Bernhard Jakoby

List of Publications by Year
in descending order

398	4,119	147566	189595
papers	citations	31 h-index	50 g-index

408	408	408	2411
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Properties of Love waves: applications in sensors. Smart Materials and Structures, 1997, 6, 668-679.	1.8	201
2	Viscosity sensors for engine oil condition monitoringâ€"Application and interpretation of results. Sensors and Actuators A: Physical, 2005, 121, 327-332.	2.0	160
3	Viscosity sensing using a Love-wave device. Sensors and Actuators A: Physical, 1998, 68, 275-281.	2.0	130
4	Miniaturized sensors for the viscosity and density of liquids-performance and issues. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 111-120.	1.7	121
5	An automotive engine oil viscosity sensor. IEEE Sensors Journal, 2003, 3, 562-568.	2.4	102
6	Integration of impedance spectroscopy sensors in a digital microfluidic platform. Microsystem Technologies, 2012, 18, 1163-1180.	1.2	90
7	Characterizing Vibrating Cantilevers for Liquid Viscosity and Density Sensing. Journal of Sensors, 2008, 2008, 1-9.	0.6	85
8	Evaluation of a vibrating micromachined cantilever sensor for measuring the viscosity of complex organic liquids. Sensors and Actuators A: Physical, 2005, 123-124, 82-86.	2.0	82
9	Non-contact photoacoustic imaging using a fiber based interferometer with optical amplification. Biomedical Optics Express, 2013, 4, 2322.	1.5	72
10	Mid-infrared absorption gas sensing using a silicon strip waveguide. Sensors and Actuators A: Physical, 2018, 277, 117-123.	2.0	67
11	Physical sensors for water-in-oil emulsions. Sensors and Actuators A: Physical, 2004, 110, 28-32.	2.0	66
12	Physical Sensors for Liquid Properties. IEEE Sensors Journal, 2011, 11, 3076-3085.	2.4	64
13	Analysis and experimental verification of a metallic suspended plate resonator for viscosity sensing. Sensors and Actuators A: Physical, 2010, 162, 418-424.	2.0	62
14	A suspended plate viscosity sensor featuring in-plane vibration and piezoresistive readout. Journal of Micromechanics and Microengineering, 2009, 19, 075010.	1.5	57
15	Photonics in the Mid-Infrared: Challenges in Single-Chip Integration and Absorption Sensing. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 452-463.	1.9	57
16	Reduced order models for resonant viscosity and mass density sensors. Sensors and Actuators A: Physical, 2014, 220, 76-84.	2.0	56
17	Simultaneous thermal conductivity and diffusivity sensing in liquids using a micromachined device. Sensors and Actuators A: Physical, 2006, 130-131, 62-67.	2.0	53
18	Analysis and optimization of Love wave liquid sensors. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 1998, 45, 1293-1302.	1.7	51

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19	Methods for the robust measurement of the resonant frequency and quality factor of significantly damped resonating devices. Measurement Science and Technology, 2012, 23, 085107.	1.4	47
20	Application of resonant steel tuning forks with circular and rectangular cross sections for precise mass density and viscosity measurements. Sensors and Actuators A: Physical, 2015, 226, 163-174.	2.0	44
21	A novel molecularly imprinted thin film applied to a Love wave gas sensor. Sensors and Actuators A: Physical, 1999, 76, 93-97.	2.0	43
22	Monitoring macro- and microemulsions using physical chemosensors. Sensors and Actuators A: Physical, 2004, 115, 209-214.	2.0	43
23	Modeling of a clampedâ€“clamped beam vibrating in a fluid for viscosity and density sensing regarding compressibility. Sensors and Actuators A: Physical, 2008, 143, 293-301.	2.0	42
24	Characterization of Evanescent Field Gas Sensor Structures Based on Silicon Photonics. IEEE Photonics Journal, 2018, 10, 1-14.	1.0	42
25	Wafer-to-wafer fusion bonding of oxidized silicon to silicon at low temperatures. Sensors and Actuators A: Physical, 1998, 68, 410-413.	2.0	39
26	A two-dimensional analysis of spurious compressional wave excitation by thickness-shear-mode resonators. Journal of Applied Physics, 2004, 95, 4989-4995.	1.1	37
27	Tunable resonators in the low kHz range for viscosity sensing. Sensors and Actuators A: Physical, 2012, 186, 111-117.	2.0	37
28	Sensing viscosity and density of glycerolâ€“water mixtures utilizing a suspended plate MEMS resonator. Microsystem Technologies, 2012, 18, 1045-1056.	1.2	37
29	Novel magneticâ€“acoustic resonator sensors for remote liquid phase measurement and mass detection. Sensors and Actuators A: Physical, 2008, 145-146, 44-51.	2.0	33
30	Non-contact liquid level measurement with electromagneticâ€“acoustic resonator sensors. Measurement Science and Technology, 2009, 20, 124002.	1.4	32
31	Miniature densityâ€“viscosity measurement cell utilizing electrodynamic-acoustic resonator sensors. Sensors and Actuators A: Physical, 2011, 172, 75-81.	2.0	32
32	Resonant pressure wave setup for simultaneous sensing of longitudinal viscosity and sound velocity of liquids. Measurement Science and Technology, 2013, 24, 125101.	1.4	31
33	Mid-infrared photonic gas sensing using a silicon waveguide and an integrated emitter. Sensors and Actuators B: Chemical, 2018, 274, 60-65.	4.0	30
34	Microacoustic Sensors for Liquid Monitoring. Sensors Update, 2001, 9, 105-160.	0.5	28
35	A resonating rheometer using two polymer membranes for measuring liquid viscosity and mass density. Sensors and Actuators A: Physical, 2011, 172, 82-87.	2.0	28
36	Electromagnetically driven torsional resonators for viscosity and mass density sensing applications. Sensors and Actuators A: Physical, 2015, 229, 182-191.	2.0	28

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37	Novel analog readout electronics for microacoustic thickness shear-mode sensors. IEEE Sensors Journal, 2005, 5, 1106-1111.	2.4	27
38	Yet another precision impedance analyzer (YAPIA)â€"Readout electronics for resonating sensors. Sensors and Actuators A: Physical, 2009, 156, 245-250.	2.0	27
39	Modeling of Infrared Gas Sensors Using a Ray Tracing Approach. IEEE Sensors Journal, 2010, 10, 1691-1698.	2.4	27
40	A vibrating membrane rheometer utilizing electromagnetic excitation. Sensors and Actuators A: Physical, 2008, 145-146, 349-353.	2.0	25
41	The potential of microacoustic SAW- and BAW-based sensors for automotive applications - a review. IEEE Sensors Journal, 2002, 2, 443-452.	2.4	24
42	A micromachined doubly-clamped beam rheometer for the measurement of viscosity and concentration of silicon-dioxide-in-water suspensions. , 2008, , .		22
43	Viscosity sensing in heated alkaline zeolite synthesis media. Physical Chemistry Chemical Physics, 2009, 11, 2854-2857.	1.3	22
44	Sensing the characteristic acoustic impedance of a fluid utilizing acoustic pressure waves. Sensors and Actuators A: Physical, 2012, 186, 94-99.	2.0	22
45	A Magnetic Membrane Actuator in Composite Technology Utilizing Diamagnetic Levitation. IEEE Sensors Journal, 2013, 13, 2786-2791.	2.4	22
46	Temperature-compensated Love-wave sensors on quartz substrates. Sensors and Actuators A: Physical, 2000, 82, 83-88.	2.0	21
47	Novel Readout Electronics for Thickness Shear-Mode Liquid Sensors Compensating for Spurious Conductivity and Capacitances. IEEE Sensors Journal, 2007, 7, 464-469.	2.4	21
48	A concept of an infrared sensor system for oil condition monitoring. Elektrotechnik Und Informationstechnik, 2008, 125, 71-75.	0.7	21
49	Modeling of the fluid-structure interaction in a fluidic sensor cell. Sensors and Actuators A: Physical, 2009, 156, 222-228.	2.0	21
50	Utilizing a high fundamental frequency quartz crystal resonator as a biosensor in a digital microfluidic platform. Sensors and Actuators A: Physical, 2011, 172, 161-168.	2.0	21
51	A CMOS Compatible Pyroelectric Mid-Infrared Detector Based on Aluminium Nitride. Sensors, 2019, 19, 2513.	2.1	20
52	A digital PLL circuit for resonator sensors. Sensors and Actuators A: Physical, 2011, 172, 69-74.	2.0	19
53	A novel measurement method for the thermal properties of liquids by utilizing a bridge-based micromachined sensor. Measurement Science and Technology, 2011, 22, 105407.	1.4	19
54	Measurement error estimation and quality factor improvement of an electrodynamic-acoustic resonator sensor for viscosity measurement. Sensors and Actuators A: Physical, 2013, 199, 318-324.	2.0	19

