

<< Curriculum Vitae >>

Name: Mohsen Ostovari
D.O.B: 4 January 1984
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Academic background

- **PhD, Medical Physics (Imaging),**
Ahvaz Jundishapour University of Medical science, Ahvaz, Iran, (2013-2017).
Thesis title:” **Evaluation of the use of gold nanoparticles to improve image contrast in magnetic resonance electrical impedance mammography** “
Supervisor: Dr. Mansour Zabihzadeh
- **MSc, Physics (Atomic and Molecular physics),**
Shiraz University, Shiraz, Iran, (2009-2011).
Thesis title: “**Dynamics of Entanglement between photons and Pi-electrons in Graphene**”
Supervisor: Dr. Mohammad Mehdi Golshan
- **BSc, Physics (Solid State physics),**
University of Kordestan, sanandaj, Iran, (2004-2008).

Teaching Experiences:

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|---|-----------------------------------|
| • Optics of Vision | M.Sc. Students of Medical Physics |
| • Laser and its application in Medical Sciences | M.Sc. Students of Medical Physics |
| • Basic principles of data processing and computer simulation | M.Sc. Students of Medical Physics |
| • Mathematics | M.Sc. Students of Medical Physics |
| • Atomic and nuclear physics | M.Sc. Students of Medical Physics |
| • Ultrasound and diagnostic sonography | M.Sc. Students of Medical Physics |
| • Acoustics and Physics of hearing | B.Sc. Students of Audiology |

- Acoustics and Physics of Speech B.Sc. Students of Speech Therapy
- Introduction to basics of radiology in the operating room B.Sc. Students of Operating Room Technology
- Medical physics, electricity, and robotics and their application in the operating room B.Sc. Students of Operating Room Technology
- Physics in anesthesia B.Sc. Students of Anesthesia Technology
- Special physics 1 B.Sc. Students of Occupational Health
- Special physics 2 B.Sc. Students of Occupational Health
- Solid mechanics B.Sc. Students of Occupational Health
- Radiology, sonology, and electrology in obstetrics & gynecology B.Sc. Students of Midwifery
- Basic physics lab. II B.Sc. Students of Physics, Electrical Engineering & Mechanical Engineering
- Basic physics I B.Sc. Students of Physics
- Basic physics II B.Sc. Students of Physics
- General physics B.Sc. Students of Mechanical Engineering
- Classical Mechanics B.Sc. Students of Mechanical Engineering

Publications:

- Moradi F, Akbari M, Vakili-Ghartavol R, Ostovari M, Hadi N. Molecular characterization of superbugs *K. pneumoniae* harboring extended-spectrum β -lactamase (ESBL) and carbapenemase resistance genes among hospitalized patients in southwestern Iran, Western Asia. *Heliyon*. (2024) Sep 15;10(17).
- Vahidian, A., Momayezan Marnani, P., Mehdizadeh, A. et al. Evaluating the effect of glycerol on increasing the safety and efficiency of hyperthermic laser lipolysis. *Lasers Med Sci* 39, 84 (2024). <https://doi.org/10.1007/s10103-024-04029-8>
- Shirazi, M., Eslahi, A., Ostovari, M., Ahmed, F., Zaid, A., Askarpour, M. R., Nikbakht, H.-A., Gholami, Z., & Shirazi, S. (2023). Reference value of testicular temperature measured by finite element analysis after first staged inguinal orchidopexy in children with abdominal testis and short spermatic cord. *Archivio Italiano Di Urologia E Andrologia*, 95(3). <https://doi.org/10.4081/aiua.2023.11528>
- Ostovari M, Haghani M, Mortazavi SA, Mortazavi SM. Are Blue-Cut Lenses Safe for Children? Potential Effects on Eye Length and Refractive Disorders. *Journal of Biomedical Physics and Engineering*. (2023) May 15.
- Ostovari, M., Zabihzadeh, M., Riahi-Alam, N., Momen-Gharibvand, M. Measurement of Electrical Properties of Tissues with and without Gold Nanoparticles (GNPs) At Different Temperatures. *Journal of Nanostructures*, (2023); 13(2): 442-452. doi: 10.22052/JNS.2023.02.014
- A. Rezaeian, M. Ostovari, M. Hoseini-Ghahfarokhi, and H. Khanbabaei, Diffusion-weighted magnetic resonance imaging at 1.5 T for peripheral zone prostate cancer: the

influence of the b-value combination on the diagnostic performance of apparent diffusion coefficient. Polish Journal of Radiology, (2022); 87(1), pp.215-219.

