



Bahram Jazi

Professor

College: faculty of Physics

Department: Laser and Photonics

First name: Bahram

Last name: Jazi

B. Sc. Educational Physics (University of Karazmi (Tarbiat Moallem) – Tehran-Iran-June,1990)

M. Sc in Atomic Physics (University of Karazmi (Tarbiat Moallem) – Tehran-Iran-Oct. 1993)

Title of M. Sc. thesis: "General theory of atomic collisions and its application in excitation of CO₂ molecule"

Supervisor: Dr. Farshad Ebrahimi (Shahid Beheshti University)

Ph. D. in Plasma Physics (Shahid Beheshti University –Tehran-Iran-Dec. 2004)

Title of Ph. D. thesis: "Investigation of surface waves on plasma surfaces and the mechanism of its excitation in modern microwave sources"

Supervisor: Prof. Babak Shokri

Affiliation : Head of microwave Lab.(In progress constructing) and electronic Lab. Physics Dep. of University of Kashan – Kashan-I. R. Iran

Academic grade: Professor

H-Index = 17

Course taught : Plasma physics- Microwave engineering- non-neutral plasma physics- Electrodynamics-Modern Optics-Electronics-Electromagnetic media

E-Mail : jaziada@kashanu.ac.ir

Web Page:: <https://faculty.kashanu.ac.ir/bahramjazi/fa>

Research Areas:

Articles Published

1**) Filamentation of a subsonic plasma jet by surface waves (B. Shokri & B. Jazi . . Elsevier. Phys. Lett. A 2002)

2**) Ion- acoustic modulation of a magnetized plasma jet by surface waves (B. Shokri, B. Jazi. Elsevier. Phys. Lett. A,2003)

3**) Azimuthal electromagnetic surface waves on an annular magnetized plasma (B. Shokri, B. Jazi. Elsevier. Phys. Lett. A 2003)

4**)Excitation of non- reciprocal electromagnetic surface waves in semi- bounded magnetized plasmas by an electron beam (B. Shokri , B. Jazi. AIP. Phys. of plasmas 2003)

5**) Dispersion relation of azimuthal electromagnetic surface waves on a magnetized plasma column in a dielectric lined slow-wave waveguide (B. Jazi, H. Mehdian . IOP . Plasma Physics and Controlled Fusion . 2004)

6**) Excitation of electromagnetic surface waves by an annular electron beam in a plasma waveguide with a dielectric rod and a magnetized plasma column(B. Jazi, B. Shokri . IOP. Plasma Physics and Controlled Fusion . 2005)

7**) Spatial growth-rate and field profiles of symmetric mode in a rod dielectric Cherenkov maser with a magnetized plasma column (B. Shokri , B. Jazi. Elsevier. Phys. Lett. A 2005)

8**) Time growth-rate of symmetric TM-mode of a rod dielectric Cherenkov plasma Maser (B. Shokri, B. Jazi, AIP . Phys. of plasmas 2005)

9**) The theoretical simulation of magnetized electron beam effects on radially polarized of an annular cylindrical piezoelectric crystal (B. Jazi, B. Khoshnevisan & H. Zeynali . Elsevier. Phys. Lett. A 2006)

10**) Azimuthal electromagnetic surface waves in a rod dielectric magnetized plasma waveguide and their excitation by an annular relativistic rotating electron beam (B. Jazi, B. Shokri & H. Arbab. IOP. Plasma Physics and Controlled Fusion . 2006)

11**)The theoretical investigation of THz electromagnetic waves in a rod degenerate plasma-waveguide (B. Jazi, M. Nejati & A. Salehi, Springer, Int. Jour. of Infrared and Millimeter waves 2006)

12**)Excitation of THz symmetric TM-modes in a cylindrical metallic waveguide with an axial magnetized degenerate plasma rod by an electron beam (B. Jazi, M. Nejati & B. Shokri . Elsevier. Phys. Lett. A 2007)

13**) The effects of thermal velocities on frequency spectra of an unbounded collision less degenerate plasma with two different type of equilibrium distribution functions. (B. Jazi, A. Salehi, B. Shokri, M. Nejati & S. E. Saatchi. IOP. Physics Scripta. 2007)

14**)A computer tracking system of solar dish with two-axis degree freedoms based on picture processing of bar shadow.[H. Arbab, B. Jazi & M. Rezagholizadeh . Elsevier . renewable energy, 2008]

15**)The single wall carbon nanotube waveguides and excitation of their $\sigma + \pi$ plasmons by electron beam(M. Nejati & C. Javaherian & B. Shokri & B. Jazi. AIP. Physics of

Plasmas. 2009)

16**) Binodal curve measurements for (water + propionic acid + dichloromethane) ternary system by cloud point method (M. Mohsen-Nia & B. Jazi & H. Amiri . Elsevier, The Journal of Chemical Thermodynamics 2009)

