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**EDUCATION**

**Ph.D In Electrical Engineering**University of Waterloo 1989-1993
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**PUBLICATIONS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1484** | **20** | **75** | **39** | **0** |
| Citations | h-Index | Article | Conference | Book |

***Articles***

**1.** Metasurface-Based Time-Reversal Focusing for Brain Tumor Microwave Hyperthermia. Hajiahmadi MohammadJavad, Faraji Dana Reza, Caloz Christophe (2022)., IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, 70(12), 12237-12246.

**2.** Nonlinear dielectric spectroscopy biosensor for SARS-CoV-2 detection. Talebipour Ali, Ghannad Amir Hosein, Sharifi Elham, Pirzadeh Morteza, Hasanzadeh Moghadam Hamed, Saviz Mehrdad, Badieirostami Majid, Karimi Reikandeh Parham, Mobasheri Hamid, Faraji Dana Reza (2022)., Scientific Reports, 12(1).

**3.** Shared Aperture Dual-Wideband Planar Antenna Arrays Using Any-Layer PCB Technology for mm-Wave Applications. Roodaki Lavasani-Fard Masoud, Sinha Siddhartha, Soens Charlotte, GAE Vandenbosch, Mohammadpouraghdam Karim, Faraji Dana Reza (2022)., IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, 69(09), 1-1.

**4.** Stochastic Method of Moments (SMoM) Analysis of Wire Antenna Arrays with Random Elements Locations. Hatamkhani Amirali, Faraji Dana Reza (2021)., IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, 69(12), 1-1.

**5.** Far field superlensing inside biological media through a nanorod lens using spatiotemporal information. Hajiahmadi MohammadJavad, Faraji Dana Reza, Skrivervik A.K. (2021)., Scientific Reports, 11(1).

**6.** A Fast Computational Method for Characteristic Modes and Eigenvalues of Array Antennas. Kaffash Sara, Faraji Dana Reza, Shahabadi Mahmoud, Safavi Naeini Safieddin (2020)., IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, 68(12), 7879-7892.

**7.** Effects of circularly-polarized electromagnetic fields on solvated hemoglobin structure. Hamedi Nastaran, مهرداد ساویز, اقدس بنایی, Shabani Siyavash, Qafary Mimoo, Moosavi Movahhedi Ali Akbar, Faraji Dana Reza (2020)., JOURNAL OF MOLECULAR LIQUIDS, 312(1), 113283.

**8.** Single-source formulation for the analysis of electromagnetic penetrable objects. Ameri Hoda, Faraji Dana Reza (2020)., JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 37(8), 2398.

**9.** In Vitro Effects of Cellular Phone Electromagnetic Fields at 940 MHz on the Structure and Half-Life of Recombinant Human Growth Hormone. Mahammadpour-Aghdam Mehdi, Molaei Rad Ahmad, Faraji Dana Reza, Azizi Azadeh (2020)., Iranian Journal of Science and Technology-Transactions of Civil Engineering, 44(3), 641-649.

**10.** Study of Ultra-weak CW and Amplitude-Modulated Microwaves effects on stem Cell Proliferation: an Experimental and Hypothetical Approach. rouzbahani yashar, kehtari mousa, imani mahdi, saviz mehrdad, shabani iman, moradikhah farzad, alizadeh farhad, karami mohammad, Seyedjafari Oliaeenejad Ehsan, jooyan najmeh, mostajabi zahra, Faraji Dana Reza (2020)., AUT Journal of electrical Engineering, 52(1), 3-8.

**11.** A Multiscale Approach to Terahertz Electric Field Estimation in Corneal Tissues. Saviz Mehrdad, Faraji Dana Reza (2020)., IEEE Journal on Multiscale and Multiphysics Computational Techniques, 5(1), 167-175.

**12.** Novel two-dimensional periodic Green's function for the efficient analysis of structures made of elements perpendicular to the dielectric substrate by complex images. Valizadeh Mahsa, Ameri Hoda, Faraji Dana Reza (2019)., IET Microwaves Antennas & Propagation, 13(10), 1536-1545.

**13.** Direct and indirect effects of exposure to 900 MHz GSM radiofrequency electromagnetic fields on CHO cell line: Evidence of bystander effect by non-ionizing radiation. Jooyan Najmeh, Golyaei Bahram, Bahareh Bigdeli Bahareh Bigdeli, Faraji Dana Reza, Zamani Ali, Entezami Milad, مرتضوی سید محمد جواد (2019)., ENVIRONMENTAL RESEARCH, 174(174).