- Z. Mohebbi, R. Ershadpoor, M. Ostovari, and M. Rakhshan, "Radiation Protection Capability of Operating Room Personnel: Development and Psychometric Properties of a Questionnaire", Journal of Biomedical Physics & Engineering 11, no. 5 (2021): 603.
- A. Fazelzadeh, M. Faraz, AR. Mehdizadeh, Z. Mohebbi, M. Ostovari, "Photogrammetric Facial Analysis of Rhinoplasty Applicants in Shiraz", Journal of Otorhinolaryngology and Facial Plastic Surgery. (2021);7(1).
- S. Abbasi, M. Khosravi, AR. Mehdizadeh, M. Ostovari, "A Novel Adjustable Anthropomorphic Head Phantom for Verifying the Dose of Radiation Therapy", Journal of Biomedical Physics & Engineering, (2020)
- M. Ostovari, N. Riahi Alam, M. M. Gharibvand, M. Hoseini, M. Zabihzadeh, "Evaluation of the use of gold nanoparticle as contrast agent in electrical impedance imaging", Iranian Journal of Medical Physics 15, 53-53 (2018).
- M. Ostovari, N. Riahi Alam, M. M. Gharibvand, A. Danyaei, M. Zabihzadeh, "Improvement ability of EIT for Thermal monitoring during Thermal Therapy by gold nanoparticles", Iranian Journal of Medical Physics 15, 58-58 (2018).
- M. Ostovari, N. Riahi Alam, M. Zabihzadeh, M. Momen Gharibvand, M. Hoseini, "Effect of Gold Nanoparticle on Electrical Impedance of Tissue in Low Frequency Ranges", Journal of Biomedical Physics and Engineering (2018).
- S. Rezaei, N. Riyahi Alam, M. Ostovari, "Gd-based nanoparticles mediated Magnetic Field Enhancement inside Homogenous Tissue: Simulation using Finite Element Method", World congress on Medical Physics and Biomedical engineering, pages 99-102, Toronto, Canada (2015)
- M. Ostovari, A. Alipour, A. R. Mehdizadeh, "Entanglement between Bio-Photons and Tubulins in Brain: implications for memory storage and information processing", *NeuroQuantology*, vol 12, N0 3 (2014).
- S. Rezaei, M. Ostovari, N. Riyahi Alam, "Simulation of Gd-based Nanoparamagnetic Particles Mediated Magnetic Field Enhancement inside Homogenous Tissue in External Magnetic Field: using Finite Element Method", 4th International Conference on Superconductivity and Magnetism (ICSM 2014).
- M. Ostovari, A. Alipour, A. R. Mehdizadeh, "Entanglement between Ultra-weak Photon Emissions and Tubulins in Brain", 2th Basic and Clinical Neuroscience Congress (BCNC 2013).
- M. Ostovari, R. Safaiee and M.M. Golshan, "Dynamics of Entanglement between Linearly Polarized Photons and π -Electrons in Graphene", International Journal of Optics and Photonics (IJOP), Vol. 6, No. 1, (2012).
- M. Ostovari, M. M. Golshan, "Effect of polarization of photon on entanglement between photons and Pi-electrons in Graphene", 13th congress of nanotechnology Graduates, Tehran, Iran (2013).
- M. Ostovari, R. Safaiee and M.M. Golshan, "Dynamics of entanglement between photons and Pi-electrons in Graphene", Proceeding of International Conference on statistical physics, page 117, Larnaca, Cyprus (2011).

Lectures:

- “Optics, Laser and Vision”, 2th summer school on Biomedical Engineering & Advanced Technology, Shiraz University of Medical Science, 14-17 Aug 2017, Shiraz, Iran.
- “Quantum Entanglement in Graphene”, Conference on Physics of novel material, Shiraz University, October 2011, Shiraz, Iran.