Qiulin Tan

List of Publications by Year
in descending order

96 papers	1,904 citations	304743 22 h-index	315739 38 g-index
96 all docs	96 docs citations	96 times ranked	1795 citing authors

#	Article	IF	Citations
1	A Flexible Temperature Sensor Based on Reduced Graphene Oxide for Robot Skin Used in Internet of Things. Sensors, 2018, 18, 1400.	3.8	180
2	Wireless wide-range pressure sensor based on graphene/PDMS sponge for tactile monitoring. Scientific Reports, 2019, 9, 3916.	3.3	112
3	A Harsh Environment-Oriented Wireless Passive Temperature Sensor Realized by LTCC Technology. Sensors, 2014, 14, 4154-4166.	3.8	90
4	Wireless flexible pressure sensor based on micro-patterned Graphene/PDMS composite. Sensors and Actuators A: Physical, 2018, 277, 150-156.	4.1	86
5	Three-gas detection system with IR optical sensor based on NDIR technology. Optics and Lasers in Engineering, 2015, 74, 103-108.	3.8	77
6	Wireless LTCC-based capacitive pressure sensor for harsh environment. Sensors and Actuators A: Physical, 2013, 197, 30-37.	4.1	68
7	A Wireless Passive Pressure and Temperature Sensor via a Dual LC Resonant Circuit in Harsh Environments. Journal of Microelectromechanical Systems, 2017, 26, 351-356.	2.5	57
8	A LC wireless passive temperature-pressure-humidity (TPH) sensor integrated on LTCC ceramic for harsh monitoring. Sensors and Actuators B: Chemical, 2018, 270, 433-442.	7.8	54
9	A Novel Surface <inline-formula> <tex-math notation="LaTeX">LC </tex-math> </inline-formula> Wireless Passive Temperature Sensor Applied in Ultra-High Temperature Measurement. IEEE Sensors Journal, 2019, 19, 105-112.	4.7	42
10	A Wireless Passive Pressure Microsensor Fabricated in HTCC MEMS Technology for Harsh Environments. Sensors, 2013, 13, 9896-9908.	3.8	40
11	Review of Research Status and Development Trends of Wireless Passive LC Resonant Sensors for Harsh Environments. Sensors, 2015, 15, 13097-13109.	3.8	40
12	Highly Sensitive NH3 Wireless Sensor Based on Ag-RGO Composite Operated at Room-temperature. Scientific Reports, 2019, 9, 9942.	3.3	40
13	A Novel Metamaterial Inspired High-Temperature Microwave Sensor in Harsh Environments. Sensors, 2018, 18, 2879.	3.8	38
14	Wirelessly powered multi-functional wearable humidity sensor based on RGO-WS2 heterojunctions. Sensors and Actuators B: Chemical, 2021, 329, 129077.	7.8	37
15	A High Temperature Capacitive Pressure Sensor Based on Alumina Ceramic for in Situ Measurement at 600 Â°C. Sensors, 2014, 14, 2417-2430.	3.8	35
16	A wireless slot-antenna integrated temperature-pressure-humidity sensor loaded with CSRR for harsh-environment applications. Sensors and Actuators B: Chemical, 2020, 311, 127907.	7.8	32
17	Antenna-resonator integrated wireless passive temperature sensor based on low-temperature co-fired ceramic for harsh environment. Sensors and Actuators A: Physical, 2015, 236, 299-308.	4.1	31
18	Wireless Passive Temperature Sensor Realized on Multilayer HTCC Tapes for Harsh Environment. Journal of Sensors, 2015, 2015, 1-8.	1.1	29