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55	A novel microacoustic viscosity sensor providing integrated sample temperature control. Sensors and Actuators A: Physical, 2005, 123-124, 274-280.	2.0	18
56	A U-shaped wire for viscosity and mass density sensing. Sensors and Actuators A: Physical, 2014, 214, 245-251.	2.0	18
57	Miniaturized integrated evanescent field IR-absorption sensor: Design and experimental verification with deteriorated lubrication oil. Vibrational Spectroscopy, 2011, 56, 129-135.	1.2	17
58	Fiber-optic annular detector array for large depth of field photoacoustic macroscopy. Photoacoustics, 2017, 5, 1-9.	4.4	17
59	Efficient semi-numerical analysis of acoustic sensors using spectral domain methodsâ€"a review. Measurement Science and Technology, 2008, 19, 052001.	1.4	16
60	Symmetric mechanical plate resonators for fluid sensing. Sensors and Actuators A: Physical, 2015, 232, 319-328.	2.0	16
61	A low-cost viscosity sensor based on electrowetting on dielectrics (EWOD) forces. Sensors and Actuators A: Physical, 2016, 244, 261-269.	2.0	16
62	Sensitivity optimization of a photonic crystal ring resonator for gas sensing applications. Sensors and Actuators A: Physical, 2017, 264, 347-351.	2.0	16
63	Printed strain gauges embedded in organic coatings - Analysis of gauge factor and temperature dependence. Sensors and Actuators A: Physical, 2018, 276, 137-143.	2.0	16
64	Fluid Sensing Using Quartz Tuning Forksâ€"Measurement Technology and Applications. Sensors, 2019, 19, 2336.	2.1	16
65	Scattering of obliquely incident waves by an impedance cylinder with inhomogeneous bianisotropic coating. IEEE Transactions on Antennas and Propagation, 1997, 45, 648-655.	3.1	15
66	Thermal property determination of laminar-flowing fluids utilizing the frequency response of a calorimetric flow sensor. , 2008, , .		15
67	Monitoring of the Dilution of Motor Oil with Diesel Using an Advanced Resonant Sensor System. Procedia Engineering, 2016, 168, 15-18.	1.2	15
68	Printed Strain Gauges Embedded in Organic Coatings. Procedia Engineering, 2016, 168, 822-825.	1.2	15
69	An advanced viscosity and density sensor based on diamagnetically stabilized levitation. Sensors and Actuators A: Physical, 2016, 248, 46-53.	2.0	15
70	Printed Embedded Transducers: Capacitive Touch Sensors Integrated Into the Organic Coating of Metalic Substrates. IEEE Sensors Journal, 2016, 16, 7101-7108.	2.4	15
71	Screen-Printed, Pure Carbon-Black Thermocouple Fabrication and Seebeck Coefficients. Sensors, 2019, 19, 403.	2.1	15
72	Real-time monitoring of a high pressure reactor using a gas density sensor. Sensors and Actuators A: Physical, 2010, 162, 215-219.	2.0	14

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73	Simultaneous measurement of density and viscosity in gases with a quartz tuning fork resonator by tracking of the series resonance frequency. Procedia Engineering, 2011, 25, 1297-1300.	1.2	14
74	An acoustic transmission sensor for the longitudinal viscosity of fluids. Sensors and Actuators A: Physical, 2013, 202, 23-29.	2.0	14
75	Symmetric Plate Resonators for Viscosity and Density Measurement. Procedia Engineering, 2014, 87, 36-39.	1.2	14
76	A photonic silicon waveguide gas sensor using evanescent-wave absorption. , 2016, , .		14
77	Drug dosage for microneedle-based transdermal drug delivery systems utilizing evaporation-induced droplet transport. Microfluidics and Nanofluidics, 2019, 23, 1.	1.0	14
78	Resonant Steel Tuning Forks for Precise Inline Viscosity and Mass Density Measurements in Harsh Environments. Procedia Engineering, 2014, 87, 1139-1142.	1.2	13
79	Fully Screen Printed Thermocouple and Microheater Applied for Time-of-Flight Sensing in Microchannels. IEEE Sensors Journal, 2018, 18, 8685-8692.	2.4	13
80	Analysis of bianisotropic layered structures with laterally periodic inhomogeneities-an eigenoperator formulation. IEEE Transactions on Antennas and Propagation, 1996, 44, 615.	3.1	12
81	Particle manipulation using 3D ac electro-osmotic micropumps. Journal of Micromechanics and Microengineering, 2008, 18, 064016.	1.5	12
82	Efficient spectral domain formulation of loading effects in acoustic sensors. Sensors and Actuators A: Physical, 2012, 186, 38-47.	2.0	12
83	A Viscosity and Density Sensor Based on Diamagnetically Stabilized Levitation. IEEE Sensors Journal, 2015, 15, 1937-1944.	2.4	12
84	Spectroscopic Gas Sensing Using a Silicon Slab Waveguide. Procedia Engineering, 2016, 168, 1265-1269.	1.2	12
85	Transparent, flexible, thin sensor surfaces for passive light-point localization based on two functional polymers. Sensors and Actuators A: Physical, 2016, 239, 70-78.	2.0	12
86	Characterizing the rheological behavior of oil-based liquids: microacoustic sensors versus rotational viscometers. IEEE Sensors Journal, 2005, 5, 850-856.	2.4	11
87	A Novel Sensor System for Liquid Properties Based on a Micromachined Beam and a Low-Cost Optical Readout. , 2007, , .		11
88	Corrosion sensors for engine oilsâ€"laboratory evaluation and field tests. Sensors and Actuators B: Chemical, 2007, 127, 15-21.	4.0	11
89	Characterization of a novel membrane-rheometer utilizing a semi-numerical modelling approach in the spectral domain. Sensors and Actuators A: Physical, 2010, 162, 310-315.	2.0	11
90	A fully spray processed embedded composite thermocouple for the use at high temperatures and harsh environments. Sensors and Actuators A: Physical, 2018, 279, 84-89.	2.0	11