17**) Effects of external electromagnetic field on binodal curve of (water + propionic acid + dichloromethane) ternary system (M. Mohsen-Nia & H. Amiri & B. Jazi. Elsevier, The Journal of Chemical Thermodynamics 2009)

18**) The theoretical simulation of Fabry-Perot interferometer with a cold collisionless plasma layer (B. Jazi & M. Monemzadeh & R. Ramezani-Arani, Springer, Jour. of infrared , millimeter and Terahertz waves, 2009)

19**) Dielectric Constants of Water, Methanol, Ethanol, Butanol and Acetone: Measurement and Computational Study (M. Mohsen-Nia & H. Amiri & B. Jazi, Springer, Journal Of Solution Chem, 2010)

20**) Generation and amplification of terahertz electromagnetic waves in a plasma waveguide with a dielectric rod and an annular degenerate plasma (H. Tashakori, A.R. Niknam, M. Nejati and B. Jazi, Talor & Francis , Waves in Random and Complex Media, 2010)

21**) About propagation of electromagnetic waves in the elliptical waveguides made of the materials with anisotropic Hermitian dielectric tensors (B. Jazi, A. Abdoli-Arani, Z. Rahmani, M. Monemzadeh, R. Ramezani-Arani, Talor & Francis , Waves in Random and Complex Media, 2010)

22) The dielectric tensor and field equations in the inhomogeneous cold collisionless magnetized drift plasmas with elliptical cross sections (B. Jazi, A. Abdoli-Arani, Z. Rahmani, R. Ramezani-Arani, M. Monemzadeh, Elsevier, Physics letters A, 2010)

23) A new description based on modified Airy function for interference in moving magnetized plasma slabs (B. Jazi, Z. Rahmani, A. Abdoli-Arani, S. Tahani-Ravandi, Talor & Francis , Waves in Random and Complex Media, 2011)

24) Influence of thermal and collisional effects on the dielectric permittivity tensor in a multi layer plasma waveguide with elliptical cross section. (B. Jazi & A. R. Niknam & A. Abdoli-Arani: IEEE: Transaction on Plasma Science 2011)

25) About excitation of electromagnetic waves by elliptical relativistic modulated electron beam in a cylindrical plasma column with elliptical cross section (B. Jazi & A. Abdoli-Arani, IEEE: Transaction on Plasma Science, 2012)

26) About excitation of surface plasma waves by elliptical relativistic electron beam in a magnetized dusty plasma column with elliptical cross section (A. Abdoli-Arani & B. Jazi, : AIP, Physics of plasmas , 2012)

27) Scattering an elliptical cylinder plasma for the electromagnetic waves with the wavelength of much greater than the dimensions of the plasma cross section (A. Abdoli-Arani , R. Ramezani-Arani , B. Jazi , S. Golharani , Talor & Francis , Waves in Random and Complex Media, 2012)

28) Analysis of the reflection of electromagnetic waves in an unsteady moving magnetized plasma slab (Z. Rahmani , B. Jazi , B. Shokri , Talor & Francis , Waves in Random and Complex Media, 2012)

29) Time growth rate and field profiles of hybrid modes excited by a relativistic elliptical electron beam in an elliptical metallic waveguide with dielectric rod (B. Jazi , Z. Rahmani , E. Heidari-Semiromi & A. Abdoli-Arani : AIP, Physics of plasmas , 2012)

30) Acceleration of an electron inside the circular and elliptical waveguides by microwave radiation (A. Abdoli-Arani, B. Jazi & B. Shokri, IEEE: Transaction on Plasma Science, 2013)

31) Reflection and absorption of electromagnetic waves propagation in an inhomogeneous dissipative magnetized plasma slab (B. Jazi, Z. Rahmani and B. Shokri, IEEE: Transaction on Plasma Science, 2013)

32) Acceleration and dynamics of an electron in the degenerate and magnetized plasma elliptical waveguide (A. Abdoli-Arani, B. Jazi , B. Shokri AIP, Physics of plasmas , 2013)

33) Total transparency of a two-moving-magnetized-plasma-layer structure, (Z. Rahmani , B.

Jazi ,B. Shokri, Elsevier, Physics letters A, 2013)

34) Electromagnetic wave scattering from a thin annular magnetized relativistic rotating electron beam (TAMRREB) with dielectric rod (B. Jazi, A. Shekari-Firouzjaei , S. Golharani, IEEE: Transaction on Antennas & Propagation, 2013)

35) Effect of relativistic elliptical beam modulation on excitation of surface plasma waves in a magnetized dusty plasma column with elliptical cross section (A. Abdoli-Arani-B. Jazi, Talor & Francis , Waves in Random and Complex Media, 2013)

36) Interference simulation in a cold collisionless moving magnetized plasma slab (Z. Rahmani, B. Jazi & A. Abdoli-Arani, Talor & Francis , Waves in Random and Complex Media, 2013)

37) Analysis of long wavelength electromagnetic scattering by a magnetized cold plasma prolate spheroid (Y. Ahmadizadeh , B. Jazi & A. Abdoli-Arani, Talor & Francis , Waves in Random and Complex Media, 2013)

