Iuliana Toma-Dasu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5794263/publications.pdf

Version: 2024-02-01

87 papers	2,033 citations	218677 26 h-index	276875 41 g-index
87 all docs	87 docs citations	87 times ranked	2140 citing authors

#	Article	IF	Citations
1	Prostate alpha/beta revisited â€“ an analysis of clinical results from 14 168 patients. Acta OncolÃ³gica, 2012, 51, 963-974.	1.8	182
2	Theoretical simulation of tumour oxygenation and results from acute and chronic hypoxia. Physics in Medicine and Biology, 2003, 48, 2829-2842.	3.0	117
3	The use of risk estimation models for the induction of secondary cancers following radiotherapy. Acta OncolÃ³gica, 2005, 44, 339-347.	1.8	108
4	Disregarding RBE variation in treatment plan comparison may lead to bias in favor of proton plans. Medical Physics, 2014, 41, 091706.	3.0	94
5	Dose prescription and treatment planning based on FMISO-PET hypoxia. Acta OncolÃ³gica, 2012, 51, 222-230.	1.8	85
6	Should single or distributed parameters be used to explain the steepness of tumour control probability curves?. Physics in Medicine and Biology, 2003, 48, 387-397.	3.0	62
7	Dose prescription and optimisation based on tumour hypoxia. Acta OncolÃ³gica, 2009, 48, 1181-1192.	1.8	59
8	Linear Energy Transfer Painting With Proton Therapy: A Means of Reducing Radiation Doses With Equivalent Clinical Effectiveness. International Journal of Radiation Oncology Biology Physics, 2015, 91, 1057-1064.	0.8	58
9	Radiobiological description of the LET dependence of the cell survival of oxic and anoxic cells irradiated by carbon ions. Journal of Radiation Research, 2013, 54, 18-26.	1.6	51
10	Clinical oxygen enhancement ratio of tumors in carbon ion radiotherapy: the influence of local oxygenation changes. Journal of Radiation Research, 2014, 55, 902-911.	1.6	50
11	Inclusion of a variable <scp>RBE</scp> into proton and photon plan comparison for various fractionation schedules in prostate radiation therapy. Medical Physics, 2017, 44, 810-822.	3.0	49
12	Is the Î±/Î² ratio for prostate tumours really low and does it vary with the level of risk at diagnosis?. Anticancer Research, 2013, 33, 1009-11.	1.1	49
13	Impact of variable RBE on proton fractionation. Medical Physics, 2013, 40, 011705.	3.0	48
14	Early survival prediction in non-small cell lung cancer from PET/CT images using an intra-tumor partitioning method. Physica Medica, 2019, 60, 58-65.	0.7	40
15	Dose-effect models for risk â€“ relationship to cell survival parameters. Acta OncolÃ³gica, 2005, 44, 829-835.	1.8	39
16	The effects of hypoxia on the theoretical modelling of tumour control probability. Acta OncolÃ³gica, 2005, 44, 563-571.	1.8	38
17	Early tumor response prediction for lung cancer patients using novel longitudinal pattern features from sequential PET/CT image scans. Physica Medica, 2018, 54, 21-29.	0.7	38
18	Modelling Tumour Oxygenation, Reoxygenation and Implications on Treatment Outcome. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-9.	1.3	36

