

Tarikul Islam

List of Publications by Year in descending order

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96
papers

1,466
citations

361413

20
h-index

377865

34
g-index

97
all docs

97
docs citations

97
times ranked

1125
citing authors

#	ARTICLE	IF	CITATIONS
1	A Direct AC Cross Conductive Sensor for Milk Quality Measurement. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-8.	4.7	3
2	Design of a Microwave Planar Device for Humidity Detection. Lecture Notes in Electrical Engineering, 2022, , 433-441.	0.4	1
3	An Accurate Model of Breather for Moisture Estimation for Transformer Health Monitoring. Lecture Notes in Electrical Engineering, 2022, , 385-395.	0.4	1
4	Anodic aluminium oxide based humidity sensor for online moisture monitoring of power transformer. Sensors and Actuators B: Chemical, 2021, 329, 128908.	7.8	25
5	Cross-Conductive Sensor for Humidity Measurement in Gas for Gas Insulated Switchgears Application. , 2021, , .		2
6	The Oxide Film-Coated Surface Acoustic Wave Resonators for the Measurement of Relative Humidity. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	12
7	High-Precision Capacitive Sensors for Intravenous Fluid Monitoring in Hospitals. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	17
8	Recent Development of Interfacing Circuits for the Capacitive Sensors. , 2021, , .		0
9	A Linear Capacitive Sensor for ppm Moisture Measurement in SF ₆ Gas-Insulated Switchgear. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	4.7	16
10	A Cross-Conductive Sensor to Measure Bottled Water Quality. , 2021, , .		6
11	Cross Capacitance Sensor for Insulation Oil Testing. IEEE Sensors Journal, 2021, 21, 20980-20989.	4.7	14
12	A constant phase impedance sensor for measuring conducting liquid level. ISA Transactions, 2021, 115, 250-258.	5.7	5
13	An accurate digital converter for lossy capacitive sensors. Sensors and Actuators A: Physical, 2021, 331, 112958.	4.1	9
14	A Dual-Slope-Based Capacitance-to-Time Signal Conditioning Circuit for Leaky Capacitive Sensors. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	4.7	8
15	A Novel Application of the Cross-Capacitive Sensor in Real-Time Condition Monitoring of Transformer Oil. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	4.7	18
16	Design and Fabrication of Fringing Field Interdigital Sensors for Physical Parameters Measurement. Smart Sensors, Measurement and Instrumentation, 2021, , 71-90.	0.6	1
17	Design and Fabrication of Fringing Field Capacitive Sensor for Non-Contact Liquid Level Measurement. IEEE Sensors Journal, 2021, 21, 24812-24819.	4.7	18
18	Fabrication of an anodized porous alumina relative humidity sensor with improved sensitivity. Instrumentation Science and Technology, 2020, 48, 128-145.	1.8	10

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19	A Thin Film Porous Alumina-Based Cross-Capacitive Humidity Sensor. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 2269-2276.	4.7	25
20	Fringing Field Impedance Sensor for Hydration Monitoring and Setting Time Determination of Concrete Material. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 2131-2138.	4.7	11
21	A Sensitive Inexpensive SAW Sensor for Wide Range Humidity Measurement. IEEE Sensors Journal, 2020, 20, 546-551.	4.7	25
22	Condition Monitoring of Transformer Breather Using a Capacitive Moisture Sensor. IEEE Transactions on Industrial Electronics, 2020, 67, 9779-9789.	7.9	15
23	Investigation of Chip Temperature on Response Characteristics of the Humidity Sensor From ppm to %RH. IEEE Transactions on Device and Materials Reliability, 2020, 20, 576-583.	2.0	5
24	AN-Z2V: Autonulling-Based Multimode Signal Conditioning Circuit for R-C Sensors. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 8763-8772.	4.7	16
25	A highly precise cross-capacitive sensor for metal debris detection in insulating oil. Review of Scientific Instruments, 2020, 91, 025005.	1.3	21
26	Design and Fabrication of an Inexpensive Capacitive Humidity Sensor for Smart Sub-Station Automation. IEEE Sensors Journal, 2020, 20, 6215-6223.	4.7	15
27	Assistive sensing technology for the elderly health monitoring. , 2020, , 185-223.		2
28	A Novel Linear Capacitive Temperature Sensor Using Polydimethylsiloxane. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 7887-7894.	4.7	15
29	Highly sensitive thin-film capacitive sensor for online moisture measurement in transformer oil. IET Science, Measurement and Technology, 2020, 14, 416-422.	1.6	20
30	An oscillator based circuit for interfacing imperfect capacitive sensors. AIP Conference Proceedings, 2020, , .	0.4	1
31	An Efficient Interface Circuit for Lossy Capacitive Sensors. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 829-836.	4.7	39
32	Impedance-to-Time Converter Circuit for Leaky Capacitive Sensors With Small Offset Capacitance. , 2019, 3, 1-4.		25
33	Innovative Technologies and Services for Smart Cities. Electronics (Switzerland), 2019, 8, 376.	3.1	5
34	Electrical circuit model of an aged ceramic humidity sensor. Materials Today: Proceedings, 2019, 18, 822-829.	1.8	2
35	Fractional order sensor for measuring the quality of milk. Materials Today: Proceedings, 2019, 18, 1077-1085.	1.8	4
36	Design and fabrication of non-contact fringing field capacitive sensor for liquid level measurement. , 2019, , .		5

