2016, 243, 123-133.	4.1	55
28	Structuring of membrane sensors using sacrificial porous silicon. Sensors and Actuators A: Physical, 2000, 84, 315-323.	4.1	54
29	Remote quality monitoring in the banana chain. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130303.	3.4	54
30	Blue and green electroluminescence from a porous silicon device. IEEE Electron Device Letters, 1993, 14, 317-319.	3.9	53
31	Application of porous silicon as a sacrificial layer. Sensors and Actuators A: Physical, 1994, 43, 239-242.	4.1	52
32	Integration Without Disruption: The Basic Challenge of Sensor Integration. IEEE Sensors Journal, 2014, 14, 2102-2111.	4.7	50
33	Electroluminescence from porous silicon after metal deposition into the pores. Thin Solid Films, 1995, 255, 49-51.	1.8	49
34	Application of a miniaturised packed gas chromatography column and a SnO2 gas detector for analysis of low molecular weight hydrocarbons with focus on ethylene detection. Sensors and Actuators B: Chemical, 2013, 180, 43-49.	7.8	49
35	A fast and sensitive catalytic gas sensors for hydrogen detection based on stabilized nanoparticles as catalytic layer. Sensors and Actuators B: Chemical, 2014, 193, 895-903.	7.8	49
36	Enhanced Blue-Light Emission from an Indium-Treated Porous Silicon Device. Japanese Journal of Applied Physics, 1994, 33, 6075-6077.	1.5	44

#	Article	IF	CITATIONS
37	Toward Flexible Thermoelectric Flow Sensors: A New Technological Approach. Journal of Microelectromechanical Systems, 2008, 17, 1114-1119.	2.5	44
38	A new silicon rate gyroscope. Sensors and Actuators A: Physical, 1999, 73, 45-51.	4.1	43
39	Detection limit improvement for NDIR ethylene gas detectors using passive approaches. Sensors and Actuators B: Chemical, 2012, 175, 246-254.	7.8	43
40	Reflexions on the future of microsystems. Sensors and Actuators A: Physical, 1999, 72, 1-15.	4.1	42
41	Dynamic localization based on spatial reasoning with RSSI in wireless sensor networks for transport logistics. Sensors and Actuators A: Physical, 2011, 171, 421-428.	4.1	42
42	Miniaturized Flexible Interdigital Sensor for <italic>In Situ</italic> Dielectric Cure Monitoring of Composite Materials. IEEE Sensors Journal, 2014, 14, 2193-2197.	4.7	42
43	A Fungus Spores Dataset and a Convolutional Neural Network Based Approach for Fungus Detection. IEEE Transactions on Nanobioscience, 2018, 17, 281-290.	3.3	42
44	Response time of thermal flow sensors with air as fluid. Sensors and Actuators A: Physical, 2011, 172, 15-20.	4.1	41
45	Semi-passive RFID and beyond: steps towards automated quality tracing in the food chain. International Journal of Radio Frequency Identification Technology and Applications, 2007, 1, 247.	0.5	40
46	A Multi-Channel, Flex-Rigid ECoG Microelectrode Array for Visual Cortical Interfacing. Sensors, 2015, 15, 832-854.	3.8	40
47	Resonant Raman scattering and photoluminescence studies of porous silicon membranes. Journal of Applied Physics, 1996, 79, 8664-8668.	2.5	38
48	Electroluminescent performance of porous silicon. Thin Solid Films, 1992, 222, 196-199.	1.8	37
49	Wireless Power Transmission for Structural Health Monitoring of Fiber-Reinforced-Composite Materials. IEEE Sensors Journal, 2014, 14, 2171-2176.	4.7	37
50	High sensitive and selective ethylene measurement by using a large-capacity-on-chip preconcentrator device. Sensors and Actuators B: Chemical, 2014, 197, 405-413.	7.8	36
51	Anisotropic etching of germanium. Sensors and Actuators A: Physical, 1995, 46, 35-37.	4.1	34
52	Boundary Layer Separation and Reattachment Detection on Airfoils by Thermal Flow Sensors. Sensors, 2012, 12, 14292-14306.	3.8	34
53	New designs of micromachined vibrating rate gyroscopes with decoupled oscillation modes. Sensors and Actuators A: Physical, 1998, 66, 118-124.	4.1	32
54	Design and fabrication of novel multi-channel floating neural probes for intracortical chronic recording. Sensors and Actuators A: Physical, 2016, 247, 125-135.	4.1	32