#	Article	IF	Citations
19	Incorporation of relative biological effectiveness uncertainties into proton plan robustness evaluation. Acta OncolÃ³gica, 2017, 56, 769-778.	1.8	35
20	Models for the risk of secondary cancers from radiation therapy. Physica Medica, 2017, 42, 232-238.	0.7	32
21	The role of computational methods for automating and improving clinical target volume definition. Radiotherapy and Oncology, 2020, 153, 15-25.	0.6	31
22	Spatial correlation of linear energy transfer and relative biological effectiveness with suspected treatmentâ€related toxicities following proton therapy for intracranial tumors. Medical Physics, 2020, 47, 342-351.	3.0	30
23	Theoretical simulation of oxygen tension measurement in tissues using a microelectrode: I. The response function of the electrode. Physiological Measurement, 2001, 22, 713-725.	2.1	29
24	The relationship between temporal variation of hypoxia, polarographic measurements and predictions of tumour response to radiation. Physics in Medicine and Biology, 2004, 49, 4463-4475.	3.0	29
25	Treatment fractionation for stereotactic radiotherapy of lung tumours: a modelling study of the influence of chronic and acute hypoxia on tumour control probability. Radiation Oncology, 2014, 9, 149.	2.7	29
26	Evaluating Tumor Response of Non-Small Cell Lung Cancer Patients With 18F-Fludeoxyglucose Positron Emission Tomography: Potential for Treatment Individualization. International Journal of Radiation Oncology Biology Physics, 2015, 91, 376-384.	0.8	27
27	To fractionate or not to fractionate? That is the question for the radiosurgery of hypoxic tumors. Journal of Neurosurgery, 2014, 121, 110-115.	1.6	25
28	Quantifying Tumour Hypoxia By Pet Imaging - A Theoretical Analysis. Advances in Experimental Medicine and Biology, 2009, 645, 267-272.	1.6	25
29	Secondary Malignancies From Prostate Cancer Radiation Treatment: A Risk Analysis of the Influence of Target Margins and Fractionation Patterns. International Journal of Radiation Oncology Biology Physics, 2011, 79, 738-746.	0.8	23
30	Optimal fractionation in radiotherapy for non-small cell lung cancer â€“ a modelling approach. Acta OncolÃ³gica, 2015, 54, 1592-1598.	1.8	22
31	Vascular oxygen content and the tissue oxygenation-A theoretical analysis. Medical Physics, 2008, 35, 539-545.	3.0	21
32	Survival and tumour control probability in tumours with heterogeneous oxygenation: A comparison between the linear-quadratic and the universal survival curve models for high doses. Acta OncolÃ³gica, 2014, 53, 1035-1040.	1.8	21
33	Practice patterns of image guided particle therapy in Europe: A 2016 survey of the European Particle Therapy Network (EPTN). Radiotherapy and Oncology, 2018, 128, 4-8.	0.6	21
34	Theoretical simulation of oxygen tension measurement in the tissue using a microelectrode: II. Simulated measurements in tissues. Radiotherapy and Oncology, 2002, 64, 109-118.	0.6	19
35	Radiation burden from secondary doses to patients undergoing radiation therapy with photons and light ions and radiation doses from imaging modalities. Radiation Protection Dosimetry, 2014, 161, 357-362.	0.8	17
36	Assessment of organs-at-risk contouring practices in radiosurgery institutions around the world â€“ The first initiative of the OAR Standardization Working Group. Radiotherapy and Oncology, 2016, 121, 180-186.	0.6	17