38) Electromagnetic wave scattering from a magnetized plasma column including a thin annular magnetized relativistic rotating electron beam (TAMRREB) (B. Jazi & A. Shekari-Firouzjaei, Talor & Francis , Waves in Random and Complex Media, 2013)

39) Long plasma column with a non-coaxial dielectric rod irradiated by an electromagnetic wave (B. Jazi, S. Golharani and E. Heidari-Semiromi, IEEE: Transaction on Plasma Science, . 2014)

40) Energy distribution along the focal axis of a metallic cylindrical parabolic reflector covered with a plasma layer (B. Jazi, B. Davoudi, M. R. Khajehmirzaei and A. R. Niknam, IEEE: Transaction on Plasma Science. 2014)

41) Theoretical investigation of resonance frequencies in long wavelength electromagnetic wave scattering process from plasma prolate and oblate spheroids placed in a dielectric layer (Y. Ahmadizadeh, B. Jazi and A. Abdoli-Arani , Talor & Francis , Waves in Random and Complex Media. 2014)

42) The role of resonance frequency of the plasmons in electromagnetic wave scattering process from a dielectric covered metallic rod placed in a plasma antenna (B. Jazi, F. Sadeghi-Nia and Z. Rahmani, Springer, Plasmonics, 2014)

43) The response of a rotating magnetized cold plasma prolate spheroid in presence of a long wavelength electromagnetic wave (Y. Ahmadizadeh, B. Jazi, and A. Abdoli-Arani,, IEEE: Transaction on Plasma Science, 2014)

44) Electromagnetic modeling of the energy distribution of a metallic cylindrical parabolic reflector covered with a magnetized plasma layer (A. R. Niknam, M. R. Khajehmirzaei, B. Davoudi-Rahaghi, Z. Rahmani, B. Jazi, and A. Abdoli-Arani, AIP, Physics of plasmas , 2014)

45) Terahertz electromagnetic wave generation and amplification by an electron beam in the elliptical plasma waveguides with dielectric rod (Z. Rahmani, B. Jazi & E. Heidari-Semiromi, AIP, Physics of plasmas , 2014)

46) Magnetic field effects on resonance frequency of the plasmons in electromagnetic wave scattering process from a dielectric covered metallic rod placed in a plasma antenna (B. Jazi, Z. Rahmani F. Sadeghi-Nia and H. Shabani, Springer, Plasmonics, 2014)

47) Scattering from an eccentric system, including a dielectric rod placed in a thin annular magnetized relativistic rotating electron beam (TAMRREB) (B. Jazi , S. Golharani ,Z. Rahmani , Talor & Francis , Waves in Random and Complex Media. 2015)

48) A theoretical study of hot plasma spheroids in the presence of low frequency electromagnetic waves (Y. Ahmadizadeh, B. Jazi , S. Barjesteh , Talor & Francis , Waves in Random and Complex Media. 2016)

49) The plasma background effect on time growth rate of THz hybrid modes in an elliptical metallic wave guide with two electron beams as energy source (S. Safari, B. Jazi, IEEE: Transaction on Plasma Science, 2016)

50) Different roles of electron beam in two stream instability in an elliptical waveguide for generation and amplification of THz electromagnetic waves (S. Safari, B. Jazi, S. Jahanbakht, , AIP, Physics of plasmas , 2016)

51) Theoretical modeling of average force acted on nano plasma spheres in presence of radiation of long wavelength point source (Z. Hajijamali-Arani, B. Jazi, and S. Jahanbakht, Springer , Plasmonics, 2016)

52) Analytical formulation for the dielectric tensor and field equations of the inhomogeneous drift plasma cylinder in rotating magnetic field (Z. Hajijamali-Arani, B. Jazi,, AIP, Physics of plasmas, 2017)

53) The existence of two electron beams in a Cherenkov maser, and its different behavior for generation and amplification of THz electromagnetic waves (Z. Hajijamali-Arani, B. Jazi,, Springer,, The European Physical Journal Plus, 2017)

54) Finite magneto-static field effect on the excitation of THz hybrid modes in an elliptical

metallic plasma waveguide with two energy sources(S. Safari,B. Jazi,, AIP, Physics of plasmas, 2017)

55)A mathematical description for the scattering phenomena of plane wave elliptical plasma antenna located in oblique static magnetic field(S. Safarii,B. Jazi,, Springer,,The European Physical Journal Plus, 2017)

56)The classical and theoretical simulation for dominant radiated frequencies of plasma nanowire in presence of a long monopole antenna with long wavelength radiation(S. Safari,B. Jazi,, AIP, Journal of Applied Physics, 2017)

57)The role of terahertz surface plasmons in the scattering pattern of electromagnetic waves in an unstable elliptical plasma antenna(S. Safarii,B. Jazi,, AIP, Physics of plasmas, 2017)

