

Curriculum Vitae

Surname: Rahmani. Nooshabadi

Name: Zeinab

Affiliation: Department of Laser and Photonics , Faculty of Physics,
University of Kashan, Kashan, I. R. Iran.

Academic grade: Assistant Professor

H-Index=3

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Education:

B.Sc. in physics: University of Kashan, Kashan, July - 2006.

M.Sc. in physics: University of Kashan, Kashan, February - 2009.

Title of M. Sc. thesis: "The study of parity effect on nuclear level density" , **Supervisor: Dr. Mehdi Nasri Nasrabadi**

Ph.D in physics: University of Kashan, Kashan, July - 2013.

Title of Ph. D. thesis: "A new description based on modified Airy function for interference mechanism in moving magnetized plasma slabs and investigation for reflection and transmission coefficient in such systems in general case" , **Supervisor: Dr. Bahram Jazi**

Research interests:

- Analysis of electromagnetic waves propagation in the magnetized plasma slabs
- Plasma waveguides
- Scattering processes due to the multilayer plasma columns
- Plasmonics

ISI Publications:

1) 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)

2) 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 lettersA, 2010)

3)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)

4)RELATIVE EVEN AND ODD PARITY LEVELS WITHIN THE NUCLEI IN THE IRON REGION (M.N.Nasrabadi, **Z. Rahmani** , ACTA PHYSICA POLONICA B, 2011)

5) The reflection index of an unsteady magnetized plasma slab when the external magnetic field is normal to the plasma surface, (**Z. Rahmani** , Talor & Francis , Waves in Random and Complex Media, 2012)

6) 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)

7) 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 , ۲۰۱۲)

8) 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, ۲۰۱۳)

9) Total transparency of a two-moving-magnetized-plasma-layer structure, (**Z. Rahmani** , B. Jazi ,B. Shokri, Elsevier, Physics letters A, ۲۰۱۳)

10) 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, ۲۰۱۳)

11) 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, ۲۰۱۴)

12) 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 , ۲۰۱۴)

13) 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 , ۲۰۱۴)

14) 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, H. Shabani, Springer, Plasmonics, ۲۰۱۴)

International Conference Publications:

New approach for the determination of relative number of even and odd parity levels in which nucleons are considered as statistically independent particles (M.N.Nasrabadi, **Z. Rahmani**, NUCLEAR STRUCTURE AND RELATIVE TOPICS CONFERENCE (NSRT), Dubna, Russia, 2009)

National Conference Publications:

- 1) یک روش جدید برای محاسبه نسبت چگالی ترازهای هسته ای پاریته فرد و پاریته زوج (**زینب رحمانی**، مهدی نصرآبادی، کنفرانس فیزیک ایران، مرداد 1388)
- 2) اثر انرژی و ساختار هسته ای بر روی نسبت چگالی ترازهای پاریته فرد و زوج هسته (**زینب رحمانی**، مهدی نصرآبادی، کنفرانس فیزیک ایران، شهریور 1389)
- 3) اثر پاریته بر روی چگالی ترازهای انرژی هسته های ناحیه آهن (**زینب رحمانی**، مهدی نصرآبادی، هفدهمین کنفرانس هسته ای ایران، اسفند 1389)
- 4) بررسی تداخل در لایه های پلاسمایی سرد مغناطیده متحرک بر اساس تابع ایری اصلاح شده (**زینب رحمانی**، اولین کنفرانس ملی مهندسی و فیزیک پلاسما، خرداد 1392)

Invited for review of articles as referee in ISI Journals :

- 1) Waves in Random and Complex media (Taylor & Francis)
- 2) International Journal of Electronics and Communications (Elsevier)
- 3) Journal of Progress In Electromagnetics Research
- 4) Iranian Journal of Physics Research (دانشگاه صنعتی اصفهان)