



Curriculum Vitae (C.V.)

Personal Data

Name: Seied Rabi (Mehdi) Mahdavi
Date of Birth: 22,10, 1341 (12, January, 1963)
Marital Status: Married
Nationality: Iranian

Work address

Department of Medical Physics, Faculty of Medicine, Iran University of Medical Sciences (IUMS), Tehran, IRAN
Tel/fax. (+98)(21)88622647

Education Records:

- 2005 PhD of Medical Physics - Tehran university of Medical Sciences (TUMs)[Thesis title: In-Vivo Radiobiological Assessment of Prostacyclin Mediated Vascular Changes leading to Development of Radiation Myelopathy in Rat Cervical Spinal Cord]
- 2005 Participation in the European Master of Sciences course in Radiation Biology at the Gray Cancer Institute those in the field of biological basis of radiotherapy and familiarized with the techniques of culturing and irradiating human cells in vitro and assessing the response using the micronucleus assay, at Mount Vernon Hospital and The Institute of Cancer Research in Sutton of London, UK
- 1996 MSc in Medical Physics – TUMS [Thesis title: Accuracy and Reproducibility assessment of treatment fields in Tele-radiotherapy]
- 1992 BSc in Radiology Technology – TUMS

Work Experiences

Currently:

- Associate Professor of Iran University of Medical Sciences
- Consultant Radiation Oncology Physicist at Iran University of Medical Sciences

- Head of Radiotherapy dept. at Radiotherapy and Oncology clinic of Omid Tehran
- Head of Radiotherapy dept. at Pars general Hospital

- 2017- President of Iranian Association of Medical Physicists (IAMP) and Vice president of Middle East Federation of Organizations of Medical Physics (MEFOMP)
- 2016- Consultant physicist of Radiotherapy Dept., Firouzgar Hospital, Iran University of Medical Sciences
- 2015- Commissioning of first Local Hyperthermia (Celsius 42+) in Iran
- 2014- Consultant physicist of Radiotherapy Dept., Haft-e-Tir Hospital, Iran University of Medical Sciences
- 2013- Dosimetry, commissioning of first Intra-Operative Radiotherapy Electron Beam Linac (IORT) in Iran
- 2006- Dosimetry and Commissioning of Radiotherapy dept. at Pars General Hospital, Tehran, Iran
- 2000- Dosimetry and Commissioning of Radiotherapy dept. at Asia General Hospital, Tehran, Iran
- 1996- 2008; Radiotherapy Physicist and Assistant Professor of Babol University of Medical Sciences (BUMS), Iran
- 1994- Dosimetry and Commissioning of Radiotherapy Dept. at Iran Uni. Of Medical Sciences, Haft-e-Tir Hospital, Tehran, Iran
- 1993- Radiotherapy Physicist: Radiotherapy physics, machine commissioning, three and two dimensional treatment planning and conformal radiotherapy experiences, clinical dosimetry and radiobiology and Linac room shielding calculation and design

Teaching Experinces

- From 2009: IUMS, Medical Physics for medical students, radiotherapy and hyperthermia physics, dosimetry, physics of nuclear medicine and MRI for MSc, and PhD students and Residents of Radiation Oncology
- 2005- 2009: IUMS & BUMS, Medical Physics, Dosimetry, and protection
- 2000- 2004: TUMS, Physics for Physiotherapy students, Radiotherapy techniques for radiographers
- 1996- 2000: BUMS, Different topics of Medical Physics for Para-medical students, Medical Physics for Medical students and Dentistry
- 1994-1995: TUMs, Radiotherapy physics for B.Sc students of Radiotherapy Technology

Research Favorites

Clinical physics of Radiotherapy, Radiation Dosimetry, Radiation Treatment Planning, Clinical and Basic Radiation Biology, Hyperthermia, Imaging related to Radiotherapy Planning and Simulation

