

Xiaoping Liao

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

88

papers

577

citations

11

h-index

18

g-index

100

ext. papers

708

ext. citations

2.7

avg, IF

4.71

L-index

#	Paper	IF	Citations
88	Review of Micro Thermoelectric Generator. <i>Journal of Microelectromechanical Systems</i> , 2018 , 27, 1-18	2.5	107
87	A Thermocouple-Based Self-Heating RF Power Sensor With GaAs MMIC-Compatible Micromachining Technology. <i>IEEE Electron Device Letters</i> , 2012 , 33, 606-608	4.4	22
86	A capacitive power sensor based on the MEMS cantilever beam fabricated by GaAs MMIC technology. <i>Journal of Micromechanics and Microengineering</i> , 2013 , 23, 035001	2	20
85	Modeling and design of a capacitive microwave power sensor for X-band applications based on GaAs technology. <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 055013	2	19
84	MEMS-Based Thermoelectric-Photoelectric Integrated Power Generator. <i>Journal of Microelectromechanical Systems</i> , 2019 , 28, 1-3	2.5	16
83	Ka-band RF MEMS capacitive switch with low loss, high isolation, long-term reliability and high power handling based on GaAs MMIC technology. <i>IET Microwaves, Antennas and Propagation</i> , 2017 , 11, 942-948	1.6	13
82	A Novel Multi-Source Micro Power Generator for Harvesting Thermal and Optical Energy. <i>IEEE Electron Device Letters</i> , 2019 , 40, 349-352	4.4	13
81	. <i>IEEE Sensors Journal</i> , 2015 , 15, 6765-6766	4	13
80	Measurements on Intermodulation Distortion of Capacitive Power Sensor Based on MEMS Cantilever Beam. <i>IEEE Sensors Journal</i> , 2014 , 14, 621-622	4	13
79	A three-channel thermoelectric RF MEMS power sensor for GaAs MMIC applications. <i>Sensors and Actuators A: Physical</i> , 2012 , 182, 68-71	3.9	13
78	Packaging-Test-Fixture for In-Line Coupling RF MEMS Power Sensors. <i>Journal of Microelectromechanical Systems</i> , 2011 , 20, 1231-1233	2.5	12
77	A Cascaded Terminating-Type and Capacitive-Type Power Sensor for 10- to 22-dBm Application. <i>IEEE Electron Device Letters</i> , 2016 , 37, 489-491	4.4	11
76	An 812 GHz microwave frequency detector based on MEMS power sensors. <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 035005	2	11
75	Micromachined Passive Bandpass Filters Based on GaAs Monolithic-Microwave-Integrated-Circuit Technology. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 221-228	2.9	11
74	. <i>IEEE Sensors Journal</i> , 2016 , 16, 3480-3481	4	11
73	A Sandwich-Type Thermoelectric Microwave Power Sensor for GaAs MMIC-Compatible Applications. <i>IEEE Electron Device Letters</i> , 2016 , 37, 1639-1641	4.4	10
72	Research on Thermocouple Distribution for Microwave Power Sensors Based on GaAs MMIC Process. <i>IEEE Sensors Journal</i> , 2015 , 15, 4178-4179	4	10

71	Improved Dynamic Range of Microwave Power Sensor by MEMS Cantilever Beam. <i>Journal of Microelectromechanical Systems</i> , 2017 , 26, 1183-1185	2.5	9
70	High-Power Handling Analysis of a Capacitive MEMS Power Sensor at $\text{X}\text{X}\text{\$}$ -Band. <i>IEEE Sensors Journal</i> , 2018 , 18, 5272-5277	4	9
69	Researches on MEMS thermoelectric-photoelectric integrated energy harvester with metal heat sink. <i>Microelectronics Journal</i> , 2020 , 96, 104702	1.8	8
68	Inline capacitive RF power sensor based on floating MEMS beam for GaAs MMIC applications. <i>Electronics Letters</i> , 2014 , 50, 1292-1294	1.1	8
67	Micromachined GaAs MMIC-Based Spiral Inductors With Metal Shores and Patterned Ground Shields. <i>IEEE Sensors Journal</i> , 2012 , 12, 1853-1860	4	8
66	Research on the Response Time of Indirect-Heating Microwave Power Sensor. <i>IEEE Sensors Journal</i> , 2016 , 16, 5270-5276	4	8
65	A Four-Port Microwave Phase Detector at $\text{X}\text{X}\text{\$}$ -Band Based on MEMS Power Sensors. <i>IEEE Sensors Journal</i> , 2017 , 17, 2029-2035	4	7
64	A MEMS microwave phase detector with broadband performance operable at X-band. <i>Microwave and Optical Technology Letters</i> , 2016 , 58, 806-809	1.2	7
63	Equivalent lumped circuit model and S-parameter of indirect-heating thermoelectric power sensor. <i>Sensors and Actuators A: Physical</i> , 2016 , 240, 110-117	3.9	7
62	Suspended Thermopile for Microwave Power Sensors Based on Bulk MEMS and GaAs MMIC Technology. <i>IEEE Sensors Journal</i> , 2015 , 15, 2019-2020	4	7
61	A novel in-line type frequency detector based on MEMS technology and the GaAs MMIC process. <i>Journal of Micromechanics and Microengineering</i> , 2014 , 24, 035005	2	7
60	Research on temperature characteristic of thermoelectric microwave power sensors based on GaAs MMIC technology. <i>Electronics Letters</i> , 2013 , 49, 1462-1464	1.1	7
59	. <i>IEEE Sensors Journal</i> , 2015 , 15, 665-666	4	6
58	An Integrated Microwave Detector Based on MEMS Technology for X-Band Application. <i>IEEE Electron Device Letters</i> , 2018 , 39, 742-745	4.4	6
57	A Dual-Channel MEMS Amplitude Demodulator for On-Line Detection in Radio Relay Station. <i>IEEE Electron Device Letters</i> , 2017 , 38, 1121-1124	4.4	6
56	An Insertion Thermoelectric RF MEMS Power Sensor for GaAs MMIC-Compatible Applications. <i>IEEE Microwave and Wireless Components Letters</i> , 2015 , 25, 265-267	2.6	6
55	A novel microwave power sensor using MEMS fixed-fixed beam 2011 ,		6
54	A Novel Thermistor-Based RF Power Sensor With Wheatstone Bridge Fabricating on MEMS Membrane. <i>Journal of Microelectromechanical Systems</i> , 2020 , 29, 1314-1321	2.5	6

