

Refereed Publications

(1114 Citations Research Gate, May 2019)

1. *A study of wavelet-based denoising and a new shrinkage function for low-dose CT scans* Mohammadi, Sadegh; Leventouri, Theodora, Biomedical Physics & Engineering Express, BPEX-101275.R2, 2019.
2. *A Dosimetric Comparison of IMR Vs VMAT Optimization in Early Stage Whole Breast Cancer*, S Pella, N Moshiri, T Leventouri, SU-I-GPD-P-18 Medical Physics **45**, 2018
3. *Dosimetric Evaluations of the Bladder and Rectum in Brachytherapy Treatments Using Multi-Lumen Cylinders*, N Dumitru¹, M Shojaei, S Pella, T Leventouri, SU-I-GPD-T-38 Medical Physics **45**, 2018.
4. *Dose Rate Dosimetric Effects During the 6 MV Flattening Filter Free RapidArc-Based Stereotactic Body Radiation Therapy On Lung* N Dumitru, M Pudasaini, S Pella, T Leventouri, SU-I-GPD-T-403 Medical Physics **45**, 2018.
5. *Selection of Functional Human Sperm with Microfluidic Sorting Device*, A Ataei, AWC Lau, Th Leventouri, W Asghar, S Pella. FL-AAPM Spring Meeting February 22-24, 2018, Orlando FL.
6. *Radio-Biological Consequences Due To Applicator Displacement In Savi Treatments With APBI For Under Evaluated Applicators At The Cavity Evaluation Process*. P. Galanakou, S. Pella, Th. Leventouri, FL-AAPM Spring Meeting February 22-24, 2018, Orlando FL.
7. *Dosimetric and Radiobiological Effect Differences between Plans from High Definition MLC and Standard MLC for SBRT Lung Cancer*, M. Pudasaini, N. Dumitru, S. Pella, Th. Leventouri, FL-AAPM Spring Meeting February 22-24, 2018, Orlando FL.
8. *Medical Physics Computational Research*, M. Rahman, G. Galanakou, G. Gibbard, Th. Leventouri, G. Kalantzis, FL-AAPM Spring Meeting February 22-24, 2018, Orlando FL
9. *Raman and IR study of the effect of Fe substitution in hydro/deutero oxyapatites* Efthymios Liarokapis, Anastasios Antonakos, Andreas Kyriakou, Theodora Leventouri, American Mineralogist **102** 85-91 (2017) DOI: 10.2138/am-2017-5884.
10. *A GPU accelerated simulation annealing algorithm for IMRT optimization*, P. Galanakou, T. Leventouri, A. Georgakilas, G. Kalantzis, (IEEE proc. SNPD 2017).
11. *Effects of Therapeutic Radiation On Sperm in Prostate External Radiotherapy* SU-I-GPD-J-92 Medical Physics **44**, 2017. A Ataei*, T Leventouri, S Pella.
12. *Implementation of a Parallel Simulating Annealing Algorithm for Intensity Modulated Radiation Therapy Optimization*, SU-I-GPD-J-99, Medical Physics **44**, 2017, P Galanakou*, T Leventouri, G Kalantzis.
13. *Consistency of Treatment Volume Vs. Bladder and Rectum Anatomical Variations with Fractionated High-Dose Rate GYN Brachytherapy Using Multi Lumen Cylinders*, SU-I-GPD-J-104, Medical Physics **44**, 2017, M Shojaei*, N Dumitru, S Pella, T Leventouri.

14. *Dosimetric Implications of the Organs at Risk in Vaginal Cuff Brachytherapy with Multi-Lumen Cylinder*, SU-I-GPD-T-37, Medical Physics **44**, 2017, N Dumitru, M Shojaei, S Pella, T Leventouri.
15. *Dosimetric and radiobiological comparison of CyberKnife M6™ InCise multileaf collimator over IRIS™ variable collimator in prostate stereotactic body radiation therapy*, Vindu Kathriarachchi, Charles Shang, Grant Evans, Theodora Leventouri, and Georgios Kalantzis, J Med Phys **41**, 135-143 (2016).
16. *Improvement of the fracture toughness of hydroxyapatite (HAp) by incorporation of carboxyl functionalized single walled carbon nanotubes (CfSWCNTs) and nylon*, S.P. Khanal, H. Mahfuz, A.J. Rondinone, Th. Leventouri, J Mat Sc Eng C **60**, 204-10 (2016).
17. *A Technique for Modeling a Diode Array Into the TPS for Lung SBRT Patient Specific QA*, C Curley, Z Ouhib and T Leventouri, SU-F-T-270 Med. Phys. **43**, 3524 (2016).
18. *A Potential Real Time AQA for Cyberknife Cones and MLC Based Treatments*, Shang C, Gibbard G, Schramm A, Leventouri T, Khana S, SU-F-T-556 Med. Phys. **43**, 3524 (2016) DOI: 10.1118/1.4956741.
19. *Investigations of a GPU-based levy-firefly algorithm for constrained optimization of radiation therapy treatment planning*, Georgios Kalantzis, Charles Shang Yu Lei, Theodora Leventouri, Swarm and Evolutionary Computation **26**, 191–20 (2016).
20. *A computational study on different penalty approaches for constrained optimization in radiation therapy treatment planning with a simulated annealing algorithm*, Sadegh Mohamadi, Charles Shang, Zoubir Ouhib, Th. Leventouri, Georgios Kalantzis, 16th IEEE/ACIS International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/ Distributed Computing (SNPD) June 1-3, (2015), Takamatsu, Japan DOI:10.1109/SNPD.2015.7176174.
21. *Evaluation of surface dose outside the treatment area for five breast cancer irradiation modalities using thermo-luminescent dosimeters*, Suraj P. Khanal, Zoubir Ouhib, Rashmi K Benda, Th. Leventouri, Intern. J. Cancer Therapy and Oncology, **3**, (2015) ISSN 2330-4049.
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26. *SU-E-T-693 Should We Use RapidArc (VMAT) for Breast Treatments? A Dosimetric Comparison of IMRT Versus VMAT Optimization in Whole Breast Irradiation of Early Stage Breast Cancer*, N Moshiri Sedeh, S Pella, T Leventouri, D Littlejohn and T Costantino *Med. Phys.* **42**, 3496 (2015); <http://dx.doi.org/10.1118/1.4925057>.
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28. *Variations of Cardiac Dose at Different Respiratory Status in CyberKnife M6 Treatment Plans for Accelerated Partial Breast Irradiation (APBI)*, S Long, C Shang, G Evans and T Leventouri, *Med. Phys.* **42**, SU-E-T-797: 3521 (2015); <http://dx.doi.org/10.1118/1.4925161>.
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