Workshop

- 2016 (1397)- Hyperthermia workshop at Mehraneh Onocology center, Zanjan
- 2015 (1394)- Workshop on clinical photon beam dosimetry: IAMP, Zanjan
- 2014 (1393)- Work shop on clinical electron beam dosimetry: IAMP, Hamedan
- 2013 (1392)- Work shop on clinical photon dosimetry: IAMP, Babolsar
- 2011 (1389)-Lecturer on Radiation Therapy Treatment Planning System
ISOgray: IAMP and DOSIsoft co., Tehran
- 2010 (1389)- Lecturer of Cancer Congress: Iranian Cancer Society, Tehran
- 2010 (1389)- Lecturer of 5th dosimetry workshop: Medical and agricultural
research center, Karaj, Iran
- 2010 (1389)- Lecturer of 2nd Linac Training course and workshop: Cancer
research institute (CRC) and IAMP, Imam Hospital, Tehran, Iran
- 2008 (1387) - Lecturer of Linac Training course and workshop: Cancer
research institute (CRC), Imam Hospital, Tehran, Iran
- 2008 (1386)- Course of Physics of Medical Accelerators: Shahid Beheshti
University, Tehran, Iran
- 2007 - Varian radiotherapy training program: Novy-Jicin radiotherapy center,
Czecrepublica
- 2007 (1386) - Workshop Enzyme Immobilization: Babol University of Medical
Sciences
- 2006 (1385) - PTW dosimetry instruments workshop: PTW company, Imam
Hosein Hospital, Sh. Beheshti Medical University, Tehran, Iran
- 2005 (1384) - Ionizing radiation dosimetry workshop: Iranian Organization of
Atomic Energy (IOAE), Karaj, Iran
- 2004 - Cell culture and Irradiation methods to radiobiological samples: Gray
Cancer Institute, London UK
- 2003 (1382) - Working with laboratory animals workshop: Razi Research
Institute, Karaj, Iran)
- 2002 (1377) - MCNP codes workshop (advanced course): IOAE, Iran
- 1999 (1377) - Interstitial and intra-cavitary radiotherapy workshop: IOAE, Iran
- 1998 (1377) - Research methodology workshop: BUMs, Iran
- 1998 (1377) - Methods of medical education workshop: BUMs, Iran
- 1996 (1376) - Intra-cavitary treatment with Cs-137 after-loading device: Sh.
Beheshti Medical University, Iran

Publications

-Books:

"IRIORT Protocol" first Iranian intra operative protocol, ME Akbari, HR Mirzaei, SR Mahdavi, N Nafisi, Cancer Research Center, 2016

"Radiotherapy techniques" S.R. Mahdavi and *et al*, Iran Medical University press, 2006

- Papers:

1. Machine learning-based radiomic models to predict intensity-modulated radiation therapy response, Gleason score and stage in prostate cancer. *Oncology Imaging*, 03 Jan. 2019.
2. Estimation of overall heat transfer coefficient of cooling system in RF capacitive hyperthermia. *J. Biomedical Science and Engineering*, 2013, 6, 509-517.
3. Enhancing the properties of beam forming bolus in hyperthermia: numerical simulation and empirical verification. *Australas Phys Eng Sci Med*, 16 Oct. 2014.
4. Cytotoxic effects of hyperthermia, chemotherapy (Navelbine) and radiation on glioma spheroids. *Radiation Physics and Chemistry* 123 (2016) 20–24.
5. The Role of Radiofrequency Hyperthermia in The Radiosensitization of A Human Prostate Cancer Cell Line. *Cell Journal(Yakhteh)*, Vol 19, Suppl 1, Spring 2017, Pages: 86-95.
6. Enhanced DNA Damages of Human Prostate Cancer Cells Induced by Radiofrequency Capacitive Hyperthermia Pre- and Post X-rays: 6 MV versus 15 MV. *Cell Journal(Yakhteh)*, Vol 19, Suppl 1, Spring 2017, Pages: 79-85
7. Thermo-chemoradiation induced MR diffusion changes after brain glioma treatment. *Global journal of advanced research*, 30 april 2019.
8. Combinatorial effects of radiofrequency hyperthermia and radiotherapy in the presence of magneto - plasmonic nanoparticles on MCF - 7 breast cancer cells. *J Cell Physiol*. 2019;1–8
9. Evaluating the effectiveness of combined radiotherapy and hyperthermia for the treatment response of patients with painful bony metastases: A phase 2 clinical trial. *Journal of Thermal Biology* 84 (2019) 129–135

