Yolanda Prezado

List of Publications by Year
in descending order

104 papers	2,157 citations	218677 26 h-index	254184 43 g-index
104 all docs	104 docs citations	104 times ranked	1526 citing authors

#	Article	IF	Citations
1	Revised rates for the stellar triple-Î± process from measurement of 12C nuclear resonances. Nature, 2005, 433, 136-139.	27.8	205
2	Effects of pulsed, spatially fractionated, microscopic synchrotron X-ray beams on normal and tumoral brain tissue. Mutation Research - Reviews in Mutation Research, 2010, 704, 160-166.	5.5	177
3	Characterization and quantification of cerebral edema induced by synchrotron x-ray microbeam radiation therapy. Physics in Medicine and Biology, 2008, 53, 1153-1166.	3.0	87
4	Protonâ€minibeam radiation therapy: A proof of concept. Medical Physics, 2013, 40, 031712.	3.0	85
5	Shell Structure of the Near-Dripline NucleusO23. Physical Review Letters, 2004, 93, 062501.	7.8	78
6	Proton minibeam radiation therapy spares normal rat brain: Long-Term Clinical, Radiological and Histopathological Analysis. Scientific Reports, 2017, 7, 14403.	3.3	75
7	Proton minibeam radiation therapy widens the therapeutic index for high-grade gliomas. Scientific Reports, 2018, 8, 16479.	3.3	61
8	Increase of lifespan for glioma-bearing rats by using minibeam radiation therapy. Journal of Synchrotron Radiation, 2012, 19, 60-65.	2.4	59
9	Better Efficacy of Synchrotron Spatially Microfractionated Radiation Therapy Than Uniform Radiation Therapy on Glioma. International Journal of Radiation Oncology Biology Physics, 2016, 95, 1485-1494.	0.8	59
10	Development and commissioning of a Monte Carlo photon beam model for the forthcoming clinical trials in microbeam radiation therapy. Medical Physics, 2011, 39, 119-131.	3.0	57
11	Tolerance to Dose Escalation in Minibeam Radiation Therapy Applied to Normal Rat Brain: Long-Term Clinical, Radiological and Histopathological Analysis. Radiation Research, 2015, 184, 314-321.	1.5	57
12	Tumor Control in RG2 Glioma-Bearing Rats: A Comparison Between Proton Minibeam Therapy and Standard Proton Therapy. International Journal of Radiation Oncology Biology Physics, 2019, 104, 266-271.	0.8	56
13	FLASH and minibeams in radiation therapy: the effect of microstructures on time and space and their potential application to protontherapy. British Journal of Radiology, 2020, 93, 20190807.	2.2	50
14	Gadolinium dose enhancement studies in microbeam radiation therapy. Medical Physics, 2009, 36, 3568-3574.	3.0	48
15	A new method of creating minibeam patterns for synchrotron radiation therapy: a feasibility study. Journal of Synchrotron Radiation, 2009, 16, 582-586.	2.4	42
16	Properties of the 12C 10 MeV state determined through Î²-decay. Nuclear Physics A, 2005, 760, 3-18.	1.5	40
17	Xâ€ray energy optimization in minibeam radiation therapy. Medical Physics, 2009, 36, 4897-4902.	3.0	40
18	Monte Carloâ€based treatment planning system calculation engine for microbeam radiation therapy. Medical Physics, 2012, 39, 2829-2838.	3.0	34

