

# **ZAHRA ATLASBAF**

## ***Associate Professor***



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### **Education**

M.Sc., Electrical Engineering (honors), Tarbiat Modares University, Tehran, Iran.  
Ph.D., Electrical Engineering (honors), Tarbiat Modares University, Tehran, Iran.

### **Research Interests**

Antennas, Metamaterials, Electromagnetic, Numerical Methods in Electromagnetic, Active & passive Microwave circuits, Active Integrated Antennas, Optics, Bio-Electromagnetic

### **Awards**

Distinguished Researcher of Electrical Engineering for the year 2020-2021 at TMU  
IEEE Senior Member since 2017

Prominent Professor of Electrical Engineering for the year 2013-2014, at TMU  
Prominent Inventor of Electrical Engineering for the year 2012-2013, at TMU

### **Patents**

1. K. Hosseini, Z. Atlasbaf," Analysis and Synthesis of Singly-Curved Microstrip Structures Utilizing Modified Schwarz-Christoffel Transformation", No. 81428, 2014
2. Z.Vahidpour, K. Forooraghi, A. Fotowat & Z. Atlasbaf, "Fast Frequency sensing by using Phase- Frequency detector", No. 77943, 2013
3. R.Shamsaee, Z. Atlasbaf, "Design and Implementation of a Dual-band Single Layer Reflectarray Antenna in X and K Bands", No.77044, Sept. 2012
4. R.Shamsaee, Z. Atlasbaf, 'Design and Implementation of Broadband Reflectarray Antenna for Radar and Space Satellite Applications', No. 73946, Jan. 2012

### **Books**

- 1- S. Hayati, Z. Atlasbaf," Photovoltaic and Photothermal Solar Cell Design Principles: Efficiency/Bandwidth Enhancement and Material Selection", *chapter of the book*, "Solar Panels - Recent Advances and Future Prospects, ISBN 978-1-83768-678-01, 2023
- 2- S. Hayati, Z. Atlasbaf," Green's function derivation for multilayered planar, cylindrical, and spherical structures with impedance boundary condition (IBC)" *chapter of the book*, " Electromagnetic Wave Propagation for Industry and Biomedical Applications" ISBN 978-1-83968-582-8, 2021
- 3- S. Hayati, Z. Atlasbaf, Mauro Cuevas" Scattering from Multilayered Graphene-Based Cylindrical and Spherical Particles", *chapter of the book* "NANOPLASMONICS", ISBN 978-1-78985-834-1, 2020
- 4- K. Hosseini, Z. Atlasbaf," Application of Composite Right/Left-Handed Metamaterials in Leaky Wave Antennas", *chapter of the book* "Modern Antenna Systems", ISBN 978-953-51-4943-9, 2018

## Journal Papers

### 2023

1. Bahareh Amini, Zahra Atlasbaf," Design and analysis of high-sensitivity tunable graphene sensors for cancer detection", *Optical and Quantum Electronics* (2023) 55:446, <https://doi.org/10.1007/s11082-023-04679-y>, 2023
2. Mehri Ziaee Bideskan, Zahra Atlasbaf, Andrei V. Lavrinenko, "The Extended Method of Lines for the Characterization of Dielectric Metasurfaces for Ultraviolet Chiral Sensing", *IEEE Transactions on Antennas and Propagation*, <https://doi.org/10.1109/TAP.2023.3320901>, 2023
3. SEYED MAHDI HOSSEINI AND ZAHRA ATLASBAF," Analysis of tightly-coupled dipole phased array antennas with metasurface superstrate", *Scientific Reports*, <https://doi.org/10.1038/s41598-023-44680-9>, 2023
4. Shima Inanloo, Zahra Atlasbaf, "A CPW-fed fractal monopole antenna with a reduced ground plane in the frequency range of 500 MHz-5.5 GHz", *IET Microwaves, Antennas & Propagation*, <https://doi.org/10.1049/mia2.12418>, 2023

### 2022

5. Mousa Abdollahvand, Eduardo Martinez-de-Rioja, Keyvan Forooraghi, Zahra Atlasbaf, José Antonio Encinar, Saptarshi Ghosh, Amir Ebrahimi," Active frequency selective surface with switchable response for satellite communications in X and Ka bands", *International Journal of RF and Microwave Computer-Aided Engineering*, Vol. 32, No.9, e23255, <https://doi.org/10.1002/mmce.23255>, Vol. 71, No. 12, pp. 9728-9737, 2022
6. Bahareh Amini, Zahra Atlasbaf," Two new broadband and tunable terahertz pyramid patch/disk absorbers based on graphene metasurface", *Photonics and Nanostructures - Fundamentals and Applications*, <https://doi.org/10.1016/j.photonics.2022.101048>, July 2022
7. Maryam Shadi, Mohammad Reza Tavakol, Zahra Atlasbaf," Inverse design of compact power divider with arbitrary outputs for 5G applications", *Scientific Reports*, <https://doi.org/10.1038/s41598-022-17212-0>, 12:12844, 2022

8. Maryam Shadi, Zahra Atlasbaf," Randomly overlap subarray feeding network to reduce number of phase shifter in 28GHz", *PLOS ONE*, <https://doi.org/10.1371/journal.pone.0277404>, December 8, 2022
9. Shiva Hayati Raad, Zahra Atlasbaf," Dual-Band Reconfigurable Refractive Index Sensing Using All-Graphene Core-Shell Spherical Nanoparticles", *IEEE TRANSACTIONS ON NANOTECHNOLOGY*, VOL. 21, pp.137-142, <https://doi.org/10.1109/TNANO.2022.3152599>, 2022
10. Shiva Hayati Raad Zahra Atlasbaf," Full Coverage of the Solar Spectrum and Beyond Using All-Manganese Plasmonic Shell Array", *Plasmonics*, Vol. 17, pp. 851–857, <https://doi.org/10.1007/s11468-021-01566-8>, 2022
11. Shiva Hayati Raad, Zahra Atlasbaf, Alessio Monti, Alessandro Toscano, AND Filiberto Bilotti," On the surface impedance modeling of metasurfaces composed of graphene-coated spherical nanoparticles", *Journal of the Optical Society of America B*, Vol. 39, No. 3, pp. 917-923, <https://doi.org/10.1364/JOSAB.448936>, March 2022
12. Alessio Monti, Shiva Hayati Raad, Zahra Atlasbaf, Alessandro Toscano, AND Filiberto Bilotti," Maximizing the forward scattering of dielectric nanoantennas through surface impedance coatings", *Optics Letters*, Vol. 47, No. 10 / 15, pp. 2386-2389, <https://doi.org/10.1364/OL.456958>, May 2022
13. SEYED MAHDI HOSSEINI AND ZAHRA ATLASBAF," Analysis of Connected Arrays and Capacitively Coupled Arrays", *IEEE Access*, pp. 28147-28154, <https://doi.org/10.1109/ACCESS.2022.3156594>, March 2022
14. Fatemeh Moharrami & Zahra Atlasbaf," Stability study of the modified HIE-FDTD method for modeling graphene as a surface boundary condition", *Waves in Random and Complex Media*, <https://doi.org/10.1080/17455030.2022.2051770>, 2022

