Amir Jafargholi

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Senior Research Fellow

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Assistant Professor

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Education

- PhD., Communication Engineering (Fields & Waves), Sept. 2011
 K. N. Toosi University of Technology, Tehran, Iran
 Thesis: Analysis of Dipole Antennas Loaded with Metamaterials
- M. Sc., Communication Engineering (Fields & Waves), Sept. 2007
 K. N. Toosi University of Technology, Tehran, Iran
 Thesis: *Design, Simulation and Implementation of UWB Sinuous Antenna*
- B. Sc., Communication Engineering, May 2005
 K. N. Toosi University of Technology, Tehran, Iran
 Thesis: Ambiguity Function Processing for Bistatic Passive Radar

Academic Experience

- Senior Research Fellow,
 5G/6G Centre, Institute for Communication Systems, University of Surrey Jun 2021 – Present
- Principal Investigator,
 Electromagnetic and Antenna Lab., Amirkabir University of Technology
 Jan. 2015 Present
- Assistant Professor, Department of Energy Engineering and Physics, Amirkabir University of Technology Member of Photonics Educational Group Mar. 2013 – Present

Teaching Experience

Undergraduate Course

- Electric Energy Systems (II), Spring 2017, Spring 2018, Spring 2019, Spring 2020, Spring 2021
- o Computer Programming (C), Fall 2017, Fall 2018, Spring 2019, Fall 2019, Fall 2020, Fall 2021
- Electromagnetism (II), Fall 2018

Graduate Course

- Special Topics in Photonics Engineering (Metamaterials), Spring 2017, Spring 2018, Spring 2019, Spring 2020, Spring 2021
- o Advanced Electrodynamics (I), Fall 2018, Fall 2019, Fall 2020
- Mathematics in Physics & Engineering, Fall 2018
- Seminar, Spring 2017, Spring 2018

Research Funding

- Photoconductive Antennas, 2021.
- o Laser Fluorescence Spectroscopy for Imaging & Bio-Photonic Applications, 2019-2021.
- Thermo-photovoltaic Solar Cells, 2019-2020.
- Nano-Rectenna Using Graphene & Metamaterial, 2018-2020.
- o 5G Antennas, 2017-2019.
- o Design and Analysis of Shaped Reflector and Reflectarray Antennas, 2014-2015.
- o Compact Wideband Metamaterial-based Antennas, 2013-2015.
- Antennas for Mobile Phone/Tablet/Laptop Applications, 2013-2014.
- Wide-band Blade Antennas, 2013-2014.
- o Broad-band Dipole Antennas, 2013-2014.

Honors

- o Received the "Distinguished Inventor" Award, Amirkabir University of Technology, 2019.
- Received the "Selected Projects of Universities and Research Institutes" Award, Ministry of Science, Research and Technology, 2018.
- o Received the "Distinguished Industrial Researcher" Award, Amirkabir University of Technology, 2018.
- Received the "Dr. Kazemi Ashtiani" Research Grant Award for Young Assistant Professor, Iran's National Elite Foundation, 2013.
- Received the "Distinguished Researcher" Award, K.N. Toosi University of Technology, 2011.
- Ranked First in 13th Khawarizmi, Youth Award, 2011.
- Research Grant Awarded, Metamaterial, 2010.
- o Ranked second in 22th Khawarizmi, International Awarded, 2009.
- o Ranked first in 10th Student Best Thesis National Festival, for BS. Thesis, 2006.

US Patents

- Reducing mutual coupling and back-lobe radiation of a microstrip antenna, US Patent App. 17/207,617, 2021.
- EMNZ metamaterial-based antennas and arrays, US Patent App. 17/207,627, 2021.
- EMNZ metamaterial-based antennas and arrays, US Patent App. 17/180,839, 2021.
- Switch, multiplexer, and phase shifter based on EMNZ metamaterials, US Patent App. 17/166,037, 2021.
- Adjusting a cutoff frequency of an EMNZ metamaterial, US Patent App. 17/096,482, 2021.
- Determining sucrose concentration in honey based on fluorescence spectroscopy, US Patent App. 17/204,956, 2021.
- Metamaterial Loaded Antenna, US Patent App. 17/478,963, 2021.
- Reducing mutual coupling and back-lobe radiation of a microstrip antenna, US Patent, 11,088,458, Aug 10, 2021.
- Optical imaging based on spectral shift assessment, US Patent App. 16/706,748, 2020.
- Wideband substrate integrated waveguide slot antenna, US Patent, 10,879,618, Dec 20, 2020.