53	A 3D Model of the Thermoelectric Microwave Power Sensor by MEMS Technology. <i>Sensors</i> , 2016 , 16,	3.8	6
52	Theoretical and Experimental Investigation of Cascaded Microwave Power Sensor. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 1728-1734	2.9	5
51	An Integrated Microwave Power and Frequency Sensor For 100 GHz Application. <i>IEEE Sensors Journal</i> , 2015 , 15, 5465-5471	4	5
50	High dynamic range microwave power sensor with thermopile and curled cantilever beam. <i>Electronics Letters</i> , 2015 , 51, 1341-1343	1.1	5
49	An 8-12GHz capacitive power sensor based on MEMS cantilever beam 2011 ,		5
48	The thermoelectric-photoelectric integrated power generator and its design verification. <i>Solid-State Electronics</i> , 2020 , 170, 107818	1.7	4
47	Modeling of an 802 GHz receiver front-end based on an in-line MEMS frequency discriminator. <i>Solid-State Electronics</i> , 2018 , 144, 54-59	1.7	4
46	Fabrication of the Differential Microwave Power Sensor by Seesaw-Type MEMS Membrane. <i>Journal of Microelectromechanical Systems</i> , 2016 , 25, 582-584	2.5	4
45	A Frequency-Compensation-Type Microwave Power Sensor Fabricated by GaAs MMIC Process. <i>IEEE Sensors Journal</i> , 2014 , 14, 2936-2937	4	4
44	An X-band Wilkinson power divider and comparison with its miniaturization based on GaAs MMIC process. <i>Microwave and Optical Technology Letters</i> , 2014 , 56, 700-705	1.2	4
43	2019 , 3, 1-4		4
42	Reliability Improvement of the Cascaded Power Sensor Based on MIM Capacitor. <i>IEEE Microwave and Wireless Components Letters</i> , 2017 , 27, 272-274	2.6	3
41	A Micro-Machined Phase Discriminator With Improved Power Capacity on C-Band and X-Band. <i>IEEE Sensors Journal</i> , 2019 , 19, 2133-2139	4	3
40	Investigations of the Thermoelectric-Photoelectric Integrated Power Generator With I-Shaped Thermocouple Structure and its Test Structures. <i>IEEE Sensors Journal</i> , 2019 , 19, 11113-11119	4	3
39	A Directional Inline-Type Millimeter-Wave MEMS Power Sensor for GaAs MMIC Applications. <i>Journal of Microelectromechanical Systems</i> , 2015 , 24, 253-255	2.5	3
38	Investigation of the adhesion of perforated MEMS clamped beams based on the GaAs MMIC process with the resonant method. <i>Journal of Adhesion Science and Technology</i> , 2015 , 29, 1663-1679	2.9	3
37	Characteristics of Doped n+ GaAs Thermopile-Based RF MEMS Power Sensors for MMIC Applications. <i>IEEE Electron Device Letters</i> , 2017 , 38, 1473-1476	4.4	3
36	An X-Band Dual Channel Microwave Phase Detector Based on GaAs MMIC Technology. <i>IEEE Sensors Journal</i> , 2016 , 16, 6515-6516	4	3

