

Curriculum Vitae
(Updated: January 2020)



Mohammad Amin Mosleh-Shirazi, PhD MIPEM CSci

Physics Unit, Radio-Oncology Department, Namazi Hospital, Shiraz University of Medical Sciences
Shiraz 71936-13311, Iran

Tel: (Office) +98 (0) 71 3612 5316

Telefax (Department): +98 (0) 71 3647 4320

Email: *mosleh_amin@hotmail.com* & *amosleh@sums.ac.ir*

BRIEF RESUME

- Member of University Faculty (Associate Professor) (Iran)
- Head of Radiotherapy Physics Unit (Iran)
- Head and Founding Member of the Center for Research on Protection against Ionizing and Non-ionizing Radiation (Iran)
- Deputy of Postgraduate Studies and former Head of Radiology and Radiobiology Department (Iran)
- President of the Iranian Association of Medical Physics
- Member of the National Examination and Assessment Board for Medical Physics, Radiation Protection, Radiobiology and Radiological Sciences (Iran)
- Member of the National Examination and Assessment Board for Clinical Oncology (Iran)
- Member of the Board of the National Radiotherapy Physics Committee (Iran)
- Advisor to the National Radiotherapy Steering Committee (Iran)
- Founding Member of Medical Imaging Research Center (Iran)
- Coordinator for PTW Freiburg Reference Hospital (Namazi Hospital, Iran)
- Chartered Scientist by the Science Council (UK)
- Registered Clinical Scientist (Medical Physicist) by the Health Professions Council (UK)
- Professional qualification: IPEM Higher Training Scheme in RT Physics (UK)
- Former Head of the University's Research Consultation Center (7.5 years) (Iran)
- Former Member of Namazi Hospital Radiation Protection Committee (5 years) (Iran)
- 25 years post-MSc experience of clinical/research/teaching work in medical physics (incl. 11 years at the Royal Marsden Hospital and Institute of Cancer Research, University of London, UK)
- Publications:
 - >100 papers in peer-reviewed journals
 - >170 conference papers and abstracts
 - Citations in >50 English-language textbooks and >1180 peer-reviewed articles
 - SCOPUS h-index: 18 (with self-citations), 17 (without self-citations)
- Member of Editorial Board: 2 journals.
- Guest Associate Editor: Medical Physics (USA)
- Scientific Secretary, Member of Scientific Committee and Session Chairman (various conferences)

**CURRENT
EMPLOYMENT**

Shiraz University of Medical Sciences, Iran
Member of Faculty

**2006 –
present**

- Associate Professor
- Head of Radiotherapy Physics Unit
- Head and Founding Member of the Center for Research on Protection against Ionizing and Non-ionizing Radiation
- Deputy of Postgraduate Studies and former Head (3 years) of Radiology and Radiobiology Department
- President of the Iranian Association of Medical Physics
- Member of the National Examination and Assessment Board for Medical Physics, Radiation Protection, Radiobiology and Radiological Sciences
- Member of the National Examination and Assessment Board for Clinical Oncology
- Member of the Board of the National Radiotherapy Physics Committee
- Advisor to the National Radiotherapy Steering Committee
- Founding Member of Medical Imaging Research Center
- Coordinator for PTW Freiburg Reference Hospital (Namazi Hospital)
- Former Head of the University's Research Consultation Center (7.5 years)
- Former Member of Namazi Hospital Radiation Protection Committee (5 years)

Main roles:

- Teaching, training, research and development
- Supervision of the patients' dose calculation and treatment planning service
- Supervision of the quality control and maintenance programmes of the equipment
- Specification, selection, acceptance and commissioning of new equipment
- Also, part-time member of the *Radiology & Radiobiology* and the *Medical Physics* Departments

**PREVIOUS
EMPLOYMENTS**

Royal Marsden Hospital and Institute of Cancer Research, UK

2000 – 2006

Clinical/Research Physicist: Senior (2000 – 2003), Principal (2003 – 2006)

- Performed clinically relevant research and development (predominantly in pediatric and CNS RT physics), teaching and training as well as contributing to the routine clinical programme.
- Work carried out to improve pediatric and CNS RT:
 - Commissioned the Pinnacle planning system for stereotactic conformal RT (including the commissioning of small-field beam models, export and modification of shielding blocks, CT-MRI fusion and DRR export to portal imaging systems).
 - Commissioned a HEK computerized block cutter.
 - Involved in the design, fabrication and clinical implementation of a new pediatric stereotactic frame and commissioning of a commercial one.
 - Carrying out an audit of the set-up reproducibility of children undergoing stereotactic conformal RT.
 - Evaluated and set up a practical method for routine craniospinal axis irradiation using forward-planned IMRT.
 - Involved in the commissioning of multislice helical CT and MRI scanners for radiotherapy applications.
 - Leading physicist on the evaluation and purchase of a wide-bore CT scanner and CT simulation package.

- Research:
 - Comparison of conventional and forward- and inverse-planned IMRT methods for craniospinal axis RT.
 - Planning study of conformal and IMRT techniques for posterior cranial fossa boosts including different treatment objectives.
 - Optimization of the number of stereotactic RT beams as a function of PTV shape and size.
 - Characterizing the properties of a prototype commercial MMLC.
 - Study assessing the efficacy of using DRRs as reference images for treatment verification in routine practice.
 - Study of observer reproducibility in interactive CT-MRI fusion techniques and its comparison with automated algorithms.
 - Planning study of cardiac dose in patients undergoing RT for esophageal cancer.
 - Investigation of Monte-Carlo generated electron dose distributions for clinical applications
 - Investigation of RT techniques for localized intracranial germinomas (including whole-ventricular RT)

- Main areas of responsibility: physics aspects of pediatric and CNS RT, the RT CT scanner, and Health & Safety

Brighton & Sussex University Hospitals, UK

1997 - 2000

Senior Clinical RT Physicist

- On a three-weekly *Duty Physicist* rotation with responsibility to deal with all RT physics queries.
- Checked treatment plans and charts, participated in the routine and developmental aspects of dosimetry, machine QA and brachytherapy programs, performed interdepartmental dosimetry audits, wrote *ISO9002* documentation, and audited the quality system.
- Involved in implementation of 3D treatment planning and commissioning of a cobalt unit, a superficial/orthovoltage machine, the *Osiris* contouring device and various dosimetry instruments.
- Commissioned beam data and shielding blocks on the *Helax-TMS* planning system, implemented a CT-based method for craniospinal axis treatments, wrote software to perform independent checks of treatment parameters, and computerized dose calculations for checking treatment plans.
- Involved in teaching and training for therapy radiographers

Royal Marsden Hospital, UK

1994 - 1997

Clinical RT Physicist (50% time)

- Carried out complex treatment planning, machine QA, TBI, dosimetry and patient contour measurement.
- Involved in the commissioning of a new wedge and beam data collection and processing for the *Target II* treatment planning system.
- Developed an automated system for processing TLD calibration readings and wrote *ISO9001* documents.

King's College Hospital, University of London, UK

1989

Fixed-Term Project Physicist

- Involved in the commissioning of a gamma camera for SPECT.

**TEACHING
AND
TRAINING**

Miscellaneous Courses

2006 - present

- Lecturer on the *Scientific Writing Course for PhD Students*, Shiraz, Iran (2020)
- Lecturer on the *Biomedical Engineering Summer School*, Shiraz, Iran (2019)
- Lecturer on the *Faculty Training Fellowship in Research*, Shiraz University of Medical Sciences (annually, 2011-present)
- Organizer and Lecturer on the *Workshop on Article Submission to Scientific Journals*, Shiraz University of Medical Sciences (annually, 2019-present)
- Organizer and Lecturer on the *Workshop on How to Write an Original Article*, Shiraz University of Medical Sciences (annually, 2017-present)
- Organizer and Lecturer on the *Workshop on How to give an effective oral presentation*, Shiraz University of Medical Sciences (annually, 2015-present)
- Organizer and Lecturer on the *Workshop on How to give an effective poster presentation*, Shiraz University of Medical Sciences (annually, 2015-present)
- Lecturer on the Clinical Radiotherapy Physics training workshops (*Photon & Electron Dosimetry, Linac Commissioning & QA, Treatment Planning*) organized by the Iranian Association of Medical Physics (2014, 2015, 2017, 2019)
- Organizer and lecturer on *Radiation Measurement Instruments Workshop*, 5th International and 17th Iranian Congress of Nuclear Medicine, Shiraz, Iran (2013)
- Organizer and Lecturer on the *Workshop on Monte Carlo simulation and the MCNP package*, Shiraz University of Medical Sciences (2011, 2012, 2016, 2017, 2018)
- Organizer and Lecturer on the *International workshop on advances in radiotherapy physics and technology*, Shiraz University of Medical Sciences (2011)
- Lecturer on *IMRT on the Workshop on Prostate Radiotherapy*, Cancer Society of Iran, Iran (2010)
- Lecturer on a refresher course on *nuclear medicine and radiotherapy technologies*, Shiraz University of Medical Sciences, Iran (2010)
- Lecturer on a course on *radiation protection in radiotherapy*, Shiraz University of Medical Sciences, Iran (2009)
- Lecturer on various topics on the *theoretical and practical course in radiotherapy*, Tehran University of Medical Sciences, Iran (2008, 2010)
- Lecturer on *medical image registration* on the *Continuing Medical Education* program, 24th Iranian International Congress of Radiology, Shiraz, Iran (2008)
- Lecturer on the *physics of modern radiotherapy* on the *radiation oncology physics* course, Matlab Group Company, Tehran, Iran (2008)

Shiraz University of Medical Sciences, Iran

2006 - present

- Lecturer and physics mentor in *Radiotherapy Physics* on the *Radiation Oncology Resident Training* programme
- Lecturer on *Radiation Dosimetry and Protection in Practice, Radiation Shielding Design, Radiation Physics, Medical Image Quality*, and *radiobiological modelling*, as part of the *Radiobiology and Radiation Protection MSc* degree
- Lecturer on the annual *Radiation Protection* course for radiology specialists
- Lecturer on *Scientific Writing* in the Master of Public Health degree programme
- Organizer and presenter of workshops on *Radiotherapy Treatment Planning, Peer Review of Scientific Papers, Effective Oral and Poster Presentation Skills*, and *Critical Appraisal*.
- Former lecturer on *Radiotherapy Physics* on the *MSc degree in Medical Physics and Radiology B.Sc.* degree
- Former lecturer on *Radiation Detection and Dosimetry* as part of the *Medical Physics MSc* degree
- Former lecturer on the *Physics of Radiology* on the *Radiology Resident Training* programme
- Former lecturer on *Medical Physics* for medical, dentistry and pharmacy students

Shiraz University, Iran

2006 - present

- Lecturer on the *Use of Imaging in Modern Radiotherapy, Advanced Radiotherapy Techniques* and *Advanced Dosimetry* as part of the *Medical Radiation PhD* degree
- Former Lecturer on *Planning and Calculation of Dose* as part of the *Medical Radiation MSc* degree
- Former Lecturer on *Radiation Detection and Dosimetry* as part of the *Medical*

Radiation MSc degree

- Member of the PhD entrance and comprehensive examination and thesis review committees

Kingston University, UK

2001 - 2005

- Lecturer on the *physics of treatment planning* as part of the *Therapeutic Radiography B.Sc.* degree

Institute of Cancer Research and Royal Marsden Hospital, UK

2001 – 2005

- Lecturer and practical tutor, annual *course on radiotherapy physics*
- Lecturer and practical tutor, annual *IMRT in clinical practice* course
- Lecturer and practical tutor, *stereotactic radiosurgery* course
- Lecturer and practical tutor, *use of CT in treatment planning* course
- Practical tutor, *IPEM physicist training* programmes (both *Basic* and *Higher*)
- Practical tutor, *RMH dosimetrist, radiation oncologist, and therapy radiographer induction training* programmes
- Practical tutor, *RMH therapy radiographer physics rotation* programme
- Direct involvement in teaching and training of visitors

**STUDENT
THESIS
SUPERVISION
(Completed
Projects)**

Shiraz University of Medical Sciences, Iran

2001 - present

- *Medical Physics or Radiobiology & Radiation Protection MSc* project supervisor: 20
- Joint *Medical Physics or Radiobiology & Radiation Protection MSc* project advisor: 14
- *Radiation Oncology Residency* project advisor: 1
- *Research placement supervisor* for an overseas medical student: 1

Shiraz University, Iran

- *Medical Radiation PhD* project supervisor: 2
- *Medical Radiation MSc* project supervisor or advisor: 22

Shiraz University of Technology, Iran

- *Applied Mathematics MSc* project advisor: 2

Tehran University of Medical Sciences, Iran

- *Medical Physics PhD* project supervisor: 1

Iran University of Medical Sciences, Iran

- *Medical Physics PhD* project advisor: 1

Isfahan University of Medical Sciences, Iran

- *Medical Physics MSc* project supervisor: 1

Shahid Beheshti University of Medical Sciences, Iran

- *Radiobiology MSc* project advisor: 1

Ahvaz Jondishapour University of Medical Sciences, Iran

- *Medical Physics PhD* project advisor: 1
- *Medical Physics MSc* project advisor: 1

Rafsanjan University of Medical Sciences, Iran

- *Dentistry* project supervisor: 1

Institute of Cancer Research and Royal Marsden Hospital, UK

- *PhD* supervisor (Jointly with Tehran University of Medical Sciences): 1
- Joint *MD research* project supervisor: 3

