Giuseppe Schettino

List of Publications by Year
in descending order

96	4,363	117453	106150
papers	citations	34 h-index	65 g-index

98	98	98	4652
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Biological consequences of nanoscale energy deposition near irradiated heavy atom nanoparticles. Scientific Reports, 2011, 1, 18.	1.6	335
2	New insights on cell death from radiation exposure. Lancet Oncology, The, 2005, 6, 520-528.	5.1	316
3	Evaluation of cytotoxicity and radiation enhancement using 1.9 nm gold particles: potential application for cancer therapy. Nanotechnology, 2010, 21, 295101.	1.3	194
4	A charged-particle microbeam: I. Development of an experimental system for targeting cells individually with counted particles. International Journal of Radiation Biology, 1997, 72, 375-385.	1.0	181
5	Biological mechanisms of gold nanoparticle radiosensitization. Cancer Nanotechnology, 2017, 8, 2.	1.9	180
6	Relative Biological Effectiveness Variation Along Monoenergetic and Modulated Bragg Peaks of a 62-MeV Therapeutic Proton Beam: A Preclinical Assessment. International Journal of Radiation Oncology Biology Physics, 2014, 90, 27-35.	0.4	178
7	Nanodosimetric effects of gold nanoparticles in megavoltage radiation therapy. Radiotherapy and Oncology, 2011, 100, 412-416.	0.3	174
8	Cell type-dependent uptake, localization, and cytotoxicity of 1.9 nm gold nanoparticles. International Journal of Nanomedicine, 2012, 7, 2673.	3.3	150
9	Identification of a BRCA1-mRNA Splicing Complex Required for Efficient DNA Repair and Maintenance of Genomic Stability. Molecular Cell, 2014, 54, 445-459.	4.5	146
10	Use of the Î³-H2AX Assay to Investigate DNA Repair Dynamics Following Multiple Radiation Exposures. PLoS ONE, 2013, 8, e79541.	1.1	143
11	Low-Dose Binary Behavior of Bystander Cell Killing after Microbeam Irradiation of a Single Cell with Focused CKX Rays. Radiation Research, 2005, 163, 332-336.	0.7	139
12	Low-Dose Studies of Bystander Cell Killing with Targeted Soft X Rays. Radiation Research, 2003, 160, 505-511.	0.7	129
13	A charged-particle microbeam: II. A single-particle micro-collimation and detection system.. International Journal of Radiation Biology, 1997, 72, 387-395.	1.0	123
14	Imaging and radiation effects of gold nanoparticles in tumour cells. Scientific Reports, 2016, 6, 19442.	1.6	111
15	Biological effectiveness on live cells of laser driven protons at dose rates exceeding 109 Gy/s. AIP Advances, 2012, 2, .	0.6	97
16	A Focused Ultrasoft X-Ray Microbeam for Targeting Cells Individually with Submicrometer Accuracy. Radiation Research, 2001, 156, 796-804.	0.7	94
17	Standards and Methodologies for Characterizing Radiobiological Impact of High-Z Nanoparticles. Theranostics, 2016, 6, 1651-1671.	4.6	75
18	Variations in the Processing of DNA Double-Strand Breaks Along 60-MeV Therapeutic Proton Beams. International Journal of Radiation Oncology Biology Physics, 2016, 95, 86-94.	0.4	74

