Ryuichi Okayasu

List of Publications by Year
in descending order

108 papers	3,303 citations	126708 33 h-index	174990 52 g-index
108 all docs	108 docs citations	108 times ranked	3325 citing authors

#	Article	IF	Citations
1	Lethal DNA Lesions Caused by Direct and Indirect Actions of X rays are Repaired via Different DSB Repair Pathways under Aerobic and Anoxic Conditions. Radiation Research, 2021, 195, 441-451.	0.7	0
2	G1 Premature Chromosome Condensation (PCC) Assay. Methods in Molecular Biology, 2019, 1984, 31-38.	0.4	2
3	Novel function of HATs and HDACs in homologous recombination through acetylation of human RAD52 at double-strand break sites. PLoS Genetics, 2018, 14, e1007277.	1.5	25
4	Strategies to Enhance Radiosensitivity to Heavy Ion Radiation Therapy. International Journal of Particle Therapy, 2018, 5, 114-121.	0.9	6
5	TAS-116, a Novel Hsp90 Inhibitor, Selectively Enhances Radiosensitivity of Human Cancer Cells to X-rays and Carbon Ion Radiation. Molecular Cancer Therapeutics, 2017, 16, 16-24.	1.9	22
6	STARLIFEâ€”An International Campaign to Study the Role of Galactic Cosmic Radiation in Astrobiological Model Systems. Astrobiology, 2017, 17, 101-109.	1.5	53
7	Low- and High-LET Ionizing Radiation Induces Delayed Homologous Recombination that Persists for Two Weeks before Resolving. Radiation Research, 2017, 188, 82.	0.7	8
8	Oxygen Enhancement Ratio in Radiation-Induced Initial DSBs by an Optimized Flow Cytometry-based Gamma-H2AX Analysis in A549 Human Cancer Cells. Radiation Research, 2017, 188, 671-674.	0.7	8
9	The purine scaffold Hsp90 inhibitor PU-H71 sensitizes cancer cells to heavy ion radiation by inhibiting DNA repair by homologous recombination and non-homologous end joining. Radiotherapy and Oncology, 2016, 121, 162-168.	0.3	22
10	Nontoxic concentration of <scp>DNA</scp>â€<scp>PK</scp> inhibitor NU7441 radioâ€sensitizes lung tumor cells with little effect on double strand break repair. Cancer Science, 2016, 107, 1250-1255.	1.7	28
11	Radiosensitization by PARP inhibition to proton beam irradiation inÂcancer cells. Biochemical and Biophysical Research Communications, 2016, 478, 234-240.	1.0	38
12	A comprehensive analysis of radiosensitization targets; functional inhibition of DNA methyltransferase 3B radiosensitizes by disrupting DNA damage regulation. Scientific Reports, 2016, 5, 18231.	1.6	10
13	The combination of Hsp90 inhibitor 17<scp>AAG</scp> and heavyâ€ion irradiation provides effective tumor control in human lung cancer cells. Cancer Medicine, 2015, 4, 426-436.	1.3	24
14	VE-821, an ATR inhibitor, causes radiosensitization in human tumor cells irradiated with high LET radiation. Radiation Oncology, 2015, 10, 175.	1.2	33
15	DNA Damage Response Proteins and Oxygen Modulate Prostaglandin E2 Growth Factor Release in Response to Low and High LET Ionizing Radiation. Frontiers in Oncology, 2015, 5, 260.	1.3	17
16	Pre-Exposure to Ionizing Radiation Stimulates DNA Double Strand Break End Resection, Promoting the Use of Homologous Recombination Repair. PLoS ONE, 2015, 10, e0122582.	1.1	13
17	Novel characteristics of CtIP at damage-induced foci following the initiation of DNA end resection. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2015, 771, 36-44.	0.4	2
18	The complexity of DNA double strand break is a crucial factor for activating ATR signaling pathway for G2/M checkpoint regulation regardless of ATM function. DNA Repair, 2015, 25, 72-83.	1.3	23

#	Article	IF	Citations
19	Carbon ion beam is more effective to induce cell death in sphere-type A172 human glioblastoma cells compared with X-rays. International Journal of Radiation Biology, 2014, 90, 1125-1132.	1.0	17
20	Resistance of Bacillus subtilis Spore DNA to Lethal Ionizing Radiation Damage Relies Primarily on Spore Core Components and DNA Repair, with Minor Effects of Oxygen Radical Detoxification. Applied and Environmental Microbiology, 2014, 80, 104-109.	1.4	67
21	Hsp90 inhibitor is a good candidate for effective combination therapy with carbon ions. Journal of Radiation Research, 2014, 55, i59-i60.	0.8	1