**14.** A Pole Extraction Algorithm for Wall Characterization in Through-the-Wall Imaging Systems. Sadeghi Sajjad, Mohammadpouraghdam Karim, Ren Kai, Faraji Dana Reza, Burkholder Robert J. (2019)., IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, 67(10), 1-1.

**15.** Morphological Changes Induced By Extremely Low‐Frequency Electric Fields. Imani Mehdi, Kazemi Sepide, مهرداد ساویز, Farahmand Leila, Sadeghi Behnam, Faraji Dana Reza (2019)., BIOELECTROMAGNETICS, 40(6), 375-390.

**16.** A time-reversal imaging system for buried objects in layered media using complex images Green’s functions. Bagherkhani Sahar, Faraji Dana Reza, Dehmollaian Mojtaba (2019)., AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, 105(6), 1-8.

**17.** Reprogrammable Graphene-based Metasurface Mirror with Adaptive Focal Point for THz Imaging. Hosseininejad Seyed Ehsan, Rouhi Kasra, Neshat Mohammad, Faraji Dana Reza, Cabellos-Aparicio Albert, Abadal Sergi, Alarcon Eduard (2019)., Scientific Reports, 9(1), 1-9.

**18.** A DORT-Uniform Diffraction Tomography Algorithm for Through-the-Wall Imaging. Sadeghi Sajjad, Mohammadpouraghdam Karim, Faraji Dana Reza, Burkholder Robert J (2019)., IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, 01(01), 1-1.

**19.** Reconfigurable THz Plasmonic Antenna Based on Few-Layer Graphene with High Radiation Efficiency. Hosseininejad Seyed Ehsan, Neshat Mohammad, Faraji Dana Reza, Lemme Max, Haring Bolivar Peter, Cabellos-aparicio Albert, Alarcon Eduard, Abadal Sergi (2018)., Nanomaterials, 8(8), 577.

**20.** High temperature superconducting YBCO microwave filters. Aghabagheri Somayeh, Rasti Mohammad, Mohammadi Zadeh Mohammad Reza, Kameli Parviz, Salamati Hadi, Mohammadpouraghdam Karim, Faraji Dana Reza (2018)., PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, 549(1), 22-26.

**21.** Analysis of 3D plasmonic circuits by using surface impedance models. Ameri Hoda, Faraji Dana Reza (2017)., JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION, 35(1), 179.

**22.** Compact, wideband-printed quasi-Yagi antenna using spiral metamaterial resonators. Saughar Jarchi, Aeini Majid, Faraji Dana Reza (2017)., ELECTRONICS LETTERS, 53(21), 1393-1394.

**23.** Differential global surface impedance (DGSI): a rigorous model for analyzing periodic structures. Ameri Hoda, Faraji Dana Reza (2017)., JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 34(5), 930.

**24.** High performance analysis of layered nanolithography masks by a surface impedance generating operator. Gholipour Alireza, Faraji Dana Reza, GAE Vandenbosch (2017)., JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION, 34(4), 464.

**25.** An electrical bio-chip to transfer and detect electromagnetic stimulation on the cells based on vertically aligned carbon nanotubes. Rafizadeh Tafti Saied, Haqiquat Khah Mohammad Hossein, Saviz Mehrdad, Janmaleki Mohsen, Faraji Dana Reza, Zanganeh Somayeh, Abdolahad Mohammad (2017)., Materials Science and Engineering: C, 70(0928-4931), 681-688.

**26.** Two-Dimensional Sub-diffraction-limited Imaging by an Optimized Multilayer Superlens. Marzieh Ahmadi, Forooraghi Keyvan, Faraji Dana Reza, محسن غفاری میاب (2016)., Journal of the Optical Society of Korea, 20(6), 653-662.

**27.** Analysis and Design of an Object-Independent Superlens. Ahmadi Marzieh, Forooraghi Keyvan, Faraji Dana Reza (2016)., Plasmonics, 12(6), 1-11.

**28.** Design and Analysis of Disordered Optical Nanoantenna Structures. Haghtalab Mohammad, Faraji Dana Reza, صفوی نایینی صفی الدین (2016)., JOURNAL OF LIGHTWAVE TECHNOLOGY, 34(11), 2838-2847.

**29.** A Practical UWB Microwave Imaging System Using Time-Domain DORT for Tumor Detection. Sadeghi Sajjad, Faraji Dana Reza (2016)., APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY JOURNAL, 31(6), 692-699.