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91	Nucleation of Porous Crystals from Ion-Paired Prenucleation Clusters. Chemistry of Materials, 2022, 34, 7139-7149.	3.2	11
92	A Novel Sensor Monitoring Corrosion Effects of Lubrication Oil in an Integrating Manner. , 0, , .		10
93	Fully Three-Dimensional Analysis of TSM Quartz Sensors Immersed in Viscous Liquids. , 0, , .		10
94	A Novel Combined Rheometer and Density Meter Suitable for Integration in Microfluidic Systems. , 2007, , .		10
95	Dielectrophoretic particle dynamics in alternating-current electro-osmotic micropumps. Applied Physics Letters, 2008, 92, 184101.	1.5	10
96	Density-dependent particle separation in microchannels using 3D AC-driven electro-osmotic pumps. Sensors and Actuators A: Physical, 2009, 156, 115-120.	2.0	10
97	M-line spectroscopy on mid-infrared Si photonic crystals for fluid sensing and chemical imaging. Optics Express, 2016, 24, 262.	1.7	10
98	Numerical and experimental analysis of an acoustic micropump utilizing a flexible printed circuit board as an actuator. Sensors and Actuators A: Physical, 2017, 260, 220-227.	2.0	10
99	Taming parasitic thermal emission by Tamm plasmon polaritons for the mid-infrared. Journal of the Optical Society of America B: Optical Physics, 2018, 35, 1490.	0.9	10
100	The Oscillation Dynamics of Droplets Subject to Electrowetting Actuation. IEEE Sensors Journal, 2019, 19, 1379-1387.	2.4	10
101	A Microfluidic Viscometer With Capacitive Readout Using Screen-Printed Electrodes. IEEE Sensors Journal, 2021, 21, 2565-2572.	2.4	10
102	Highly Sensitive Sensor for Flow Velocity and Flow Direction Measurement. , 2006, , .		9
103	Spectral Resolution of the Grating Coupler of a Miniaturized Integrated Evanescent Field IR Absorption Sensor. IEEE Journal of Quantum Electronics, 2011, 47, 950-958.	1.0	9
104	CO2 monitoring using a simple Fabryâ€“Perot-based germanium bolometer. Sensors and Actuators B: Chemical, 2011, 154, 245-250.	4.0	9
105	Droplet mixing and liquid property tracking using an electrodynamic plate resonator. , 2013, , .		9
106	Resonance parameter estimation from spectral data: CramÃ©râ€“Rao lower bound and stable algorithms with application to liquid sensors. Measurement Science and Technology, 2014, 25, 105303.	1.4	9
107	Moving Electrode Impedance Spectroscopy for Accurate Conductivity Measurements of Corrosive Ionic Media. ACS Sensors, 2020, 5, 3392-3397.	4.0	9
108	Aluminium, gold-tin and titanium-tungsten alloys for mid-infrared plasmonic gratings. Optical Materials Express, 2021, 11, 1058.	1.6	9

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109	Designing Mid-Infrared Gold-Based Plasmonic Slot Waveguides for CO2-Sensing Applications. Sensors, 2021, 21, 2669.	2.1	9
110	Characterizing Resonating Cantilevers for Liquid Property Sensing. , 2006, , .		8
111	Principle of a non-contact liquid level sensor using electromagnetic-acoustic resonators. Elektrotechnik Und Informationstechnik, 2009, 126, 3-7.	0.7	8
112	Viscoelasticity Sensor with Resonance Tuning and Low-Cost Interface. Procedia Engineering, 2011, 25, 623-626.	1.2	8
113	Measuring CO2 concentration with a Fabryâ€“Perot based bolometer using a glass plate as simple infrared filter. Sensors and Actuators B: Chemical, 2012, 170, 143-147.	4.0	8
114	Comparison and experimental validation of two potential resonant viscosity sensors in the kilohertz range. Measurement Science and Technology, 2013, 24, 084005.	1.4	8
115	Temporal change in the electromechanical properties of dielectric elastomer minimum energy structures. Journal of Applied Physics, 2014, 115, 214105.	1.1	8
116	Development and Investigation of Thermal Devices on Fully Porous Silicon Substrates. IEEE Sensors Journal, 2014, 14, 992-997.	2.4	8
117	Highly insulating, fully porous silicon substrates for high temperature micro-hotplates. Sensors and Actuators A: Physical, 2014, 213, 35-42.	2.0	8
118	High-Quality-Factor Photonic Crystal Ring Resonator with Applications for Gas Sensing. Procedia Engineering, 2016, 168, 375-379.	1.2	8
119	Hysteresis and Material Effects of Printed Strain Gauges Embedded in Organic Coatings. Proceedings (mdpi), 2017, 1, 624.	0.2	8
120	A Screen Printed Thermocouple-Array on a Flexible Substrate for Condition Monitoring. Proceedings (mdpi), 2018, 2, .	0.2	8
121	Embedded, Fully Spray-Coated Pressure Sensor Using a Capacitive Transducing Mechanism. Polymers, 2018, 10, 852.	2.0	8
122	Screen printed sensors fabricated on non-planar surfaces by water transfer print. Microelectronic Engineering, 2019, 209, 49-52.	1.1	8
123	A dielectric coating for improved performance of capacitive sensors in all-polymer microfluidic devices. Microelectronic Engineering, 2020, 223, 111220.	1.1	8
124	Asymptotic expansions for Green's dyadics in bianisotropic media (Summary). Journal of Electromagnetic Waves and Applications, 1996, 10, 93-96.	1.0	7
125	Particle separation in alternating-current electro-osmotic micropumps using field-flow fractionation. Microfluidics and Nanofluidics, 2009, 7, 191-203.	1.0	7
126	The relation between relaxation time, mean free path, collision time and drift velocityâ€”pitfalls and a proposal for an approach illustrating the essentials. European Journal of Physics, 2009, 30, 1-12.	0.3	7

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127	Digital phase-locked loop circuit for driving resonant sensors. Procedia Engineering, 2010, 5, 204-207.	1.2	7
128	A liquid properties sensor utilizing pressure waves. , 2011, , .		7
129	Modeling and Experimental Investigation of Resonant Viscosity and Mass Density Sensors Considering their Cross-Sensitivity to Temperature. Procedia Engineering, 2014, 87, 472-475.	1.2	7
130	Modeling of a Highly Optimizable Vertical-Cavity Thermal Emitter for the Mid-Infrared. Procedia Engineering, 2016, 168, 1214-1218.	1.2	7
131	Investigation and Modeling of an Acoustoelectric Sensor Setup for the Determination of the Longitudinal Viscosity. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 2187-2197.	1.7	7
132	Monitoring early zeolite formation via in situ electrochemical impedance spectroscopy. Chemical Communications, 2016, 52, 5478-5481.	2.2	7
133	Revisiting Silicalite-1 Nucleation in Clear Solution by Electrochemical Impedance Spectroscopy. Langmuir, 2017, 33, 2581-2589.	1.6	7
134	Printed strain sensors in organic coatings: In depth analysis of sensor signal effects. Sensors and Actuators A: Physical, 2018, 281, 258-263.	2.0	7
135	Balanced torsionally oscillating pipe used as a viscosity sensor. Measurement Science and Technology, 2019, 30, 015101.	1.4	7
136	Higher-Order Models for Resonant Viscosity and Mass-Density Sensors. Sensors, 2020, 20, 4279.	2.1	7
137	Singularity in Green dyadics for uniaxial bianisotropic media. Electronics Letters, 1995, 31, 779-781.	0.5	7
138	Automatic Design of Microfluidic Gradient Generators. IEEE Access, 2022, 10, 28155-28164.	2.6	7
139	Analysis of guided waves in inhomogeneous bianisotropic cylindrical waveguides. IEEE Transactions on Microwave Theory and Techniques, 1996, 44, 297-310.	2.9	6
140	Sensing Viscosity and Density with a Micromachined Suspended Plate Resonator. Procedia Chemistry, 2009, 1, 1467-1470.	0.7	6
141	A numerically efficient method of modeling interdigitated electrodes for capacitive film sensing. Procedia Engineering, 2011, 25, 431-434.	1.2	6
142	On the Robust Measurement of Resonant Frequency and Quality Factor of Damped Resonating Sensors. Procedia Engineering, 2011, 25, 1537-1540.	1.2	6
143	Utilizing the transient response of an acoustic transmission setup utilizing pressure waves to determine physical liquid parameters. , 2012, , .		6
144	A Flexible Polymer Sensor for Light Point Localization. Procedia Engineering, 2012, 47, 795-800.	1.2	6