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19	Preclinical radiotherapy at the Australian Synchrotron's Imaging and Medical Beamline: instrumentation, dosimetry and a small-animal feasibility study. Journal of Synchrotron Radiation, 2017, 24, 854-865.	2.4	33
20	Short and long-term evaluation of the impact of proton minibeam radiation therapy on motor, emotional and cognitive functions. Scientific Reports, 2020, 10, 13511.	3.3	33
21	Large asymmetry in the strongest Î²-transition for A=9. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 576, 55-61.	4.1	32
22	First proton minibeam radiation therapy treatment plan evaluation. Scientific Reports, 2020, 10, 7025.	3.3	32
23	Implementation of planar proton minibeam radiation therapy using a pencil beam scanning system: A proof of concept study. Medical Physics, 2018, 45, 5305-5316.	3.0	29
24	Spatially fractionated proton minibeams. British Journal of Radiology, 2019, 92, 20180466.	2.2	28
25	Advancing proton minibeam radiation therapy: magnetically focussed proton minibeams at a clinical centre. Scientific Reports, 2020, 10, 1384.	3.3	28
26	Monte Carlo dose enhancement studies in microbeam radiation therapy. Medical Physics, 2011, 38, 4430-4439.	3.0	27
27	Optimization of the mechanical collimation for minibeam generation in proton minibeam radiation therapy. Medical Physics, 2017, 44, 1470-1478.	3.0	27
28	Synchrotron-Generated Microbeam Sensorimotor Cortex Transections Induce Seizure Control without Disruption of Neurological Functions. PLoS ONE, 2013, 8, e53549.	2.5	27
29	Low-lying resonance states in the 9Be continuum. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 618, 43-50.	4.1	25
30	Potential High Resolution Dosimeters For MRT. AIP Conference Proceedings, 2010, , .	0.4	25
31	Synchrotron X-ray interlaced microbeams suppress paroxysmal oscillations in neuronal networks initiating generalized epilepsy. Neurobiology of Disease, 2013, 51, 152-160.	4.4	24
32	Biological equivalent dose studies for dose escalation in the stereotactic synchrotron radiation therapy clinical trials. Medical Physics, 2009, 36, 725-733.	3.0	23
33	Study of the biochemical effects induced by X-ray irradiations in combination with gadolinium nanoparticles in F98 glioma cells: first FTIR studies at the Emira laboratory of the SESAME synchrotron. Analyst, The, 2016, 141, 2238-2249.	3.5	17
34	Measurement of carbon ion microdosimetric distributions with ultrathin 3D silicon diodes. Physics in Medicine and Biology, 2016, 61, 4036-4047.	3.0	17
35	First Evaluation of Temporal and Spatial Fractionation in Proton Minibeam Radiation Therapy of Glioma-Bearing Rats. Cancers, 2021, 13, 4865.	3.7	17
36	Divide and conquer: spatially fractionated radiation therapy. Expert Reviews in Molecular Medicine, 2022, 24, .	3.9	17

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37	Survival Analysis of F98 Glioma Rat Cells Following Minibeam or Broad-Beam Synchrotron Radiation Therapy. Radiation Oncology, 2011, 6, 37.	2.7	15
38	Carbon and oxygen minibeam radiation therapy: An experimental dosimetric evaluation. Medical Physics, 2017, 44, 4223-4229.	3.0	15
39	Correlated emission of three Î±-particles in the Î²-decay of 12N. European Physical Journal A, 2002, 15, 135-138.	2.5	14
40	Spatial fractionation of the dose using neon and heavier ions: A Monte Carlo study. Medical Physics, 2015, 42, 5928-5936.	3.0	14
41	Spatial fractionation of the dose in heavy ions therapy: An optimization study. Medical Physics, 2018, 45, 2620-2627.	3.0	14
42	Improving the dose distributions in minibeam radiation therapy: Helium ions vs protons. Medical Physics, 2019, 46, 3640-3648.	3.0	14
43	X-rays minibeam radiation therapy at a conventional irradiator: Pilot evaluation in F98-glioma bearing rats and dose calculations in a human phantom. Clinical and Translational Radiation Oncology, 2021, 27, 44-49.	1.7	14
44	Spatially Modulated Proton Minibeams Results in the Same Increase of Lifespan as a Uniform Target Dose Coverage in F98-Glioma-Bearing Rats. Radiation Research, 2020, 194, 715-723.	1.5	14
45	Spatial fractionation of the dose in proton therapy: Proton minibeam radiation therapy. Cancer Radiotherapie: Journal De La Societe Francaise De Radiotherapie Oncologique, 2019, 23, 677-681.	1.4	13
46	News on 12C from Î²-decay studies. Nuclear Physics A, 2004, 738, 59-65.	1.5	11
47	Photon activation therapy of RG2 glioma carrying Fischer rats using stable thallium and monochromatic synchrotron radiation. Physics in Medicine and Biology, 2012, 57, 8377-8391.	3.0	11
48	Scatter factors assessment in microbeam radiation therapy. Medical Physics, 2012, 39, 1234-1238.	3.0	11
49	Analysis of Platinum and Trace Metals in Treated Glioma Rat Cells by X-Ray Fluorescence Emission. Biological Trace Element Research, 2015, 163, 177-183.	3.5	10
50	Heterogeneous intratumoral distribution of gadolinium nanoparticles within U87 human glioblastoma xenografts unveiled by micro-PIXE imaging. Analytical Biochemistry, 2017, 523, 50-57.	2.4	10
51	Effect of X-ray minibeam radiation therapy on clonogenic survival of glioma cells. Clinical and Translational Radiation Oncology, 2018, 13, 7-13.	1.7	10
52	Impact of cardiosynchronous brain pulsations on Monte Carlo calculated doses for synchrotron microâ€•and minibeam radiation therapy. Medical Physics, 2018, 45, 3379-3390.	3.0	10
53	Minibeam radiation therapy: A microâ€•and nanoâ€dosimetry Monte Carlo study. Medical Physics, 2020, 47, 1379-1390.	3.0	10
54	Theoretical dosimetric evaluation of carbon and oxygen minibeam radiation therapy. Medical Physics, 2017, 44, 1921-1929.	3.0	9