58) Modeling of a bimetallic eccentric cylindrical plasma waveguide based on a transmission line for TEM-mode (S. Golharani, B. Jazi, Saiad Jahanbakht & A. Moeini-Nashal,Talor & Francis , Waves in Random and Complex Media. 2017)

59) A Theoretical Description for Elliptical Plasma Antenna Response in Presence of Terahertz Electromagnetic Plane Wave Based on Surface Plasmon Concept (S. Safarii,B. Jazi,, SPRINGER, Plasmonics, 2017)

60)An electromagnetic description for collisional drift thermal plasmas in presence of rotating magnetic field (Z. Hajijamali-Arani,B. Jazi,, Springer,,The European Physical Journal Plus, 2017)

61)About background plasma effects on excitation and generation of the waves in a cylindrical metallic waveguide with anisotropic dielectric rod(S. Zahedi,B. Jazi,Z. Rahmani, AIP, Physics of plasmas, 2017)

62) The Effects of a Transverse Anisotropy DielectricRod in Excitation and Amplification Phenomenaof Hybrid Electromagnetic Waves ina Cylindrical Metallic Waveguide , Zahedi, Saeed; Jazi, Bahram; Rahmani, Zeinab; Kaabomeir, Shima IEEE: Transaction on Plasma Science, 2018)

63)A description on plasma background effect in growth rate of THz waves in a metallic cylindrical waveguide, including a dielectric tube and two current sources (Z. Hajijamali-Arani,B. Jazi,, Springer,,The Indian Journal of Physics, 2018)

64)Terahertz radiation generation through the nonlinear interaction of Hermite and LaguerreGaussian laser beams with collisional plasma: field profileoptimization(S. Safari,A.R. Niknam, F. Jahangiri and B. Jazi,, AIP, Journal of Applied Physics, 2018)

65)Time growth rate optimization of terahertz electromagnetic wave generation with converting occupied plasma region from annular plasma to filled plasma in core, in an elliptical Cherenkov maser with two energy sources(S. Safari, B. Jazi, Springer, Pramana, Journal of Physics, 2018)

66)The infrared (far terahertz) generation by nonlinear interactions of two visible laser beams in a metallic background: infrared surface plasmon effect(S. Safari,B. Jazi, Springer , Plasmonics, 2018)

67)About generation of terahertz radiation due to the nonlinear interaction of Gaussian and Hermite-cosh-Gaussian laser beams in collisional plasma background: optimization and field profile controlling(S. Safari, B. Jazi, IEEE: Transaction on Plasma Science, 2018)

68) The dependence of resonance frequency to landing angle in reciprocal scattering phenomena of the waves from an elliptical plasma dielectric antenna (S. Golharani,Z. Rahmani, B. Jazi, IEEE: Transaction on Plasma Science, 2019)

69)The influence of static magnetic field on nonlinear response of a plasma background to presence of two laser beams with different profiles (Hermite and Laguerre Gaussian)(S Safari, B Jazi, A R Niknam, F Jahangiri, IOP , Laser Physics, 2019)

70) A theoretical study for temperature effects on dominant color in colloidal nano sphere solutions (Z. Hajijamali-Arani, B. Jazi, IOP, Physica Scripta, 2019)

71) About azimuthal acceleration of the electrons by azimuthal surface waves in a dielectric-lined circular waveguide with two thin annular rotating electron beams (Z. Hajijamali-Arani, B. Jazi, IEEE: Transaction on Plasma Science, 2019)

72) About the helix plasma antenna: Effective factors on characteristics of radiation, Mansooreh Safi, Bahram Jazi, Samaneh Safari, Taylor & Francis , Waves in Random and

Complex Media,2019)

73)The mode generation due to the wave transmission phenomena from a loss free isotropic cylindrical metallic waveguide to the semi-bounded plasma waveguide, Samaneh Najari, Bahram Jazi, S.Sajad Jahanbakht,Taylor & Francis , Waves in Random and Complex Media,2019)

74) Theoretical investigation of the presence of the azimuthal backward waves (ABWs) and their amplification in a magnetized plasma waveguide with two annular rotating energy sources beams (Z. Hajijamali-Arani, B. Jazi, Springer, The European Physical Journal D, 2020)

75) The heating phenomenon of a plasma column by electromagnetic wave injection from a semi-bounded waveguide(S. Najari, B. Jazi, Elsevier, Optik, 2020)

76)Plasma covered long cylindrical non-isotropic dielectric lenses for targeted control of energy distribution (S. Golharani, E. Heidari-Semiromi, B. Jazi, Z. Rahmani, Springer, The European Physical Journal Plus, 2020)

77)The role of the filamented multi-electron beams on electron azimuthal acceleration in a plasma waveguide,(Z. Hajijamali-Arani, B. Jazi, Elsevier, Optik, 2020)

78)The description of mode matching method, in electromagnetic wave transmission from a loss free semi-bounded waveguide to the plasma waveguide(S. Najari, B. Jazi, Springer, The European Physical Journal Plus, 2020)