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37	Design and fabrication of humidity sensor for condition monitoring of breather of transformer. , 2019, , .		1
38	A novel design of the Parallel Plate Capacitive Sensor for Displacement Measurement. , 2019, , .		4
39	Structural Health Monitoring Using Impedance Sensor. , 2019, , .		0
40	A Novel Cross-Capacitive Sensor for Noncontact Microdroplet Detection. IEEE Transactions on Industrial Electronics, 2019, 66, 4759-4766.	7.9	32
41	Linearization of the sensors characteristics: a review. International Journal on Smart Sensing and Intelligent Systems, 2019, 12, 1-21.	0.7	18
42	Study of Long Term Drift of Aluminum Oxide Thin Film Capacitive Moisture Sensor. IEEE Transactions on Device and Materials Reliability, 2018, 18, 180-188.	2.0	17
43	Design and Development of a Non-Contact Cross-Capacitive Micro Droplet Detector. , 2018, , .		2
44	A Simple Method on Transformer Principle for Early Age Hydration Monitoring and Setting Time Determination of Concrete Materials. IEEE Sensors Journal, 2018, 18, 7265-7272.	4.7	8
45	An efficient signal conditioning circuit to piecewise linearizing the response characteristic of highly nonlinear sensors. Sensors and Actuators A: Physical, 2018, 280, 559-572.	4.1	10
46	A Passive Wireless Tag With Digital Readout Unit for Wide Range Humidity Measurement. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 1013-1020.	4.7	19
47	Advanced Interfacing Techniques for the Capacitive Sensors. Smart Sensors, Measurement and Instrumentation, 2017, , 73-109.	0.6	11
48	Modelling of breather for transformer health assessment. IET Science, Measurement and Technology, 2017, 11, 194-203.	1.6	19
49	Design and Modeling of MEMS-Based Trace-Level Moisture Measurement System for GIS Applications in Smart Grid Environment. IEEE Sensors Journal, 2017, 17, 7758-7766.	4.7	14
50	Smart Sensors and Internet of Things: A Postgraduate Paper. IEEE Sensors Journal, 2017, 17, 577-584.	4.7	79
51	Sensitivity Enhancement of a PPM Level Capacitive Moisture Sensor. Electronics (Switzerland), 2017, 6, 41.	3.1	13
52	An Oscillator-Based Active Bridge Circuit for Interfacing Capacitive Sensors With Microcontroller Compatibility. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 2560-2568.	4.7	29
53	A CCII-based relaxation oscillator as a versatile interface for resistive and capacitive sensors. , 2016, , .		11
54	A sensitive and highly linear capacitive thin film sensor for trace moisture measurement in gases. Sensors and Actuators B: Chemical, 2016, 228, 658-664.	7.8	38

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55	Investigation of the Electrical Characteristics on Measurement Frequency of a Thin-Film Ceramic Humidity Sensor. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 694-702.	4.7	43
56	A semi flexible integrated wireless humidity sensor. , 2015, , .		1
57	A flexible low cost RH humidity sensor on plastic foil. , 2015, , .		1
58	A simple non invasive technique for structural health monitoring. , 2015, , .		0
59	A simple analog interface for capacitive sensor with offset and parasitic capacitance. , 2015, , .		2
60	A Novel Humidity Sensor Based on the Extension of Thompson and Lampard Theorem. IEEE Transactions on Electron Devices, 2015, 62, 4237-4241.	3.0	15
61	A Novel Sol-gel Al_2O_3 Thin-Film-Based Rapid SAW Humidity Sensor. IEEE Transactions on Electron Devices, 2015, 62, 4242-4250.	3.0	28
62	A comprehensive comparative study of DGA based transformer fault diagnosis using fuzzy logic and ANFIS models. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 590-596.	2.9	142
63	A micro interdigitated thin film metal oxide capacitive sensor for measuring moisture in the range of 175-625 ppm. Sensors and Actuators B: Chemical, 2015, 221, 357-364.	7.8	50
64	A Simple MOX Vapor Sensor on Polyimide Substrate for Measuring Humidity in ppm Level. IEEE Sensors Journal, 2015, 15, 3004-3013.	4.7	39
65	A CCII-based wide frequency range square/triangular wave generator. , 2015, , .		12
66	A differential interface for trace moisture sensor. , 2015, , .		2
67	Development of virtual humidity sensor system. , 2015, , .		1
68	A Novel Sol-gel Thin-Film Constant Phase Sensor for High Humidity Measurement in the Range of 50-100% RH. IEEE Sensors Journal, 2015, 15, 2370-2376.	4.7	18
69	A Relaxation Oscillator-Based Transformer Ratio Arm Bridge Circuit for Capacitive Humidity Sensor. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 3414-3422.	4.7	27
70	A time domain bridge-based impedance measurement technique for wide-range lossy capacitive sensors. Sensors and Actuators A: Physical, 2015, 234, 248-262.	4.1	48
71	Fabrication of High Frequency Surface Acoustic Wave (SAW) Devices for Real Time Detection of Highly Toxic Chemical Vapors. International Journal on Smart Sensing and Intelligent Systems, 2015, 8, 1601-1623.	0.7	5
72	A nanoporous thin-film miniature interdigitated capacitive impedance sensor for measuring humidity. International Journal of Smart and Nano Materials, 2014, 5, 169-179.	4.2	14

