

Hongsheng Li

List of Publications by Year in descending order

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48
papers

600
citations

623734

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all docs

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docs citations

48
times ranked

393
citing authors

#	ARTICLE	IF	CITATIONS
1	Sensing mode coupling analysis for dual-mass MEMS gyroscope and bandwidth expansion within wide-temperature range. <i>Mechanical Systems and Signal Processing</i> , 2018, 98, 448-464.	8.0	61
2	An improved interface and noise analysis of a turning fork microgyroscope structure. <i>Mechanical Systems and Signal Processing</i> , 2016, 70-71, 1209-1220.	8.0	59
3	Optimization and Experimentation of Dual-Mass MEMS Gyroscope Quadrature Error Correction Methods. <i>Sensors</i> , 2016, 16, 71.	3.8	46
4	Investigation of a vacuum packaged MEMS gyroscope architecture's temperature robustness. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2013, 41, 495-506.	0.6	32
5	Power Management for Kinetic Energy Harvesting IoT. <i>IEEE Sensors Journal</i> , 2018, 18, 4336-4345.	4.7	31
6	Overview and analysis of MEMS Coriolis vibratory ring gyroscope. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 182, 109704.	5.0	29
7	A Novel Temperature Compensation Method for a MEMS Gyroscope Oriented on a Periphery Circuit. <i>International Journal of Advanced Robotic Systems</i> , 2013, 10, 327.	2.1	23
8	Digital Control System for the MEMS Tuning Fork Gyroscope Based on Synchronous Integral Demodulator. <i>IEEE Sensors Journal</i> , 2015, 15, 5755-5764.	4.7	22
9	Comparison of Three Automatic Mode-Matching Methods for Silicon Micro-Gyroscopes Based on Phase Characteristic. <i>IEEE Sensors Journal</i> , 2016, 16, 610-619.	4.7	20
10	The Effect of the Anisotropy of Single Crystal Silicon on the Frequency Split of Vibrating Ring Gyroscopes. <i>Micromachines</i> , 2019, 10, 126.	2.9	19
11	Automatic Mode-Matching Method for MEMS Disk Resonator Gyroscopes Based on Virtual Coriolis Force. <i>Micromachines</i> , 2020, 11, 210.	2.9	17
12	On Bandwidth Characteristics of Tuning Fork Micro-Gyroscope with Mechanically Coupled Sense Mode. <i>Sensors</i> , 2014, 14, 13024-13045.	3.8	16
13	A Switch-Bridge-Based Readout Circuit for Differential Capacitance Measurement in MEMS Resonators. <i>IEEE Sensors Journal</i> , 2017, 17, 6978-6985.	4.7	15
14	Mechanical and Electrical Noise in Sense Channel of MEMS Vibratory Gyroscopes. <i>Sensors</i> , 2017, 17, 2306.	3.8	15
15	Design and Application of Quadrature Compensation Patterns in Bulk Silicon Micro-Gyroscopes. <i>Sensors</i> , 2014, 14, 20419-20438.	3.8	14
16	Automatic Frequency Tuning Technology for Dual-Mass MEMS Gyroscope Based on a Quadrature Modulation Signal. <i>Micromachines</i> , 2018, 9, 511.	2.9	14
17	Collaborative In-Network Processing for Internet of Battery-Less Things. <i>IEEE Internet of Things Journal</i> , 2019, 6, 5184-5195.	8.7	13
18	HPIPS: A High-Precision Indoor Pedestrian Positioning System Fusing WiFi-RTT, MEMS, and Map Information. <i>Sensors</i> , 2020, 20, 6795.	3.8	13

