

# Mahmoud Shahabadi

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/7813729/mahmoud-shahabadi-publications-by-year.pdf>

**Version:** 2024-04-17

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

129  
papers

1,329  
citations

19  
h-index

31  
g-index

186  
ext. papers

1,653  
ext. citations

2.7  
avg, IF

4.8  
L-index

#	Paper	IF	Citations
129	Disk-loaded silicon micro-ring resonator for high-Q resonance. <i>Optics Express</i> , <b>2021</b> , 29, 22688-22703	3.3	
128	A Fast Computational Method for Characteristic Modes and Eigenvalues of Array Antennas. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2020</b> , 68, 7879-7892	4.9	1
127	Entangled Nanoplasmonic Cavities for Estimating Thickness of Surface-Adsorbed Layers. <i>ACS Nano</i> , <b>2020</b> , 14, 8518-8527	16.7	12
126	Dyadic Green's function for the electrically biased graphene-based multilayered spherical structures. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2020</b> , 256, 107251	2.1	6
125	Narrow-Band 4.3 $\mu$ m Plasmonic Schottky-Barrier Photodetector for CO <sub>2</sub> Sensing <b>2019</b> , 3, 1-4		2
124	Analysis of a fiber-optic deep-etched silicon Fabry-Pérot temperature sensor and modeling its fabrication imperfections. <i>Microsystem Technologies</i> , <b>2019</b> , 25, 389-397	1.7	1
123	Scattering From Graphene-Based Multilayered Spherical Structures. <i>IEEE Nanotechnology Magazine</i> , <b>2019</b> , 18, 1129-1136	2.6	12
122	Design of a wideband terahertz absorber composed of graphene patches. <i>IET Optoelectronics</i> , <b>2019</b> , 13, 235-239	1.5	2
121	Terahertz Detection With a Low-Cost Packaged GaAs High-Electron-Mobility Transistor. <i>IEEE Transactions on Terahertz Science and Technology</i> , <b>2019</b> , 9, 27-37	3.4	7
120	Design, fabrication, and measurement of a polymer-based anti-reflection coating for improved performance of a solar panel under a specific incident angle. <i>Solar Energy Materials and Solar Cells</i> , <b>2019</b> , 189, 175-180	6.4	11
119	Tunable terahertz filter composed of an array of subwavelength metallic ring apertures. <i>Optik</i> , <b>2018</b> , 164, 355-361	2.5	2
118	Continuous Wave Terahertz Sensing Using GaN HEMTs. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 215, 1700607	1.6	4
117	Balanced Filter With Wideband Common-Mode Suppression in Groove Gap Waveguide Technology. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2018</b> , 28, 132-134	2.6	13
116	Proposing a non-linear microwave ring resonator for efficient multi-tone generation. <i>IET Microwaves, Antennas and Propagation</i> , <b>2018</b> , 12, 783-788	1.6	1
115	Improved Wireless Power Transfer Efficiency Using Reactively Terminated Resonators. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2018</b> , 17, 803-807	3.8	4
114	Low Phase-Noise Self-Oscillating Cross-Coupled Active Antenna. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2018</b> , 66, 4516-4523	4.9	5
113	Microstrip Antenna Array Fed by a Low-Loss Gap-Waveguide Feed Network. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2018</b> , 66, 4359-4363	4.9	5