## **2021**

15. Shiva Hayati Raad, Zahra Atlasbaf, "Solar cell design using graphene-based hollow nano-pillars" *Scientific Reports*, <https://doi.org/10.1038/s41598-021-95684-2>, 2021
16. Shiva Hayati Raad, Zahra Atlasbaf, "Dual polarized engineering the extinction cross-section of a dielectric wire using graphene-based oligomers", *Scientific Reports*, <https://doi.org/10.1038/s41598-021-87145-7>, 2021
17. AHAD SHEIKHOLESLAMI, ZAHRA ATLASBAF," Novel Phase Distributions for Electronically Large Beam-Scanning Reflectarrays", *Scientific Reports*, <https://doi.org/10.1038/s41598-021-00883-6>, Vol. 11, 2021
18. ZAHRA LASEMIIMENI, ZAHRA ATLASBAF AND NIMA KARBASCHI," Dual-Functional Ultrawideband Antenna with High Fidelity Factor for Body Area Networks and Microwave Imaging Systems", *IEEE Access*, <https://doi.org/10.1109/ACCESS.2021.3104511>, VOL. 9, pp. 112930- 112941, 2021
19. MEHRI ZIAEE BIDESKAN, KEYVAN FOROORAGHI, ZAHRA ATLASBAF, ALI MEHRDADIAN AND ANDREI V. LAVRINENKO, "Method of lines for the analysis of tunable plasmonic devices composed of graphene-dielectric stack arrays", *Optics Express*, <https://doi.org/10.1364/OE.433185>, Vol. 29, No. 18 / 30 Aug 2021 / 28787
20. Shiva Hayati Raad, Zahra Atlasbaf "Bi-functional tunable reflector/high-Q absorber design using VO<sub>2</sub> assisted graphene-coated cylinder array", *Optics Express* 17510, <https://doi.org/10.1364/OE.423129>, Vol. 29, No. 11 / 24 May 2021

21. Mehri Ziae Bideskan, Keyvan Forooraghi & Zahra Atlasbaf, "Method of lines for analysis of plane wave scattering by periodic arrays of magnetically-biased graphene strips", *Nature Scientific Reports*, <https://doi.org/10.1038/s41598-021-86882-z>, (2021) 11:7588, 2021
22. F. Moharrami, Z. Atlasbaf," Stability Analysis of the SIBC Modeling of Graphene in the FDTD Method", *IEEE Transactions on Antennas and Propagation*, <https://doi.org/10.1109/TAP.2020.3019575>, Vol. 69, Issue 4, pp. 2421 – 2426, April 2021

## **2020**

23. Shiva Hayati Raad, Zahra Atlasbaf, Carlos J. Zapata-Rodríguez," Broadband absorption using all-graphene grating-coupled nanoparticles on a reflector", *Scientific Reports*, <https://doi.org/10.1038/s41598-020-76037-x>, 2020
24. Reza Shamsaei Malfajania, Alireza Gholipourb, and Zahra Atlasbaf," Linear to circular polarization converter single-layer reflectarray antenna", <https://doi.org/10.1080/02726343.2021.1864580>, *ELECTROMAGNETICS*, 2020
25. Hayati Raad, Shiva, Atlasbaf, Zahra, Carlos J. Zapata-Rodríguez, Mahmoud Shahabadi, Jalil Rashed-Mohassel," Dyadic Green's Function for the Electrically Biased Graphene-Based Multilayered Spherical Structures", *Journal of Quantitative Spectroscopy and Radiative Transfer*, <https://doi.org/10.1016/j.jqsrt.2020.107251>, 256 (2020) 107251, 2020
26. P.Nochian, Zahra Atlasbaf," A Novel Single Layer Ultra-Wide Band Metamaterial Absorber", *Progress In Electromagnetics Research Letters*, Vol. 93, pp. 107–114, 2020
27. Z. Lasemiiimeni, Z. Atlasbaf, "Impact of Fidelity Factor on Breast Cancer Detection", *IEEE ANTENNAS AND WIRELESS PROPAGATION LETTERS*, <https://doi.org/10.1109/LAWP.2020.3011801>, Vol. 19, No. 10, pp. 1649-1653, OCTOBER 2020
28. M. Shadi, Z. Atlasbaf," Meta-Heuristic Multi-Objective as an Affordable Method for Improving the Grating Lobe in a Wide Scan Phased Array Antenna", *Progress in Electromagnetics Research C*, vol. 103, pp. 155–166, 2020
29. Hayati Raad, Shiva, Atlasbaf, Zahra," Broadband continuous/discrete spectrum optical absorber using graphene-wrapped fractal oligomers", *Optics Express*, <https://doi.org/10.1364/OE.396500>, pp. 18049-18058, vol. 28, no. 12, 2020
30. A. Esmaeilnia, Z. Atlasbaf," A Quadrupole Tensor Analysis Approach to Design a Broadband Absorber", *IEEE Access*, <https://doi.org/10.1109/ACCESS.2020.2984769>, pp. 65513- 65519, 2020
31. S.Tajik, Z. Atlasbaf," Investigating Extraordinary Optical Transmission and sensing performance through periodic bilayer magneto-plasmonic structure", *Journal of Applied Physics*, <https://doi.org/10.1063/1.5116180>, vol. 127, no. 2, 2020
32. F. Moharrami, Z. Atlasbaf," Simulation of Graphene-Dielectric multilayer metamaterial by implementing SBC model of graphene in the HIE-FDTD method", *IEEE Transactions on Antennas and Propagation*, <https://doi.org/10.1109/TAP.2019.2948505>, vol. 68, no. 3, pp. 2238- 2245, 2020
33. M. Abdolahvand, k. Forooraghi, Jose A. Encinar, Z. Atlasbaf," A 20/30 GHz Reflectarray Backed by FSS for Shared Aperture Ku/Ka-Band Satellite Communication Antennas", *IEEE Antennas and Wireless Propagation Letters*, <https://doi.org/10.1109/LAWP.2020.2972024> , vol. 19, no. 4, pp. 566-571, 2020
34. M. Abdolahvand, K. Forooraghi, Jose A. Encinar, Z. Atlasbaf, Eduardo Martinez-de-Rioja," Design and Demonstration of a Tri-band Frequency Selective Surface for Space Applications in X, K and Ka Bands", *Microwave and Optical Technology Letters*, <https://doi.org/10.1002/mop.32225>, pp. 1-10, 2020

35. F. Moharrami: Z. Atlasbaf," Tunable GRIN Lensing Based on Graphene-Dielectric Multilayer Metamaterial", *J. Optics* (IOP), <https://doi.org/10.1088/2040-8986/ab6425>, 22,025102 (9pp), 2020