#	Article	IF	CITATIONS
55	A thin film bolometer using porous silicon technology. Sensors and Actuators A: Physical, 1994, 43, 185-187.	4.1	31
56	Testing network protocols and signal attenuation in packed food transports. International Journal of Sensor Networks, 2011, 9, 170.	0.4	31
57	Gas phase hydrophobisation of MEMS silicon structures with self-assembling monolayers for avoiding in-use sticking. Sensors and Actuators B: Chemical, 2007, 126, 13-17.	7.8	29
58	Membrane-based thermal flow sensors on flexible substrates. Sensors and Actuators A: Physical, 2013, 195, 113-122.	4.1	29
59	Miniature 3D Gas Chromatography Columns with Integrated Fluidic Connectors Using High-resolution Stereolithography Fabrication. Procedia Engineering, 2015, 120, 703-706.	1.2	29
60	A Thermoelectric Energy Harvester Directly Embedded Into Casted Aluminum. IEEE Electron Device Letters, 2012, 33, 233-235.	3.9	28
61	Embedding Piezoresistive Pressure Sensors to Obtain Online Pressure Profiles Inside Fiber Composite Laminates. Sensors, 2015, 15, 7499-7511.	3.8	28
62	The Benefits of Embedded Intelligence – Tasks and Applications for Ubiquitous Computing in Logistics. , 2008, , 105-122.		28
63	A miniaturized catalytic gas sensor for hydrogen detection based on stabilized nanoparticles as catalytic layer. Sensors and Actuators B: Chemical, 2013, 187, 420-425.	7.8	27
64	Influence of the electrode distance and metal ion concentration on the resulting structure in electrochemical micromachining with structured counter electrodes. International Journal of Machine Tools and Manufacture, 2013, 72, 25-31.	13.4	27
65	A Gas Chromatographic System for the Detection of Ethylene Gas Using Ambient Air as a Carrier Gas. Sensors, 2017, 17, 2283.	3.8	27
66	Heat transport from a chip. IEEE Transactions on Electron Devices, 1990, 37, 958-963.	3.0	26
67	The silicon angular rate sensor system DAVED®. Sensors and Actuators A: Physical, 2000, 84, 280-284.	4.1	26
68	Stabilizing Catalytically Active Nanoparticles by Ligand Linking: Toward Three-Dimensional Networks with High Catalytic Surface Area. Langmuir, 2014, 30, 5564-5573.	3.5	25
69	A Flexible 202-Channel Epidural ECoG Array With PEDOT: PSS Coated Electrodes for Chronic Recording of the Visual Cortex. IEEE Sensors Journal, 2019, 19, 820-825.	4.7	25
70	New Results on Electroluminescence from Porous Silicon. Materials Research Society Symposia Proceedings, 1992, 283, 343.	0.1	24
71	Photoluminescence and Raman studies of porous silicon in polymethyl methacrylate. Applied Physics Letters, 1994, 64, 613-615.	3.3	24
72	Challenges and opportunities in remote monitoring of perishable products. Food Packaging and Shelf Life, 2017, 14, 18-25.	7.5	24

#	Article	IF	CITATIONS
73	Cross-coupling of the oscillation modes of vibratory gyroscopes. , 0, , .		23
74	New digital readout electronics for capacitive sensors by the example of micro-machined gyroscopes. Sensors and Actuators A: Physical, 2002, 97-98, 557-562.	4.1	22
75	Dynamic indoor localization using multilateration with RSSI in wireless sensor networks for transport logistics. Procedia Engineering, 2010, 5, 220-223.	1.2	22
76	A thin-film bolometer for radiation thermometry at ambient temperature. Sensors and Actuators A: Physical, 1990, 22, 473-477.	4.1	20
77	Modeling of the Response Time of Thermal Flow Sensors. Micromachines, 2011, 2, 385-393.	2.9	20
78	Merging ethylene NDIR gas sensors with preconcentrator-devices for sensitivity enhancement. Sensors and Actuators B: Chemical, 2012, 170, 21-27.	7.8	20
79	Embedded Strain Gauges for Condition Monitoring of Silicone Gaskets. Sensors, 2014, 14, 12387-12398.	3.8	19
80	What Can MEMS Do for Logistics of Food? Intelligent Container Technologies: A Review. IEEE Sensors Journal, 2016, 16, 6810-6818.	4.7	19
81	An Assessment of Surface Treatments for Adhesion of Polyimide Thin Films. Polymers, 2021, 13, 1955.	4.5	19
82	Ligand-stabilized Pt nanoparticles (NPs) as novel materials for catalytic gas sensing: influence of the ligand on important catalytic properties. Physical Chemistry Chemical Physics, 2014, 16, 21243-21251.	2.8	18
83	Highly Stable PEDOT:PSS Coating on Gold Microelectrodes with Improved Charge Injection Capacity for Chronic Neural Stimulation. Proceedings (mdpi), 2017, 1, .	0.2	18
84	Novel catalytic gas sensors based on functionalized nanoparticle layers. Sensors and Actuators B: Chemical, 2012, 174, 145-152.	7.8	17
85	Temperature Modulation of a Catalytic Gas Sensor. Sensors, 2014, 14, 20372-20381.	3.8	17
86	Detection of Ethylene Using Gas Chromatographic System. Procedia Engineering, 2016, 168, 380-383.	1.2	17
87	Fungus Detection Through Optical Sensor System Using Two Different Kinds of Feature Vectors for the Classification. IEEE Sensors Journal, 2017, 17, 5341-5349.	4.7	17
88	A pressure sensor based on a nitride membrane using single-crystalline piezoresistors. Sensors and Actuators A: Physical, 1996, 54, 488-492.	4.1	16
89	Convection-based micromachined inclinometer using SOI technology. , 0, , .		16
90	Versatile Crackâ€Free Ceramic Micropatterns Made by a Modified Molding Technique. Journal of the American Ceramic Society, 2010, 93, 2574-2578.	3.8	16

