

Bernhard Jakoby

List of Publications by Year in descending order

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Version: 2024-02-01

398
papers

4,119
citations

147566

31
h-index

189595

50
g-index

408
all docs

408
docs citations

408
times ranked

2411
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1 | Electromechanical resonators for sensing fluid density and viscosity—a review. <i>Measurement Science and Technology</i> , 2022, 33, 012001. | 1.4 | 6 |
| 2 | Numerical analysis of an infrared gas sensor utilizing an indium-tin-oxide-based plasmonic slot waveguide. <i>Journal of Sensors and Sensor Systems</i> , 2022, 11, 15-20. | 0.6 | 1 |
| 3 | Design of a dual electrochemical quartz crystal microbalance with dissipation monitoring. <i>Journal of Sensors and Sensor Systems</i> , 2022, 11, 21-28. | 0.6 | 0 |
| 4 | Automatic Design of Microfluidic Gradient Generators. <i>IEEE Access</i> , 2022, 10, 28155-28164. | 2.6 | 7 |
| 5 | Announcing the 2021 Measurement Science and Technology Outstanding Paper Awards. <i>Measurement Science and Technology</i> , 2022, 33, 070201. | 1.4 | 1 |
| 6 | Design of a Slab Tamm Plasmon Resonator Coupled to a Multistrip Array Waveguide for the Mid Infrared. <i>Sensors</i> , 2022, 22, 2968. | 2.1 | 4 |
| 7 | Mixed finite elements applied to acoustic wave problems in compressible viscous fluids under piezoelectric actuation. <i>Acta Mechanica</i> , 2022, 233, 1967-1986. | 1.1 | 1 |
| 8 | Design, Analysis, and Optimization of a Plasmonic Slot Waveguide for Mid-Infrared Gas Sensing. <i>Nanomaterials</i> , 2022, 12, 1732. | 1.9 | 3 |
| 9 | Localized sensing of bulk properties of oils. <i>Materials Today: Proceedings</i> , 2022, , . | 0.9 | 0 |
| 10 | Nucleation of Porous Crystals from Ion-Paired Prenucleation Clusters. <i>Chemistry of Materials</i> , 2022, 34, 7139-7149. | 3.2 | 11 |
| 11 | Efficient and Accurate Modeling of the Surface Deflection of Thin Layers on Composite Substrates with Applications to Piezoelectric Parameter Measurements. <i>Micro</i> , 2022, 2, 369-389. | 0.9 | 0 |
| 12 | Using Moving Electrode Impedance Spectroscopy to Monitor Particle Sedimentation. <i>IEEE Sensors Journal</i> , 2021, 21, 9636-9641. | 2.4 | 5 |
| 13 | A Microfluidic Viscometer With Capacitive Readout Using Screen-Printed Electrodes. <i>IEEE Sensors Journal</i> , 2021, 21, 2565-2572. | 2.4 | 10 |
| 14 | Design of a Curved Shape Photonic Crystal Taper for Highly Efficient Mode Coupling. <i>Sensors</i> , 2021, 21, 585. | 2.1 | 4 |
| 15 | Implementation of a Density Sensitive Structure in the Torsionally Oscillating Resonant Pipe Viscosity Sensor. <i>IEEE Sensors Journal</i> , 2021, 21, 14693-14700. | 2.4 | 3 |
| 16 | Aluminium, gold-tin and titanium-tungsten alloys for mid-infrared plasmonic gratings. <i>Optical Materials Express</i> , 2021, 11, 1058. | 1.6 | 9 |
| 17 | Designing Mid-Infrared Gold-Based Plasmonic Slot Waveguides for CO ₂ -Sensing Applications. <i>Sensors</i> , 2021, 21, 2669. | 2.1 | 9 |
| 18 | Towards Integrated Plasmonic Gas Sensors in the MWIR. <i>Engineering Proceedings</i> , 2021, 6, . | 0.4 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Embedded Transducers in Polymeric Coatings on Metallic Substrates. IEEE Sensors Journal, 2021, 21, 12444-12456. | 2.4 | 2 |
| 20 | Optimizing Heater Electrode and Temperature Distributions on Large Scale Sheet Metal Heaters. , 2021, , , | | 1 |
| 21 | Plasmonic Silver Grating for Mid-Infrared Sensing. , 2021, , , | | 1 |
| 22 | Ultra-Narrow SPP Generation from Ag Grating. Sensors, 2021, 21, 6993. | 2.1 | 4 |
| 23 | Advanced fluid models for resonant online oil condition monitoring systems. TM Technisches Messen, 2021, , | 0.3 | 0 |
| 24 | Monitoring Zeolite Formation with Moving Electrode Conductometry. , 2021, , , | | 0 |
| 25 | Electroosmotic Pump Using a Glass Fiber Filter for High Flow Rate Water Transport. , 2021, , , | | 2 |
| 26 | Higher-Order Models for Resonant Viscosity and Mass-Density Sensors. Sensors, 2020, 20, 4279. | 2.1 | 7 |
