

# Amer Zakaria

## List of Publications by Year in descending order

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55  
papers

991  
citations

567281

15  
h-index

610901

24  
g-index

55  
all docs

55  
docs citations

55  
times ranked

470  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Wideband Microwave Tomography System With a Novel Frequency Selection Procedure. IEEE Transactions on Biomedical Engineering, 2010, 57, 894-904.	4.2	121
2	Finite-element contrast source inversion method for microwave imaging. Inverse Problems, 2010, 26, 115010.	2.0	107
3	Analysis of Incident Field Modeling and Incident/Scattered Field Calibration Techniques in Microwave Tomography. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 900-903.	4.0	85
4	On Super-Resolution With an Experimental Microwave Tomography System. IEEE Antennas and Wireless Propagation Letters, 2010, 9, 393-396.	4.0	64
5	Enhancement of Gauss-Newton Inversion Method for Biological Tissue Imaging. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 3424-3434.	4.6	64
6	A Near-Field Dual Polarized (TE-TM) Microwave Imaging System. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 1376-1384.	4.6	59
7	FULL-VECTORIAL PARALLEL FINITE-ELEMENT CONTRAST SOURCE INVERSION METHOD. Progress in Electromagnetics Research, 2013, 142, 463-483.	4.4	58
8	BREAST IMAGING USING MICROWAVE TOMOGRAPHY WITH RADAR-BASED TISSUE-REGIONS ESTIMATION. Progress in Electromagnetics Research, 2014, 149, 161-171.	4.4	53
9	Microwave Imaging of Human Forearms: Pilot Study and Image Enhancement. International Journal of Biomedical Imaging, 2013, 2013, 1-17.	3.9	49
10	Microwave Imaging for Early Breast Cancer Detection: Current State, Challenges, and Future Directions. Journal of Imaging, 2022, 8, 123.	3.0	41
11	Estimation and Use of Prior Information in FEM-CSI for Biomedical Microwave Tomography. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 1606-1609.	4.0	38
12	Application of Multiplicative Regularization to the Finite-Element Contrast Source Inversion Method. IEEE Transactions on Antennas and Propagation, 2011, 59, 3495-3498.	5.1	35
13	Microwave Imaging Using Normal Electric-Field Components Inside Metallic Resonant Chambers. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 923-933.	4.6	24
14	Ambient noise cancelation with a time-domain EMI measurement system using adaptive filtering. , 2008, , ,		22
15	A study of matching fluid loss in a biomedical microwave tomography system. Medical Physics, 2013, 40, 023101.	3.0	22
16	The University of Manitoba Microwave Imaging Repository: A Two-Dimensional Microwave Scattering Database for Testing Inversion and Calibration Algorithms [Measurements Corner]. IEEE Antennas and Propagation Magazine, 2011, 53, 126-133.	1.4	21
17	A 3-D Dual-Polarized Near-Field Microwave Imaging System. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 1790-1797.	4.6	15
18	Smart airport foreign object debris detection rover using LiDAR technology. Internet of Things (Netherlands), 2019, 5, 1-11.	7.7	15

#	ARTICLE	IF	CITATIONS
19	Investigating a double layer Vivaldi antenna design for fixed array field measurement. International Journal of Ultra Wideband Communications and Systems, 2010, 1, 282.	0.1	14
20	The Finite-Element Method Contrast Source Inversion Algorithm for 2D Transverse Electric Vectorial Problems. IEEE Transactions on Antennas and Propagation, 2012, 60, 4757-4765.	5.1	13
21	Large-scale channel characterization at 28 GHz on a university campus in the United Arab Emirates. Telecommunication Systems, 2020, 74, 185-199.	2.5	11
22	Novel Microwave Tomography System Using a Phased-Array Antenna. IEEE Transactions on Microwave Theory and Techniques, 2018, , 1-10.	4.6	10
23	Biomedical microwave inversion in conducting cylinders of arbitrary shapes. , 2009, , .		5
24	Microwave imaging by mixed-order discontinuous Galerkin contrast source inversion. , 2014, , .		5
25	Preliminary Numerical Analysis of Monitoring Bone Density Using Microwave Tomography. , 2018, , .		5
26	Monitoring Bone Density Using Microwave Tomography of Human Legs: A Numerical Feasibility Study. Sensors, 2021, 21, 7078.	3.8	5
27	A novel microwave tomography system for breast imaging based on the modulated scattering technique. , 2014, , .		4
28	A study of adaptive meshing in FEM-CSI for microwave tomography. , 2010, , .		3
29	Enhancing microwave tomography in a circular metallic chamber by an inhomogeneous background. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 044102.	0.5	3
30	Electromagnetic imaging inside metallic enclosures using the normal boundary field components. , 2014, , .		2
31	Breast cancer imaging using microwave tomography with radar-derived prior information. , 2014, , .		2
32	Feasibility of employing orthodontic braces as radiating antenna for implantable devices. , 2017, , .		2
33	Large-scale Channel Measurements at 28 GHz in the United Arab Emirates for 5G systems. , 2019, , .		2
34	An ultra-wideband microwave tomography system: Preliminary results. , 2009, 2009, 2288-91.		1
35	Experimental validation of thin-wire FVTD models. , 2009, , .		1
36	Evaluation of a microwave tomography system for animal tissue imaging. , 2012, , .		1

#	ARTICLE	IF	CITATIONS
37	A novel 3D near-field microwave imaging system. , 2013, , .		1
38	Grain bin monitoring via microwave imaging. , 2014, , .		1
39	Simultaneous high-order contrast source inversion of dielectric and magnetic targets. , 2014, , .		1
40	Discontinuous-Galerkin microwave imaging. , 2014, , .		1
41	Low-cost microwave security camera system. , 2016, , .		1
42	Electromagnetic 3D Model of Oral Cavity with Dental Excitation. , 2018, , .		1
43	Guidelines Towards a Wearable Microwave Tomography System. , 2019, , .		1
44	Image Classification in Microwave Tomography using a Parametric Intensity Model. , 2021, , .		1
45	Using prior information to enhance microwave tomography images in bone health assessment. BioMedical Engineering OnLine, 2022, 21, 8.	2.7	1
46	Liquid Dielectric Property Determination using Monopole Probes Operating at Microwave Frequencies. , 2006, , .		0
47	On the implementation of a three-dimensional finite-element contrast source inversion method. , 2012, , .		0
48	Grain bin storage monitoring via microwave imaging. , 2013, , .		0
49	Exploration of novel contrast agents for functional imaging using microwave tomography. , 2013, , .		0
50	Investigation of tumour detection using contrast agents and FEM-CSI in biomedical microwave tomography. , 2013, , .		0
51	System and formulation options for biomedical microwave imaging. , 2014, , .		0
52	A study of contrast-enhanced functional microwave imaging. , 2014, , .		0
53	On the achievable resolution from microwave tomography. , 2015, , .		0
54	A water-based 3-D breast imaging system: Modelling and use of prior information. , 2015, , .		0

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55	Liquid Dielectric Property Determination using Monopole Probes Operating at Microwave Frequencies. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2006, , .	0.0	0