PROFESSIONAL TRAINING AND CERTIFICATION	<ul style="list-style-type: none"> • <i>IPEM Higher Training Scheme in RT Physics</i> 1994 – 1999 – approved by an IPEM panel through written portfolios and oral examinations, leading to <i>Corporate Membership (MIPEM)</i> (equivalent to <i>ABR</i> certification). • <i>IPEM Continuing Professional Development Programme</i> 2000 – present • <i>Registered Clinical Scientist (Medical Physicist)</i> by the <i>UK Health & Care Professions Council</i> 1999 – present • <i>Chartered Scientist (CSci)</i> by the <i>UK Science Council</i> 2005 – present • Faculty Training Fellowship in Medical Education 2009 (1 month)
EDUCATION	<p>PhD in Medical Physics 1992 - 1997 <u>Institute of Cancer Research, University of London, UK</u> Supervisors: Prof. W. Swindell, Prof. S. Webb</p> <ul style="list-style-type: none"> • <i>Taught module</i>: Included relevant physics, mathematics and statistics, introduction to cancer, and specialist electives on radiotherapy physics, medical imaging physics and Monte Carlo simulation • <i>Thesis</i>: Design, construction and evaluation of a combined portal imaging device and cone-beam megavoltage CT scanner for verification of RT treatments. <ul style="list-style-type: none"> – Work included <i>EGS4</i> Monte Carlo simulations, total design and implementation of an optical Monte Carlo model, hardware and software design, synchronization of the detector to an accelerator, and evaluation of the system for different types of treatment verification. – Examiners: Prof. Marcel van Herk and Dr. Ian Cullum <p>MSc in Medical Physics 1990 - 1991 <u>University of Surrey, UK</u></p> <ul style="list-style-type: none"> • Broad range of medical physics courses. • Thesis on ultrasonic tissue characterization in liver disease. <p>BSc (Honours) in Physics with Medical Applications 1986 - 1990 <u>King's College, University of London, UK</u></p> <ul style="list-style-type: none"> • Pure and applied physics courses. • Thesis on optimization of imaging parameters in brain SPECT.
PUBLICATIONS	<ul style="list-style-type: none"> • >100 papers in peer-reviewed journals • >170 conference papers and abstracts • Sets of lecture notes on <i>Radiotherapy Physics</i> (Introductory, Intermediate, Advanced)
CITATIONS	<ul style="list-style-type: none"> • Papers cited in >50 English-language textbooks and >1180 peer-reviewed articles • SCOPUS h-index: 18 (with self-citations), 17 (without self-citations)
MEMBERSHIP	<ul style="list-style-type: none"> • Corporate (Full) Member of the <i>Institute of Physics and Engineering in Medicine (IPEM, UK)</i> • Full Member of the <i>Iranian Association of Medical Physics</i> • Corresponding Member of the <i>American Association of Physicists in Medicine (AAPM)</i> • Affiliate Member of the <i>European Society for Radiotherapy and Oncology (ESTRO)</i> • Member of the <i>Iranian Radiographic Sciences Association</i>

PATENTS
(joint)

- Disinfection of medical waste using solar energy
- High-density concrete containing datolite for radiation shielding
- High-density concrete containing colemanite and galena for radiation shielding
- 4D MRI lung phantom

AWARDS

- Full scholarship, Summer School on Medical Radiation Detectors, Oxford University, UK, 1993
- IPEM prize for “best poster on a medical physics topic”, Roentgen Centenary Congress, UK, 1995
- “Best radiotherapy poster”, World Radiography Day Conference, London, UK, 2005
- “Member of Faculty with a large number of citations in reference textbooks”, Shiraz University of Medical Sciences award, 2008
- “Member of Faculty with a high *h-index*”, Shiraz University of Medical Sciences award, 2008 & 2015
- IAEA travel award, 2009
- “High-ranking faculty member in the Medical School” (based on educational quality evaluation), Shiraz University of Medical Sciences, 2011 & 2012
- Waived registration fee award, Joint AAPM/COMP Meeting, Vancouver, Canada, 2011
- “Largest number of international conference presentations by a Member of Faculty”, Shiraz University of Medical Sciences award, 2012
- IOMP travel award, 2013
- “Largest number of international conference oral presentations by a Member of Faculty”, Shiraz University of Medical Sciences award, 2013
- “Exemplary Faculty Member of the Medical School in 2013”, Shiraz University of Medical Sciences
- Senior author of the “best clinical dosimetry oral presentation”, Siemens Radiotherapy Users Meeting, Mashhad, Iran, 2014
- Project supervisor for the “best oral presentation award” winner, Iranian Conference on Medical Physics, Tehran, 2014
- Research-based promotion, Shiraz University of Medical Sciences award, 2015
- “Elite researcher in Iranian medical sciences community ($H\text{-index} > 15$ without self-citation)”, Ministry of Health, 2018
- “Elite researcher in the Fars Province”, Governor of Fars, 2019

EDITORIAL WORK

- Member of Editorial Board
 - *International Journal of Radiation Research*
 - *Middle East Journal of Cancer*
- Guest Associate Editor
 - *Medical Physics* (American Association of Physicists in Medicine)
- Former English Language Editor
 - Iranian Journal of Medical Physics
- Manuscript Reviewer
 - *Radiotherapy and Oncology* (European Society for Radiotherapy and Oncology)
 - *Medical Physics* (American Association of Physicists in Medicine)
 - *Physics in Medicine and Biology* (Institute of Physics and Engineering in Medicine, UK)
 - *British Journal of Radiology* (British Institute of Radiology)
 - *Clinical Oncology* (Royal College of Radiologists, UK)
 - *Physica Medica: European Journal of Medical Physics*
 - *African Journal of Biotechnology*
 - *Iranian Red Crescent Medical Journal*
 - *International Journal of Radiation Research*
 - *Iranian Journal of Medical Physics*
 - *Iranian Journal of Immunology*
 - *Journal of Research in Medical Sciences* (University of Isfahan, Iran)
 - *Scientific Medical Journal* (Ahvaz University of Medical Sciences, Iran)
- Conferences
 - *Scientific Secretary*
 - *Member of Scientific Committee*
 - *Session Chairman*
 - *Member of Discussion Panel*

EXPERIENCE AND SKILLS SUMMARY

- 25 years post-MSc experience of working on clinical/research/teaching aspects of medical physics
- Experience of teaching at B.Sc., M.Sc., Ph.D., M.D., professional development and medical specialist courses and supervision of students, projects and work placements at all levels.
- Areas of research:
 - *Radiotherapy*: Treatment verification and IGRT, brachytherapy, stereotactic RT, CNS RT, paediatric RT, oesophageal RT, head and neck RT, breast RT, treatment planning, IMRT, Monte Carlo simulation, electron RT, proton RT, dosimetry, total-body irradiation, radiobiology, radiation protection
 - *Imaging*: Detector development and optimization, multi-modality image registration, analytical and Monte Carlo model development, electronic portal imaging, cone-beam CT, PET-CT, SPECT
- Clinical experience in conventional and conformal RT including:
 - equipment commissioning and calibration
 - QA of treatment machines, simulators, CT scanners, planning systems and dosimetry equipment
 - dosimetry of MV and kV x-rays, electrons and γ -rays, and TLD and diode dosimetry
 - inter-departmental dosimetry audits
 - stereotactic RT and radiosurgery
 - 3D/IMRT/brachytherapy treatment planning (*Pinnacle, Oncentra EXB, Oncentra Brachy, Helax TMS, Eclipse, CadPlan, XKnife, Target, Panther, SagiPlan*)
 - beam data acquisition and analysis
 - treatment verification (EPIDs, megavoltage CT, verification of IMRT)
 - TBI, brachytherapy (LDR, HDR, Iridium wire), radionuclide therapy
- Research grants for capital equipment (UK) and medical research (Iran).
- Programming in *C, Visual Basic, FORTRAN, MATLAB* and *Pinnacle script language*
- Computing experience with *DOS, Windows, UNIX* and *VMS* on *PCs, SUNs, IBM RS6000s* and *VAXes*.

PAPERS IN PEER-REVIEWED JOURNALS

1. Daneshvar F, Salehi F, Karimi M, Vais RD, Mosleh-Shirazi MA, Sattarahmady N. "Combined X-ray radiotherapy and laser photothermal therapy of melanoma cancer cells using dual-sensitization of platinum nanoparticles." *J Photochem Photobiol B*. **203**:111737 (2020)
2. Mosleh-Shirazi MA, Shahcheraghi-Motlagh E, Gholami MH, Shakibafard A, Karbasi S, Fardid R. "Influence of dwell time homogeneity error weight parameter on treatment plan quality in inverse optimized high-dose-rate cervix brachytherapy using SagiPlan." *J Contemp Brachytherapy* **11**(3):256-266 (2019)
3. Salehi F, Daneshvar F, Karimi M, Dehdari Vais R, Mosleh-Shirazi MA, Sattarahmady N. "Enhanced melanoma cell-killing by combined phototherapy/radiotherapy using a mesoporous platinum nanostructure." *Photodiagnosis Photodyn Ther*. **28**:300-307 (2019)
4. Mosleh-Shirazi MA, Amraee A, Mohaghegh F. "Dose-response relationship and normal-tissue complication probability of conductive hearing loss in patients undergoing head-and-neck or cranial radiotherapy: A prospective study including 70 ears." *Phys Med*. **61**:64-69 (2019)
5. Zeinali-Rafsanjani B, Mosleh-Shirazi MA, Faghihi R, Saeedi-Moghadam M, Lotfi M, Jalli R. "A method for cranial target delineation in radiotherapy treatment planning aided by single-voxel magnetic resonance spectroscopy: evaluation using a custom-designed gel-based phantom and simulations." *Br J Radiol*. **92**(1104):20190216 (2019)
6. Kanani A, Karbasi S, Mosleh-Shirazi MA. "Independent assessment of source transit time for the BEBIG SagiNova[®] cobalt-60 high dose rate brachytherapy afterloader." *Australas Phys Eng Sci Med*. **42**(4):913-919 (2019)
7. Fardid R, Ghahramani P, Mosleh-Shirazi MA, Kalantari T, Behzad-Behbahani A, Kazemi E, Okhovat MA. "Expression of transforming growth factor-beta and interferon gamma biomarkers after whole body gamma irradiation." *J Cancer Res Ther*. **15**(Suppl):S135-S139 (2019)
8. Ketabi A, Ghafarian P, Mosleh-Shirazi MA, Mahdavi SR, Rahmim A, Ay MR. "Impact of image reconstruction methods on quantitative accuracy and variability of FDG-PET volumetric and textural measures in solid tumors." *Eur Radiol*. **29**(4):2146-2156 (2019)
9. Hosseini, M.A., Feizi, S., Mehdizadeh, A., Ashtari, P., Mojtahedzadeh, M., Mosleh-Shirazi, M.A., Alipour, A. "Dosimetric investigation of a new quantum dots/nanocomposite (CdTe QDs/PVK) sensor for real-time gamma radiation detection." *Applied Physics A: Materials Science and Processing* **125**(12):868 (2019)
10. Zeinali-Rafsanjani B, Faghihi R, Mosleh-Shirazi MA, Moghadam SM, Lotfi M, Jalli R, Sina S, Mina L. "MRS Shimming: An Important Point Which Should not be Ignored." *J Biomed Phys Eng*. **8**(3):261-270 (2018)
11. Zeinali-Rafsanjani, B., Mosleh-Shirazi, M.A., Saeedi-Moghadam, M., Sefidbakht, S. "Evaluating the distribution of research in radiation sciences as published in general medical physics journals." *Egyptian Journal of Radiology and Nuclear Medicine* **49**(4):1119-1124 (2018)
12. Tahmasebi Birgani MJ, Mahdavi M, Zabihzadeh M, Lotfi M, Mosleh-Shirazi MA. "Simultaneous characterization of electron density and effective atomic number for radiotherapy planning using stoichiometric calibration method and dual energy algorithms." *Australas Phys Eng Sci Med*. **41**(3):601-619 (2018)
13. Arianfard, F., Mosleh-Shirazi, M.A., Karbasi, S., Mousavi, S. "Quantification of skin dose increase and photon beam attenuation for a commercial couch top and breast board using dosimetric and Monte Carlo methods," *Int J of Rad Research* **16**(3), 299-309 (2018)
14. Ketabi, A., Ghafarian, P., Mosleh-Shirazi, M.A., Mahdavi, S.R., Ay, M.R. "The influence of using different reconstruction algorithms on sensitivity of quantitative 18F-FDG-PET volumetric measures to background activity variation," *Iran J of Nucl Med* **26**(2), 87-97 (2018)
15. Hosseini, M.A., Mohamadianpanah, M., Zare-Bandeamiri, M., Mosleh-Shirazi, M.A. "A preliminary study on the estimation of the number of cancer patients eligible for hadron therapy in Iran and Fars Province," *Iran J of Med Sciences* **43**(3), 313-317 (2018)
16. Keshtkar, M., Saba, V., Mosleh-Shirazi, M.A. "Application of different methods for reducing radiation dose to breast during MDCT," *J of Biomed Physics and Eng* **8**(4), 341-346 (2018)
17. Haddadi, G., Abbaszadeh, A., Mosleh-Shirazi, M.A., Okhovat, M.A., Salajeghe, A., Ghorbani, Z. "Evaluation of the effect of hesperidin on vascular endothelial growth factor gene expression in rat skin animal models following cobalt-60 gamma irradiation," *J of Cancer Research and Therapeutics* **14**(12), S1098-S1104 (2018)
18. Zeinali-Rafsanjani, B., Faghihi, R., Mosleh-Shirazi, M.A., Saeedi-Moghadam, M., Jalli, R., Sina, S. "Effect of age-dependent bone electron density on the calculated dose distribution from kilovoltage and megavoltage photon and electron radiotherapy in paediatric MRI-only treatment planning," *Brit J of Radiol* **91**(1081), 20170511 (2018)
19. Nedaie, H.A., Pak, F., Vaezzadeh, V., Eqlimi, E., Takavar, A., Saligheh Rad, H.R., Mosleh Shirazi, M.A., Mirheydari, M. "A novel quantification method for low-density gel dosimeter," *J of Cancer Research and Therapeutics* **14**(2), 292-299 (2018)
20. Jamali, F, Mortazavi, S.M.J., Kardan, M., Mosleh-Shirazi, M.A., Sina, S., Rahpeyma, J. "Developing light nano-composites with improved mechanical properties for neutron shielding," *Kerntechnik* **82**(6), 648-652 (2017)
21. Roncali, E., Mosleh-Shirazi, M.A., Badano, A. "Modelling the transport of optical photons in scintillation detectors for diagnostic and radiotherapy imaging," *Phys Med Biol* **62**(20): R207-R235 (2017)
22. Alizadeh Zarei, M., Takhshid, M.A., Behzad Behbahani, A., Hosseini, S.Y., Okhovat, M.A., Rafiee Dehbidi, G.R., Mosleh Shirazi, M.A. "Synergistic effects of NDRG2 overexpression and radiotherapy on cell death of human prostate LNCaP cells," *J Biomedical Physics Engineering* **7**(3): 257-264 (2017)
23. Faghihi, R., Zeinali-Rafsanjani, B., Mosleh-Shirazi, M.A., Saeedi-Moghadam, M., Lotfi, M., Jalli, R., Iravani, V. "Magnetic