| 27 | 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 |
| 28 | Impact of Different Metals on the Performance of Slab Tamm Plasmon Resonators. Sensors, 2020, 20, 6804. | 2.1 | 4 |
| 29 | Moving Electrode Impedance Spectroscopy for Accurate Conductivity Measurements of Corrosive Ionic Media. ACS Sensors, 2020, 5, 3392-3397. | 4.0 | 9 |
| 30 | Announcing the 2019 Measurement Science and Technology Outstanding Paper Awards. Measurement Science and Technology, 2020, 31, 080101. | 1.4 | 0 |
| 31 | 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 |
| 32 | 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 |
| 33 | A dielectric coating for improved performance of capacitive sensors in all-polymer microfluidic devices. Microelectronic Engineering, 2020, 223, 111220. | 1.1 | 8 |
| 34 | Embedded Temperature and Anti-Icing Monitoring Systems Directly Printed on 3D Shaped Substrates. IEEE Sensors Journal, 2020, 20, 5314-5321. | 2.4 | 6 |
| 35 | Embedded screen-printed transducers in bulk polymer microfluidic devices. Elektrotechnik Und Informationstechnik, 2020, 137, 128-134. | 0.7 | 1 |
| 36 | Parallel Droplet Deposition via a Superhydrophobic Plate with Integrated Heater and Temperature Sensors. Micromachines, 2020, 11, 354. | 1.4 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | A multi-parameter physical fluid sensor system for industrial and automotive applications. <i>TM Technisches Messen</i> , 2020, 87, 189-200. | 0.3 | 2 |
| 38 | Characterization of a Vertical-Cavity Enhanced Detector for Narrowband Detection in the Mid-Infrared. <i>Proceedings (mdpi)</i> , 2019, 2, . | 0.2 | 0 |
| 39 | Design of a Mid-Infrared Bandpass Filter With Large Rejection Bandwidth for Silicon Photonics. <i>Journal of Lightwave Technology</i> , 2019, 37, 3770-3776. | 2.7 | 3 |
| 40 | A CMOS Compatible Pyroelectric Mid-Infrared Detector Based on Aluminium Nitride. <i>Sensors</i> , 2019, 19, 2513. | 2.1 | 20 |
| 41 | A frequency-tunable nanomembrane mechanical oscillator with embedded quantum dots. <i>Applied Physics Letters</i> , 2019, 115, . | 1.5 | 6 |
| 42 | Announcing the 2018 <i>Measurement Science and Technology</i> Outstanding Paper Awards. <i>Measurement Science and Technology</i> , 2019, 30, 120101. | 1.4 | 0 |
| 43 | Fluid Sensing Using Quartz Tuning Forksâ€™ Measurement Technology and Applications. <i>Sensors</i> , 2019, 19, 2336. | 2.1 | 16 |
| 44 | Drug dosage for microneedle-based transdermal drug delivery systems utilizing evaporation-induced droplet transport. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1. | 1.0 | 14 |
| 45 | Screen printed sensors fabricated on non-planar surfaces by water transfer print. <i>Microelectronic Engineering</i> , 2019, 209, 49-52. | 1.1 | 8 |
| 46 | Highly Selective CMOS-Compatible Mid-Infrared Thermal Emitter/Detector Slab Design Using Optical Tamm-States. <i>Materials</i> , 2019, 12, 929. | 1.3 | 6 |
| 47 | Balanced torsionally oscillating pipe used as a viscosity sensor. <i>Measurement Science and Technology</i> , 2019, 30, 015101. | 1.4 | 7 |
| 48 | Lab-scale prototyping of polymer based microfluidic devices using gallium as phase-changing sacrificial material. <i>Microelectronic Engineering</i> , 2019, 211, 50-54. | 1.1 | 6 |
| 49 | Screen-Printed, Pure Carbon-Black Thermocouple Fabrication and Seebeck Coefficients. <i>Sensors</i> , 2019, 19, 403. | 2.1 | 15 |
| 50 | Monitoring Particle Sedimentation in Conductive Suspensions with Moving Electrode Impedance Spectroscopy. , 2019, , . | | 1 |
| 51 | Modeling of a CMOS-Compatible Slab Tamm Plasmon Absorber using N-Type Silicon. , 2019, , . | | 0 |
| 52 | Using an optimized grating as a mid-IR surface plasmon gas sensor utilizing highly doped silicon. , 2019, , . | | 2 |
| 53 | In-plane Tuning Fork Resonator for Shear-Wave Spectroscopy of Small Samples of Complex Liquids. , 2019, , . | | 0 |
| 54 | An Inkjet Printed ZNO Based Gas Sensor on a Flexible High Temperature Substrate for No₂ Sensing. , 2019, , . | | 1 |

