Zhili Hao

List of Publications by Year
in descending order

46 papers	1,237 citations	567281 15 h-index	477307 29 g-index
47 all docs	47 docs citations	47 times ranked	819 citing authors

#	Article	IF	Citations
1	Radial and Axial Motion of the Initially Tensioned Orthotropic Arterial Wall in Arterial Pulse Wave Propagation. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2022, 5, .	0.5	0
2	Radial and Axial Displacement of the Initially-Tensioned Orthotropic Arterial Wall Under the Influence of Harmonics and Wave Reflection. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2022, 5, .	0.5	1
3	A Hypothesized Mechanistic Model of Longitudinal Wall Motion at the Common Carotid Artery. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2021, 4, .	0.5	3
4	Measurement of Post-Exercise Response of Local Arterial Parameters Using an Adjustable Microfluidic Tactile Sensor*. , 2021, 2021, 1284-1287.		0
5	Arterial Pulse Signal Amplification by Adding a Uniform PDMS Layer to a Pyrex-Based Microfluidic Tactile Sensor. IEEE Sensors Journal, 2020, 20, 2164-2172.	4.7	8
6	Post-exercise Response of Arterial Parameters for Arterial Health Assessment Using a Microfluidic Tactile Sensor and Vibration-Model-Based Analysis: A Proof-of-Concept Study. Cardiovascular Engineering and Technology, 2020, 11, 295-307.	1.6	2
7	Model-based analysis of arterial pulse signals for tracking changes in arterial wall parameters: a pilot study. Biomechanics and Modeling in Mechanobiology, 2019, 18, 1629-1638.	2.8	8
8	A Distributed-Deflection Sensor With a Built-In Probe for Conformal Mechanical Measurements of Costal Cartilage at Its Exterior Surface. IEEE Sensors Journal, 2018, 18, 822-829.	4.7	1
9	Arterial Wall Motion and its Dynamic Modeling for Arterial Stiffness and Damping. , 2018, , .		2
10	Radial and longitudinal motion of the arterial wall: Their relation to pulsatile pressure and flow in the artery. Physical Review E, 2018, 98, .	2.1	9
11	Correlation between stress drop and applied strain as a biomarker for tumor detection. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 86, 450-462.	3.1	2
12	Mechanical Characterization of Mouse Mammary Tumors via a 2-D Distributed-Deflection Sensor. IEEE Sensors Journal, 2017, 17, 604-613.	4.7	1
13	Performance Investigation of a Wearable Distributed-Deflection Sensor in Arterial Pulse Waveform Measurement. IEEE Sensors Journal, 2017, 17, 3994-4004.	4.7	15
14	Design and Analysis of a Distributed-Deflection Sensor With a Built-In Probe for Mechanical Measurement of Soft Tissues With Curved Surface. , 2017, , .		0
15	A Two-Dimensional (2D) Distributed-Deflection Sensor for Tissue Palpation With Correction Mechanism for Its Performance Variation. IEEE Sensors Journal, 2016, 16, 4219-4229.	4.7	5
16	A Flexible PET-based Wearable Sensor for Arterial Pulse Waveform Measurement. , 2016, , .		2
17	Dynamic characterization of a polymer-based microfluidic device for distributed-load detection. Sensors and Actuators A: Physical, 2015, 222, 102-113.	4.1	6
18	Stress relaxation measurement of viscoelastic materials using a polymer-based microfluidic device. Sensors and Actuators A: Physical, 2013, 203, 119-130.	4.1	6

