



BABAK HAGHIGHI

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EDUCATION

Postdoctoral research (Postdoc), Condensed Matter Physics (Theoretical)

Kharkov National University of Karazine V. N., Ukraine.

Subject: "Characteristic low dimensional electron gas",
September 2001 to January 2004

Ph.D., Physics-Mathematical science, (Theoretical), Kharkov National University of Karazine V. N., Ukraine.

Dissertation: "Deceleration of charged particles in two-dimensional conductors with impurity electron states",

Dissertation Advisor: A. M. Yermolaev,
September 1996 to March 2000

M.A., Physics-Mathematical science, (Theoretical), Kharkov State University,

Dissertation: "high-frequency conductivity for two-dimensional electron gas with impurity states of electrons",

Dissertation Advisor: A. M. Yermolaev
September 1994 to March 1996

B.A., Solid State Physics, I. A. University, Tehran Center Branch, Iran,

Thesis: "Satellites moving",
January 1994 to June 1998,

PUBLICATIONS (BOOKS)

1. 1-Scintillators, First Edition, Mashhad, Pub. Marandiz, 2010
2. 2-Electromagnetic Principles, - Volume I, First Edition, Mashhad, Pub. Marandiz, 2010
3. 3-Mathematical Methods in Physics for Physicists, - Volume I, First Edition, Mashhad, Pub. Marandiz, 2010
4. 4-Fundamentals of Optics, First Edition, Mashhad, Pub. Marandiz, 2010

5. 5-Research Topics Condensed Matter Physics (Two Dimensional Electron Systems, Part One), First Edition, Mashhad, Pub. Marandiz, 2017
6. 6-Research Topics Condensed Matter Physics (Earth's Electromagnetic Interactions), First Edition, Mashhad, Pub. Marandiz, 2017
7. 7-College Physics – Vol. 1, (Theory, Supplementary Problems and Solved Problems), First Edition, Mashhad, Pub. Marandiz, 2017
8. 8-Electrodynamics - Vol.1, First Edition, Mashhad, Pub. Marandiz, 2017
9. 9-Solid State Physics Problems and Solutions, First Edition, Mashhad, Pub. Marandiz, 2017
10. 10-Research Topics Condensed Matter Physics (Solid-State Spectroscopy, Ferro Electromagnetism, Acosta Electronics, Engraving Polymer, Etc.), First Edition, Mashhad, Pub. Marandiz, 2017
11. 11-Research Topics Condensed Matter Physics (Electromagnetic Cellular Interactions), First Edition, Mashhad, Pub. Marandiz, 2017
12. 12-Optics Laboratory, First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
13. 13-Electromagnetic Problems", Volume II, First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
14. Fundamentals of Holography, First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
15. Electro-Optical Devices-(Theory & Design), First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
16. Electromagnetic Problems", Volume I, First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
17. Physics of Fluids, Volume I, First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
18. Solid State Physics Laboratory, First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
19. Fundamentals of Physics Laboratory, First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
20. Nuclear Physics Laboratory, First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
21. Modern Physics, First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
22. Introductory Electromagnetic, First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
23. Electrodynamics, First Edition, Mashhad, Pub. Marandiz, 2020(Coming soon)
24. Basics Theory of Oscillations, First Edition, Mashhad, Pub. Marandiz, 2019(Coming soon)
25. Fundamentals of the Theory of Electromagnetic, First Edition, Mashhad, Pub. Marandiz, 2019(Coming soon)
26. Fundamentals of the Theory of Electricity, First Edition, Mashhad, Pub. Marandiz, 2019(Coming soon)
27. The Theory of Electromagnetic, First Edition, Mashhad, Pub. Marandiz, 2019(Coming soon)

PUBLICATIONS (PAPERS)