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145	Controlled Liquid Flow in a Microfluidic Network with Pressure Sensitive Valves based on Polydimethylsiloxane (PDMS)/Neodymium (NdFeB) Composites. Procedia Engineering, 2012, 47, 382-385.	1.2	6
146	An Acoustic Transmission Sensor for the Characterization of Fluids in Terms of Their Longitudinal Viscosity. Procedia Engineering, 2012, 47, 248-252.	1.2	6
147	Derivation of reduced order models from complex flow fields determined by semi-numeric spectral domain models. Sensors and Actuators A: Physical, 2013, 202, 44-51.	2.0	6
148	Efficient numerical modeling of oscillatory fluid-structure interaction. , 2014, , .		6
149	An Electromagnetically Actuated Oscillating Sphere Used as a Viscosity Sensor. IEEE Sensors Journal, 2014, 14, 1914-1922.	2.4	6
150	Optimal Parameter Estimation Method for Different Types of Resonant Liquid Sensors. Procedia Engineering, 2014, 87, 1581-1584.	1.2	6
151	Validity of Describing Resonant Viscosity and Mass Density Sensors by Linear 2nd Order Resonators. Procedia Engineering, 2014, 87, 644-647.	1.2	6
152	Viscoelasticity and Dielectric Measurement of Small Sample Volume for Diagnostic Platform of Synovial Fluid. Procedia Engineering, 2015, 120, 171-174.	1.2	6
153	Characterization of Viscous and Viscoelastic Fluids Using Parallel Plate Shear-Wave Transducers. IEEE Sensors Journal, 2016, 16, 2950-2957.	2.4	6
154	Temperature Dependence of Gauge Factor of Printed Piezoresistive Layers Embedded in Organic Coatings. Proceedings (mdpi), 2017, 1, 618.	0.2	6
155	Numerical Investigations of Infrared Slot Waveguides for Gas Sensing. Proceedings (mdpi), 2018, 2, 799.	0.2	6
156	Determination of particle distributions from sedimentation measurements using a piezoelectric tuning fork sensor. Sensors and Actuators A: Physical, 2018, 284, 266-275.	2.0	6
157	A frequency-tunable nanomembrane mechanical oscillator with embedded quantum dots. Applied Physics Letters, 2019, 115, .	1.5	6
158	Highly Selective CMOS-Compatible Mid-Infrared Thermal Emitter/Detector Slab Design Using Optical Tamm-States. Materials, 2019, 12, 929.	1.3	6
159	Lab-scale prototyping of polymer based microfluidic devices using gallium as phase-changing sacrificial material. Microelectronic Engineering, 2019, 211, 50-54.	1.1	6
160	Embedded Temperature and Anti-Icing Monitoring Systems Directly Printed on 3D Shaped Substrates. IEEE Sensors Journal, 2020, 20, 5314-5321.	2.4	6
161	Electromechanical resonators for sensing fluid density and viscosityâ€"a review. Measurement Science and Technology, 2022, 33, 012001.	1.4	6
162	Sensing the thermal conductivity of deteriorated mineral oils using a hot-film microsensor. Sensors and Actuators A: Physical, 2005, 123-124, 397-402.	2.0	5

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163	Remote Electromagnetic Excitation of High-Q Silicon Resonator Sensors. , 2006, , .		5
164	Liquid condition monitoring using physical sensors. Procedia Engineering, 2011, 25, 657-664.	1.2	5
165	A study on tunable resonators for rheological measurements. , 2011, , .		5
166	Position-dependent characterization of bone tissue with electrical impedance spectroscopy. , 2012, , .		5
167	Dynamic capacitive extensometry setup for in-situ monitoring of dielectric elastomer actuators. , 2012, , .		5
168	Modeling of large-area sensors with resistive electrodes for passive stimulus-localization. Sensors and Actuators A: Physical, 2013, 202, 37-43.	2.0	5
169	High temperature micro-hotplates on porous silicon substrates. , 2013, , .		5
170	Silicon photonics in the mid-infrared: Waveguide absorption sensors. , 2014, , .		5
171	Microfluidic Device for Acoustophoresis and Dielectrophoresis Assisted Particle and Cell Transfer between Different Fluidic Media. Procedia Engineering, 2015, 120, 691-694.	1.2	5
172	Sensing Physical Fluid Properties in Microcavities Utilizing Diamagnetic Levitation. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	5
173	Microfluidic Pumping Utilizing a PDMS Membrane With an Integrated Nonuniform Open-Porous Foam. IEEE Sensors Journal, 2015, 15, 5109-5114.	2.4	5
174	Design and Analysis of a Slot Photonic Crystal Waveguide for Highly Sensitive Evanescent Field Absorption Sensing in Fluids. Micromachines, 2020, 11, 781.	1.4	5
175	Using Moving Electrode Impedance Spectroscopy to Monitor Particle Sedimentation. IEEE Sensors Journal, 2021, 21, 9636-9641.	2.4	5
176	Optimized design of quartz disc viscosity sensors for the application in harsh chemical environments. , 0, , .		5
177	Driving modes and material stability of a double membrane rheometer and density sensor. Journal of Sensors and Sensor Systems, 2013, 2, 19-26.	0.6	5
178	Screen printed and laminated electrodes for low-cost capacitive level measurement systems. Journal of Electrical Engineering, 2018, 69, 177-182.	0.4	5
179	TE-TM source decomposition for general uniaxial bianisotropic media. Microwave and Optical Technology Letters, 1995, 9, 345-349.	0.9	4
180	Development trends in the field of sensors. Elektrotechnik Und Informationstechnik, 2003, 120, 388-394.	0.7	4