22	Introduction to NIRS International Open Laboratory (IOL). Journal of Radiation Research, 2014, 55, i68-i69.	0.8	0
23	Dose-rate effect was observed in T98G glioma cells following BNCT. Applied Radiation and Isotopes, 2014, 88, 81-85.	0.7	7
24	Radiosensitization of human lung cancer cells by the novel purine-scaffold Hsp90 inhibitor, PU-H71. International Journal of Molecular Medicine, 2014, 33, 559-564.	1.8	21
25	Heterochromatin Domain Number Correlates with X-Ray and Carbon-Ion Radiation Resistance in Cancer Cells. Radiation Research, 2014, 182, 408.	0.7	15
26	Parg deficiency confers radio-sensitization through enhanced cell death in mouse ES cells exposed to various forms of ionizing radiation. Biochemical and Biophysical Research Communications, 2013, 435, 100-106.	1.0	28
27	The complexity of DNA double strand breaks is a critical factor enhancing end-resection. DNA Repair, 2013, 12, 936-946.	1.3	71
28	Influence of track directions on the biological consequences in cells irradiated with high LET heavy ions. International Journal of Radiation Biology, 2013, 89, 401-410.	1.0	5
29	Chromosome aberrations in normal human fibroblasts analyzed in G0/G1 and G2/M phases after exposure in G0 to radiation with different linear energy transfer (LET). Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2013, 756, 101-107.	0.9	7
30	Evaluation of SCCVII tumor cell survival in clamped and non-clamped solid tumors exposed to carbon-ion beams in comparison to X-rays. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2013, 756, 146-151.	0.9	29
31	Comparison of the bromodeoxyuridine-mediated sensitization effects between low-LET and high-LET ionizing radiation on DNA double-strand breaks. Oncology Reports, 2013, 29, 2133-2139.	1.2	16
32	Relative biological effects of neutron mixed-beam irradiation for boron neutron capture therapy on cell survival and DNA double-strand breaks in cultured mammalian cells. Journal of Radiation Research, 2013, 54, 70-75.	0.8	20
33	OH Radicals from the Indirect Actions of X-Rays Induce Cell Lethality and Mediate the Majority of the Oxygen Enhancement Effect. Radiation Research, 2013, 180, 514-523.	0.7	33
34	Selective Enhancing Effect of Early Mitotic Inhibitor 1 (Emi1) Depletion on the Sensitivity of Doxorubicin or X-ray Treatment in Human Cancer Cells. Journal of Biological Chemistry, 2013, 288, 17238-17252.	1.6	18
35	Visualisation of Î³H2AX Foci Caused by Heavy Ion Particle Traversal; Distinction between Core Track versus Non-Track Damage. PLoS ONE, 2013, 8, e70107.	1.1	68
36	Radiation-Induced Delayed Genome Instability and Hypermutation in Mammalian Cells. , 2013, , 183-198.		1

#	Article	IF	Citations
37	Radiosensitization effect of poly(<scp>ADP</scp>â€ribose) polymerase inhibition in cells exposed to low and high liner energy transfer radiation. Cancer Science, 2012, 103, 1045-1050.	1.7	54
38	Repair of DNA damage induced by accelerated heavy ionsâ€"A mini review. International Journal of Cancer, 2012, 130, 991-1000.	2.3	105
39	ASPM influences DNA double-strand break repair and represents a potential target for radiotherapy. International Journal of Radiation Biology, 2011, 87, 1189-1195.	1.0	42
40	Benzyl isothiocyanate sensitizes human pancreatic cancer cells to radiation by inducing apoptosis. International Journal of Molecular Medicine, 2011, 28, 1043-7.	1.8	13
41	Effectiveness of combined treatment using Xâ€rays and a phosphoinositide 3â€kinase inhibitor, ZSTK474, on proliferation of HeLa cells in vitro and in vivo. Cancer Science, 2011, 102, 1176-1180.	1.7	9
42	DNA double-strand break induction in Ku80-deficient CHO cells following Boron Neutron Capture Reaction. Radiation Oncology, 2011, 6, 106.	1.2	30
43	In vitro characterization of cells derived from chordoma cell line U-CH1 following treatment with X-rays, heavy ions and chemotherapeutic drugs. Radiation Oncology, 2011, 6, 116.	1.2	35
44	Effects of Carbon Ion Beam on Putative Colon Cancer Stem Cells and Its Comparison with X-rays. Cancer Research, 2011, 71, 3676-3687.	0.4	113