#	Article	IF	Citations
19	Detection of distributed static and dynamic loads with electrolyte-enabled distributed transducers in a polymer-based microfluidic device. Journal of Micromechanics and Microengineering, 2013, 23, 035015.	2.6	18
20	Performance study of a PDMS-based microfluidic device for the detection of continuous distributed static and dynamic loads. Journal of Micromechanics and Microengineering, 2013, 23, 085007.	2.6	12
21	Concurrent spatial mapping of the elasticity of heterogeneous soft materials via a polymer-based microfluidic device. Journal of Micromechanics and Microengineering, 2013, 23, 105007.	2.6	5
22	Investigation of the Measured Quality Factor Versus Polarization Voltage of a Multiple-Beam Tuning-Fork Gyroscope. , 2012, , .		0
23	Effect of polarization voltage on the measured quality factor of a multiple-beam tuning-fork gyroscope. Sensors and Actuators A: Physical, 2012, 187, 118-126.	4.1	13
24	A novel piezoelectric device with dual functions of studying biological soft tissues. , 2011, , .		0
25	A multiple-beam tuning-fork gyroscope with high quality factors. Sensors and Actuators A: Physical, 2011, 166, 22-33.	4.1	27
26	Design and Implementation of a Multiple-Beam Tuning-Fork Gyroscope. , 2011, , .		0
27	An analytical study on interfacial dissipation in piezoelectric rectangular block resonators with in-plane longitudinal-mode vibrations. Sensors and Actuators A: Physical, 2010, 163, 401-409.	4.1	47
28	An Analytical Investigation of Interfacial Dissipation in Piezoelectric Block Resonators. , 2010, , .		0
29	Vibration displacement on substrate due to time-harmonic stress sources from a micromechanical resonator. Journal of Sound and Vibration, 2009, 322, 196-215.	3.9	26
30	A thermal-energy method for calculating thermoelastic damping in micromechanical resonators. Journal of Sound and Vibration, 2009, 322, 870-882.	3.9	50
31	Numerical models and experimental investigation of energy loss mechanisms in SOI-based tuning-fork gyroscopes. Sensors and Actuators A: Physical, 2009, 152, 63-74.	4.1	29
32	Investigating energy loss mechanisms in an SOI-based tuning-fork gyroscope. , 2009, , .		0
33	Investigation of Energy Loss Mechanisms in Surface-Micromachined Resonators. , 2009, , .		2
34	Thermoelastic damping in the contour-mode vibrations of micro- and nano-electromechanical circular thin-plate resonators. Journal of Sound and Vibration, 2008, 313, 77-96.	3.9	69
35	A Mode-Matched Silicon-Yaw Tuning-Fork Gyroscope With Subdegree-Per-Hour Allan Deviation Bias Instability. Journal of Microelectromechanical Systems, 2008, 17, 1526-1536.	2.5	148
36	A Numerical and Experimental Investigation of Energy Loss Mechanisms in Tuning-Fork Gyroscopes. , 2008, , .		0

#	Article	IF	Citations
37	Support loss in the radial bulk-mode vibrations of center-supported micromechanical disk resonators. Sensors and Actuators A: Physical, 2007, 134, 582-593.	4.1	64
38	A Temperature-Compensated ZnO-on-Diamond Resonant Mass Sensor. , 2006, , .		9
39	Thermoelastic Damping in Flexural-Mode Ring Gyroscopes. , 2005, , 335.		19
40	VHF Single Crystal Silicon Capacitive Elliptic Bulk-Mode Disk Resonatorsâ€"Part II: Implementation and Characterization. Journal of Microelectromechanical Systems, 2004, 13, 1054-1062.	2.5	103
41	VHF Single-Crystal Silicon Elliptic Bulk-Mode Capacitive Disk Resonatorsâ€"Part I: Design and Modeling. Journal of Microelectromechanical Systems, 2004, 13, 1043-1053.	2.5	90
42	An analytical model for support loss in micromachined beam resonators with in-plane flexural vibrations. Sensors and Actuators A: Physical, 2003, 109, 156-164.	4.1	328
43	A design methodology for a bulk-micromachined two-dimensional electrostatic torsion micromirror. Journal of Microelectromechanical Systems, 2003, 12, 692-701.	2.5	45
44	Modeling air-damping effect in a bulk micromachined 2D tilt mirror. Sensors and Actuators A: Physical, 2002, 102, 42-48.	4.1	35
45	Support loss in micromechanical disk resonators. , 0, , .		24
46	A High-Q Length-Extensional Bulk-Modemass Sensor with Annexed Sensing Platforms. , 0, , .		3