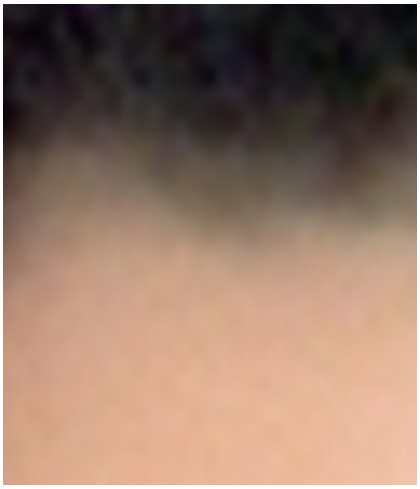


Akbar Dad

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Departments : Physics

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Education

- B.Sc, Applied Physics,Ferdowsi University of Mashhad - 1998
- MS, Nuclear Physics,Ferdowsi University of Mashhad - 2000
- PhD, Nuclear Physics,Ferdowsi University of Mashhad - 2005
- PhD, Nuclear Physics,Ferdowsi University of Mashhad - 2005

Courses

1. Mathematical Physics1
2. Nuclear Physics1 and Laboratory
3. Computational Physics
4. Basic Physics 1
5. Advanced Quantum Mechanics 1
6. Technical English
7. Special Topics
8. Nuclear Physics1
9. Advanced Nuclear Physics 1
10. Laboratory of Advanced Nuclear Physics 1
11. Laboratory of Advanced Nuclear Physics 2
12. Detectors Physics
13. Methods of Numerical Simulation
14. Special Topics of Nuclear Physics
15. Basic Physics 2
16. Advanced Nuclear Physics
17. Advanced Quantum Mechanics 2
18. Pre-General Physics
19. Nuclear and Particle Physics
20. General Physics 2
21. Technical English Nuclear Physics
22. General Physics 1
23. Advanced Topics in Nuclear Physics2
24. Advanced Quantum Mechanics
25. Advanced Methods in Computational Physics and Simulation
26. Special Topics 1

Thesis

Master Thesis

1. Setting up and characterizing an electron impact ion source

نگين اويشي, [Akbar Dad, Vahid Dehghani, Hamid Shabani, Sareh Dadfar]

نيمسال دوم سال تحصيلي 1402-1403

2. Positron Annihilation Lifetime Spectrometry and Mechanical Behavior of Epoxy-Matrix Nanocomposite Containing Nano Co Oxide@Graphene Hybrid

مريم ميربهاءالدين, [Akbar Dad, Hamed Khosravi, Seyed Alireza Alavi, Vahid Dehghani, Salaheddin Zarrin]

نيمسال دوم سال تحصيلي 00-01

3. Differential Cross Section measurment of Light Particle Induced Gamma-ray Emission of 6,7Li and 10,11B Targets for Isotopic Analysis

حافظ تقي پوراصلاني, [Ali Akbar Mehman Doost Khajeh Dad, H H, H H]

نيمسال دوم سال تحصيلي 00-01

4. Positron Annihilation Lifetime Spectrometry of Epoxy/Carbon Nanotubes and Epoxy/Graphene

محمد كوهكن, [Akbar Dad, Hamed Khosravi]

نيمسال اول سال تحصيلي 00-01

5. Doppler broadening positron annihilation spectroscopy of irradiated N- and P-type Silicon samples

معصومه اربابي بلوچستان, [Akbar Dad]

نيمسال اول سال تحصيلي 97-98

6. Study of Light Landa-Hypernuclei by Relativistic Mean Field Theory

داريوش محمدي بركاني, [Akbar Dad, Bamdad Yaghmaee]

نيمسال اول سال تحصيلي 97-98

7. Study of pp scattering in the inelastic region in generalized linear sigma model

حميدرضا صادقي, [Akbar Dad, Soodeh Zarepour, Vahid Dehghani, Mahboobe Sayahi, Seyed Alireza Alavi]