#	Article	IF	CITATIONS
91	A model for the electroluminescence of porous n-silicon. Journal of Luminescence, 1993, 57, 163-167.	3.1	15
92	Influence of different metallic contacts on porous silicon electroluminescence. Thin Solid Films, 1996, 276, 159-163.	1.8	15
93	Optical Characterization of Free-Standing Porous Silicon Films. Journal of Porous Materials, 1997, 4, 227-237.	2.6	15
94	Application of Neurocomputing for Data Approximation and Classification in Wireless Sensor Networks. Sensors, 2009, 9, 3056-3077.	3.8	15
95	A micromachined preconcentrator for ethylene monitoring system. Sensors and Actuators B: Chemical, 2010, 151, 304-307.	7.8	15
96	A microfluidic preconcentrator for enhanced monitoring of ethylene gas. Sensors and Actuators A: Physical, 2011, 167, 226-230.	4.1	15
97	Microlens array production in a microtechnological dry etch and reflow process for display applications. Journal of the European Optical Society-Rapid Publications, 0, 7, .	1.9	15
98	Accelerated soak performance of BPDA-PPD polyimide for implantable MEAs. Procedia Engineering, 2015, 120, 36-40.	1.2	15
99	Sensors on a plasticized thermoset substrate for cure monitoring of CFRP production. Sensors and Actuators A: Physical, 2017, 267, 560-566.	4.1	15
100	Harmonic frequency generation by oscillating flames. Combustion and Flame, 1991, 83, 253-262.	5.2	14
101	Porous silicon light-emitting p-n junction. Journal of Luminescence, 1993, 57, 169-173.	3.1	14
102	Micromachined switches for low electric loads. Sensors and Actuators A: Physical, 1999, 74, 203-206.	4.1	14
103	Sensorial materials—A vision about where progress in sensor integration may lead to. Sensors and Actuators A: Physical, 2011, 171, 1-2.	4.1	14
104	Minimum Detectable Air Velocity by Thermal Flow Sensors. Sensors, 2013, 13, 10944-10953.	3.8	14
105	Systems for locally resolved measurements of physical loads in manufacturing processes. CIRP Annals - Manufacturing Technology, 2015, 64, 495-498.	3.6	14
106	Investigations on the Impact of Material-Integrated Sensors with the Help of FEM-Based Modeling. Sensors, 2015, 15, 2336-2353.	3.8	14
107	Design and Manufacturing of a Disposable, Cyclo-Olefin Copolymer, Microfluidic Device for a Biosensor â€. Sensors, 2019, 19, 1178.	3.8	14
108	Hybrid directed energy deposition for fabricating metal structures with embedded sensors. Additive Manufacturing, 2020, 35, 101397.	3.0	14

#	Article	IF	CITATIONS
109	Silicon nitride membrane sensors with monocrystalline transducers. Sensors and Actuators A: Physical, 1995, 51, 71-75.	4.1	13
110	A highly sensitive catalytic gas sensor for hydrogen detection based on sputtered nanoporous platinum. Procedia Engineering, 2010, 5, 123-126.	1.2	13
111	Sensor integration in rubber gaskets for structural health monitoring made by compression molding. Polymer Testing, 2015, 48, 31-36.	4.8	13
112	Light-emitting diodes in porous silicon. Sensors and Actuators A: Physical, 1994, 43, 153-156.	4.1	12
113	Electrostatically actuated micromirror devices in silicon technology. Sensors and Actuators A: Physical, 1999, 74, 216-218.	4.1	12
114	A multi-purpose ultrasonic streaming mixer for integrated magnetic bead ELISAs. Journal of Micromechanics and Microengineering, 2015, 25, 104001.	2.6	12
115	Smart aluminum components: Printed sensors for integration into aluminum during high-pressure casting. Journal of Manufacturing Processes, 2017, 26, 166-172.	5.9	12
116	Silicon-Based Microfabrication of Free-Floating Neural Probes and Insertion Tool for Chronic Applications. Micromachines, 2018, 9, 131.	2.9	12
117	Online Monitoring of Moisture Diffusion in Carbon Fiber Composites Using Miniaturized Flexible Material Integrated Sensors. Sensors, 2019, 19, 1748.	3.8	12
118	Towards Long-Term Stable Polyimide-Based Flexible Electrical Insulation for Chronically Implanted Neural Electrodes. Micromachines, 2021, 12, 1279.	2.9	12
119	Influence of rapid thermal oxidation on differently prepared porous silicon. Thin Solid Films, 1995, 255, 224-227.	1.8	11
120	Anisotropic etching for optical gratings. Sensors and Actuators A: Physical, 1995, 51, 77-80.	4.1	11
121	Ultrafast absorption in freeâ€standing porous silicon films. Applied Physics Letters, 1995, 67, 1966-1968.	3.3	11
122	Interpolation of spatial temperature profiles by sensor networks. , 2011, , .		11
123	Temperature Sensor Measurement System for Firefighter Gloves. Procedia Engineering, 2012, 47, 611-614.	1.2	11
124	Development of a Fully Implantable Recording System for ECoG Signals. , 2013, , .		11
125	Smart Sensors for the Intelligent Container. , 2014, , .		11
126	Testing Lora for food applications - Example application for airflow measurements inside cooled warehouses with apples. Procedia Manufacturing, 2018, 24, 284-289.	1.9	11

#	Article	IF	CITATIONS
127	Characterization and Design Evaluation of Membrane-Based Calorimetric MEMS Sensors for Two-Dimensional Flow Measurement. IEEE Sensors Journal, 2020, 20, 4602-4609.	4.7	11
128	Applications of porous silicon microstructuring. Journal of Micromechanics and Microengineering, 1995, 5, 175-176.	2.6	10
129	Stability of electroluminescence and photoluminescence of porous silicon. Thin Solid Films, 1996, 276, 284-286.	1.8	10
130	A novel flex-rigid and soft-release ECoG array. , 2011, 2011, 2973-6.		10
131	Steel integrated thin film sensors for characterizing grinding processes. Sensors and Actuators A: Physical, 2016, 242, 203-209.	4.1	10
132	Design of Novel Ceramic Preconcentrator and Integration in Gas Chromatographic System for Detection of Ethylene Gas from Ripening Bananas. Sensors, 2018, 18, 2589.	3.8	10
133	Design and Fabrication Challenges of a Highly Sensitive Thermoelectric-Based Hydrogen Gas Sensor. Micromachines, 2019, 10, 650.	2.9	10
134	Transport Scenario for the Intelligent Container. , 2007, , 393-404.		10
135	The Minimum Number of Sensors – Interpolation of Spatial Temperature Profiles in Chilled Transports. Lecture Notes in Computer Science, 2009, , 232-246.	1.3	10
136	Geometrical dispersion of dielectric and optic axes in a monoclinic crystal. Physical Review B, 1982, 26, 7119-7122.	3.2	9
137	Cross-Correlation of Sound Pressure and Heat Release Rate for Oscillating Flames with Several Frequencies Excited. Combustion Science and Technology, 1987, 54, 399-406.	2.3	9
138	A simulation tool for mechanical sensor design. Sensors and Actuators A: Physical, 1992, 32, 521-524.	4.1	9
139	Technology and RBS analysis of porous silicon light-emitting diodes. Thin Solid Films, 1997, 297, 268-271.	1.8	9
140	Anisotropic conductive adhesion of microsensors applied in the instance of a low pressure sensor. Sensors and Actuators A: Physical, 2002, 97-98, 323-328.	4.1	9
141	Condensation Detection Using a Wirelessly Powered RF-Temperature Sensor. IEEE Transactions on Vehicular Technology, 2009, 58, 1667-1672.	6.3	9
142	Temperature stability improvement of thin-film thermopiles by implementation of a diffusion barrier of TiN. , 2009, , .		9
143	Low level ethylene detection using preconcentrator/sensor combinations. , 2010, , .		9
144	Manufacturing of a wear detecting sensor made of 17-4PH steel using standard wafer processing technology. Sensors and Actuators A: Physical, 2011, 171, 34-37.	4.1	9