- 1- The high-frequency conductivity of the two dimensional electron gas with impurity states of electrons in a magnetic field", (In Russian). *Isvestia visnic ychiebnik zavidenie, Fizika*, 1994, 7,[91-94], Fellow authors: N.V Glizer, A. M Ermolaev.
- 2- The high-frequency conductivity of the two dimensional electro gas with impurity states of electrons in a magnetic field", *Low Tem. Phys*, [Fiz. Nizk. Temp. 1997, 23(1), [73-78]. Co. author: A. M Ermolaev.
- 3- Magnetoplasma waves in inversion layer with local electron states, *Low Tem. Phys*, [Fiz. Nizk. Temp. 1997, 23(11), [1223-1228], Fellow authors: N.V Glizer, A. M Ermolaev.
- 4- Plasma waves in two-dimensional conductors with impurity electron states, (In Russian). *Visnik Kharkovskavo Universiteta, seria Fizika*, 1998, 2(418), [13-16]. Co. author: A. M Ermolaev.
- 5- Deceleration (Stopping-power) of charged particles in two-dimensional electron gas with impurity electron states, *Low Tem. Phys*, [Fiz. Nizk. Temp. 1999, 25(6), [446-452]. Co. author: A. M Ermolaev.
- 6- Поглошение плазмонов заряженными частицами в двумерном электрронном газе (Absorption plasmons by charged particles in two-dimensional electron gas), (In Russian), *Вісник ХНУ, Фізика (physics)*, *Visnik Kharkovskavo Universiteta, seria Fizika*, 1999, 440(3), [13-15], Fellow authors: N.V., Glizer A. M Ermolaev. & G. I. Rashba.
- 7- Characteristic energy losses of electrons in a two-dimensional electron gas in a magnetic field, *Low Tem. Phys*, 1999, 25(12), [968-991], [Fiz. Nizk. Temp. 1999, 25(12), [1313-1319], Co. author: A. M Ermolaev.
- 8- Plasmons in two-dimensional conductors with impurity electron states, *Canadian journal of Physics / Rev. Can. Phys.* 2000, 78(11), [1017-1021], Co. author: A. M Ermolaev.
- 9- Коллективные и одночастичных возбуждения спиновой системы неферромагнитных металлов с квазилокальными состояниями электронов (Collective and single-particle excitation of spin system of nonferromagnetic metals with quasilocal electron states), (In Russian), *Вісник ХНУ, Фізика (physics)*, *Visnik Kharkovskavo Universiteta, seria Fizika*, 2001, 462(53), [22-24], Fellow authors: A. M Ermolaev, N.V.Ulyanov.
- 10- Температура магнитного упорядочения в тонких магнитных пленках (The temperature of magnetic ordering in thin magnetic films), (In Russian), *Вісник ХНУ, Фізика (physics)*, *Visnik Kharkovskavo Universiteta, seria Fizika*, 2002, 480(6), [16-21], Fellow authors: A. M Ermolaev, N.V.Ulyanov.
- 11- Электромагнитные волны в слоистых проводниках и сверхпроводниках, (Electromagnetic waves in layered conductors & superconductors), (In Russian), *Вісник ХНУ, Фізика (physics)*, *Visnik Kharkovskavo Universiteta, seria Fizika*, 2003, 490(7), [4-7], Co. author: A. M Ermolaev.
- 12- Распространение нелинейных волн вдоль плоскопараллельных дефектов (Propagation of nonlinear waves along the parallel plane defects), *Вісник ХНУ, Фізика (physics)*, (In Russian), *Visnik Kharkovskavo Universiteta, seria Fizika*, 2004, 502(7), [8-12]], Co. author: A. M Ermolaev.