نيمسال اول سال تحصيلي 96-97

8. The relationship between the potential well and ortho-positronium lifetime in the spherical and ellipsoidal nano-cavities in the RTE model

مهديه شهركي اصيل, [Akbar Dad, Vahid Dehghani, Morteza Khaghani]

نيمسال اول سال تحصيلي93-94

Journals Papers

2025

1. Investigation of Positron Annihilation Lifetime Spectroscopy and Tensile behavior of Graphene Oxide/Epoxy Nanocomposites

Mohamad Koohkan, Akbar Dad, Hamed Khosravi

Volume: (44) 68 - 78

2. Application of positron annihilation lifetime spectroscopy to study mechanical properties of Epoxy-Matrix Nanocomposite Containing Nano Cobalt Oxide/Graphene Oxide Hybrid

Maryam Mirbahaeddin, Akbar Dad, Hamed Khosravi

Iranian Journal of Physics Research Volume: (25) 263 - 271

2024

3. Differential cross-section measurement for 10B(p, ag1)7Be, 10B(p, pg1)10B and 11B(p, pg1) 11B reactions

Hafez Taghipour Aslani, Alireza Jokar, Akbar Dad, Hossein Rafi-Kheiri

NUCLEAR INSTRUMENTS and METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS Volume: (556) 1 - 7

4. On the positron annihilation spectroscopy and tensile behavior of COOH-MWCNT/epoxy nanocomposites

Mohamad Koohkan, Akbar Dad, Hamed Khosravi

Journal of Particle Science and Technology Volume: (10) 51 - 57

2023

5. DIGE differential cross-section data for 6Li and 19F analysis

Hafez Taghipour Aslani, Alireza Jokar, Akbar Dad, Hossien Rafi-Kheiri

NUCLEAR INSTRUMENTS and METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS Volume: (535) 96 - 101

6. Differential cross-section measurements of the 11B(d, pgamma1,2)12B reactions for analytical applications

Hafez Taghipour Aslani, Akbar Dad, Alireza Jokar, Hossain Rafi-Kheiri

NUCLEAR INSTRUMENTS and METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS Volume: (540) 141 - 147

7. Doppler broadening of positron annihilation on gamma, neutron, and electron-irradiated N- and P-type Silicon wafers

Masume Arbabi balochestan, Akbar Dad

Volume: (12) 73 - 79

2022

8. Thermal properties of nuclei using RMF theory with average value gap parameter

, Akbar Dad, Vahid Dehghani

NUCLEAR PHYSICS A Volume: (1017) 122353-1 - 122353-17

9. Characterization of LiF thin layer by nuclear reaction techniques

Hafez Taghipour Aslani, Alireza Jokar, Akbar Dad, Hossien Rafi-kheiri

Radiation Physics and Engineering Volume: (3) 17 - 21

10. Analyzing powers at low nucleon-nucleon relative energies in proton-deuteron breakup reaction

, H. R. Amir-Ahmadi, M. T Bayat, A Deltuva, M Eslami-Kalantari, J. Golak, N. Kalantar-Nayestanaki, S

EUROPEAN PHYSICAL JOURNAL A Volume: (58) 173-1 - 173-9

2020

11. Analyzing powers in d(p, pp)n at intermediate and large scattering angles at 190 MeV

, H. R. Amir Ahmadi, M.T Bayat, A Deltuva, M Eslami-Kalantari, J Golak, N Kalantar-Nayestanaki, St

EUROPEAN PHYSICAL JOURNAL A Volume: (65) 56 - 81

2019

12. NE102A plastic scintillator response to 3He ions

, Akbar Dad, , ghaleh nima, yazdandoust hamideh

Physics of Particles and Nuclei Letters Volume: (16) 761 - 767

2017

13. Temperature Dependence of o-Ps Annihilation Lifetime in Non-uniform Cylindrical Pores in Comparison with ETE Model

, Akbar Dad

NUCLEAR INSTRUMENTS and METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS Volume: (396) 11 - 17