#	Article	IF	Citations
37	The influence of breathing motion and a variable relative biological effectiveness in proton therapy of left-sided breast cancer. Acta OncolÃ³gica, 2017, 56, 1428-1436.	1.8	17
38	Impact of <scp>SBRT</scp> fractionation in hypoxia dose painting â€" Accounting for heterogeneous and dynamic tumor oxygenation. Medical Physics, 2019, 46, 2512-2521.	3.0	17
39	Fractionated SRT using VMAT and Gamma Knife for brain metastases and gliomas â€" a planning study. Journal of Applied Clinical Medical Physics, 2015, 16, 3-16.	1.9	15
40	Towards Multidimensional Radiotherapy: Key Challenges for Treatment Individualisation. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-8.	1.3	15
41	Dosimetric comparison between intra-cavitary breast brachytherapy techniques for accelerated partial breast irradiation and a novel stereotactic radiotherapy device for breast cancer: GammaPodâ„¢. Physics in Medicine and Biology, 2013, 58, 4409-4421.	3.0	14
42	Multi-institutional study of the variability in target delineation for six targets commonly treated with radiosurgery. Acta OncolÃ³gica, 2018, 57, 1515-1520.	1.8	14
43	Radiation-induced Vascular Damage and the Impact on the Treatment Outcome of Stereotactic Body Radiotherapy. Anticancer Research, 2019, 39, 2721-2727.	1.1	14
44	What is the Clinically Relevant Relative Biologic Effectiveness? A Warning for Fractionated Treatments With High Linear Energy Transfer Radiation. International Journal of Radiation Oncology Biology Physics, 2008, 70, 867-874.	0.8	13
45	Dosimetric evaluation of manually and inversely optimized treatment planning for high dose rate brachytherapy of cervical cancer. Acta OncolÃ³gica, 2014, 53, 1012-1018.	1.8	13
46	Defining the hypoxic target volume based on positron emission tomography for image guided radiotherapy â€" the influence of the choice of the reference region and conversion function. Acta OncolÃ³gica, 2017, 56, 819-825.	1.8	13
47	A Comparative Study of Radiomics and Deep-Learning Based Methods for Pulmonary Nodule Malignancy Prediction in Low Dose CT Images. Frontiers in Oncology, 2021, 11, 737368.	2.8	13
48	Impact of physiological breathing motion for breast cancer radiotherapy with proton beam scanning â€" An in silico study. Physica Medica, 2017, 39, 88-94.	0.7	12
49	Hypoxia Induced by Vascular Damage at High Doses Could Compromise the Outcome of Radiotherapy. Anticancer Research, 2019, 39, 2337-2340.	1.1	12
50	The influence of dose heterogeneity on tumour control probability in fractionated radiation therapy. Physics in Medicine and Biology, 2011, 56, 7585-7600.	3.0	11
51	Variability in target delineation for cavernous sinus meningioma and anaplastic astrocytoma in stereotactic radiosurgery with Leksell Gamma Knife Perfexion. Acta Neurochirurgica, 2014, 156, 2303-2313.	1.7	11
52	Will intrafraction repair have negative consequences on extreme hypofractionation in prostate radiation therapy?. British Journal of Radiology, 2015, 88, 20150588.	2.2	11
53	High brachytherapy doses can counteract hypoxia in cervical cancerâ€"a modelling study. Physics in Medicine and Biology, 2017, 62, 560-572.	3.0	10
54	Risk of second cancer following radiotherapy. Physica Medica, 2017, 42, 211-212.	0.7	10

#	Article	IF	Citations
55	Cancer risk after breast proton therapy considering physiological and radiobiological uncertainties. Physica Medica, 2020, 76, 1-6.	0.7	10
56	Towards the virtual tumor for optimizing radiotherapy treatments of hypoxic tumors: A novel model of heterogeneous tissue vasculature and oxygenation. Journal of Theoretical Biology, 2022, 547, 111175.	1.7	10
57	Clinical Investigations Biological effective dose evaluation and assessment of rectal and bladder complications for cervical cancer treated with radiotherapy and surgery. Journal of Contemporary Brachytherapy, 2012, 4, 205-212.	0.9	9
58	RBE for proton radiation therapy â€“ a Nordic view in the international perspective. Acta OncolÃ³gica, 2020, 59, 1151-1156.	1.8	9
59	Evaluation of third treatment week as temporal window for assessing responsiveness on repeated FDG-PET-CT scans in Non-Small Cell Lung Cancer patients. Physica Medica, 2018, 46, 45-51.	0.7	8
60	Non-linear conversion of HX4 uptake for automatic segmentation of hypoxic volumes and dose prescription. Acta OncolÃ³gica, 2018, 57, 485-490.	1.8	8
61	The Relationship Between Vascular Oxygen Distribution And Tissue Oxygenation. Advances in Experimental Medicine and Biology, 2009, 645, 255-260.	1.6	8
62	Accounting for Two Forms of Hypoxia for Predicting Tumour Control Probability in Radiotherapy: An In Silico Study. Advances in Experimental Medicine and Biology, 2018, 1072, 183-187.	1.6	8
63	Impact of Dose and Sensitivity Heterogeneity on TCP. Computational and Mathematical Methods in Medicine, 2014, 2014, 1-7.	1.3	7
64	Relative clinical effectiveness of carbon ion radiotherapy: theoretical modelling for H&N tumours. Journal of Radiation Research, 2015, 56, 639-645.	1.6	7
65	Treatment modelling: The influence of micro-environmental conditions. Acta OncolÃ³gica, 2008, 47, 896-905.	1.8	6
66	Predictive value of modelled tumour control probability based on individual measurements ofin vitroradiosensitivity and potential doubling time. British Journal of Radiology, 2013, 86, 20130015.	2.2	6
67	Evolution of the hypoxic compartment on sequential oxygen partial pressure maps during radiochemotherapy in advanced head and neck cancer. Physics and Imaging in Radiation Oncology, 2021, 17, 100-105.	2.9	6
68	Theoretical Simulation of Tumour Oxygenation - Practical Applications. , 2006, 578, 357-362.		6
69	Radiobiological Evaluation of Combined Gamma Knife Radiosurgery and Hyperthermia for Pediatric Neuro-Oncology. Cancers, 2021, 13, 3277.	3.7	5
70	Assessment of the Probability of Tumour Control for Prescribed Doses Based on Imaging of Oxygen Partial Pressure. Advances in Experimental Medicine and Biology, 2021, 1269, 185-190.	1.6	4
71	Dose painting by numbers - do the practical limitations of the technique decrease or increase the probability of controlling tumours?. IFMBE Proceedings, 2013, , 1731-1734.	0.3	3
72	Impact of Tumour Cell Infiltration on Treatment Outcome in Gamma Knife Radiosurgery: A Modelling Study. Anticancer Research, 2019, 39, 1675-1687.	1.1	3