10. "Effect of Gold Nanoparticles on Prostate Dose Distribution under Ir-192 Internal and 18 MV External Radiotherapy Procedures Using Gel Dosimetry and Monte Carlo Method". *J Biomed Phys Eng*; 5(1), 2015.
11. "Short-term cohort study on sensorineural hearing changes in head and neck radiotherapy". *Med Oncol*, 32:200, 1-7, 2015.
12. "Improvement of dose distribution in breast radiotherapy using a reversible transverse magnetic field Linac-MR unit". *Med. Phys.* 41 (1), 1-11, January 2014.
13. "Breast dosimetry in transverse and longitudinal field MRI-Linac radiotherapy systems". *Med. Phys.* 42 (2), 925-936, February 2015.
14. "Cytotoxic effects of hyperthermia, chemotherapy (Navelbine) and radiation on glioma spheroids". *Radiation Physics and Chemistry* 123 20–24, 2016
15. "Application of Gafchromic EBT2 film for intraoperative radiation therapy quality assurance". *Physica Medica*, Accepted 31 January 2015
16. "Dosimetric evaluation of Gafchromic EBT2 film for breast Intraoperative electron radiotherapy verification". *Physica Medica*, 31 (37-42) 2015.
17. "Comparing the dosimetric characteristics of the electron beam from dedicated intraoperative and conventional radiotherapy accelerators". *Journal of Applied Clinical Medical Physics*, volume 16, number 2, 2015.
18. "Size Effects of Gold and Iron Nanoparticles on Radiation Dose Enhancement in Brachytherapy and Teletherapy: A Monte Carlo Study". *Iran J Med Phys*, Vol. 11 , No. 2 & 3, Spring & Summer 2014.
19. "Magnetic Resonance Imaging - Based Target Volume Delineation in Radiation Therapy Treatment Planning for Brain Tumors Using Localized Region-Based Active Contour". *Int J Radiation Oncol Biol Phys*, Vol. 87, No. 1, pp. 195-201, 2013.
20. "The Effects of Backscattered Radiation into Beam Monitor Chamber: Study of 6 and 18 MV Conventional and Removed Flattening Filter Clinical Accelerator" *BIOSCIENCES BIOTECHNOLOGY RESEARCH ASIA*, March 2015. Vol. 12, p. 25-36
21. "Monte Carlo Calculation of Neutron Doses to Organs of a Female Undergoing A Pelvic 18 MV Irradiation" *Biomedical & Pharmacology Journal* Vol. 8 (March Spl Edition), 65-71 (2015)
22. "Comparison of CCC and ETAR dose calculation algorithms in pituitary adenoma radiation treatment planning; Monte Carlo evaluation" *Journal of Radiotherapy in Practice* (2014) Page 1 of 9
23. "Determination of Correction Factors for Small Field Radiotherapy Using 6 and 18MV Energies of a Linac" *J Mazandaran Univ Med Sci* 2015; 24(120): 173-187 (Persian)

24. "Optimization of clinical target volume delineation using magnetic resonance spectroscopic imaging (MRSI) in 3D conformal radiotherapy of prostate cancer" *Int. J. Radiat. Res.*, October 2014; 12(4): 303-309
25. "Effect of uniform magnetic field on dose distribution in the breast radiotherapy" *Int. J. Radiat. Res.*, April 2014;12(2): 161-170
26. "Monte Carlo study on beam hardening effect of physical wedges" *Int. J. Radiat. Res.*, July 2014;12(3): 249-256
27. "The role of iron oxide nanoparticles in the radiosensitization of human prostate carcinoma cell line DU145 at megavoltage radiation energies" *International Journal of Radiation Biology*, 2014; Early Online: 1–6
28. "Skin Reaction in Radiation Therapy for Breast Cancer" *Iranian Journal of Medical Physics* Vol. 11 , No. 4, Autumn 2014, 316-321
29. "Size Effects of Gold and Iron Nanoparticles on Radiation Dose Enhancement in Brachytherapy and Teletherapy: A Monte Carlo Study" *Iranian Journal of Medical Physics*, Vol. 11 , No. 2 & 3, Spring & Summer 2014, 253-259
30. "Evaluation of the Cytotoxic Effects of PLGA Coated Iron Oxide Nanoparticles as a Carrier of 5-Fluorouracil and Mega-Voltage X-Ray Radiation in DU145 Prostate Cancer Cell Line" *IEEE TRANSACTIONS ON NANOBIOSCIENCE*, VOL. 13, NO. 4, DECEMBER 2014
31. "Consequences of Lethal-Whole-Body Gamma Radiation and Possible Ameliorative Role of Melatonin" *The Scientific World Journal* Volume 2014, Article ID 621570, 9 pages
32. "Enhancing the properties of beam forming bolus in hyperthermia: numerical simulation and empirical verification" *Australasian College of Physical Scientists and Engineers in Medicine* 2014
33. "Estimation of overall heat transfer coefficient of cooling system in RF capacitive hyperthermia" *J. Biomedical Science and Engineering*, 2013, 6, 509-517
34. "An Inverse Problem of Temperature Optimization in Hyperthermia by Controlling the Overall Heat Transfer Coefficient" *Journal of Applied Mathematics* Volume 2013, Article ID 734020 , 9 pages
35. "Relative Biological Effectiveness (RBE) of ^{131}I Radiation Relative to ^{60}Co Gamma Rays" *Cell Journal(Yakhteh)*, Vol 15, No 3, Autumn 2013, Pages: 224-229
36. "A comprehensive procedure for characterizing arbitrary azimuthally symmetric photon beams" *Physica Medica* 30 (2014) 191-201
37. "Monte Carlo investigation of the effect of small cutouts on beam profile parameters of 12 and 14 MeV electron beams" *Radiation Measurements* (2013) 1-7

