

Curriculum Vitae

Maryam Afsary

Introduction:

I am a PhD candidate in Sharif University of Technology. I started the carrier with the insight of working on quantum optics which switched to quantum thermodynamics later. I hopefully will finish the carrier before the end of this year.

Personal Information

First Name: Maryam **Last Name:** Afsray **Gender:** Female **Date of Birth:** 21/04/1986 **Location:** Tehran, Iran
Nationality: Iranian **Email:** m_afsary@ymail.com

Current Position(s):

➤ **PhD Candidate...**

Educations

Ph.D. Student (Started 01/09/2012, Finished 00/00/2000)

Sharif University of Technology, Tehran, Iran

Ph.D. in Physics, 2012-0000, Total GPA: (18.27/20)

Research Field: Quantum Thermodynamics

Thesis Title: Thermodynamics in open quantum systems

Supervisor: Prof.Bahrampour, Dr.Rezakhani

M.Sc. (Started 01/09/2008, Finished 01/06/2011)

Tarbiat Modarres University, Tehran, Iran

M.Sc. in Physics, 2008-2011, Total (Current) GPA: (17.31/20)

Research Field: Nanoparticles

Thesis Title: Investigation of Quantum Confinement Effect on Nonlinear Optical Properties for Lead Sulfide Nanoparticles

Thesis Grade: 19.5

Supervisor: Dr.Malekfar

B.Sc. (Started 01/09/2004, Finished at 01/06/2008)

Tarbiat Moalem University, Tehran, Iran

B.Sc. in Physics, 2004-2008, Total GPA: (14.57 / 20)

Research Field:-----

Project Title:-----

Project Grade: (.../20)

Supervisor: -----

Scientific Activities

- Quantum Thermodynamics
- Quantum Optics
- Open Quantum System

Presentations

- The Role of Correlations and Interactions in Binding Energy of Bipartite Quantum Systems, Sharif University of Technology, 2018.
- Quantum information implementation, Sharif University of Technology, 2014.
- Title, Place, Date

Publications

- **Investigation of Third-order Nonlinear Optical Properties of Lead sulfide Nanoparticles**, *M.H. Majles Ara, M. Afsary, M. Hatami, R. Malekfar, P. Boroujerdian, Optics and Precision Engineering*, 2011.
- **Thermal nonlinear optical properties of TiO₂ nanocrystals prepared through pulsed laser deposition**, *F. Moslehirad, M.H. Majles Ara, M. J. Torkamany, M. Afsary, M. Ghorannevis and J. Sabbaghzadeh, Laser Physics*, 2013
- **Quantum imaging with undetected photons as ancilla-assisted process tomography**, *M. Ghalaii, M. Afsary, S. Alipour, A. T. Rezakhani, Phys. Rev. A.*, 2016.
- **Correlations in quantum thermodynamics: Heat, work, and entropy production**, *S. Alipour, F. Benatti, F. Bakhshinezhad, M. Afsary, S. Marcantoni, A. T. Rezakhani, Sci. Rep.*, 2016
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Teaching Experiences

Example:

- **Teaching Assistant** in the course of General Physics 1
Physics Dept., Sharif University of Technology, Fall 2012 & Fall 2013
- **Teaching Assistant** in the course of General Physics 2
Physics Dept., Sharif University of Technology, Spring 2013 & Fall 2014
- **Teaching Assistant** in the course of General Physics Lab. 1
Physics Dept., Sharif University of Technology, Fall 2014 & Fall 2015
- **Teaching Assistant** in the course of General Physics Lab. 2
Physics Dept., Sharif University of Technology, Spring 2014

Computer Skills

Scientific Software Tools: Maple, Mathematica

Programming Languages:

Languages

Persian Native

English Fluent

Arabic Fair

References

- Dr. A.R. Bahrapour, Professor, Sharif Uni. of Tech., Bahrapour@sharif.edu
- Dr. A. T. Rezakhani, Assistant Professor, Department of Physics, Sharif University of Technology. rezakhani@sharif.edu