112	Indirect Determination of Solute Complex Permittivity Using a Highly Accurate Time-Domain Analysis. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2018</b> , 66, 4634-4640	4.1	1
111	A Grating-Optic-Less Visible Spectrometer Using Fresnel Zone Plate Patterns on a Digital Light Processor. <i>IEEE Sensors Journal</i> , <b>2018</b> , 18, 6432-6437	4	2
110	Distributed-element modelling for spiral resonators used in wireless power transfer. <i>International Journal of Circuit Theory and Applications</i> , <b>2018</b> , 46, 313-327	2	3
109	Improved Fourier Analysis of Periodically Patterned Graphene Sheets Embedded in Multilayered Structures and Its Application to the Design of a Broadband Tunable Wide-Angle Polarizer. <i>IEEE Journal of Quantum Electronics</i> , <b>2017</b> , 53, 1-8	2	2
108	. <i>IEEE Sensors Journal</i> , <b>2017</b> , 17, 5460-5465	4	2
107	Design and fabrication of a fiber-optic deep-etched silicon fabry-perot temperature sensor <b>2017</b> ,		2
106	Experimental investigation on convective heat transfer and hydrodynamic characteristics of magnetite nanofluid under the influence of an alternating magnetic field. <i>International Journal of Thermal Sciences</i> , <b>2016</b> , 99, 113-124	4.1	84
105	A Hybrid Photonic-Plasmonic Sensing Platform for Differentiating Background and Surface Interactions Using an Array of Metal-Insulator-Metal Resonators. <i>IEEE Sensors Journal</i> , <b>2016</b> , 16, 1621-1627	4	3
104	Investigation of electric and magnetic coupling between two helical resonators of a wireless power transfer system. <i>Electronics Letters</i> , <b>2016</b> , 52, 312-314	1.1	4
103	Integrated Optical-Phased Array Nanoantenna System Using a Plasmonic Rotman Lens. <i>Journal of Lightwave Technology</i> , <b>2016</b> , 34, 2118-2126	4	23
102	Spurious-free analysis of two-dimensional low-loss metallic gratings. <i>Journal of Optics (United Kingdom)</i> , <b>2016</b> , 18, 035001	1.7	
101	Analysis of magnetically biased graphene-based periodic structures using a transmission-line formulation. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2016</b> , 33, 2566	1.7	10
100	<b>2016</b> ,		5
99	Highly sensitive terahertz dielectric sensor for small-volume liquid samples. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 191105	3.4	17
98	Continuous spectrum of modes for optical micro-sphere resonators. <i>Optics Communications</i> , <b>2016</b> , 375, 1-8	2	2
97	Broadband Reflectarray Antenna on a Periodically Perforated Substrate. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2016</b> , 64, 3711-3717	4.9	19
96	Linear Analysis of Helix Traveling-Wave Tubes With Nonnegligible Space Charge Using the Improved Helical-Harmonics Approximation. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 1024-1031	2.9	1
95	Coplanar rotman lens and antipodal vivaldi antenna array for L- and S-band applications. <i>Microwave and Optical Technology Letters</i> , <b>2015</b> , 57, 1305-1308	1.2	3

94	Analytical modeling of the extrusion process using the electrostatics concept. <i>Mechanics of Materials</i> , <b>2015</b> , 88, 87-102	3.3	4
93	Analysis of integrated MIM-based plasmonic devices using a transmission-line formulation. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2015</b> , 32, 1843	1.7	2
92	Analysis of 2-D dielectric-waveguide-coupled optical ring resonators using a transmission-line formulation. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2015</b> , 32, 1797-804	1.8	2
91	Highly Directive Hybrid Plasmonic Leaky-Wave Optical Antenna With Controlled Side-Lobe Level. <i>Journal of Lightwave Technology</i> , <b>2015</b> , 33, 4791-4798	4	19
90	3-Coil orientation insensitive wireless power transfer for capsule endoscope <b>2015</b> ,		9
89	Convective heat transfer characteristics of magnetite nanofluid under the influence of constant and alternating magnetic field. <i>Powder Technology</i> , <b>2015</b> , 274, 258-267	5.2	92
88	External Cylindrical Invisibility Cloaks With Small Material Dynamic Range. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2014</b> , 62, 2187-2191	4.9	11
87	Guided Mode Resonance Sensor With Enhanced Surface Sensitivity Using Coupled Cross-Stacked Gratings. <i>IEEE Sensors Journal</i> , <b>2014</b> , 14, 1216-1222	4	20
86	Analysis of Helical Slow-Wave Structures for Modeling Helix Thickness Using an Improved Helical-Harmonics Approximation Part II: Simulation Results. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 172-177	2.9	2
85	Analysis of Helical Slow-Wave Structures for Modeling Helix Thickness Using an Improved Helical-Harmonics Approximation Part I: Theory. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 166-171	2.9	3
84	Design and implementation of compact WPT system using printed spiral resonators. <i>Electronics Letters</i> , <b>2014</b> , 50, 110-111	1.1	29
83	One-dimensional finite-elements method for the analysis of whispering gallery microresonators. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2014</b> , 31, 1614-9	1.8	1
82	Correction of positioning error in Talbot lithography under noncoherent illumination. <i>Journal of Nanophotonics</i> , <b>2014</b> , 8, 084089	1.1	3
81	Modeling of a frequency comb source for terahertz generation <b>2014</b> ,		1
80	Microfluidic terahertz sensor based on an array of parallel-plate resonators <b>2014</b> ,		1
79	Possibility of perfect concealment by lossy conventional and lossy metamaterial cylindrical invisibility cloaks. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 244501	2.5	4
78	SIW cavity-backed slot antennas with improved gain <b>2013</b> ,		3
77	Terahertz Parallel-Plate Ladder Waveguide With Highly Confined Guided Modes. <i>IEEE Transactions on Terahertz Science and Technology</i> , <b>2013</b> , 3, 87-95	3.4	9