38. "Dosimetric comparison of different inhomogeneity correction algorithms for external photon beam dose calculations" *Journal of Medical Physics*, Vol. 38, No.2, 74-81, 2013
39. "An Inverse Problem of Temperature Optimization in Hyperthermia by Controlling the Overall Heat Transfer Coefficient" *Journal of Applied Mathematics* Volume 2013, Article ID734020, 9 pages
40. "An analytical model to determine inter-seed attenuation effect in low-dose-rate brachytherapy" *Journal of Applied clinical Medical Physics*, Vol. 14, no. 3, 2013
41. "Dose enhancement effect of gold nanoparticles on MAGICA polymer gel in mega voltage radiation therapy" *Int. J. Radiat. Res.*, Vol. 11 No. 1, January 2013
42. "Magnetic Resonance Imaging - Based Target Volume Delineation in Radiation Therapy Treatment Planning for Brain Tumors Using Localized Region -Based Active Contour" *Int J Radiation Oncol Biol Phys*, Vol. 87, No. 1, pp. 195 -201, 2013
43. "Radio-protective effects of melatonin against irradiation -induced oxidative damage in rat peripheral blood" *Physica Medica* (2013) 29, 65-74
44. "Conformal fields in prostate radiotherapy: A comparison between measurement, calculation and simulation" *Journal of Cancer Research and Therapeutics* - January-March 2012 - Volume 8 - Issue 1
45. "Radio-protective role of antioxidant agents" *Oncology Reviews* 2012; 6-16
46. "Commissioning and initial acceptance tests for a commercial convolution dose calculation algorithm for radiotherapy treatment planning in comparison with Monte Carlo simulation and measurement" *Journal of Medical Physics*, Vol. 37, No. 3, 145-50
47. "A Comparison of dosimetric parameters between IAEA TRS-398, AAPM TG-51 protocols and Monte-Carlo simulation" *Iran. J. Radiat. Res.*, 2012; 10(1): 43-51
48. "Physical Properties of Ethyl Methacrylate as a Bolus in Radiotherapy" *Iranian Journal of Medical Physics* Vol. 9, No. 2, Spring 2012, 127-134
49. "Applicator Attenuation Effect on Dose Calculations of Esophageal High-Dose Rate Brachytherapy Using EDR2 Film" *Iranian Journal of Medical Physics* Vol. 8, No. 1, Winter 2012, 19-24
50. "Normal Tissue Complication Probability Modeling of Radiation-Induced Hypothyroidism After Head-and-Neck Radiotherapy" *International Journal of Radiation Oncology, biology, physics*. Accepted for publication Mar 15, 2012