## **2019**

36. M. Abdolahvand, K. Forooraghi, Jose. A. Encinar, Z. Atlasbaf," Design and fabrication of a novel single-layer Ka-band reflectarray antenna,", *International Journal of Microwave and Wireless Technologies*, <https://doi.org/10.1017/S1759078719001582>, vol. 23, pp. 1-10, December 2019
37. Hayati Raad, Shiva, Zapata-Rodriguez, Carlos J, Atlasbaf, Zahra," Multi-frequency near-field enhancement with graphene-coated nano-disk homo-dimers", *Journal of Optics Express*, <https://doi.org/10.1364/OE.27.037012>, vol. 27, no. 25, pp. 37012-37024, December 2019
38. Hayati Raad, Shiva; Atlasbaf, Zahra; Jalil Rashed-Mohassel; Mahmoud Shahabadi,"Scattering from Graphene-Based Multilayered Spherical Structures, *IEEE Transactions on Nanotechnology*, <https://doi.org/10.1109/TNANO.2019.2942972>, vol. 18, pp. 1129-1136, 2019
39. Hayati Raad, Shiva; Zapata-Rodriguez, Carlos J; Atlasbaf, Zahra, "Graphene-coated resonators with frequency-selective super-scattering and invisibility", *Journal of Physics D: Applied Physics*, <https://doi.org/10.1088/1361-6463/ab3fbc>, vol. 5, 495101(7 pages), 2019
40. Hayati Raad, Shiva; Atlasbaf, Zahra," Tunable optical meta-surface using graphene-coated spherical nanoparticles", *AIP Advances* 9, 075224; <https://doi.org/10.1063/1.5101000>, 2019
41. Hayati Raad, Shiva, Atlasbaf, Zahra,"Dyadic analysis of a cylindrical wire consisting of a cover with fully-populated surface conductivity tensor", *Journal of Optics Express* 21214, vol. 27, no. 15, <https://doi.org/10.1364/OE.27.021214>, 2019
42. Hayati Raad, Shiva, Zapata-Rodriguez, Carlos J, Atlasbaf, Zahra," Multi-frequency Super-Scattering from Sub-Wavelength Graphene-Coated Nanotubes", *Journal of the Optical Society of America B*, vol. 36, no. 8, pp. 2292-2298, <https://doi.org/10.1364/JOSAB.99.099999>, 2019
43. Shiva Hayati Raad, Zahra Atlasbaf, Mahmoud Shahabadi, Jalil Rashed-Mohassel," Dyadic Green's Function for the Tensor Surface Conductivity Boundary Condition", <https://doi.org/10.1109/TNANO.2019.2942972>, vol. 55, no. 11, *IEEE Transactions on Magnetics*, 2019
44. Shiva Hayati Raad, Zahra Atlasbaf," Equivalent RLC Ladder Circuit for Light Scattering by Graphene-Coated Nano-Spheres", *IEEE Transactions on Nanotechnology*, vol. 18, pp. 212-219, <https://doi.org/10.1109/TNANO.2019.2893350>, 2019

## **2018**

45. K. Hosseini, Z. Atlasbaf," Simple Intuitive Relations Concerning the Effect of Boundaries on the Stability of the FDTD Method", *IEEE Transactions on Antennas and Propagation*, <https://doi.org/10.1109/TAP.2018.2866990>, vol. 66, no.12, pp. 7483-7487, Dec. 2018
46. P.Fathi, Z. Atlasbaf, K. Forooraghi," Compact Dual-Wideband Bandpass Filter Using CSRR Based Extended Right/Left-Handed Transmission Line", *Progress in Electromagnetic Research C*, <https://doi.org/10.2528/PIERC17100206>, vol. 81, 21–30, 2018
47. K. Hosseini, Z. Atlasbaf," Efficient Three-Step LOD-FDTD Method in Lossy Saturated Ferrites with Arbitrary Magnetization", *IEEE Transactions on Antennas and Propagation*, <https://doi.org/10.1109/TAP.2018.2796383>, vol. 66, no.3, pp. 1374-1383, March 2018
48. K. Hosseini, Z. Atlasbaf, "PLRC-FDTD Modeling of General GSTC-Based Dispersive Bianisotropic Metasurfaces", *IEEE Transactions on Antennas and Propagation*, <https://doi.org/10.1109/TAP.2017.2769691>, vol. 66, no.1, pp. 262-270, January 2018

## 2017

49. M.Mohammadi, P.Alizadeh, Z.Atlasbaf," Investigation on electrical properties of wollastonite glass-ceramic and wollastonite glass-ceramic/TiO<sub>2</sub> composites", *Physics and Chemistry of Glasses-European Journal of Glass Science and Technology Part B*, vol. 5, pp. 201-206, 2017
50. M. Bozorgi, Z. Atlasbaf," Theoretical Investigations on a Class of Double-Focus Planar Lens on the Anisotropic Material", *Optics Communications*, <https://doi.org/10.1016/j.optcom.2017.01.006>, vol. 391, pp. 48-56, 2017
51. K. Hosseini, Z. Atlasbaf," Unconditionally Stable FDTD in Anisotropic Magnetized Plasma", *IEEE Microwave and Wireless Components Letters*, <https://doi:10.1109/LMWC.2017.2662016>, vol. 27, no. 3, pp. 212-214, Mar. 2017

## 2016

52. A. Sedghara, Z. Atlasbaf," A Novel Single Feed Reconfigurable Antenna for Polarization and Frequency Diversity", *International Journal of Microwave and Wireless Technologies*, <https://doi:10.1017/S1759078716001240>, 7 pages, Dec. 2016
53. Z.Sharifi, Z. Atlasbaf," A new procedure to design low RCS near perfect isotropic and homogeneous triangular carpet cloaks", *Journal of the Optical Society of America A*, <https://doi:10.1364/JOSAA.33.002066>, vol. 33, Issue 10, pp. 2066-2070, 2016
54. P.Fathi, Z. Atlasbaf,K. Forooraghi," A Modified Extended Right/Left Handed Layout Loaded With CSRR For Quad Band Applications", *Progress in Electromagnetic Research Letters*, <https://doi:10.2528/PIERL16030404>, vol. 61, page 7-12, 2016
55. M. Bozorgi, Z. Atlasbaf , "Spectral Solution for Scattering Analysis of Periodic Plasmonic Nano-antennas on Iso/Anisotropic Substrate", *IEEE Journal of Lightwave Technology*, OSA, <https://doi: 10.1109/JLT.2016.2541923>, 2016
56. M. Niayesh, Z. Atlasbaf," Broadband CRLH Beam Scanning Leaky-wave Antenna Designed on Dual-layer SIW", *The Applied Computational Electromagnetics Society Journal (ACES)*, vol. 31, No. 4, pp. 450-454, April 2016
57. M. Rafaei Booket, Z. Atlasbaf, M. Shahabadi," Broadband Reflectarray Antenna on a Periodically Perforated Substrate", *IEEE Trans. Antennas and Propagation*, <https://doi: 10.1109/TAP.2016.2570253>, vol. 64, No. 8, pp. 3711-3717, August 2016
58. Zahra Hamzavi Zarghani and Zahra Atlasbaf," A Single-Layer Multi-Band Reflectarray Antenna in X/Ku/K Bands", *The Applied Computational Electromagnetics Society Journal (ACES)*, Vol. 31, No.5, pp. 555-561, May 2016
59. A. Khaledian, Z. Atlasbaf," Dual Band and Dual Mode Microstrip Antenna for Body Centric Wireless Communication", *The Applied Computational Electromagnetics Society Journal (ACES)*, Vol. 31, No. 4, pp. 417-422, April 2016
60. M. Rafaei Booket, Z. Atlasbaf," A New Ku-Band Reflectarray Antenna by Using Anisotropic Superstrate on an Artificial Magnetic Conductor", *International Journal of Microwave and Wireless Technologies*, <https://dx.doi.org/10.1017/S175907871600060X>, 11 pages., 2016
61. S. Keshavarzi, Z. Atlasbaf," Switchable Bandpass Filter Using CRLH Cells Based on a New Kind of Admittance Inverter", *International Journal of Microwave and Wireless Technologies*, <https://dx.doi.org/10.1017/S1759078715001488>, 9 pages. Published online: 07 April 2016
62. Javad Aliasgari, Zahra Atlasbaf," A Novel Compact Monopulse Parallel Plate Slot Array Antenna", *IEEE Antenna and Wireless Propagation letter*, <https://doi:10.1109/LAWP.2015.2472462>, Vol. 15, pp.762-765, 2016
63. A. Sedghara, Z. Atlasbaf," A New Dual-Band, Dual-Polarized and Single Feed Reconfigurable Antenna", *The Applied Computational Electromagnetics Society Journal (ACES)*, Vol. 31, No. 1, pp. 26-31, Jan. 2016