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55	A Potential Renewed Use of Very Heavy Ions for Therapy: Neon Minibeam Radiation Therapy. Cancers, 2021, 13, 1356.	3.7	9
56	New information on 12C states from the decays of 12N and 12B. Nuclear Physics A, 2003, 718, 541-543.	1.5	8
57	Biomedical Research Programs at Present and Future High-Energy Particle Accelerators. Frontiers in Physics, 2020, 8, 00380.	2.1	8
58	Verification of a Monte Carlo dose calculation engine in proton minibeam radiotherapy in a passive scattering beamline for preclinical trials. British Journal of Radiology, 2020, 93, 20190578.	2.2	8
59	Monte Carlo Comparison of Proton and Helium-ion Minibeam Generation Techniques. Frontiers in Physics, 2021, 9, .	2.1	8
60	Secondary neutron dose contribution from pencil beam scanning, scattered and spatially fractionated proton therapy. Physics in Medicine and Biology, 2021, 66, 225010.	3.0	8
61	One-neutron knockout of 23O. European Physical Journal A, 2005, 25, 343-346.	2.5	7
62	Monte Carlo-based dose calculation engine for minibeam radiation therapy. Physica Medica, 2014, 30, 57-62.	0.7	7
63	Conceptual Design of a Novel Nozzle Combined with a Clinical Proton Linac for Magnetically Focussed Minibeams. Cancers, 2021, 13, 4657.	3.7	7
64	A scanning dynamic collimator for spot-scanning proton minibeam production. Scientific Reports, 2021, 11, 18321.	3.3	7
65	Synchrotron radiation in cancer treatments and diagnostics: an overview. Clinical and Translational Oncology, 2011, 13, 715-720.	2.4	6
66	Metal micro-detector TimePix imaging synchrotron radiation beams at the ESRF Bio-Medical Beamline ID17. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 682, 8-11.	1.6	6
67	Dose evaluation of Grid Therapy using a 6 MV flattening filterâ€free (FFF) photon beam: A Monte Carlo study. Medical Physics, 2017, 44, 5378-5383.	3.0	6
68	First theoretical determination of relative biological effectiveness of very high energy electrons. Scientific Reports, 2021, 11, 11242.	3.3	6
69	Preclinical dosimetry in proton minibeam radiation therapy: Robustness analysis and guidelines. Medical Physics, 2022, 49, 5551-5561.	3.0	6
70	The Clinical Trials Program at the ESRF Biomedical Beamline ID17: Status and Remaining Steps. AIP Conference Proceedings, 2010, , .	0.4	5
71	Synchrotron Radiation Therapy from a Medical Physics point of view. , 2010, , .		5
72	Minibeam radiation therapy at a conventional irradiator: Dose-calculation engine and first tumor-bearing animals irradiation. Physica Medica, 2020, 69, 256-261.	0.7	5