- Resonance Spectroscopy and its Clinical Applications: A Review," *J Med Imaging and Rad Sciences* **48**(3): 233-253 (2017)
24. Mortazavi, S.M.J., Mostafavi-Pour, Z., Daneshmand, M., Zal, F., Zare, R., Mosleh-Shirazi, M.A. "Adaptive response induced by pre-exposure to 915 MHz radiofrequency: A possible role for antioxidant enzyme activity," *J Biomedical Physics Engineering* **7**(2):137-142 (2017)
 25. Fardid, R., Salajegheh, A., Mosleh-Shirazi, M.A., Sharifzadeh, S., Okhovat, M.A., Najafi, M., Rezaeyan, A., Abaszadeh, A. "Melatonin ameliorates the production of COX-2, iNOS, and the formation of 8-OHdG in non-targeted lung tissue after pelvic irradiation," *Cell Journal* **19**(2):324-331 (2017)
 26. Zeinali-Rafsanjani, B., Mosleh-Shirazi, M.A., Haghhighatafshar, M., Jalli, R., Saeedi-Moghadam, M. "Assessment of the dose distribution of Minibeam radiotherapy for lung tumors in an anthropomorphic phantom: A feasibility study," *Technol Health Care* **25**(4):683-692 (2017)
 27. Zeinali-Rafsanjani B, Faghihi R, Mosleh-Shirazi MA, Mosalaei A, Hadad K. "Revision of orthovoltage chest wall treatment by Monte Carlo simulations," *Technol Health Care* **25**(3):413-424 (2017)
 28. Aghamir SM, Mehrabani D, Amini M, Mosleh-Shirazi MA, Nematollahi S, Shekoochi-Shooli F, Mortazavi SM, Razeghian Jahromi I. "The Regenerative Effect of Bone Marrow-Derived Stem Cells on Cell Count and Survival in Acute Radiation Syndrome," *World J Plast Surg.* **6**(1):111-113 (2017)
 29. Haddadi GH, Rezaeyan A, Mosleh-Shirazi MA, Hosseinzadeh M, Fardid R, Najafi M, Salajegheh A. "Hesperidin as Radioprotector against Radiation-induced Lung Damage in Rat: A Histopathological Study." *J Med Phys* **42**(1):25-32 (2017)
 30. Najafi M, Fardid R, Takshshid MA, Mosleh-Shirazi MA, Rezaeyan AH, Salajegheh A. "Radiation-Induced Oxidative Stress at Out-of-Field Lung Tissues after Pelvis Irradiation in Rats," *Cell J.* **18**(3):340-5 (2016)
 31. Mortazavi SM, Shekoochi-Shooli F, Aghamir SM, Mehrabani D, Dehghanian A, Zare S, Mosleh-Shirazi MA. "The healing effect of bone marrow-derived stem cells in acute radiation syndrome," *Pak J Med Sci.* **32**(3):646-51 (2016)
 32. M.A. Mosleh-Shirazi, S. Rahimi, S. Karbasi. "Medium-term stability of the photon beam energy of an Elekta Compact linear accelerator based on daily measurements of beam quality factor," *Iran J Med Phys.* **12**(4): 230-234 (2015)
 33. P Mohammadyari, R Faghihi, MA Mosleh-Shirazi, M Lotfi, MR Hematiyan, C Koontz, AS Meigooni. "Calculation of dose distribution in compressible breast tissues using finite element modeling, Monte Carlo simulation and thermoluminescence dosimeters," *Phys. Med. Biol.* **60**(23): 9185–9202 (2015)
 34. Akmal Z, Shahbazi-Gahreuei D, Mosleh-Shirazi MA, Baradaran-Ghahfarokhi M, Fallahian N, Sherkat S. "Design and Fabrication of a 4-dimensional of Respiratory Phantom for Studying Tumor Movement in Radiotherapy with Magnetic Resonance Imaging," *J Isfahan Med Sch* **33**(333): 631-42 (2015)
 35. Mortazavi S. M. J., Rahimi S., Mosleh-Shirazi M. A., Arjomandi M., Soleimani A., Koohi Hossein-abadi O., Haghani M., Alavi M., "A Comparative Study on the Life-Saving Radioprotective Effects of Vitamins A, E, C and Over-the-Counter Multivitamins," *J Biomed Phys Eng* **5**(2): 59-66 (2015)
 36. Zeinali-Rafsanjani B, Mosleh-Shirazi MA, Faghihi R, Karbasi S, Mosalaei A. "Fast and accurate Monte Carlo modelling of a kilovoltage X-ray therapy unit using a photon-source approximation for treatment planning in complex media." *J Med Phys* **40**:74-9 (2015)
 37. Tahamtan R, Shabestani Monfared A, Tahamtani Y, Tavassoli AR, Akmal M, Mosleh-Shirazi MA, Naghizadeh MM, Ghasemi D, Keshavarz M, Haddadi GhH. "Radioprotective effect of melatonin on radiation-induced lung injury and lipid peroxidation in rats." *Cell J.*; **17**(1): 111-120 (2015)
 38. Mortazavi, S., Foadi, M., Mozdarani, H., Haghani, M., Mosleh-Shirazi, M.A., Abolghasemi, P., Nematollahi, S., Sharifzadeh, S. "Future role of vitamin C in radiation mitigation and its possible applications in manned deep space missions: Survival study and the measurement of cell viability," *Int. J. Radiat. Res* **11**(1): 55-60 (2015)
 39. M.A. Mosleh-Shirazi, S. Norouzi, M. Ansari, N. Ahmadloo, S.M.J. Mortazavi, S. Karbasi, A. Mosalaei, "Rectal wall dose estimation in intracavitary brachytherapy: A preliminary comparison of an in-house rectal wire versus ICRU 38 recommendations," *Int. J. Radiat. Res* **12**(4):369-372 (2014)
 40. S Omidvari, SH Hamed, L Moaddab-Shoar, H Nasrollahi, Y Daneshbod, MA Mosleh-Shirazi, M Ansari, M Mohammadianpanah, N Ahmadloo, A Mosalaei, "Paratesticular sarcoma; a case report," *Iran J Cancer Prev.*, **4**:239-43 (2014)
 41. S.M.R. Aghamiri, S.M.J. Mortazavi, M.A. Mosleh Shirazi, M. Baradaran-Ghahfarokhi, F. Rahmani, A. Amiri, S. Jarideh. "Production of a novel high strength heavy concrete using tourmaline and galena for neutron and photon radiation shielding," *Int. J. Radiat. Res.*, **12**(3): 277-282 (2014)
 42. M.A. Mosleh-Shirazi, Z. Zarrini-Monfared, S. Karbasi, A. Zamani, "ScintSim1: A new Monte Carlo simulation code for transport of optical photons in 2D arrays of scintillation detectors," *J Med Phys* **39**(1):18-23 (2014)
 43. M.A. Mosleh-Shirazi, A. Ketabi, S. Karbasi, R. Faghihi, "Assessment of an Unshielded Electron Field Diode Dosimeter for Beam Scanning in Small- to Medium-Sized 6 MV Photon Fields," *Iran J Med Phys*, **10**(1-2):51-57 (2013)
 44. Sina, S., Faghihi, R., Meigooni, A.S., Siavashpour, Z., Mosleh-Shirazi, M.A. "Developing a treatment planning software based on TG-43U1 formalism for Cs-137 LDR brachytherapy," *Iranian Red Crescent Medical Journal* **15**(8), 712-717 (2013)
 45. Zabihzadeh M, Mosleh Shirazi MA, Karegar L, Shams N. Investigation of Tissue Heterogeneities Effect on Dose Distribution from 192-Ir Source During Brachytherapy Treatments. *Jundishapur Sci Med J*; **12**(3):285-297 (2013) (in Farsi)
 46. Mortazavi S, Mosleh-Shirazi M, Tavassoli A, Taheri M, Mehdizadeh A, Namazi S, Jamali A, Ghalandari R, Bonyadi S, Haghani M, Shafie M. Increased Radioresistance to Lethal Doses of Gamma Rays in Mice and Rats after Exposure to Microwave Radiation Emitted by a GSM Mobile Phone Simulator. *Dose-Response*, **11**:281–292 (2013)
 47. M. Haghani, S.M.J. Mortazavi, D. Sardari, M.A. Mosleh-Shirazi, A. Mansouri. "Assessment of the role of specific absorption

- rate of mobile phones on the induction of microwave induced survival adaptive responses after exposure to lethal doses of gamma radiation." *Int. J. Radiat. Res.*, **11**(3): 167-173 (2013)
48. Nedaie HA, Mosleh-Shirazi MA, Allahverdi M. "Monte Carlo N Particle code - Dose distribution of clinical electron beams in inhomogeneous phantoms." *J Med Phys* **38**:15-21 (2013)
 49. M. A. Mosleh-Shirazi, K. Hadad, R. Faghihi, M. Baradaran-Ghahfarokhi, Z. Naghshnezhad, A. S. Meigooni. "EchoSeed Model 6733 Iodine-125 brachytherapy source: Improved dosimetric characterization using the MCNP5 Monte Carlo code," *Med. Phys.* **39**(8), 4653-9 (2012)
 50. MA Mosleh-Shirazi, S Karbasi, D Shahbazi-Gahrouei, and S Monadi. "A Monte Carlo and experimental investigation of the dosimetric behavior of low- and medium-perturbation diodes used for entrance in-vivo dosimetry in megavoltage photon beams," *J. Applied Clin. Med. Phys.* **13**(6):326-338 (2012)
 51. Zehtabian M, Faghihi R, Mosleh-Shirazi MA, Shakibafard AR, Mohammadi M, Baradaran-Ghahfarokhi M. "A Fast Model to Predict Respiratory Lung Motion for Image-Guided Radiotherapy: A feasibility study." *Iran. J. Radiat. Res.* **10**(2): 73-81 (2012)
 52. B Zeinali Rafsanjani, MA Mosleh-Shirazi, R Faghihi, A Mosalaei, S Omidvari, K Hadad, S Karbasi. "Breast Cancer and its Radiotherapeutic Methods." *Iran J Med Phys*, **9**(2), 75-85 (2012)
 53. Aghamiri SM, Mortazavi SM, Razi Z, Mosleh-Shirazi MA, Baradaran-Ghahfarokhi M, Rahmani F, Faeghi F. "Ulexite-galena intermediate-weight concrete as a novel design for overcoming space and weight limitations in the construction of efficient shields against neutrons and photons." *Radiat Prot Dosimetry* **154**(3):375-80 (2012)
 54. Mohammadianpanah M, Ashouri Y, Hoseini S, Ahmadloo N, Talei A, Tahmasebi S, Nasrolahi H, Mosalaei A, Omidvari S, Ansari M, Mosleh-Shirazi MA. "The efficacy and safety of neoadjuvant chemotherapy +/- letrozole in postmenopausal women with locally advanced breast cancer: a randomized phase III clinical trial," *Breast Cancer Res Treat.* **132**(3):853-61 (2012)
 55. M Zehtabian, R Faghihi , M H Zahmatkesh, A S Meigooni , M A Mosleh-Shirazi , S Mehdizadeh , S Sina and S Bagheri "Investigation of the dose rate dependency of the PAGAT gel dosimeter at low dose rates," *Radiat. Meas.* **47**, 139-144 (2012)
 56. M.A. Mosleh Shirazi, R. Faghihi, Z. Siavashpour, H.A. Nedaie, S. Mehdizadeh. "Independent Evaluation of an In-house Brachytherapy Treatment Planning System using Simulation, Measurement and Calculation Methods," *J. Applied Clin. Med. Phys.* **13**(2), 103-112 (2012)
 57. Naghshnezhad Z., Faghihi R., Mosleh-Shirazi M. A, Meigooni A. S. "Updating the Planar Patterson-Parker Table for Ir-192 and Cs-137 Brachytherapy Sources Using the Most Recent TG-43U1 Recommended Dosimetric Parameters," *J Biomed Phys Eng*, **2**(1): 1-15 (2012)
 58. Mohammadianpanah M, Razmjou-Ghalaei S, Shafizad A, Ashouri-Taziani Y, Khademi B, Ahmadloo N, Ansari M, Omidvari S, Mosalaei A, Mosleh-Shirazi MA. "Efficacy and safety of concurrent chemoradiation with weekly cisplatin \pm low-dose celecoxib in locally advanced undifferentiated nasopharyngeal carcinoma: A phase II-III clinical trial," *J Cancer Res Ther.* **7**(4):442-7 (2011)
 59. Lotfi M, Bagheri MH, Mosleh-Shirazi MA, Faghihi R, Baradaran-Ghahfarokhi M. "Evaluation of the changes in the shape and location of the prostate and pelvic organs due to bladder filling and rectal distension." *Iran. Red Crescent Med. J.* **13**(8):566-75 (2011)
 60. Aghamiri M.R., Mortazavi S.M.J., Tayebi M., Mosleh-Shirazi M.A., Baharvand H., Tavakkoli-Golpayegani A., Zeinali-Rafsanjani B. "A Novel Design for Production of Efficient Flexible Lead-Free Shields against X-ray Photons in Diagnostic Energy Range," *J Biomed Phys Eng* **1**(1): 17-21(2011)
 61. Sina S, Faghihi R, Meigooni AS, Mehdizadeh S, Mosleh Shirazi MA, Zehtabian M. "Impact of the vaginal applicator and dummy pellets on the dosimetry parameters of Cs-137 brachytherapy source." *J Appl Clin Med Phys.* **12**(3):183-193 (2011)
 62. S.M.J. Mortazavi, M.A. Mosleh-Shirazi, A.R. Tavassoli, M. Taheri, Z. Bagheri, R. Ghalandari, S. Bonyadi, M. Shafie, M. Haghani. "A comparative study on the increased radioresistance to lethal doses of gamma rays after exposure to microwave radiation and oral intake of flaxseed oil," *Iran. J. Radiat. Res.* **9**(1): 9-14 (2011)
 63. A. Fakhrazadeh Jahromi, O. Bozorg, H. Maleki, M. A. Mosleh-Shirazi. "Fluence Map Optimization in Intensity Modulated Radiation Therapy for Fuzzy Target Dose," *Iranian Journal of Fuzzy Systems* **8**(4): 93-105 (2011)
 64. V. Moslemi, A. Esmaili-Torshabi, M.A. Mosleh-Shirazi, R. Faghihi, A. Mosallae, S. Mehdizadeh, K. Hadad. "CT-based brachytherapy treatment planning using Monte Carlo simulation aided by an interface software," *Iran. J. of Med. Physics* **8**(1):41-53 (2011) (in Farsi)
 65. M Ansari, S Omidvari, A Mosalaei, N Ahmadloo, MA Mosleh-Shirazi, M Mohammadianpanah. "A Phase II Study of Docetaxel, Cisplatin and 5- Fluorouracil (TPF) In Patients with Locally Advanced Head and Neck Carcinomas," *Iran. Red Crescent Med. J.* **13**(3):187-191 (2011)
 66. S Omidvari, A Shafizad, S Razmjou-Ghalaei, H Nasrolahi, N Ahmadloo, M Ansari, A Mosalaei, MA Mosleh-Shirazi, M Mohammadianpanah. "Efficacy of Topical Honey, Topical Hydrocortisone 1% and Simple Washing on Healing of Radiation-induced Dermatitis in Breast Cancer Patients," *Journal of Isfahan Medical School* **28**(113), 2nd week, January, 1-9 (2011) (in Farsi)
 67. M Baradaran-Ghahfarokhi, M H Bagheri, M Lotfi, M A Mosleh-Shirazi, R Faghihi, K Hadad, S Sina. "Comparison of Prostate and Bladder Volume Measurements from MRI and Pre- and Post-MRI Ultrasound Images," *Middle East J. of Cancer* **1**(4): 167-173 (2010)
 68. S.M.J. Mortazavi, M.A. Mosleh-Shirazi, P. Roshan-Shomal, N. Raadpey and M. Baradaran-Ghahfarokhi. "High-Performance Heavy Concrete as a Multi-Purpose Shield," *Radiation Protection Dosimetry* **142**(2-4), 120-124 (2010)