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|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Simultaneous Microfluidic Flow Velocity and Thermal Conductivity Measurement Utilizing Screen Printed Thermal Sensors. , 2019, , . | | 1 |
| 56 | Parallel Dosing Using a Superhydrophobic, Heated Plate by Evaporation Induced Droplet Transport. , 2019, , . | | 0 |
| 57 | Thermal Condition Monitoring System Fully Printed on a 3D Substrate. , 2019, , . | | 1 |
| 58 | Screen Printed Thermal Flow Velocity Sensor for Microfluidic Devices Featuring Intrinsic Compensation of Spurious Heat Transfe. , 2019, , . | | 0 |
| 59 | The Oscillation Dynamics of Droplets Subject to Electrowetting Actuation. IEEE Sensors Journal, 2019, 19, 1379-1387. | 2.4 | 10 |
| 60 | 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 |
| 61 | Capacitive Contact Sensor on an Elastic Polymer Sheet. Proceedings (mdpi), 2018, 2, . | 0.2 | 0 |
| 62 | Sensitivity Comparison of Integrated Mid-Infrared Silicon-Based Photonic Detectors. Proceedings (mdpi), 2018, 2, 796. | 0.2 | 0 |
| 63 | Hybrid Photonic Crystal-Surface Plasmon Polariton Waveguiding System for On-Chip Sensing Applications. Proceedings (mdpi), 2018, 2, . | 0.2 | 4 |
| 64 | Narrow-Band Thermal Photonic Crystal Emitter for Mid-Infrared Applications. Proceedings (mdpi), 2018, 2, 752. | 0.2 | 2 |
| 65 | Numerical Investigations of Infrared Slot Waveguides for Gas Sensing. Proceedings (mdpi), 2018, 2, 799. | 0.2 | 6 |
| 66 | A Diffusor/Nozzle Pump Based on a Magnetically Actuated Flexible PCB Diaphragm. Proceedings (mdpi), 2018, 2, . | 0.2 | 1 |
| 67 | A Screen Printed Thermocouple-Array on a Flexible Substrate for Condition Monitoring. Proceedings (mdpi), 2018, 2, . | 0.2 | 8 |
| 68 | FEM Modeling and Capillary Wave Analysis of Electrowetting Induced Droplet Oscillations. , 2018, , . | | 2 |
| 69 | Fully Screen Printed Carbon Black-Only Thermocouple and the Corresponding Seebeck Coefficients. Proceedings (mdpi), 2018, 2, 802. | 0.2 | 2 |
| 70 | 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 |
| 71 | Fully Screen Printed Thermocouple and Microheater Applied for Time-of-Flight Sensing in Microchannels. IEEE Sensors Journal, 2018, 18, 8685-8692. | 2.4 | 13 |
| 72 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Characterization of Evanescent Field Gas Sensor Structures Based on Silicon Photonics. IEEE Photonics Journal, 2018, 10, 1-14. | 1.0 | 42 |
| 74 | Embedded, Fully Spray-Coated Pressure Sensor Using a Capacitive Transducing Mechanism. Polymers, 2018, 10, 852. | 2.0 | 8 |
| 75 | 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 |
| 76 | Mid-infrared absorption gas sensing using a silicon strip waveguide. Sensors and Actuators A: Physical, 2018, 277, 117-123. | 2.0 | 67 |
| 77 | 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 |
| 78 | 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 |
| 79 | 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 |
| 80 | A Density and Viscosity Sensor Utilizing a Levitated Permanent Magnet. IEEE Sensors Journal, 2018, 18, 7786-7792. | 2.4 | 2 |
| 81 | Material screening for fully printed polymer-based thermocouples designed for use in harsh environments. Measurement Science and Technology, 2018, 29, 105104. | 1.4 | 1 |
| 82 | Printed transducers embedded in polymer coatings. Elektrotechnik Und Informationstechnik, 2018, 135, 401-407. | 0.7 | 4 |
| 83 | Announcing the 2017 Measurement Science and Technology Outstanding Paper Awards. Measurement Science and Technology, 2018, 29, 090102. | 1.4 | 0 |
| 84 | 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 |
| 85 | Characterization of a Narrowband Resonant Cavity Enhanced Detector in the Mid-Infrared. , 2018, , . | | 0 |
| 86 | Photoacoustic scanning macroscopy with interferometric ultrasound detection based on a fiber-optic ring array. , 2018, , . | | 0 |
| 87 | Screen printed and laminated electrodes for low-cost capacitive level measurement systems. Journal of Electrical Engineering, 2018, 69, 177-182. | 0.4 | 5 |
| 88 | Fiber-optic annular detector array for large depth of field photoacoustic macroscopy. Photoacoustics, 2017, 5, 1-9. | 4.4 | 17 |
| 89 | FEM-Simulation and Experimental Realization of Low-Cost Electrowetting Actuators for a Flexible Microfluidic Pixel. IEEE Sensors Journal, 2017, , 1-1. | 2.4 | 2 |
| 90 | Characterizing the geometrical tolerances of optimized vertical-cavity thermal emitter stack configurations for the mid-infrared via Monte Carlo testing. , 2017, , . | | 1 |