45	Induction of DNA DSB and its rejoining in clamped and non-clamped tumours after exposure to carbon ion beams in comparison to X rays. Radiation Protection Dosimetry, 2011, 143, 508-512.	0.4	15
46	Role of the Nfo and ExoA Apurinic/Apyrimidinic Endonucleases in Radiation Resistance and Radiation-Induced Mutagenesis of Bacillus subtilis Spores. Journal of Bacteriology, 2011, 193, 2875-2879.	1.0	15
47	Recent Advances in the Biology of Heavy-Ion Cancer Therapy. Journal of Radiation Research, 2010, 51, 365-383.	0.8	122
48	Astrobiological Aspects of the Mutagenesis of Cosmic Radiation on Bacterial Spores. Astrobiology, 2010, 10, 509-521.	1.5	35
49	Ascorbic acid gives different protective effects in human cells exposed to X-rays and heavy ions. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2010, 699, 58-61.	0.9	14
50	Rejoining kinetics of G1-PCC breaks induced by different heavy-ion beams with a similar LET value. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2010, 701, 47-51.	0.9	9
51	p53 independent radio-sensitization of human lymphoblastoid cell lines by Hsp90 inhibitor 17-allylamino-17-demethoxygeldanamycin. Oncology Reports, 2010, 23, 199-203.	1.2	9
52	Regulation of ATM in DNA double strand break repair accounts for the radiosensitivity in human cells exposed to high linear energy transfer ionizing radiation. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2009, 670, 15-23.	0.4	36
53	Chemopreventive agent sulforaphane enhances radiosensitivity in human tumor cells. International Journal of Cancer, 2009, 125, 1205-1211.	2.3	24
54	Signatures of DNA double strand breaks produced in irradiated G1 and G2 cells persist into mitosis. Journal of Cellular Physiology, 2009, 219, 760-765.	2.0	24

#	Article	IF	Citations
55	Enhanced radiation-induced cell killing by Herbimycin A pre-treatment. Radiation Physics and Chemistry, 2009, 78, 1184-1187.	1.4	4
56	ATM-Dependent Hyper-Radiosensitivity in Mammalian Cells Irradiated by Heavy Ions. International Journal of Radiation Oncology Biology Physics, 2009, 75, 235-243.	0.4	38
57	Application of monochromatic keV X-ray source to X-ray drug delivery system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 608, S47-S50.	0.7	3
58	Contributions of Direct and Indirect Actions in Cell Killing by High-LET Radiations. Radiation Research, 2009, 171, 212-218.	0.7	133
59	Radioprotection by DMSO in nitrogen-saturated mammalian cells exposed to helium ion beams. Radiation Physics and Chemistry, 2009, 78, 1175-1178.	1.4	14
60	Down regulation of BRCA2 causes radioâ€sensitization of human tumor cells in vitro and in vivo. Cancer Science, 2008, 99, 810-815.	1.7	24
61	Comparison of the induction and disappearance of DNA double strand breaks and Î³-H2AX foci after irradiation of chromosomes in G1-phase or in condensed metaphase cells. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2008, 639, 108-112.	0.4	40
62	High LET heavy ion radiation induces lower numbers of initial chromosome breaks with minimal repair than low LET radiation in normal human cells. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2008, 652, 95-101.	0.9	26
63	Arsenic accumulation, elimination, and interaction with copper, zinc and manganese in liver and kidney of rats. Food and Chemical Toxicology, 2008, 46, 3646-3650.	1.8	45
64	Ionizing radiation downregulates ASPM, a gene responsible for microcephaly in humans. Biochemical and Biophysical Research Communications, 2008, 369, 953-957.	1.0	26
65	Sulforaphane induces DNA double strand breaks predominantly repaired by homologous recombination pathway in human cancer cells. Biochemical and Biophysical Research Communications, 2008, 377, 341-345.	1.0	28
66	Roles of the Major, Small, Acid-Soluble Spore Proteins and Spore-Specific and Universal DNA Repair Mechanisms in Resistance of Bacillus subtilis Spores to Ionizing Radiation from X Rays and High-Energy Charged-Particle Bombardment. Journal of Bacteriology, 2008, 190, 1134-1140.	1.0	81
67	The Difference in LET and Ion Species Dependence for Induction of Initially Measured and Non-rejoined Chromatin Breaks in Normal Human Fibroblasts. Radiation Research, 2008, 170, 163-171.	0.7	33
