Mohammad Abdolrazzaghi

List of Publications by Citations

62 papers	1,572 citations	24 h-index	37 g-index
66 ext. papers	1,890 ext. citations	4.6 avg, IF	5.7 L-index

#	Paper	IF	Citations
62	Strongly Enhanced Sensitivity in Planar Microwave Sensors Based on Metamaterial Coupling. *IEEE Transactions on Microwave Theory and Techniques*, **2018**, 66, 1843-1855	4.1	135
61	Noncontact and Nonintrusive Microwave-Microfluidic Flow Sensor for Energy and Biomedical Engineering. *Scientific Reports*, **2018**, 8, 139	4.9	89
60	A Microwave Ring Resonator Sensor for Early Detection of Breaches in Pipeline Coatings. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 1626-1635	8.9	66
59	Microwave ring resonator-based non-contact interface sensor for oil sands applications. *Sensors and Actuators B: Chemical*, **2016**, 224, 632-639	8.5	61
58	Selective microwave sensors exploiting the interaction of analytes with trap states in TiO2 nanotube arrays. *Nanoscale*, **2016**, 8, 7466-73	7.7	60
57	Liquid Sensing Using Active Feedback Assisted Planar Microwave Resonator. *IEEE Microwave and Wireless Components Letters*, **2015**, 25, 621-623	2.6	53
56	Non-invasive continuous-time glucose monitoring system using a chipless printable sensor based on split ring microwave resonators. *Scientific Reports*, **2020**, 10, 12980	4.9	52
55	Detection of Volatile Organic Compounds Using Microwave Sensors. *IEEE Sensors Journal*, **2015**, 15, 248-254	4	51
54	High resolution microwave microstrip resonator for sensing applications. *Sensors and Actuators A: Physical*, **2015**, 233, 224-230	3.9	50
53	Sensitivity enhancement in planar microwave active-resonator using metal organic framework for CO2 detection. *Sensors and Actuators B: Chemical*, **2018**, 255, 1561-1568	8.5	50
52	Liquid sensing in aquatic environment using high quality planar microwave resonator. *Sensors and Actuators B: Chemical*, **2016**, 225, 517-521	8.5	47
51	A non-contact microwave sensor for monitoring the interaction of zeolite 13X with CO2 and CH4 in gaseous streams. *Sensors and Actuators B: Chemical*, **2017**, 238, 1240-1247	8.5	47
50	Microbead-assisted high resolution microwave planar ring resonator for organic-vapor sensing. *Applied Physics Letters*, **2015**, 106, 062903	3.4	45
49	Multiresonant Chipless RFID Array System for Coating Defect Detection and Corrosion Prediction. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 8868-8877	8.9	40
48	Wide dynamic range microwave planar coupled ring resonator for sensing applications. *Applied Physics Letters*, **2016**, 108, 232906	3.4	39
47	Monitoring Solid Particle Deposition in Lossy Medium Using Planar Resonator Sensor. *IEEE Sensors Journal*, **2017**, 17, 7981-7989	4	35
46	High-Resolution RFID Liquid Sensing Using a Chipless Tag. *IEEE Microwave and Wireless Components Letters*, **2017**, 27, 311-313	2.6	33

45	Miniaturized Quarter-Mode Substrate Integrated Cavity Resonators for Humidity Sensing. *IEEE Microwave and Wireless Components Letters*, **2017**, 27, 612-614	2.6	32
44	Effect of phosphonate monolayer adsorbate on the microwave photoresponse of TiO2 nanotube membranes mounted on a planar double ring resonator. *Nanotechnology*, **2016**, 27, 375201	3.4	31
43	Robust Ultra-High Resolution Microwave Planar Sensor Using Fuzzy Neural Network Approach. *IEEE Sensors Journal*, **2017**, 17, 323-332	4	29
42	Noninvasive Glucose Sensing in Aqueous Solutions Using an Active Split-Ring Resonator. *IEEE Sensors Journal*, **2021**, 21, 18742-18755	4	26
41	Particle size characterization using a high resolution planar resonator sensor in a lossy medium. *Sensors and Actuators B: Chemical*, **2016**, 234, 332-337	8.5	25
40	Dual-Band Microwave Circuits for Selective Binary Gas Sensing System. *IEEE Transactions on Microwave Theory and Techniques*, **2019**, 67, 4206-4219	4.1	24
39	Wireless Communication in Feedback-Assisted Active Sensors. *IEEE Sensors Journal*, **2016**, 16, 8151-8157	4	24
38	Locally Strong-Coupled Microwave Resonator Using PEMC Boundary for Distant Sensing Applications. *IEEE Transactions on Microwave Theory and Techniques*, **2019**, 67, 4130-4139	4.1	23
37	Dual Active Resonator for Dispersion Coefficient Measurement of Asphaltene Nano-Particles. *IEEE Sensors Journal*, **2017**, 17, 7248-7256	4	22
36	Investigation on planar microwave sensors with enhanced sensitivity from microfluidic integration. *Sensors and Actuators A: Physical*, **2020**, 301, 111752	3.9	22
35	Ultraviolet sensing using a TiO nanotube integrated high resolution planar microwave resonator device. *Nanoscale*, **2018**, 10, 4882-4889	7.7	21
34	A Dual-Mode Split-Ring Resonator to Eliminate Relative Humidity Impact. *IEEE Microwave and Wireless Components Letters*, **2018**, 28, 939-941	2.6	21
33	Exploiting Sensitivity Enhancement in Micro-wave Planar Sensors Using Intermodulation Products With Phase Noise Analysis. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2020**, 67, 4382-4395	3.9	19
32	**2014**,		19
31	Contactless Asphaltene Detection Using an Active Planar Microwave Resonator Sensor. *Energy & Fuels*, **2017**, 31, 8784-8791	4.1	19
30	Non-contact liquid sensing using high resolution microwave microstrip resonator **2015**,		19
29	Sensitivity enhancement of split ring resonator based liquid sensors **2016**,		18
28	Comparative Analysis of Machine Learning Techniques for Temperature Compensation in Microwave Sensors. *IEEE Transactions on Microwave Theory and Techniques*, **2021**, 69, 4223-4236	4.1	18