Publications

Book and Book Chapter

- Metamaterials in Antenna Engineering, Theory and Applications, *LAP Academic Publishing*, Germany, Oct. 2011.
- Investigation of Dipole Antenna Loaded with DPS and DNG Materials, Chapter 15, Metamaterial, *In-Tech.*, pp. 374-402, May 2012.

- Applications of Artificial Magnetic Conductors in Monopole and Dipole Antennas, Chapter 22, Metamaterial, *In-Tech.*, pp. 577-598, May 2012.
- Theory and Applications of Metamaterial Covers, Chapter 12, Trends in Electromagnetism – From Fundamentals to Applications, *In-Tech.*, pp. 277-290, Mar. 2012.

Journal Papers

- [1] S Seyedi, P Parvin, A Jafargholi, A Abbasian, M Mehdinejad, A Khorrami, M Mehrabi, A Moafi, Fluorescence emission quenching of RdB fluorophores in attendance of various blood type RBCs based on Stern-Volmer formalism, *Spectrochimica Acta Part A: Molecular Spectroscopy*, vol. 248, pp. 119237, 2021.
- [2] A Jafargholi, M Salehi, A Bagheri, Compact Dual-Band Near/Far-Field Dipole Antenna/Tag, IET Microwave Antenna Propag., IET Microwave Antenna Propag., vol. 14, no. 11, pp. 1190-1197, 2020.
- [3] S S Seyedi, P Parvin, A Jafargholi, N Hashemi, S M. Tabatabaee, A Abbasian, A Khorrami, Spectroscopic properties of various blood antigens/antibodies, *Biomedical Optics Express*, vol. 11, no. 4, pp. 2298-2312, 2020.
- [4] S Seyedi, P Parvin, **A Jafargholi**, S Jelvani, M Shahabi, M Shahbazi, P Mohammadimatin, A Moafi, Fluorescence properties of Phycocyanin and Phycocyanin-human serum albumin complex, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, vol. 239, pp. 118468, 2020.
- [5] A Jafargholi, A Jafargholi, JH Choi, M Veysi, A Soleimani, Microstrip Patch Back Radiation Reduction Using Metamaterial Superstrate, *IET Microwave Antenna Propag.*, vol. 14, no. 2, pp. 158-164, 2020.
- [6] SSM Khaleghi, G Moradi, RS Shirazi, A Jafargholi, Microstrip Line Impedance Matching Using ENZ Metamaterials, Design and Application, *IEEE Trans. Antennas Propagat.*, vol. 67, no. 4, pp. 2243-2251, 2019.
- [7] N Amani, **A Jafargholi**, Band-Notched UWB Antennas using Non-Periodic CRLH Resonators, *Int. Journal of RF and Microwave Computer-Aided Engineering*, vol. 29, no. 6, 2019.
- [8] A Jafargholi, A Jafargholi, JH Choi, Mutual Coupling Reduction in an Array of Patch Antennas Using Capacitively Loaded Loop Metamaterial Superstrate for MIMO Applications, *IEEE Trans. Antennas Propagat.*, vol. 67, no. 1, pp. 179-189, 2019.
- [9] N Amani, A Jafargholi, Strip-like Internal Antenna for GPS/Glonass/LTE/GSM/WLAN Applications, Int. Journal of Electronics Letters, vol. 7, no. 1, pp. 77-84, 2019.
- [10]**A Jafargholi**, A Jafargholi, B Ghalamkari, Dual-Band Slim Microstrip Patch Antennas, *IEEE Trans. Antennas Propagat.*, vol. 66, no. 12, pp. 6818-6825, 2018.
- [11]MH Mazaheri, A Jafargholi, A Broadband Array Antenna Using ε-Near Zero Metamaterials for MIMO Applications, *International Journal of RF and Microwave Computer-Aided Engineering*, vol. 28, no. 7, 2018.
- [12]M Nosrati, **A Jafargholi**, R Pazoki, N Tavassolian, Broadband Slotted Blade Dipole Antenna for Airborne UAV Applications, *IEEE Trans. Antennas Propagat.*, vol. 66, no. 8, pp. 3857-3864, 2018.
- [13]**A Jafargholi**, A Jafargholi, Miniaturization of Printed Slot Antennas Using Artificial Magnetic Conductors, *IET Microwave Antenna Propag.*, vol. 12, no. 7, pp. 1054-1059, 2018.
- [14]M Bod, R Sarraf-Shirazi, G Moradi, A Kiaee, A Jafargholi, P Mousavi, A Decoupled Source Current Reconstruction Method for Noisy and Reactive Near-Field to Far-Field Transformation, *Int. Journal of RF and Microwave Computer-Aided Engineering*, vol. 28, no. 1, 2018.
- [15]MR Tavakol, A Saba, **A Jafargholi**, A Khavasi, Terahertz Spectrum Splitting by Graphene-Covered Array of Rectangular Grooves, *Optics Letters*, vol. 42, no. 23, pp. 4808-4811, 2017.
- [16]M Bod, R Sarraf, G Moradi, A Jafargholi, A Moallemizadeh, A Hybrid Tikhonov Source Current Reconstruction Method for Large-Scale Problems, *IET Microwave Antenna Propag.*, vol. 12, no. 1, pp. 77-81, 2018.
- [17]N Amani, A Jafargholi, R Pazoki, A Broadband V/UHF Loaded Dipole Antenna in the Vicinity of a Human Body, *IEEE Trans. Antennas Propagat.*, vol. 65, no. 10, pp. 5577-5582, 2017.