**30.** Change in Oxygen Absorption and Fetal Hemoglobin Due to 940 MHz Electromagnetic Field Radiation Exposure. Banaei Aghdas, Ghourchian Hedayatollah, Faraji Dana Reza, Moosavi Movahhedi Ali Akbar, Naghavi Mohammad Hosein, Saviz Mehrdad, Amjadi Rrr., Hisseinzadeh Reza (2015)., Biomacromolecular Journal, 1(2), 187-195.

**31.** Complementary Periodic Structures for Miniaturization of Planar Antennas. Jarchi Saughar, Rashed Mohassel Jalil Agha, Faraji Dana Reza, Shahabadi Mahmoud (2015)., International Journal of Engineering, 28(10 (A)), 1463-1468.

**32.** Integral Equation Analysis of Multilayered Waveguide Bends Using Complex Images Green's Function Technique. Kamandi Mohammad, Emadi Smh, Faraji Dana Reza (2015)., JOURNAL OF LIGHTWAVE TECHNOLOGY, 33(9), 1774-1779.

**33.** Time-Domain Integral Equation Solver for Planar Circuits Over Layered Media Using Finite Difference Generated Green's Functions. غفاری میاب محسن, Valdes Felipe, Faraji Dana Reza, Michielssen Eric (2014)., IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, 62(6), 3076-3090.

**34.** An Efficient Closed-Form Derivation of Spatial Green's Function for Finite Dielectric Structures Using Characteristic Green's Function-Rational Function Fitting Method. Torabi Abdorreza, احمد شیشه گر امیر, Faraji Dana Reza (2014)., IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, 62(3), 1282-1292.

**35.** Analysis of Modal Reflectivity of Optical Waveguide End-Facets by the Characteristic Green&#x2019;s Function Technique. Torabi Abdorreza, Faraji Dana Reza, احمد شیشه گر امیر (2014)., JOURNAL OF LIGHTWAVE TECHNOLOGY, 32(6), 1168-1176.

**36.** Simplified estimation of membrane potentials induced by high-frequency electric signals. Saviz Mehrdad, Faraji Dana Reza (2013)., Journal of Electrical Bioimpedance, 5(1), 9-13.

**37.** Electromagnetic fields (UHF) increase voltage sensitivity of membrane ion channels; possible indication of cell phone effect on living cells. Ketabi Niloofar, Mobasheri Hamid, Faraji Dana Reza (2013)., ELECTROMAGNETIC BIOLOGY AND MEDICINE, 1(1), 1-13.

**38.** Surface Impedance Modeling of Plasmonic Circuits at Optical Communication Wavelengths. Gholipour Alireza, Faraji Dana Reza, Vandenbosch GAE, Safavi Naeini Safieddin (2013)., JOURNAL OF LIGHTWAVE TECHNOLOGY, 31(20), 3315-3322.

**39.** A New Open-Source Toolbox for Estimating the Electrical Properties of Biological Tissues in the Terahertz Frequency band. Saviz Mehrdad, Toko Lynda Mogouon, Spathmann Oliver, Streckert Joachim, Hansen Volkert, Clemens Markus, Faraji Dana Reza (2013)., JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES, 34(9), 529-538.

**40.** Theoretical Estimations of Safety Thresholds for Terahertz Exposure of Surface Tissues. Saviz Mehrdad, Spathmann Oliver, Streckert Joachim, Hansen Volkert, Clemens Markus, Faraji Dana Reza (2013)., IEEE Transactions on Terahertz Science and Technology, 3(5), 635-640.

**41.** Effects of 940 MHz EMF on luciferase solution: Structure, function, and dielectric studies. Sefidbakht Yahya, Hosseinkhani Saman, Mortazavi Mojtaba, Iman Tavakkolnia, Shakiba-herfeh Mahdi, Khellat Mohammad R., Saviz Mehrdad, Faraji Dana Reza, Saboury Ali Akbar, Sheibani Nader, Moosavi Movahhedi Ali Akbar (2013)., BIOELECTROMAGNETICS, 34(6), 489-498.

**42.** A THEORETICAL MODEL FOR THE FREQUENCY- DEPENDENT DIELECTRIC PROPERTIES OF CORNEAL TISSUE AT MICROWAVE FREQUENCIES. Saviz Mehrdad, Faraji Dana Reza (2013)., PROGRESS IN ELECTROMAGNETICS RESEARCH, 137(1), 389-406.