68	Metabolism and the Paradoxical Effects of Arsenic: Carcinogenesis and Anticancer. Current Medicinal Chemistry, 2008, 15, 2293-2304.	1.2	53
69	Single extreme low dose/low dose rate irradiation causes alteration in lifespan and genome instability in primary human cells. British Journal of Cancer, 2007, 96, 1707-1710.	2.9	29
70	Cytotoxicity of cigarette smoke condensate is not due to DNA double strand breaks: Comparative studies using radiosensitive mutant and wild-type CHO cells. International Journal of Radiation Biology, 2007, 83, 583-591.	1.0	10
71	DNA topoisomerase inhibitor, etoposide, enhances GC-box-dependent promoter activity via Sp1 phosphorylation. Cancer Science, 2007, 98, 858-863.	1.7	8
72	Inhibition of homologous recombination repair in irradiated tumor cells pretreated with Hsp90 inhibitor 17-allylamino-17-demethoxygeldanamycin. Biochemical and Biophysical Research Communications, 2006, 351, 658-663.	1.0	113

#	Article	IF	Citations
73	The PCC assay can be used to predict radiosensitivity in biopsy cultures irradiated with different types of radiation. Oncology Reports, 2006, 16, 1293.	1.2	2
74	Repair of DNA Damage Induced by Accelerated Heavy Ions in Mammalian Cells Proficient and Deficient in the Non-homologous End-Joining Pathway. Radiation Research, 2006, 165, 59-67.	0.7	137
75	Enhancement of chromosomal aberrations in tumor cells with a non-labeled Cuâ€“PTSM and irradiation with Cu K-shell monochromatic X rays. Radiation Protection Dosimetry, 2006, 122, 188-194.	0.4	0
76	Radio-sensitivity of the Cells from Amyotrophic Lateral Sclerosis Model Mice Transfected with Human Mutant SOD1. Journal of Radiation Research, 2005, 46, 67-73.	0.8	5
77	Extremely Low Dose Ionizing Radiation Up-regulates CXC Chemokines in Normal Human Fibroblasts. Cancer Research, 2005, 65, 10159-10163.	0.4	57
78	Caffeine Sensitizes Nondividing Human Fibroblasts to X Rays by Inducing a High Frequency of Misrepair. Radiation Research, 2005, 164, 509-513.	0.7	6
79	Facilitated detection of chromosome break and repair at low levels of ionizing radiation by addition of wortmannin to G1-type PCC fusion incubation. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2004, 562, 11-17.	0.9	8
80	Induction of DNA double strand breaks by arsenite: comparative studies with DNA breaks induced by X-rays. DNA Repair, 2003, 2, 309-314.	1.3	19
81	Radiosensitization of Normal Human Cells by LY294002: Cell Killing and the Rejoining of DNA and Interphase Chromosome Breaks. Journal of Radiation Research, 2003, 44, 329-333.	0.8	16
82	Inhibition of radiation-induced DNA-double strand break repair by various metal/metalloid compounds. International Congress Series, 2002, 1236, 327-330.	0.2	0
83	Inhibition of DNA-double strand break repair by antimony compounds. Toxicology, 2002, 180, 249-256.	2.0	39
84	Silencing expression of the catalytic subunit of DNA-dependent protein kinase by small interfering RNA sensitizes human cells for radiation-induced chromosome damage, cell killing, and mutation. Cancer Research, 2002, 62, 6400-4.	0.4	103
85	Inhibition of Repair of Radiation-Induced DNA Double-Strand Breaks by Nickel and Arsenite. Radiation Research, 2000, 154, 686-691.	0.7	19
86	Biological effects of naturally occurring and man-made fibres: in vitro cytotoxicity and mutagenesis in mammalian cells. British Journal of Cancer, 1999, 79, 1319-1324.	2.9	26
87	The phosphatidylinositol 3-kinase inhibitor wortmannin sensitizes quiescent but not proliferating MG-63 human osteosarcoma cells to radiation. Cancer Letters, 1998, 133, 161-167.	3.2	22
88	Wortmannin Inhibits Repair of DNA Double-Strand Breaks in Irradiated Normal Human Cells. Radiation Research, 1998, 149, 440.	0.7	63
89	Induction of DNA Double-Strand Breaks by Restriction Enzymes in X-Ray-Sensitive Mutant Chinese Hamster Ovary Cells Measured by Pulsed-Field Gel Electrophoresis. Radiation Research, 1995, 141, 153.	0.7	14
90	Mitotic metaphase cells from different cell lines cause different levels of expression of the Î±-form of interphase chromosome breaks irradiated CHO cels. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1994, 310, 65-71.	0.4	1