79)تولید مد های جدید در فرآیند عبور امواج از میان دو موجبر نیمه کراندا ربا دیواره ی فلزی استوانه ای با حضور یک میله ی پلاسمایی اتلافی در یکی از آنها (سمانه نجاری-بهرام جزی، دانشگاه صنعتی اصفهان مجله پژوهش فیزیک ایران 1400)

80)Measurement of Plasma Current in Damavand Tokamak Using Magnetic Probes Assembly as a Discrete Rogowski Coil(Fateme Shakeri,Ardavan Kouhi, Bahram Jazi,Mahsa Moazzemi,Elsevier,Fusion Engineering and Design,2021)

81)The role of adiabatic and non-adiabatic phenomena in passing waves from a semi-bounded loss free waveguide to semi-bounded plasma waveguide,Samaneh Najari, Bahram Jazi, Springer , Indian Journal of Physics , 2021)

82)The cylindrical column lenses and reflectors made of transverse anisotropy plasma and dielectrics and their response to the presence of plane electromagnetic waves,(S. Golharani, B. Jazi, E.Heidari,Z. Rahmani, Elsevier, Optik, 2021)

83)A novel approach in heating phenomena of the drift plasmas in the presence of rotating magnetic field: Appearance of anti-Hermitian part in dielectric tensor(S. Safari, B. Jazi, Pramana – J. Phys. Springer, 2021)

84)تعمیمی برای ضرایب فرنل(عبور و انعکاس) در موجبرهای نیمه کراندار پلاسمایی(و تاثیر دمای پلازما بر آنها)سمانه نجاری-بهرام جزی-نشریه ی پژوهش سیستم های بس ذره ای- دانشگاه شهید چمران اهواز-1400

85)Simulation of Gaussian electromagnetic wave interaction and its effect on the dynamics of metallic nanosphere (repulsion or even elasticity)(F.Khosravi,B.Jazi,A.Abdoli, Springer,The European Physical Journal Plus,2022)

86)The plasma nanosphere cooling rate simulation in presence of the coherent electromagnetic waves with Gaussian profile(F.Khosravi,B.Jazi,A.Abdoli, Springer,The European Physical Journal D,2022)

87)The role of ordinary Bessel function and Hankel function in simulation of plasma valve mechanism in a loss-free metallic cylindrical waveguide(Asghar Karamian,Bahram Jazi,Samaneh Najari, Mathematics Interdisciplinary Research, 2022)

88)A theoretical explanation for the existence of certain maxima in the visible spectrum pattern of wave scattering from spherical metal-dielectric-Janus nanoparticles based on surface plasmon excitation(Maryam Dehdar , Bahram~Jazi and Fatemeh Khosravi, Springer,PLASMONICS,2024)

89)A theoretical investigation on the role of surface plasmon excitation in the cloaking and protection of gold cylindrical rods using metallic layers of different materials, (Soheila Hajihashemi, Bahram Jazi, Samane Najari, Springer , Plasmonics, 2024)

90)Ohmic resistance correction for an inductive modulator in DC-condition biased plasma antennas , while Modulation the signal in the VLF band, Mahshad Salimiyan , Bahram Jazi, Morteza Shafiei Active and Passive Electronic Components, John Wiley & Sons, (2025)

کلیه حقوق متعلق به دانشگاه کاشان می باشد ©

Employment Information

| Faculty/Department | Position/Rank | Employment Type | Cooperation Type | Grade |
|--------------------|---------------|-----------------|------------------|-------|
| (not set) | (not set) | Tenured | Full Time | 32+6 |