14. The Effect of Curing Light Intensity of Free Volume Size in Some Dental Composites

, Ali Akbar Mehman Doost Khajeh Dad, Vahid Dehghani, ,

Polimery w medycynie Volume: (46) 129 - 133

2016

15. با به كارگيري نظريه گينزبرگ-لانداو اصلاح شده w185 و w184 خواص ترموديناميكي هسته هاي

Vahid Dehghani, Akbar Dad,

Iranian Journal of Physics Research Volume: (16) 165 - 172

16. The Effect of Curing Light Intensity on Free Volume Size in Some Dental Composites

Mahdiye Shirazinia, Akbar Dad, Vahid Dehghani, Jamshid Mehmandoost-Khajeh-Dad,

Polimery w medycynie Volume: (46) 129 - 133

2015

17. پايداري سامانه اندازه گيري طول عمر پوزيترون و بررسي نوع و غلظت عيب ناشي از تابش الكترون هاي 10 مگا الكترون ولتي بر نمونه هاي سيليكوني نوع ان و پي

Esmaeel Tayeb fard, Akbar Dad, , ,

Iranian Journal of Physics Research Volume: (15) 33 - 40

2014

18. Applying modified Ginzburg-Landau theory to nuclei

Vahid Dehghani, Akbar Dad

PHYSICAL REVIEW C Volume: (90) 1 - 5

2013

19. روش هاي طيف سنجي نابودي پوزيترون در مواد و جزئيات فني برخي سيستم هاي اندازه گيري

Akbar Dad

Volume: (6) 1 - 10

20. CONDITION OF OBSERVING THE PRINCIPLES OF RADIATION PROTECTION IN RADIOLOGY CENTERS IN SISTAN AND BALUCHESTAN PROVINCE OF IRAN

Akbar Dad

International Journal of Current Research and Review Volume: (5) 82 - 85

2012

21. Calculation of Ax for the proton-Deuteron Breakup Reaction at 135 MeV

, Akbar Dad,

FEW-BODY SYSTEMS Volume: (53) 1 - 4

22. Experimental Results of the p d - 3He g Reactions up to 450 MeV

Akbar Dad

Journal of Theoretical and Applied Physics Volume: (6) 1 - 7

23. Experimental results of the p d --- 3He Gamma reactions up to 450 MeV

Akbar Dad

Journal of Theoretical and Applied Physics Volume: (6) 23 - 30

24. 3-(p-Toluidino)-5-phenyl-1-p-tolyl-1H-pyrrol-2(5H)-one as an organic liquid scintillator used for gamma Spectroscopy

Akbar Dad

RADIATION MEASUREMENTS Volume: (47) 434 - 437

2011

25. Proton-Deuteron Radiative Capture Cross-sections at Intermediate Energies

Ali Akbar Mehman Doost Khajeh Dad

european physical journal a Volume: (47) 1 - 6

2005

26. Few-body physics activities at KVI an overview

Akbar Dad

KVI Annual Report Volume: (1) 150 - 152

27. Cross section measurements in proton-deuter on radiative capture

Akbar Dad

KVI Annual Report Volume: (30) 160 - 162

28. Virtual-Photon production in proton-deuteron capture reaction

Akbar Dad

KVI Annual Report Volume: (30) 97 - 98

Conferences Papers

2025

1. The effect of number of spherical harmonic oscillator shells on the binding energy of 16O and 40Ca nuclei in the relativistic mean field equations solved by the expansion method

, Vahid Dehghani, Akbar Dad

2024

2. Temperature dependence of proton and neutron radii of 120,126,130Sn isotopes in the relativistic mean field model with the pairing gap parameters calculated by BCS and modified Ginsberg-Landau model

, Akbar Dad, Vahid Dehghani

3. Investigating the temperature dependence of BCS and modified Ginsberg-Landau gap parameters used in relativistic mean field model calculations for stable, even-even, and spherical nuclei from 86Kr to 138Ba