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|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 91 | Numerical and experimental analysis of an acoustic micropump utilizing a flexible printed circuit board as an actuator. <i>Sensors and Actuators A: Physical</i> , 2017, 260, 220-227. | 2.0 | 10 |
| 92 | Revisiting Silicalite-1 Nucleation in Clear Solution by Electrochemical Impedance Spectroscopy. <i>Langmuir</i> , 2017, 33, 2581-2589. | 1.6 | 7 |
| 93 | Sensitivity optimization of a photonic crystal ring resonator for gas sensing applications. <i>Sensors and Actuators A: Physical</i> , 2017, 264, 347-351. | 2.0 | 16 |
| 94 | Photonics in the Mid-Infrared: Challenges in Single-Chip Integration and Absorption Sensing. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017, 23, 452-463. | 1.9 | 57 |
| 95 | Characterisation of a resonant-cavity enhanced thermal emitter for the mid-infrared. , 2017, , . | | 3 |
| 96 | Intrinsic damping in silicon slab waveguides in the mid-infrared. , 2017, , . | | 0 |
| 97 | Characterization of silver microheaters for vertical-cavity enhanced resonant thermal emission. , 2017, , . | | 1 |
| 98 | Modeling of acoustic streaming in viscoelastic fluids. , 2017, , . | | 0 |
| 99 | The dynamics of EWOD oscillations. , 2017, , . | | 1 |
| 100 | Absorption Based Characterization Method for Fluid Properties Using Electrowetting-on-Dielectric Forces: Modeling and Fabrication. <i>Proceedings (mdpi)</i> , 2017, 1, 332. | 0.2 | 0 |
| 101 | Monitoring of Monosodium Urate Crystallization for the Detection of Crystal Arthropathies in Human Joints. <i>Proceedings (mdpi)</i> , 2017, 1, . | 0.2 | 2 |
| 102 | Acoustic Streaming Actuator and Multifrequency Resonator Sensor. <i>Proceedings (mdpi)</i> , 2017, 1, . | 0.2 | 2 |
| 103 | Photonic Gas Sensor Using a Silicon Strip Waveguide. <i>Proceedings (mdpi)</i> , 2017, 1, 547. | 0.2 | 2 |
| 104 | Evanescent-Wave Gas Sensing Using an Integrated Thermal Light Source. <i>Proceedings (mdpi)</i> , 2017, 1, 550. | 0.2 | 2 |
| 105 | A Spray Processed Polymer-Based High Temperature Organic/Metal Thermocouple for Embedding in Organic Coatings of Steel Substrates. <i>Proceedings (mdpi)</i> , 2017, 1, . | 0.2 | 2 |
| 106 | Temperature Dependence of Gauge Factor of Printed Piezoresistive Layers Embedded in Organic Coatings. <i>Proceedings (mdpi)</i> , 2017, 1, 618. | 0.2 | 6 |
| 107 | Hysteresis and Material Effects of Printed Strain Gauges Embedded in Organic Coatings. <i>Proceedings (mdpi)</i> , 2017, 1, 624. | 0.2 | 8 |
| 108 | Efficient Vertical-Cavity Mid-IR Thermal Radiation to Silicon-Slab Waveguide Coupling Using a Shallow Blazed Grating. <i>Proceedings (mdpi)</i> , 2017, 1, . | 0.2 | 2 |