#	Article	IF	Citations
19	Low-Dose Hypersensitivity in Chinese Hamster V79 Cells Targeted with Counted Protons Using a Charged-Particle Microbeam. Radiation Research, 2001, 156, 526-534.	0.7	73
20	DNA Double Strand Break Repair: A Radiation Perspective. Antioxidants and Redox Signaling, 2013, 18, 2458-2472.	2.5	72
21	Non-targeted Effects of Radiation: Bystander Responses in Cell and Tissue Models. Radiation Protection Dosimetry, 2002, 99, 223-226.	0.4	71
22	hSSB1 rapidly binds at the sites of DNA double-strand breaks and is required for the efficient recruitment of the MRN complex. Nucleic Acids Research, 2011, 39, 1692-1702.	6.5	70
23	Evidence for induction of DNA double strand breaks in the bystander response to targeted soft X-rays in CHO cells. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2004, 556, 209-215.	0.4	68
24	Investigating the Implications of a Variable RBE on Proton Dose Fractionation Across a Clinical Pencil Beam Scanned Spread-Out Bragg Peak. International Journal of Radiation Oncology Biology Physics, 2016, 95, 70-77.	0.4	57
25	Future development of biologically relevant dosimetry. British Journal of Radiology, 2015, 88, 20140392.	1.0	55
26	A Kinetic-Based Model of Radiation-Induced Intercellular Signalling. PLoS ONE, 2013, 8, e54526.	1.1	55
27	Energy Dependence of Gold Nanoparticle Radiosensitization in Plasmid DNA. Journal of Physical Chemistry C, 2011, 115, 20160-20167.	1.5	50
28	A mechanistic study of gold nanoparticle radiosensitisation using targeted microbeam irradiation. Scientific Reports, 2017, 7, 44752.	1.6	50
29	Dose, dose-rate and field size effects on cell survival following exposure to non-uniform radiation fields. Physics in Medicine and Biology, 2012, 57, 3197-3206.	1.6	43
30	Microbeam Studies of the Bystander Response. Journal of Radiation Research, 2009, 50, A1-A6.	0.8	40
31	Focused very high-energy electron beams as a novel radiotherapy modality for producing high-dose volumetric elements. Scientific Reports, 2019, 9, 10837.	1.6	40
32	Histone H2AX Phosphorylation in Normal Human Cells Irradiated with Focused Ultrasoft X Rays: Evidence for Chromatin Movement during Repair. Radiation Research, 2006, 166, 31-38.	0.7	37
33	DNA DSB Repair Dynamics following Irradiation with Laser-Driven Protons at Ultra-High Dose Rates. Scientific Reports, 2019, 9, 4471.	1.6	37
34	A Novel Scaffold-Based Hybrid Multicellular Model for Pancreatic Ductal Adenocarcinomaâ€"Toward a Better Mimicry of the in vivo Tumor Microenvironment. Frontiers in Bioengineering and Biotechnology, 2020, 8, 290.	2.0	37
35	Protein disulphide isomerase as a target for nanoparticle-mediated sensitisation of cancer cells to radiation. Nanotechnology, 2016, 27, 215101.	1.3	36
36	Small field dosimetry for the small animal radiotherapy research platform (SARRP). Radiation Oncology, 2017, 12, 204.	1.2	30