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73	Oscillator-Based Active Bridge Circuit for Resistance Measurement. , 2014, , .		0
74	A low cost polyimide based metal oxide film RH sensor. , 2014, , .		2
75	Moisture measurement of transformer oil using thin film capacitive sensor. , 2014, , .		1
76	Moisture measurement of transformer oil using thin film capacitive sensor. , 2014, , .		0
77	Artificial neural network based implementation of Oommen's curve. , 2014, , .		0
78	Artificial neural network based implementation of Oommen's curve. , 2014, , .		0
79	ANFIS based identification and location of paper insulation faults of an oil immersed transformer. , 2014, , .		5
80	ANFIS based identification and location of paper insulation faults of an oil immersed transformer. , 2014, , .		7
81	A Single Chip Integrated Sol-Gel Thin Film LC Sensor for Measuring Moisture in ppm Level. IEEE Sensors Journal, 2014, 14, 1148-1153.	4.7	13
82	A Digital Hygrometer for Trace Moisture Measurement. IEEE Transactions on Industrial Electronics, 2014, 61, 5599-5605.	7.9	52
83	A highly sensitive readout circuitry for a wide range thin film capacitive humidity sensors. , 2014, , .		3
84	A SENSITIVE DIGITAL MOISTURE DETECTOR FOR NANOSTRUCTURED THIN FILM SENSOR. International Journal on Smart Sensing and Intelligent Systems, 2014, 7, 1059-1076.	0.7	2
85	Relaxation Oscillator-Based Active Bridge Circuit for Linearly Converting Resistance to Frequency of Resistive Sensor. IEEE Sensors Journal, 2013, 13, 1507-1513.	4.7	48
86	Accuracy analysis of oscillator-based active bridge circuit for linearly converting resistance to frequency. , 2013, , .		9
87	Effect of Polyethylene Glycol in Porous Alumina Based Thin Film Capacitive Humidity Sensor and Its Modelling. Transactions of the Indian Ceramic Society, 2013, 72, 47-51.	1.0	3
88	A novel sol-gel thin film porous alumina based capacitive sensor for measuring trace moisture in the range of 2.5-25 ppm. Sensors and Actuators B: Chemical, 2012, 173, 377-384.	7.8	76
89	Surface Acoustic Wave (SAW) vapour sensor using 70 MHz SAW oscillator. , 2012, , .		2
90	γ -Al ₂ O ₃ -Coated Porous Silicon for Trace Moisture Detection. IEEE Sensors Journal, 2011, 11, 882-887.	4.7	8

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91	A medium range hygrometer using nano-porous thin film of \hat{A}_2 -Al ₂ O ₃ with electronics phase detection. IEEE Sensors Journal, 2011, , .	4.7	6
92	Precision Active Bridge Circuit for Measuring Incremental Resistance with ANN Compensation of Excitation Voltage Variation. Journal of Sensor Technology, 2011, 01, 57-64.	1.0	4
93	Organic vapour sensing by porous silicon: Influence of molecular kinetics in selectivity studies. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 1648-1652.	2.7	29
94	Porous Silicon Based Moisture Detector in the ppmV Range. Sensor Letters, 2008, 6, 746-751.	0.4	4
95	Development of Active Bridge Technique for Measuring Low Capacitance Over Wide Frequency Range. IETE Journal of Education Online, 2005, 46, 19-25.	0.6	0
96	Determination of the relative humidity at the parts-per-million (ppm) level in gases by a nanoporous alumina thin-film on a surface acoustic wave (SAW) resonator. Instrumentation Science and Technology, 0, , 1-14.	1.8	1