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19	An Embedded Passive Resonant Sensor Using Frequency Diversity Technology for High-Temperature Wireless Measurement. IEEE Sensors Journal, 2015, 15, 1055-1060.	4.7	27
20	Nano-fabrication methods and novel applications of black silicon. Sensors and Actuators A: Physical, 2019, 295, 560-573.	4.1	27
21	LC temperature-pressure sensor based on HTCC with temperature compensation algorithm for extreme 1100â€‰Â°C applications. Sensors and Actuators A: Physical, 2018, 280, 437-446.	4.1	26
22	Characterization of biomechanical properties of cells through dielectrophoresis-based cell stretching and actin cytoskeleton modeling. BioMedical Engineering OnLine, 2017, 16, 41.	2.7	25
23	An LC Passive Wireless Gas Sensor Based on PANI/CNT Composite. Sensors, 2018, 18, 3022.	3.8	23
24	Dielectrically-Loaded Cylindrical Resonator-Based Wireless Passive High-Temperature Sensor. Sensors, 2016, 16, 2037.	3.8	22
25	Novel Multilayer SAW Temperature Sensor for Ultra-High Temperature Environments. Micromachines, 2021, 12, 643.	2.9	22
26	Slot Antenna Integrated Re-Entrant Resonator Based Wireless Pressure Sensor for High-Temperature Applications. Sensors, 2017, 17, 1963.	3.8	21
27	Tunable electromagnetically induced reflection with a high Q factor in complementary Dirac semimetal metamaterials. Materials Research Express, 2018, 5, 125804.	1.6	20
28	Acetone Sensing Properties of a Gas Sensor Composed of Carbon Nanotubes Doped With Iron Oxide Nanopowder. Sensors, 2015, 15, 28502-28512.	3.8	18
29	A Novel Temperature and Pressure Measuring Scheme Based on LC Sensor for Ultra-High Temperature Environment. IEEE Access, 2019, 7, 162747-162755.	4.2	18
30	Development of an Optical Gas Leak Sensor for Detecting Ethylene, Dimethyl Ether and Methane. Sensors, 2013, 13, 4157-4169.	3.8	17
31	A Wireless Passive LC Resonant Sensor Based on LTCC under High-Temperature/Pressure Environments. Sensors, 2015, 15, 16729-16739.	3.8	17
32	A Room-Temperature CNT/Fe3O4 Based Passive Wireless Gas Sensor. Sensors, 2018, 18, 3542.	3.8	17
33	A novel SAW temperature-humidity-pressure (THP) sensor based on LiNbO₃ for environment monitoring. Journal Physics D: Applied Physics, 2020, 53, 375401.	2.8	17
34	Wireless Detection of Biogenic Amines Using a Split-Ring Resonator with Silver Nanoparticles-Decorated Molybdenum Disulfide. Sensors and Actuators B: Chemical, 2021, 343, 130155.	7.8	17
35	A high-sensitivity MoS2/graphene oxide nanocomposite humidity sensor based on surface acoustic wave. Sensors and Actuators A: Physical, 2022, 341, 113573.	4.1	17
36	A High-Performance LC Wireless Passive Pressure Sensor Fabricated Using Low-Temperature Co-Fired Ceramic (LTCC) Technology. Sensors, 2014, 14, 23337-23347.	3.8	16

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37	Diaphragm-free fiber-optic Fabryâ€“Perot interferometer based on tapered hollow silica tube. Optics Communications, 2016, 371, 201-205.	2.1	16
38	High-performance strain sensor based on a 3D conductive structure for wearable electronics. Journal Physics D: Applied Physics, 2019, 52, 395401.	2.8	16
39	Temperature and Pressure Composite Measurement System Based on Wireless Passive LC Sensor. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	4.7	16
40	A noncontact wireless passive radio frequency (RF) resonant pressure sensor with optimized design for applications in high-temperature environments. Measurement Science and Technology, 2014, 25, 075101.	2.6	15
41	High-Temperature Dielectric Properties of Aluminum Nitride Ceramic for Wireless Passive Sensing Applications. Sensors, 2015, 15, 22660-22671.	3.8	15
42	Substrate Integrated Waveguide (SIW)-Based Wireless Temperature Sensor for Harsh Environments. Sensors, 2018, 18, 1406.	3.8	15
43	Tunable Plasmon-Induced Transparency with Ultra-Broadband in Dirac Semimetal Metamaterials. Plasmonics, 2019, 14, 1717-1723.	3.4	14
44	MWCNTs/WS2 nanocomposite sensor realized by LC wireless method for humidity monitoring. Sensors and Actuators A: Physical, 2019, 290, 207-214.	4.1	14
45	A microwave SIW sensor loaded with CSRR for wireless pressure detection in high-temperature environments. Journal Physics D: Applied Physics, 2020, 53, 085101.	2.8	14
46	Phase Interrogation Used for a Wireless Passive Pressure Sensor in an 800 Â°C High-Temperature Environment. Sensors, 2015, 15, 2548-2564.	3.8	13
47	Microwave Backscatter-Based Wireless Temperature Sensor Fabricated by an Alumina-Backed Au Slot Radiation Patch. Sensors, 2018, 18, 242.	3.8	13
48	Polarization-insensitive classical electromagnetically induced transparency metamaterial with large group delay by Dirac semimetal. Results in Physics, 2020, 19, 103377.	4.1	13
49	Wearable pressure sensor based on MXene/single-wall carbon nanotube film with crumpled structure for broad-range measurements. Smart Materials and Structures, 2021, 30, 035024.	3.5	13
50	Measurement of relative permittivity of LTCC ceramic at different temperatures. AIP Advances, 2014, 4, .	1.3	12
51	Al2O3-Based a-IGZO Schottky Diodes for Temperature Sensing. Sensors, 2019, 19, 224.	3.8	12
52	High Performance Amorphous IGZO Thin-Film Transistor Based on Alumina Ceramic. IEEE Access, 2019, 7, 184312-184319.	4.2	12
53	Wireless Passive LC Temperature and Strain Dual-Parameter Sensor. Micromachines, 2021, 12, 34.	2.9	12
54	An Insertable Passive LC Pressure Sensor Based on an Alumina Ceramic for In Situ Pressure Sensing in High-Temperature Environments. Sensors, 2015, 15, 21844-21856.	3.8	11

