Robert D Stewart

List of Publications by Year
in descending order

48 papers	2,237 citations	331670 21 h-index	233421 45 g-index
49 all docs	49 docs citations	49 times ranked	2222 citing authors

#	Article	IF	Citations
1	Induction and Repair of Clustered DNA Lesions: What Do We Know So Far?. Radiation Research, 2013, 180, 100-109.	1.5	239
2	Impact of prolonged fraction delivery times on tumor control: A note of caution for intensity-modulated radiation therapy (IMRT). International Journal of Radiation Oncology Biology Physics, 2003, 57, 543-552.	0.8	192
3	Report of the <scp>AAPM TG</scp>â€256 on the relative biological effectiveness of proton beams in radiation therapy. Medical Physics, 2019, 46, e53-e78.	3.0	189
4	Effects of Radiation Quality and Oxygen on Clustered DNA Lesions and Cell Death. Radiation Research, 2011, 176, 587-602.	1.5	171
5	Combined Use of Monte Carlo DNA Damage Simulations and Deterministic Repair Models to Examine Putative Mechanisms of Cell Killing. Radiation Research, 2008, 169, 447-459.	1.5	123
6	Effects of oxygen on intrinsic radiation sensitivity: A test of the relationship between aerobic and	3.0	117
7	A Mechanism-Based Approach to Predict the Relative Biological Effectiveness of Protons and Carbon Ions in Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2012, 83, 442-450.	0.8	113
8	Toward Patient-Specific, Biologically Optimized Radiation Therapy Plans for the Treatment of Glioblastoma. PLoS ONE, 2013, 8, e79115.	2.5	101
9	Neutron scattered dose equivalent to a fetus from proton radiotherapy of the mother. Medical Physics, 2006, 33, 2479-2490.	3.0	96
10	Systemic mechanisms and effects of ionizing radiation: A new â¿¿oldâ¿¿ paradigm of how the bystanders and distant can become the players. Seminars in Cancer Biology, 2016, 37-38, 77-95.	9.6	96
11	Comparison ofin vitroandin vivoÂ/Â ratios for prostate cancer. Physics in Medicine and Biology, 2004, 49, 4477-4491.	3.0	95
12	Rapid MCNP simulation of DNA double strand break (DSB) relative biological effectiveness (RBE) for photons, neutrons, and light ions. Physics in Medicine and Biology, 2015, 60, 8249-8274.	3.0	81
13	A comparison of mechanismâ€inspired models for particle relative biological effectiveness (RBE). Medical Physics, 2018, 45, e925-e952.	3.0	69
14	BGRT: Biologically guided radiation therapyâ€"The future is fast approaching!. Medical Physics, 2007, 34, 3739-3751.	3.0	57
15	Extension of TOPAS for the simulation of proton radiation effects considering molecular and cellular endpoints. Physics in Medicine and Biology, 2015, 60, 5053-5070.	3.0	56
16	Induction and Processing of Oxidative Clustered DNA Lesions in56Fe-Ion-Irradiated Human Monocytes. Radiation Research, 2007, 168, 87-97.	1.5	55
17	Dose escalation in permanent brachytherapy for prostate cancer: dosimetric and biological considerations. Physics in Medicine and Biology, 2003, 48, 2753-2765.	3.0	44
18	Neutron Exposures in Human Cells: Bystander Effect and Relative Biological Effectiveness. PLoS ONE, 2014, 9, e98947.	2.5	32