Papers in Conferences

1. مهشاد سلیمیان، بهرام جزی، مرتضی شفیع، تصحیح پارامترهای مداری برای مدولاتورهای القایی (مقاومت اهمی و ضریب خودالقا) در حین ارسال سیگنال بر روی آنتن پلاسمایی میله ای، دهمین کنفرانس مهندسی و فیزیک پلاسما، ۱۳ - تهران، ۲۰۲۳، ۰۷ ۱۲
2. اصغر کرمان، سمانه نجاری، بهرام جزی، شبیه سازی عملکرد شیر پلاسمایی در مسیر یک موجبر استوانه‌ای، نهمین کنفرانس مهندسی و فیزیک پلاسما، ۱ - گنبد کاووس، ۲۰۲۲، ۰۷ ۱۳
3. مجتبی گلی پزوه، فرشته جوکار کاشی، مرتضی شفیع، بهرام جزی، بررسی اثر پلاسمای سرد اتمسفری بر غیرفعال کردن باکتریهای استافیلوکوکوس اورئوس و ای کولای، نهمین کنفرانس مهندسی و فیزیک پلاسما، ۱ - گنبد کاووس، ۲۰۲۲، ۰۷ ۱۳
4. سعیده گلهرانی دارانی، بهرام جزی، ابراهیم حیدری، زینب رحمانی نوش آبادی، فاطمه خسروی، حمید ملکی قاسمی، شبیه سازی پاسخ لنزهای استوانه-ای طویل محافظت شده با یک لایه-ی پلاسما به حضور امواج میکروویو تخت به کمک هشتمین کنفرانس مهندسی و فیزیک پلاسما، ۱ - مازندران، ۲۰۲۱، ۰۷ ۱۴ FEM روش عددی
5. سعیده گلهرانی دارانی، بهرام جزی، ابراهیم حیدری، زینب رحمانی نوش آبادی، فاطمه خسروی، حمید ملک محمدی، شبیه هشتمین کنفرانس، FEM سازی پاسخ لنزهای ستونی پلاسمایی به حضور امواج تخت میکروویو به کمک روش عددی مهندسی و فیزیک پلاسما، ۱ - مازندران، ۲۰۲۱، ۰۷ ۱۴
6. فاطمه خسروی، بهرام جزی، عباس عبدلی آرانی، سعیده گلهرانی دارانی، نیروی وارد بر نانوکرات پلاسمایی تحت تابش محوری پرتوهای گاوسی، هشتمین کنفرانس مهندسی و فیزیک پلاسما، ۱ - مازندران، ۲۰۲۱، ۰۷ ۱۴
7. فاطمه خسروی، بهرام جزی، عباس عبدلی آرانی، سعیده گلهرانی دارانی، عوامل مؤثر بر رشد و یا کاهش سرعت دمای نانوکرات پلاسمایی ناشی از اندرکنش امواج همدوس الکترومغناطیسی با پروفایل گاوسی، هشتمین کنفرانس مهندسی و فیزیک پلاسما، ۱ - مازندران، ۲۰۲۱، ۰۷ ۱۴

8. سمانه نجاری، بهرام جزئی، فرهاد مختاریان، پیمان‌ه ای شدن ضرائب تعمیم یافته ی فرنل برای انتقال انرژی از یک موجبر نیمه-کراندار استوانه-ای به یک موجبر نیمه کراندار دیگر شامل یک ستون پلاسمایی، هشتمین کنفرانس مهندسی و فیزیک پلازما، ۱ - مازندران، ۲۰۲۱، ۱۴ ۰۷
9. سمانه نجاری، بهرام جزئی، فرهاد مختاریان، نرخ رشد دمای ستون های پلاسمایی نیمه کراندار در موجبر های نیمه کراندار . از طریق تزریق امواج الکترومغناطیسی به آن، هشتمین کنفرانس مهندسی و فیزیک پلازما، ۱ - مازندران، ۲۰۲۱، ۱۴ ۰۷
10. سعیده گلهرانی دارانی، بهرام جزئی، ابراهیم حیدری، زینب رحمانی نوش آبادی، فاطمه خسروی، حمید ملکی قاسمی، شبیه سازی پاسخ لنزهای استوانه-ای طویل محافظت شده با یک لایه-ی پلازما به حضور امواج مایکروویو تخت به کمک هشتمین کنفرانس مهندسی و فیزیک پلازما، ۱ - مازندران، ۲۰۲۱، ۱۴ ۰۷ FEM، روش عددی
11. زینب حاجی جمالی ارانی، بهرام جزئی، خواص انتشاری امواج آهسته در یک موجبر دی الکتریک ناهمسانگرد با دو . چشمه انرژی، کنفرانس فیزیک ایران ۱، ۱۳۹۷ - قزوین، ۲۰۱۸، ۲۷ ۰۸
12. مرتضی شفیع، زینب حاجی جمالی ارانی، بهرام جزئی، بهبود طول ستون پلازما در پلازما جت مایکروویوی طراحی شده در فشار اتمسفری، ششمین کنفرانس مهندسی و فیزیک پلازما، ۱ - قزوین، ۲۰۱۸، ۱۸ ۰۷
13. مرتضی شفیع، زینب حاجی جمالی ارانی، بهرام جزئی، بهبود طول ستون پلازما در پلازما جت مایکروویوی طراحی شده در فشار اتمسفری، ششمین کنفرانس مهندسی و فیزیک پلازما، ۱ - قزوین، ۲۰۱۸، ۱۸ ۰۷