- 13-Plasma waves in 5D on surface grapheme, Visnik Kharkovskavo Universiteta, ceria Fizika, 2012,(...), [...-....]], Fellow authors: Mohammad mir, lili Motevalizade.
- 14-Two Dimensional Electron Gas (5DEG) Systems, International Journal of Science and Engineering Investigations, 2013, 2(13), (98-85), 5525-1134, Co. author: Mohammad mir.
- 15-Магнитоплазменные волн в двумерном сверхрешетки с местными электронными состояниями--Magnetoplasma waves in two-dimensional superlattice with local electron states, Физика твердого тела , (Solid State Physics), 2015, 56(3), (1002-1007), Co Author: Esmaili Neda.
- 16-Plasma waves in type I and II two-dimensional impure superlattice due to excitation of electromagnetic waves, International Journal of Science and Engineering Investigations, 2014, 4(4), (11-13), Co Author: Esmaili Neda.
- 17-Торможение заряженных частиц на поверхности кристаллов гелия-- Deceleration of charged particles on surface Helium crystals, Физика твердого тела , (Solid State Physics), 2013, 55(9-a) (1002-1007), Fellow Authors: Shafahi S.T., Mahmudi T.
- 18-Торможение заряженных частиц на поверхности кристаллов гелия-- Deceleration of charged particles on surface Helium crystals with defects in High Magnetic field, Физика твердого тела , (Solid State Physics), 2013, 55(9-d), (1202-1209), Co Author: Farjad M.
- 19-Влияние остановки власти в двумерной сверхрешетки с примесью----Effect of stopping power in two-dimensional superlattice with impurity, Физика твердого тела, (Solid State Physics), 2014, 54(30-c), (1205-1209), Co Author: Vahedi , M.
- 20-ПЛАЗМЕННЫЕ ВОЛНЫ в двумерном сверхрешетки С МЕСТНЫМИ ЭЛЕКТРОННЫМИ СОСТОЯНИЯМИ---- Plasma waves in two-dimensional superlattice with local electron states, Физика твердого тела , (Solid State Physics), 2013, 53(10-c), (1312-1319), Co Author: Akhgari, S.
- 21-Reduce Resistivity and Increase the Conductivity of Two-Dimensional Graphene with Local Electron, International Journal of Science and Engineering Investigations, 1013, 2(22), (108-112), Co. author: Mohammad mir.
- 22-Study of Thermal Anomalies before Earthquake, International Journal of Science and Engineering Investigations, 2015, 4(42), (104-117), Abolfazl Maleki.
- 23-White light signal simulator Microcontroller design, International Journal of Science and Engineering Investigations, 2015, 4(42),(15-19), Co. author: Ebrahimi, N. .
- 24-Designing Sour Taste Signal Microcontroller Simulator, International Journal of Science and Engineering Investigations, 2015, 4(42),(15-19), Co. author: Haji Ghasemi, Hamideh
- 25-Magnetoplasma waves on the Graphene with impurity in high magnetic field, Cumhuriyet Science Journal, 2015, 36(3), Special Issue, I 10. 17776 csj. 00974, Fellow Authors: MIR M., HAGHIGHI N.
- 26-Electromagnetic waves caused by tectonic earth movement, Journal of Fundamental and Applied Sciences, 2016, 8(3), Special Issue, I Fellow Authors: Montazeri M., Haghghi N.
- 27-White light signal simulator Microcontroller design, Journal of Fundamental and Applied Sciences, 2016, 1(4), Special Issue I, Fellow Authors: Ebrahimi N., Haghghi N.

- 28- Designing Sour Taste Signal Microcontroller Simulator, Journal of Fundamental and Applied Sciences, 2016, 1(4), Special Issue I, Fellow Authors: Haj Ghasemi H, Haghghi N.
- 29- Plasma waves in type I and II two-Dimensional superlattices due to excitation of electromagnetic waves,
- 30- Journal of Fundamental and Applied Sciences, 2016, 1(4), Special Issue I, Co. Author: Esmaili N. Ebrahimi.

