

Monireh Ganjali

1, 2nd Golnaz alley, Shadmehr Str., Tehran, 14566-55945, Iran
 +982166009909
 +989360905246

monireh_110@yahoo.com



ACADEMIC POSITION 2009 - Present, Assistant Professor, Nanotechnology and Advanced Materials Department, Materials and Energy Research Center (MERC)

Education

PhD of Physics & Mathematics (Laser physics), Inst. of Physics, 2000 - 2005
National Academy of Science of Belarus

“Characteristics of Planar Waveguide CO₂-Lasers With Steady Multipass Resonators”. Presented at 9 different international conferences and 2 workshops and also published on 3 papers in Journal of Applied Spectroscopy (JAS) and 1 paper in Quantova Electronica.

Master of laser physics and Spectroscopy, Blarussian State University 1995 - 1998

Thesis was on “A Study of The Effect Exerted By The Parameters of Weak Laser Radiation On The Biological Activity of Cell Structures”. Also performed research on investigation into the mode structure of He-Ne laser and characteristics of YAG:Nd laser.

B.S in Physics Bu-Ali University 1988 - 1992

Current project **Materials and Energy Research Center (MERC)** *Tehran, Iran, 2012-to be continue*
 Head of project

Synthesis of Nanocomposite Al₂O₃-ZrO₂ by laser

Finished project **Materials and Energy Research Center (MERC)** *Tehran, Iran, 2012*
 Head of project

Effect of chemical etching on surface morphology of Si

	Materials and Energy Research Center (MERC) Research assistant	Tehran, Iran, 2012
	<i>"Synthesis of SrFe₁₂O₁₉ Powders via Precipitation Route: Effect of Thermal Treatment and Salt Medium on Crystalline Growth and Morphology".</i>	
	Materials and Energy Research Center (MERC) One of the Head of project	Tehran, Iran 2010-2012
	<i>Manufacturing Sealed CO₂ laser with 150 watt output power</i>	
	Materials and Energy Research Center (MERC) Research assistant	Tehran, Iran 2011-2012
	<i>Laser Cladding of Fe/TiC Nanocomposite on Steel Substrate</i>	
	Materials and Energy Research Center (MERC) Head of project	Tehran, Iran 2010-2011
	<i>Pulsed laser – induced increasing of electrical energy efficiency in solar cells</i>	
	Materials and Energy Research Center (MERC) Research assistant	Tehran, Iran 2010-2011
	<i>Laser Pulse Induced Bimetallic Nanoparticles Ag/Au, Au/Cu and Ag/Cu in Liquids</i>	
	Laser Research Center Head of Project	Tehran, Iran 2005-2007
	<i>"Effect of low-intensity visible laser radiation on biological cells"</i>	
	<i>"Optimization of Gas Mixture of CO₂:N₂:He in an active media of CW electric-discharge CO₂-lasers"</i>	
	<i>Research on a possible design and making of waveguide CO₂-Laser with transverse radio frequency pumping at 10 Watt"</i>	
	National Academy of Science Of Belarus Research Assistant	Minsk, Belarus 2001-2005
	<i>"Investigation of the physical process in an active media for gas lasers and the development of new structures and generation modes"</i>	
Experience	Materials and Energy Research Center Professor assistant	Teheran, Iran 2009 – to be continued
	Materials and Energy Research Center	Teheran, Iran 2009 – 2010

Statistic represent and portal statistic chief

Teheran, Iran 2009 – 2010

Materials and Energy Research Center

Administrative Secretary of proceeds evaluation committee

Malek Ashtar University

Lecturer and Researcher

Tehran, Iran 2008 – 2009

University Sains (Sciences) Malaysia

Visiting Lecturer

Penang, Malaysia 2007 - 2008

Hosnieh High School

Instructor

Tehran, Iran 1985 – 1998

**Publications
And
Conference
Papers**

1. "Synthesis of Al₂O₃-ZrO₂ Nanocomposite by Mechanical Activated Self-propagating High temperature Synthesis(MASHS) and ignited via Laser", Monireh Ganjali, Mohammad Reza Vaezi, S. Ali Tayebifard, Somayeh asgharpour, International Journal of Engineering (IJE), 2013 (In press)
2. "Synthesis of Bimetallic Nanoalloy Layer Using Simultaneous Plasmas of Monometallic Targets", Mansoureh Ganjali, Monireh Ganjali, Parvaneh Sangpour, Journal fo Applied Spectroscopy, 80 (6), 2013
3. "Decreasing the Reflectance of Polycrystalline Si Wafers by Laser Texturization", Monireh Ganjali, Mansoureh Ganjali, Ali Khanlarkhani, Parvaneh Sangpour, Ali Meshkot, J. Laser Micro/Nanoengineering, 7(1), 2012.
4. "Synthesis and Optical Properties: Laser-Mixture Based Procedure of Nano-Alloy Au-Cu", Mansoureh Ganjali, Monireh Ganjali, Soraya Khoby, Mohammad Ali Meshkot, Nano-Micro Letters, 3 (4), 256-263, 2011.
5. "On The Temperature Model Of CO₂ Lasers", V.V. Nevdakh, M. Ganjali, K.I. Arshinov, Quantum Electronics, 2006 Vol. 37, No. 3, Pg. 243-247.
6. "Investigation a three-mirror multipass waveguide laser resonator for a compact All CO₂ laser with radio frequency pumping", V.A Saetchnikov, Monireh Ganjali, Journal Applied Spectroscopy, March 2005 Vol. 72, No. 2, Pg.198-201.
7. "Optimization of The Ratio CO₂ :N₂ :He In Active Media of CW Electric-Discharge CO₂ lasers", V.V Nevdakh, Monireh Ganjali, Journal Applied Spectroscopy, July 2005 vol.71, No.4 pp.490-495.
8. "Oscillatory temperatures in active media of CW waveguides CO₂ lasers", V.V Nevdakh, Monireh Ganjali, Journal Applied Spectroscopy, January 2004 vol.72, No.1 pp.72-79.