#	Article	IF	Citations
73	Dosimetric and Radiobiological Evaluation of Hybrid Inverse Planning and Optimization for Cervical Cancer Brachytherapy. Anticancer Research, 2015, 35, 6091-6.	1.1	3
74	Conversion of polarographic electrode measurementsâ€"a computer based approach. Physics in Medicine and Biology, 2005, 50, 4581-4591.	3.0	2
75	In Response to Dr. Karger etÂal.. International Journal of Radiation Oncology Biology Physics, 2008, 70, 1614-1615.	0.8	2
76	Predictive Models of Tumour Response to Treatment Using Functional Imaging Techniques. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-2.	1.3	2
77	Simultaneous Truth and Performance Level Estimation Method for Evaluation of Target Contouring in Radiosurgery. Anticancer Research, 2021, 41, 279-288.	1.1	2
78	Computer Simulation of Oxygen Microelectrode Measurements in Tissues. Advances in Experimental Medicine and Biology, 2003, 510, 157-161.	1.6	2
79	Quantitative Hypoxia Imaging for Treatment Planning of Radiotherapy. Advances in Experimental Medicine and Biology, 2014, 812, 143-148.	1.6	2
80	Radiobiological Framework for the Evaluation of Stereotactic Radiosurgery Plans for Invasive Brain Tumours. ISRN Oncology, 2013, 2013, 1-5.	2.1	1
81	Reply to the comment on â€˜The influence of dose heterogeneity on tumour control probability in fractionated radiation therapyâ€™. Physics in Medicine and Biology, 2013, 58, 6591-6592.	3.0	1
82	Cancer incidence and radiation therapy in Mozambique â€“ a comparative study to Sweden. Acta OncolÃ³gica, 2014, 53, 712-715.	1.8	1
83	Theoretical Simulation of Tumour Hypoxia Measurements. , 2006, 578, 369-374.		1
84	Recent Developments in the Prediction of Clinical Outcomes Data in Radiation Oncology. International Journal of Radiation Oncology Biology Physics, 2020, 108, 513-517.	0.8	0
85	Mathematical Description of Changes in Tumour Oxygenation from Repeated Functional Imaging. Advances in Experimental Medicine and Biology, 2018, 1072, 195-200.	1.6	0
86	Predicting the sensitivity to ion therapy based on the response to photon irradiation--experimental evidence and mathematical modelling. Anticancer Research, 2014, 34, 2801-6.	1.1	0
87	Radiobiological treatment planning evaluation of inverse planning simulated annealing for cervical cancer high-dose-rate brachytherapy. Anticancer Research, 2015, 35, 935-9.	1.1	0