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|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 109 | Announcing the 2015<i>Measurement Science and Technology</i>outstanding paper awards. <i>Measurement Science and Technology</i> , 2016, 27, 070101. | 1.4 | 0 |
| 110 | Modeling and fabrication of low-cost electrowetting actuators for flexible microfluidic display applications. , 2016, , . | | 4 |
| 111 | Monitoring of the Dilution of Motor Oil with Diesel Using an Advanced Resonant Sensor System. <i>Procedia Engineering</i> , 2016, 168, 15-18. | 1.2 | 15 |
| 112 | High-Quality-Factor Photonic Crystal Ring Resonator with Applications for Gas Sensing. <i>Procedia Engineering</i> , 2016, 168, 375-379. | 1.2 | 8 |
| 113 | Sensitivity Optimization of Microwave Biosensors. <i>Procedia Engineering</i> , 2016, 168, 634-637. | 1.2 | 3 |
| 114 | A Resonant Rolling Sphere Viscometer Using Magnetic Actuation and Readout. <i>Procedia Engineering</i> , 2016, 168, 670-674. | 1.2 | 1 |
| 115 | Acoustic Streaming via a Flexible PCB for Micropumping Applications. <i>Procedia Engineering</i> , 2016, 168, 856-859. | 1.2 | 3 |
| 116 | Fluid Impedance Model for Resonator Viscosity Sensors. <i>Procedia Engineering</i> , 2016, 168, 1012-1015. | 1.2 | 3 |
| 117 | Modeling of a Highly Optimizable Vertical-Cavity Thermal Emitter for the Mid-Infrared. <i>Procedia Engineering</i> , 2016, 168, 1214-1218. | 1.2 | 7 |
| 118 | Spectroscopic Gas Sensing Using a Silicon Slab Waveguide. <i>Procedia Engineering</i> , 2016, 168, 1265-1269. | 1.2 | 12 |
| 119 | Ball Viscometer Using Active Magnetic Levitation. <i>Procedia Engineering</i> , 2016, 168, 1525-1528. | 1.2 | 0 |
| 120 | Simple Synthetic Jet Actuators for Cooling Applications Using Soft or Rigid Magnets. <i>Procedia Engineering</i> , 2016, 168, 1541-1546. | 1.2 | 4 |
| 121 | Printed Strain Gauges Embedded in Organic Coatings. <i>Procedia Engineering</i> , 2016, 168, 822-825. | 1.2 | 15 |
| 122 | A photonic silicon waveguide gas sensor using evanescent-wave absorption. , 2016, , . | | 14 |
| 123 | Low-Cost Silver Screen-Printed Electrowetting on Dielectrics Structure for Optofluidic Switches. <i>Procedia Engineering</i> , 2016, 168, 1061-1065. | 1.2 | 2 |
| 124 | On the origin and the calculation of the force in electrostatic actuators. <i>European Journal of Physics</i> , 2016, 37, 045207. | 0.3 | 1 |
| 125 | A Differential Pressure Wave-Based Sensor Setup for the Acoustic Viscosity of Liquids. <i>IEEE Sensors Journal</i> , 2016, 16, 7609-7619. | 2.4 | 3 |
| 126 | Investigation and Modeling of an Acoustoelectric Sensor Setup for the Determination of the Longitudinal Viscosity. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2016, 63, 2187-2197. | 1.7 | 7 |