**43.** Proximity effects of a layered periodic structure on miniaturization of patch antennas. Jarchi Saghar, Rashed Mohassel Jalil Agha, Faraji Dana Reza (2012)., INTERNATIONAL JOURNAL OF RF AND MICROWAVE COMPUTER-AIDED ENGINEERING, 23(5), 549-558.

**44.** Miniaturized Integrated Antennas for Far-Field Wireless Powering. Mohammadpouraghdam Karim, Radiom Soheil, Faraji Dana Reza, Guy A E Vandenbosch, Walter Deraedt (2012)., AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, 66(10), 789-796.

**45.** Application of Ultra-Wideband Sensors for On-Line Monitoring of Transformer Winding Radial Deformations&#x2013;A Feasibility Study. Hejazi Maryam, ابراهیمی جواد, قره پتیان گئورگ, mohamadi mohamad, Faraji Dana Reza, مرادی غلامرضا (2012)., IEEE SENSORS JOURNAL, 12(6), 1649-1659.

**46.** Integral equation analysis and optimization of 2D layered nanolithography masks by complex images Greens function technique in TM polarization. Haghtalab Mohammad, Faraji Dana Reza (2012)., JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION, 29(5), 748-756.

**47.** \_\_Miniaturized RFID/UWB Antenna Structure that can be optimized for Arbitrary Input Impedance. Mohammadpouraghdam Karim, Radiom Soheil, Faraji Dana Reza, Guy A E Vandenbosch, Georges G E Gielen (2012)., IEEE ANTENNAS AND PROPAGATION MAGAZINE, 54(2), 74-87.

**48.** Robust and efficient method for evaluation of the non - symmetrical components of the Greens functions for microstrip structures. Zaker Hossein Firouzeh, R Moini, Shh Sadeghi, Faraji Dana Reza (2011)., IET Microwaves Antennas & Propagation, 5(4), 379 - 385 .

**49.** COMPUTATION OF PERIODIC GREENS FUNCTIONS IN LAYERED MEDIA USING COMPLEX IMAGES TECHNIQUE. Bahadori Hamideh, Alaeian Hadiseh, Faraji Dana Reza (2011)., PROGRESS IN ELECTROMAGNETICS RESEARCH, 112(1), 225-240.

**50.** Greens Function Analysis of Electromagnetic Wave Propagation in Photonic Crystal Devices Using Complex Images Technique. Hoda Ameri, Faraji Dana Reza (2011)., JOURNAL OF LIGHTWAVE TECHNOLOGY, 29(3), 298-304.

**51.** Viscosity reduction of heavy and extra heavy crude oils by pulsed electric field. Fatemeh Homayunia, Hamidi Ali Asghar, Vatani Ali, Shaygani Akmal Amir Abbas, Faraji Dana Reza (2011)., PETROLEUM SCIENCE AND TECHNOLOGY, 29(19), 2052-2060.

**52.** Miniaturised integrated antenna set for RFID / UWB applications. Karim Mohammadpoor Aqdam, S Radiom, Faraji Dana Reza, Gae Vandenbosch, Gge Gielen (2011)., ELECTRONICS LETTERS, 47(2), 82-83.

**53.** A new on - line monitoring method of transformer winding axial displacement based on measurement of scattering parameters and decision tree. Maryam Akhavanhejazi, G B Gharehpetian, Faraji Dana Reza, G R Moradi, M Mohammadi, H A Alehoseini (2011)., EXPERT SYSTEMS WITH APPLICATIONS, 38(7), 8886-8893.

**54.** Reconstruction of Unknown Surface Profiles in Multilayered Media by Complex Images Greens Functions Technique. Behzad Yektakhah, Faraji Dana Reza (2011)., IEEE Antennas and Wireless Propagation Letters, 10(---), 350-353.

**55.** EFFICIENT EVALUATION OF GREENS FUNCTIONS FOR LOSSY HALF - SPACE PROBLEMS. Firouze Zaker Hosein, Faraji Dana Reza, Shh Sadeghi, R Moeini, Gae Vandenbosch (2010)., PROGRESS IN ELECTROMAGNETICS RESEARCH, 109(1), 139-157.

**56.** Transient analysis of thin - wire structures above a multilayer medium using complex - time Greens functions. Mohammad Hasan Haddad, Mohsen Ghaffari Miab, Faraji Dana Reza (2010)., IET Microwaves Antennas & Propagation, 4(11), 1937-1947.