76	Beam splitting using self-collimation phenomenon in photonic crystal. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2013</b> , 30, 3140	1.7	2
75	EIT based tunable metal composite spherical nanoparticles. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , <b>2012</b> , 10, 102-111	2.6	6
74	Phase-Shifter-Less Beam Scanning of a Receive Array Using Spatial LO Distribution. <i>Journal of Electromagnetic Waves and Applications</i> , <b>2012</b> , 26, 653-662	1.3	
73	Plasmonic nanostructures for increasing the efficiency of terahertz large-area photomixers <b>2012</b> ,		1
72	Radiation characteristics of large-area photomixer used for generation of continuous-wave terahertz radiation. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2012</b> , 29, 813	1.7	11
71	Plasmonic grating as a nonlinear converter-coupler. <i>Optics Express</i> , <b>2012</b> , 20, 1392-405	3.3	16
70	Large-area microstructured photomixer as scannable detector of continuous-wave terahertz radiation. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2012</b> , 29, 3254	1.7	1
69	Nanoscale all-optical plasmonic switching using electromagnetically induced transparency. <i>Applied Optics</i> , <b>2012</b> , 51, 5019-27	1.7	8
68	Analysis of plasmon propagation along a chain of metal nanospheres using the generalized multipole technique. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2011</b> , 28, 937	1.7	24
67	Conditions of maximum efficiency for wireless power transfer between two helical wires. <i>IET Microwaves, Antennas and Propagation</i> , <b>2011</b> , 5, 545	1.6	11
66	Analysis of Multipactor RF Breakdown Thresholds in Elliptical Waveguides. <i>IEEE Transactions on Electron Devices</i> , <b>2011</b> , 58, 876-881	2.9	13
65	Analysis of multi-layer optical waveguides using a pseudospectral technique. <i>Journal of Optics (United Kingdom)</i> , <b>2011</b> , 13, 125703	1.7	1
64	Higher-order soliton-effect pulse compression in a nonlinear left-handed transmission line. <i>AEU - International Journal of Electronics and Communications</i> , <b>2011</b> , 65, 848-851	2.8	2
63	MODAL ANALYSIS OF MULTILAYER CONICAL DIELECTRIC WAVEGUIDES FOR AZIMUTHAL INVARIANT MODES. <i>Progress in Electromagnetics Research</i> , <b>2010</b> , 105, 213-229	3.8	4
62	Plane-wave diffraction by periodic structures with artificial anisotropic dielectrics. <i>Journal of Optics (United Kingdom)</i> , <b>2010</b> , 12, 055102	1.7	3
61	Thin Wideband Radar Absorbers. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2010</b> , 58, 4051-4058	4.9	70
60	Spoof surface plasmons propagating along a periodically corrugated coaxial waveguide. <i>Journal Physics D: Applied Physics</i> , <b>2010</b> , 43, 135302	3	28
59	Application of the generalized multipole technique to the analysis of a ladder parallel-plate waveguide for terahertz guided-wave applications. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2010</b> , 27, 2061	1.7	5