35	A cascade RF power sensor based on GaAs MMIC for improved dynamic range application 2014,		3
34	n+ GaAs/AuGeNi-Au Thermocouple-Type RF MEMS Power Sensors Based on Dual Thermal Flow Paths in GaAs MMIC. <i>Sensors</i> , 2017 , 17,	3.8	3
33	Third-order intermodulation distortion of the capacitive microwave power sensor using MEMS clamped beam 2012,		3
32	MEMS microwave power sensor with thermovoltage compensation and transformation. <i>Electronics Letters</i> , 2018 , 54, 1042-1043	1.1	3
31	Power management circuit based on micro-electromechanical systems thermoelectric-photoelectric integrated power generator. <i>Microwave and Optical Technology Letters</i> , 2020 , 62, 1082-1086	1.2	3
30	Miniaturization of a broadband power divider for X-band application based on GaAs technology. <i>Microwave and Optical Technology Letters</i> , 2017 , 59, 1427-1431	1.2	2
29	Analysis and design of a broadband coplanar Wilkinson power divider at X-band. <i>Microwave and Optical Technology Letters</i> , 2017 , 59, 307-312	1.2	2
28	RF MEMS Thermistor Power Sensor Based on Wheatstone Full-Bridge Structure 2019,		2
27	Modeling of an in-line MEMS frequency discriminator for RF receiver front-end application 2017,		2
26	Third-Order Intermodulation of an MEMS Clamped-Clamped Beam Capacitive Power Sensor Based on GaAs Technology. <i>IEEE Sensors Journal</i> , 2015 , 15, 3645-3646	4	2
25	2-D model of the indirectly-heated type microwave power sensor based on GaAs MMIC process 2013,		2
24	A novel RF Power Detector Based on Positive and Negative Thermistors Using Standard CMOS Technology. <i>IEEE Electron Device Letters</i> , 2021 , 1-1	4.4	2
23	High-power electro-mechanical behavior of a capacitive microwave power sensor with warped cantilever beam. <i>Solid-State Electronics</i> , 2020 , 172, 107877	1.7	2
22	Electromagnetic-Thermal-Electric Analysis of Indirectly-Heated RF MEMS Power Sensors With Different Terminal Resistor Dimensions. <i>IEEE Sensors Journal</i> , 2021 , 21, 4342-4349	4	2
21	A C-Band MEMS Frequency Discriminator With High Sensitivity and Linearity. <i>IEEE Electron Device Letters</i> , 2021 , 42, 410-413	4.4	2
20	A New RF MEMS Power Sensor Based on Double-Deck Thermocouples With High Sensitivity and Large Dynamic Range. <i>IEEE Microwave and Wireless Components Letters</i> , 2021 , 31, 1023-1026	2.6	2
19	2-Dimensional vibration model of MEMS cantilever beams with step-up anchors. <i>Microsystem Technologies</i> , 2016 , 22, 893-901	1.7	1
18	Modeling of Differential Power Sensor Based on Seesaw Structure for Microwave Communication Application. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 4664-4670	2.9	1

17	Bent cantilever radio frequency microelectromechanical system power detector with improved linearity up to 1 W. <i>IET Microwaves, Antennas and Propagation</i> , 2019 , 13, 1732-1736	1.6	1
16	Accuracy improvement of micro-electro-mechanical system microwave power sensor based on self-reference algorithm. <i>Microwave and Optical Technology Letters</i> , 2019 , 61, 897-902	1.2	1
15	High-power up to 4 W characteristics of the capacitive microwave power sensor with grounded beam. <i>Electronics Letters</i> , 2015 , 51, 1798-1800	1.1	1
14	Sensitivity characteristics in the packaged inline RF MEMS power sensors under different temperature and humidity environments 2012 ,		1
13	Research on the phase of an inline coupling RF MEMS power sensor 2011 ,		1
12	Microwave frequency detector based on MEMS technology 2008 ,		1
11	Balanced-Bridge Method for the Characterization of Dielectric Charging in RF MEMS Cantilever Switches. <i>IEEE Sensors Journal</i> , 2020 , 20, 1928-1933	4	1
10	High-power handling capacity and output response of a capacitive microwave power sensor 2016 ,		1
9	Design of the microwave frequency sensor for power-unknown signal based on MEMS technology 2016 ,		1
8	Application Consideration of Thermocouple-Based Microwave Power Sensor 2018 ,		1
7	One to 40 GHz ultra-wideband RF MEMS direct-contact switch based on GaAs MMIC technique. <i>IET Microwaves, Antennas and Propagation</i> , 2018 , 12, 879-884	1.6	1
6	Modeling of the Photoelectric-Thermoelectric Integrated Micropower Generator. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 4509-4515	2.9	1
5	Research on Micro-Electro-Mechanical System-Based Integrated Energy Harvester with Test Structures. <i>Energy Technology</i> , 2021 , 9, 2100488	3.5	1
4	Theoretical and Experimental Investigation of a Photoelectric-Thermoelectric Integrated Power Generator Filled by Al Layer. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-7	2.9	0
3	Residual stress and adhesion experiment on the capacitive MEMS power sensor based on GaAs MMIC process. <i>Journal of Adhesion Science and Technology</i> , 2016 , 30, 803-813	2	
2	Research of a Compact MEMS-Based Integrated Detector for X-Band Application: Theory, Design, Fabrication, and Measurement. <i>IEEE Sensors Journal</i> , 2021 , 1-1	4	
1	Investigations of microwave integrated detector and its processing circuit. <i>International Journal of Electronics Letters</i> , 1-8	0.6	