**57.** On - Line Monitoring of Transformer Winding Axial Displacement Using UWB Sensors and Neural Network. Maryam Akhavan Hejazi, Faraji Dana Reza, G B Gharehpetian, G Mokhtari (2010)., International Review of Electrical Engineering-IREE, 5(5), 2122-2128.

**58.** A Robust Method for the Computation of New Closed - Form Green’s Functions for Microstrip Structures. Zaker Hossein Firouzeh, Rouzbeh Moin, Seyed Hossein Hesamedin Sadegh, Faraji Dana Reza (2010)., INTERNATIONAL JOURNAL OF RF AND MICROWAVE COMPUTER-AIDED ENGINEERING, -(---), -.

**59.** A miniaturised monopole antenna for ultra - wide band applications with band - notch filter. B Ahmadi, Faraji Dana Reza (2009)., IET Microwaves Antennas & Propagation, 3(8), 1224-1231.

**60.** A Fast and Accurate Analysis of 2 - D Periodic Devices Using Complex Images Green's Functions. H Alaeian, Faraji Dana Reza (2009)., JOURNAL OF LIGHTWAVE TECHNOLOGY, 27(13), 2216 - 2223.

**61.** Estimating Brain Deformation During Surgery Using Finite Element Method Optimization and Comparison of Two Linear Models. Hajar Hamidian, Soltanian Zadeh Hamid, Faraji Dana Reza, M Gity (2009)., Journal of Signal Processing Systems for Signal Image and Video Technology, 55(1,3), 157-167.

**62.** Fast and Accurate Cascaded Particle Swarm Gradient Optimization Method for Solving 2 - D Inverse Scattering Problems. Mohsen Farmahini Farahani, Faraji Dana Reza, Shahabadi Mahmoud (2009)., APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY JOURNAL, 24(5), 511-517.

**63.** A Novel Greens Function Analysis of Wave Scattering by an Infinite Grating Using Complex Images Technique. Hadiseh Alaeian, Faraji Dana Reza (2009)., APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY JOURNAL, 24(---), 56-63.

**64.** A Novel Coplanar Waveguide - Fed Slot Antenna for Ultrawideband Applications. Aydin Mehdipour, Karim Mohammadpour Aghdam, Faraji Dana Reza, Mihammad Reza Kashani Khatib (2008)., IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, 56(12), 3857 - 3862.

**65.** A practical Feeder for Differential Elliptical Antenna in Ultra - wideband Applications. Aidin Mehdipour, Karim Mohammadpour Aghdam, Reza Kashani Khatib, Faraji Dana Reza (2008)., MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, 50(8), 2103-2107.

**66.** Modified slot Bow - Tie antenna for UWB applications. Aidin Mehdipour, Karim Mohammadpour Aghdam, Faraji Dana Reza, Abdel Razik Sebak (2007)., MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, 50(2), 429-432.

**67.** Nonuniform arrayed waveguide gratings for flat - top passband transfer function. Alireza Gholipoor, Faraji Dana Reza (2007)., IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART A-SYSTEMS AND HUMANS, 25(12), 3678-3685 .

**68.** Complete dispersion analysis of Vivaldi antenna for ultra wideband applications. Aydin Mehdipour, Karim Mohammadpour Aghdam, Faraji Dana Reza (2007)., PROGRESS IN ELECTROMAGNETICS RESEARCH, 77(1), 85-96.

**69.** An efficient hybrid Swarm intelligence - gradient optimization method for complex time Greens functions of multilayer media. Faraji Dana Reza, Ali Farmahini, Lucas Caro, Mohsen Ghafari Miab (2007)., PROGRESS IN ELECTROMAGNETICS RESEARCH, 77(---), 181-192.

**70.** Design and optimisation of a high - frequency EMC wideband horn antenna. Abbas Azimi M, Arazm Farokh, Faraji Dana Reza (2007)., IET Microwaves Antennas & Propagation, 1(3), 580-585.

**71.** Using Photon Wave Function for the Time - Domain Analysis of Electromagnetic Wave Scattering. B. Khadem-hosseinieh, Y. Komijani, Faraji Dana Reza, Shahabadi Mahmoud (2007)., PROGRESS IN ELECTROMAGNETICS RESEARCH, 76(---), 397-417.

**72.** The Sinous Antenna, A Dual Polarized feed for reflector - based searching systems. Karim Mohammad Pour Aghdam, Faraji Dana Reza, Jalil Rashed Mohassel (2005)., AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, 59(7), 392-400.

**73.** . جلیل راشد محصل, Faraji Dana Reza, کریم محمدپور اقدم (2005)., journal of iranian association of electical and electronics engineers, 1(3), 23-32.