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181	Novel Magnetic-Acoustic Face Shear Mode Resonators for Liquid Property Sensing. , 2007, , .		4
182	Design of a Novel Fully Integrated IR - Absorption Sensor System. , 2007, , .		4
183	A Novel Characterization Method for Thermal Thin-Film Properties Applied toPECVD Silicon Nitride. , 2007, , .		4
184	Estimation of vibration amplitudes for resonating sensors immersed in liquids. Measurement Science and Technology, 2009, 20, 124003.	1.4	4
185	Fast thermo-pneumatic actuation of a thin PDMS membrane using a micro Peltier-element for microfluidic applications. Elektrotechnik Und Informationstechnik, 2009, 126, 70-74.	0.7	4
186	Analog compensation of parasitic sensor signals in a subsampling impedance analyzer circuit for resonating sensors. Procedia Engineering, 2010, 5, 57-61.	1.2	4
187	Modeling of a piezoelectric fluid sensor excited by lateral fields using a spectral domain approach. Procedia Engineering, 2010, 5, 82-86.	1.2	4
188	Gas monitoring with a Fabryâ€“Perot based bolometer: Cross-sensitivity to water vapor. Procedia Engineering, 2010, 5, 1220-1223.	1.2	4
189	A double membrane sensor for liquid viscosity facilitating measurements in a large frequency range. Procedia Engineering, 2010, 5, 1458-1461.	1.2	4
190	Driving Modes and Material Stability of a Vibrating Polyethylene Membrane Viscosity Sensor. Procedia Engineering, 2011, 25, 176-179.	1.2	4
191	Miniaturized Resonating Viscometers Facilitating Measurements at Tunable Frequencies in the Low kHz-Range. Procedia Engineering, 2011, 25, 639-642.	1.2	4
192	Utilizing acoustic pressure waves for sensing fluid properties. Procedia Engineering, 2011, 25, 775-778.	1.2	4
193	Fabry-PÃƒÂ©rot-based thin film structure used as IR-emitter of an NDIR gas sensor: ray tracing simulations and measurements. Proceedings of SPIE, 2011, , .	0.8	4
194	A viscosity sensor utilizing an electromagnetically actuated oscillating sphere. , 2011, , .		4
195	Reactance-locked loop for driving resonant sensors. , 2012, , .		4
196	Modeling and data analysis of a multimode resonator sensor loaded with viscous and viscoelastic fluids. , 2012, , .		4
197	The Effect of Temperature on Resonant Viscosity Sensors. Procedia Engineering, 2012, 47, 786-790.	1.2	4
198	Experimental and theoretical evaluation of the achievable accuracies of resonating viscosity and mass density sensors. , 2013, , .		4

#	Article	IF	Citations
199	Light curtain for 2D large-area object detection. Optics Express, 2013, 21, 12757.	1.7	4
200	A Spiral Spring Resonator for Mass Density and Viscosity Measurements. Procedia Engineering, 2014, 87, 1143-1146.	1.2	4
201	Modeling and fabrication of low-cost electrowetting actuators for flexible microfluidic display applications. , 2016, , .		4
202	Simple Synthetic Jet Actuators for Cooling Applications Using Soft or Rigid Magnets. Procedia Engineering, 2016, 168, 1541-1546.	1.2	4
203	Hybrid Photonic Crystal-Surface Plasmon Polariton Waveguiding System for On-Chip Sensing Applications. Proceedings (mdpi), 2018, 2, .	0.2	4
204	Printed transducers embedded in polymer coatings. Elektrotechnik Und Informationstechnik, 2018, 135, 401-407.	0.7	4
205	Impact of Different Metals on the Performance of Slab Tamm Plasmon Resonators. Sensors, 2020, 20, 6804.	2.1	4
206	Screen Printed Sensor Design for Thermal Flow Velocity Measurement With Intrinsic Compensation of Thermal Fluid Conductivity. IEEE Sensors Journal, 2020, 20, 5698-5704.	2.4	4
207	Design of a Curved Shape Photonic Crystal Taper for Highly Efficient Mode Coupling. Sensors, 2021, 21, 585.	2.1	4
208	Ultra-Narrow SPP Generation from Ag Grating. Sensors, 2021, 21, 6993.	2.1	4
209	Design of a Slab Tamm Plasmon Resonator Coupled to a Multistrip Array Waveguide for the Mid Infrared. Sensors, 2022, 22, 2968.	2.1	4
210	Online Application of Sensors Monitoring Lubricating Oil Properties in Biogas Engines. , 2006, , .		3
211	Determining Thermal Properties of Liquids: Membrane-based versus Bridge-based Micromachined Sensors. , 2006, , .		3
212	3K-4 Acoustic Wave Generation and Detection in Non-Piezoelectric High-Q Resonators. , 2006, , .		3
213	Multi-mode excitation of electromagnetic-acoustic resonant sensor arrays. , 2008, , .		3
214	A micromachined suspended plate viscosity sensor featuring in-plane vibrations and integrated piezoresistive readout. , 2009, , .		3
215	A Novel Oscillating Shear Viscosity Sensor for Complex Liquids. Procedia Chemistry, 2009, 1, 895-898.	0.7	3
216	Improving the Precision of a Compact Subsampling Impedance Analyzer for Resonating Sensors. Procedia Chemistry, 2009, 1, 1335-1338.	0.7	3

#	Article	IF	Citations
217	Gas density sensor for real-time monitoring in a high pressure reactor. Procedia Chemistry, 2009, 1, 108-111.	0.7	3
218	Double membrane sensors for liquid viscosity and mass density facilitating measurements in a large frequency range. , 2010, , .		3
219	Design of an NDIR gas sensor with two non-symmetric Fabry-Perot absorber-structures working as IR-emitter and IR-detector. , 2010, , .		3
220	Electromagnetic-acoustic high-Q silicon resonators for liquid phase sensing. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 1000-1002.	1.7	3
221	Density sensitive driving mode of a double membrane viscometer. , 2011, , .		3
222	Miniaturized viscosity and mass density sensors combined in a measuring cell for handheld applications. , 2012, , .		3
223	A magnetic membrane actuator utilizing diamagnetic levitation. , 2012, , .		3
224	Viscosity Measurement Cell Utilizing Electrodynamic-Acoustic Resonator Sensors: Design Considerations and Issues. Procedia Engineering, 2012, 47, 160-164.	1.2	3
225	Evaluating the Robustness of an Algorithm Determining Key Parameters of Resonant Sensors. Procedia Engineering, 2012, 47, 330-333.	1.2	3
226	A simple mid-infrared measurement system based on a tunable filter for the analysis of ternary gas mixtures. Measurement Science and Technology, 2013, 24, 084006.	1.4	3
227	Bidirectional micromachined flow sensor featuring a hot film made of amorphous germanium. Measurement Science and Technology, 2013, 24, 084002.	1.4	3
228	Theoretical Analysis and Simulation Studies of the Orbiting Sphere Viscometer. IEEE Sensors Journal, 2014, 14, 3669-3676.	2.4	3
229	Ethanol Fermentation as the Basis for Autonomous, Long-term and High-pressure Fluid Transport in Microfluidics. Procedia Engineering, 2015, 120, 100-105.	1.2	3
230	Sensitivity Optimization of Microwave Biosensors. Procedia Engineering, 2016, 168, 634-637.	1.2	3
231	Acoustic Streaming via a Flexible PCB for Micropumping Applications. Procedia Engineering, 2016, 168, 856-859.	1.2	3
232	Fluid Impedance Model for Resonator Viscosity Sensors. Procedia Engineering, 2016, 168, 1012-1015.	1.2	3
233	A Differential Pressure Wave-Based Sensor Setup for the Acoustic Viscosity of Liquids. IEEE Sensors Journal, 2016, 16, 7609-7619.	2.4	3
234	Ethanol fermentation bioreactor for microfluidic actuation. Sensors and Actuators A: Physical, 2016, 240, 145-152.	2.0	3