## 2015

64. Hojjatollah Fallahi, Zahra Atlasbaf," Bandwidth Enhancement of a CPW-fed Monopole Antenna with Small Fractal Elements", *International Journal of Electronics and Communications (AEÜE)*, Vol. 69, pp. 590-595, 2015
65. Zahra Hamzavi Zarghani and Zahra Atlasbaf,"A New Broadband Single-Layer Dual-Band Reflectarray Antenna in X and Ku Bands", *IEEE Antenna and Wireless Propagation letter*, <https://10.1109/LAWP.2014.2374351>, Vol.14, pp.602-604, 2015
66. Seyed Amir Hossein Saghehzad, Zahra Atlasbaf," Miniaturized Dual-band CPW-fed Antennas Loaded with U-shaped Metamaterials", *IEEE Antenna and Wireless Propagation letter*, <https://10.1109/LAWP.2014.2376554>, Vol.14, pp. 658-661, 2015

## **2014**

67. Farzaneh Ahmadi, Keyvan Forooraghi, Zahra Atlasbafa & Bal Virdeeb,"Bandwidth Enhancement of Dielectric Resonator Reflectarray Antenna", *Electromagnetics*, 34:7, pp. 513-521, 2014
68. Majid Norooziarab, Zahra Atlasbaf, Farhad Farzami," Substrate Integrated Waveguide Loaded by 3Dimensional Embedded Split Ring Resonators", *International Journal of Electronics and Communications (AEÜE)*, Vol. 68, pp. 658-660, 2014
69. Reza Shamsaee Malfajani, Zahra Atlasbaf, "Design and Implementation of a Dual-band Single Layer Reflectarray in X and K Bands", *IEEE Trans. Antennas and Propagation*, <https://10.1109/TAP.2014.2327137>, Vol. 62, No. 8, pp. 4425-4431, 2014

## **2013**

70. Hojjatollah Fallahi, Zahra Atlasbaf," Study of a Class of UWB CPW-fed Monopole Antenna with Fractal Elements", *IEEE Antenna and Wireless Propagation letter*, <https://10.1109/LAWP.2013.2289868>, Vol. 61, pp. 1-8, 2013
71. Keyhan Hosseini, Zahra Atlasbaf," Analysis and Synthesis of Single-Curved Microstrip Structures Utilizing Modified Schwarz-Christoffel Transformation", *IEEE Trans. Antennas and Propagation*, <https://10.1109/TAP.2013.2279995>, vol. 61, pp. 5940-5947, 2013
72. Farzaneh Ahmadi, Keyvan Forooraghi, Zahra Atlasbaf, Bal Virdee," A New Dielectric Resonator Antenna Element for Circularly Polarized Reflectarray Antenna", *Electromagnetics*, 33:8, pp. 575-582, 2013
73. A. Ghaedi, Z. Atlasbaf, A. Pirhadi, "Electromagnetic Cloak as an Electric Shield with the Least SCS", *Electronic Industries*, pp. 81-98, 2013
74. Keyhan Hosseini, Zahra Atlasbaf," Guided- and Radiated-Wave Characteristics of a Rectangular Patch Antenna Located on a Singly-Curved Surface", *PIERC*, vol. 38, pp. 205-216, 2013
75. F.Ahmadi, K.Forooraghi, Z. Atlasbaf, Bal Virdee, " Dual Linear Polarized Dielectric Resonator Reflectarray Antenna", *IEEE Antenna and Wireless Propagation letter*, <https://10.1109/LAWP.2013.2259611>, pp. 635-638, 2013
76. Abed PourSohrab, Zahra Atlasbaf," A Circuit Analog Absorber with Optimum Thickness and Response in X band", *IEEE Antenna and Wireless Propagation letter*, <https://10.1109/LAWP.2013.2248073>, pp. 276-279, 2013
77. Keyhan Hosseini, Zahra Atlasbaf," Mutual Coupling Between Two Microstrip Patch Antennas on a Singly-Curved Surface", *IEEE Antenna and Wireless Propagation letter*, <https://10.1109/LAWP.2013.2250244> , pp. 313-316, 2013
78. Zeynab Vahidpoor, Keyvan Forooraghi, Ali Fotowat-Ahmadi, and Zahra Atlasbaf," Fast adjustable sensing circuit for cognitive radio applications", *International Journal of Circuit Theory and Applications*, <https://10.1002/cta.1878>, 2013

79. Zeynab Vahidpoor, Keyvan Forooraghi, Ali Fotowat-Ahmadi, and Zahra Atlasbaf," Coplanar waveguide-fed Planar Spiral Antenna with Integrated Impedance Transformer", *Microwave and Optical Technology Letters*, pp. 1338-1341, 2013
80. Z. Vahidpoor, K. Forooraghi, A. Fotowat-Ahmadi, and Z. Atlasbaf," A New Sensing Method Using Output Analysis of the PFD", *IEEE Transactions on Circuits and Systems—II: Express Briefs*, <https://10.1109/TCSII.2013.2251972>, vol. 60, No. 6, pp. 366-370, June 2013

## **2012**

81. A.Ghaedi, Z.Atlasbaf, A. Pirhadi, "Simplified Cylindrical Electromagnetic Cloak for Reduction of RCS", *Passive Defense Sci. & Tech.*, No.3, pp. 249-258, 2012
82. Sepideh Fallahzadeh, Keyvan Forooraghi, Zahra Atlasbaf, "Design, Simulation and Measurement of a Polarization Insensitive Planar ELC metamaterial Absorber", *Progress in Electromagnetics Letters* Vol.35, 135-144, 2012
83. Reza Shamsaei Malfajani, Zahra Atlasbaf, "Design and Implementation of a Broadband Single-Layer Reflectarray Antenna With Large-Range Linear Phase Elements", *IEEE Antenna and Wireless Propagation letters*, vol.11, pp.1442-1445, 2012
84. M. Rafael Booket, M. Veysi, Z. Atlasbaf, A. Jafargholi, "Ungrounded composite right-/left-handed metamaterials: design, synthesis and applications", *IET Microwave, Antennas & Propagation*, pp. 1259-1268, 2012
85. Reza Shamsaei Malfajani, Zahra Atlasbaf, "Design and Implementation of a Broadband Single Layer Circularly Polarized Reflectarray Antenna", *IEEE Antenna and Wireless Propagation letters*, vol. 11, pp. 973-976, 2012
86. S.Rezvani, Z.Atlasbaf, K.Forooraghi, " A New Compact Reconfigurable Patch Antenna for Polarization and Frequency Diversity, " *Electromagnetics*, vol. 32, pp.287-293, 2012
87. Mehdi Mahdavi, Zahra Atlasbaf, Keyvan Forooraghi,"A Very Compact CPW-fed Ultra-Wideband Circular Monopole Antenna", *Microwave and Optical Technology Letters*, vol. 54, no.7, pp.1665-1668, 2012