51. "Conformal fields in prostate radiotherapy: A comparison between measurement, calculation and simulation" *Journal of Cancer Research and Therapeutics* - January-March 2012 - Volume 8 - Issue 1
43. "Role of MRS in target volume definition of Prostate radiotherapy" *Iran J Med Phys* Vol. 8, No.3, Winter 2012.
44. "Developing a Verification and Training Phantom for Gynecological Brachytherapy System" *Iran J Med Phys* Vol. 8, No. 1, Winter 2012.
45. "Designing and evaluating a simple small phantom for dosimetry intercomparison" *Journal of Nuclear Science and Technology*, No 57, (4) 2011.
46. "Evaluation of Thyroid Disorders During Head and Neck Radiotherapy by Using Functional Analysis and Ultrasonography" *International Journal of Radiation Oncology, biology, physics*. Accepted for publication May 26, 2011
47. " Dosimetry analysis of two new design 103Pd interstitial brachytherapy sources" *Int. J. Low Radiation*, Vol. 8, Nos. 5/6, 2011
48. "Comparing the results of 3D treatment planning and practical dosimetry in craniospinal radiotherapy using Rando phantom" *Iran. J. Radiat. Res.*, 2011; 9(3): 151-158
49. " Evaluation of the combined effect of 2ME2 and Co60 on the inducement of DNA damage by IUdR in spheroid model of the U87MG glioblastoma cancer cell line using alkaline comet assay" *Cell Journal (Yakhteh)*, 2011; 13(2) 83-90
50. "Development and characterization of a novel PRESAGE formulation for radiotherapy applications" *Applied Radiation and Isotopes* 69 (2011) 1540–1545
51. "Monte Carlo estimation of electron contamination in 18 MV clinical photon beam" *Iran. J. Radiat. Res.*, 2011; 9(1): 15-28
52. "Evaluation of melatonin for modulation of apoptosis-related genes in irradiated cervical spinal cord" *Int. J. Low Dose Radiation*, Vol. 7, No. 6, 2010; 436-445
53. " Dosimetric comparison of two craniospinal radiotherapy techniques for treatment optimization" *Iranian Journal of Medical Physics* 2010; Vol 7 (2) 1-8
54. " Photoneutron and capture gamma dose equivalent for different room and maze layouts in radiation therapy" *Radiation Protection Dosimetry* (2010), pp. 1–8
55. " The effect of ethanolic extract of propolis on radiationinduced mucositis in rats" *Saudi Med J* 2010; Vol. 31 (6) 179-183
56. "A basic dosimetric study of PRESAGE: the effect of different amounts of fabricating components on the sensitivity and stability of the dosimeter" *Phys. Med. Biol.* **55** (2010) 903–912

57. " Characterization of a Radiochromic Solid Polymer Dosimeter According to its' Composition" WC 2009, IFMBE Proceedings 25/ III, pp. 284-287
58. " Monte Carlo estimation of photoneutrons contamination from high-energy x-ray medical accelerators in treatment room and maze: a simplified model" Radiation Protection Dosimetry, 2009: 1–12
59. " Evaluation of melatonin for prevention of radiation myelopathy in irradiated cervical spinal cord" Yakhteh Medical Journal, 2009: 11 (1): 43-48
60. "The role of CT-based radiotherapy planning on dosimetric correction" Iran J Radiol, 2009: 6(1): 23-28
61. "Role of CT simulation in radiation treatment planning" Journal of Babol University of Medical Sciences, 2008, 10(4): 7-15
62. "Monte Carlo simulation of TLD response function: Scattered radiation field application" Int. J. Low Radiation, 2008, 5(2): 124-133
63. "Melatonin as a protective agent in spinal cord damage after gamma irradiation" Rep Pract Oncol Radiother, 2007: 12(2): 95-99
64. "Adjacent field dose modification in breast radiotherapy by use of half-blocks" Tehran University Medical Journal (TUMJ), 2007: 64(11):32-36
65. "Ovarian absorbed doses in radiotherapy of thoracic and abdominal regions" Journal of Babol University of Medical Sciences, 2006: 8(4):7-12
66. "Chronological response of prostacyclin changes to moderately low doses of radiation in rat cervical spinal cord" Iranian Journal of Radiation Research, 2006: 4(3): 129-136
67. "Long term changes of prostacyclin secretion in radiation induced myelopathy", Rep Pract Oncol Radiother, 2006: 11(6): 273-279
68. "Portal image contrast enhancement". Rep Pract Oncol Radiother, 2006: 11(1): 23-28
69. "Surveying the contra-lateral breast dose during the primary breast irradiation of mastectomy patients in three hospitals in Tehran". Journal of Iran university of medical sciences, 2005: 12 (46):323-330
70. "Developing a PC-based portal image contrast enhancement program". Iranian Journal of Radiation Research, 2005: 3(1): 37-42
71. "Ultra-structural histopathologic changes in radiation myelopathy of rat cervical spinal cord". Tehran university medical journal (TUMJ), 2005: 63(8):607-614
72. "Evaluation of tissue heterogeneity effect on the received dose of orthovoltage X-ray in rat's cervical spinal cord". Journal of Iran university of medical sciences, 2005: 12(49): 53-62
73. "Dosimetry, Control and Irradiation of rat cervical spinal cord". Journal of Babol university of Medical Sciences 2005 7(2):7-13