Papers in Journals

1. سمانه نجاری، بهرام جزئی، تعمیمی برای ضرایب فرنل (عبور و انعکاس) در موجبرهای نیمه کراندار پلاسمایی و تأثیر JCR, ISC, دمای پلازما بر آنها، مجله ی پژوهش سیستم های بس ذره ای، ۱۴۰۰/۰۶/۲۳
2. سمانه نجاری، بهرام جزئی، تولید مدهای جدید در فرایند عبور امواج از میان دو موجبر نیمه کراندار با دیواره فلزی استوانه‌ای با حضور یک میله پلاسمایی اتلافی در یکی از آنها، پژوهش فیزیک ایران، مجلد ۲، شماره صفحات ۶۸۱، ۱۳۹۹/۱۲/۲۲، ISI-Listed.
3. Ohmic Resistance Correction for an Inductive Modulator in DC-Condition Biassed Plasma Antennas, While Modulation the Signal in the VLF Band, Active and Passive Electronic Components, Vol. 2025, pp. 1, 2025 02 06, JCR.
4. A Theoretical Investigation on the Role of Surface Plasmon Excitation in the Cloaking and Protection of Gold Cylindrical Rods Using Metallic Layers of Different Materials, plasmonics, 2024 09 06, JCR.
5. A Theoretical Investigation on the Role of Surface Plasmon Excitation in the Cloaking and Protection of Gold Cylindrical Rods Using Metallic Layers of Different Materials, plasmonics, 2024 09 06, JCR.
6. A Theoretical Explanation for the Existence of Certain Maxima in the Visible Spectrum Pattern of Wave Scattering from Spherical Metal-Dielectric-Janus Nanoparticles Based on Surface Plasmon Excitation, plasmonics, 2024 08 27, JCR.
7. The role of ordinary Bessel function and Hankel function in simulation of plasma valve mechanism in a loss-free metallic cylindrical waveguide, Mathematics Interdisciplinary Research, 2022 07 10, ISC.
8. The plasma nanosphere cooling rate simulation in the presence of the coherent electromagnetic waves with Gaussian profile, EUR PHYS J D, 2022 05 31, JCR.
9. Simulation of Gaussian electromagnetic wave interaction and its effect on the dynamics of metallic nanosphere (repulsion or even elasticity), EUR PHYS J PLUS, 2022 01 19, JCR.
10. The cylindrical column lenses and reflectors made of transverse an-isotropic plasma and dielectrics and their response to presence of plane electromagnetic waves, OPTIK, 2021 05 21, JCR.
11. A novel approach in heating phenomena of the drift plasmas in the presence of rotating magnetic field: Appearance of anti-Hermitian part in dielectric tensor, PRAMANA-J PHYS, 2021 05 19, JCR.
12. The role of adiabatic and non-adiabatic phenomena in passing waves from a semi-bounded loss-free waveguide to semi-bounded plasma, INDIAN J PHYS, 2021 04 08, JCR.

13. فاطمه شاکری، اردوان کوهی، بهرام جزئی، مهسا معظمی قمصری، Measurement of plasma current in Damavand tokamak using magnetic probes assembly as a discrete Rogowski coil, FUSION ENG DES, 2021 03 02, JCR.
14. زینب حاجی جمالی ارانی، بهرام جزئی، The role of the filamented multi-electron beams on electron azimuthal acceleration in a plasma waveguide, OPTIK, 2020 11 02, JCR.
15. سمانه نجاری، بهرام جزئی، The description of mode matching method, in electromagnetic wave transmission from a loss free semi-bounded waveguide to the plasma waveguide, EUR PHYS J PLUS, 2020 10 15, JCR.
16. سعیده گلهرانی دارانی، ابراهیم حیدری، بهرام جزئی، زینب رحمانی نوش آبادی، Plasma-covered long cylindrical non-isotropic dielectric lenses for targeted control of energy distribution, EUR PHYS J PLUS, 2020 09 27, JCR.
17. سمانه نجاری، بهرام جزئی، The heating phenomenon of a plasma column by electromagnetic wave injection from a semi-bounded waveguide, OPTIK, 2020 09 25, JCR.
18. زینب حاجی جمالی ارانی، بهرام جزئی، A theoretical investigation of the presence of the azimuthal backward waves (ABWs) and their application in a magnetized plasma waveguide with two annular rotating energy sources, EUR PHYS J D, Vol. 74, pp. 1, 2020 02 25, JCR.
19. زینب حاجی جمالی ارانی، بهرام جزئی، A theoretical investigation of the presence of the azimuthal backward waves (ABWs) and their application in a magnetized plasma waveguide with two annular rotating energy sources, EUR PHYS J D, Vol. 74, pp. 1, 2020 02 25, JCR.
20. منصوره صافی، بهرام جزئی، سمانه صفری، About the helix plasma antenna: effective factors on characteristics of radiation, WAVE RANDOM COMPLEX, 2019 09 12, JCR.
21. زینب حاجی جمالی ارانی، بهرام جزئی، A theoretical study for temperature effects on the dominant color in colloidal nano sphere solutions, PHYS SCRIPTA, Vol. 94, pp. 125002, 2019 09 05, JCR.
22. سمانه نجاری، بهرام جزئی، آقاسجاد جهانخت، The mode generation due to the wave transmission phenomena from a loss free isotropic cylindrical metallic waveguide to the semi-bounded plasma waveguide, WAVE RANDOM COMPLEX, 2019 09 02, JCR.
23. زینب حاجی جمالی ارانی، بهرام جزئی، About Azimuthal Acceleration of the Electrons by Azimuthal Surface Waves in a Dielectric-Lined Circular Waveguide With Two Thin Annular Rotating Electron Beams, IEEE T PLASMA SCI, 2019 07 02, JCR.
24. سمانه صفری، بهرام جزئی، علیرضا نیکنام، فاضل جهانگیری، The influence of static magnetic field on nonlinear response of a plasma background in the presence of two laser beams with different profiles (Hermite- and Laguerre-Gaussian), LASER PHYS, Vol. 29, pp. 46002, 2019 03 12, ISI.
25. سمانه صفری، بهرام جزئی، علیرضا نیکنام، فاضل جهانگیری، The influence of static magnetic field on nonlinear response of a plasma background in the presence of two laser beams with different profiles (Hermite- and Laguerre-Gaussian), LASER PHYS, Vol. 29, pp. 46002, 2019 03 12, ISI.
26. سعیده گلهرانی دارانی، زینب رحمانی نوش آبادی، بهرام جزئی، The Dependence of Resonance Frequency to Landing Angle in Reciprocal Scattering Phenomena of the Waves From an Elliptical Plasma Dielectric Antenna, IEEE T PLASMA SCI, Vol. 47, pp. 233, 2019 01 11, ISI.
27. سمانه صفری، بهرام جزئی، The Infrared (Far Terahertz) Generation by Nonlinear Interactions of Two Visible Laser Beams in a Metallic Background : Infrared Surface Plasmon Effect, PLASMONICS, Vol. 13, pp. 1, 2018 06 11, ISI.
28. زینب حاجی جمالی ارانی، بهرام جزئی، A description on plasma background effect in growth rate of THz waves in a metallic cylindrical waveguide, including a dielectric tube and two current sources, INDIAN J PHYS, Vol. 92, pp. 1, 2018 04 11, ISI.
29. سمانه صفری، علیرضا نیکنام، فاضل جهانگیری، بهرام جزئی، Terahertz radiation generation through the nonlinear interaction of Hermite and Laguerre Gaussian laser beams with collisional plasma: Field profile optimization, J APPL PHYS, Vol. 123, pp. 1531011, 2018 04 11, ISI.
30. سعید زاهدی، بهرام جزئی، زینب رحمانی نوش آبادی، شیما کعب عمیر، The Effects of a Transverse Anisotropy Dielectric Rod in Excitation and Amplification Phenomena of Hybrid Electromagnetic Waves in a Cylindrical Metallic Waveguide, IEEE T PLASMA SCI, Vol. 46, pp. 72, 2018 01 11, ISI.