Papers Presented At Various Conferences

1. "Effect of chemical etching to reduce reflection on the surface morphology of the silicon wafer surface", Monireh Ganjali, Maryam Saidifar, Mansoureh Ganjali, Kamran Ahmadi, Applications of Advanced Materials in Air and Energy Industries, Energy and Materials Research Center, Oct. 2012.

2. "Electromagnetic Effect of Synthesized Photoreactive Gelatin for Application of Photolithography and Cell Printing", M. Heydar, M. Ganjali, Sh. Mashayekhan, Y. Ito, Colloids and Nanomedicine 2012, 15-17 July 2012, Netherlands-Amsterdam.
3. "Synthesis of Au₃₉-Cu₆₁ bimetal nanoalloy by dual procedure", Ma. Ganjali, Mo. Ganjali, NAMIC 2012-May 30-31-Iran-Isfahan.
4. "Structural and magnetic properties of nanocrystalline SrFe₁₂O₁₉ hexaferrite by co-precipitation method", Ar. Eskandari, Ma. Ganjali, Mo. Ganjali, NAMIC 2012-May 30-31-Iran-Isfahan.
5. "Development & synthesis of Ni-nylon smart nanocomposites", Ma. Ganjali, Mo. Ganjali, A. Naimzad, IBCN2012- 27-29 June, Belarus, Minsk.
6. "Laser cladding of Fe-TiC nano composite on middle carbon steel substrate", Mo. Ganjali, Ma. Ganjali, M. Ganji, M. R. Rahimpour, IBCN2012- 27-29 June, Belarus, Minsk.
7. "Synthesis of ZnO nanoparticles via Sonochemical method", Mo. Ganjali, Ma. Ganjali, Am. Hassanjani, S. M. Kazemzadeh, M. R. Vaezi, IBCN2012- 27-29 June, Belarus, Minsk.
8. "Binary Nanometal Alloy(Ag-Au) Layer Formation by Laser Induced Dual Plasmas", Ma. Ganjali, Mo. Ganjali, A. A. Kazemzadeh, IBCN2012- 27-29 June, Belarus, Minsk.
9. "Decreasing of reflection of polycrystalline silicon wafers by laser texturization", Monireh Ganjali, Mansoureh Ganjali, Advances in Applied Physics & Materials Science Congress, APMAS 2011, Turkey.
10. "Impact of polarized low intensity laser radiation and extra field on mitosis activity of cells", Monireh Ganjali, Mansoureh Ganjali, Advances in Applied Physics & Materials Science, Congress APMAS 2011, Turkey.
11. "Study of optical properties and compositions of laser synthesized bimetallic colloidal nono-alloys", Mansoureh Ganjali, Monireh Ganjali, Advances in Applied Physics & Materials Science Congress-APMAS 2011, Turkey.
12. "Wavelength and Period after the Emission Beam off with Low intensity Laser on Monkey Kidney Cell Mitosis Activity" International Congress in Laser Med.,Tehran– Iran 16-18 Feb. 2011.
13. "Impact of Polarized Intensity He-Ne Laser Radiation and Extra Magnetic Field on Mitosis Activity of Cells",Monireh Ganjali, Mansoureh Ganjali, Laser Iran Congress, 2011
14. "Laser Texturing of Crystalline Silicon for Solar Cells", Monireh Ganjali, Mansoureh Ganjali, Samaneh Mehrabani, ICTP Winter College on Optics and Energy, Miramare – Trieste, Italy, 8-19 February 2010
15. "Polycrystalline Si Laser Surface Scribing for Solar Cells", Monireh Ganjali, Mansoureh Ganjali, Samaneh Mehrabani, 2nd National Fuel, Energy and Environment National Congress, Kermanshah – Iran, 12-13 May 2010
16. "Produced Nanoparticles by Single and Double Pulse Laser Ablation" Monireh Ganjali, Mansoureh Ganjali, Ahmad Reza Fadaian, First National – Scientific Research Conference of Passive Defense, 2008, Tehran, Iran (in Persian)
17. "Application of Laser Transient Gratings Technique in CVD Diamond Thermal conductivity Measurement" Mansoureh Ganjali, Monireh Ganjali, First National – Scientific Research Conference of Passive Defense, 2008, Tehran, Iran (in Persian)