74. "Short term changes in prostacyclin secretory profile of".
Prostaglandins, Leukotrienes and Essential Fatty Acids, 2005: 72(5):
373-378
75. "Radiation myelopathy: a radiobiological review". Rep Pract Oncol
Radiother, 2004: 9:119-27
76. "Evaluation of accuracy and reproducibility of teletherapy doses by in
vivo dosimetry" Iranian Journal of Medical Physics, 2003: 1(1):9-17
77. "Comparison of the different computer speed in calculating of Co-60
depth dose by MCNP4A and MCNP4B Monte Carlo codes". Journal of
Babol university of Medical Sciences 2004: 6(3):7-11
78. "Evaluation and measurement of Co-60 gamma ray for the inactivation
of lymphocytes". Journal of Iran university of medical sciences,
2003:10(35):397-405

Abstract Published

1. "Melatonin as a protective agent in spinal cord damage after gamma
irradiation" Radiotherapy and Oncology, Journal of European Society
for Therapeutic Radiology and Oncology, March 2009, Vol 90, Suppl
3
2. "CT simulation role in radiation therapy dosimetry" Journal of
Radiological Sciences, April 2008, vol 1, Issue 2
3. "Simulation of increment in skin exit dose due to base plate in
radiotherapy by Monte Carlo method" Journal of Radiological
Sciences, April 2008, vol 1, Issue 2
4. "Presentation of nursing oncology in Babol". International Journal of
Hematology-Oncology & Bone Marrow Transplantation, 2007, Vol.
4, Suppl. 1.
5. "Long term changes of prostacyclin in radiation myelopathy". 6th
LOWRAD international conference, 2007
6. "The role of CT simulation in radiotherapy treatment planning".
Iranian Journal of Radiology, 2007, Vol. 4, Suppl. 2
7. "Thermoluminescence dosimeter response". Journal of Rafsanjan
University of Medical Sciences, Summer 2006, Vol. 5, No.2, special
supplement
8. "Response of prostacyclin to low dose irradiation in the development
of radiation myelopathy". European journal of cancer (EJC)
Supplements 2005; Vol 3 N0 2 Oct. 2005

9. "Short term changes in prostacyclin secretory profile of irradiated rat cervical spinal cord" Toxicology and Applied Pharmacology 197 (2004) page 211
10. "Comparison between Co60 and Cs 137 radiations doses for lymphocyte inactivating". Physica medica EFOMP

Abstract Presented In Congress

- local hyperthermia case study for prostate cancer. VII Hyperthermie Kongress HypertHermIe InternatIonal Programm, Berlin 30.09. – 02.10.2016
- Quality Assurance in IOERT: Flatness and symmetry of the radiation beam. 10th International Breast Cancer Congress, Sh. Beheshti Medical University, Tehran-Feb. 2015 (1393)
- Radiobiology of single fraction electron beam radiotherapy. Presented at Mashhad IORT workshop, summer 1391
- The Role of MRSI in Clinical Target Volume Assessment for Radiotherapy of Prostate Cancer. 28th Iranian Congress of Radiology, Tehran, Iran, 15-18 May 2012
- GYN brachytherapy training phantom. 4th annual congress of the Iranian Society of Gynecological Oncology, Tehran, Iran, June 19-21, 2012
- Medical Physics role in Medical Laser application. 6th annual congress of Iranian Medical Laser Association, 29-30 Dec, 2011
- Development of a tool for converting MRS images to DICOM file. 17th Iranian Conference on Biomedical Engineering, 3-4 Nov. 2010
- Comparison between two methods of treatment plannings for Cranio-Spinal Irradiation. Persian Gulf Biotechnology Park, Queshm, 17-18, 2010
- Melatonin as a protective agent in spinal cord damage after gamma irradiation. Fourth International Conference on Translational Research and Pre-Clinical Strategies in Radiation Oncology – Geneva, March 11-13 2009
- Radiotherapy data workflow: Data Formats, Networking and Archiving. Imam Khomeini Imaging center, Tehran, Iran, January 2009
- Image based radiation therapy. Digital imaging treatment planning Seminar, Imam Khomeini Imaging center, Tehran, Iran, April 2008
- Investigation of vascular endothelial growth factor gene expression in irradiated rat cervical spinal cord. The 6th Congress of the Iranian Radiographic Sciences Association (6icrsa). Homa Hotel Shiraz, April 25-26/2008.