- [18]M Bod, R Sarraf-Shirazi, GH Moradi, A Jafargholi, A Regularized Source Current Reconstruction Method for Reactive Near Field to Far Field Transformation, *Applied Computational Electromagnetics Society*, ACES Journal, vol 32, no. 2, pp. 113-119, 2017.
- [19]P Forouzannezhad, A Jafargholi, A Jahanbakhshi, Multiband Compact Antenna for Near-Field and Far-Field RFID and Wireless Portable Applications, *IET Microwave Antenna Propag.*, vol. 11, no. 4, pp. 535-541, 2017.
- [20] A Jafargholi, MM Khani, Miniaturized Microstrip Antenna Using High Impedance Wires Incorporating AMC MTMs, *Int. Journal of Electronics Letters*, vol. 4, no. 4, pp. 489-496, 2015.
- [21]N Amani, A Jafargholi, M Kamyab, SA Golgun, Asymmetrical Single Cell Multiband Uni-Planar Mushroom Resonant Antenna, *Applied Computational Electromagnetics Society*, ACES Journal, vol 31, no. 8, pp. 970-975, 2016.
- [22]MH Mazaheri, N Amani, A Jafargholi, Wideband Printed Slot Bowtie Antenna Using Symmetric Vias, *Microwave and Optical Technology Letters*, vol. 58, no. 6, pp. 1301-1304, 2016.
- [23] A Jafargholi, MH Mazaheri, Broadband Microstrip Antenna Using ENZ Metamaterials, *IET Microwave Antenna Propag.*, vol. 9, no. 14, pp. 1612-1617, 2015.
- [24]N Amani, A Jafargholi, Internal Uni-Planar Antenna for LTE/WWAN /GPS/GLONASS Applications in Tablet/Laptop Computers, *IEEE Antennas and Wireless Propagation Letters*, vol. 14, pp. 1654-1657, 2015.
- [25]N Amani, A Jafargholi, Zeroth-Order and TM₁₀ Modes in One-Unit Cell CRLH Mushroom Resonator, IEEE Antennas and Wireless Propagation Letters, vol.14, pp. 1396-1399, 2015.
- [26]**A Jafargholi**, An Exact Solution for the Generalized Spherical Orthogonality Integral of the Legendre Functions of the First and Second Kind, *Applied Computational Electromagnetics Society*, ACES Journal, vol 30, no. 4, pp. 452-456, 2015.
- [27]M Rafaei-Booket, A Jafargholi, Dual-Band Compact Array of Printed Dipole Antennas, *Applied Computational Electromagnetics Society*, ACES Journal, vol 30, no. 3, pp. 319-326, 2015.
- [28] A Jafargholi, SA Akbarzadeh, MH Mazaheri, Wideband Microstrip Patch Antenna Using ENZ Metamaterials, *Microwave and Optical Technology Letters*, vol. 56, no. 9, pp. 2080-2084, 2014.
- [29]N Amani, M Kamyab, A Jafargholi, A Hosseinbeig, JS Meiguni, Compact tri-band metamaterialinspired antenna based on CRLH resonant structures, *Electronics Letters*, vol. 50, no. 12, pp. 847-848, 2014.
- [30]N Amani, A Jafargholi, M Kamyab, A Vaziri, Asymmetrical wideband zeroth-order resonant antenna, *Electronics Letters*, vol. 50, no. 2, pp. 59-60, 2014.
- [31]A. Jafargholi, A Jafargholi, Compact Broadband Printed Monopole Antenna, *Applied Computational Electromagnetics Society*, ACES Journal, vol 28, no. 4, pp. 321-326, 2013.
- [32] A Jafargholi, A Jafargholi, Broadband Miniaturized Efficient Array Antennas, *Applied Computational Electromagnetics Society*, ACES Journal, vol 28, no. 3, pp. 188-194, 2013.
- [33] A Jafargholi, A Jafargholi, Ultrawide-band Negative Refraction Based on Moving Media Concept, Applied Computational Electromagnetics Society, ACES Journal, vol 27, no. 11, pp. 931-937, 2012.
- [34]M Danaeifar, M Kamyab, A Jafargholi, Broadband Cloaking with Transmission Line Networks and Metamaterials, *International Journal of RF and Microwave Computer Aided Engineering*, vol. 22, no. 6, pp.663–668, Wiley, 2012.
- [35]M Veysi, A Jafargholi, Directivity and Bandwidth Enhancement of Proximity-Coupled Microstrip Antenna Using Metamaterial Cover, *Applied Computational Electromagnetics Society*, ACES Journal, vol 27, no. 11, pp. 925-930, 2012.
- [36] A Jafargholi, M Kamyab, Input Impedance Analysis of Dielectric Covered Loaded Biconical Antennas Using Mode-Matching Theory, International Journal of Electronics and Communications, (AEÜ) vol. 66, pp. 828–832, 2012.
- [37]MR Booket, M Veysi, Z Atlasbaf, A Jafargholi, Ungrounded Composite Right/Left-Handed Metamaterials: Design, Synthesis, and Applications, *IET Microwave Antenna Propag.*, vol. 6, no. 11, pp. 1259 – 1268, 2012.
- [38] A Jafargholi, M Kamyab, Dipole Antenna Miniaturization Using Single-Cell Metamaterial, *Applied Computational Electromagnetics Society*, ACES, vol 27, no. 3, pp. 261-270, 2012.
- [39] A Jafargholi, M Kamyab, M Veysi, MN Azar, Microstrip Gap Proximity Fed-Patch Antennas, Analysis, and Design, *International Journal of Electronics and Communications*, (AEÜ), vol. 66, pp. 115–121, 2012.