#	Article	IF	CITATIONS
145	Gas Chromatograph based on Packed μGC-Columns and μ-Preconcentrator Devices for Ethylene Detection in Fruit Logistic Applications. Procedia Engineering, 2012, 47, 486-489.	1.2	9
146	Low-frequency Inductive Power Transmission for Piezo-Wafer-Active-Sensors in the Structural Health Monitoring of Carbon-Fiber-Reinforced-Polymer. Procedia Technology, 2014, 15, 648-657.	1.1	9
147	An Impedance-Based Mold Sensor with on-Chip Optical Reference. Sensors, 2016, 16, 1603.	3.8	9
148	Detection of fungus through an optical sensor system using the histogram of oriented gradients. , 2016, , .		9
149	Measuring Material Moisture in Fiber Reinforced Polymers by Integrated Sensors. IEEE Sensors Journal, 2018, 18, 3836-3843.	4.7	9
150	Characterization of a highly sensitive and selective hydrogen gas sensor employing Pt nanoparticle network catalysts based on different bifunctional ligands. Sensors and Actuators B: Chemical, 2020, 322, 128619.	7.8	9
151	Shelf Life Prediction by Intelligent RFID – Technical Limits of Model Accuracy. , 2008, , 231-238.		9
152	Excitation wavelength dependence of Raman and photoluminescence spectra of porous Si membranes. Thin Solid Films, 1996, 276, 73-75.	1.8	8
153	Comparison of Several Optical Methods for an Automated Fungal Spore Sensor System Concept. IEEE Sensors Journal, 2016, 16, 5596-5602.	4.7	8
154	Reduction of power consumption and expansion of the measurement range by pulsed excitation of thermal flow sensors. Sensors and Actuators A: Physical, 2017, 265, 313-320.	4.1	8
155	Online monitoring of the curing of adhesives with a miniaturised interdigital sensor using impedance spectroscopy. Journal of Adhesion Science and Technology, 2018, 32, 772-786.	2.6	8
156	Simultaneous Measurement of Strain and Temperature with two Resistive Strain Gauges made from Different Materials. Procedia Manufacturing, 2018, 24, 258-263.	1.9	8
157	Ligand-Linked Nanoparticles-Based Hydrogen Gas Sensor with Excellent Homogeneous Temperature Field and a Comparative Stability Evaluation of Different Ligand-Linked Catalysts. Sensors, 2019, 19, 1205.	3.8	8
158	Ultraviolet light from porous silicon by a microscopic discharge. Journal of Luminescence, 1993, 57, 185-189.	3.1	7
159	Investigation of porous Si grains by optical spectroscopy. Thin Solid Films, 1995, 255, 119-122.	1.8	7
160	Time-resolved electroluminescence of porous silicon. Thin Solid Films, 1996, 276, 164-167.	1.8	7
161	New micromachined membrane switches in silicon technology. IEEE Transactions on Components and Packaging Technologies, 2002, 25, 397-401.	1.3	7
162	Combination of a novel perforated thermoelectric flow and impedimetric sensor for monitoring chemical conversion in micro fluidic channels. Procedia Chemistry, 2009, 1, 1127-1130.	0.7	7