#	ARTICLE	IF	CITATIONS
19	Modeling and Compensation of Assembly Inclination Error of Micro Hemispherical Resonator Gyroscope Under Force-to-Rebalance Mode. IEEE Sensors Journal, 2021, 21, 14726-14738.	4.7	13
20	Frequency Tuning of Work Modes in Z-Axis Dual-Mass Silicon Microgyroscope. Journal of Sensors, 2014, 2014, 1-13.	1.1	11
21	A Force Rebalanced Micro-Gyroscope Driven by Voltages Oscillating at Half of Structure's Resonant Frequency. IEEE Sensors Journal, 2016, 16, 8897-8907.	4.7	11
22	Electrostatic stiffness correction for quadrature error in decoupled dual-mass MEMS gyroscope. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2014, 13, 033003.	0.9	10
23	A Lumped Mass Model for Circular Micro-Resonators in Coriolis Vibratory Gyroscopes. Micromachines, 2019, 10, 378.	2.9	10
24	A Lever Coupling Mechanism in Dual-Mass Micro-Gyroscopes for Improving the Shock Resistance along the Driving Direction. Sensors, 2017, 17, 995.	3.8	9
25	Combination of Smartphone MEMS Sensors and Environmental Prior Information for Pedestrian Indoor Positioning. Sensors, 2020, 20, 2263.	3.8	9
26	Design and Implementation of a Dual-Mass MEMS Gyroscope with High Shock Resistance. Sensors, 2018, 18, 1037.	3.8	8
27	In-Run Scale Factor Compensation for MEMS Gyroscope Without Calibration and Fitting. IEEE Sensors Journal, 2021, 21, 7316-7325.	4.7	7
28	Analysis of Frequency Response and Scale-Factor of Tuning Fork Micro-Gyroscope Operating at Atmospheric Pressure. Sensors, 2015, 15, 2453-2472.	3.8	6
29	Design and Optimization of a Vibrating Ring Gyroscope With High Shock Resistance by Differential Evolution. IEEE Sensors Journal, 2021, 21, 16510-16518.	4.7	6
30	In-Run Automatic Mode-Matching of Whole-Angle Micro-Hemispherical Resonator Gyroscope Based on Standing Wave Self-Precession. IEEE Sensors Journal, 2022, 22, 13945-13957.	4.7	6
31	Research on Nonlinear Dynamics of Drive Mode in Z-Axis Silicon Microgyroscope. Journal of Sensors, 2014, 2014, 1-11.	1.1	4
32	Compensation of Assembly Eccentricity Error of Micro Hemispherical Resonator Gyroscope. , 2021, , .		4
33	Bias Modulation of Force-to-Rebalanced Micro Hemispherical Resonator Gyroscope Based on Mode-Rotation. IEEE Sensors Journal, 2022, 22, 15802-15816.	4.7	4
34	Design and analysis of a novel dual-mass MEMS resonant output gyroscope. AIP Advances, 2018, 8, .	1.3	3
35	Latency-Aware In-Network Computing for Internet of Battery-Less Things. , 2018, , .		3
36	In-run Mode-Matching of MEMS Gyroscopes based on Power Symmetry of Readout Signal in Sense Mode. IEEE Sensors Journal, 2021, , 1-1.	4.7	3

#	ARTICLE	IF	CITATIONS
37	Enhancing the Shock Response Performance of Micromachined Silicon Resonant Accelerometers by Electrostatic Active Damping Control. <i>Micromachines</i> , 2021, 12, 1548.	2.9	3
38	Design and Simulation of a Micromechanical Silicon Resonant Accelerometer with Low Temperature Sensitivity. , 2018, , .		2
39	Characterization of Modal Frequencies and Orientation of Axisymmetric Resonators in Coriolis Vibratory Gyroscopes. <i>Micromachines</i> , 2021, 12, 1206.	2.9	2
40	Demodulation phase angle compensation for quadrature error in decoupled dual-mass MEMS gyroscope. <i>Journal of Micro/ Nanolithography, MEMS, and MOEMS</i> , 2018, 17, 1.	0.9	2
41	Online Compensation of Phase Delay Error Based on P-F Characteristic for MEMS Vibratory Gyroscopes. <i>Micromachines</i> , 2022, 13, 647.	2.9	2
42	Structure design and simulation of micro dynamically tuned gyroscope with three equilibrium rings. , 2013, , .		1
43	A novel demodulation algorithm for MEMS gyroscope digital control system. , 2014, , .		1
44	Synchronous integrator based on digital control system for silicon micromachined gyroscope. , 2015, , .		1
45	The implementation of improved phase projection method in FPGA. , 2011, , .		0
46	A novel fully-decoupled dual-mass silicon micromachined gyroscope. , 2016, , .		0
47	Power Management for Controlling Event Detection Probability of Supercapacitor Powered Sensor Networks. , 2018, , .		0
48	In-run Self-calibration of Scale Factor Temperature Drifts for MEMS Gyroscope. , 2019, , .		0