Andrea Ottolenghi

List of Publications by Year
in descending order

94 papers	2,257 citations	236612 25 h-index	243296 44 g-index
95 all docs	95 docs citations	95 times ranked	2370 citing authors

#	Article	IF	Citations
1	Radiation pneumonitis after breast cancer irradiation: analysis of the complication probability using the relative seriality model. International Journal of Radiation Oncology Biology Physics, 2000, 46, 373-381.	0.4	152
2	Comprehensive track-structure based evaluation of DNA damage by light ions from radiotherapy-relevant energies down to stopping. Scientific Reports, 2017, 7, 45161.	1.6	149
3	Use of the Î³-H2AX Assay to Investigate DNA Repair Dynamics Following Multiple Radiation Exposures. PLoS ONE, 2013, 8, e79541.	1.1	143
4	Simulation of DNA fragment distributions after irradiation with photons. Radiation and Environmental Biophysics, 1999, 38, 39-47.	0.6	128
5	Galactic cosmic ray simulation at the NASA Space Radiation Laboratory. Life Sciences in Space Research, 2016, 8, 38-51.	1.2	112
6	Cellular communication and bystander effects: a critical review for modelling low-dose radiation action. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2002, 501, 1-12.	0.4	92
7	First steps towards systems radiation biology studies concerned with DNA and chromosome structure within living cells. Radiation and Environmental Biophysics, 2008, 47, 49-61.	0.6	71
8	Biological mechanisms of normal tissue damage: Importance for the design of NTCP models. Radiotherapy and Oncology, 2012, 105, 79-85.	0.3	67
9	The physics of the FLUKA code: Recent developments. Advances in Space Research, 2007, 40, 1339-1349.	1.2	64
10	The origin of neutron biological effectiveness as a function of energy. Scientific Reports, 2016, 6, 34033.	1.6	62
11	Track structure, radiation quality and initial radiobiological events: Considerations based on the PARTRAC code experience. International Journal of Radiation Biology, 2012, 88, 77-86.	1.0	52
12	Simulation of light ion induced DNA damage patterns. Radiation Protection Dosimetry, 2006, 122, 116-120.	0.4	49
13	A New Standard DNA Damage (SDD) Data Format. Radiation Research, 2018, 191, 76.	0.7	49
14	Progress in low dose health risk research. Mutation Research - Reviews in Mutation Research, 2018, 776, 46-69.	2.4	45
15	Multidisciplinary European Low Dose Initiative (MELODI): strategic research agenda for low dose radiation risk research. Radiation and Environmental Biophysics, 2018, 57, 5-15.	0.6	44
16	Gamma ray-induced bystander effect in tumour glioblastoma cells: a specific study on cell survival, cytokine release and cytokine receptors. Radiation Protection Dosimetry, 2006, 122, 271-274.	0.4	43
17	A Monte Carlo Study of the Radiation Quality Dependence of DNA Fragmentation Spectra. Radiation Research, 2010, 173, 263-271.	0.7	37
18	Experimental and theoretical analysis of cytokine release for the study of radiation-induced bystander effect. International Journal of Radiation Biology, 2009, 85, 690-699.	1.0	36