CONFERENCE PRESENTATIONS

- 1- — Dynamic conductivity for a disordered 5D electron system with impurity states of electrons " (In Russian), Second International Conference MPSL 96. 1996, Sumy State University, Ukraine, Fellow Authors: N.V Glizer, A. M Ermolaev,
- 2- Electromagnetic waves in a neighborhood cyclotron of a resonance in a metals with quasi-local electron states, application of personal computers in scientific researches & education process, kharkov State University, Ukraine Ukraine Kharkov 1996, Fellow Authors: N.V Glizer, A. M Ermolaev,
- 3- Longitudinal & transversal conductivity of two-dimensional electron gas with local electron states, 2th International Conference, The physical phenomena in solid states,,kharkov State University, 1997, Fellow Authors: Glizer N.V., Ermolaev A. M. & G. I. Rashba,
- 4- Plasmons waves in two- dimensional electron gas with local electron states, 14th Annual Physics Conference of Iran, Rasht - Gilan University, 1997, Co. Author: Ermolaev A. M.
- 5- Dynamic conductivity for a disordered two-dimensional electron system with local electron states, 14th Annual Physics Conference of Iran, Rasht - Gilan University, 1997, Co. Author: Ermolaev A. M.
- 6- Collective & single -particle excitation of spin of nonferromagnetic metals, physics & technology Low Temperature. Kharkov National University of Karazin V. N, 2001, Fellow Authors: N.V., Glizer A. M Ermolaev. & G. I. Rashba
- 7- The temperature of magnetic of magnetic ordering in thin magnetic films with local electron states Kharkov National University of Karazin V. N, 2002, Co. Author: A. M Ermolaev
- 8- Deceleration of charged particles in on dimensional electron gas, Kharkov National University of Karazin V. N, 2003, Co. Author: A. M Ermolaev
- 9- Longitudinal & transversal conductivity of one- dimensional electron gas local electron states, Kharkov National University of Karazin V. N, 2004, Co. Author: A. M Ermolaev
- 10- Investigation of electron effective mass in C.B. of dilute nitride semiconductors, 9 th. Conference condensed matter, Iran, Thehran, 2008, Fellow Authors: Razmara M., Harati zade H. , Amiri R .
- 11- Composite anti Electromagnetic waves as to 10^{22} Hertz, 2nd ICEEE2009 Conference, Iran, Gonabad, 19-20, AUG, ,2009. Fellow Authors: M. Montazeri.- Gh.Haghghi.