#	Article	IF	Citations
37	Investigating the cellular effects of isolated radiation tracks using microbeam techniques. Advances in Space Research, 2002, 30, 871-876.	1.2	29
38	The impact of microbeams in radiation biology. Nuclear Instruments & Methods in Physics Research B, 2001, 181, 426-430.	0.6	28
39	Using the Proton Energy Spectrum and Microdosimetry to Model Proton Relative Biological Effectiveness. International Journal of Radiation Oncology Biology Physics, 2019, 104, 316-324.	0.4	28
40	Microbeam evolution: from single cell irradiation to pre-clinical studies. International Journal of Radiation Biology, 2018, 94, 708-718.	1.0	27
41	Microbeams in radiation biology: review and critical comparison. Radiation Protection Dosimetry, 2011, 143, 335-339.	0.4	26
42	Two approaches for irradiating cells individually: a charged-particle microbeam and a soft X-ray microprobe. Nuclear Instruments & Methods in Physics Research B, 1997, 130, 270-274.	0.6	24
43	Radiation microbeams as spatial and temporal probes of subcellular and tissue response. Mutation Research - Reviews in Mutation Research, 2010, 704, 68-77.	2.4	24
44	Impact of superparamagnetic iron oxide nanoparticles on in vitro and in vivo radiosensitisation of cancer cells. Radiation Oncology, 2021, 16, 104.	1.2	24
45	Single ion actions: The induction of micronuclei in V79 cells exposed to individual protons. Advances in Space Research, 2000, 25, 2095-2101.	1.2	22
46	Antiproton induced DNA damage: proton like in flight, carbon-ion like near rest. Scientific Reports, 2013, 3, 1770.	1.6	21
47	Chemoradiotherapy screening in a novel biomimetic polymer based pancreatic cancer model. RSC Advances, 2019, 9, 41649-41663.	1.7	21
48	New insights into the cellular response to radiation using microbeams. Nuclear Instruments & Methods in Physics Research B, 2005, 231, 189-194.	0.6	19
49	ELIMED, MEDical and multidisciplinary applications at ELI-Beamlines. Journal of Physics: Conference Series, 2014, 508, 012010.	0.3	19
50	LhARA: The Laser-hybrid Accelerator for Radiobiological Applications. Frontiers in Physics, 2020, 8, .	1.0	19
51	Pro-inflammatory Signaling in a 3D Organotypic Skin Model after Low LET Irradiationâ€"NF-ÎºB, COX-2 Activation, and Impact on Cell Differentiation. Frontiers in Immunology, 2017, 8, 82.	2.2	18
52	3d tissue models as tools for radiotherapy screening for pancreatic cancer. British Journal of Radiology, 2021, 94, 20201397.	1.0	17
53	Biological effects of static magnetic field exposure in the context of MR-guided radiotherapy. British Journal of Radiology, 2019, 92, 20180484.	1.0	16
54	Relative biological effectiveness (RBE) and out-of-field cell survival responses to passive scattering and pencil beam scanning proton beam deliveries. Physics in Medicine and Biology, 2012, 57, 6671-6680.	1.6	15

#	Article	IF	Citations
55	Radiobiological Implications of Nanoparticles Following Radiation Treatment. Particle and Particle Systems Characterization, 2020, 37, 1900411.	1.2	14
56	On the Evaluation of a Novel Hypoxic 3D Pancreatic Cancer Model as a Tool for Radiotherapy Treatment Screening. Cancers, 2021, 13, 6080.	1.7	14
57	ELIMED: a new hadron therapy concept based on laser driven ion beams. Proceedings of SPIE, 2013, , .	0.8	13
58	The effect of radioiodine treatment on the diseased thyroid gland. International Journal of Radiation Biology, 2019, 95, 1718-1727.	1.0	13
59	Upgrading of the Gray Laboratory Soft X Ray Microprobe with V79 Survival Measurements Following Irradiation of One or All Cells with a Ck X Ray Beam of Different Size. Radiation Protection Dosimetry, 2002, 99, 287-288.	0.4	12
60	Recommendations for clinical translation of nanoparticle-enhanced radiotherapy. British Journal of Radiology, 2018, 91, 20180325.	1.0	12
61	Mechanisms of DNA Damage Response to Targeted Irradiation in Organotypic 3D Skin Cultures. PLoS ONE, 2014, 9, e86092.	1.1	12
62	Development and Implementation of an End-To-End Test for Absolute Dose Verification of Small Animal Preclinical Irradiation Research Platforms. International Journal of Radiation Oncology Biology Physics, 2020, 107, 587-596.	0.4	11
63	Development of a method for assessing non-targeted radiation damage in an artificial 3D human skin model. International Journal of Radiation Biology, 2010, 86, 593-601.	1.0	10
64	Spatiotemporal investigations of DNA damage repair using microbeams. Radiation Protection Dosimetry, 2011, 143, 340-343.	0.4	9
65	The influence of lack of reference conditions on dosimetry in pre-clinical radiotherapy with medium energy x-ray beams. Physics in Medicine and Biology, 2020, 65, 085016.	1.6	9
66	Evaluation of a Novel Liquid Fiducial Marker, BioXmarkÂ®, for Small Animal Image-Guided Radiotherapy Applications. Cancers, 2020, 12, 1276.	1.7	9
67	Novel Anticancer and Treatment Sensitizing Compounds against Pancreatic Cancer. Cancers, 2021, 13, 2940.	1.7	8
68	Impact of fractionation on out-of-field survival and DNA damage responses following exposure to intensity modulated radiation fields. Physics in Medicine and Biology, 2016, 61, 515-526.	1.6	7
69	Oxidative Metabolism Involved in Non-targeted Effects Induced by Proton Radiation in Intact Arabidopsis Seeds. Journal of Radiation Research, 2011, 52, 159-167.	0.8	6
70	X-ray Microbeams for Radiobiological Studies: Current Status and Future Challenges. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2010, 6, 207-211.	0.4	6
71	Laser-plasma generated very high energy electrons (VHEEs) in radiotherapy. , 2017, , .		5
72	Evaluation of a micro ionization chamber for dosimetric measurements in image-guided preclinical irradiation platforms. Physics in Medicine and Biology, 2021, 66, 245012.	1.6	5