69. M. Baradaran-Ghahfarokhi, M.A. Mosleh-Shirazi, R. Faghihi, M.H. Bagheri, K. Hadad, A. Alavian-Ghavanini, Z. Siavashpour, H. Kasayi. "Calculation of Changes in Radiation Exposure due to Prostate Displacement in Permanent Prostate Brachytherapy," *Middle East J. of Cancer* **1**(3): 123-128 (2010)
70. N Ahmadloo, F Bidouei, MA Mosleh-Shirazi, GH Omrani, S Omidvari, A Mosalaei, M Ansari, H K Ahmadi, M Mohammadianpanah. "Impact of Scattered Radiation on Testosterone Deficiency and Male Hypogonadism in Rectal Cancer Treated with External Beam Pelvic Irradiation," *Middle East J. of Cancer* **1**(3): 115-122 (2010)
71. Mosleh-Shirazi MA. "Safe and Judicious Use of Advanced Radiotherapy Techniques and Equipment: A Medical Physicist's Perspective on Recent Accident Reports." *Middle East J. of Cancer* **1**(2): 59-63 (2010) (Editorial)
72. SMJ Mortazavi, MA Mosleh-Shirazi, M Baradaran-Ghahfarokhi, Z Siavash-Pour, A Farshadi, M Ghafouri, A Shahvar. "Production of a Datolite Based Heavy Concrete for Shielding Nuclear Reactors and Megavoltage Radiotherapy Rooms," *Iran. J. Radiat. Res.* **8**(1): 11-15 (2010)
73. A Mosalaei, H Nasrolahi, A Shafizad, N Ahmadloo, M Ansari, MA Mosleh-Shirazi, S Omidvari, M Mohammadianpanah. "Effect of Oral Zinc Sulphate in Prevention of Radiation Induced Oropharyngeal Mucositis During and After Radiotherapy in Patients with Head and Neck Cancers." *Middle East J. of Cancer* **1**(2): 69-76 (2010)
74. SMJ Mortazavi, MA Mosleh-Shirazi, S Mehdizadeh, MS Rouintan, J Ebrahimi, M Tamaddon and M Koshnevis. "Short-term Radon Inhalation Induces a Significant Survival Adaptive Response in Balb/c Mice," *Int. J. Low Rad.* **7**(2): 98-109 (2010)
75. S. Sina, R. Faghihi, A.S. Meigooni, S. Mehdizadeh, M. Zehtabian, M.A. Mosleh-Shirazi. "Simulation of the shielding effects of an applicator on the AAPM TG-43 parameters of CS-137 Selectron LDR brachytherapy sources," *Iran. J. Radiat. Res.* **7**(3): 135-140 (2009)
76. N Ahmadloo, MA Nazer Mozaffari, M Mohammadianpanah, SH Omidvari, A Mosalaei, MA Mosleh-Shirazi. "Combined Neoadjuvant Chemotherapy and Celecoxib in Locally Advanced Breast Cancer," *Iran. Red Cresc. Med. J.* **11**(4):419-424 (2009)
77. R Faghihi, MA Mosleh-Shirazi, F Moradi-Mocarram. "Optimization of beam orientation and weight in forward-planned radiotherapy using a genetic algorithm," *Iran. J. of Med. Physics* **6**(2): 51-58 (2009) (in Farsi)
78. M.A. Mosleh-Shirazi, D. Shahbazi-Gahreuei, S. Karbasi. "Characterization and Monte Carlo Simulation of Low- and High-Perturbation in-vivo Diode Dosimeters for 9 MV X-Rays," *IFMBE Proc.* **25**(I): 731-734 (2009)
79. M. Mohammadianpanah, N. Ahmadloo, M.A. Nazer Mozaffari, M.A. Mosleh-Shirazi, S. Omidvari and A. Mosalaei. "Primary localized stages I and II non-Hodgkin's lymphoma of the nasopharynx: a retrospective 17-year single institutional experience," *Ann. Hematol.* **88**(5): 441-7 (2009)
80. M.S. Mosleh-Shirazi, M. Mohammadianpanah, M.A. Mosleh-Shirazi. "Squamous cell carcinoma of the oral tongue: a 25-year single institution experience," *J. Laryngol. Otol.* **123**: 114-120 (2009)
81. E. Raggi, M.A. Mosleh-Shirazi, F.H. Saran. "An evaluation of conformal and intensity-modulated radiotherapy in whole-ventricular irradiation for localised primary intracranial germinomas." *Clin. Oncol.* **20**: 253-260 (2008)
82. V. Moslemi, R. Faghihi, M.A. Mosleh-Shirazi, A. Mosallae, S. Mehdizadeh. "CT number to electron density calibration using stoichiometry for use in radiotherapy." *Iran. J. of Med. Physics* **3** (13): 59-66 (2007) (in Farsi)
83. SMJ Mortazavi, MA Mosleh-Shirazi, MR Maheri, H Yousefnia, S Zolghadri, and A Haji-pour. "Production of an Economic High-Density Concrete for Shielding Megavoltage Radiotherapy Rooms." *Iran. J. Radiat. Res.* **5** (3): 143-146 (2007)
84. S. Omidvari, H. Saboori, M. Mohammadianpanah, A. Mosalaei, N. Ahmadloo, F. Jowkar, M.A. Mosleh-Shirazi, S. Namazi. "Evaluation of topical betamethasone for the prevention of acute radiation-induced dermatitis: a prospective clinical trial." *Indian J Dermatol Venereol Leprol.* **73**: 209 (2007)
85. G. Minniti, F. Saran, D. Traish, R. Soomal, S. Sardell, A. Gonsalves, S. Ashley, J. Warrington, K. Burke, A. Mosleh-Shirazi, M. Brada. "Fractionated stereotactic conformal radiotherapy following conservative surgery in the control of craniopharyngiomas." *Radiother Oncol.* **82**(1): 90-95 (2007)
86. M.A. Mosleh-Shirazi. "Radiotherapy techniques for intracranial tumours." *Iran. J. Radiat. Res.* **4**(2): 53-62 (2006)
87. M.A. Mosleh-Shirazi, H. Taylor, A.P. Warrington, F.H. Saran. "Measurement of the immobilisation efficacy of a head fixation system." *Iran. J. Radiat. Res.* **4** (1): 1-6 (2006)
88. H. Nedaie, M.A. Mosleh-Shirazi, M. Shariari, H. Gharaati, M. Allahverdi. "Monte Carlo Study of Electron Dose Distributions Produced by the Elekta Precise Linear Accelerator." *Rep. Pract. Oncol. Radiother.* **11**(6): 287-292 (2006)
89. H. Nedaie, M.A. Mosleh-Shirazi, M. Shariari, H. Gharaati, M. Allahverdi. "Assessment of different MCNP Monte Carlo codes in electron absorbed dose." *Rep. Pract. Oncol. Radiother.* **11**(6): 293-298 (2006)
90. P. M. Evans, M.A. Mosleh-Shirazi, E.J. Harris, J. Seco. "Monte Carlo and Lambertian Light Guide Models of the Light Output from Scintillation Crystals at Megavoltage Energies." *Med. Phys.* **33**(6): 1797-1809 (2006)
91. M.A. Mosleh-Shirazi and C. P. South. "How precise is manual CT-MRI registration for cranial radiotherapy planning?" *Iran. J. Radiat. Res.* **3**(2): 53-62 (2005)
92. S.J. Rogers, M.A. Mosleh-Shirazi, F.H. Saran. "Radiation therapy of localised CNS germinoma - time to sever historical ties?" *Lancet Oncol.* **6**(7), 509-519 (2005)
93. M. Cominos, M.A. Mosleh-Shirazi, D. Tait, A. Henrys, P. Cornes. "Quantification and reduction of cardiac dose in the treatment of oesophageal cancer." *Br. J. Radiol.* **78** 1069-1074 (2005)
94. H.A. Nedaie, H. Gharaati, M. Shariary, M. Allahverdi, M.A. Mosleh-Shirazi "Comparison of different MCNP4C, 4B and 4A Monte Carlo codes when calculating electron therapy depth doses." *Iran. J. Radiat. Res.* **2**(4): 191-195 (2005)
95. M.A. Mosleh-Shirazi, V.N. Hansen, P.J. Childs, A.P. Warrington, F.H. Saran. "Commissioning and implementation of a stereotactic conformal radiotherapy technique using a general-purpose planning system." *J. Applied Clin. Med. Phys.* **5**(3), 1-14 (2004)

96. J.L. Bedford, P.J. Childs, V.N. Hansen, M.A. Mosleh-Shirazi, F. Verhaegen and A.P. Warrington. "Commissioning and quality assurance of the ADAC Pinnacle³ radiotherapy treatment planning system for external beam photons." *Br. J. Radiol.* **76**(903):163-176 (2003)
97. G.S. Wagner, S.E. Batey and M.A. Mosleh-Shirazi, "Directionality of extruded lithium fluoride thermoluminescence dosimeters in a cobalt-60 beam," *Br. J. Radiol.* **73**(873):1007-9 (2000)
98. M. Partridge, P.M. Evans, A. Mosleh-Shirazi, and D. Convery "Independent verification using portal imaging of intensity-modulated beam delivery by the dynamic MLC technique," *Med. Phys.* **25**(8), 1872-9 (1998)
99. M. Partridge, P.M. Evans, and M.A. Mosleh-Shirazi, "Linear accelerator output variations and their consequences for megavoltage imaging," *Med. Phys.* **25**(8), 1443-52 (1998)
100. M.A. Mosleh-Shirazi, P.M. Evans, W. Swindell, J.R.N. Symonds-Taylor, S. Webb, and M. Partridge "Rapid portal imaging with a high-efficiency, large field-of-view detector," *Med. Phys.* **25**(12), 2333-46 (1998)
101. M.A. Mosleh-Shirazi, P.M. Evans, W. Swindell, S. Webb, and M. Partridge, "A cone-beam megavoltage CT scanner for treatment verification in conformal radiotherapy," *Radiother. Oncol.* **48**, 319-28 (1998)
102. M.A. Mosleh-Shirazi, W. Swindell, and P.M. Evans, "Optimization of the scintillation detector in a combined 3D megavoltage CT scanner and portal imager," *Med. Phys.* **25**(10), 1880-90 (1998)
103. W. Swindell and M.A. Mosleh-Shirazi, "Noise reduction by frame averaging: A numerical simulation for portal imaging systems," *Med. Phys.* **22**(9), 1405-11 (1995)
104. M.A. Mosleh-Shirazi, W. Swindell, and P.M. Evans, "Monte Carlo simulations of CsI(Tl) scintillation crystals for use in a three-dimensional megavoltage CT scanner," *Nucl. Inst. Meth. A* **348**, 563-6 (1994)

CONFERENCE TALKS AND POSTERS:

1. MA Mosleh-Shirazi, "IGRT: Targeting cancer with safety," *IMRT Indications, Uncertainties and Concerns Seminar*, Mashhad, Iran (2019) (invited)
2. MA Mosleh-Shirazi, "Imaging-based accuracy requirements and uncertainties in radiotherapy," *First IMRT Seminar*, Erfan Niayesh Hospital, Tehran, Iran (2019) (invited)
3. MA Mosleh-Shirazi, "Role of QA in Radiotherapy," *IAEA IMRT Workshop*, Tehran, Iran (2019) (invited)
4. MA Mosleh-Shirazi, "Radiobiological Modelling of the Probability of Normal Tissue Damage in Radiotherapy," *Third Int. Clinical Oncology Congress*, Tehran, Iran (2018) (invited)
5. MA Mosleh-Shirazi, "Feasibility of Ion Therapy in Iran," *First Seminar on the Status & Emerging Role of Particle Therapy in Oncology*, Tehran, Iran (2018) (invited)
6. MA Mosleh-Shirazi, "Recent advances in radiotherapy of female-specific cancers." *7th Int. Conference on Women's Health*, Shiraz, Iran (2018) (invited)
7. MA Mosleh-Shirazi, E Fathipour, M Ansari; M Mohammadianpanah, MR Sasani, P Jafari, SH Hamed, MR Sasani, H Nasrollahi, A Mosalaei, S Omidvari, N Ahmadloo, A Amraee. "Acute esophagitis and swallowing dysfunction in head-and-neck radiotherapy: Evaluation of dose-response and NTCP model parameters," *World Congress on Medical Physics and Biomedical Engineering*, Prague, Czech Republic, 1055 (2018)
8. M.A. Mosleh-Shirazi, "The role of imaging in modern radiotherapy methods," *National Conference of Radiological Sciences*, Rafsanjan, Iran (2018) (invited)
9. N Shahsavani; MA Mosleh-Shirazi; Sh Omidvari; A Abolhasani Foroughi; B Zeinali Rafsanjani; H Nasrollahi; M Mohammadianpanah; A Mosalaei; N Ahmadloo; M Ansari; AE Nahum. "Chest-wall irradiation by kilovoltage x-rays: Observed local control rate versus predicted radiobiological tumor control probability," *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 466, 10.22038/IJMP.2018.13158 (2018)
10. H Abdollahi; MA Mosleh-Shirazi; SMJ Mortazavi; S Omidvari. "Comparing of different normal tissue complication probability models for plan evaluation of radical radiotherapy for esophageal cancer," *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 199, 10.22038/IJMP.2018.12816.12793 (2018)
11. H Abdollahi; MA Mosleh-Shirazi. "A free user friendly program for evaluation of radiotherapy plans based on different dose response models." *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 201, 10.22038/IJMP.2018.12818 (2018)
12. S Ranjbar; MA Mosleh-Shirazi; S Gholami; S Karbasi; Z Zarrini-Monfared. "Comparison of ScintSim1 and Geant4 Monte Carlo simulation codes for optical photon transport in thick segmented scintillator arrays," *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 218, 10.22038/IJMP.2018.12841 (2018)
13. B Zeinali-Rafsanjani; MA Mosleh-Shirazi; R Faghihi; M Saeedi-Moghadam; R Jalli. "Discrepancies in dose distributions due to age-dependent bone electron density in pediatric MRI-only treatment planning: A Monte Carlo study," *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 333, 10.22038/IJMP.2019.12987 (2018)
14. E Fathipour; MA Mosleh-Shirazi; M Ansari; M Mohammadianpanah; MR Sasani; P Jafari. "A prospective radiobiological study of acute esophagitis and swallowing dysfunction in head-and-neck radiotherapy," *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 59, 10.22038/IJMP.2018.11964 (2018)
15. Z Akmal; D Shahbazi-Gahreuei; MA Mosleh-Shirazi; M Baradaran-Ghahfarokhi; N Fallahian; S Sherkat. "Design and Fabrication of a Four-Dimensional Respiratory Phantom for Studying Tumor Movement in Radiotherapy with Magnetic

- Resonance Imaging,” *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 252, 10.22038/IJMP.2018.12888 (2018)
16. A Kanani; S Karbasi; MA Mosleh-Shirazi. “Independent assessment of source transit time for the BEBIG SagiNova[®] high dose rate brachytherapy afterloader,” *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 268, 10.22038/IJMP.2018.12912 (2018)
 17. MJ Thahmasebi Birgani; M Mahdavi; M Zabihzadeh; M Lotfi; MA Mosleh-Shirazi. “Characterization of electron density of the real tissues for radiotherapy planning using dual energy algorithm and stoichiometric calibration method,” *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 109, 10.22038/IJMP.2018.12438 (2018)
 18. M Rajabi-pour; R Fardid; T Zare; MA Mosleh Shirazi. “Assessment of adaptive response of gamma radiation in the operating room personnel exposed to anesthetic gases by measuring the expression of Ku 80, Ligase1 and P53 genes,” *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 181, 10.22038/IJMP.2018.12793 (2018)
 19. V Nazari; SR Mahdavi; A Mostaar; HA Nedaei; MA Mosleh Shirazi; Golbarg Esmailie. “Camera based EPID dosimetric verification of radiation treatments,” *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 217, 10.22038/IJMP.2018.12840 (2018)
 20. M Behjati; M Sohrabpour; SP Shirmardi; MA Mosleh-Shirazi; F Bouzarjomehri. “Calculation of wedged dose distributions using an analytical method,” *12th Iranian Congress of Medical Physics, Ir. J. of Med. Physics* **15** (Suppl) 105, 10.22038/ijmp.2018.12433 (2018)
 21. M.A. Mosleh-Shirazi, “Equipment for in-room imaging,” *Perspectives of Advanced Radiotherapy in Middle Income Countries Conference*, Tehran, Iran (2018) (invited)
 22. M.A. Mosleh-Shirazi, A. Amraee, F. Mohaghegh. “A prospective study of dose-response relationship and NTCP of conductive hearing loss in patients undergoing head and neck radiotherapy,” *European Congress of Medical Physics, Copenhagen, Denmark, Physica Medica: European J of Med Physics* **52** (Suppl 1) 28 (2018)
 23. M.A. Mosleh-Shirazi, The use of linear accelerators in modern radiation therapy of cancer, *Third Iranian Particle Accelerator Conference*, Esfahan, Iran (2017) (invited)
 24. M.A. Mosleh-Shirazi, F. Arianfard, S. Karbasi, S. Mousavi. “Quantification of skin dose and beam attenuation for the iBEAM couch and Compact accelerator,” *36th Annual ESTRO Conference*, Vienna, Austria, *Radiother. Oncol.* (Suppl 1) (2017)
 25. M.A. Mosleh-Shirazi. “Image guidance in modern radiotherapy: Some new aspects,” *The Second National Conference on Optimisation in Radiotherapy*, Mashhad, Iran (2017) (invited)
 26. A Amraee, MA Mosleh-Shirazi, F Mohaghegh. “Evaluation of the need for considering conductive hearing loss in optimization of radiotherapy treatment planning of head and neck cancer: A prospective study,” *The Second National Conference on Optimisation in Radiotherapy*, Mashhad, Iran (2017)
 27. M.A. Mosleh-Shirazi, “Scientific thinking & communication: An invitation to young researchers,” *6th National Students’ Congress on New Horizons of Rehabilitation Sciences*, Shiraz, Iran (2017) (invited)
 28. M.A. Mosleh-Shirazi, M. Zehtabian, T. Amirabadi, M.R. Hematiyan, M.R. Parishan, H. Shahbazi, S. Farahangiz. “Predictive modeling of respiratory lung motion using single-phase CT and finite-element analysis,” *35th Annual ESTRO Conference*, Turin, Italy, *Radiother. Oncol.* **119** (Suppl 1), S830 (2016)
 29. B Zeinali-Rafsanjani, MA Mosleh-Shirazi, M Haghigatafshar, M Saeedi-Moghadam, “Evaluation of important physical parameters in micro-beam radiotherapy of lung tumors,” *14th International Congress of the International Radiation Protection Association*, Cape Town, South Africa, P03.114 (2016)
 30. F Jamali, SMJ Mortazavi, MR Kardan, S Sina, MA Mosleh-Shirazi, J Rahpeyma. “Developing Light Nano-Composites with Improved Mechanical Properties for Neutron Shielding,” *14th International Congress of the International Radiation Protection Association*, Cape Town, South Africa, P03.32 (2016)
 31. SMJ Mortazavi, F Jamali, MR Kardan, S Sina, MA Mosleh-Shirazi, J Rahpeyma. “Comparison of the Efficacy of Neutron Shielding of Aluminum and Polyethylene Composites Containing Micro and Nano-Sized B4C and Carbon Nanotubes,” *14th International Congress of the International Radiation Protection Association*, Cape Town, South Africa, P04.16 (2016)
 32. B Zeinali-Rafsanjani, M Haghigatafshar, M Saeedi-Moghadam, MA Mosleh-Shirazi. “Assessment of radiation science studies in 4 successive years,” *14th International Congress of the International Radiation Protection Association*, Cape Town, South Africa, P02.96 (2016)
 33. M.A. Mosleh-Shirazi, R. Faghihi, N. Bahaedini, K. Haddad, M. Mohammadianpanah, “Dependence of jaws-only and MLC-based IMRT quality on PTV shape complexity: A comparison using a complexity index,” *Third ESTRO Forum*, Barcelona, Spain, *Radiother. Oncol.* **115** (Suppl 1), S868 (2015)
 34. F. Dana, M.A. Mosleh-Shirazi, R. Faghihi, A. Piroozmand, S. Karbasi, S. Sina, H. Safigholi, “Simulation of a miniature x-ray tube used with nanoparticles for improved tumor dose homogeneity and enhancement,” *Third ESTRO Forum*, Barcelona, Spain, *Radiother. Oncol.* **115** (Suppl 1), S535 (2015)
 35. M.A. Mosleh-Shirazi, “Intensity modulated arc therapy and volumetric modulated arc therapy,” *Proceedings of the Iranian Conf of Medical Physics*, Tehran, Iran, 97 (2014) (invited)
 36. P Mohammadyari, R Faghihi, MA Mosleh-Shirazi, M Lotfi, MR Hemmatian, Craig Koontz, AS Meigooni, “Calculation of Dose Distribution of AccuBoost Brachytherapy in Deformable Polyvinyl Alcohol Breast Phantom using Biomechanical Modeling and Monte Carlo Simulation,” *Iranian Conf of Medical Physics*, Tehran, Iran, 99 (2014)
 37. M Zehtabian, MA Mosleh-Shirazi, R Faghihi, J Shepherd, M Mohammadi, “Comparison of the volumes of lung tumor PTVs obtained from 3D-CT and 4D-CT,” *Iranian Conf of Medical Physics*, Tehran, Iran, 108 (2014)
 38. A Ketabi, MA Mosleh-Shirazi, S Karbasi, R Faghihi, “Investigation of in-vivo dosimetry for small radiotherapy fields using

- measurements and Monte Carlo simulations,” *Iranian Conf of Medical Physics*, Tehran, Iran, 117 (2014)
39. A Ketabi, MA Mosleh-Shirazi, S Karbasi, R Faghihi, “A study of the effects of in-vivo dosimeters in small-to-medium sized radiotherapy fields: TLD and EFD measurements and Monte Carlo simulations,” *Iranian Conf of Medical Physics*, Tehran, Iran, 118 (2014)
 40. A Ketabi, MA Mosleh-Shirazi, S Karbasi, R Faghihi, “Comparison of the EFD with PFD, RK chamber and Monte Carlo simulations for scanning in small-to-medium radiotherapy fields,” *Iranian Conf of Medical Physics*, Tehran, Iran, 119 (2014)
 41. MR Akbari, M sadeghi, R Faghihi, MA Mosleh-Shirazi, M Khonakdar, “Monte Carlo-based calculation of the spectra of secondary particles and doses in non-target tissues in proton radiotherapy for thyroid cancer,” *Iranian Conf of Medical Physics*, Tehran, Iran, 127 (2014)
 42. B Zeinali-Rafsanjani, MA Mosleh-Shirazi, R Faghihi, K Hadad, A Mosalaei, S Karbasi, “A study of important parameters in chest-wall kilovoltage x-ray therapy and suggestions for improvements,” *Iranian Conf of Medical Physics*, Tehran, Iran, 141 (2014)
 43. J Bagherzadeh-Homaie, MA Mosleh-Shirazi, S Karbasi, SMJ Mortazavi, “Validation of the percentage depth dose and beam profiles calculated by the Prowess Panther treatment planning system for wedged and unwedged beams of an Elekta Compact linac,” *Iranian Conf of Medical Physics*, Tehran, Iran, 146 (2014)
 44. Z Noori Mazandarani Rad, MA Mosleh-Shirazi, M Ansari, “The effect of the type of accurate dose algorithm and the iteration number it is used on the quality of the treatment plan obtained by Oncentra EXB,” *Iranian Conf of Medical Physics*, Tehran, Iran, 159 (2014)
 45. M Behjati, M Sohrabpour, F Bouzarjomehri, MA Mosleh-Shirazi, “Calculation of dose distributions from wedged megavoltage beams using an analytical method,” *Iranian Conf of Medical Physics*, Tehran, Iran, 191 (2014)
 46. N Bahaedini, MA Mosleh-Shirazi, R Faghihi, K Hadad, M Mohammadiapanah, “Investigation of the capabilities of jaws-only IMRT,” *Iranian Conf of Medical Physics*, Tehran, Iran, 196 (2014)
 47. V Nazari, SR Mahdavi, MA Mosleh-Shirazi, A Mostaar, H Nedaie, “A study of the dosimetric properties of an electronic portal imaging device,” *Iranian Conf of Medical Physics*, Tehran, Iran, 200 (2014)
 48. A Safari, SMJ Mortazavi, AR Mehdizadeh, MA Mosleh-Shirazi, S Sina, M Tayyebi, F Jamali, “Optimisation of x-ray attenuation in flexible lead-free radiation shields using a novel multilayer design,” *Iranian Conf of Medical Physics*, Tehran, Iran, 388 (2014)
 49. Z. Zarrini-Monfared, M.A. Mosleh-Shirazi, S. Karbasi, A. Zamani, “ScinSim2: A new optical photon transport Monte Carlo code for modelling parallel- and focused-element scintillation detector arrays and its use for examination of the optical MTF responses of segmented scintillators,” *Iranian Conf of Medical Physics*, Tehran, Iran, 509 (2014)
 50. A Ketabi, MA Mosleh-Shirazi, S Karbasi, H Abdollahi, M Rahimian, “Dependence of the relative readings of the Hermes daily linac beam checking device to changes in beam energy,” *Iranian Conf of Medical Physics*, Tehran, Iran, 518 (2014)
 51. F Jamali, SMJ Mortazavi, MA Mosleh-Shirazi, S Sina, Z Rahpeyma, A Safari, “A study of a polyethylene composite as a neutron shield for cosmic radiation using the MCNPX Monte Carlo code,” *Iranian Conf of Medical Physics*, Tehran, Iran, 521 (2014)
 52. M Zehtabian, M Karimipourfard, F Lotfalizadeh, K Jabbari, H Saberi Anvar, MA Mosleh-Shirazi, S Sina, “Monte Carlo simulation of the Siemens ONCOR linear accelerator using the MCNPX code,” *Iranian Conf of Medical Physics*, Tehran, Iran, 570 (2014)
 53. M.A. Mosleh-Shirazi, Z. Zarrini-Monfared, S. Karbasi, A. Zamani, “A new optical photon transport Monte Carlo code for modelling parallel- and focused-element scintillation detector arrays and its use for examination of the full MTF responses of thick segmented CsI(Tl) scintillators,” *8th European Conf on Medical Physics*, Athens, Greece, ***Physica Medica: European J of Med Physics* 30** (Suppl 1): e28 (2014)
 54. M.A. Mosleh-Shirazi, “Linac acceptance testing and commissioning: Local perspectives on rationale and responsibilities,” *First Siemens Radiotherapy Users Meeting*, Mashhad, Iran (2014) (Invited)
 55. S Norouzi, S Karbasi, I Namazi, HK Ahmadi, S Mousavi, M.A. Mosleh-Shirazi, “Comparison of various dosimeters for measurements in photon and electron beams of a high-energy linear accelerator,” *First Siemens Radiotherapy Users Meeting*, Mashhad, Iran (2014)
 56. S Karbasi, I Namazi, HK Ahmadi, S Norouzi, S Mousavi, A Davani, M.A. Mosleh-Shirazi, “Acceptance testing and commissioning of a Siemens ONCOR linear accelerator: Shiraz experience,” *First Siemens Radiotherapy Users Meeting*, Mashhad, Iran (2014)
 57. M.A. Mosleh-Shirazi, A. Ketabi, S. Karbasi, R. Faghihi, “An experimental and Monte-Carlo study of in-vivo dosimetry in small radiotherapy fields using in-vivo diodes and TLD,” *Proceedings of the Int Conf on Medical Physics, Brighton, UK, MEDICAL PHYSICS INTERNATIONAL Journal* 1(2):399 (2013)
 58. M.A. Mosleh-Shirazi, S. Norouzi, M. Ansari, N. Ahmadloo, S.M.J. Mortazavi, S. Karbasi, “Evaluation of three rectal dose determination methods in gynecological intracavitary brachytherapy,” *Proceedings of the Int Conf on Medical Physics, Brighton, UK, MEDICAL PHYSICS INTERNATIONAL Journal* 1(2):615 (2013)
 59. M. Zehtabian, M.A. Mosleh-Shirazi, R. Faghihi, A. Shakibafard, M. Mohammadi, M. Baradaran-Ghahfarokhi, “A fast model for prediction of respiratory lung motion for image-guided radiotherapy: a feasibility study,” *Proceedings of the Int Conf on Medical Physics, Brighton, UK, MEDICAL PHYSICS INTERNATIONAL Journal* 1(2):514 (2013)
 60. SMJ Mortazavi, Reza Faghihi, MR Aghamiri, A Aghaz, M Tayyebi, MA Mosleh-Shirazi, S Mehdizadeh, A Haghparast, “New challenges in moving toward nano-sized leadfree radiation shields,” *Proceedings of the Int Conf on Medical Physics, Brighton, UK, MEDICAL PHYSICS INTERNATIONAL Journal* 1(2):254 (2013)

