

Sayed Hossein Masoumi Tabaghdehi
email: tmhs31@gmail.com

Research field: gel dosimetry/ medical dosimetry/ treatment planning/medical radiation physicist/research associate/

Educational Background:

1. **Ph.D.** in Medical Physics, Tarbiat Modares of Medical school, Tehran, Iran, Sep.2010-Sep.2015
Title of Thesis: “Extraction of ultrasound parameters of gel dosimetry in presence of gold nanoparticles after radiotherapy cobalt-60”
2. **M.Sc.** in Medical Physics, Isfahan University of Medical School, Isfahan, IRAN, Feb.2001 – Jan.2004
Title of Thesis:” A Comparison Of Methodology Of Dose Calculation Methods For Asymmetric fields defined by Independent Collimators Of Medical Linacs”
3. **B.Sc.** In Apply Physic University of Polly technic Tehran, IRAN, Sep.1996– Sep.2001

Teaching Experience:

- 1- Medical Physics for Medicine & Dental students
- 2- Radiation Physics for student of Radiology
- 3- Radiobiology and Protection for student of Radiology
- 4- Physics of Diagnostic Radiology for student of Radiology
- 5- Radiation Physics for Environment Health students
- 6- Physics of computer tomography for student of Radiology
- 7- Physics of Ultrasound for student of Radiology

Papers:

- 1- “Role of diffusion tensor imaging as an imaging biomarker and theranostic tool in structural imaging of traumatic brain injury”. Journal of Chemical and Pharmaceutical Sciences, Volume 9, Issue 2, April-June 2016, Pages 854-864 Salehi MG, Masoumi H, Tanha R
- 2- “Role of magnetic nanoparticles in targeted drug delivery for central nervous system”, Journal of Chemical and Pharmaceutical Sciences, Volume 9, Issue 3, 2016, Pages 1419-1423, Salehi MG, Rostamzadeh A, Masoumi H
- 3- “Trends in metabolical and molecular imaging of glioma by magnetic resonance spectroscopy”, Research Journal of Medical Sciences, Volume 10, Issue 4, 2016, Pages 330-336, Taheri A, Masoumi H,
- 4- “Comparison of advanced magnetic resonance imaging techniques in evaluation of brain tumors; Literature review from bench to bedside”, Journal of Chemical and Pharmaceutical Sciences. Volume 9, Issue 3, 2016, Pages 1430-1433, Fatehi D, Taheri A, Masoumi H.
- 5- “A review on fundamental principles of cellular and molecular imaging in practice with magnetic resonance imaging using magnetic nano particles; Stem cells tracking oriented”, Journal of Chemical and Pharmaceutical Sciences, Volume 9, Issue 3, 2016, Pages 1359-1367, Fatehi D, Masoumi H, Rostamzadeh A.
- 6- “Application of perfusion-weighted magnetic resonance imaging as an imaging biomarker in clinical practice: A review from bench to bedside” Journal of Chemical and Pharmaceutical Sciences. Volume 9, Issue 3, 2016, Pages 1374-1380: Fatehi D, Taheri D, Masoumi H, Rostamzadeh A.
- 7- “Trends in metabolical and molecular imaging of glioma by magnetic resonance spectroscopy” Research Journal of Medical Sciences, Volume 10, Issue 4, 2016, Pages 330-336: Taheri D, Masoumi H, Moayeri A, Rostamzadeh A.