#	Article	IF	Citations
73	Relationship of In Vitro Toxicity of Technetium-99m to Subcellular Localisation and Absorbed Dose. International Journal of Molecular Sciences, 2021, 22, 13466.	1.8	5
74	Experimental setup and first measurement of DNA damage induced along and around an antiproton beam. European Physical Journal D, 2010, 60, 209-214.	0.6	4
75	Ion source development and radiobiology applications within the LIBRA project. , 2011, , .		4
76	Development of a low-energy particle irradiation facility for the study of the biological effectiveness of the ion track end. Journal of Physics: Conference Series, 2012, 373, 012019.	0.3	4
77	First results on cell irradiation with laser-driven protons on the TARANIS system. , 2013, , .		3
78	Understanding Radiation Damage to Cells Using Microbeams. Acta Physica Polonica A, 2006, 109, 257-264.	0.2	3
79	<title>Development and application of a focused ultrasoft x-ray probe for radiobiological applications</title>. , 2001, , .		2
80	Spatio-temporal analysis of DNA damage repair using the X-ray microbeam. European Physical Journal D, 2010, 60, 157-161.	0.6	1
81	Microbeam Radiation Biology. , 2014, , 23-42.		1
82	<title>X-ray microprobe for studies of cellular radiation response</title>. , 1998, , .		0
83	The x-ray microprobe for studies of cellular radiation response. AIP Conference Proceedings, 2000, , .	0.3	0
84	453 poster CONSEQUENCES OF NANOSCALE ENERGY DEPOSITION AROUND HEAVY ATOM NANOPARTICLES: IMPLICATIONS FOR RADIOTHERAPY. Radiotherapy and Oncology, 2011, 99, S182.	0.3	0
85	Biological cell irradiation at ultrahigh dose rate employing laser driven protons. , 2012, , .		0
86	Differential Mechanisms of Cellular Radiobiological Response Following Exposure to Intensity Modulated Radiation Fields. International Journal of Radiation Oncology Biology Physics, 2012, 84, S672.	0.4	0
87	Radiobiology at ultra-high dose rates employing laser-driven ions. Proceedings of SPIE, 2013, , .	0.8	0
88	Radiobiology challenges for ELIMED. , 2013, , .		0
89	Investigations of DNA damage induction and repair resulting from cellular exposure to high dose-rate pulsed proton beams. , 2013, , .		0
90	Enhancement of radiation effectiveness by high Z nanoparticles. Physica Medica, 2015, 31, e34.	0.4	0

#	Article	IF	Citations
91	Effects of magnetic field on an optical fibre radiation dosimeter. , 2016, , .		0
92	Effects of dead time on quantitative dual-energy imaging using a position-sensitive spectroscopic detector. , 2017, , .		0
93	The Gray Cancer institute X-ray microprobe and its radiobiological applications. European Physical Journal Special Topics, 2003, 104, 301-304.	0.2	0
94	Application of Microbeams to the Study of the Biological Effects of Low Dose Irradiation. , 2010, , 575-594.		0
95	Spatial and Temporal Aspects of Radiation Response in Cell and Tissue Models. Biological and Medical Physics Series, 2012, , 385-396.	0.3	0
96	The DNA Damage Response in Nontargeted Cells. , 2009, , 193-198.		0