#	Article	IF	Citations
235	Characterisation of a resonant-cavity enhanced thermal emitter for the mid-infrared. , 2017, , .		3
236	Design of a Mid-Infrared Bandpass Filter With Large Rejection Bandwidth for Silicon Photonics. Journal of Lightwave Technology, 2019, 37, 3770-3776.	2.7	3
237	Implementation of a Density Sensitive Structure in the Torsionally Oscillating Resonant Pipe Viscosity Sensor. IEEE Sensors Journal, 2021, 21, 14693-14700.	2.4	3
238	Microsensors Based on Mechanically Vibrating Structures. , 2012, , 183-193.		3
239	Design, Analysis, and Optimization of a Plasmonic Slot Waveguide for Mid-Infrared Gas Sensing. Nanomaterials, 2022, 12, 1732.	1.9	3
240	On the Transformation of the Maxwell Equations for Inhomogeneous and Anisotropic Media into a Numerically Stable Eigenproblem and its Applications. , 1992, , .		2
241	<title>Micromachined wet cell for a Love-wave liquid sensor</title>. , 1998, 3328, 194.		2
242	Remote electromagnetic excitation of miniaturized in-plane plate resonators for sensing applications. , 2008, , .		2
243	Wavelength selectivity of a thermal IR-absorber as part of a fully integrated IR-absorption sensor. , 2008, , .		2
244	Fluidic sensors based on vibrating miniaturized devices. , 2009, , .		2
245	An efficient semi-numeric model for a novel miniaturized membrane-rheometer. Procedia Chemistry, 2009, 1, 92-95.	0.7	2
246	An electrowetting on dielectrics based lab-on-a-chip utilizing an integrated high fundamental frequency quartz crystal resonator as a biosensor. Procedia Engineering, 2010, 5, 959-964.	1.2	2
247	Shear wave sensors for viscoelastic properties. Procedia Engineering, 2010, 5, 1316-1319.	1.2	2
248	Miniature flow-through resonator cell for density and viscosity sensing. Procedia Engineering, 2010, 5, 1413-1417.	1.2	2
249	A full-wave model of a piezo-electric fluid sensor using lateral field excitation. , 2010, , .		2
250	A semi-numerical model of a lateral field excited piezoelectric fluid sensor. , 2010, , .		2
251	Impedance Spectroscopy of a Human Hepatic 3D Cell Model in-Vitro: A Comparative Study with Differently Shaped Electrodes. Procedia Engineering, 2011, 25, 1000-1003.	1.2	2
252	Modeling of an LFE piezoelectric fluid sensor as layered structure in the spectral domain. Sensors and Actuators A: Physical, 2011, 172, 129-134.	2.0	2

#	Article	IF	Citations
253	Properties of thermal devices and sensors on porous silicon substrates. , 2012, , .		2
254	A comparison of the electromechanical characteristics of dielectric elastomer minimum energy structures (DEMES) and planar dielectric elastomer actuators (p-DEAs). , 2013, , .		2
255	Modeling of piezoelectric tube resonators for liquid sensing applications. , 2013, , .		2
256	Frequency Domain Based Measurement Method for the Thermal Parameters of a Thin-film Diaphragm Embedded in a MEMS Multi-parameter Wind Sensor. Procedia Engineering, 2014, 87, 632-635.	1.2	2
257	Semi-numeric boundary element method for piezoelectric fluid sensors using a fourier spectral approach. , 2014, , .		2
258	Rigorous analytical analysis of resonant Euler-Bernoulli beams with constant thickness and polynomial width. , 2014, , .		2
259	Resonator sensor array for synovial fluid characterization. , 2015, , .		2
260	Acoustic streaming driven by immersed resonator structures. , 2015, , .		2
261	Understanding voltage induction in a short dipole antenna. European Journal of Physics, 2015, 36, 025009.	0.3	2
262	Low-Cost Silver Screen-Printed Electrowetting on Dielectrics Structure for Optofluidic Switches. Procedia Engineering, 2016, 168, 1061-1065.	1.2	2
263	Thermal Properties of a Thin-Film Membrane Embedded in a Multiparameter Wind Sensorâ€"On-Device Characterization Utilizing a Transient Measurement Approach. IEEE Sensors Journal, 2016, 16, 3409-3418.	2.4	2
264	FEM-Simulation and Experimental Realization of Low-Cost Electrowetting Actuators for a Flexible Microfluidic Pixel. IEEE Sensors Journal, 2017, , 1-1.	2.4	2
265	Monitoring of Monosodium Urate Crystallization for the Detection of Crystal Arthropathies in Human Joints. Proceedings (mdpi), 2017, 1, .	0.2	2
266	Acoustic Streaming Actuator and Multifrequency Resonator Sensor. Proceedings (mdpi), 2017, 1, .	0.2	2
267	Photonic Gas Sensor Using a Silicon Strip Waveguide. Proceedings (mdpi), 2017, 1, 547.	0.2	2
268	Evanescent-Wave Gas Sensing Using an Integrated Thermal Light Source. Proceedings (mdpi), 2017, 1, 550.	0.2	2
269	A Spray Processed Polymer-Based High Temperature Organic/Metal Thermocouple for Embedding in Organic Coatings of Steel Substrates. Proceedings (mdpi), 2017, 1, .	0.2	2
270	Efficient Vertical-Cavity Mid-IR Thermal Radiation to Silicon-Slab Waveguide Coupling Using a Shallow Blazed Grating. Proceedings (mdpi), 2017, 1, .	0.2	2

#	Article	IF	Citations
271	Narrow-Band Thermal Photonic Crystal Emitter for Mid-Infrared Applications. Proceedings (mdpi), 2018, 2, 752.	0.2	2
272	FEM Modeling and Capillary Wave Analysis of Electrowetting Induced Droplet Oscillations. , 2018, , .		2
273	Fully Screen Printed Carbon Black-Only Thermocouple and the Corresponding Seebeck Coefficients. Proceedings (mdpi), 2018, 2, 802.	0.2	2
274	A Density and Viscosity Sensor Utilizing a Levitated Permanent Magnet. IEEE Sensors Journal, 2018, 18, 7786-7792.	2.4	2
275	Using an optimized grating as a mid-IR surface plasmon gas sensor utilizing highly doped silicon. , 2019, , .		2
276	Parallel Droplet Deposition via a Superhydrophobic Plate with Integrated Heater and Temperature Sensors. Micromachines, 2020, 11, 354.	1.4	2
277	Embedded Transducers in Polymeric Coatings on Metallic Substrates. IEEE Sensors Journal, 2021, 21, 12444-12456.	2.4	2
278	Determining Liquid Properties Using Mechanically Vibrating Sensors. , 2010, , 95-104.		2
279	Active magnetic levitation and 3-D position measurement for a ball viscometer. Journal of Sensors and Sensor Systems, 2016, 5, 447-455.	0.6	2
280	A multi-parameter physical fluid sensor system for industrial and automotive applications. TM Technisches Messen, 2020, 87, 189-200.	0.3	2
281	Electroosmotic Pump Using a Glass Fiber Filter for High Flow Rate Water Transport. , 2021, , .		2
282	‹title›Integral design of a microacoustic wave-based sensor device‹/title›. , 1998, , .		1
283	Substrates for zero temperature coefficient Love wave sensors. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2000, 47, 701-705.	1.7	1
284	Analysis of viscous losses in the chemical interface layer of Love wave sensors. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2000, 47, 696-700.	1.7	1
285	Analysis of Spurious Effects in Membrane-Based Micromachined Thermal Conductivity Sensors. , 0, , .		1
286	5D-5 Electromagnetic Excitation of High-Q Silicon Face Shear Mode Resonator Sensors. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	1
287	Towards an integrated IR-absorption microsensor for the online monitoring of fluids. Elektrotechnik Und Informationstechnik, 2008, 125, 65-70.	0.7	1
288	Droplet and particle manipulation in emulsions and suspensions using 3D electro-osmotic micropumps. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	1