#	Article	IF	CITATIONS
163	Implementation and Verification of a Low-Power UHF/LF Wireless Sensor Network as Part of the Intelligent Container. Procedia Engineering, 2012, 47, 68-71.	1.2	7
164	Failure of Silicon Substrates Embedded in Epoxy Resin. Procedia Technology, 2014, 15, 216-220.	1.1	7
165	Fungus Detection System. , 2016, , .		7
166	Study of resin flow in carbon fiber reinforced polymer composites by means of pressure sensors. Journal of Composite Materials, 2017, 51, 3585-3594.	2.4	7
167	Sensor Integration in Castings Made of Aluminum - New Approaches for Direct Sensor Integration in Aluminum High Pressure Die Casting. Key Engineering Materials, 0, 742, 786-792.	0.4	7
168	Online Monitoring of Composites with a Miniaturized Flexible Combined Dielectric and Temperature Sensor. Proceedings (mdpi), 2017, 1, .	0.2	7
169	Integrating sensors in castings made of aluminum – new approaches for direct sensor integration in gravity die casting. Procedia Manufacturing, 2018, 24, 179-184.	1.9	7
170	Visual epidural field potentials possess high functional specificity in single trials. Journal of Neurophysiology, 2019, 122, 1634-1648.	1.8	7
171	Investigations into packaging technology for membrane-based thermal flow sensors. Journal of Sensors and Sensor Systems, 2015, 4, 45-52.	0.9	7
172	Bulk micromachining of Ge for IR gratings. Journal of Micromechanics and Microengineering, 1996, 6, 46-48.	2.6	6
173	Response time of thermal flow sensors. Procedia Engineering, 2010, 5, 524-527.	1.2	6
174	Advanced Bio-inspired Plausibility Checking in a Wireless Sensor Network Using Neuro-immune Systems: Autonomous Fault Diagnosis in an Intelligent Transportation System. , 2010, , .		6
175	Micropatterning of nanoparticle films by bilayer lift-off. Journal of Micromechanics and Microengineering, 2014, 24, 015001.	2.6	6
176	Design and fabrication of multi-contact flexible silicon probes for intracortical floating implantation. , 2015, , .		6
177	Strain gauge printed on carbon weave for sensing in carbon fiber reinforced plastics. , 2016, , .		6
178	Wireless actuation of piezo-elements for the structural health monitoring of carbon-fiber-reinforced-polymers. Mechatronics, 2016, 34, 128-136.	3.3	6
179	Demonstration of Intracortical Chronic Recording and Acute Microstimulation Using Novel Floating Neural Probes. Proceedings (mdpi), 2017, 1, .	0.2	6
180	Challenges and Opportunities of RFID Sensortags Integration by Fibre-Reinforced Plastic Components Production. Procedia Manufacturing, 2018, 24, 54-59.	1.9	6

#	Article	IF	CITATIONS
181	Design Parameters for the Housing of Two-Dimensional Air Flow Sensors. IEEE Sensors Journal, 2018, 18, 10154-10162.	4.7	6
182	Embedded Wireless Sensor Systems for Resin Flow Monitoring in Glass and Carbon Fiber Composites. IEEE Sensors Journal, 2019, 19, 10654-10661.	4.7	6
183	Using piezoresistive pressure sensors for resin flow monitoring in wind turbine blades. Materials Today: Proceedings, 2021, 34, 140-148.	1.8	6
184	Low-Cost and Highly Sensitive Pressure Sensor with Mold-Printed Multi-Walled Carbon Nanotubes Dispersed in Polydimethylsiloxane. Sensors, 2021, 21, 5069.	3.8	6
185	Embedded Intelligent Objects in Food Logistics Technical Limits of Local Decision Making. , 2011, , 207-228.		6
186	The orientation of water molecules in monoclinic Li2SO4·H2O investigated by light scattering. Journal of Physics and Chemistry of Solids, 1983, 44, 789-791.	4.0	5
187	Novel pressure stable thermoelectric flow sensor in non-steady state operation mode for inline process analysis in micro reactors. Procedia Chemistry, 2009, 1, 148-151.	0.7	5
188	An Experimental Study of Signal Propagation and Network Performance in Monitoring of Food Transportation. , 2009, , .		5
189	Thermoelectric Flow Sensor Integrated Into an Inductively Powered Wireless System. IEEE Sensors Journal, 2012, 12, 1891-1892.	4.7	5
190	Sensorial Surfaces-Embedding Sensor Structures Into the Surface of Materials. IEEE Sensors Journal, 2014, 14, 2078-2083.	4.7	5
191	Cokriging for cross-attribute fusion in sensor networks. Information Fusion, 2015, 24, 137-146.	19.1	5
192	An Investigation on High-Resolution Temperature Measurement in Precision Fly-Cutting. Sensors, 2021, 21, 1530.	3.8	5
193	ONO structures investigated by SIMS, RBS, and NRA. Nuclear Instruments & Methods in Physics Research B, 1992, 64, 650-653.	1.4	4
194	Microtherm: a program for thermal modelling of microstructures. Sensors and Actuators A: Physical, 1995, 47, 637-639.	4.1	4
195	Generating a microplasma with porous silicon. Sensors and Actuators A: Physical, 1996, 53, 284-287.	4.1	4
196	Improved simulation for strongly coupled micro-electro-mechanical systems: resonant vacuum sensor optimization. Sensors and Actuators A: Physical, 1999, 74, 190-192.	4.1	4
197	A mechanically controlled oscillator. Sensors and Actuators A: Physical, 2000, 82, 74-78.	4.1	4
198	Thermoelectric Flow Sensors with Monolithically Integrated Channel Structures for Measurements of Very Small Flow Rates. , 2007, , .		4