- [40]**A Jafargholi**, M Kamyab, Full-Wave Analysis of Double Positive/Double Negative Loaded Dipole Antennas, *Electromagnetics*, vol. 32, no. 2, pp. 103-116, 2012.
- [41]MR Booket, A Jafargholi, M Kamyab, H Eskandari, M Veysi, SM Mousavi, Compact Multi-Band Printed Dipole Antenna Loaded With Single-Cell MTM, *IET Microwave Antenna Propag.*, vol. 6, no. 1, pp. 17-23, 2012.
- [42]M. Danaeifar, M. Kamyab, A. Jafargholi, and M. Veysi, Bandwidth Enhancement of a Class of Cloaks Incorporating Metamaterials, Progress In Electromagnetics Research Letters, vol. 28, 37-44, 2012.
- [43]A Jafargholi, M Kamyab, Full-Wave Analysis of Loaded Dipole Antennas Using Mode-Matching Theory, Applied Computational Electromagnetics Society, ACES Journal, vol 26, no. 11, pp. 915-921, 2011.
- [44]M Veysi, M Kamyab, A Jafargholi, Single Feed Dual Band Dual Linearly Polarized Proximity-Coupled Patch Antenna, *IEEE Antenna Propag. Magazine*, vol. 53, no. 1, pp. 90-96, 2011.
- [45]A Jafargholi, M Kamyab, M Veysi, Spiral Array Architecture, design, synthesis and application, IET Microwave Antenna Propag, vol. 5, no. 5, pp. 503-511, 2011.
- [46]**A Jafargholi**, M Kamyab, A New Approach for Feeding Sinuous Antennas, *International Journal of Electronics and Communications*, (AEÜ), vol. 65, pp. 312–319, 2011.
- [47]M Danaeifar, M Kamyab, **A Jafargholi**, Broadband Cloaking of Large Arbitrary Object by Double-Sided Parallel-Strip Line, *IEICE Electronics Express* (ELEX), vol. 8, no. 22, pp.1905-1912, 2011.
- [48]M Veysi, M Kamyab, J Moghaddasi, A Jafargholi, Transmission Phase Characterizations of Metamaterial Covers for Antenna Application, *Progress In Electromagnetic Research Letter*, vol. 21, pp. 49-57, 2011.
- [49] A Jafargholi, M Kamyab, Loaded Dipole Antenna Using DPS and DNG Materials," *International Review of Communication, Antenna and Propagation*, IRECAP, vol. 1, no. 3, pp. 265-271, 2011.
- [50] A Jafargholi, M Kamyab, M Veysi, PMC-based Waveguide-fed Slot Array, *ISRN Communications and Networking*, Hindawi, vol. 2011, Article ID 941070, 5 Pages.
- [51]M Veysi, M Kamyab, SM Mousavi, A Jafargholi, Wideband Miniaturized Polarization Dependent HIS Incorporating Metamaterials, IEEE Antennas Wireless Propag. Letter, vol. 9, 764-766, 2010.
- [52] A Jafargholi, M Kamyab, M Veysi, Artificial Magnetic Conductor Loaded Monopole Antenna, IEEE Antennas Wireless Propag. Letter, vol. 9, pp. 211-214, 2010.
- [53] A Jafargholi, M Kamyab, Pattern Optimization in an UWB Spiral Array Antenna, *Progress In Electromagnetic Research M*, vol. 11, pp. 137-151, 2010.
- [54] A Jafargholi, M Kamyab, MR Booket, M Veysi, A Compact Dual-band Printed Dipole Antenna Loaded with CLL-Based Metamaterials, *International Review of Electrical Engineering* (IREE), vol. 5, no. 6, pp. 2710-2714, 2010.
- [55]M Rafaei Booket, M Kamyab, A Jafargholi, SM Mousavi, Analytic Modeling and Implementation of The Printed Dipole Antenna loaded with CRLH Structures, *Progress In Electromagnetic Research B*, vol. 20, pp. 167-186, 2010.
- [56] A Jafargholi, A Hosseinbeig, M Emadi, L Farhoudi, SA Golgoon, VHF-LB Vest Antenna, Progress In Electromagnetic Research B, vol. 14, pp. 247-262, 2009.
- [57]M Emadi, A Jafargholi, HS Moghadam, F Marvasti, New Anti-ARM Technique by Using Random Phase and Amplitude Active Decoys, *Progress In Electromagnetic Research*, PIER 87, pp. 297-311, 2008.
- [58]M Emadi, KH Sadeghi, A Jafargholi, F Marvasti, Co Channel Interference Cancellation by the use of Iterative Digital Beam forming Method, *Progress In Electromagnetic Research*, PIER 87, pp. 89-103, 2008.