18. "Temperature Model For High Power CO₂ Lasers", V.V. Nevdakh, M. Ganjali, K.I. Arshinov, Technical Program XII Conference on Laser Optics, St. Petersburg. June 2006
19. "Investigation A Three-Mirror Multipass Waveguide Laser Resonator For A Compact All CO₂ Laser With Radio Frequency Pumping", V.A Saetchnikov, Monireh Ganjali, 5th International Conference on quantum electronics, November, 2004, Minsk, Belarus.
20. "Oscillatory Temperatures In Active Media Of CW Waveguides CO₂ Lasers", 5th International conference on quantum electronics, Minks, Belarus, November 2004
21. "Optimization Of The ratio CO₂ :N₂ :He In Active Media Of CW Electric-Discharge CO₂ Lasers", V.V Nevdakh, Monireh Ganjali, XV international Symposium On Gas Flow and Chemical Lasers & High Power Lasers. Prague, Czech Republic. 2004, pg. 129.
22. "Losses In Multielement Waveguides CO₂ Lasers", Monireh Ganjali, International conference on laser and laser application, ICLPA'2003, Minks, Belarus, May 2003 (in Russian).
23. "Computed New Design of The Compact SSDPL Laser Development", L.N. Orlov, Monireh Ganjali, IV International conference on science and technology, "Quantum Electronics", November 2002, Minsk, Belarus, pp. 33. (in Russian).
24. "New Concept Of Multipass Resonators For Gas and Solid-State Lasers ", L.N Orlov, Monireh Ganjali, 4th international workshop on laser and fiber-optical modeling, June 2002, Kharkiv, Ukraine, pp.1.
25. "Development of Computation of a New Resonator Design" Monireh Ganjali, 5th international conference on quantum electronics, Minsk, Belarus, November 2002, pg.9-14.
26. "Development Of Computation of a New Stable Multipass Design" Monireh Ganjali, XVII international conference for physics students " ICPS 2002", Budapest, Hungary. August 2002 Pg. 88-94.

Book Published

Mansoureh Ganjali and Monireh Ganjali, Laser Material Processing: First Section: Product of Beam laser (Translation from English to Persian), Materials and Energy Research Center, Iran-Tehran, 2012

Workshops and Short courses

1. "LAMMPS85-University of Tehran, Software in Dynamic Molecule", Tehran, Iran, 2011
2. "Principle of CO₂ laser and It's Application – Theory and Practice", Research and Technology Exhibition, Tehran, Iran, 25-30 December 2010
3. "Dye Solar cells", 2nd National Congress on Fuel, Energy and Environment, Kermanshah – Iran, 19-20 May 2010
4. "Introduction to Spectroscopy Methods Bases on Fiber Optics and Particle Size Analysis device", Materials and Energy Research Center, 14 May 2010
5. "ICTP Winter College on Optics and Energy", Miramare – Trieste, Italy, 8-19 February 2010
6. "Preparatory School to the (ICTP)Winter College on Optics and Energy"

Miramare – Trieste, Italy, 1-5 February 2010

7. “Developing & Marketing Centers in New Nanotechnologies” Tehran – Iran. 8, November 2009
8. “Principle & Application of Coating by Sputtering”, Tehran – Iran. 7, November 2009
9. “Analytical Methods of Nanomaterials”, Tehran – Iran. 8, November 2009
10. “Workshop on AFM & SEM Analyzers” Tehran – Iran. 12, October 2009
11. “Short Courses ICONO’2001”, International Conference on Coherent and Nonlinear Optics, ICON 2001”, Minsk, Belarus. 27-30 June 2001
12. “International Summer College On Optics And Photonics”, Tabriz - Iran. 12-24, August 2001

National Patent

1. “Induce of polycrystalline Si surface reflectance by laser”, Monireh Gangali, Mansoureh Ganjali, code number 004860 89/A, March 2011)
2. “Synthesis and optical properties metallic nanoalloy using mechanical stirring”, Mansoureh Ganjali, Monireh Ganjali, code number 004861, 89/A, March 2011.

Scientific Society Member

1. Solar Scientific Society of Iran, 2010 to be continued
2. Photonics Society of Iran, 2011 to be continued

Subjects Instructed

1. Optics – Malek Ashtar University, 2007 – 2008, Iran, Tehran
2. Solid state and quantum physics - Materials and Energy Research Center 2009 – 2010, Iran, Tehran
3. Laser application on nanotechnology - Materials and Energy Research Center 2009 – 2010, Iran, Tehran

Syllabus course editor

1. CCD – 2 credit for Master student of CCD engineering, Malek Ashtar University, 2007 – 2008, Iran, Tehran
2. Solid state and quantum physics – 3 credit for Master student of Nanomaterials engineering, Materials and Energy Research Center 2009 – 2010, Iran, Tehran
3. Laser welding – 2 credit for PhD student of Materials engineering, Materials and Energy Research Center 2009 – 2010, Iran, Tehran

Journal Reviewer:

Journal of Engineering Materials (JEM), Iran