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19	Equivalence of the linearÂquadratic and two-lesion kinetic models. Physics in Medicine and Biology, 2002, 47, 3197-3209.	3.0	29
20	Effective Target Size for the Induction of Bystander Effects in Medium Transfer Experiments. Radiation Research, 2007, 168, 627-630.	1.5	23
21	On the biophysical interpretation of lethal DNA lesions induced by ionising radiation. Radiation Protection Dosimetry, 2006, 122, 169-172.	0.8	22
22	Biological and dosimetric characterisation of spatially fractionated proton minibeams. Physics in Medicine and Biology, 2017, 62, 9260-9281.	3.0	18
23	Modeling prostate cancer: In regards to Nahum et al. (Int J Radiat Oncol Biol Phys 2003;57:391â€"401). International Journal of Radiation Oncology Biology Physics, 2005, 61, 309-310.	0.8	17
24	Investigation of effective decision criteria for multiobjective optimization in IMRT. Medical Physics, 2011, 38, 2964-2974.	3.0	17
25	A feasibility study: Selection of a personalized radiotherapy fractionation schedule using spatiotemporal optimization. Medical Physics, 2015, 42, 6671-6678.	3.0	17
26	Dosimetric characteristics of the University of Washington Clinical Neutron Therapy System. Physics in Medicine and Biology, 2018, 63, 105008.	3.0	17
27	Does Neutron Radiation Therapy Potentiate an Immune Response to Merkel Cell Carcinoma?. International Journal of Particle Therapy, 2018, 5, 183-195.	1.8	15
28	Induction of DNA Damage by Light Ions Relative to 60Co Î³-rays. International Journal of Particle Therapy, 2018, 5, 25-39.	1.8	15
29	The Dancing Cord: Inherent Spinal Cord Motion and Its Effect on Cord Dose in Spine Stereotactic Body Radiation Therapy. Neurosurgery, 2020, 87, 1157-1166.	1.1	14
30	DNA double strand break (DSB) induction and cell survival in iodine-enhanced computed tomography (CT). Physics in Medicine and Biology, 2017, 62, 6164-6184.	3.0	13
31	In vitrodetermination of radiation sensitivity parameters for DU-145 prostate cancer cells. International Journal of Radiation Biology, 2008, 84, 515-522.	1.8	11
32	MCNP6 model of the University of Washington clinical neutron therapy system (CNTS). Physics in Medicine and Biology, 2016, 61, 937-957.	3.0	10
33	Comparative photon and proton dosimetry for patients with mediastinal lymphoma in the era of Monte Carlo treatment planning and variable relative biological effectiveness. Radiation Oncology, 2019, 14, 243.	2.7	10
34	Mechanistic Modeling of the Relative Biological Effectiveness of Boron Neutron Capture Therapy. Cells, 2020, 9, 2302.	4.1	10
35	Designing equivalent treatment regimens for prostate radiotherapy based on equivalent uniform dose. British Journal of Radiology, 2008, 81, 59-68.	2.2	9
36	An Extended Tabulation of Effective Dose Equivalent from Neutrons Incident on a Male Anthropomorphic Phantom. Health Physics, 1993, 65, 405-413.	0.5	8

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37	Retrospective analysis of double-strand break rejoining data collected using warm-lysis PFGE protocols. International Journal of Radiation Biology, 2005, 81, 421-428.	1.8	7
38	Fourth Intercomparison of Personal Dosemeters used in US Department of Energy Accelerator Facilities. Radiation Protection Dosimetry, 2000, 87, 77-86.	0.8	6
39	Reducing the Cost of Proton Radiation Therapy: The Feasibility of a Streamlined Treatment Technique for Prostate Cancer. Cancers, 2015, 7, 688-705.	3.7	6
40	Comparisons of 3-Dimensional Conformal and Intensity-Modulated Neutron Therapy for Head and Neck Cancers. International Journal of Particle Therapy, 2021, 8, 51-61.	1.8	5
41	Volume effects in the TCP for hypoxic and oxygenated tumors. Medical Physics, 2020, 47, 4626-4633.	3.0	4
42	Scattering kernels for fast neutron therapy treatment planning. Physics in Medicine and Biology, 2020, 65, 165009.	3.0	3
43	Tumor control probability in hypofractionated radiotherapy as a function of total and hypoxic tumor volumes. Physics in Medicine and Biology, 2021, 66, 125010.	3.0	2
44	Mechanistic Modeling of the Relative Biological Effectiveness of Photon, Proton, and Carbon Ion Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2010, 78, S48-S49.	0.8	1
45	Fast-neutron testing at the University of Washington Medical Cyclotron Facility. , 2019, , .		1
46	A new approach to modeling the microdosimetry of proton therapy beams. Medical Physics, 2020, 47, 3184-3190.	3.0	1
47	A Monte-Carlo Derived Dual-Source Model for Helical Tomotherapy Treatment Planning. Technology in Cancer Research and Treatment, 2008, 7, 141-147.	1.9	0
48	Towards Temporal Optimization of Radiation Fractionation: The Kinetic Effects of Tumor Hypoxia, DNA Damage Repair, and Tumor Cell Repopulation. International Journal of Radiation Oncology Biology Physics, 2009, 75, S615-S616.	0.8	0