58	All-optical wavelength converter based on a heterogeneously integrated GaP on a silicon-on-insulator waveguide. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2010</b> , 27, 2273-2277	1.7	11
57	Miniaturization of Circular Patch Antennas Using MNG Metamaterials. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2010</b> , 9, 1194-1196	3.8	30
56	Analysis of Frequency Selective Surfaces on Periodic Substrates Using Entire Domain Basis Functions. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2010</b> , 58, 876-886	4.9	7
55	Full-wave analysis of photonic-crystal structures with multi quantum well active region. <i>Optics Communications</i> , <b>2010</b> , 283, 3747-3754	2	
54	Wideband substrate integrated waveguide power splitter with high isolation. <i>IET Microwaves, Antennas and Propagation</i> , <b>2010</b> , 4, 817	1.6	19
53	Substrate-integrated waveguide circuit analysis and optimisation. <i>IET Microwaves, Antennas and Propagation</i> , <b>2010</b> , 4, 2115	1.6	1
52	Loss Measurement of Aluminum Thin-Film Coplanar Waveguide (CPW) Lines at Microwave Frequencies. <i>IEEE Transactions on Electron Devices</i> , <b>2010</b> , 57, 2037-2040	2.9	5
51	Large Overlapping Subdomain Method of Moments for the Analysis of Frequency Selective Surfaces. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2010</b> , 58, 2175-2187	4.1	3
50	Numerical Multimode Thru-Line (TL) Calibration Technique for Substrate Integrated Waveguide Circuits. <i>Journal of Electromagnetic Waves and Applications</i> , <b>2009</b> , 23, 1785-1793	1.3	14
49	Reduction of the staircasing error in the single-domain pseudospectral frequency-domain method for analysis of photonic crystals. <i>Journal of Optics</i> , <b>2009</b> , 11, 065101		
48	High frequency integrated feed for front end circuitry and antenna arrays. <i>International Journal of RF and Microwave Computer-Aided Engineering</i> , <b>2009</b> , 19, 380-388	1.5	5
47	Wide-band low-loss CPW-based composite right/left-handed transmission line. <i>Microwave and Optical Technology Letters</i> , <b>2009</b> , 51, 1388-1390	1.2	
46	Substrate-integrated-waveguide feed network for microstrip antenna arrays. <i>Microwave and Optical Technology Letters</i> , <b>2009</b> , 51, 1619-1621	1.2	1
45	BRIGHT AND DARK SOLITON GENERATION IN A LEFT-HANDED NONLINEAR TRANSMISSION LINE WITH SERIES NONLINEAR CAPACITORS. <i>Progress in Electromagnetics Research</i> , <b>2009</b> , 96, 237-249	3.8	26
44	Via-Free CPW-Based Composite Right/Left-Handed Transmission Line and a Calibration Approach to Determine Its Propagation Constant. <i>Journal of Electromagnetic Waves and Applications</i> , <b>2008</b> , 22, 1599-1606	1.3	9
43	Parallel-Series feed network with improved G/T performance for high-gain microstrip antenna arrays. <i>Electronics Letters</i> , <b>2008</b> , 44, 180	1.1	15
42	Design of a Single-Feed Dual-Band Dual-Polarized Printed Microstrip Antenna Using a Boolean Particle Swarm Optimization. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2008</b> , 56, 1845-1852	4.9	64
41	Plasmonic ring resonator. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2008</b> , 25, 2116	1.7	24

40	Coupling of free space sub-terahertz waves into dielectric slabs using PC waveguides. <i>Optics Express</i> , <b>2008</b> , 16, 6112-8	3.3	2
39	X-Band Substrate Integrated Waveguide Amplifier. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2008</b> , 18, 815-817	2.6	41
38	Symmetry reduction for maximization of higher-order stop-bands in two-dimensional photonic crystals. <i>Journal of Modern Optics</i> , <b>2008</b> , 55, 2971-2980	1.1	5
37	Achieving large higher-order stop-bands in two-dimensional photonic crystals using a real-valued genetic algorithm. <i>Journal of Optics</i> , <b>2008</b> , 10, 085203		4
36	Investigation of the effect of conductor loss and mismatch on the tunneling through frequency selective surfaces <b>2008</b> ,		1
35	MODAL ANALYSIS OF EXTRAORDINARY TRANSMISSION THROUGH AN ARRAY OF SUBWAVELENGTH SLITS. <i>Progress in Electromagnetics Research</i> , <b>2008</b> , 79, 59-74	3.8	13
34	Sub-terahertz on/off switch based on a two-dimensional photonic crystal infiltrated by liquid crystals. <i>Optics Communications</i> , <b>2008</b> , 281, 4623-4625	2	66
33	Prediction and verification of negative refraction in a two-dimensional photonic crystal slab using a rigorous semi-analytical approach. <i>Journal of Modern Optics</i> , <b>2007</b> , 54, 1793-1802	1.1	1
32	APPLICATION OF GENERALIZED MULTIPOLE TECHNIQUE TO THE ANALYSIS OF DISCONTINUITIES IN SUBSTRATE INTEGRATED WAVEGUIDES. <i>Progress in Electromagnetics Research</i> , <b>2007</b> , 69, 227-235	3.8	23
31	USING PHOTON WAVE FUNCTION FOR THE TIME-DOMAIN ANALYSIS OF ELECTROMAGNETIC WAVE SCATTERING. <i>Progress in Electromagnetics Research</i> , <b>2007</b> , 76, 397-412	3.8	4
30	Diffraction Analysis of Periodic Structures Using a Transmission-Line Formulation: Principles and Applications. <i>Journal of Computational and Theoretical Nanoscience</i> , <b>2007</b> , 4, 649-666	0.3	10
29	Multiple-scale analysis of optical bistability in semiconductor periodic structures. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2007</b> , 24, 887	1.7	
28	Diffraction analysis of photonic metamaterials using a transmission line formulation <b>2007</b> ,		1
27	Low-Radiation-Loss Waveguide-to-Microstrip Transition Using a Double Slit Configuration for Microstrip Array Feeding <b>2007</b> ,		1
26	Wideband Planar Log-Periodic Antenna <b>2007</b> ,		11
25	Hybrid Ku-band low-noise amplifier for mobile DBS active phased-array antennas. <i>International Journal of RF and Microwave Computer-Aided Engineering</i> , <b>2006</b> , 16, 573-583	1.5	1
24	Reduction of dielectric losses in substrate integrated waveguide. <i>Electronics Letters</i> , <b>2006</b> , 42, 1230	1.1	29
23	Modeling of the correlation coefficients of a receive antenna array in a MIMO multipath channel <b>2006</b> ,		4