61. M Zehtabian, R Faghihi, M Mosleh-Shirazi, J Shepherd, M Mohammadi, S Sarasanandarajah, B Higgs, "A Phantom-Based Comparison of Lung Tumor Planning Target Volumes and Organs at Risk Dose Reduction Between 4D-CT and 3D-CT," *Proceedings of the Annual Meeting of the American Association of Physicists in Medicine*, Indianapolis, USA, **Med. Phys.** **40**, 178 (2013)
62. H Safigholi, D Sardari, S Sina, S Karimi Jashni, M Mosleh-Shirazi, S Karbasi, F Massicano, R Guedes Possoni, H Yoriyaz, A Meigooni, "A Phantom-Based Comparison of Lung Tumor Planning Target Volumes and Organs at Risk Dose Reduction Between 4D-CT and 3D-CT," *Proceedings of the Annual Meeting of the American Association of Physicists in Medicine*, Indianapolis, USA, **Med. Phys.** **40**, 326 (2013)
63. MA Mosleh-Shirazi, Z Zarrini-Monfared, S Karbasi, A Zamani, "Optical Photon Transport in 2D Arrays of Scintillation Detectors: Development of a New Monte Carlo Model," *5th International and 17th Iranian Congress of Nuclear Medicine*, Shiraz, Iran (2013)
64. Mortazavi S.M.J., Faghihi R, Aghamiri M.R., Aghaz A, Tayebi M., Mehdizadeh S, Mosleh-Shirazi M.A., Moradgholi J, Baharvand H., Haghani M., "Lead-Free Radiation Shields: Should We Move to Nano-sized Structures?," *5th International and 17th Iranian Congress of Nuclear Medicine*, Shiraz, Iran (2013)
65. Ketabi A, Rahimian M, Abdollahi H, Zarrini Z, Mosleh-Shirazi MA, "Risk Perception and Communication in Nuclear Medicine Centers: A Survey," *5th International and 17th Iranian Congress of Nuclear Medicine*, Shiraz, Iran (2013)
66. Mosleh-Shirazi MA, Karbasi S, Ketabi A, Mohammadianpanah M, Mosalaei A. "Investigation of the dosimetric stability of a new linear accelerator and development of its Monte Carlo model." *IPEM Medical Physics and Engineering and Biennial Radiotherapy Physics Conference*, Oxford, UK, 121-2 (2012)
67. Mosleh-Shirazi MA, Zeinali Rafsanjani B, Faghihi R, Mosalaei A, Hadad K, Karbasi S. "A Monte-Carlo study of chest-wall radiotherapy by kilovoltage x-rays." *World Congress on Medical Physics and Biomedical Engineering*, Beijing, China (2012)
68. Mosleh-Shirazi MA, Norouzi S, Ansari M, Ahmadloo N, Mortazavi SMJ, Karbasi S. "Comparison of two methods of estimating maximum rectal wall dose in intracavitary brachytherapy of patients with gynecological cancers." *World Congress on Medical Physics and Biomedical Engineering*, Beijing, China (2012)
69. Mosleh-Shirazi MA, Ketabi A, Karbasi S, Faghihi R. "An MCNP model of the Elekta Compact linear accelerator and sensitivity of its calculated percentage depth dose to beam energy." *World Congress on Medical Physics and Biomedical Engineering*, Beijing, China (2012)
70. Mosleh-Shirazi MA, Abdollahi H, Mortazavi SMJ, Omidvari S, Abbasi K. "Comparison of different physical indices and biological models to predict radiation pneumonitis in esophageal cancer patients undergoing radiotherapy." *World Congress on Medical Physics and Biomedical Engineering*, Beijing, China (2012)
71. A Ketabi, H Abdolahi Nasehabad, MA Mosleh-Shirazi, SMJ Mortazavi. "A survey of safety precautions taken by industrial high-power laser users in Shiraz, Iran." *Non-ionizing Radiation Safety Conference*, Shiraz University, Shiraz, Iran (2012)
72. Mosleh-Shirazi MA, Zeinali Rafsanjani B, Faghihi R, Hadad K, Mosalaei A, Karbasi S, "Evaluation of important dosimetric parameters in chest-wall radiotherapy by kilovoltage x-rays using Monte Carlo modeling," *7th International Breast Cancer Congress*, Tehran, Iran, **Iranian J. of Breast Diseases**, Winter 1390, 75 (2012)
73. Karbasi S, Nasrollahi H, Mosleh-Shirazi MA, Mosalaei A, Omidvari Sh, Mohammadianpanah M, Ahmadloo N, Ansari M, "Investigation of chest-wall dose homogeneity in kilovoltage x-ray therapy using diode in-vivo dosimetry," *7th International Breast Cancer Congress*, Tehran, Iran, **Iranian J. of Breast Diseases**, Winter 1390, 58 (2012)
74. Mosleh-Shirazi MA and Karbasi S. "The radiotherapy challenge in developing countries and initial experiences with a new type of linac installed in Iran," *1st MEFOMP International Conference of Medical Physics*, Shiraz, Iran, **J Biomed Phys Eng; 1(Suppl 1)**, S21-S22 (2011)
75. Mosleh-Shirazi MA, Faghihi R, Hadad K, Bagheri MH, Baradaran-Ghahfarokhi M, Siavashpour Z, Meigooni AS. "¹²⁵I Versus ¹⁰³Pd for Prostate Brachytherapy: A Monte Carlo Dosimetric Study," *1st MEFOMP International Conference of Medical Physics*, Shiraz, Iran, **J Biomed Phys Eng; 1(Suppl 1)**, S222-S223 (2011)
76. Mosleh-Shirazi MA, Ketabi A, Karbasi S, Faghihi R. "Monte Carlo modeling of a new radiotherapy linear accelerator: Tuning and validation," *1st MEFOMP International Conference of Medical Physics*, Shiraz, Iran, **J Biomed Phys Eng; 1(Suppl 1)**, S233-S234 (2011)
77. Zeinali-Rafsanjani B, Mosleh-Shirazi MA, Faghihi R, Hadad K, Mosalaei A, Karbasi S. "Development and Validation of a Monte Carlo Model of a Kilovoltage X-ray Therapy Unit for Chest-Wall Irradiation," *1st MEFOMP International Conference of Medical Physics*, Shiraz, Iran, **J Biomed Phys Eng; 1(Suppl 1)**, S201 (2011)
78. Mahani H, Mosleh-Shirazi MA, Faghihi R, Boostani R, Hadad K. "An optimization algorithm for beam angle, beam weight and wedge angle in forward treatment planning of external-beam radiotherapy based on an integer-representation adaptive mutation probability genetic algorithm," *1st MEFOMP International Conference of Medical Physics*, Shiraz, Iran, **J Biomed Phys Eng; 1(Suppl 1)**, S194 (2011)
79. Baradaran-Ghahfarokhi M, Mosleh-Shirazi MA, Faghihi R, Bagheri MH, Hadad K, Meigooni AS. "A novel four-dimensional method of organ dosimetry in prostate brachytherapy," *1st MEFOMP International Conference of Medical Physics*, Shiraz, Iran, **J Biomed Phys Eng; 1(Suppl 1)**, S192-S193 (2011)
80. Mortazavi SMJ, Mosleh-Shirazi MA, Haghani M "Does Specific Absorption Rate of GSM mobile phones affect the magnitude of induced radioresistance to lethal doses of gamma rays?" *1st MEFOMP International Conference of Medical Physics*, Shiraz, Iran, **J Biomed Phys Eng; 1(Suppl 1)**, S191-S192 (2011)
81. Mahdavi M, Mosleh Shirazi MA, Karbalaeeidoost S, Miri R, Bahaedini N. "Radioprotective Effect of polysorbate 20 against whole Body Gamma radiation in Balb/C mice," *1st MEFOMP International Conference of Medical Physics*, Shiraz, Iran, **J**