- 12- Composite anti longitudinal waves as earthquake vibration, , 2nd ICEEE2009 Conference, Iran, Gonabad, 19-20, AUG, ,2009. Fellow Authors: M. Montazeri.- Gh.Haghigh, S. Alami, D. Atapur, " -.
- 13-Electromagnetic wave equations to calculate the magma, International conf. Geology & Exploration of Resources, Iran, Shiraz, March 2014, Fellow Authors: M. Montazeri.-N..Haghighi, H, Yari.
- 14-Study of thermal anomalies before earthquake, International conf. Geology & Exploration of Resources, Iran, Shiraz, March 2014, Co. Author: Maleki A.
- 15-Provide a model for earthquake precursors of chemical processes rocks under pressure, International conf. Geology & Exploration of Resources, Iran, Shiraz, March 2014, Fellow Authors: M. Montazeri.-N.Haghighi,
- 16-Stopping power of charged particles on the surface of helium crystals, Physics Conference of Iran, Iran, Sep. 2013, Co. Author: Shafai S.
- 17- Magneto plasma waves in the graphene localized electron with, Conference and Workshop on Science and Technology Science, Iran, 2013
- 18-Two-dimensional electron gas systems with impurity, Kharkov State University, Ukraine, Kharkov, Feb, 2, 1998.
- 19-Dynamic conductivity for a disordered two-dimensional electron system with local electron states||. Kharkov, Ukraine. December, 16.1999.
- 20-Two-dimensional electron gas systems with impurity, Kharkov National University of Karazin V. N., Ukraine. Kharkov, January, 18, 1999.
- 21-Two-dimensional electron gas systems, Sistan & Balouchestan State University, Iran, Zahedan, Feb, 2. 2006.
- 22-Two-dimensional electron gas systems, Urmia State Universiy, Iran, Urmia, Feb, 2. 2006.
- 23-Deceleration of charged particles on surface Helium crystals, Second National Conference on Applied Research in Mathematics and Physics, Iran, Tehran, Jan. 2015, Co. Author: Haghighi N.
- 24-Magnetoplasma waves on the Graphene with impurity in high magnetic field, Second National Conference on Applied Research in Mathematics and Physics, Iran, Tehran, Jan. 2015, Fellow Authors: M. Mir, N. Haghighi.
- 25-Study of electromagnetic waves induced of Earth tectonics, Second National Conference on Applied Research in Mathematics and Physics, Iran, Tehran, Jan. 2015, Fellow Authors: M. Montazeri, N. Haghighi.
- 26-Power electromagnetic radiation magma flow, Second National Conference on Applied Research in Mathematics and Physics, Iran, Tehran, Jan. 2015, Co. Author: Timuri, M.
- 27-Absorption of high-frequency electromagnetic waves in HEMT transistors, Sixth National Conference on Physics PNU, Iran, Esfahan, Feb.2014, Co. Author: GHALEKHANI F.
- 28-The effect of stopping of charged particles at the surface of graphene by impurities in the presence of a strong magnetic field, Sixth National Conference on Physics PNU, Iran, Esfahan, Feb.2014, Co. Author: Mirkiyan,B. E.
- 29-The effect of stopping the charged particles on two-dimensional superlattice gross, Sixth National Conference on Physics PNU, Iran, Esfahan, Feb.2014, Co. Author: Vahedi, M.

- 30-Study of electromagnetic waves caused by chemical processes resulting from tectonic movements, The third Iranian Conference on Engineering Electromagnetic (ICEEM 5253), Iran, Tehran, Dec. 4-3, 2014, Fellow Authors: Montazeri, M. ,Yari, H.
- 31-The effect of stopping of charged particles at the surface of graphene by impurities in the presence of a strong magnetic field, Physics Conference of Iran, iran, Zahedan, Sep.2014, Co. Author: Vahedi, M.
- 32-Study of plasma waves in a two-dimensional superlattice gross types I and II induced electromagnetic waves, Physics Conference of Iran, iran, Zahedan, Sep.2014, Fellow Author: Esmaili, N., Aghgari, E. S., Vahedi, M.
- 33-The interaction of electromagnetic waves with type I and II superlattice, The third Iranian Conference on Engineering Electromagnetic (ICEEM 5253),
- 34-Study of electromagnetic waves in a magma chamber, The third Iranian Conference on Engineering Electromagnetic (ICEEM 5253), Iran, Tehran, Dec. 4-3, 2014, Co. Author: Oruji, KH.
- 35-Electromagnetic radiation can be calculated magma flow The third Iranian Conference on Engineering Electromagnetic (ICEEM 5253), Iran, Tehran, Dec. 4-3, 2014, Co. Author: Timuri, M.
- 36-Provide a model for earthquake precursors of chemical processes rocks under pressure, National conference of geology and exploration of recourses, Iran, Shiraz, March 2015, Fellow Authors: Montazeri, m., Haghghi, N.
- 37-Check thermal anomalies before earthquake,, National conference of geology and exploration of recourses, Iran, Shiraz, March 2015, Co. Author: Maleki, A.
- 38-Calculate the frequency of the electromagnetic wave wall flow of magma, , National conference of geology and exploration of recourses, Iran, Shiraz, March 2015, Fellow Authors: Montazeri, M. , Haghghi, N. ,Yari, H.
- 39-Assessing the risk of landslides on the slopes of the mountain forest - forest edge Ramian, Sixteenth Conference of geophysical techniques, Iran, Tehran, May 2014, Fellow Authors: M. Montazeri, H. Yari.
- 40-The Forecast of the Tsunami waves heights at the North Sea coast of Oman - coastline Jask, Fifteenth Conference of Iran Geophysics, Fifteenth Conference of Iran Geophysics, Iran, Tehran, May 2012, Fellow Authors: M. Montazeri, H. Yari.
- 41- Flying birds in the Koran and Newton's third law, The first international Holy Quran congeress, Iran, Mashhad, Nov. 2013. Co. Authur: Mir M.
- 42-Examine how living and death in the Qur'an and the conservation laws of physics, The first international Holy Quran congeress, Iran, Mashhad, Nov. 2013. Co. Authur: Mir M.
- 43-plasma waves in type I and II two-dimensional gross superlattice due to excitation of electromagnetic waves, Physics Conference of Iran, Iran, Mashhad, Sep. 2015, Co. Authur: Esmaili, Neda5
- 44-Magnetic hydrodynamic equations to calculate the fluid environment of magma, Physics Conference of Iran, Iran, Mashhad, Sep. 2015, Co. Authur:Timuri, M.
- 45-Calculate the energy of tectonic, IAGC, Iran, Mashhad, May 2015, , Fellow Authors: N. Haghghi, M. Montazeri
- 46- Calculate the frequency of the electromagnetic wave wall flow of Magma, IAGC, Iran, Mashhad, May 2015, , Fellow Authors: N. Haghghi, M. Mir, M. Montazeri
- 47-Calculate the frequency of the electromagnetic waves induced of tectonics, IAGC, Iran, Mashhad, May 2015, , Fellow Authors: N. Haghghi, M. Montazeri.