27	Noncontact high sensitivity chipless tag microwave resonator for bitumen concentration measurement at high temperatures. *Fuel*, **2020**, 265, 116916	7.1	17
26	Multifunctional Ultrahigh Sensitive Microwave Planar Sensor to Monitor Mechanical Motion: Rotation, Displacement and Stretch. *Sensors*, **2020**, 20,	3.8	15
25	A Temperature-Compensated High-Resolution Microwave Sensor Using Artificial Neural Network. *IEEE Microwave and Wireless Components Letters*, **2020**, 30, 919-922	2.6	15
24	. *IEEE Microwave and Wireless Components Letters*, **2018**, 28, 837-839	2.6	14
23	Monitoring the residual capacity of activated carbon in an emission abatement system using a non-contact, high resolution microwave resonator sensor. *Sensors and Actuators B: Chemical*, **2019**, 282, 218-224	8.5	14
22	Monitoring pH Level Using High-Resolution Microwave Sensor for Mitigation of Stress Corrosion Cracking in Steel Pipelines. *IEEE Sensors Journal*, **2020**, 20, 7033-7043	4	13
21	Highly sensitive microwave split ring resonator sensor using gap extension for glucose sensing **2017**,		13
20	A Novel Technique for Determining the Adsorption Capacity and Breakthrough Time of Adsorbents Using a Noncontact High-Resolution Microwave Resonator Sensor. *Environmental Science & Technology*, **2017**, 51, 427-435	10.3	12
19	Selective Volume Fraction Sensing Using Resonant- Based Microwave Sensor and its Harmonics. *IEEE Transactions on Microwave Theory and Techniques*, **2020**, 68, 3958-3968	4.1	12
18	Enhanced Q double resonant active sensor for humidity and moisture effect elimination **2016**,		12
17	A novel miniaturized asymmetric CPW split ring resonator with extended field distribution pattern for sensing applications. *Sensors and Actuators A: Physical*, **2020**, 304, 111769	3.9	8
16	Fast-forward solver for inhomogeneous media using machine learning methods: artificial neural network, support vector machine and fuzzy logic. *Neural Computing and Applications*, **2018**, 29, 1583-1591	4.8	8
15	Highly Sensitive Microwave Sensor for High Precision Sensing of Water Contamination in Mineral Oil. *IEEE Sensors Journal*, **2021**, 21, 13247-13254	4	6
14	High-Dynamic-Range Chipless Microwave Resonator-Based Strain Sensor. *IEEE Transactions on Instrumentation and Measurement*, **2021**, 70, 1-7	5.2	6
13	Sensitive Spectroscopy Using DSRR Array and Linvill Negative Impedance **2019**,		5
12	An SIW Oscillator for Microfluidic Lossy Medium Characterization **2020**,		4
11	Being an Electromagnetic Engineer: It Is Not a Job, It Is a Lifestyle [Women in Engineering]. *IEEE Antennas and Propagation Magazine*, **2019**, 61, 116-119	1.7	4
10	Discrete Microwave Spectroscopy using Planar Resonator **2019**,		4

9	Sensitivity Optimization in SRRs Using Interferometry Phase Cancellation **2019**,		3
8	Stepped-impedance slotted microstrip-fed patch antenna for on-metal radio frequency identification applications. *Microwave and Optical Technology Letters*, **2020**, 62, 3324-3332	1.2	3
7	Compelling impact of intermodulation products of regenerative active resonators on sensitivity **2017**,		3
6	Highly sensitive miniaturized bio-sensor using 2-layer double split ring resonators **2015**,		3
5	A 4 GHz Near-Field Monitoring Planar Oscillator Sensor **2018**,		3
4	Non-contact real-time water and brine concentration monitoring in crude oil based on multi-variable analysis of microwave resonators. *Measurement: Journal of the International Measurement Confederation*, **2021**, 177, 109286	4.6	2
3	Contactless asphaltene solid particle deposition monitoring using active microwave resonators **2016**,		2
2	Non-recovery moisture sensor for breach integrity using the degenerate mode of planar microwave ring resonator. *Sensors and Actuators A: Physical*, **2021**, 328, 112775	3.9	1
1	Printed concave-like slot for bandwidth enhancement of inset-fed patch antenna on metallic surfaces. *Microwave and Optical Technology Letters*, **2021**, 63, 1745-1752	1.2	