#	Article	IF	Citations
289	Frequency response of a micromachined doubly-clamped vibrating beam for the measurement of liquid properties. , 2008, , .		1
290	Thermische Kopplungseigenschaften eines Gitterkopplers als zentrales Element eines IR-AbsorptionssensorsGrating-Couplers for Thermal Radiation as an Essential Element of a Fully Integrated IR-Absorption Sensor System. TM Technisches Messen, 2008, 75, 655-661.	0.3	1
291	Simultaneous pumping and density-selective particle focusing using AC-driven electro-osmotic micropumps. , 2009, , .		1
292	A Simple Fabry-Perot-Based Germanium Bolometer for CO2 Monitoring: Simulation and Measurement. Procedia Chemistry, 2009, 1, 1375-1378.	0.7	1
293	Improvement of an evanescent field IR-absorption sensor by utilizing a photonic taper structure. Procedia Engineering, 2010, 5, 1013-1016.	1.2	1
294	Smart analog compensation of spurious signals for a fully differential interface for resonating sensors. , 2010, , .		1
295	Thermal wave propagation and reflection modeling in porous silicon membranes. , 2011, , .		1
296	An efficient method for modeling planar interdigitated electrodes for capacitive sensing. , 2011, , .		1
297	Viscosity and density measurements of glycerol-water mixtures utilizing a novel resonant MEMS sensor. , 2011, , .		1
298	The relation of Tellegen's theorem to the continuous field equations revisited. International Journal of Circuit Theory and Applications, 2011, 39, 411-415.	1.3	1
299	Viscosity measurement cell utilizing electrodynamic-acoustic resonator sensors: Issues and improvements. , 2012, , .		1
300	Application of resonant sensors for magnetic flux density measurements. , 2012, , .		1
301	Complete Semi-Numeric Model of a Double Membrane Liquid Sensor for Density and Viscosity Measurements. Procedia Engineering, 2012, 47, 598-602.	1.2	1
302	Localized Microwave Heating in Microwells for Use as Microreactors in Mobile Lab-on-a-Chip Developments. Experimental Heat Transfer, 2012, 25, 197-205.	2.3	1
303	Magnetic circuits based on polymer composites for controlled actuation of a ferromagnetic sphere at a microfluidic junction. , 2013, , .		1
304	Characterization and calibration of U-shaped mass density and viscosity sensors by an analytical modeling approach. , 2013, , .		1
305	Linking the momentum of the electromagnetic field to the associated photons. European Journal of Physics, 2013, 34, 1575-1579.	0.3	1
306	Concept study on an electrodynamically driven and read-out torsional oscillator. , 2014, , .		1

#	Article	IF	Citations
307	Parallel plates shear-wave transducers for the characterization of viscous and viscoelastic fluids. , 2014, , .		1
308	Transient measurement method for the thermal properties of the thin-film membrane in a multi-parameter wind sensor. , 2014, , .		1
309	Ultrasonic piezoelectric tube resonator for physical liquid property sensing. , 2014, , .		1
310	A broadband grating-coupled silicon nitride waveguide for the mid-IR: characterization and sensitive measurements using an external cavity quantum cascade laser. Applied Physics B: Lasers and Optics, 2014, 116, 325-332.	1.1	1
311	Fluid Dynamics of an Electrowetting-on-dielectrics Tube Oscillator. Procedia Engineering, 2015, 120, 189-193.	1.2	1
312	Printed capacitive touch sensors embedded in organic coatings on sheet steel. , 2015, , .		1
313	Acoustic sensor for in-line monitoring in polymer extrusion dies. , 2015, , .		1
314	Electrochemical impedance spectroscopy for in situ monitoring of early zeolite formation. , 2015, , .		1
315	A Resonant Rolling Sphere Viscometer Using Magnetic Actuation and Readout. Procedia Engineering, 2016, 168, 670-674.	1.2	1
316	On the origin and the calculation of the force in electrostatic actuators. European Journal of Physics, 2016, 37, 045207.	0.3	1
317	Fast method for the calculation of surface bending on circular multilayered piezoelectric structures. , 2016, , .		1
318	Characterizing the geometrical tolerances of optimized vertical-cavity thermal emitter stack configurations for the mid-infrared via Monte Carlo testing. , 2017, , .		1
319	Characterization of silver microheaters for vertical-cavity enhanced resonant thermal emission. , 2017, , .		1
320	The dynamics of EWOD oscillations. , 2017, , .		1
321	A Diffusor/Nozzle Pump Based on a Magnetically Actuated Flexible PCB Diaphragm. Proceedings (mdpi), 2018, 2, .	0.2	1
322	Design and Numerical Evaluation of a Highly Selective CMOS-Compatible Mid-IR Thermal Emitter/Detector Structure Using Optical Tamm-States. Proceedings (mdpi), 2018, 2, 1032.	0.2	1
323	Material screening for fully printed polymer-based thermocouples designed for use in harsh environments. Measurement Science and Technology, 2018, 29, 105104.	1.4	1
324	Monitoring Particle Sedimentation in Conductive Suspensions with Moving Electrode Impedance Spectroscopy. , 2019, , .		1

#	Article	IF	Citations
325	An Inkjet Printed ZNO Based Gas Senor on a Flexible High Temperature Substrate for No₂ Sensing. , 2019, , .		1
326	Simultaneous Microfluidic Flow Velocity and Thermal Conductivity Measurement Utilizing Screen Printed Thermal Sensors. , 2019, , .		1
327	Thermal Condition Monitoring System Fully Printed on a 3D Substrate. , 2019, , .		1
328	Embedded screen-printed transducers in bulk polymer microfluidic devices. Elektrotechnik Und Informationstechnik, 2020, 137, 128-134.	0.7	1
329	Optimizing Heater Electrode and Temperature Distributions on Large Scale Sheet Metal Heaters. , 2021, , .		1
330	Plasmonic Silver Grating for Mid-Infrared Sensing. , 2021, , .		1
331	Numerical analysis of an infrared gas sensor utilizing an indium-tin-oxide-based plasmonic slot waveguide. Journal of Sensors and Sensor Systems, 2022, 11, 15-20.	0.6	1
332	Announcing the 2021 Measurement Science and Technology Outstanding Paper Awards. Measurement Science and Technology, 2022, 33, 070201.	1.4	1
333	Mixed finite elements applied to acoustic wave problems in compressible viscous fluids under piezoelectric actuation. Acta Mechanica, 2022, 233, 1967-1986.	1.1	1
334	Real space Green's function for stacked structures consisting of bianisotropic materials. , 1993, , .		0
335	<title>Performance optimization of a Love wave device for biosensing</title>. , 1998, , .		0
336	A Novel Miniaturized Electromagnetically Excited Vibrating Membrane Rheometer. , 2007, , .		0
337	Messung physikalischer FlÃ¼ssigkeitseigenschaften mit beidseitig eingespannten Balkenstrukturen (Measurement of Liquid Properties Using a Vibrating Clampedâ€“Clamped Beam Structure). TM Technisches Messen, 2008, 75, 84-90.	0.3	0
338	Design of multilayered grating couplers as key elements of a fully integrated IR-absorption sensor. , 2008, , .		0
339	Electromagnetic membrane-pump with an integrated magnetic yoke. , 2009, , .		0
340	Utilizing electromagnetic-acoustic resonators for liquid level sensing. , 2009, , .		0
341	Condition monitoring of viscous liquids using microsensors. Elektrotechnik Und Informationstechnik, 2009, 126, 164-172.	0.7	0
342	Ein prÃziser Impedanzanalysator fÃ¼r resonante SensorenA Precise Impedance Analyser for Resonating Sensors. TM Technisches Messen, 2010, 77, 101-106.	0.3	0