- 48- Electromagnetic waves caused by tectonic earth movement, International conference on science and engineering, UAE, Dubai, Dec. 2015, Co. Author: , M. Montazeri,
- 49- Simulation of visible light, International conference on science and engineering, UAE, Dubai, Dec. 2015, Co. Author: N. Haghighi,
- 50- Simulation tasting pickle, International conference on science and engineering, UAE, Dubai, Dec. 2015, Co. Author: , N. Haghighi,
- 51- White light signal simulator Microcontroller design, 2 th. International conference on research in science and technology, Malaysia, Kuala Lumpur, Dec.2015, Co Author: N. Ebrahimi.
- 52- Designing Sour Taste Signal Microcontroller Simulator, 2 th. International conference on research in science and technology, Malaysia, Kuala Lumpur, Dec.2015, Co Author: H. H. Ghasemi
- 53- Electromagnetic waves caused by tectonic earth movement, 2 th. International conference on research in science and technology, Malaysia, Kuala Lumpur, Dec.2015, Fellow Authors: M. Montazeri, N. Haghighi.
- 54- Plasma waves in type I and II two-Dimensional superlattices due to excitation of electromagnetic waves, 2 th. International conference on research in science and technology, Malaysia, Kuala Lumpur, Dec.2015, Co Author: N. Esmaili,
- 55- Magnetoplasma waves In Graphene transistor with local electron states, International conference on engineering and applied science, UAE, Emirate –Dubai, March 2015, Co. Author: S. Ahmadpour,
- 56- Plasma waves In Graphene transistor with local electron states, International conference on engineering and applied science, UAE, Emirate –Dubai, March 2015, Co. Author: F. Parhizkar.
- 57- Calculating power of radiant electromagnetic of magma flow, International conference on engineering and applied science, UAE, Emirate –Dubai, March 2015, Co. Author: S. Ahmadpour, M. Montazeri.
- 58- Spin polarization in Aluminum Oxide with impurity, Mn, 4 th. International conference on research in science and engineering, Russia, Saint Petersburg, July 2017,
- 59- Deceleration of charged particles in Graphene transistors with impurity states of electrons, 4 th. International conference on research in science and engineering, Russia, Saint Petersburg, July 2017, Co. Author: S. Ahmadpour,
- 60- The dynamic conductivity tensor graphene transistors with electrons localized level, International conference on knowledge and innovation in Engineering, Science and Technology, Azerbaijan-Baku, May 2017.
- 61- The new look of the dangers of depleted Uranium: um, International conference on knowledge and innovation in Engineering, Science and Technology, Azerbaijan-Baku, May 2017. Co. Author: Omidtorshiz A.
- 62- Systematic study of individual isotopes of high-spin disks (Dy), International conference on knowledge and innovation in Engineering, Science and Technology, Azerbaijan-Baku, May 2017. Co. Author: Omidtorshiz A., Frrashbashi H. , Mohammadi S