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73	Nuclear structure of light exotic nuclei from break-up reactions. Nuclear Physics A, 2004, 746, 479-482.	1.5	4
74	Clarification of the low-lying states of9Be. Physica Scripta, 2006, T125, 103-107.	2.5	4
75	The effect of beam polarization in Microbeam Radiation Therapy (MRT): Monte Carlo simulations using Geant4. , 2009, , .		4
76	EFOMP survey results on national radiotherapy dosimetry audits. Physica Medica, 2021, 84, 10-14.	0.7	4
77	The Î²-decay of 9Li to the high lying states in 9Be. Nuclear Physics A, 2004, 746, 518-521.	1.5	3
78	Optics Design and Beam Dynamics simulation for a VHEE Radiobiology beam line at PRAE accelerator. Journal of Physics: Conference Series, 2019, 1350, 012200.	0.4	3
79	Proton minibeam radiation therapy: a promising therapeutic approach for radioresistant tumors. Comptes Rendus - Biologies, 2021, 344, 409-420.	0.2	3
80	Proton Minibeam Radiation Therapy and Arc Therapy: Proof of Concept of a Winning Alliance. Cancers, 2022, 14, 116.	3.7	3
81	Structure of neutron-rich oxygen isotopes. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1629-S1632.	3.6	2
82	Radiation Therapy Using Synchrotron Radiation: Preclinical Studies Toward Clinical Trials. Synchrotron Radiation News, 2011, 24, 8-12.	0.8	2
83	Characterization of equipment for shaping and imaging hadron minibeams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 872, 119-125.	1.6	2
84	The Biophysics Collaboration for research at FAIR and other new accelerator facilities. Europhysics News, 2019, 50, 27-30.	0.3	2
85	Converging Proton Minibeams with Magnetic Fields for Optimized Radiation Therapy: A Proof of Concept. Cancers, 2022, 14, 26.	3.7	2
86	Beta-Delayed Multiparticle Emission Studies at ISOL-type Facilities. Nuclear Physics A, 2004, 746, 243-247.	1.5	1
87	Medical Applications of Synchrotron Radiation. Biological and Medical Physics Series, 2012, , 433-444.	0.4	1
88	[I147] New approaches in radiotherapy: Spatial fractionation of the dose. Physica Medica, 2018, 52, 56.	0.7	1
89	PV-0569: Proton minibeam radiation therapy widens the therapeutic window for gliomas. Radiotherapy and Oncology, 2018, 127, S299-S300.	0.6	1
90	High-Energy Charged Particles for Spatially Fractionated Radiation Therapy. Frontiers in Physics, 2020, 8, .	2.1	1

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91	Editorial: Applied Nuclear Physics at Accelerators. Frontiers in Physics, 2021, 9, .	2.1	1
92	Translational research in radiobiology in the framework of France HADRON national collaboration. Translational Cancer Research, 2017, 6, S795-S806.	1.0	1
93	Multiple particle break-up study of low excited states in 9Be: The ghost peak in the 8Be excitation energy spectrum visited. European Physical Journal: Special Topics, 2007, 150, 137-138.	2.6	0
94	Particle Induced X-ray Emission Imaging of Gadolinium Distribution into Xenograft U87 Human Glioblastoma after AGuIX Nanoparticles Injection. Microscopy and Microanalysis, 2016, 22, 1094-1095.	0.4	0
95	FTIR Study of the Biochemical Effects Induced by X-Ray Irradiations Combined with GD Nanoparticles in F98 Glioma Cells. Biophysical Journal, 2016, 110, 475a.	0.5	0
96	Microdosimetry with micro-pattern silicon devices. , 2016, , .		0
97	Abstract ID: 80 Charged particles grid and minibeam radiation therapy: Monte Carlo dosimetry evaluations. Physica Medica, 2017, 42, 16.	0.7	0
98	[OA187] Transfer of minibeam radiation therapy into a cost-effective equipment: A proof of concept. Physica Medica, 2018, 52, 71-72.	0.7	0
99	[P128] Spatial fractionation of the dose in charged particle therapy: Dosimetry evaluations. Physica Medica, 2018, 52, 136.	0.7	0
100	[OA052] Proton minibeam radiation therapy: A promising alternative for high-grade gliomas. Physica Medica, 2018, 52, 22.	0.7	0
101	OC-0570 Dosimetric study to guide preclinical trials in proton minibeam radiotherapy. Radiotherapy and Oncology, 2019, 133, S299-S300.	0.6	0
102	Emerging neurosurgical applications of synchrotron-generated microbeams. Cureus, 2011, , .	0.5	0
103	SU-E-T-333: A New Approach in Radiation Therapy: Proton Grid Therapy. Medical Physics, 2013, 40, 281-281.	3.0	0
104	SU-E-T-531: Spatial Fractionation of the Dose in Heavy Ion Therapy. Medical Physics, 2013, 40, 327-327.	3.0	0