12

#	Article	IF	CITATIONS
199	Application of data approximation and classification in measurement systems - comparison of "neural network" and "Least Squares" approximation. , 2008, , .		4
200	Monitoring of Machining Processes Using Sensor Equipped Tools. Advanced Engineering Materials, 2010, 12, 641-645.	3.5	4
201	Merging ethylene NDIR gas sensors with preconcentrator-devices for sensitivity enhancement. Procedia Engineering, 2010, 5, 1192-1195.	1.2	4
202	Dynamic control of data measurement intervals in a networked sensing system using neurocomputing. , 2010, , .		4
203	Design and Fabrication of a Micropreconcentrator Focuser for Sensitivity Enhancement of Chemical Sensing Systems. IEEE Sensors Journal, 2012, 12, 2528-2534.	4.7	4
204	A low-power wireless UHF/LF sensor network with web-based remote supervision — Implementation in the intelligent container. , 2013, , .		4
205	Embedding rigid and flexible inlays in carbon fiber reinforced plastics. , 2014, , .		4
206	On-chip Monitoring of pH Change in Agar-gels during Fungi Growth by Integrating Impedance and Colorimetric Principles. Procedia Engineering, 2014, 87, 373-376.	1.2	4
207	None Hazardous Chemical Method for Etching Thin Film Silicon Nitride Using Aqueous Solutions of Chelating Agents. Procedia Engineering, 2015, 120, 1107-1110.	1.2	4
208	Online Process Monitoring and Control by Dielectric Sensors for a Composite Main Spar. Materials Science Forum, 0, 825-826, 936-943.	0.3	4
209	Computational fluid dynamics modelling of deviating airflow and cooling conditions in banana containers. Acta Horticulturae, 2017, , 193-200.	0.2	4
210	Implications for a Wireless, External Device System to Study Electrocorticography. Sensors, 2017, 17, 761.	3.8	4
211	Screen-Printed Resistive Pressure Sensors: Influence of Electrode Geometry on the Performance and on Cross-Sensitivity to Strain and Temperature. Journal of Physics: Conference Series, 2021, 1837, 012004.	0.4	4
212	Synthesis and Characterization of Ligand‣inked Pt Nanoparticles: Tunable, Threeâ€Dimensional, Porous Networks for Catalytic Hydrogen Sensing. ChemistryOpen, 2021, 10, 697-712.	1.9	4
213	Measuring strain during a cylindrical grinding process using embedded sensors in a workpiece. Journal of Sensors and Sensor Systems, 2017, 6, 331-340.	0.9	4
214	Carbon Nanotubes/Polymer Films for Microsensors Applications. , 2021, , .		4
215	Detection limits of surface contamination analysis by nitrogen-RBS. Surface and Interface Analysis, 1991, 17, 357-362.	1.8	3
216	Lumineszenz in porösem Silizium. Physik in Unserer Zeit, 1993, 24, 63-69.	0.0	3

#	Article	IF	CITATIONS
217	Micro Electro Mechanical Systems: From Research to Applications. Japanese Journal of Applied Physics, 1998, 37, 7047-7051.	1.5	3
218	Humidity measurement by dynamic dew-point detection. , 0, , .		3
219	Fused Silica as Substrate Material for Surface Micromachined Capacitive Pressure Sensors Operable in Touch-Mode. , 0, , .		3
220	A nickel electrostatic curved beam actuator for valve applications. Procedia Engineering, 2010, 5, 1409-1412.	1.2	3
221	Thermoelectric flow sensors on flexible substrates and their integration process. , 2010, , .		3
222	The intelligent container $\hat{a} \in \mathbb{C}$ What can MEMS do for logistics of food?. , 2015, , .		3
223	Plasticisation of Epoxy Resin Transfer Molding Substrate for Fabrication of Interdigital Capacitive Sensors. Procedia Engineering, 2016, 168, 1110-1113.	1.2	3
224	Current driver with read-out HV protection for neural stimulation. , 2016, , .		3
225	Strain gauges based on NBR substrates for the integration into elastic materials. Materials Letters, 2016, 172, 60-63.	2.6	3
226	8-Channel Neural Stimulation ASIC for Epidural Visual Cortex Stimulation. Journal of Circuits, Systems and Computers, 2017, 26, 1740008.	1.5	3
227	HV compliant current driver with on-chip read-out protection switch for neural stimulation. Analog Integrated Circuits and Signal Processing, 2017, 92, 415-426.	1.4	3
228	An efficient and simple embedded system of fungus detection system. , 2017, , .		3
229	Wireless Piezoresistive Pressure Sensors Used for Quality Control in Glass Fiber Composite Laminates. , 2018, , .		3
230	Highly Sensitive and Selective Hydrogen Gas Sensor with Platinum Nanoparticles Linked by 4,4"-Diamino-P-Terphenyl (Dater). , 2019, , .		3
231	A Combined Thin Film/Thick Film Approach to Realize an Aluminum-Based Strain Gauge Sensor for Integration in Aluminum Castings. Sensors, 2020, 20, 3579.	3.8	3
232	Flexible passive LC resonator for wireless measurement during curing of thermosets. Journal of Physics: Conference Series, 2021, 1837, 012001.	0.4	3
233	Wireless Sensor Network for Structural Health Monitoring by Means of Lamb-Waves. , 0, , .		3
234	15 Years of Intelligent Container Research. , 2021, , 227-247.		3

15 Years of Intelligent Container Research. , 2021, , 227-247. 234

#	Article	IF	CITATIONS
235	Digital Twin Features for the Intelligent Container. Lecture Notes in Logistics, 2022, , 217-228.	0.8	3
236	Luminescent Porous Silicon Investigated by accelerator analytics. Materials Research Society Symposia Proceedings, 1992, 281, 531.	0.1	2
237	RF smart-sensor for venous ulcer treatment. , 0, , .		2
238	Simple Modeling of the Thermal Behavior of a Tiny Liquid Splat on a Thermal Microsensor. Journal of Microelectromechanical Systems, 2007, 16, 473-479.	2.5	2
239	Thermodynamic analysis of a novel thermoelectric microdroplet sensor. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	2
240	Inline chemical process analysis in micro-plants based on thermoelectric flow and impedimetric sensors. Measurement Science and Technology, 2010, 21, 105203.	2.6	2
241	Application of bio-inspired data processing in intelligent transportation systems. , 2010, , .		2
242	Strategies for Passive Sensitivity Improvement of NDIR Ethylene Gas Detectors. Procedia Engineering, 2011, 25, 1153-1156.	1.2	2
243	Impedance spectroscopy for detection of mold in archives with an integrated reference measurement. Proceedings of SPIE, 2015, , .	0.8	2
244	Inductive wireless sensor-actuator node for structural health monitoring of fiber reinforced polymers by means of Lamb-waves. Proceedings of SPIE, 2015, , .	0.8	2
245	Material integrated sensors for an optimal baseline selection on a wireless SHM network. , 2016, , .		2
246	Pulsed Excitation of Thermal Flow Sensors for Reduced Power Consumption and Expanded Measurement Range. Procedia Engineering, 2016, 168, 762-765.	1.2	2
247	A Multi-Nozzle Electrospray Emitter for Pneumatically Assisted Electrospray in LC-MS Analysis. Procedia Engineering, 2016, 168, 1366-1369.	1.2	2
248	Membrane-sealed Bioreactor for On-site Autonomous Detection of Fungi Spore Contamination in Archives. Procedia Engineering, 2016, 168, 529-532.	1.2	2
249	Compressed radio transmission of spatial field measurements by virtual sensors. , 2016, , .		2
250	Development of a Fungal Risk Monitor for the next generation of intelligent containersaper. , 2016, , .		2
251	Design and evaluation of a freeform lens by using a method of luminous intensity mapping and a differential equation. , 2017, , .		2
252	Housing design for two-dimensional air flow sensors. , 2017, , .		2