#	Article	IF	Citations
19	Heavy-ion effects: from track structure to DNA and chromosome damage. New Journal of Physics, 2008, 10, 075008.	1.2	32
20	DNA Fragmentation Induced in Human Fibroblasts by⁵⁶Fe Ions: Experimental Data and Monte Carlo Simulations. Radiation Research, 2009, 171, 438-445.	0.7	32
21	A Model of Chromosome Aberration Induction: Applications to Space Research. Radiation Research, 2005, 164, 567-570.	0.7	31
22	The FLUKA code: an overview. Journal of Physics: Conference Series, 2006, 41, 151-160.	0.3	31
23	A model of chromosome aberration induction and chronic myeloid leukaemia incidence at low doses. Radiation and Environmental Biophysics, 2004, 43, 165-171.	0.6	30
24	Modelling radiation-induced bystander effect and cellular communication. Radiation Protection Dosimetry, 2006, 122, 244-251.	0.4	30
25	Exploring innovative radiation shielding approaches in space: A material and design study for a wearable radiation protection spacesuit. Life Sciences in Space Research, 2017, 15, 69-78.	1.2	29
26	Investigation of the mechanisms underpinning IL-6 cytokine release in bystander responses: The roles of radiation dose, radiation quality and specific ROS/RNS scavengers. International Journal of Radiation Biology, 2012, 88, 751-762.	1.0	26
27	Proton activation analysis of stable isotopes for a molybdenum biokinetics study in humans. Medical Physics, 1995, 22, 1293-1298.	1.6	24
28	GCR and SPE organ doses in deep space with different shielding: Monte Carlo simulations based on the FLUKA code coupled to anthropomorphic phantoms. Advances in Space Research, 2006, 37, 1791-1797.	1.2	24
29	Integration of Monte Carlo Simulations with PFGE Experimental Data Yields Constant RBE of 2.3 for DNA Double-Strand Break Induction by Nitrogen Ions between 125 and 225 keV/Î¼m LET. Radiation Research, 2013, 179, 690-697.	0.7	24
30	Effects of Ionizing Radiation on Cell-to-Cell Communication. Radiation Research, 2010, 174, 280-289.	0.7	23
31	A Clarion Call for Large-Scale Collaborative Studies of Pediatric Proton Therapy. International Journal of Radiation Oncology Biology Physics, 2017, 98, 980-981.	0.4	23
32	Predicting DNA damage foci and their experimental readout with 2D microscopy: a unified approach applied to photon and neutron exposures. Scientific Reports, 2019, 9, 14019.	1.6	21
33	The COOLER Code: A Novel Analytical Approach to Calculate Subcellular Energy Deposition by Internal Electron Emitters. Radiation Research, 2017, 188, 204-220.	0.7	19
34	The ANDANTE project: a multidisciplinary approach to neutron RBE. Radiation Protection Dosimetry, 2015, 166, 311-315.	0.4	18
35	A water-filled garment to protect astronauts during interplanetary missions tested on board the ISS. Life Sciences in Space Research, 2018, 18, 1-11.	1.2	18
36	The Interplay between Radioresistant Caco-2 Cells and the Immune System Increases Epithelial Layer Permeability and Alters Signaling Protein Spectrum. Frontiers in Immunology, 2017, 8, 223.	2.2	17

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37	Human exposure to space radiation: role of primary and secondary particles. Radiation Protection Dosimetry, 2006, 122, 362-366.	0.4	16
38	Modeling Dose Deposition and DNA Damage Due to Low-Energy Î²^{â€“}Emitters. Radiation Research, 2014, 182, 322-330.	0.7	16
39	Differential Response and Priming Dose Effect on the Proteome of Human Fibroblast and Stem Cells Induced by Exposure to Low Doses of Ionizing Radiation. Radiation Research, 2016, 185, 299.	0.7	16
40	Radiation-induced cell cycle perturbations: a computational tool validated with flow-cytometry data. Scientific Reports, 2021, 11, 925.	1.6	16
41	Monte Carlo evaluation of DNA fragmentation spectra induced by different radiation qualities. Radiation Protection Dosimetry, 2011, 143, 226-231.	0.4	15
42	Analytical formulas representing track-structure simulations on DNA damage induced by protons and light ions at radiotherapy-relevant energies. Scientific Reports, 2020, 10, 15775.	1.6	15
43	Low-dose radiation action: possible implications of bystander effects and adaptive response. Journal of Radiological Protection, 2002, 22, A39-A42.	0.6	14
44	Radiation risk estimation: Modelling approaches for â€œtargetedâ€•and â€œnon-targetedâ€•effects. Advances in Space Research, 2007, 40, 1392-1400.	1.2	13
45	Cellular communication and â€œnon-targeted effectsâ€: Modelling approaches. Advances in Space Research, 2009, 44, 917-925.	1.2	13
46	The risks to healthy tissues from the use of existing and emerging techniques for radiation therapy. Radiation Protection Dosimetry, 2011, 143, 533-535.	0.4	13
47	Cross-section scaling for track structure simulations of low-energy ions in liquid water. Radiation Protection Dosimetry, 2015, 166, 15-18.	0.4	13
48	European low-dose radiation risk research strategy: future of research on biological effects at low doses. Radiation Protection Dosimetry, 2015, 164, 38-41.	0.4	13
49	Track-structure simulations of energy deposition patterns to mitochondria and damage to their DNA. International Journal of Radiation Biology, 2019, 95, 3-11.	1.0	13
50	Whole exome sequencing discloses heterozygous variants in the <i><scp>DNAJC</scp>21</i> and <i><scp>EFL</scp>1</i> genes but not in <i><scp>SRP</scp>54</i> in 6 out of 16 patients with Shwachmanâ€Diamond Syndrome carrying biallelic <i><scp>SBDS</scp></i> mutations. British Journal of Haematology, 2019, 185, 627-630.	1.2	12
51	The European strategy on low dose risk research and the role of radiation quality according to the recommendations of the â€œad hocâ€•High Level and Expert Group (HLEG). Radiation and Environmental Biophysics, 2010, 49, 463-468.	0.6	11
52	Radiation-induced perturbation of cell-to-cell signalling and communication. Radiation Protection Dosimetry, 2011, 143, 294-300.	0.4	11
53	Assessment of cancer risk from neutron exposure â€“ The ANDANTE project. Radiation Measurements, 2013, 57, 68-73.	0.7	11
54	<i>Ex vivo</i> miRNome analysis in <i>Ptch1+/âˆ’</i> cerebellum granule cells reveals a subset of miRNAs involved in radiation-induced medulloblastoma. Oncotarget, 2016, 7, 68253-68269.	0.8	11