National Journal Papers

- [1] A Jafargholi, A Jafargholi, A Dual-Band Dual-Polarized Slot Antennas Using CCLL-Inspired Metamaterial, *Electronic Industries Quarterly*, vol. 11, no. 1, pp. 95-104, Spring 2020.
- [2] A Jafargholi, A Jafargholi, A Compact Multi-Band Metamaterial-Inspired Antenna Incorporating Shorting Pins, *Electronic Industries Quarterly*, vol. 11, no. 1, pp. 85-94, Spring 2020.
- [3] A. Bagheri, A. Jafargholi, Broadband Slim Internal Antenna for Wireless and Satellite Phone Communications, *Electronic Industries Quarterly*, vol. 10, no. 1, pp. 85-89, Spring 2019.
- [4] MJ Hassani, A Jafargholi, M Tondro, Wide-Band Electrically Small Antennas Using Active Non-Foster Circuits as Inspired-Metamaterial, *Electronic Industries Quarterly*, vol. 7, no. 4, pp. 109-115, Winter 2017.

- [5] A. Farsad, M. Kamyab, A. Jafargholi, Presenting an Accurate Model of Electrically Small, Near-Field Resonant Parasitic (NFRP) Antennas Using Non-Foster NIC Circuit, *Electronic Industries Quarterly*, vol. 8, no. 2, pp. 119-127, Summer 2017.
- [6] MJ Hassani, A Jafargholi, Wide-Band Near-Field Resonance Z-Antennas Using Change In Parasitic Structure and Capacitive Lumped Element as Replacement of Non-Foster Impedance Matching Circuits, *Electronic Industries Quarterly*, vol. 8, no. 1, pp. 13-21, Spring 2017.
- [7] MH Mazaheri, G Moradi, RS Shirazi, **A Jafargholi**, Blind Adaptive Phased Array Calibration Using Zero-Knowledge Algorithm, *Electronic Industries Quarterly*, vol. 3, no. 4, pp. 113-126, Winter 2012.
- [8] M Danaeifar, M Kamyab, **A Jafargholi**, Broadband Cloacking Huge Arbitrary Object by Transmission Line, *Electronic Industries Quarterly*, vol. 2, no. 2, pp. 7-20, Summer 2011.
- [9] A Jafargholi, M Kamyab, Miniaturization of Microstrip Patch Antenna Using High Impedance Wire Structures, *Electronic Industries Quarterly*, vol. 2, no. 1, pp. 117-131, Spring 2011.
- [10]O Zandi, A Jafargholi, Design and Simulation of Q-band Parabolic Reflector Antenna, *Electronic Industries Quarterly*, vol. 2, no. 1, pp. 53-79, Spring 2011.
- [11]SM Mousavi, M Kamyab, A Jafargholi, M Rafaei Booket, Rigorous and Comprehensive Method for Retrieving the Electromagnetic Constitutive Parameters Based on Kramers-Kronig Relation, *Electronic Industries*, vol. 2, no. 1, pp. 7-21, Spring 2011.

Selected Conference Papers