## **2011**

88. Omid Zandi, Zahra Atlasbaf, Mohammad Abrishamian, "Alternative Expression for the Phase Homogenous Plane Waves", *IEEE Transacsion on Microwave Theory and Techniques*, vol. 59, no. 11, pp. 2781-2787, <https://10.1109/TMTT.2011.2166804> , Nov. 2011
89. Nasrin Amiri, Keyvan Forooraghi, and Zahra Atlasbaf,"A Wideband Uniplanar Polarization Independent Left-Handed Metamaterial", *IEEE Antenna and Wireless Propagation Letters*, vol. 10, no. 2, pp. 524-527, <https://10.1109/LAWP.2011.2153821> , 2011
90. M.A. Nikravan and Z. Atlasbaf," Tapered-Lline Resonators and Their Applications to Compact Dual-Band Bandpass Filters", *JEMWA*, vol. 25, no. 8/9, pp. 1280-1288, 2011
91. N.Amiri, K.Forooraghi, Z.Atlasbaf, "Miniatirized resonant inclusions as non-bianisotropic double negative metamaterials for normal incidence", *International Journal of Electronics and communications (AEÜE)*, pp. 993-996, 2011
92. M.A. Nikravan and Z. Atlasbaf,"T-section dual-band impedance transformer for frequency-dependent complex impedance loads", *IET Electronics Letters*, vol. 47, No. 9, pp. 551 - 553 , 28th April 2011
93. M.Naghipourfar, Z.Atlasbaf,"NEW DUAL-BAND DNG METAMATERIALS", *Canadian Journal on Electrical and Electronics Engineering*, pp. ,2011
94. S.Rezvani, Z.Atlasbaf, K.Forooraghi, "A Novel Miniaturized Reconfigurable Slotted Microstrip Patch Antenna with DGS", *Journal of Electromagnetics*, Vol. 31, pp. 349-354, 2011
95. N.Amiri, K. Forooraghi, Z.Atlasbaf, "A Miniaturized Planar Non-bianisotropic Left-Handed Metamaterial", *International Journal of RF and Microwave Computer-Aided Engineering*, 2011

## **2010 & Before**

96. M. Mohammadi, P.Alizadeh, Z.Atlasbaf, "Effect of frit Size on sintering, Crystallization and Electrical Properties of Wollastonite Glass-Ceramics", *Journal of Non-Crystalline Solids*, pp. , 2010
97. Omid Zandi, Zahra Atlasbaf, M.S. Abrishamian,"Combined Electromagnetic Energy and Momentum Conservation Equation", *IEEE Trans. Antenna and Propagation*, pp. , 2010
98. Omid Zandi, Zahra Atlasbaf, M.S. Abrishamian, "On the Orthogonality of the Phase Velocity and Its Feasibility for Plane Waves", *Optik*, pp. , 2010
99. O.Zandi and Z.Atlasbaf, "Novel Method to Analyze And Design One-Dimensional Reciprocal Periodic Structures with Symmetrical Cells", *Progress in Electromagnetic Research B*, Vo. 19, pp. 285-303, 2010
100. M.Nosrati, T.Faraji, Z.Atlasbaf,"A Compact Broad Stop-Band Elliptic-Function Low-Pass Filter for Ultra Wide-Band Applications Using Interdigital Capacitor", *Progress in Electromagnetic Research Letters*, PIERL, Vol. 7, 87-95, 2009
101. H.Sabri and Z.Atlasbaf, "Two Novel Compact Triple-Band Microstrip Annular-Ring Slot Antenna For PCS-1900 and WLAN Applications", *Progress in electromagnetic research Letters*, PIERL, Vol. , pp., 2008
102. S.A. Hosseini, Z.Atlasbaf and K. Forooraghi, "Two new loaded compact planar ultra-wideband antennas using defected ground structures", *Progress in electromagnetic research, PIER B*, Vol. 2, 165-176, 2008
103. S. Ali Hosseini and Z. Atlasbaf, "Optimization of side lobe level and fixing Quasi-nulls in both of the sum and difference patterns by using continues ant colony optimization (ACO) method", *Progress in Electromagnetic Research, PIER 79*, 321-337, 2008
104. S.A. Hosseini, Z. Atlasbaf and K. Forooraghi," A New Compact Ultra Wide Band (UWB) Planar Antenna Using Glass as Substrate", *J. of Electromagnetic Waves and Appl.*, Vol. 22, No. 1, 47-59, 2008
105. O.Zandi, Z. Atlasbaf and K. Forooraghi," Flat Multilayer Dielectric Reflector Antennas", *Progress in electromagnetic research*, PIER 2007
106. Reza Dehbashi, Zahra Atlasbaf and Keyvan Forooraghi, "A new compact size microstrip antenna with harmonic rejection", *IEEE Antennas and Wireless Propagation Letters*, Vol.5, pp.395-398, 2006.
107. Z.Atlasbaf, K. Forooraghi, "Applying variations op permeability and permittivity in isotropic and anisotropic media by using hybrid nodes in transmission line matrix method", *Journal of Tarbiat Modares University*, No. 16, pp. 23-32, Summer 2004
108. Z.Atlasbaf, K. Forooraghi," Analysis of nearly cylindrical antennas by a combination of TLM and S2DS method", *Amir Kabir Journal*, Vol. 14, No. 56, pp. 1033-1044, Autumn 2003

## **Conference Papers**

## **2021**

1. M. Abdollahvand, K. Forooraghi, Z. Atlasbaf, E. Martinez-de-Rioja, J. A. Encinar, A. Ebrahimi, S. Ghosh, "Reconfigurable FSS Based on PIN Diodes for Shared-Aperture X/Ka-Band Antennas" EuCap 2021

## 2020

- 2.

## 2019

3. M. Jafaripour, S.M. Sadrameli\*, S.A.H. Seyed Mousavi, H.Pahlavanzadeh, Z.Atlasbaf," Modification of thermal properties for a composite of stearic acid/kaolin used as a phase change material by infrared camera analysis approaches", *9th National Seminar of Chemistry and Environment, Arak Univ.*, 3-4 Sept. 2019
4. M. Jafaripour, S.M. Sadrameli\*, S.A.H. Seyed Mousavi, H. Pahlavanzadeh,Z.Atlasbaf," Improvement of phase change materials loading on kaolin for temperature control of a co-axial cable surface", *9th National Seminar of Chemistry and Environment, Arak Univ.*, 3-4 Sept. 2019

## 2018

5. Pegah Nochian, Zahra Atlasbaf," A Novel Single Layer X-Band Single Negative Metamaterial Absorber", *9th International Conf. on Electrical, Computer, Mechanical and Mechatronics Engineering (ICE-2018)*, 2018
6. Ashkan Esmaeilnia Shirvani, Zahra Atlasbaf," Analyzing One Layer Array consisting of two sets of different sphere particle", *26th Iranian Conference on Electrical Engineering (ICEE2018)*, 2018
7. Shiva Hayati Raad, Zahra Atlasbaf," Tunable Optical Absorption using Graphene Covered Core-Shell Nano-Spheres", *26th Iranian Conference on Electrical Engineering (ICEE2018)*, 2018

## 2017

8. K. Hosseini, Z.Atlasbaf," Development of a CPML for Scattered-Field One- Step Leapfrog ADI-FDTD Scheme", *25th Iranian Conference on Electrical Engineering (ICEE2017)*, 2017

## 2016

9. Montazeri, آنتن تک قطبی کوچک فرآپهن باند دارای قابلیت کنترل باند حذف با استفاده از بارگذاری تشیدگر حلقه خازن', *24th Iranian Conference on Electrical Engineering (ICEE),pp. 1-4, 2016*
10. M. Abdollahvand; J. A. Encinar; K. Forooraghi; Z. Atlasbaf; M. Barba," Single-layer dual-frequency reflectarray for Ka-band antennas", *10th European Conference on Antennas and Propagation (EuCAP)*, DOI: 10.1109/EuCAP.2016.7481879, pp. 1-4, 2016

11. M. Abdollahvand, J. A. Encinar, K. Forooraghi, Z. Atlasbaf, J. E. Page, "Tri-Band FSS for Ku/Ka Bands Reflector Antennas", *10th European Conference on Antennas and Propagation (EuCAP)*, DOI: 10.1109/EuCAP.2016.7481865, pp. 1-4, 2016
12. K. Hosseini, Z. Atlasbaf, "Product Formula Approach for Stable FDTD Modeling of Magnetized Plasma", 24th Iranian Conference on Electrical Engineering (ICEE), 2016
13. P. Fathi, Z. Atlasbaf, "A novel layout for extended composite right/left handed transmission lines based on CSRR resonators", 24th Iranian Conference on Electrical Engineering (ICEE), 2016