#	Article	IF	CITATIONS
253	Piezoresistive Pressure Sensors for Resin Flow Monitoring in Carbon Fibre-Reinforced Composite. Proceedings (mdpi), 2017, 1, .	0.2	2
254	Surface Integrated Printed Interdigital Structure for Process Monitoring the Curing of an Adhesive Joint. Proceedings (mdpi), 2017, 1, .	0.2	2
255	Experimental and Numerical Investigations in Shallow Cut Grinding by Workpiece Integrated Infrared Thermopile Array. Sensors, 2017, 17, 2250.	3.8	2
256	Printed Sensors for Material Integrated Sensing: Functionalization of Semi-Finished Parts. Proceedings (mdpi), 2017, 1, .	0.2	2
257	In-Vitro and In-Vivo Longevity Evaluation of Free-Floating Intracortical Silicon-Stiffened Neural Probes. , 2019, , .		2
258	Functionalization of Semi-Finished Parts by Printed Interdigital Structures for Cure Monitoring of Adhesive Joints. IEEE Sensors Journal, 2019, 19, 2370-2377.	4.7	2
259	Design and evaluation of a freeform lens-array for a structured light illumination. OSA Continuum, 2021, 4, 774.	1.8	2
260	Towards self-healing biomimetic hair flow sensor. Procedia Manufacturing, 2020, 52, 44-49.	1.9	2
261	Experimental Study on Stress Impact during FML Manufacturing on the Functional Conformity of an Embeddable SHM-Sensor-Node. , 2021, 10, .		2
262	Micro-Oscillator as Integrable Sensor for Structure-Borne Ultrasound. , 2021, 10, .		2
263	Highly porous and electrically insulating films deposited by reactive physical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1990, 8, 4108-4110.	2.1	1
264	Silicon thermal microrelays with multiple switching states. Sensors and Actuators A: Physical, 1997, 62, 612-615.	4.1	1
265	<title>Micromachined angular rate sensor MARS-RR</title> . , 1998, , .		1
266	Contactless Liquid Level Sensing using Wave Damping Phenomena in Free-Space. , 2007, , .		1
267	Ultra Low Tensile Stress Electroplated Nickel Layers: A New Application as Membrane Material for Acoustic Devices. , 2007, , .		1
268	Evaporation Model of Micro-Menisci for Thermoelectric Drop Sensor. , 2007, , .		1
269	Energy saving by using floating input approach in a wireless sensor network. , 2009, , .		1
270	Novel impedimetric and perforated thermal flow sensor for inline chemical process analysis in micro residence time reactors. , 2009, , .		1

#	Article	IF	CITATIONS
271	Robustness in Autonomous and Central Wireless Sensor Network: The Orchard Example. , 2009, , .		1
272	Miniaturized thermal flow sensors with through silicon vias for flip-chip packaging. , 2010, , .		1
273	A nanoparticles based catalytic gas sensor with improved stability. , 2012, , .		1
274	A Miniaturized Catalytic Gas Sensor for Hydrogen Detection Containing a High Porous Catalytic Layer Formed by Dry Lift-Off. Procedia Engineering, 2012, 47, 1149-1152.	1.2	1
275	Embedding without disruption: The basic challenge of sensor integration. , 2012, , .		1
276	Bend sensor based on fibreoptics and concept for a compact evaluation unit. Production Engineering, 2013, 7, 15-22.	2.3	1
277	Development of hydrogenated amorphous carbon thin film with high electrical resistance for use in embedded sensors in abrasive environment. Journal of Intelligent Material Systems and Structures, 2013, 24, 2197-2203.	2.5	1
278	Resistive silicon microstructure for embedding in aluminium during casting. , 2014, , .		1
279	Steel Integrated IR Thermopile Array for Characterizing Grinding Processes. Procedia Engineering, 2016, 168, 1568-1572.	1.2	1
280	Foil-based strain gauges with nanogranular platinum structures for the integration in elastomer gaskets. , 2016, , .		1
281	An easy fabrication process of fully-sealed parylene microfluidic channels with a single deposition step. Microsystem Technologies, 2016, 22, 1927-1932.	2.0	1
282	A flexible multichannel ECoG array with PEDOT-coated electrodes for minimally invasive recording and stimulation. , 2017, , .		1
283	Spatial processing of sensor network data: Demonstrator and feasibility study. , 2017, , .		1
284	Using Allan variance to determine the resolution of ethylene gas chromatographic system. , 2017, , .		1
285	Screen-Printed Interdigital Structure on Flexible RTM6 Substrate. Proceedings (mdpi), 2017, 1, 612.	0.2	1
286	Intelligent Machine Parts: Challenges in the Condition Monitoring of Elastomer Gaskets with Integrated Sensors. Proceedings (mdpi), 2017, 1, .	0.2	1
287	A Disposable, Cyclo-Olefin Copolymer, RNA Microfluidic Sensor for Bacteria Detection. , 2018, , .		1
288	A Micromachined, Membrane Based, Thermoelectric Flow Sensor for 2-Dimensional Measurement with		1

High Angular Resolution. , 2018, , .