- Urea Spectroscopy at Different Concentrations, 26th Iranian Conference on Optic & Photonics (ICOP)
 & 12th Iranian Conference on Photonics Engineering and Technology (ICPET), Iran, 2020.
- Cholesterol Spectroscopy at Different Concentrations, 26th Iranian Conference on Optic & Photonics (ICOP) & 12th Iranian Conference on Photonics Engineering and Technology (ICPET), Iran, 2020.
- LIBS analysis and comparison of the copper sample in the simulated Mars and Earth gaseous atmosphere, 26th Iranian Conference on Optic & Photonics (ICOP) & 12th Iranian Conference on Photonics Engineering and Technology (ICPET), Iran, 2020.
- In vitro Study of Laser Diode Radiation Effect on the Photo-Damage of MCF-7 and MCF-10A Cell Clusters, 21st Int. Conference on Biophysical and Biomedical Engineering, ICBBE, France, 2019.
- In Vitro Study of the Laser Irradiation on Destruction of Breast Cancer Cells, *First Int. Iranian Tissue Engineering and Regenerative Medicine Congress* (ITERM), Tehran, 2018.
- A broadband blade dipole antenna for UAV applications, *IEEE Int. Symposium on Antennas and Propagation* (APSURSI), Fajardo, 2016.
- Wide-Band Electrically Small Antennas Using NON-Foster Active Metamaterials Instead of Inspired metamaterial, 2nd Iranian Conference on Engineering Electromagnetics, ICEEM, Tehran, 2014.
- Compact Tri-Band Metamaterial-Inspired Zeroth-Order Resonant Antenna, 2nd *Iranian Conference on Engineering Electromagnetics*, ICEEM, Tehran, 2014.
- Zero-knowledge Phase/Amplitude Calibration in Software Defined Radio Phased Array Antennas, 2nd Iranian Conference on Engineering Electromagnetics, ICEEM, Tehran, 2014.
- Compact Dualband T-junction Zeroth-order resonant Antenna with Extended Bandwidth, *ICEE*, Iran, 2013.
- Miniaturized Dual-band Dipole Antenna Loaded with Metamaterial Based Structure, *ICEE*, Iran, 2011.
- Artificial Magnetic Conductor Loaded Monopole Antenna, *Metamaterial*, Germany, 2010, (Research Grant Awarded).
- VHF-LB Vest Antenna, Simulation and Design, *IEEE Int. Conference on Portable Information Devices*, Portable, 2007.
- Effects of Vest and Whip VHF-LB Antenna on Human Body, *IEEE Int. Conference on Portable Information Devices*, Portable, 2007.
- VHF-LB vest antenna design, IEEE Int. Workshop on Antenna Technology: Small and Smart Antennas Metamaterials and Applications, iWAT, pp. 247-250, 2007.