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55	Wireless passive separated LC temperature sensor based on high-temperature co-fired ceramic operating up to 1500 Â°C. Journal of Micromechanics and Microengineering, 2019, 29, 035015.	2.6	11
56	LGS-based SAW sensor that can measure pressure up to 1000ÂÂ°C. Sensors and Actuators A: Physical, 2022, 334, 113315.	4.1	11
57	A MoS2 Nanoflakes-Based LC Wireless Passive Humidity Sensor. Sensors, 2018, 18, 4466.	3.8	10
58	Na-Doped ZnO and RGO Composite-Based Flexible Acetone Gas Sensor Operated in Room Temperature. IEEE Access, 2020, 8, 171568-171574.	4.2	10
59	Design and Fabrication of a Thick Film Heat Flux Sensor for Ultra-High Temperature Environment. IEEE Access, 2019, 7, 180771-180778.	4.2	9
60	Nanoforest of black silicon fabricated by AIC and RIE method. Materials Letters, 2016, 164, 613-617.	2.6	8
61	Highly Sensitive Reentrant Cavity-Microstrip Patch Antenna Integrated Wireless Passive Pressure Sensor for High Temperature Applications. Journal of Sensors, 2017, 2017, 1-10.	1.1	8
62	Properties of Ceramic Substrate Materials for High-Temperature Pressure Sensors for Operation above 1000Â°C. Advances in Materials Science and Engineering, 2018, 2018, 1-6.	1.8	8
63	Wireless passive sensor based on microstrip antenna for metal crack detection and characterization. Measurement Science and Technology, 2019, 30, 045103.	2.6	8
64	High-temperature direct bonding of langasite using oxygen plasma activation. Scripta Materialia, 2021, 194, 113681.	5.2	8
65	Design and Fabrication of Thermocouple Sensors Based on a Ceramic Curved Alumina Substrate. IEEE Sensors Journal, 2021, 21, 19780-19788.	4.7	8
66	Design of double-layer parallel printed spiral coil for wireless power transfer applied to rotating equipment. Sensors and Actuators A: Physical, 2021, 331, 112761.	4.1	8
67	Wireless Passive Flexible Strain Sensor Based on Aluminium Nitride Film. IEEE Sensors Journal, 2022, 22, 3074-3079.	4.7	8
68	Novel Surface Acoustic Wave Temperatureâ€“Strain Sensor Based on LiNbO3 for Structural Health Monitoring. Micromachines, 2022, 13, 912.	2.9	8
69	Fabrication of nanopillar forests with high infrared absorptance based on rough poly-Si and spacer technology. Journal of Micromechanics and Microengineering, 2013, 23, 095033.	2.6	7
70	Signal Readout of LC Pressure Sensor Operated in Multi-dimensional rotating Environment with Dual-inductance Resonator. Sensors and Actuators A: Physical, 2019, 296, 178-185.	4.1	7
71	Applications of chip-scale semiconductor metamaterials based on plasmon-induced transparency in modulation and sensing. Journal of Applied Physics, 2021, 129, .	2.5	7
72	A Passive Pressure Sensor Fabricated by Post-Fire Metallization on Zirconia Ceramic for High-Temperature Applications. Micromachines, 2014, 5, 814-824.	2.9	6