22	Design, simulation, and optimization of an on-chip bow-tie slot antenna using genetic algorithm <b>2006,</b>		2
21	Full-wave analysis of lossy anisotropic optical waveguides using a transmission line approach based on a Fourier method. <i>Journal of Optics</i> , <b>2006</b> , 8, 1080-1087		10
20	Modal analysis of multilayer planar lossy anisotropic optical waveguides. <i>Journal of Optics</i> , <b>2006</b> , 8, 856-863		7
19	High SNR flexible top hat monopole probe for 1.5 T MRI. <i>Measurement Science and Technology</i> , <b>2006</b> , 17, 1987-1994	2	1
18	ANALYSIS OF A LOSSY MICRORING USING THE GENERALIZED MULTIPOLE TECHNIQUE. <i>Progress in Electromagnetics Research</i> , <b>2006</b> , 66, 287-299	3.8	8
17	MULTIPLE-SCALE ANALYSIS OF PLANE WAVE REFRACTION AT A DIELECTRIC SLAB WITH KERR-TYPE NONLINEARITY. <i>Progress in Electromagnetics Research</i> , <b>2006</b> , 56, 81-92	3.8	4
16	Low-cost, high-efficiency quasi-planar array of waveguide-fed circularly polarized microstrip antennas. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2005</b> , 53, 2036-2043	4.9	42
15	Perturbation analysis of plane-wave transmission through a dielectric slab with Kerr-type nonlinearity. <i>Optics Express</i> , <b>2005</b> , 13, 6587-96	3.3	1
14	FULL-WAVE ANALYSIS OF COUPLED WAVEGUIDES IN A TWO-DIMENSIONAL PHOTONIC CRYSTAL. <i>Progress in Electromagnetics Research</i> , <b>2004</b> , 49, 291-307	3.8	6
13	A Novel open-ended intravascular MRI loop probe. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2004</b> , 2004, 1148-50		
12	Transmission line formulation for the full-wave analysis of two-dimensional dielectric photonic crystals. <i>IET Science, Measurement and Technology</i> , <b>2004</b> , 151, 327-334		37
11	G/T of multi-segment active arrays - dependence on array configuration <b>2004,</b>		3
10	Application of equal-weight orthogonal signalling to non-directed wireless infrared CDMA networks. <i>Electronics Letters</i> , <b>2002</b> , 38, 804	1.1	0
9	A Rigorous Two-Dimensional Field Analysis of Dfb Structures - Abstract. <i>Journal of Electromagnetic Waves and Applications</i> , <b>1999</b> , 13, 897-898	1.3	
8	Millimeter-wave holographic power splitting/combining. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>1997</b> , 45, 2316-2323	4.1	18
7	Design, simulation, and fabrication of a novel multi-band miniaturized antenna for wireless communication applications		2
6	Effect of dielectric losses on the propagation characteristics of the substrate integrated waveguide		1
5	A Novel 2D Genetic Algorithm for Band Gap Optimization of Two-Dimensional Photonic Crystals		2



4	Boolean Particle Swarm Optimization and Its Application to the Design of a Dual-Band Dual-Polarized Planar Antenna	32
3	A simple method for analyzing a 2-D photonic crystal waveguide	1
2	A 65 GHz holographic power combiner	3
1		2