**74.** Design, Simulation and Construction of Dual Polarized Sinuous Antenna in the 2-18 GHz Frequency Range. Rashed Mohassel Jalil Agha, کریم محمدپوراقدم, Faraji Dana Reza (2004)., journal of iranian association of electical and electronics engineers, 1(3), 23-32.

**75.** . عظیم فرد, Faraji Dana Reza, احد توکلی (2004)., University, 38(1), 63-71.

***Books***

***Conferences***

**1.** Circularly polarized Wideband Planar Antenna Array using Any-Layer PCB Technology for mm-Wave Applications. Roodaki Lavasani-Fard Masoud, GAE Vandenbosch, Mohammadpouraghdam Karim, Faraji Dana Reza (2022)., European Conference on Antennas & Propagation, 28-31 March, Madrid, Spain.

**2.** Deep Brain Focusing Using Time-Reversing Metasurface Assisted by PEC Walls. Hajiahmadi MohammadJavad, Faraji Dana Reza, Dehmollaian Mojtaba, Caloz Christophe (2020)., 2020 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting, 5-10 July.

**3.** Breast Cancer Hemispheric Shaped Hyperthermia System Designed with Compact Conformal Planar Antenna Array. Dadzadi Alireza, Faraji Dana Reza (2019)., 2019 IEEE Asia-Pacific Microwave Conference (APMC), 10-13 December.

**4.** The Effect of mobile electromagnetic waves on large biomacromolecules such as hemoglobin is polarization dependent. Hamedi Nastaran, اقدس بنایی, مهرداد ساویز, Faraji Dana Reza, Moosavi Movahhedi Ali Akbar (2019)., 26th national and 4rd international Iranian Conference on Biomedical Engineering, 27-28 November, Tehran, Iran.

**5.** Ablation of Deep-Seated Brain Tumors Using Metasurfaces. Hajiahmadi MohammadJavad, Faraji Dana Reza, Caloz Christophe (2019)., 2019 Thirteenth International Congress on Artificial Materials for Novel Wave Phenomena (Metamaterials), 16-21 September.

**6.** Application of Differential Global Surface Impedance (DGSI) Model in the Analysis of Plasmonic circuits. AMERI HODA, Faraji Dana Reza (2018)., 2018 Fifth International Conference on Millimeter-Wave and Terahertz Technologies (MMWaTT), 18-20 December.

**7.** A Compact Unidirectional Wideband Step Slot Antenna over an Artificial Magnetic Conductor. Entezami Milad, Sadeghi Sajjad, Faraji Dana Reza (2018)., 2018 18th International Symposium on Antenna Technology and Applied Electromagnetics (ANTEM), 19-22 August, Canada.

**8.** On the Validity of Standard and Accurate Local Surface Impedance Models. Ameri Hoda, Faraji Dana Reza (2018)., 2018 18th International Symposium on Antenna Technology and Applied Electromagnetics (ANTEM), 19-22 August, Canada.

**9.** A Novel Algorithm for Wall Characterization in Through-the-Wall Imaging based on Spectral Analysis. Sadeghi Sajjad, Mohammadpouraghdam Karim, Faraji Dana Reza, Burkholder Robert J. (2018)., 18th International Symposium on Antenna Technology and Applied Electromagnetics (ANTEM), 19-22 August, Waterloo, CANADA.

**10.** Array Antenna Diagnosis from Far Field Data Using the Theory of Characteristic Modes. Kaffash Sara, Faraji Dana Reza, صفوی نایینی صفی الدین (2018)., 2018 18th International Symposium on Antenna Technology and Applied Electromagnetics (ANTEM), 19-22 August, Canada.

**11.** MAC-oriented programmable terahertz PHY via graphene-based Yagi-Uda antennas. Hosseininejad Ehsan, Abadal Sergi, Neshat Mohammad, Faraji Dana Reza, Lemme Max, Suessmeier Christoph, Haring Bolivar Peter, Alarcon Eduard, Cabellos-aparicio Albert (2018)., IEEE Wireless Communications and Networking Conference, 15-18 April, Barcelona, SPAIN.

**12.** Terahertz Dielectric Resonator Antenna Coupled to Graphene Plasmonic Dipole. Hosseininejad Ehsan, Neshat Mohammad, Faraji Dana Reza, Abadal Sergi, Lemme Max, Haring Bolivar Peter, Alarcon Eduard, Cabellos-aparicio Albert (2018)., 12th European Conference on Antennas and Propagation, 9-13 April, London, United Kingdom.