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55	Modeling of DNA fragmentation induced in human fibroblasts by 56Fe ions. Advances in Space Research, 2007, 40, 1401-1407.	1.2	10
56	Mechanisms of the induction of apoptosis mediated by radiation-induced cytokine release. Radiation Protection Dosimetry, 2015, 166, 165-169.	0.4	10
57	Modelling human exposure to space radiation with different shielding: the FLUKA code coupled with anthropomorphic phantoms. Journal of Physics: Conference Series, 2006, 41, 135-142.	0.3	9
58	MELODI: the 'Multidisciplinary European Low-Dose Initiative'. Radiation Protection Dosimetry, 2011, 143, 330-334.	0.4	8
59	In vitro Î³-ray-induced inflammatory response is dominated by culturing conditions rather than radiation exposures. Scientific Reports, 2015, 5, 9343.	1.6	8
60	Radiosensitivity in lymphoblastoid cell lines derived from Shwachmanâ€“Diamond syndrome patients. Radiation Protection Dosimetry, 2015, 166, 95-100.	0.4	8
61	Reaction mechanism interplay in determining the biological effectiveness of neutrons as a function of energy. Radiation Protection Dosimetry, 2015, 166, 316-319.	0.4	8
62	MODELLING Î³-H2AX FOCI INDUCTION TO MIMIC LIMITATIONS IN THE SCORING TECHNIQUE. Radiation Protection Dosimetry, 2019, 183, 121-125.	0.4	8
63	Radiochromic Films for Improved Evaluation of Patient Dose in Liver Interventions. Journal of Vascular and Interventional Radiology, 2006, 17, 855-862.	0.2	7
64	INVESTIGATION INTO THE PROBABILITY FOR MISCOUNTING IN FOCI-BASED ASSAYS. Radiation Protection Dosimetry, 2019, 183, 126-130.	0.4	7
65	Education and training to support radiation protection research in Europe: the DoReMi experience. International Journal of Radiation Biology, 2019, 95, 90-96.	1.0	7
66	A Co-culture Method to Investigate the Crosstalk Between X-ray Irradiated Caco-2 Cells and PBMC. Journal of Visualized Experiments, 2018, , .	0.2	6
67	Immunophenotyping Reveals No Significant Perturbation to PBMC Subsets When Co-cultured With Colorectal Adenocarcinoma Caco-2 Cells Exposed to X-Rays. Frontiers in Immunology, 2020, 11, 1077.	2.2	6
68	An Integrated Analysis of the Response of Colorectal Adenocarcinoma Caco-2 Cells to X-Ray Exposure. Frontiers in Oncology, 2021, 11, 688919.	1.3	6
69	Heavy-ion collisions: preliminary results of a new QMD model coupled with FLUKA. Journal of Physics: Conference Series, 2006, 41, 519-522.	0.3	5
70	WHAT ROLES FOR TRACK-STRUCTURE AND MICRODOSIMETRY IN THE ERA OF -omics AND SYSTEMS BIOLOGY?. Radiation Protection Dosimetry, 2019, 183, 22-25.	0.4	5
71	INNOVATIVE SOLUTIONS FOR PERSONAL RADIATION SHIELDING IN SPACE. Radiation Protection Dosimetry, 2019, 183, 228-232.	0.4	5
72	A COMPARISON BETWEEN X-RAY AND CARBON ION IRRADIATION IN HUMAN NEURAL STEM CELLS. Radiation Protection Dosimetry, 2019, 183, 102-106.	0.4	5