82. Tahamtan R, Shabestani Monfared A, Hadadi GH, Mosleh-Shirazi MA, Tavassoli AR. "The histopathological evaluation of Melatonin effect as a radioprotector against radiation pneumonia in gamma irradiated rats," *1st MEFOMP International Conference of Medical Physics*, Shiraz, Iran, *J Biomed Phys Eng; 1(Suppl 1)*, S182-S183 (2011)
83. Aghamiri MR, Mortazavi SMJ, Tayebi M4, Mosleh-Shirazi MA, Baharvand H, Tavakkoli-Golpayegani A, Zeinali-Rafsanjani B. "A novel design for production of efficient flexible lead-free shields against X-ray photons in diagnostic energy range," *1st MEFOMP International Conference of Medical Physics*, Shiraz, Iran, *J Biomed Phys Eng; 1(Suppl 1)*, S18-S19 (2011)
84. Mosleh-Shirazi MA, Faghihi R, Hadad K, Mosalaei A, Zeinali B, Karbasi S. "Development and validation of a Monte Carlo model of a kilovoltage x-ray therapy unit for chest-wall irradiation," *Joint Meeting of American Association of Physicists in Medicine and Canadian Organization of Medical Physicists*, Vancouver, Canada, *Med. Phys.* **38**(6), 3645 (2011)
85. Mosleh-Shirazi MA, Faghihi R, Bagheri MH, Hadad K, Baradaran-Ghahfarokhi M. "A finite-element model to predict prostate displacement and deformation due to bladder filling, rectal distension and patient posture during prostate brachytherapy," *Joint Meeting of American Association of Physicists in Medicine and Canadian Organization of Medical Physicists*, Vancouver, Canada, *Med. Phys.* **38**(6), 3553 (2011)
86. Baradaran-Ghahfarokhi M, Mosleh-Shirazi MA, Faghihi R, Hadad K, Bagheri M.H, Naghshnezhad Z, Meigooni AS. "A novel 4D dosimetric characterization of a common 103-Pd brachytherapy source with mobile internal components," *Joint Meeting of American Association of Physicists in Medicine and Canadian Organization of Medical Physicists*, Vancouver, Canada, *Med. Phys.* **38**(6), 3578 (2011)
87. Mahani H, Mosleh-Shirazi MA, Faghihi R, Boostani R, Hadad K. "An optimization algorithm for beam angle, beam weight and wedge angle in forward treatment planning of external-beam radiotherapy based on an integer-representation adaptive mutation probability genetic algorithm," *Joint Meeting of American Association of Physicists in Medicine and Canadian Organization of Medical Physicists*, Vancouver, Canada, *Med. Phys.* **38**(6), 3631 (2011)
88. Z Siavashpour, Mosleh-Shirazi MA, Faghihi R. "The Effects of Applicator Displacement on Dose Distribution Around Cs-137 Brachytherapy Sources," *Joint Meeting of American Association of Physicists in Medicine and Canadian Organization of Medical Physicists*, Vancouver, Canada, *Med. Phys.* **38**(6), 3652 (2011)
89. Zehtabian M, Faghihi R, Mosleh-Shirazi MA, Baradaran-Ghahfarokhi M, Shakibafard AR, Mohammadi M. "A Fast Finite Element Model to Predict Respiratory Lung Motion," *Joint Meeting of American Association of Physicists in Medicine and Canadian Organization of Medical Physicists*, Vancouver, Canada, *Med. Phys.* **38**(6), 3471 (2011)
90. S Sina, R Faghihi, A Meigooni, Z Siavashpour, M Mosleh-Shirazi. "Developing a TG-43U1 Based Dose Calculation Treatment Planning Software for Cs-137 LDR Brachytherapy," *Joint Meeting of American Association of Physicists in Medicine and Canadian Organization of Medical Physicists*, Vancouver, Canada, *Med. Phys.* **38**(6), 3654 (2011)
91. Mahani H, Mosleh-Shirazi MA, Faghihi R. "An optimization algorithm for beam angle, beam weight and wedge angle in forward treatment planning of external-beam radiotherapy based on an integer-representation adaptive mutation probability genetic algorithm," *9th Iranian Congress of Radiographic Science*, Tehran, Iran, 12 (2011)
92. Zeinali-Rafsanjani B, Mosleh-Shirazi MA, Faghihi R, Hadad K, Mosalaei A, Karbasi S. "Development and validation of a Monte Carlo model of a kilovoltage x-ray therapy unit for chest-wall irradiation," *9th Iranian Congress of Radiographic Science*, Tehran, Iran, 11 (2011)
93. Mosleh-Shirazi MA, Faghihi R, Bagheri MH, Baradaran-Ghahfarokhi M. "A finite-element model to predict prostate displacement and deformation due to bladder filling, rectal distension and patient posture during prostate brachytherapy." *10th Asia-Oceania Congress of Medical Physics*, Taipei, Taiwan, 68-69 (2010)
94. M.A. Mosleh Shirazi, "What can we learn from patient treatment errors in radiotherapy?," *9th Iranian Congress of Medical Physics*, Tehran, Iran, 40 (2010) (invited)
95. M.A. Mosleh Shirazi, R. Faghihi, H.A. Nedaie, S. Mehdizadeh, Z. Siavashpour, "Evaluation of an in-house brachytherapy treatment planning system using Monte Carlo simulation, TLD measurement and comparison with PLATO," *9th Iranian Congress of Medical Physics*, Tehran, Iran, 109 (2010)
96. Mortazavi SMJ, Mosleh-Shirazi MA, Roshan-Shomal P, Raadpey N, Baradaran-Ghahfarokhi M, "High Performance Heavy Concrete as a Multi-Purpose Shield," *9th Iranian Congress of Medical Physics*, Tehran, Iran, 37 (2010)
97. Mortazavi SMJ, Mosleh-Shirazi MA, Ghalandari R, Bonyadi S, Shafie M, Namazi AS, Jamali A. "Increased Radioresistance to Lethal Doses of Gamma Rays in Mice and Rats after Exposure to Microwave Radiation Emitted by a GSM Mobile Phone Simulator," *7th International Conference on High Levels of Natural Radiation and Radon Areas*, Mumbai, India, 83-84 (2010)
98. A. Mosalaei, H. Nasrolahi, N. Ahmadloo, M. Ansari, M. Mohammadianpanah, M.A. Mosleh-Shirazi, S. Omidvari, "Effect of zinc sulphate in prevention of radiation induced oropharyngeal mucositis during and after radiotherapy in patients with head and neck cancer," *Annual Meeting of Clinical Oncology*, Tehran, Iran, 59 (2010)
99. S. Omidvari, A. Shafizad, S. Razmjoo-Ghalaei, M. Mohammadianpanah, M. Ansari, N. Ahmadloo, A. Mosalaei, M.A. Mosleh-Shirazi, "Comparison of the effects of topical application of honey and hydrocortisone ointment on the healing of radiation induced dermatitis in breast cancer patients," *Annual Meeting of Clinical Oncology*, Tehran, Iran, 57-58 (2010)
100. Mosleh-Shirazi M, Mohammadianpanah M, Mosleh-Shirazi MA, "Breast cancer in young women," *Proceedings of the 3rd Tehran Breast Cancer Congress*, Tehran, Iran, *Iranian J. of Breast Diseases*, 205 (2010)
101. Mortazavi SMJ, Mosleh-Shirazi MA, Roshan-Shomal P, Raadpey N, Baradaran-Ghahfarokhi M, "High Performance Heavy Concrete as a Multi-Purpose Shield," *1st Research Festival of Radiological Sciences Students*, Shiraz, Iran, 37 (2010)
102. Mortazavi SMJ, Mosleh-Shirazi MA, Arjomandi M, Rahimi S, Aliabasi S, Jelodar A, "A comparative study on the life-saving radioprotective effects of vitamins A, E, C and over-the-counter multivitamins," *1st Research Festival of Radiological*

- Sciences Students*, Shiraz, Iran, 48 (2010)
103. Mortazavi SMJ, Atefi M, Bahaedini N, Gheysari F, Mosleh-Shirazi MA, "Radioprotective response induced by diagnostic doses of Tc-99m in Wistar rats after receiving a lethal dose," *1st Research Festival of Radiological Sciences Students*, Shiraz, Iran, 52 (2010)
 104. Mortazavi SMJ, Takhsid MA., Mosleh-Shirazi MA, Tanide N, Kaveh M, "Significant enhancement in survival of rats exposed to lethal doses of gamma rays after oral intake of tomato extract," *1st Research Festival of Radiological Sciences Students*, Shiraz, Iran, 57 (2010)
 105. Baradaran-Ghahfarokhi M, Mosleh-Shirazi MA, Faghihi R, Hadad K, Bagheri MH, Faghihi F, Naghshnezhad Z, Meigooni AS, "A novel 4D dosimetric characterization of brachytherapy seed sources with mobile internal components," *1st Research Festival of Radiological Sciences Students*, Shiraz, Iran, 59 (2010)
 106. Mortazavi SMJ, Mosleh-Shirazi MA, Ghalandari R, Bonyadi S, Shafie M, Namazi SAS, Jamali A, "Increased radioresistance to lethal doses of gamma rays in mice and rats after exposure to microwave radiation emitted by a GSM mobile phone simulator," *1st Research Festival of Radiological Sciences Students*, Shiraz, Iran, 61 (2010)
 107. Mosleh-Shirazi M, Mohammadianpanah M, Mosleh-Shirazi MA, "Characteristics, prognostic factors and treatment outcomes of young breast cancer patients in southern Iran," *1st Research Festival of Radiological Sciences Students*, Shiraz, Iran, 67 (2010)
 108. Baradaran-Ghahfarokhi M, Mosleh-Shirazi MA, Faghihi R, Bagheri MH, "A finite-element model to predict prostate displacement and deformation due to bladder filling, rectal distension and patient posture during prostate brachytherapy." *1st Research Festival of Radiological Sciences Students*, Shiraz, Iran, 69 (2010)
 109. S Sina, R Faghihi, M Mosleh-Shirazi, S Mehdizadeh, A Meigooni, and M Zehtabian, "Impact of Applicator and Dummy Pellets On the TG 43 Parameters of Selectron Cs-137 Source," *American Association of Physicists in Medicine Annual Meeting*, Anaheim, California, USA, *Med. Phys.* **36**(6), 2522 (2009)
 110. M Zehtabian, R Faghihi, A Meigooni, M Mosleh-Shirazi, M Zahmatkesh, S Mehdizadeh, S Sina, M Nili, and K Mansouri, "Investigation of Pagat Gel Dosimeter Application in Low Dose Rate Brachytherapy by Determination of TG-43 Parameters of Selectron Cs-137 Source," *American Association of Physicists in Medicine Annual Meeting*, Anaheim, California, USA, *Med. Phys.* **36**(6), 2518 (2009)
 111. Mortazavi SMJ, Mosleh-Shirazi MA, Baradaran-Ghahfarokhi M, Siavash-Pour Z, Farshadi A, Ghafoori M, Shahvar A. "Production of a Datolite-Based Heavy Concrete for Shielding Nuclear Reactors and Megavoltage Radiotherapy Rooms." *Modern Radiotherapy: Challenges and advances in radiation protection of patients*, Versailles, France (2009)
 112. MA Mosleh-Shirazi, R Faghihi, S Mehdizadeh, HA Nedaie, Z Siavashpour, "Investigation of the standard isodoses from the PLATO treatment planning system for cervix cancer brachytherapy using a Monte Carlo method," *Congress on Peaceful Applications of Nuclear Technology*, 29, Shiraz, Iran (2009)
 113. Lotfi M, Bagheri M.H, Mosleh-Shirazi M.A, Faghihi R, Baradaran-Ghahfarokhi M, Nehrir A, Dizavandi M.R, Sharifi Z, "Evaluation of the changes in the location of the prostate after bladder filling," *Congress on Peaceful Applications of Nuclear Technology*, 16, Shiraz, Iran (2009)
 114. Lotfi M, Bagheri M.H, Mosleh-Shirazi M.A, Faghihi R, Baradaran-Ghahfarokhi M, Nehrir A, Dizavandi M.R, Sharifi Z, "A magnetic resonance imaging study of prostate motion due to rectal distension," *Congress on Peaceful Applications of Nuclear Technology*, 15, Shiraz, Iran (2009)
 115. M Zehtabian, R Faghihi, M Zahmatkesh, A Meigooni, M Mosleh-Shirazi, S Mehdizadeh, S Sina, M Nili, and K Mansouri, "Investigation of Pagat Gel Dosimeter Application in Low Dose Rate Brachytherapy by Determination of TG-43 Parameters of Selectron Cs-137 Source," *Congress on Peaceful Applications of Nuclear Technology*, 19, Shiraz, Iran (2009)
 116. S Sina, R Faghihi, S Mehdizadeh, M Mosleh-Shirazi, A Meigooni, "Impact of Applicator and Dummy Pellets On the TG 43 Parameters of Selectron Cs-137 Source," *Congress on Peaceful Applications of Nuclear Technology*, 18, Shiraz, Iran (2009)
 117. S.M.J. Mortazavi, M.A. Mosleh-Shirazi, M.R. Maheri, H. Yousefnia, S. Zolghadri, A. Haji-pour, "Production of a new type of low-cost high-density concrete for shielding megavoltage radiotherapy bunkers," *International Conference on Advances in Radiation Oncology*, Vienna, Austria, 224-5 (2009)
 118. MA Mosleh-Shirazi, "Radiation protection and error reduction in radiotherapy through correct commissioning and quality assurance of treatment planning systems," *1st Congress of Radiation Protection in Radiotherapy & Diagnostic and Interventional Radiology*, 58, Tehran, Iran (2009) (invited)
 119. R Faghihi, MA Mosleh-Shirazi, F Moradi-Mocarram. "Optimization of beam orientation and weight in forward-planned radiotherapy using a genetic algorithm," *1st Congress of Radiation Protection in Radiotherapy & Diagnostic and Interventional Radiology*, 23, Tehran, Iran (2009)
 120. AR Fakharzadeh-Jahromi, MA Mosleh-Shirazi, O Bozorg. "A hybrid IMRT optimization and its application in the protection of the critical organs in the head and neck," *1st Congress of Radiation Protection in Radiotherapy & Diagnostic and Interventional Radiology*, 16, Tehran, Iran (2009)
 121. M.A. Mosleh-Shirazi, "Comparison of stereotactic conformal radiotherapy with intensity-modulated radiotherapy in the treatment of skull base tumours," *Clinical Oncology Congress*, 36, Mashhad, Iran (2008)
 122. M.A. Mosleh-Shirazi, "State-of-the-art radiotherapy," *1st Seminar on New Horizons in Radiation Therapy of the 3rd Millennium*, Shiraz, Iran (2008) (invited)
 123. SMJ Mortazavi, MA Mosleh-Shirazi, H Yousefnia, S Zolghadri and J. Keikhafarzaneh. "Survival adaptive response in Wistar rats after a short-term keeping in a simulated environment with higher than normal levels of background radiation," *7th International Meeting on the Effects of Low Doses of Radiation in Biological Systems*, 31, Lisbon, Portugal (2008)
 124. SMJ Mortazavi, MA Mosleh-Shirazi, S Mehdizadeh, MS Rouintan, J Ebrahimi, M Tamaddon and M Koshnevis. "Short-term