Reviewer of

- *IEEE Transaction on Antennas and Propagation*, IEEE (IF : 4.38)
- IEEE Antennas and Wireless Propagation Letters, IEEE (IF : 3.83)
- o IEEE Journal of Radio Frequency Identification, IEEE
- *IEEE Systems Journal*, IEEE (IF : 3.93)
- o IEEE Access, IEEE (IF : 3.36)
- Optics Letters, OSA (IF : 3.77)
- *IET Nanodielectrics*, IET (IF : 6.27)
- *Electronics Letters*, IET (IF : 1.31)
- o *2D Materials*, IOP (IF : 7.10)
- Journal of Physics D: Applied Physics, IOP (IF : 3.20)
- Journal of Micromechanics and Microengineering, IOP (IF : 1.88)
- o *IET Microwave Antenna Propagation*, IET (IF : 2.60)
- o Int. Journal of Electronics, Taylor & Francis (IF : 1.33)
- o Microwave and Optical Technology Letters, Wiley (IF : 1.57)
- Progress In Electromagnetic Research, PIER Journal (IF : 2.94)
- o Int Journal of Electronics and Communications (AEÜ), Elsevier (IF : 3.18)
- o Int. Journal of RF and Microwave Computer-Aided Engineering, Wiley (IF : 1.69)

Ph.D. and MS Theses Supervised

PhD

- Seyede Solale Seyedi, "Antibody and antigen blood typing system and method based on spectrophotometric approach", Nov. 2020.
- Parisa Mohammdi Matin, "Detection of glioblastoma and meningioma brain tumors by laser spectroscopy", Proposal Defense on Oct. 2020.
- Azadeh Niazi, "Design and fabrication of fluorescence microscope based on spectral shift in the detection of cancer tissue samples", Proposal Defense on July 2020.

MSc

- G. Farhoomand, "Optical spectroscopy of blood disease", Aug. 2021.
- o R. Allaf Zadeh, "Acoustic imaging based on Q-Switch laser acoustic pulse", Aug. 2021.
- A. Karimi, "New design of Fiber Optic and ring laser Gyroscope by optimization of geometrical structure and laser characteristics", Aug. 2021.
- o K. Rostami, "Design and simulation of terahertz detector ", Apr. 2021.
- o A. S. Hosseini, "LIF spectroscopy of blood components to diagnose hepatitis B", Mar. 2021.
- S. A Dehghanian, "Design and implementation of improved laser induced fluorescence imaging setup based on spectral shift analysis", Feb. 2020.
- M. Raji, "Approach for biosensing based on plasmonic nanorod metamaterials using artificial neural network (ANN)", Feb. 2020.
- Y. Ashja Mahdavi, "Terahertz resonator", Sept. 2019.
- Z. Zare, "Optical spectroscopy of cholesterol, triglyceride and urea to diagnose related disease", Sept. 2019.
- H. Ghasemi, "Diagnosis of diabetes using Laser-induced fluorescence (LIF)", Jul. 2019.
- \circ M. Ahadi, "Design and simulation of a metasurface using graphene", Feb. 2019.