Projects and research

- 1- Composite anti longitudinal waves as earthquake vibration, Iran, IAU Mashhad, 2009
- 2- Composite anti Electromagnetic waves as to 5255 Hertz, Iran, IAU Mashhad, 2009
- 3- Composite anti Racket & Pulse, Iran, IAU Mashhad, 2009
- 4- Dubrovine Gas Thermometer Iran, IAU Tehran, 1993
- 5- Wave simulators, Iran, IAU Mashhad, 2009
- 6- White light signal simulator design, Iran, IAU Mashhad, 2015
- 7- Design of pickle flavor signal simulator, Iran, IAU Mashhad, 2016
- 8- Design of saline flavor signal simulator, Iran, IAU Mashhad, 2016
- 9-Design of olfactory signal simulator - rose scent, Iran, IAU Mashhad, 2016
- 10-Design simulation of vegetable bean drop signal Iran, IAU Mashhad, 2016
- 11-Simulated signal design to prevent bean drop Iran, IAU Mashhad, 2017
- 12-Simulation of bread mold signal design Iran, IAU Mashhad, 2017
- 13-Making the necessary combination for packing legumes without the need for preservatives Iran, IAU Mashhad, 2018
- 14- Determination of the earthquake prediction method and its power
- 15- Determination of volcano pre-indicator method

Favorite Research Topics

- 1- Studying multiple senses and simulating them
- 2-Study of diseases and treatment by electromagnetic waves
- 3-Cell-biophysics - plant and human
- 4-Study pre-earthquake - volcano - underground watercourses etc ...)
- 5-Research on recovered materials
- 6-New Energy Research

PROFESSIONAL SERVICE

- 1-Instructor, Teaching Physics and Laboratory, High School Amar Yaser, Tehran, Iran, 1985-1987
- 2-Teaching Physics and Accession professor, Department of Physics, Graduate Student Research & Teaching Assistant, Researched problems of –The two-dimensional electron, gas model||. Assisted in developing a method function, Green's in studying the two dimensional electron gas, model. Taught lessons on a statistical physics, thermodynamics & mathematical physics to the students 5-3 courses & special of a course for graduate students (5-5 semester) , Department of Physics Kharkov State University. Kharkov, Ukraine, 1998-2004.
- 3-Teaching Persian Language, Kharkov Kalemium Institute, Department of Literature, Kharkov, Ukraine-, 2003-2004
- 4-Accession professor- IAU, Department of Physics, Mashhad, Iran, 2005 t0 present.
- 5-Accession professor- IA, University, Department of Physics, Gonabad, Iran, 2005-2009
- 6-Director of the Department of Physics, I A University, Department of Physics, Mashhad, Iran, 2011-2015

TEACHING EXPERIENCE (B.S., M.S., and Ph.D.)