**13.** Design and Implementation of a Head Imaging System for Trauma Detection. Entezami Milad, Faraji Dana Reza, Dehmollaian Mojtaba (2017)., The Iranian Conference on Electrical Engineering (ICEE2017), 2-4 May, Tehran, Iran.

**14.** Design of a dual-mode meander-line loaded monopole antenna with characteristic mode theory. Bagheriasl Mohammad, Mohammadpouraghdam Karim, Faraji Dana Reza (2017)., European Conference on Antennas and Propagation (EUCAP), 19-24 March, paris, France.

**15.** Millimeter wave rectangular waveguide to grounded CPW transition on multi-layer substrate. Hosseini Fahraji Ali, Mohammadpouraghdam Karim, Faraji Dana Reza (2016)., Fourth International Conference on Millimeter-Wave and Terahertz Technologies (MMWaTT), 20-22 December, Tehran, Iran.

**16.** Tunable whispering-gallery-mode resonance sensor for the detection of dielectric loss of small volume liquid samples. Naghavi SeyyedMohammadHossein, Faraji Dana Reza (2016)., Fourth International Conference on Millimeter-Wave and Terahertz Technologies (MMWaTT), 20-22 December, Tehran, Iran.

**17.** Millimeter Wave Rectangular Waveguide to Grounded CPW Transition on Multi-Layer Substrate. Hosseini-fahraji Ali, Mohammadpouraghdam Karim, Faraji Dana Reza (2016)., 4th International Conference on Millimeter-Wave and Terahertz Technologies, 20-22 December, Tehran, Iran.

**18.** Fabrication of a microwave filter by PLD-films of YBCO. Aghabagheri Somayeh, Mohammadi Zadeh Mohammad Reza, Kamali Payam, Mohammadpouraghdam Karim, Bagheri Vahidreza, Hosseini-fahraji Ali, Faraji Dana Reza (2016)., 3rd International Workshop on Superconducting Sensors and detectors, 14-17 November, Japan.

**19.** Efficient Design Procedure of Dual-Mode Antennas Based on the Characteristic Modes Theory. Bagheriasl Mohammad, Mohammadpouraghdam Karim, Faraji Dana Reza (2016)., IEEE Middle-east Conference on Antennas & Propagation, MECAP 2016, 20-22 September, Beirut, Lebanon.

**20.** Accuracy analysis of applying global surface impedance boundary condition to MPIE formulation for modeling plasmonic structures. Gholipour Alireza, Ameri Hoda, Faraji Dana Reza (2016)., International Symposium on Antenna Technology and Applied Electromagnetics (ANTEM), 10-13 July, Montreal, Canada.

**21.** A miniaturized Vivaldi antenna with modified feeding structure for UWB applications. Madannejad Alireza, Ameri Hoda, Sadeghi Sajjad, Faraji Dana Reza (2016)., International Symposium on Antenna Technology and Applied Electromagnetics (ANTEM), 10-13 July, Montreal, Canada.

**22.** Convergence of a Global Surface Impedance boundary condition in the analysis of plasmonic structures. Gholipour Alireza, Ameri Hoda, Faraji Dana Reza (2016)., International Symposium on Antenna Technology and Applied Electromagnetics (ANTEM), 10-13 July, Montreal, Canada.

**23.** Design of wideband millimeter-wave bandpass filter using substrate integrated waveguide. Hosseini-fahraji Ali, Mohammadpouraghdam Karim, Faraji Dana Reza (2016)., 2016 24th Iranian Conference on Electrical Engineering (ICEE), 10-12 May.

**24.** synthesis and analysis of high temperature superconducting YBCO microwave filter. Aghabagheri Somayeh, Mahdikhani Fatyma, Mohammadi Zadeh Mohammad Reza, Kamelei Parviz, Mohamadpour Aghdam Karim, Baghari Vahid Reza, Hosseini Ali, Salamati Hadi, Faraji Dana Reza (2016)., The 5th national advances in superconductivity, 3-4 May, Urmia, Iran.

**25.** Design, Construction and Measurement of a Millimeter-wave Filter with 40-60 GHz Pass-band. Bagheri Vahidreza, Mohammadpouraghdam Karim, Mansouri Mahdad, Faraji Dana Reza (2015)., 3rd Conference on Millimeter-Wave and Terahertz Technologies, MMWATT 2014, 30 December-1 January, Tehran, Iran.