The Annual Physics Conference of Iran 1403

, Vahid Dehghani, Akbar Dad

2023

4. Construction a suitable target for measuring the differential cross section of the 11B(p, p gamma1-0)11B reaction

the 29th Iranian Nuclear Conference

Hafez Taghipour Aslani, Akbar Dad, Alireza Jowkar, Hossain Rafikhayri

5. Dead layer thickness measuring of an HPGe detector

the 29th Iranian Nuclear Conference

Hafez Taghipour Aslani, Alireza Jowkar, Akbar Dad, Hossain Rafikhayri

6. Mass measurements of neutron-rich nuclides at the N=126 shell with the FRS Ion Catcher

DPG Spring Meeting 2023

Kriti Mahajan, Daler Amanbayev, Alison Bruce, Timo Dickel, Tuomas Grahn, Gabriella KripkoKoncz, Akbar Dad, Stephane Pietri, Wolfgang Plass, Christoph Scheidenberger

2022

7. Characterization of LiF thin layer by nuclear reaction techniques

1st International 28 th National Conference on Nuclear Science and Technology

Hafez Taghipour Aslani, alireza jokar, Hossien Rafi-kheiri, Akbar Dad

8. Differential cross sections measurement of 11B(d,pgamma1,2)12B reactions for analytical applications

14th european conference on accelerators in applied research and technology sessions

2018

9. Design and simulation of a portable system for material irradiation using gamma source

The Annual Physics Conference of Iran 1397

Hafez Taghipoor aslani, Akbar Dad

10. Design and Simulation of a Cold Neutron Focusing System

24rd Iranians Nuclear Conference

, Akbar Dad, Vahid Dehghani

11. Three-Nucleon Force Studies in Proton-Deuteron Break-Up Reaction with BINA at 190 MeV

22International Conference on Few-Body Problems in Physics

, M. T Bayat, Nasser Kalantar-Nayestanaki, St Kistryn, A Kozela, Akbar Dad, Messchendorp J. G., R Ramazani-Sharifabadi, E Stephan, H Tavakoli-Zaniani

2017

12. Ortho-positronium annihilation investigation of porous material in the presence of nitrogen gas at different pressures

23rd Iranian Nuclear Conference

, Akbar Dad,

13. Temperature dependence of positron annihilation rate in semiconductors and insulators

The Annual Physics Conference of Iran 1396

, Akbar Dad

2016

14. The relationship between the shape of a potential well and the ortho-positronium lifetime in spherical and elliptical nano pores based on the RTE model

The Annual Physics Conference of Iran 1395

, Akbar Dad, Vahid Dehghani,

15. The Colomb effect on electron-positron annihilation cross section

18. Proton-deuteron radiative capture cross sections at intermediate energies

XLIX International Winter Meeting on Nuclear Physics

Akbar Dad

19. Study of Proton-Deuteron Radiative Capture Process at KVI

The 19th Particles and Nuclei International Conference (PANIC11)

20. Luminescence study of 14-phenyl-14H-dibenzo a j xanthenes as an organic liquid scintillator for low energy gamma-rays detection

18th Iranian Seminar of Analytical Chemistry

Akbar Dad

21. Deuteron-proton radiative capture at intermediate energies

18th International IUPAP Conference on Few-Body Problems in Physics

Akbar Dad

Executive activities

مدیر دفتر تهران

from 1403/07/22 - now

مدیر پژوهشي دانشگاه

from 1398/06/23 - to 1401/06/18

مدیر پژوهشي دانشگاه

from 1397/11/13 - to 1398/06/22

Research Project

2022

2015

1. Basic concepts in nuclear and hadron physics applicable to modern research

Akbar Dad, naser kalantar nistak;d - 2015

2012

2. Study of proton deuteron radiative capture and the photo disintigration of 3He reactions and compari

Akbar Dad - 2012

3. Conceptual design of a low-energy electron accelerator, as a positron source

Akbar Dad - 2012

2010

4. Analysis of the proton-deuteron radiative capture reaction and calculation of its differential cross

Akbar Dad - 2010

2009

5. Designing and manufacturing of a slow positron beam system

Akbar Dad - 2009