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Education

- ✓ B.Sc, Physics, Shahid Rajaei Teacher Training University - 2007
- ✓ MS, Nanophysics, University of Tehran - 2011
- ✓ PhD, Solid-State Physics, IASBS - 2017

Courses

- | | |
|---|---|
| 1. Basic Physics 2 | 2. Physics 2 |
| 3. General Physics1 | 4. Physics 1 |
| 5. Solid State Physics1 | 6. Special Topics 1 |
| 7. Advanced Solid State Physics 1 | 8. Physics Laboratory 1 |
| 9. Advanced Solid State Physics 2 | 10. Advanced Magnetism And Magnetic Materials |
| 11. General Physics Laboratory1 | 12. Special Topics 1 |
| 13. Thermodynamics and Statistical Physics1 | 14. Advanced Superconductivity |
| 15. Physics I | 16. Advanced Solid State Physics 1 |

Master Thesis

- 1. Extended Bose-Hubbard model with artificial magnetic field on the square lattice**
محمد امين جابري [Fatemeh Heydari nasab, Mojtaba Ashhadi, Majid Azarang, Hamid Shabani]
نیمسال اول سال تحصیلی 1401-1402
- 2. Spin transport properties through ferromagnetic /single molecule/ ferromagnetic structure: Influence of molecule to electrodes interface structure**
زهرا حسين ابادي [Mojtaba Ashhadi, Fatemeh Heydari nasab, Majid Azarang, Naser Hatefi Kargan]
نیمسال اول سال تحصیلی 97-98
- 3. Investigation of the contaminant carbon nanotube (CNT) effects on Young,s modulus of cubic silicon carbide (3C_SiC)**
مجيد کوهستانیان [Zihab Sohbatzadeh, Sasan Rezaee, Fatemeh Heydari nasab, Mohammad Reza Mohammadi, Mähboobe Sayahi]
نیمسال اول سال تحصیلی 97-98

Journals Papers

2024

1. Paramagnon heat capacity and anomalous thermopower in anisotropic magnetic systems: Understanding interlayer spin correlations in a magnetically disordered phase

Fatemeh Heydari nasab, Morteza Jazandari, Md Mobarak Hossain Polash, Jahanfar Abouie, Daryoosh Vasha

PHYSICAL REVIEW B Volume: (109) 054418-1 - 054418-9

2022

2. Frustrated mixed-spin chains: Three-site interactions and flat-band magnons

somaye Seyedi, Fatemeh Heydari nasab, jahanfar abouie

PHYSICAL REVIEW B Volume: (106) 104412-1 - 104412-11

2020

3. Mixed-spin system with supersolid phases: Magnetocaloric effect and thermal properties

Fatemeh Heydari nasab, Jahanfar Abouie

JOURNAL OF PHYSICS-CONDENSED MATTER Volume: (32) 165084-1 - 165804-12

Conferences Papers

2024

1. Two dimensional Bose-Hubbard model in the presence of artificial magnetic field

Annual physics conference of Iran

2023

2. Extended Bose-Hubbard model on the square optical lattice: Asymmetric hopping energy and thermal fluctuations

30th Symposium of Crystallography And Mineralogy of Iran

Mohammad amin Jaberi, Fatemeh Heydari nasab

2022

3. Understanding the Anomalous magnetic heat capacity and thermopower of MnTe above the Néel temperature using cluster mean-field theory

American Physics Society- March meeting 2022

Fatemeh Heydari nasab, Morteza Jazandari, Md Mobarak Hossain Polash, Jahanfar Abouie, Daryoosh Vashae

4. Spin liquid phase in frustrated mixed-spin chains: effects of three-site four-spin interactions

27th Annual IASBS Meeting on Condensed Matter Physics

Fatemeh Heydari nasab, Jahanfar Abouie

5. Paramagnon Heat Capacity and Anomalous Thermopower in Paramagnetic Phase: Effects of Spin Correlations

annual physics conference of Iran 2022

Fatemeh Heydari nasab, morteza jazandari, mobarak hossein polash, jahanfar abouie, daryoosh vashaie

2021

6. Mixed-spin system with supersolid phases: magnetocaloric effect and thermal properties

The physics society of Iran annual meeting

Fatemeh Heydari nasab, J. Abouie

Executive activities

مشاوره دانشجویان کارشناسی

from 1402/11/21 - to 1403/04/04

مشاوره دانشجویان کارشناسی

from 1402/07/01 - to 1402/11/05