## 2015

14. J. Aliasgari, Z. Atlasbaf, "A Novel Monopulse Planar Array Using CSRR Slots", *23rd Iranian Conference on Electrical Engineering (ICEE)*, pp. 274-277, 2015
15. M. Rafaee, Z. Atlasbaf, "Metallic Grating Embedded in an Anisotropic Slab for Realization of a Reflectarray Antenna", *23rd Iranian Conference on Electrical Engineering (ICEE)*, pp. 374-378, 2015

## 2014

16. J. Aliasgari, Z. Atlasbaf, "آنتن‌های مونوپالس آرایه‌ای شکاف شعاعی (RLSA)", *The third Iranian Conference on Engineering Electromagnetic (ICEEM 2014)*, Dec. 3-4, 2014
17. M. Zolfaghari, Z. Atlasbaf, "Study and Design of Conical Modified Goubau Waveguide at Terahertz Frequency", *The third Iranian Conference on Engineering Electromagnetic (ICEEM 2014)*, Dec. 3-4, 2014
18. Seyed Amir Hossein Saghanezhad, Zahra Atlasbaf, "Miniaturized Patch Antenna on Substrate Loaded with Ring-Shape Metamaterial", *22nd Iranian Conference on Electrical Engineering (ICEE)*, pp. 1591-1593, 2014
19. Z. Hamzavi Zarghani, Z. Atlasbaf, "A New Broadband Single-Layer Reflectarray Antenna", *22nd Iranian Conference on Electrical Engineering (ICEE)*, pp. 1619-1622, 2014
20. S.A.H. Saghanezhad, Z. Atlasbaf, "Miniaturized Dual band Rectangular Patch Antenna on Metasubstrate", *The Second Iranian Conference on Engineering Electromagnetics (ICEEM 2014)*, Jan. 8-9, 2014
21. Z. Hamzavi Zarghani, Z. Atlasbaf, "Design of Broadband Single-layer Reflectarray Antenna", *The Second Iranian Conference on Engineering Electromagnetics (ICEEM 2014)*, Jan. 8-9, 2014

## 2013

22. Esrafil Jedari, Zahra Atlasbaf, Sima Noghanian, Behnam Shahrava, "Effects of Antenna Selection on Vehicle-to-Vehicle Communication in Highways", *Antennas and Propagation Society International Symposium (APSURSI)*, IEEE, pp. 2109-211, 2013
23. Keyhan Hosseini, Zahra Atlasbaf, "Mutual Coupling Between Two Microstrip Patch Antennas on Concave and Convex Cylindrical Surfaces", *Electrical Engineering (ICEE)*, *21st Iranian Conference on*, pp. 1-4, 2013
24. Sajjad Mohamadi, Keyvan Forooraghi, Zahra Atlasbaf, "Gain Enhancement of Waveguide Slot Antennas Using Quasi-TEM Mode in Rectangular Waveguide", *Electrical Engineering (ICEE)*, *21st Iranian Conference on*, pp. 1-4, 2013
25. Ailar SedghAra, Zahra Atlasbaf, "Reconfigurable Single-Feed Antenna With Switchable Polarization", *Electrical Engineering (ICEE)*, *21st Iranian Conference on*, pp. 1-4, 2013
26. Ailar SedghAra, Zahra Atlasbaf, "A New Reconfigurable Single-Feed Microstrip Antenna With Polarization Diversity", *Antennas and Propagation (EuCAP)*, *2013 7th European Conference on*, pp. 2403-2406, 2013

## 2012

27. Norooziarab, M.; Rafeei-Booket, M.; Atlasbaf, Z.; Farzami, F.; "A tunable transmission line based on an SIW loaded by a new single-cell metamaterial," *Telecommunications (IST), 2012 Sixth International Symposium on*, vol., no., pp.75-79, 6-8 Nov. 2012.
28. Abed Pour Sohrab, Zahra Atlasbaf," A Thin Wideband Absorber with Uniform Response in X-band", *15th ANTEM Symposium in Toulouse, IEEE*, pp.1-3, 2012
29. Keyhan Hosseini and Zahra Atlasbaf," Design of a Cylindrical CRLH Leaky-Wave Antenna Using Conformal Mapping", *IST 2012*
30. Ahmadi, Farzaneh; Forooraghi Keyvan; Atlasbaf, Zahra, "Circular polarized reflectarray antenna", *Electrical Engineering (ICEE), 2012 20th Iranian Conference on* , pp. 1135 – 1139, 2012
31. Sepideh Fallahzadeh, Keyvan Forooraghi, and Zahra Atlasbaf," A Polarization-Insensitive Metamaterial Absorber with a Broad Angular Band", *Electrical Engineering (ICEE), 2012 20th Iranian Conference on*, pp. 1540 – 1543, 2012
32. Omid Zandi, Zahra Atlasbaf, Mohammad Sadegh Abrishamian, "Classification of Media Where Electromagnetic Fields Cannot Propagate", *Antennas and Propagation Society International Symposium (APSURSI), 2012 IEEE*, pp. 1-2, 2012

## 2011

33. Booket M.Rafaei, Jafargholi,A., Atlasbaf Z.,Kamyab, M.," Miniaturized dual-band dipole antenna loaded with metamaterial based structure", *19th Iranian Conference on Electrical Engineering*, 1-4, 2011
34. Zeynab Vahidpoor, Keyvan Forooraghi, Zahra Atlasbaf, Ali Fotowat Ahmadi," A New Spectrum Sensing Circuit for Cognitive Radio Applications", *Third International Conference on Computational Intelligence, Modelling & Simulation*, 2011, pp. 404-407, 2011

## 2010

35. M.A.Nikravan, Z.Atlasbaf,"Compact Dual-Band Microstrip Bandpass Filter Using Folded Linear Tapered-Line Resonator", *Proceedings of Asia-Pacific Microwave Conference 2010*

## 2009

36. Nasrin Amiri, Keyvan Forooraghi, Zahra Atlasbaf,"Design and Simulation of a Novel Double Negative Metamaterial",*Asia-Pacific Microwave Conference*, 2009

37. طراحی آنتنی با پترن زین اسپی در باند فرکانسی L برای محموله مخابراتی ماهواره های ارتفاع کم؛ کنفرانس برق دانشگاه صنعتی اصفهان 1389

38. Z. Vahidpoor, Keyvan Forooraghi, Ali Fotowatt Ahmadi, Z.Atlasbaf."Two Dimensional Sensing for Cognitive Radio Applications Using Antenna Array", *Asia-Pacific Microwave Conference*, 2009

## 2008

39. Hamed Movahedi Pour, Zahra Atlasbaf, Alireza Mirzaee, Mohammad Hakkak, " A Hybrid Approach Involving Artificial Network And ANT COLONY Optimization for Direction of Arrival Estimation", *Canada, pp. , IEEE 2008*

## 2007

40. R.Dehbashi, K.Forooraghi, Z.Atlasbaf,"Circuit model of the new Inset-Fed U-slot microstrip antenna using transmission line model", *Antennas and Propagation International Symposium IEEE* , 3908- 3911, 2007
41. Z. Vahidpoor, Ebadi,S., Z.Atlasbaf, "A narrow beam low sidelobe level planar phased array antenna design using pattern search algorithm", *Antennas and Propagation International Symposium IEEE*, June 2007 Page(s):3936 – 3936, 2007
42. Z. Vahidpoor, Z.Atlasbaf, "A narrow beam low sidelobe level planar monopulse antenna design using pattern search algorithm", *Microwave Conference, 2007. European* 10-12 Oct. Page(s):409 - 412, 2007