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73	Highly Sensitive Air-Filled Substrate Integrated Waveguide Resonator Integrated Wireless Passive Slot-Antenna for Confined Environmental Detection. IEEE Sensors Journal, 2019, 19, 10027-10033.	4.7	6
74	Modeling, simulation and coupling experiment for integrated passive wireless multi-parameters ceramic sensor. Sensor Review, 2016, 36, 98-106.	1.8	5
75	A wireless passive pressure sensor based on aperture coupled microstrip patch antenna. Sensor Review, 2018, 38, 156-162.	1.8	5
76	CSRR Integrated Microwave Humidity Sensor Based Go@Mxene for Breath Monitoring. , 2019, , .		5
77	A ceramic-based microwave sensor for both permittivity and permeability characterization of materials. Journal Physics D: Applied Physics, 2020, 53, 345103.	2.8	5
78	Magnetically propelled soft micromachines with multipatterned fabrications. Journal of Micromechanics and Microengineering, 2020, 30, 085001.	2.6	4
79	Test and Analysis of SAW High Temperature Strain Sensor Based on Langasite. IEEE Sensors Journal, 2022, 22, 12622-12628.	4.7	4
80	Development and Evaluation of Temperature Sensing Smart Skin for High-Temperature Measurements in Pipes. IEEE Sensors Journal, 2022, 22, 17712-17720.	4.7	4
81	A Novel Ceramic-Based Heat Flux Sensor Applied for Harsh Heat Flux Measurement. , 2018, , .		3
82	Alumina ceramic based high-temperature performance of wireless passive pressure sensor. Photonic Sensors, 2016, 6, 328-332.	5.0	2
83	Tunable Plasmonâ€“Induced Transparency Based on Dirac Semimetals. Plasmonics, 2022, 17, 1183-1190.	3.4	2
84	Langasite Bonding via High Temperature for Fabricating Sealed Microcavity of Pressure Sensors. Micromachines, 2022, 13, 479.	2.9	2
85	Simulation Design of Surface Acoustic Wave Sensor Based on Langasite Coplanar Integration with Multiple Parameters. Micromachines, 2022, 13, 705.	2.9	2
86	Wireless measurement for passive pressure sensors in high temperature environment. Sensor Review, 2015, 35, 146-156.	1.8	1
87	Langasite Micromachining Technology Applied to Surface Acoustic Wave Sensors in Ultra-High Temperatures. , 2021, , .		1
88	Voltage standing wave ratio reading circuit design for inductance capacitance wireless passive ammonia sensors. Review of Scientific Instruments, 2021, 92, 085003.	1.3	1
89	Manufacturing a langasite crystal microstructure for a high-temperature environment. Vacuum, 2022, , 111252.	3.5	1
90	Package improvements and testing of a novel MEMS bionic vector hydrophone. , 2010, , .		0

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91	Embedded seal cavity preparation technology based on the zirconia. , 2013, , .		0
92	Probing mechanical behaviors of chronic myeloid leukemia cells in doxorubicin resistance by robotic manipulation with optical tweezers. , 2013, , .		0
93	Passive wireless pressure sensor fabricated in low-temperature co-fired ceramic technology. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems, 2015, 229, 160-165.	0.1	0
94	Systematic Theoretical Analysis of Dual-Parameters RF Readout by a Novel LC-Type Passive Sensor. Modelling and Simulation in Engineering, 2017, 2017, 1-11.	0.7	0
95	Processing and Manufacturing Technology of Special Sensors. Precision Manufacturing, 2019, , 1-35.	0.1	0
96	Processing and Manufacturing Technology of Special Sensors. Precision Manufacturing, 2020, , 401-434.	0.1	0