- Simulation of increment in skin exit dose due to base plate in radiotherapy by Monte Carlo method. The 6th Congress of the Iranian Radiographic Sciences Association (6icrsa). Homa Hotel Shiraz, April 25-26/2008.
- CT Simulation Role in Radiation Therapy Dosimetry. The 6th Congress of the Iranian Radiographic Sciences Association (6icrsa). Homa Hotel Shiraz, April 25-26/2008.
- Presentation of nursing oncology in Babol. 19th Asia, Pacific, Cancer Conference, APCC 2007, Nov. 15-17, 2007, Tehran, Iran
- Application of 3D treatment planning in head and neck radiotherapy, Congress of head and neck tumors, 18th annual cancer congress, cancer research center, 26-26, Oct., Tehran, Iran
- The role of CT simulation in radiotherapy treatment planning. Imaging Informatics Conference, Tehran, Iran
- Long term study of prostacyclin changes in radiation myelopathy. Neuro Oncology Congress, 22-24 Dec., Sh. Beheshti Medical University Cancer Research Center
- Quality dependence of LiF thermoluminescence dosimeter response. 1st human, life and radiation conference, 29-31 Oct., Rafsanjan, Iran
- Chronological response of prostacyclin changes to low-moderate doses of radiation in Rat cervical spinal cord. 2nd European IRPA congress on radiation protection, 15-19 May, Paris, France
- Short term changes in Prostacyclin secretory profile of irradiated Rat cervical spinal cord. 10th International congress of toxicology 11-15 July, Tampere, Finland
- Dosimetry in radiobiology. 6th Iranian congress of medical physics, held at Mashhad University of Medical Sciences
- Radiation myelopathy: a radiobiological review. Current achievements in oncology congress, 6-8 Nov., Poznan- Poland
- Lymphocyte inactivating Co60 radiation dose. 8th European congress of Medical Physics, 20-23 May, Eindhoven University of Technology- The Netherlands
- Comparison between two methods of shielded fields calculations. 1st int. congress of radiation applications in treatment and diagnosis, 18-20 Oct., Sh. Beheshti University of Medical Sciences
- Application of Sr89 in bone metastasis. 4th congress of Biochemistry, Babol university of medical sciences
- Accuracy and Reproducibility assessment of treatment fields in tele-radiotherapy. 3rd Iranian congress of Medical Physics, Iran University of Medical Sciences

Thesis supervisor

- 2017 (1396)- "Assesment of normal tissue comlication probability modelling based on radiogenomics and radiomics in patients with head and neck cancer" PhD Thesis Iran University of Medical Sciences.
- 2015 (1394)- "Radiobiological study of hyperthermia thermal enhancement effect on concurrent GBM radiotherapy based on clinical results", PhD Thesis, Iran University of Medical Sciences.
- 2015(1394)- " Monte Carlo simulation, verification and measurement of parameters effective in absorbed dose in IORT" PhD thesis, Tehran University of Medical Sciences
- 2013(1393)- "Feasibility of simultaneous Imaging, Dosimetry and Planning during breast IORT" PhD thesis, Sh. Beheshti University, Tehran
- 2013(1392)- "Treatment Planning Dosimetric Parameters of IORT" MSc thesis, Azad university
- 2012(1391)-"Development of a new method based on intelligence modeling to determine safe margin for CTV in adaptive radiotherapy for treatment of prostate cancer" PhD thesis, Iran Uni. of Medical Sciences
- 2012(1391)- "Determination and comparison of Dose-Response curves and radiobiological_Iso-effective doses between tele-therapy plus ultrasonic_hyperthermia and tele-therapy plus high dose rate brachytherapy in spheroid model of DU-145 human prostate carcinoma cell line" PhD thesis, Iran Uni. of Medical Sciences
- 2013(1392)- " Dosimetric calibration and validation of electronic portal imaging device for absorbed dose measurement in external radiation therapy" PhD thesis, Iran Uni. of Medical Sciences
- 2013 (1392)- "Comparison and specification of integral dose in 3DCRT and IMRT using megavoltage energies for optimization of treatment planning" PhD thesis, Iran Uni. of Medical Sciences
- 2013(1392)- "Dose response relation of auditory system in head and neck radiotherapy patients" PhD thesis, Iran Uni. of Medical Sciences
- 2013(1391)- " the evaluation of dose– effect relationship for radiotherapy-induced thyroid toxicity in head and neck cancer with Functional assay according to the NTCP models" PhD thesis, Tarbiat Modares Medical University