## 2006

43. Hamed Movahedi Pour, Zahra Atlasbaf, Mohammad Hakkak, "Evaluation of an MLP-based Direction of Arrival System Using Genetic Algorithm for Training", *Wireless and Microwave Technology Conference, 2006. WAMICON '06. IEEE Annual*, 1-5,2006
44. Zahra Atlasbaf, Keyvan Forooraghi,"A New Dual Band Branch-Line Coupler Using Coupled Lines", *7th Int. Symposium on Antennas Propagation and EM Theory Proceeding* 2006
45. Nosrati, M., Atlasbaf, Z.. "A Compressed Planar Band Pass Filter Using Microstrip square resonators with interdigital capacitor", *7th Int. Symposium on Antennas, Propagation and EM Theory Proceeding* 2006
46. Mehdi Nosrati, Zahra Atlasbaf, "A New Miniaturized Electronically Tunable Bandpass Filter", *7th Int. Symposium on Antennas, Propagation and EM Theory Proceeding* 2006
47. Mehdi Nosrati, Zahra Atlasbaf, "A Novel Model of Small sized Dual Band Rectangular ring band pass filter", *7th Int. Symposium on Antennas, Propagation and EM Theory Proceeding* 2006
48. R.Dehbashi, K.Forooraghi, Z.Atlasbaf,"Dual-Fed Antenna for Wireless Power Transmission and Data Communication",*6 IEEE Antennas and Propagation Society International Symposium with USNC/URSI National Radio Science and AMEREM Meeting* 2006
49. R.Dehbashi, K.Forooraghi, Z.Atlasbaf,"Active Integrated Antennas Based Rectenna Using a New Probe-Fed U-slot Antenna with Harmonic Rejection", *IEEE Antennas and Propagation Society International Symposium with USNC/URSI National Radio Science and AMEREM Meeting* 2006
50. P.Varahram, Z.Atlasbaf and A.Farrokh Payam,"Power Amplifiers linearization Based on Gain Predistortion Used in Third Generation Systems", *Iranian Conference on Electrical Engineering* 2006
51. R.Dehbashi, K.Forooraghi, Z.Atlasbaf"A Harmonic-Rejecting Inset-Fed U-Slot Antenna for Rectenna Application", *IEEE Sarnoff Symposium*, Princeton, NewJercy, March 2006
52. R.Dehbashi, Z.Atlasbaf, K.Forooraghi, "Analysis of a Novel Band-Stop Resonator by 3D CFTD Method", *IEEE Sarnoff Symposium*, Princeton, NewJercy, March 2006
53. Zahra Atlasbaf, Keyvan Forooraghi, "A New Compact Broad Band Branch-Line Coupler Using Coupled Line", *IEEE Sarnoff Symposium*, Princeton, NewJercy, March 2006

## 2005 & Before

54. P.Varahram, Z.Atlasbaf, N.V.Heydarian, "Adaptive Digital Predistortion for Power Amplifiers used in CDMA Applications", *Asia-Pacific Conference on Applied Electromagnetic 2005*
55. R.Dehbashi, K.Forooraghi, Z.Atlasbaf, N.Amiri, "A Novel Broad-Band Stop Resonator with Compact Size", *Asia-Pacific Conference on Applied Electromagnetics (APMC 2005)*,2005
56. P.Varahram, Z.Atlasbaf,"Adaptive Digital Predistortion for High Power Amplifiers with Memory Effects", *Asia-Pacific Microwave Conference (APMC2005)*, 2005

57. H.R.Oskouei, Z.Atlasbaf, "A Modified Dual Mode Band Pas Filter with Defected Ground Structure (DGS)", *The 13 Conference on Microwave Techniques (COMITE 2005)*, 126-131, Sept.26-28, 2005
58. Zahra Atlasbaf, Keyvan Forooraghi,"A New Hybrid method to calculate the Self Admittance of a Longitudinal Waveguide Slot Antenna Radiating", *Antennas and Propagation International Symposium, IEEE 2004*
59. Zahra Atlasbaf, Keyvan Forooraghi,"Radiation Pattern Calculation of Nearly Cylindrical Antennas Using the Spectrum of Two-Dimensional", *Antennas and Propagation International Symposium, IEEE 2002*

## Editorial Board of Journals

1. Editorial Board Member of Scientific Reports (sep.2022- )
2. Editorial Board Member of Scientia Iranica Journal
3. Reviewer of IEEE Transaction on Microwave Theory and Techniques
4. Reviewer of IEEE Transaction on Antennas and Propagation
5. Reviewer of Antenna and Wireless Propagation Letter
6. Reviewer of Journal of Electromagnetic Waves and Applications
7. Reviewer of Progress in Electromagnetic Research
8. Reviewer of IET

## Memberships in Societies

1. IEEE Senior Member (2017) (AP & MTT& WIE)
2. ACES Member

## Thesis Supervision

Supervising and advising over 40 Master's theses and Ph.D. dissertations in the mentioned research fields.

### Ph.D. Thesis Supervised

1. Mahdi Hosseini,'
2. Maryam Shadi,' Advanced Array Antenna for 5th Wireless Communication Systems", Sept. 2022
3. Fatemeh Moharami,' Analysis and design of tunable multilayer graphene-dielectric metamaterial structures", Summer 2020
4. Shiva Hayati raad,' Ananlysis of Graphene-Based Multilayered Conformal Periodic Structures", Sept. 2019
5. Keyhan Hosseini,' Unconditionally Stable FDTD in Complex Media", Feb. 2018
6. Mahdieh Bozorgi,'Analysis of Plasmonic Nano-Antenna Supported by Anisotropic Media', Jan. 2017
7. Mahmood Rafaei Booket,'Analysys of Reflectarray Antenna supported by Uniaxial and Biaxial Anisotropic Layers', May 2016
8. Omid Zandi, 'Phase and Group Velocities of Electromagnetic Plane Waves in Bi-Anisotropic and Moving Media', Winter 2011