**26.** Analysis and Design of a Multilayer Plasmonic Superlens by Complex Images Technique. Darvishzadeh-vercheie Mahsa, Faraji Dana Reza (2014)., 7th International Symposium on Telecommunications, IST 2014, 9-11 September, Tehran, Iran.

**27.** Realistic cell and organelle shape modeling for computational bioengineering: A new open-source toolbox. Saviz Mehrdad, Faraji Dana Reza (2014)., 22nd Iranian Conference on Electrical Engineering, ICEE’2014, 2-25 June, Tehran, Iran.

**28.** A frequency domain MVDR beamformer for UWB microwave breast cancer imaging in dispersive mediums. Arabshahi Forough, Monajemi Sadaf, شیخ زاده نجار حمید, Rahemifar Kamran, Faraji Dana Reza (2013)., IEEE ISSPIT 2013, 12-15 December, Athens, Greece.

**29.** Application of the characteristic Green's function technique in closed-form derivation of spatial green's function of finite dielectric structures. Torabi Abdorreza, احمد شیشه گر امیر, Faraji Dana Reza (2013)., 2013 Computational Electromagnetics Workshop, CEM 2013, 2-5 August, İzmir, Turkey.

**30.** Designing ultra-wideband (UWB) systems using effective antenna length concept. Gholipour Alireza, Askarpour Amirnader, Faraji Dana Reza (2013)., 2013 IEEE Antennas and Propagation Society, AP-S International Symposium, 7-13 July, orlando,FL, United States Of America.

**31.** Studying the cellular effects of mobile phone radiation on HEK293T cells harboring luciferase. Sefidbakht Y.., Hosseinkhani Saman, Khodagholi Fariba, Torkzadeh- Mahani M.., Foolad F.., Faraji Dana Reza, Moosavi Movahhedi Ali Akbar (2013)., 1st Tabriz International Life Science & 12th Iran Biophysical Chemistry Conference, 22-24 May, Tabriz, Iran.

**32.** Reconstruction of hidden wire objects using complex time Green's functions and particle swarm optimization. Roodaki-lavasani-fard Masoud, Faraji Dana Reza (2013)., 2013 21st Iranian Conference on Electrical Engineering, ICEE 2013, 14-16 May, Mashhad, Iran.

**33.** Mobile phone radiation effects on HEK293T cells harboring luciferase reporter. Sefidbakht Y, Hosseinkhani S, Torkzadeh-Mahani M, Faraji Dana Reza, Moosavi Movahhedi Ali Akbar (2012)., Annual Meeting of The German Biophysical Society, 23-26 August, G?ttingen, Germany.

**34.** Mobile Phone Electromagnetic Field Effect on HEK Cell Line Trough Luciferase Reporter. Sefidbakht Y.., Hosseinkhani S, Torkzadeh-Mahani M, Tavakkolnia I, Faraji Dana Reza, Saboury Ali Akbar, Moosavi Movahhedi Ali Akbar (2012)., The First International 11th Iran Biophysical Chemistry Conference, 13-15 June, Ardebil, Iran.

**35.** A new robust technique for transient analysis of conducting cylinders-TM case. فیروزه ذاکر حسین, Moeini R, Sadeghi SHH, Faraji Dana Reza, Vandenbosch GAE (2011)., 5th European Conference onAntennas and Propagation EUCAP, 11-15 April, Rome, Italy.

**36.** Comparison of Linear and Nonlinear Models for Estimating Brain Deformation Using Finite Element Method. Hamidian Hajar, Soltanian Zadeh Hamid, Akhondi-asl A.r., Faraji Dana Reza (2009)., ICSICC’2008, 8-10 March, Kish Island, Iran.

**37.** Estimating Brain Deformation During Surgery Using Finite Element Method Comparison of Two Linear Models. Hamidian Hajar, Soltanian Zadeh Hamid, Faraji Dana Reza, Gity m (2008)., CARS2008, 25-28 June, Barcelona, Spain.

**38.** Comparison of two linear models for estimating brain deformation during surgery using finite element method. Hamidian Hajar, Soltanian Zadeh Hamid, Faraji Dana Reza, گیتی م (2008)., IEEE International Joint Conference on Neural Networks, 1-6 June, Hongkong, China.

**39.** Optimization of Two Linear Models for Estimating Brain Deformation During Surgery Using Finite Element Method. Hamidian Hajar, Soltanian Zadeh Hamid, Faraji Dana Reza, Gity m (2008)., WOSPA’2008, 17-19 March, United Arab Emirate, United Arab Emirates.

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