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73	Carbon induced reactions at low incident energies. Journal of Physics: Conference Series, 2006, 41, 212-218.	0.3	4
74	AT THE PHYSICSâ€“BIOLOGY INTERFACE: THE NEUTRON AFFAIR. Radiation Protection Dosimetry, 2018, 180, 278-281.	0.4	4
75	Coupling Radiation Transport and Track-Structure Simulations: Strategy Based on Analytical Formulas Representing DNA Damage Yields. Frontiers in Physics, 2021, 9, .	1.0	4
76	A systems radiation biology approach to unravel the role of chronic low-dose-rate gamma-irradiation in inducing premature senescence in endothelial cells. PLoS ONE, 2022, 17, e0265281.	1.1	4
77	Stimulation of intercellular induction of apoptosis in transformed cells at very low doses of ionising radiation: spatial and temporal features. Radiation Protection Dosimetry, 2015, 166, 161-164.	0.4	3
78	Energy dependence of the complexity of DNA damage induced by carbon ions. Radiation Protection Dosimetry, 2015, 166, 86-90.	0.4	3
79	The PERSEO Experience: A Water-Filled Garment Prototype for Personal Radiation Protection of Astronauts Successfully Tested on Board the International Space Station. Aerotecnica Missili & Spazio, 2020, 99, 111-114.	0.5	3
80	A 3D In Vitro Model of the Human Airway Epithelium Exposed to Tritiated Water: Dosimetric Estimate and Cytotoxic Effects. Radiation Research, 2020, 195, 265-274.	0.7	3
81	Role of DNA/chromatin organisation and scavenging capacity in USX- and proton- induced DNA damage. Radiation Protection Dosimetry, 2006, 122, 141-146.	0.4	2
82	A Monte Carlo approach to study neutron and fragment emission in heavy-ion reactions. Advances in Space Research, 2007, 40, 1350-1356.	1.2	2
83	Second Malignancies following Breast Cancer Treatment: A Case-Control Study Based on the Peridose Methodology. ALLEGRO Project (Task 5.4). Tumori, 2012, 98, 715-721.	0.6	2
84	EDUCATION AND TRAINING IN EUROPE TO SUPPORT LOW-DOSE RADIATION PHYSICS AND RADIOBIOLOGY. Radiation Protection Dosimetry, 2019, 183, 156-159.	0.4	2
85	Role of DNA organisation and environmental scavenging capacity in the evolution of radiobiological damage: models and simulations. Radiotherapy and Oncology, 2004, 73, S170-S172.	0.3	1
86	Investigation of radiation-induced multilayered signalling response of the inflammatory pathway. Radiation Protection Dosimetry, 2015, 166, 157-160.	0.4	1
87	BIOINFORMATIC ANALYSIS OF DOSE- AND TIME-DEPENDENT miRNome RESPONSES. Radiation Protection Dosimetry, 2019, 183, 151-155.	0.4	1
88	Chromosome Aberrations by Heavy Ions. Biological and Medical Physics Series, 2012, , 371-384.	0.3	1
89	Editorial. Radiation Protection Dosimetry, 2006, 122, 1-2.	0.4	0
90	Low energy light ion interactions. AIP Conference Proceedings, 2007, , .	0.3	0

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91	How to optimize exposures using radiobiology as a guide. Physica Medica, 2014, 30, e6.	0.4	0
92	Neutron flux characterisation of the Pavia TRIGA Mark II research reactor for radiobiological and microdosimetric applications. Radiation Protection Dosimetry, 2015, 166, 261-265.	0.4	0
93	Early Events Leading to Radiation-Induced Biological Effects. , 2014, , 1-22.		0
94	Second malignancies following breast cancer treatment: a case-control study based on the Peridose methodology. Allegro project (task 5.4). Tumori, 2012, 98, 715-21.	0.6	0