#	Article	IF	CITATIONS
289	Influence of strain on miniaturized flexible sensor for on-line monitoring of CFRP production. Procedia Manufacturing, 2018, 24, 173-178.	1.9	1
290	Online monitoring of shape memory polymers with a material integrated flexible interdigital sensor. , 2019, , .		1
291	Using RFID to Monitor the Curing of Aramid Fiber Reinforced Polymers. Lecture Notes in Logistics, 2020, , 441-450.	0.8	1
292	Functional concept for the source independent beam-shaping of LED light. OSA Continuum, 2019, 2, 759.	1.8	1
293	Characterization of specular freeform surfaces from reflected ray directions using experimental ray tracing. Journal of Sensors and Sensor Systems, 2021, 10, 261-270.	0.9	1
294	Thin Chip Flow Sensors for Nonplanar Assembly. , 2011, , 377-387.		1
295	Precise measurement of known and unknown freeform surfaces using Experimental Ray Tracing. , 2019, , .		1
296	Condition Monitoring of O-Ring Seals with Integrated Strain Gauges and Finite Element Analysis Assisted Signal Evaluation. Procedia Manufacturing, 2020, 52, 56-60.	1.9	1
297	Dynamic Decision Making on Embedded Platforms in Transport Logistics – A Case Study. , 2008, , 191-198.		1
298	Luminescent Properties of Rapid Thermal Oxidized Porous Silicon. Materials Research Society Symposia Proceedings, 1994, 342, 85.	0.1	0
299	Fabrication and characterization of porous silicon light-emitting devices. , 1994, , .		0
300	Optimization of micromachined membrane switches. Journal of Micromechanics and Microengineering, 1997, 7, 240-243.	2.6	0
301	Herausforderungen in der Entwicklung passiver HF-Sensoren (Challenges in the Development of) Tj ETQq1 1 0.78	4314 rgB⊺ 0.7	Г /Qverlock
302	Adaptive Production and Inventory Control in Supply Chains against Changing Demand Uncertainty. , 2008, , 143-150.		0
303	SCAR: Sequential Coordinate Routing Algorithm for Autonomous Wireless Sensor Network. , 2008, , .		0
304	Measurement Results of the First Two Chip Silicon Microphone with Low Stress Nickel Membrane Covering Full Audio Range. , 2009, , .		0
305	Adaptive data sensing rate in ad-hoc sensor networks for autonomous transport application. , 2010, , .		0
306	Humidity influence in application of µGC-Systems for ethylene gas with preconcentrator devices and SnO <inf>2</inf> based detectors. , 2011, , .		0

#	Article	IF	CITATIONS
307	Combining Machine-to-Machine Communications with Intelligent Objects in Logistics. Communications in Computer and Information Science, 2012, , 102-112.	0.5	0
308	Monocrystalline-silicon-based thermogenerator with broad temperature working range embedded using metal-spray-deposition. Sensors and Actuators A: Physical, 2014, 216, 417-425.	4.1	0
309	Flexible Flow Measuring System for Measurements on Non-planar Surfaces. Procedia Technology, 2014, 15, 238-247.	1.1	0
310	Strain gauges — Volume embedding vs. surface application. , 2014, , .		0
311	Fabrication of parylene channels embedded in silicon using a single parylene deposition step. Proceedings of SPIE, 2015, , .	0.8	0
312	Sensor Sticker for Detection of Fungi Spore Contamination on Bananas. Advances in Science and Technology, 0, , .	0.2	0
313	In-Situ Sub-Surface Strain Measurement in Deep Rolling Processes. , 2020, , .		0
314	Hybrid Directed Energy Deposition for Fabricating Metal Structures with Embedded Sensors for the Oil and Gas Industry. , 2020, , .		0
315	Development of a Highly Miniaturized PQT-Sensor for Monitoring and Diagnosing of Pneumatic Systems. , 2007, , .		0
316	Optimal Sample Number for Autonomous and Central Wireless Sensor Actuator Network. Lecture Notes in Electrical Engineering, 2010, , 495-505.	0.4	0
317	Characterization of Thermal Flow Sensors for Air Flow Measurements in Transport Containers. Lecture Notes in Logistics, 2013, , 361-370.	0.8	0
318	Linear Guide with Material Integrated Strain Gauges for Structural Health Monitoring. , 0, , .		0
319	Materialintegrierte Sensorik für Fahrzeug-Leichtbautechnik. , 2016, , 191-216.		0
320	Advantages of Sub-GHz Communication in Food Logistics and DASH7 Implementation. Lecture Notes in Logistics, 2017, , 219-228.	0.8	0
321	Airflow Behavior Under Different Loading Schemes and Its Correspondence to Temperature in Perishables Transported in Refrigerated Containers. Lecture Notes in Logistics, 2017, , 481-490.	0.8	0
322	Combining the transformation and the integration methods to design a refractive lens-array for signal lighting applications. , 2017, , .		0
323	Measurement of form and mid-spatial-frequency errors of specular freeform surfaces. , 2019, , .		0
324	Editorial: System-Integrated Intelligence – Intelligent, Flexible and Connected Systems in Products and Production. Procedia Manufacturing, 2020, 52, 1-3.	1.9	0

#	Article	IF	CITATIONS
325	Stainless-Steel Antenna on Conductive Substrate for an SHM Sensor System with High Power Demand. Sensors, 2021, 21, 7841.	3.8	0
326	Online monitoring of thermoplastic crystallization with miniaturized interdigital sensors. , 2020, , .		0
327	Considerations and Limits of Embedding Sensor Nodes for Structural Health Monitoring into Fiber Metal Laminates. Sensors, 2022, 22, 4511.	3.8	0