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|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 127 | An advanced viscosity and density sensor based on diamagnetically stabilized levitation. Sensors and Actuators A: Physical, 2016, 248, 46-53. | 2.0 | 15 |
| 128 | M-line spectroscopy on mid-infrared Si photonic crystals for fluid sensing and chemical imaging. Optics Express, 2016, 24, 262. | 1.7 | 10 |
| 129 | Printed Embedded Transducers: Capacitive Touch Sensors Integrated Into the Organic Coating of Metallic Substrates. IEEE Sensors Journal, 2016, 16, 7101-7108. | 2.4 | 15 |
| 130 | Electric field driven extensional rheometry of synovial fluid. , 2016, , . | | 0 |
| 131 | Fast method for the calculation of surface bending on circular multilayered piezoelectric structures. , 2016, , . | | 1 |
| 132 | Guest Editorial Special Issue on Selected Papers From the IEEE Sensors Conference 2014. IEEE Sensors Journal, 2016, 16, 3348-3348. | 2.4 | 0 |
| 133 | A low-cost viscosity sensor based on electrowetting on dielectrics (EWOD) forces. Sensors and Actuators A: Physical, 2016, 244, 261-269. | 2.0 | 16 |
| 134 | Characterization of Viscous and Viscoelastic Fluids Using Parallel Plate Shear-Wave Transducers. IEEE Sensors Journal, 2016, 16, 2950-2957. | 2.4 | 6 |
| 135 | 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 |
| 136 | Monitoring early zeolite formation via in situ electrochemical impedance spectroscopy. Chemical Communications, 2016, 52, 5478-5481. | 2.2 | 7 |
| 137 | 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 |
| 138 | Ethanol fermentation bioreactor for microfluidic actuation. Sensors and Actuators A: Physical, 2016, 240, 145-152. | 2.0 | 3 |
| 139 | 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 |
| 140 | Viscoelasticity and Dielectric Measurement of Small Sample Volume for Diagnostic Platform of Synovial Fluid. Procedia Engineering, 2015, 120, 171-174. | 1.2 | 6 |
| 141 | Resonator sensor array for synovial fluid characterization. , 2015, , . | | 2 |
| 142 | Pressure compensation behavior inside an EWOD oscillator. , 2015, , . | | 0 |
| 143 | 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 |
| 144 | Fluid Dynamics of an Electrowetting-on-dielectrics Tube Oscillator. Procedia Engineering, 2015, 120, 189-193. | 1.2 | 1 |