- 2011(1390)- " Evaluation of Diagnostic reference Level on CT Scan Examination in the City of Tehran" MSc student of Medical Physics, Tehran University of Medical Sciences
- 2011(1390)- " Organ body dose simulation using Monte Carlo EGS5 and human anthropomorphic phantom and benchmarking with TLD" MSc student of Medical Radiation engineering, Sharif University, Tehran
- 2011(1390)- " Dose simulation in different body parts in radiotherapy using Fluka Monte Carlo code on human phantom and benchmarking with TLD. MSc student of Medical Radiation engineering, Sharif University, Tehran
- 2011(1390)- " Dose simulation in different body parts in radiotherapy using BEAM Monte Carlo code on human phantom and benchmarking with TLD. MSc student of Medical Radiation engineering, Sharif University, Tehran
- 2010(1389)- " Investigation of cumulative genotoxic damage in spheroid culture of glioblastoma cells caused by 6 Mv X-ray or Iodine-131 beta-particles in presence of methoxy estradiol, IUDR and Topotecan. PhD student of Medical Physics, Tehran University of Medical Sciences
- 2010(1389)- "Dosimetric characterization of enhanced dynamic wedge implementation in radiation therapy of a heterogeneous phantom by measurement and Monte Carlo calculation" PhD student of Tehran (ex. Iran) University of Medical Sciences, Tehran
- 2010(1389)- "Numerical solution of bio-heat equation for optimization of thermal dose distribution in hyperthermia" PhD student, AZAD Uni., Tehran
- 2009(1388)- "Dynamic wedge dosimetry in chest wall irradiation" MSc student of medical radiation, AZAD Uni., Tehran
- 2009(1388)- "Comparison of conformal fields dosimetric parameters between 3D TPS..." MSc student of medical radiation, AZAD Uni., Tehran
- 2009(1388)- "Comparison of dosimetric parameters obtained by measurement, Coreplan 3D" MSc student of medical radiation, AZAD Uni., Tehran
- 2009(1388)- "MRS role in target definition of Brain tumour treatment planning" MSc student of medical radiation, AZAD Uni., Tehran
- 2009(1388)- "Simulation and Experimental Evaluation of Dose Enhanced Radiation Sensitivity in Prostate Cancer by Gold

- Nanoparticles in Mice" PhD of Medical Physics, Tehran University of Medical Sciences
- 2008(1387) - " Optimization of ethanol-chlorobenzene mass attenuation coefficient as a dosimeter for whole blood irradiation in Gamma-cell...." Iran University of Medical Sciences
MSc of Medical Physics, Iran Uni. Of Medical Sciences
- 2008(1387) - "Comparison of TRS-398 and AAPM-59 protocols for photon and electron beams with...." MSc of Physics, Mazandaran science university

Thesis co-supervision

- 2011(1389)- "Synergic effect of Iron Oxide nanoparticle with 5FU polymeric cover and 6MV x-ray on human prostate cancer cell of DU-145" MSc of Medical Physics, Tehran Uni. of Medical Sciences, Tehran
- 2010(1389)- " the evaluation of dose– effect relationship for radiotherapy-induced thyroid toxicity in head and neck cancer with Functional assay according to the NTCP models" PhD thesis of Tarbiat Moddaress University, Tehran
- 2010(1388)- "Radiobiological determination of direct damage in DNA, by I-131 and comparing to Monte Carlo simulation in Glioblastoma cells in monolayer cell culture" MSc of Medical Physics, Iran Uni. of Medical Sciences, Tehran
- 2010(1388)- "An alternative method for determination of requirement for using wedge in post mastectomy radiotherapy and Mont Carlo simulation" MSc of medical radiation, AZAD Uni., Tehran
- 2010(1388)-"Evaluation and analytical comparison of different 2D and 3D radiotherapeutic Treatment Planning Systems using Monte Carlo simulation and dosimetry with anthropomorphic thoracic phantom based on IAEA TEC-DOC 1583 protocol " MSc of medical radiation, AZAD Uni., Tehran
- 2010(1388)- " Design and fabrication of the IRA–¹⁰³Pd eye plaque..." PhD of Medical Radiation, AZAD Uni., Tehran
- 2009(1387)-" Spectral and dose distribution analysis of neutron and electron contamination produced in medical linear electron accelerators
- 2009(1387)-" Construction and development of a chemical dosimeter based on the radiochromic solid polymer and evaluation of it's response

- to high energy photons used in radiotherapy" PhD of Medical Physics, Tarbiat Moddaress University
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