- 8- "Prevalence of brain neoplasms: The emerging role of advanced magnetic resonance imaging techniques in neuro-oncology diagnosis and treatment" Journal of Chemical and Pharmaceutical Sciences, Volume 9, Issue 3, 2016, Pages 1404-1412: Taheri D, Masoumi H, Fathei D, Salehi M.G, Rostamzadeh A.
- 9- "Changing the paradigm of multiple sclerosis characteristics: Fact or fiction; Role of non-conventional MRI techniques in screening, prognosis, diagnosis, and following" Journal of Chemical and Pharmaceutical Sciences, Volume 9, Issue 3, 2016, Pages 1413-1418: Taheri D, Masoumi H, Rostamzadeh A, Garib A, Fathei D.
- 10- "Idiopathic generalized epilepsies and efficiency of advanced magnetic resonance imaging techniques in present era; perspectives in future" Journal of Chemical and Pharmaceutical Sciences, Volume 9, Issue 3, 2016, Pages 1381-1385: Masoumi H, Naleini F, Salehi M.G, Garib A, Rostamzadeh A.
- 11- "Clinical and pharmacological applications of silymarin components at cellular and molecular level: A review" Research Journal of Medical Sciences, Volume 10, Issue 3, 2016, Pages 102-107: , Masoumi H, Anjamshoa M, Mohammadi M, Fallahi S, Rostamzadeh A.
- 12- "The ability of ultrasonic characterization to extract the dose distribution of magic-f polymer gel" Journal of Kerman University of Medical Sciences: Volume 22, Issue 4, 1 July 2015, Pages 394-409; , Masoumi H, Mokhtari-Dizaji M, Ababi A, Bakhshandeh M.
- 13- "Medical imaging modalities: Prevention of unnecessary orders and non-optimized radiation exposure" International Journal of Epidemiologic research: Volume 2, Issue 4, 2015, page 162-163; Ayoob Rostamzadeh, Masoud Amiri, Mohammad Gharib Salehi, Hossein Masoumi.
- 14- "Epidemiology of traumatic spinal cord injury: The substantial role of imaging methods" International Journal of Epidemiologic research; Volume 3, Issue 2, 2016, page 172-175 Ayoob Rostamzadeh, Daryoush Fatehi, Hossein Masoumi, Masoud Amiri.
- 15- "Determine the Dose Distribution Using Ultrasound Parameters in MAGIC-f Polymer Gels" Dose-Response: Volume 14, Issue 1, 2016.
- 16- "Gel Dosimetry By Medical Imaging Modalities And Future Of Molecular Imaging" Research Journal of Pharmaceutical, Biological and Chemical Sciences; Volume 8, Issue 1, 2017, page 1528-1532: Masoumi H.
- 17- "Determination of Optimal Gel Dosimetry of the MAGIC-f and Tissue Mimicking Composition Using Ultrasonic Parameters in Megavoltage Energy" Journal of Acoustical Society of Iran; Volume 3, Issue 2, 2016, page 11-22: Hossein Masoumi, Manijhe Mokhtari Dizaji, Azim Arbabi, Mohsen Bakhshandeh.
- 18- "Radiation sensitivity of MAGIC-f polymer Gel by Gold nanoparticles" WWW.CIVILIKA.COM: Hossein Masoumi, Manijhe Mokhtari Dizaji, Azim Arbabi, Mohsen Bakhshandeh.
- 19- "The beneficial role of SIRT1 activator on chemo- and radiosensitization of breast cancer cells in present of IL-6" Hossein Masoumi, Amin Soltani, Mahdi Ghatrehsamani.
- 20- "Sonodynamic therapy of the breast cancer cells (4t1) using gold nanoclusters-loaded ultrasound-activated nanodroplets" Roghayeh Kamran Samani, Fatemeh Maghsoudinia, Seyed Hossein Masoumi*,
- 21- "Impact of Combination Therapy with Chemical Drugs and Megavoltage X-ray Exposure on Breast Cancer Stem Cell Viability and Proliferation of MCF-7 and MDA-MB 231 Cell Lines" Fatemeh Banisharif Dehkordi, Mahdi Ghatrehsamani, Maryam Abdolvand, Amin Soltani, Seyed Hossein Masoumi*

Participated international congresses, workshops, and courses:

- 1- The 6th Iranian Congress Of Medical Physics May 11-13, 2004, Mashhad University Of Medical Sciences
- 2- The 1th Optimization in radiotherapy May 4-5,2013
- 3- The 12th annual electrochemistry seminar of iran:Tehran-Iran;16-17November 2016

Clinical Experience:

- 1- Medical Dosimerty
- 2- Treatment Planning
- 3- Medical Radiotherapy

BOOK:

1. Basic and clinical principles of MRI physics, Masoumi H, Rostamzadeh, ebnesina press, Tehran, Iran, May 2017. (in Persian)

References:

- 1- Dr.Mokhtari M, PhD,Professor in Medical Physics, Ultrasound & Sonotherapy & Phototherapy
Address: Tarbiyat Modares University of Medical School, Department of Medical Physics Unit, Tehran, Iran,
[Tel:98\(0\)21 82883828](tel:9802182883828)
- 2- Dr.Shahbazi D, PhD, Professor in Medical Physics, Radiotherapy Address: Isfahan University of Medical School,
Department of Medical Physics Unit, , Isfahan, Iran, Tel.: +98 (0) 311 7922495
- 3- Dr.Shokrani P, PhD, Professor in Medical Physics, Radiotherapy Head Unit.Address: Isfahan University of Medical
School, Department of Medical Physics Unit, , Isfahan, Iran, Tel.: +98 (0) 311 7922432