#	Article	IF	Citations
343	Convective flows in 3-dimensional microfluidic networks induced by localized microwave heating. , 2010, , .		0
344	Tunable miniaturized viscosity sensors operating in the kHz-range. , 2011, , .		0
345	A Refined Modeling for the Liquid Loading Effect in Microacoustic Sensors. Procedia Engineering, 2011, 25, 435-438.	1.2	0
346	Impedance spectroscopy on a digital microfluidic platform. , 2011, , .		0
347	Extended model for pressure wave fluid characterization setup including diffraction effects. , 2012, , .		0
348	Monitoring of Gas Mixtures by Means of a Flexible IR-Sensor System Utilizing Tunable Filters. Procedia Engineering, 2012, 47, 285-288.	1.2	0
349	Feasibility of Miniaturized Viscosity Sensors for the Characterization of Suspensions. Procedia Engineering, 2012, 47, 924-928.	1.2	0
350	Resonance characteristics of different operation modes of an orbiting sphere viscometer. , 2012, , .		0
351	Modeling approaches for electrodynamically driven viscosity and mass density sensors operated in the kHz range and experimental verifications. , 2013, , .		0
352	Mid-infrared rib waveguide absorption sensors based on Si. , 2013, , .		0
353	Mechatronics 2012. Measurement Science and Technology, 2013, 24, 080301.	1.4	0
354	U-shaped, wire-based oscillators for rheological applications bridging the gap between 100 Hz and 100 kHz. , 2013, , .		0
355	PDMS membrane with integrated open-porous foam featuring a gradient in pore-size for simultaneous filtration and pumping of fluids in microfluidic structures. , 2014, , .		0
356	Investigation of higher mode excitation of resonant mass density and viscosity sensors. , 2014, , .		0
357	Single-platform Si photonic components for mid-infrared sensing and chemical imaging. Proceedings of SPIE, 2014, , .	0.8	0
358	Introducing polarization and magnetization into Maxwell's equations: A modified approach. American Journal of Physics, 2014, 82, 47-51.	0.3	0
359	Introduction of a general model for the resonance parameters of fluid sensors and validation with recent sensor setups. , 2014, , .		0
360	Impedance Spectroscopy for Silica Nanoparticle Detection in Caco-2 Cells. Procedia Engineering, 2014, 87, 364-368.	1.2	0

#	Article	IF	Citations
361	Concept Studies of Torsional Resonators for Viscosity and Mass Density Sensing Applications. Procedia Engineering, 2014, 87, 1198-1201.	1.2	0
362	Pressure compensation behavior inside an EWOD oscillator. , 2015, , .		0
363	Announcing the 2014Measurement Science and Technologyoutstanding paper awards. Measurement Science and Technology, 2015, 26, 070202.	1.4	0
364	U-shaped wire based resonators for mass density and viscosity sensing. , 2015, , .		0
365	Separate experimental investigation of the influence of liquids' mass densities and viscosities on the frequency response of resonant sensors using designated liquid series. , 2015, , .		0
366	Prototype for Single-cell Impedance Spectroscopy. Procedia Engineering, 2015, 120, 31-35.	1.2	0
367	Announcing the 2015Measurement Science and Technologyoutstanding paper awards. Measurement Science and Technology, 2016, 27, 070101.	1.4	0
368	Ball Viscometer Using Active Magnetic Levitation. Procedia Engineering, 2016, 168, 1525-1528.	1.2	0
369	Fluidic Physical Sensors and Sensor Systems. Advances in Science and Technology, 0, , .	0.2	0
370	Electric field driven extensional rheometry of synovial fluid. , 2016, , .		0
371	Guest Editorial Special Issue on Selected Papers From the IEEE Sensors Conference 2014. IEEE Sensors Journal, 2016, 16, 3348-3348.	2.4	0
372	Intrinsic damping in silicon slab waveguides in the mid-infrared. , 2017, , .		0
373	Modeling of acoustic streaming in viscoelastic fluids. , 2017, , .		0
374	Absorption Based Characterization Method for Fluid Properties Using Electrowetting-on-Dielectric Forces: Modeling and Fabrication. Proceedings (mdpi), 2017, 1, 332.	0.2	0
375	Capacitive Contact Sensor on an Elastic Polymer Sheet. Proceedings (mdpi), 2018, 2, .	0.2	0
376	Sensitivity Comparison of Integrated Mid-Infrared Silicon-Based Photonic Detectors. Proceedings (mdpi), 2018, 2, 796.	0.2	0
377	Characterization of a Vertical-Cavity Enhanced Detector for Narrowband Detection in the Mid-Infrared. Proceedings (mdpi), 2019, 2, .	0.2	0
378	Highly sensitive fluid sensing due to slow light in pillar-based photonic crystal ring resonators. TM Technisches Messen, 2018, 85, 515-520.	0.3	0

#	Article	IF	Citations
379	Announcing the 2017 Measurement Science and Technology Outstanding Paper Awards. Measurement Science and Technology, 2018, 29, 090102.	1.4	0
380	Announcing the 2018 Measurement Science and Technology Outstanding Paper Awards. Measurement Science and Technology, 2019, 30, 120101.	1.4	0
381	Modeling of a CMOS-Compatible Slab Tamm Plasmon Absorber using N-Type Silicon. , 2019, , .		0
382	In-plane Tuning Fork Resonator for Shear-Wave Spectroscopy of Small Samples of Complex Liquids. , 2019, , .		0
383	Parallel Dosing Using a Superhydrophobic, Heated Plate by Evaporation Induced Droplet Transport. , 2019, , .		0
384	Screen Printed Thermal Flow Velocity Sensor for Microfluidic Devices Featuring Intrinsic Compensation of Spurious Heat Transfe. , 2019, , .		0
385	Announcing the 2019 Measurement Science and Technology Outstanding Paper Awards. Measurement Science and Technology, 2020, 31, 080101.	1.4	0
386	An Alternative Path to Foster's Reactance Theorem and Its Relation to Narrow-Band Equivalent Circuits. IEEE Circuits and Systems Magazine, 2020, 20, 32-39.	2.6	0
387	Towards Integrated Plasmonic Gas Sensors in the MWIR. Engineering Proceedings, 2021, 6, .	0.4	0
388	Electromagnetically excited resonator sensors for remote mass detection and liquid phase sensing. , 0, , .		0
389	Electromagnetically Actuated Membrane-Based Micropumps with Integrated Magnetic Yoke. Journal of Microelectronics and Electronic Packaging, 2009, 6, 205-210.	0.8	0
390	On the Modelling of Resonating Fluid Sensors. Lecture Notes in Computer Science, 2012, , 25-32.	1.0	0
391	An electro wetting on dielectrics - system utilizing two different dielectric layers. Houille Blanche, 2013, 99, 57-63.	0.3	0
392	Characterization of a Narrowband Resonant Cavity Enhanced Detector in the Mid-Infrared. , 2018, , .		0
393	Photoacoustic scanning macroscopy with interferometric ultrasound detection based on a fiber-optic ring array. , 2018, , .		0
394	Advanced fluid models for resonant online oil condition monitoring systems. TM Technisches Messen, 2021, .	0.3	0
395	Monitoring Zeolite Formation with Moving Electrode Conductometry. , 2021, , .		0
396	Design of a dual electrochemical quartz crystal microbalance with dissipation monitoring. Journal of Sensors and Sensor Systems, 2022, 11, 21-28.	0.6	0

#	Article	IF	Citations
397	Localized sensing of bulk properties of oils. Materials Today: Proceedings, 2022, , .	0.9	0
398	Efficient and Accurate Modeling of the Surface Deflection of Thin Layers on Composite Substrates with Applications to Piezoelectric Parameter Measurements. Micro, 2022, 2, 369-389.	0.9	0