31. زینب حاجی جمالی ارانی، بهرام جزی، An electromagnetic description for collisional drift thermal plasmas in the presence of a rotating magnetic field, EUR PHYS J PLUS, Vol. 474, pp. 1, 2017 11 11, ISI.
32. زینب حاجی جمالی ارانی، بهرام جزی، An electromagnetic description for collisional drift thermal plasmas in the presence of a rotating magnetic field, EUR PHYS J PLUS, Vol. 474, pp. 1, 2017 11 11, ISI.
33. سعید زاهدی، بهرام جزی، زینب رحمانی نوش آبادی، About background plasma effects on excitation and generation of the waves in a cylindrical metallic waveguide with anisotropic dielectric rod, PHYS PLASMAS, Vol. 24, pp. 112107, 2017 11 11, ISI.
34. سمانه صفری، بهرام جزی، A Theoretical Description for Elliptical Plasma Antenna Response in Presence of Terahertz Electromagnetic Plane Wave Based on Surface Plasmon Concept, PLASMONICS, Vol. 12, pp. 1, 2017 09 11, ISI.
35. زینب رحمانی نوش آبادی، بهرام جزی، ابراهیم حیدری، Terahertz electromagnetic wave generation and amplification by an electron beam in the elliptical plasma waveguides with dielectric rod, PHYS PLASMAS, Vol. 21, pp. 921221, 2014 09 11, ISI.
36. بابک شکری، حسین ارباب، Azimuthal Electromagnetic Surface Waves in a Rod Dielectric Magnetized Plasma Waveguide and Their Excitation by an Annular Relativistic Rotating Electron Beam, Azimuthal Electromagnetic Surface Waves in a Rod Dielectric Magnetized Plasma Waveguide and Their Excitation by an Annular Relativistic Rotating Electron Beam, Vol. 48, pp. 1105, 2006 05 11, ISI.
37. سمانه صفری، بهرام جزی، About Generation of Terahertz Radiation Due to the Nonlinear Interaction of Gaussian and Hermite–Cosh–Gaussian Laser Beams in Collisional Plasma Background: Optimization and Field Profile Controlling, IEEE T PLASMA SCI, 0000 00 11, ISI.
38. سمانه صفری، بهرام جزی، Time growth rate optimisation of terahertz electromagnetic wave generation by converting occupied plasma region from annular plasma to filled plasma in the core, in an elliptical Cherenkov maser with two energy sources, PRAMANA-J PHYS, 0000 00 11, ISI.