- Radon Inhalation Induces a Significant Survival Adaptive Response in BALB/c Mice," *7th International Meeting on the Effects of Low Doses of Radiation in Biological Systems*, 124, Lisbon, Portugal (2008)
125. M. Owrangi, M. Masudiefar, H. Nedaie, Z. Anjomani, M. Mosleh-Shirazi. "External Electron Beam Comparison of Monte Carlo Codes (BEAMnrc, MCNP4C) in Homogeneous Phantom and Interfaces." *Proceedings of the American Association of Physicists in Medicine Annual Meeting*, Houston, Texas, USA, **Med. Phys.** **35**(6), 2807 (2008)
 126. M.A. Mosleh-Shirazi, "Comparison of conformal and intensity-modulated radiotherapy of the posterior cranial fossa with the aim of reducing cochlea dose." *8th Iranian Congress of Medical Physics*, Tehran, Iran (2008)
 127. M. Masudiefar, M. A. Mosleh-Shirazi, R. Faghihi, M.A. Owrangi, "Comparison of the MCNP4C and BEAMnrc Monte Carlo codes when simulating different electron energies of a Neptun 10pc linear accelerator." *8th Iranian Congress of Medical Physics*, Tehran, Iran (2008)
 128. M.A. Mosleh-Shirazi, "Radiotherapy: the past, the present and the future," *6th Congress of the Iranian Radiographic Sciences Association*, Shiraz, Iran, 96 (2008) (invited)
 129. M.A. Mosleh-Shirazi, D. Shahbazi-Gahreuei, S. Karbasi, "Comparison of the two main available protocols for in-vivo diode dosimetry," *6th Congress of the Iranian Radiographic Sciences Association*, Shiraz, Iran, 100 (2008)
 130. V. Moslemi, R. Faghihi, M.A. Mosleh-Shirazi, S. Mehdizadeh, A. Mosalaei, "Comparison of absorbed dose in an intracavitary brachytherapy pelvic phantom using Monte Carlo simulation and TLD measurement," *6th Congress of the Iranian Radiographic Sciences Association*, Shiraz, Iran, 91 (2008)
 131. V. Moslemi, A.E. Torshabi, R. Faghihi, S. Mehdizadeh, K. Haddad, M.A. Mosleh-Shirazi, "Design and Implementation of Interface Software to Produce MCNP4C Geometry Input File From Tomography Images and Comparison of Dose in Brachytherapy between the Interface Software and Standard Monte Carlo Simulation," *6th Congress of the Iranian Radiographic Sciences Association*, Shiraz, Iran, 93 (2008)
 132. S.M.J. Mortazavi, M.A. Mosleh-Shirazi, H. Yousefnia, S. Zolghadri, J. Keikhafarzaneh, "Survival adaptive response in Wistar rats after a short-term keeping in a simulated environment with higher than normal levels of background radiation," *6th Congress of the Iranian Radiographic Sciences Association*, Shiraz, Iran, 16 (2008)
 133. M.A. Mosleh-Shirazi, R.S. Soomal, F.H. Saran, M. Brada, "Target dose coverage versus deafness in children with medulloblastoma undergoing posterior fossa irradiation: physical dose analysis," *16th International Conference on Medical Physics*, Dubai, United Arab Emirates, 58-59 (2008)
 134. M.A. Mosleh-Shirazi, R. Faghihi, M. Masudiefar, M.A. Owrangi, "Comparison of the MCNP4C and BEAMnrc Monte Carlo codes when simulating different electron energies of a Neptun 10pc linear accelerator," *16th International Conference on Medical Physics*, Dubai, United Arab Emirates, 94-95 (2008)
 135. M.A. Mosleh-Shirazi, R. Faghihi, M.A. Owrangi, M. Masudiefar, "Photon-beam Monte-Carlo simulation of a Neptun 10pc linear accelerator using the MCNP4C and BEAMnrc codes," *16th International Conference on Medical Physics*, Dubai, United Arab Emirates, 94 (2008)
 136. S. Sina, R. Faghihi, A.S. Meigooni, S. Mehdizadeh, M.A. Mosleh-Shirazi, "Evaluation of applicator and inactive pellet perturbing effect on dose distribution of low dose rate Selectron Cs-137 Brachytherapy seed," *16th International Conference on Medical Physics*, Dubai, United Arab Emirates, 79 (2008)
 137. S. Sina, R. Faghihi, A.S. Meigooni, S. Mehdizadeh, M.A. Mosleh-Shirazi, "Calculation of TG-43 dosimetry parameters of Cs-137 Selectron/LDR brachytherapy sources by MCNP4C code," *16th International Conference on Medical Physics*, Dubai, United Arab Emirates, 82 (2008)
 138. MA Mosleh-Shirazi, "Image-guided radiotherapy", *19th Asia Pacific Cancer Conference*, Tehran, Iran, *Int. J. of Hematology-Oncology & Bone Marrow Transplantation*, Vol. 4, Suppl. 1, 28-29 (2007) (invited)
 139. MA Mosleh-Shirazi, "Head-and-neck planning target volume margins for conformal or intensity-modulated radiotherapy obtained from electronic portal imaging," *18th International Annual Meeting of The Cancer Institute of Iran*, Tehran, Iran, 70 (2007)
 140. MA Mosleh-Shirazi, E Raggi, F.H. Saran. "Dose-Volume Evaluation of Whole-ventricular Radiotherapy for Localised Intracranial Germinomas." *UK Radiation Oncology Conference*, Edinburgh, UK, **Clin Oncol.** **19**(3):S40-1 (2007).
 141. M.A. Mosleh-Shirazi, E. Raggi, F.H. Saran. "A modern radiotherapy approach in CNS tumours: Whole-ventricular irradiation for localised primary intracranial germinomas." *International Conference on Childhood Cancer*, Tehran, Iran (2006) (invited)
 142. H.A. Nedaie, M.A. Mosleh-Shirazi, H. Gharati. "Monte Carlo Simulation of Electron Dose Distributions Produced by the Elekta Synergy Linear Accelerator." *12th Annual Meeting of MCNEG*, London, UK (2006)
 143. M.A. Mosleh-Shirazi. "Image-based treatment verification." *Symposium on Modern Radiotherapy Techniques*, Tehran, Iran (2006) (invited)
 144. M.A. Mosleh-Shirazi. "Normal-tissue dose reduction in modern radiotherapy." *First National Congress on Environment, Occupation and Cancer*, Tehran, Iran. 169 (2006)
 145. P.M. Evans, M.A. Mosleh-Shirazi, E.J. Harris and J. Seco. "Models of the Light Output from Scintillation Crystals." *9th International Workshop on Electronic Portal Imaging*, Melbourne, Australia. (2006)
 146. E. Raggi, M.A. Mosleh-Shirazi, F.H. Saran. "Whole ventricular irradiation (WVRT) in intracranial germ cell tumors (CNS GCTs): an evaluation of conformal and intensity modulated radiotherapy (IMRT) planning." *Second International Symposium on CNS Germ Cell Tumors*, Los Angeles, U.S.A. **Neuro-oncol.** **7**(4): 532-533 (2005)
 147. P. Evans and A. Mosleh-Shirazi. "Models of the light output from scintillation crystals." *8th Biennial ESTRO Meeting on Physics and Radiation Technology for Clinical Radiotherapy*, Lisbon, Portugal, **Radiother. Oncol.** **76** (Suppl 2), S76 (2005)
 148. M.A. Mosleh-Shirazi, F.H. Saran, J. Warrington. "A Parametric Study of Facial Shielding in the Cranial Beams for

- Craniospinal Radiotherapy." *UK Radiation Oncology Conference*, York, UK, *Clin. Oncol.* **17**(2), S32 (2005)
149. M.A. Mosleh-Shirazi, C.P. South, F.H. Saran, J. Warrington. "Manual and Automated Cranial CT-MRI Registration in Radiotherapy: Reproducibility and Target Volume Precision." *UK Radiation Oncology Conference*, York, UK, *Clin. Oncol.* **17**(2), S15-S16 (2005)
150. A. Henrys, M. Cominos, M.A. Mosleh-Shirazi, D. Tait, P. Cornes. "Quantification and Reduction of Cardiac Dose in the Treatment of Oesophageal Cancer." *UK Radiation Oncology Conference*, York, UK, *Clin. Oncol.* **17**(2), S30-S31 (2005)
151. H.A. Nedaie, M.A. Mosleh-Shirazi, H. Gharraati. "Comparison of different MCNP Monte Carlo codes." *11th Annual Meeting of MCNEG*, Birmingham, UK (2005)
152. M.A. Mosleh-Shirazi, C.P. South, F.H. Saran, A.P. Warrington. "Reproducibility of manual and automatic cranial CT-MRI fusion techniques and its impact on target volume position." *Proceedings of the 23rd Annual ESTRO Meeting*, Amsterdam, Holland. *Radiother. Oncol.* **73** (Suppl 1), S444 (2004)
153. M.A. Mosleh-Shirazi, H. Taylor, N. Lincoln, A.P. Warrington, F.H. Saran. "Set-up reproducibility in conformal cranial radiotherapy for children: a portal imaging study." *8th International Workshop in Electronic Portal Imaging*, Brighton, UK, 44-45 (2004)
154. P.M. Evans, M.A. Mosleh-Shirazi, J. Seco and A.L. Fielding. "The x-ray energy dependence of the light output from CsI crystals." *8th International Workshop in Electronic Portal Imaging*, Brighton, UK, 124-125 (2004)
155. M.A. Mosleh-Shirazi, F.H. Saran. "Radiotherapy of the whole central nervous system in children." *6th Iranian Congress of Medical Physics*, Mashhad, Iran (2004) (invited)
156. M.A. Mosleh-Shirazi, R.S. Soomal, F.H. Saran. "Paediatric craniospinal axis irradiation with forward-planned, intensity-modulated radiotherapy." *International Congress of Pediatric Radiation Oncology*, Lyon, France, 27 (2003)
157. R. Soomal, F. Saran, M.A. Mosleh-Shirazi, M. Brada. "Cochlear avoidance in standard risk medulloblastoma: Comparison of 3D conformal and IMRT planning techniques." *International Congress of Pediatric Radiation Oncology*, Lyon, France, 20 (2003)
158. M.A. Mosleh-Shirazi, B. Suter, S. Ashley, R.S. Soomal. "Optimisation of cranial radiotherapy verification by portal imaging: Which reference image modality?" *UK Radiation Oncology Conference*, Bath, UK, *Clin. Oncol.* **15**(2), S8 (2003)
159. R. Soomal, M.A. Mosleh-Shirazi, F. Saran. "Conventionally planned posterior fossa fields in medulloblastoma – A clinical audit." *UK Radiation Oncology Conference*, Bath, UK, *Clin. Oncol.* **15**(2), S16 (2003)
160. M.A. Mosleh-Shirazi, A.P. Warrington, V.N. Hansen and P.J. Childs. "Modelling of small fields designed for stereotactic conformal radiotherapy on the Pinnacle planning system." *IPEM Meeting on the Validation of Dosimetry for Treatment Planning Systems*, London, UK, 22-23 (2003) (invited)
161. V.N. Hansen, F. Verhaegen, M.A. Mosleh-Shirazi, J.L. Bedford, P.J. Childs. "Using Monte Carlo simulation to generate a physics model in the Pinnacle³ planning system." *IPEM Meeting on the Validation of Dosimetry for Treatment Planning Systems*, London, UK, 6-7 (2003)
162. M.A. Mosleh-Shirazi. "Measurement of the field shaping properties of the Elekta MMLC (Beam Modulator)." *21st Annual ESTRO Meeting*, Prague, Czech Republic, *Radiother. Oncol.* **64** (Suppl 1), S212 (2002)
163. M.A. Mosleh-Shirazi, P.G.S. Cornes, D.M. Tait, N. Kamangari, R. Ahmad and J.P. Glees. "Computation of cardiac dose in two-phase radiotherapy for esophageal cancer." *21st Annual ESTRO Meeting*, Prague, Czech Republic, *Radiother. Oncol.* **64** (Suppl 1), S77 (2002)
164. R. Soomal, M.A. Mosleh-Shirazi, F. Saran and M. Brada. "What is the cost of cochlea avoidance in paediatric medulloblastoma? Evaluation of 3D conformal and IMRT planning techniques for the posterior fossa boost." *21st Annual ESTRO Meeting*, Prague, Czech Republic, *Radiother. Oncol.* **64** (Suppl 1), S81 (2002)
165. T.V. Ajithkumar, A. Mosleh-Shirazi, K. Burke and M. Brada. "Can we gain from complexity? Optimization of stereotactically-guided conformal radiotherapy of brain tumours based on normal brain dose volume histograms." *21st Annual ESTRO Meeting*, Prague, Czech Republic, *Radiother. Oncol.* **64** (Suppl 1), S83 (2002)
166. P.G.S. Cornes, M.A. Mosleh-Shirazi, D.M. Tait, N. Kamangari, R. Ahmad and J.P. Glees. "Cardiac dose and toxicity following radiotherapy for oesophageal cancer." *21st Annual ESTRO Meeting*, Prague, Czech Republic, *Radiother. Oncol.* **64** (Suppl 1), S183 (2002)
167. R. Soomal, M.A. Mosleh-Shirazi, F. Saran and M. Brada. "What is the cost of cochlea avoidance in pediatric medulloblastoma? Evaluation of 3D conformal planning techniques for the posterior fossa boost." *ASTRO 44th Annual Meeting*, New Orleans, USA, *Int. J. Radiat. Oncol. Biol. Phys.* **54**(2) (Suppl 1), 204 (2002)
168. M.A. Mosleh-Shirazi, V.N. Hansen, A.P. Warrington, P.J. Childs, F. Verhaegen, J.L. Bedford. "Aspects of Commissioning the Pinnacle³ Treatment Planning System for High-Precision Conformal Radiotherapy." *AAPM Annual Meeting*, Montreal, Canada, *Med. Phys.* **29**(6), 1250 (2002)
169. M.A. Mosleh-Shirazi, F.H. Saran, R.S. Soomal, C. Knowles, H. Taylor, P.J. Childs, H. McNair and V.N. Hansen. "CT-planned, supine craniospinal radiotherapy for medulloblastoma on a quadriplegic patient." *UK Radiological Congress*, Birmingham, UK, *B.J.R. Congress Series*, 51 (2002)
170. V.N. Hansen, F. Verhaegen, M.A. Mosleh-Shirazi, P.J. Childs. "The use of Monte Carlo generated accelerator data in the photon model of the Pinnacle planning system." *6th Biennial ESTRO Meeting on Physics for Clinical Radiotherapy*, Seville, Spain, *Radiother. Oncol.* **61** (Suppl 1), S21 (2001)
171. M.A. Mosleh-Shirazi, D.N. Prior, S.E. Batey, G.S. Wagner and K.V. Hall "Commissioning shielding blocks for 3D radiotherapy treatment planning", *IPEM Annual National Conference*, Brighton, UK, p35 (1998)
172. G.S. Wagner, S.E. Batey and M.A. Mosleh-Shirazi "An experimental investigation of the directionality of thermoluminescence dosimetry with LiF chips," *IPEM Annual National Conference*, Brighton, UK, p166 (1998)

173. M.A. Mosleh-Shirazi, P.M. Evans, W. Swindell, R. Symonds-Taylor, S. Webb and M. Partridge "Large-volume megavoltage CT and high-speed portal imaging for radiotherapy verification," *IPEM Annual National Conference*, Dundee, p101 (1997)
174. M. Partridge, M.A. Mosleh-Shirazi and P.M. Evans "Accelerator output fluctuation: the effect on megavoltage CT and portal image quality," *Radiology 1997*, Birmingham, UK, *Brit. J. Radiol.*(70) (Suppl), p39 (1997)
175. M. Partridge, P.M. Evans and M.A. Mosleh-Shirazi, "Accelerator output fluctuation: the effect on megavoltage CT and portal image quality," *International Conference on Computers in Radiotherapy (ICCR)*, Salt Lake City, U.S.A. (1997)
176. M.A. Mosleh-Shirazi, W. Swindell and P.M. Evans "A combined 3D megavoltage CT scanner and portal imager for treatment verification in radiotherapy," *Roentgen Centenary Congress*, Birmingham, UK, p475 (1995)
177. M.A. Mosleh-Shirazi, W. Swindell and P.M. Evans "A combined electronic portal imaging device and large-volume megavoltage CT scanner," *Third International Workshop on Electronic Portal Imaging*, San Francisco, U.S.A., Section VII (1994)
178. M.A. Mosleh-Shirazi, W. Swindell and P.M. Evans "Development of a large-volume megavoltage computed tomography scanner for radiotherapy verification," *Annual Congress of the British Institute of Radiology*, Birmingham, UK, WIP 2 (1994)
179. M.A. Mosleh-Shirazi, W. Swindell and P.M. Evans "Monte Carlo simulations of scintillation crystals for use in a two-dimensional megavoltage CT scanner," *Third London Conference on Position-Sensitive Detectors*, London, UK, Abs 97 (1993)