Solid State Physics, Electromagnetic, Electronic, Analytical Mechanics, Fluid Mechanics, Mechanics and statistical physics, Semiconductor components, Mathematical Physics, Mathematical applications in physics, Waves, Basic physics, Thermodynamics, Physical Electronics, Modern physics, Fractal Systems, Electrodynamics, - Superconductivity, Two-dimensional systems, Electromagnetic environment, Acoustic, Optics, Specific topics in Physics, Advanced Solid State, Advanced Electrodynamics,

Workshops and Courses

1- Nanotechnology certification, University of Azad E. Branch Tehran, Iran. January 2008

2-Astronomy certification, Tehran, Iran. 1984-1986

3-Russian language certification, Kharkov State University, Ukraine. January 1994 to June 1994

4-Workshop designed to test questions University of Azad E. Branch Tehran, Iran. January 2008

5- Working with software and programming languages, "mathematic, Mat lab, Origin, Latex, Maple, Fluent, Fortran, C++"

6- 142 hours' Workshop, university education departments Management

7-60 hours of workshops, training and human studies

8-60 hours period of discernment

LANGUAGES

Farsi: Native Language

English: Fluent, Advanced Reading and Writing

Russian: Fluent, Advanced Reading and Writing

Ukrainian: Novice Speaker

Arabic: Novice Speaker

COMPUTER SKILLS

Microsoft Office, Word Press, Google Analytics, Social Media, software and programming languages, "mathematic, Mat lab, Origin, Latex, Maple, Fluent, Fortran, C++",

LIST OF GUIDED THESES

- 1- Study of Tape Repulsion Modeling in Dilute Nitrogen Semiconductor Nanostructures, Mustafa –Razmara, 2007
- 2- Disruption of Electronic Chains in Spaceship and Satellite Electronic Systems , Namvar-Mohammad Jafar, 2007
- 3- ,The effect of magnetic impurities on the electro-optical properties of zinc oxide in the cubic phase, Forutan-Fatima, 2010
- 4- Investigation of Spin Polarization of Manganese Magnetic Lamina Aperture on Electro proactive Properties of Indium Oxide in Bisbase Phase, Amiri Fatima, 2010
- 5- Study of the dependence of electro-optical properties on the spin orientation of manganese atoms in alumina composition, Mahmudi Narges, 2010
- 6- Initial study of the static effects on the electronic structure of single-walled carbon nanotube armchairs, Asadollahi Yazdi Elham, 2011
- 7- Study of surface degradation of Batio₃ and Srtio₃ using basic principles, Sohrabi Akram, 2011
- 8- Studying the electronic structure of titanium dioxide in two phases: Rutile and Anatase, Banihashemi Vajihesadat, 2011
- 9- Investigation of magneto-plasma waves on graphene surfaces with electron substituted states at high frequencies, Mir Mohammad, 2011
- 10- Effects of electromagnetic waves (inferior HF frequency and ELF) on bone marrow, Jahanisani Fariba, 2012
- 11- Investigation of the stopping effect of charged particles on the surface of 2D helium crystals, Shafaiititkanlu sara, 2012
- 12- Study of electromagnetic waves caused by the displacement of the earth's (piezoelectric) layers, Shakergilani Mehdi, 2012
- 13- Investigation of the stopping effect of charged particles on graphene surface, Malekiyan Bita, 2012
- 14- Investigation of particle stopping effect on the surface of 2D helium crystals in the presence of strong magnetic field, Fajad Mahsa, 2012
- 15- Investigation of Plasmonic Waves in 2D Gross Cloud Networks, Ismaili Neda, 2012
- 16- Investigation of the stopping effect of charged particles in 2D gross cloud networks, Vahedi Marziye, 2012
- 17- Investigation of Magneto Plasmon Waves on Grid 2D Grids, Akhgari Samane, 2012
- 18- Investigation of the stopping effect of charged particles on graphene surface despite impurities in the presence of strong magnetic field, Mirkiyanbajestani Elham, 2013
- 19- Study of electromagnetic waves caused by the displacement of the Earth's layers (piezo magnet), Parisa Abade, 2012
- 20- Calculation of Plasma Waves in HEMT Transistors at High Frequencies in Alternatives, Ghalekgani Fatima, 2013
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