## **Ph.D. Thesis Advised**

1. Mousa Abdollahvand,’
2. Zeynab Vahidpour,’
3. Nasrin Amiri,’

## **M.Sc. Thesis Supervised**

- 1.
2. S. Inanloo,””, Jan. 2020
3. A. Shiekholeslam,’ ‘, Feb. 2019
4. P. Nochian,’ Design and Fabrication of a Wideband Metamaterial Absorber”, Jan. 2019
5. M. Keshavarz,’Design and implementation of beam shaped reflectarray antenna’, Sep. 2018
6. Sh. Tajik,’Analysys and Design a Megneto-Dielectric Plasmonic Nano Antenna’, Feb. 2018
7. H. dolatkhah,’ ‘, Mar. 2018
8. R.Masoumi,’Design and Fabrication of LMDS Base Station Antenna’, Aug. 2017
9. M. Kalaki,’ Design and Implementation of Dielectric Resonator Filter for Satellite Application’, May 2017
10. Z. Lasemi, ‘Design & Fabrication of UWB antennas for Microwave Imaging Tomur Detection’, Apr. 2017
11. Z. Sharifi,’ Design a novel carpet cloak by using transformation optics’, Jan. 2016
12. P.Fathi,’ A novel layout for Metamaterial base ECRLH structures and their applications in microwave components”, December 2015
13. M.Niayesh,’ Design and fabrication of a novel CRLH leaky-wave antenna’, February 2015
14. J.Aliasgari,’ Design and Fabrication of Radial Line Slot Array Antenna’, March 2015
15. M. Zolfaghari,’ Study and Design of a Modified Conical Goubau Waveguide’, Fall 2014
16. Mohammad Davari,’ Scattering Reduction of Multilayered Cylindrical Structures with Dielectrics and Metamaterials in NIR Spectrum Frequency, Incident Plane Wave with Arbitrary Polarization’, April, 2014 (Maleke Ashtar Univ.)
17. Samaneh Keshavarzi,’Analysis and fabrication of a bandpass filter based on metamaterials’, March 2014
18. Amir Hossein Saghanejad,’ Design and Implementation of a New Metamaterial-Loaded Multiband Compact Planar Antenna’, Feb. 2014
19. Zahra Hamzavi,’ Design and Implementation of a Multi-band Microstrip Reflectarray Antenna”, Jan. 2014
20. Hojjatollah Fallahi,’ Design and Fabrication of a UWB Antenna for Breast Tumor Detection”, Feb. 2013
21. Ailar Sedghara,’Design of a Dual Band, Dual Polarized Reconfigurable Single Port Antenna for WLAN Application’, Feb. 2013

22. Keyhan Hosseini,’ Design and Fabrication of Conformal Leaky-Wave Antennas Utilizing Periodic Structures and Metamaterials’, Feb. 2013
23. Seiran Khaledian,’ Design and Implementation of a Dual Band and Dual Pattern Antenna for On-body and Off-body Communication Modes in Body Centric Wireless Application’, Dec. 2012
24. Abed Pour Sohrab,’Design and Fabrication of a Wideband Microwave Absorber by Periodic Structures”, Spring 2012
25. Reza Shamsaei Malfajani,’ Design and Implementation of a Dual-Band Microstrip Reflectarray Antenna (X & K Bands)’, Feb. 2012
26. Majid Norooziarab,’ Design and Implementation of an SIW Reconfigurable Filter in Two Bands’, Winter 2011
27. Vahideh Anami,’Design and Implementation of a New Leaky Wave Antenna by Metamateria’, Summer 2011
28. Mehdi Mahdavi, ‘Design and Implementation of a New Compact Planar UWB Antenna for Communication Applications’, Spring 2011
29. Mohammad Amin Nikravan,’ Design and Implementation of a Compact Dual-Band Microstrip Bandpass Filter’, Winter 2010
30. Somayeh Rezvani, ‘Design, Synthesis and Manufacture of a Dual Band Microstrip Antenna with Switchable Polarization’, April 2010
31. Maryam Mohammadi,’Wollastonite Glass-(second component) Composite Synthesis and Electrical Property Studies’, June 2009
32. Mostafa Naghipourfar, ‘Design and Analysis of a New Dual-Band Metamaterial in Microwave Frequencies’, June 2009
33. Hossein Sabri, ‘Miniaturized Triple-Band Microstrip Slot Antenna ', Fall 2008
34. Zeynab Vahidpour, 'Optimization of Monopulse Antenna Pattern by Using Pattern Search Algorithm'-Summer 2007
35. Omid Zandi, 'Analysis and Design of Multilayer Dielectric Resonator Antennas', August 2007
36. Seyed Ali Hosseini, 'A Novel Compact Planar UWB Antenna in the FCC Frequency Band ', April 2007
37. Mehdi Nosrati, 'Synthesis and Analysis of the New Compact Band-Pass Filter Using Coupled Transmission Lines’ – Autumn 2006
38. Hamed Movahedi Pour, 'Performance Optimization of Direction of Arrival Estimator Using Neural Networks with Genetic Algorithm and Ant Colony Optimization Approach' - November 2006
39. Pooria Varahram, ‘Adaptive Digital Predistortion for High Power Amplifiers’, Summer 2005

### **M.Sc. Thesis Advised**

1. H.Montazeri,’ , June 2016
2. Mohsen Khadir,’ Feb. 2014

3. Sajjad Mohammadi, 'April 2013
4. Farzaneh Ahmadi, 2013
5. Sepideh Fallahzadeh, 2013
6. Reza Dehbashi, 2007
7. Ali Razmtouz, 'Design and Analysis of Active Patch Antennas - Feb. 2007', Adviser
8. Rosa Seyf, 'Design and Analysis of a Compact and Dual Band Rectangular Microstrip Antenna to Operate in Frequencies 2GHz and 5GHz, Winter 2007 Adviser
9. Elyas Roudgar, 'Design and Analysis of a Broadband Microstrip Array Antenna for LMDS Applications - Dec. 2007', Adviser
10. Mohsen Golpour Dehsari, 'Design and Analysis of Compact Low Pass Filter Based on DGS', Adviser 2009
11. Hadi Bahrami Abarghori, 'Design and Analysis of Compact Waveguide Filters Based on Metamaterials', Adviser, 2009
12. Alireza Mahmoudian, 'Design of Leaky Wave Antenna by Using Periodic Structures', Adviser, 2008
13. رجaneh فرهودی, 'روشهای نامساوی ماتریسی خطی برای طراحی فیدبک خروجی چند منظوره بر اساس تئوری پایداری تعیین یافته', Adviser
14. پریوش حاجیانی, 'جهت یابی سیگنال ارسالی در آرایه دایره‌ای با کاهش اثر کوپلینگ', Adviser

## Courses Taught

- Advanced Mathematics II, MSc
- Microwave II, MSc
- High Frequency Circuit Design, MSc
- Numerical Methods in Electromagnetic, PhD
- Special Topics on RF/Microwave Circuit Design for Wireless Applications, PhD
- Metamaterials, PhD
- Special Topics on Conformal Antennas, PhD
- Conformal Antennas, PhD
- Phased Array Antennas, PhD
- Engineering Circuit Analysis, MSc
- Microwave I, MSc
- Antenna Theory, MSc

## Professional Experiences

1. Member of the Technical Program Committee of the Conference on Millimeter Wave and Terahertz Technologies (MMWaTT)-2023
  2. Associate Professor, faculty of Electrical & Computer Engineering, 2011- present, Tarbiat Modares University, Tehran, Iran
  3. Director of Satellite Com. Lab. of Elect. Eng. Dept., 2010-present, Tarbiat Modares University, Tehran, Iran
  4. Director of Metamaterial Com. Lab. of Elect. Eng. Dept., 2007-present, Tarbiat Modares University, Tehran, Iran
  5. Vice-Dean for Academic Affairs, 2014-2016, Faculty of Electrical and Computer Engineering, Tarbiat Modares University, Tehran, Iran
  6. Director of Communications Engineering Group, April 2007-April 2012, Tarbiat Modares University, Tehran, Iran
  7. Assistant Professor, faculty of Electrical & Computer Engineering, Aug. 2005- 2011, Tarbiat Modares University, Tehran, Iran
  8. Tehran, Iran Nokia's GC consultant in MCT (BTS & BSS) tenders, 2004 -2005,
  9. Senior Researcher RF Group, Mobile Communications techniques, Tehran, Iran, 1999 - 2004
  10. Senior Researcher RF Group, Iranian Research Organization for Science and Technology, Tehran, Iran, 1997 - 1999
  11. Senior Researcher Antenna & RF Group, Antenkar, Tehran, Iran Senior Researcher Antenna & RF Group, 1997 - 1999
  12. Research Engineer, Tarbiat Modares University, Tehran, Iran, 1996 - 1998
  13. Research Engineer, ITRC Tehran, Iran, 1995 - 1996
-