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|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 145 | Microfluidic Device for Acoustophoresis and Dielectrophoresis Assisted Particle and Cell Transfer between Different Fluidic Media. <i>Procedia Engineering</i> , 2015, 120, 691-694. | 1.2 | 5 |
| 146 | Printed capacitive touch sensors embedded in organic coatings on sheet steel. , 2015, , . | | 1 |
| 147 | Announcing the 2014 Measurement Science and Technology outstanding paper awards. <i>Measurement Science and Technology</i> , 2015, 26, 070202. | 1.4 | 0 |
| 148 | Sensing Physical Fluid Properties in Microcavities Utilizing Diamagnetic Levitation. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4. | 1.2 | 5 |
| 149 | U-shaped wire based resonators for mass density and viscosity sensing. , 2015, , . | | 0 |
| 150 | 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 |
| 151 | Acoustic sensor for in-line monitoring in polymer extrusion dies. , 2015, , . | | 1 |
| 152 | Prototype for Single-cell Impedance Spectroscopy. <i>Procedia Engineering</i> , 2015, 120, 31-35. | 1.2 | 0 |
| 153 | Acoustic streaming driven by immersed resonator structures. , 2015, , . | | 2 |
| 154 | Electrochemical impedance spectroscopy for in situ monitoring of early zeolite formation. , 2015, , . | | 1 |
| 155 | Understanding voltage induction in a short dipole antenna. <i>European Journal of Physics</i> , 2015, 36, 025009. | 0.3 | 2 |
| 156 | Application of resonant steel tuning forks with circular and rectangular cross sections for precise mass density and viscosity measurements. <i>Sensors and Actuators A: Physical</i> , 2015, 226, 163-174. | 2.0 | 44 |
| 157 | Electromagnetically driven torsional resonators for viscosity and mass density sensing applications. <i>Sensors and Actuators A: Physical</i> , 2015, 229, 182-191. | 2.0 | 28 |
| 158 | Symmetric mechanical plate resonators for fluid sensing. <i>Sensors and Actuators A: Physical</i> , 2015, 232, 319-328. | 2.0 | 16 |
| 159 | Microfluidic Pumping Utilizing a PDMS Membrane With an Integrated Nonuniform Open-Porous Foam. <i>IEEE Sensors Journal</i> , 2015, 15, 5109-5114. | 2.4 | 5 |
| 160 | A Viscosity and Density Sensor Based on Diamagnetically Stabilized Levitation. <i>IEEE Sensors Journal</i> , 2015, 15, 1937-1944. | 2.4 | 12 |
| 161 | Frequency Domain Based Measurement Method for the Thermal Parameters of a Thin-film Diaphragm Embedded in a MEMS Multi-parameter Wind Sensor. <i>Procedia Engineering</i> , 2014, 87, 632-635. | 1.2 | 2 |
| 162 | Concept study on an electrodynamically driven and read-out torsional oscillator. , 2014, , . | | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 163 | Silicon photonics in the mid-infrared: Waveguide absorption sensors. , 2014, , . | | 5 |
| 164 | Efficient numerical modeling of oscillatory fluid-structure interaction. , 2014, , . | | 6 |
| 165 | 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 |
| 166 | Parallel plates shear-wave transducers for the characterization of viscous and viscoelastic fluids. , 2014, , . | | 1 |
| 167 | Investigation of higher mode excitation of resonant mass density and viscosity sensors. , 2014, , . | | 0 |
| 168 | Transient measurement method for the thermal properties of the thin-film membrane in a multi-parameter wind sensor. , 2014, , . | | 1 |
| 169 | Temporal change in the electromechanical properties of dielectric elastomer minimum energy structures. Journal of Applied Physics, 2014, 115, 214105. | 1.1 | 8 |
| 170 | Ultrasonic piezoelectric tube resonator for physical liquid property sensing. , 2014, , . | | 1 |
| 171 | Resonance parameter estimation from spectral data: Cram r  Rao lower bound and stable algorithms with application to liquid sensors. Measurement Science and Technology, 2014, 25, 105303. | 1.4 | 9 |
| 172 | Semi-numeric boundary element method for piezoelectric fluid sensors using a fourier spectral approach. , 2014, , . | | 2 |
| 173 | Single-platform Si photonic components for mid-infrared sensing and chemical imaging. Proceedings of SPIE, 2014, , . | 0.8 | 0 |
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