#	Article	IF	Citations
91	Evidence That the Product of the xrs Gene Is Predominantly Involved in the Repair of a Subset of Radiation-Induced Interphase Chromosome Breaks Rejoining with Fast Kinetics. Radiation Research, 1994, 138, 34.	0.7	15
92	Hypertonic Treatment during Premature Chromosome Condensation Allows Visualization of Interphase Chromosome Breaks Repaired with Fast Kinetics in Irradiated CHO Cells. Radiation Research, 1993, 135, 160.	0.7	28
93	Hypertonic Treatment Does Not Affect the Radiation Yield of Interphase Chromosome Breaks in DNA Double-Strand Break Repair-Deficient xrs-5 Cells. Radiation Research, 1993, 135, 171.	0.7	15
94	Ionizing Radiation Induces Two Forms of Interphase Chromosome Breaks in Chinese Hamster Ovary Cells That Rejoin with Different Kinetics and Show Different Sensitivity to Treatment in Hypertonic Medium or Î²-araA. Radiation Research, 1993, 136, 262.	0.7	28
95	Increased frequency of formation of interphase ring-chromosomes in radiosensitive irs-1 cells exposed to X-rays. Mutation Research DNA Repair, 1993, 294, 199-206.	3.8	15
96	Comparison of Yields and Repair Kinetics of Interphase Chromosome Breaks Visualized by Sendai-virus or PEG-mediated Cell Fusion in Irradiated CHO Cells. International Journal of Radiation Biology, 1993, 64, 689-694.	1.0	13
97	The Shape of DNA Elution Dose-response Curves Under Non-denaturing Conditions: The Contribution of the Degree of Chromatin Condensation. International Journal of Radiation Biology, 1992, 61, 455-463.	1.0	12
98	Induction by H 2 O 2 of DNA and Interphase Chromosome Damage in Plateau-Phase Chinese Hamster Ovary Cells. Radiation Research, 1992, 131, 192.	0.7	26
99	Measurement of DNA Double Strand Breaks in Mammalian Cells: Comparison Between Pulsed Field Gel Electrophoresis and Non-Unwinding Filter Elution. , 1991, , 55-69.		2
100	Effects of hyperthermia on the repair of radiation-induced DNA single-and double-strand breaks in DNA double-strand break repair-deficient and repair-proficient cell lines. International Journal of Hyperthermia, 1990, 6, 813-833.	1.1	45
101	Radiosensitivity Throughout the Cell Cycle and Repair of Potentially Lethal Damage and DNA Double-strand Breaks in an X-ray-sensitive CHO Mutant. International Journal of Radiation Biology, 1990, 57, 1195-1211.	1.0	61
102	Mechanism of Radiosensitization by Halogenated Pyrimidines: Effect of BrdU on Radiation Induction of DNA and Chromosome Damage and Its Correlation with Cell Killing. Radiation Research, 1989, 119, 286.	0.7	55
103	Comparative studies on repair inhibition by AraA, AraC and aphidicolin of radiation induced dna and chromosome damage in rodent cells: Comparison with fixation of PLD. International Journal of Radiation Oncology Biology Physics, 1989, 16, 1261-1265.	0.4	16
104	Linear DNA Elution Dose Response Curves Obtained in CHO Cells with Non-unwinding Filter Elution after Appropriate Selection of the Lysis Conditions. International Journal of Radiation Biology, 1989, 55, 569-581.	1.0	87
105	Radiosensitive Xrs-5 and Parental CHO Cells Show Identical DNA Neutral Filter Elution Doseâ€"response: Implications for a Relationship between Cell Radiosensitivity and Induction of DNA Double-strand Breaks. International Journal of Radiation Biology, 1988, 54, 55-62.	1.0	55
106	The Level of Induced DNA Double-strand Breaks Does Not Correlate with Cell Killing in X-irradiated Mitotic and G1-phase CHO Cells. International Journal of Radiation Biology, 1988, 53, 395-404.	1.0	34
107	Variation through the Cell Cycle in the Dose-response of DNA Neutral Filter Elution in X-irradiated Synchronous CHO-cells. International Journal of Radiation Biology, 1988, 53, 729-747.	1.0	66
108	¹²⁵IdUrd-induced Chromosome Fragments, Assayed by Premature Chromosome Condensation, and DNA Double-strand Breaks Have Similar Repair Kinetics in G₁-phase CHO-cells. International Journal of Radiation Biology and Related Studies in Physics, Chemistry, and Medicine, 1987, 52, 705-722.	1.0	23