Kai Rothkamm

List of Publications by Year in Descending Order

138 papers	6,467 citations	35 h-index	78 g-index
159 ext. papers	7,190 ext. citations	3.9 avg, IF	5.76 L-index

#	Paper	IF	Citations
138	Monitoring Very Low Dose Radiation Damage in DNA Using Field-Friendly Biomarkers. *NATO Science for Peace and Security Series A: Chemistry and Biology*, **2022**, 137-151	0.1	
137	Efficient DNA Repair Mitigates Replication Stress Resulting in Less Immunogenic Cytosolic DNA in Radioresistant Breast Cancer Stem Cells.. *Frontiers in Immunology*, **2022**, 13, 765284	8.4	1
136	Increased replication stress and R-loop accumulation in EGFRvIII-expressing glioblastoma present new therapeutic opportunities.. *Neuro-Oncology Advances*, **2022**, 4, vdab180	0.9	0
135	MEDB-50. Assessment of cellular radiosensitivity and DNA repair in medulloblastoma cell lines and patient-derivded xenograft slice cultures. *Neuro-Oncology*, **2022**, 24, i117-i118	1	
134	Kinomic comparison of snap frozen and ex vivo-cultured head and neck tumors. *Oral Oncology*, **2021**, 123, 105603	4.4	0
133	DNA Damage Response during Replication Correlates with CIN70 Score and Determines Survival in HNSCC Patients. *Cancers*, **2021**, 13,	6.6	3
132	X-ray-Based Techniques to Study the Nano-Bio Interface. *ACS Nano*, **2021**, 15, 3754-3807	16.7	18
131	X-ray Fluorescence Uptake Measurement of Functionalized Gold Nanoparticles in Tumor Cell Microsamples. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	4
130	Analyzing tyrosine kinase activity in head and neck cancer by functional kinomics: Identification of hyperactivated Src family kinases as prognostic markers and potential targets. *International Journal of Cancer*, **2021**, 149, 1166-1180	7.5	3
129	Investigating the impact of long term exposure to chemical agents on the chromosomal radiosensitivity using human lymphoblastoid GM1899A cells. *Scientific Reports*, **2021**, 11, 12616	4.9	1
128	Fully automated counting of DNA damage foci in tumor cell culture: A matter of cell separation. *DNA Repair*, **2021**, 102, 103100	4.3	0
127	Dual Inhibition of PARP and the Intra-S/G2 Cell Cycle Checkpoints Results in Highly Effective Radiosensitization of HPV-Positive HNSCC Cells. *Frontiers in Oncology*, **2021**, 11, 683688	5.3	5
126	Interplay between DNA replication stress, chromatin dynamics and DNA-damage response for the maintenance of genome stability. *Mutation Research - Reviews in Mutation Research*, **2021**, 787, 108346	7	4
125	TP53 modulates radiotherapy fraction size sensitivity in normal and malignant cells. *Scientific Reports*, **2021**, 11, 7119	4.9	4
124	Feasibility of Monitoring Tumor Response by Tracking Nanoparticle-Labelled T Cells Using X-ray Fluorescence Imaging-A Numerical Study. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	1
123	Radiosensitisation and enhanced tumour growth delay of colorectal cancer cells by sustained treatment with trifluridine/tipiracil and X-rays. *Cancer Letters*, **2020**, 493, 179-188	9.9	3
122	DNA Damage Repair Deficiency in Prostate Cancer. *Trends in Cancer*, **2020**, 6, 974-984	12.5	10

121	EGFRvIII upregulates DNA mismatch repair resulting in increased temozolomide sensitivity of MGMT promoter methylated glioblastoma. *Oncogene*, **2020**, 39, 3041-3055	9.2	23
120	Prevention of DNA Replication Stress by CHK1 Leads to Chemoresistance Despite a DNA Repair Defect in Homologous Recombination in Breast Cancer. *Cells*, **2020**, 9,	7.9	12
119	Exploiting Chromosomal Instability of PTEN-Deficient Triple-Negative Breast Cancer Cell Lines for the Sensitization against PARP1 Inhibition in a Replication-Dependent Manner. *Cancers*, **2020**, 12,	6.6	2
118	The Role of Telomerase in Radiation-Induced Genomic Instability. *Radiation Research*, **2020**, 193, 451-459	3.1	1
117	Improving the Efficacy of Tumor Radiosensitization Through Combined Molecular Targeting. *Frontiers in Oncology*, **2020**, 10, 1260	5.3	6
116	Radiation Biomarkers in Large Scale Human Health Effects Studies. *Journal of Personalized Medicine* , **2020**, 10,	3.6	2
115	Second-Generation Antiandrogen Therapy Radiosensitizes Prostate Cancer Regardless of Castration State through Inhibition of DNA Double Strand Break Repair. *Cancers*, **2020**, 12,	6.6	5
114	Establishment of a Transformation Coupled End Joining Assay to Estimate Radiosensitivity in Tumor Cells. *Frontiers in Oncology*, **2020**, 10, 1480	5.3	
113	Analyzing expression and phosphorylation of the EGF receptor in HNSCC. *Scientific Reports*, **2019**, 9, 13564	4.9	18
112	The inflammation-reducing compatible solute ectoine does not impair the cytotoxic effect of ionizing radiation on head and neck cancer cells. *Scientific Reports*, **2019**, 9, 6594	4.9	6
111	A functional ex vivo assay to detect PARP1-EJ repair and radiosensitization by PARP-inhibitor in prostate cancer. *International Journal of Cancer*, **2019**, 144, 1685-1696	7.5	11
110	Receptor tyrosine kinase MET as potential target of multi-kinase inhibitor and radiosensitizer sorafenib in HNSCC. *Head and Neck*, **2019**, 41, 208-215	4.2	4
109	Loss of PTEN-assisted G2/M checkpoint impedes homologous recombination repair and enhances radio-curability and PARP inhibitor treatment response in prostate cancer. *Scientific Reports*, **2018**, 8, 3947	4.9	37
108	BCL2-overexpressing prostate cancer cells rely on PARP1-dependent end-joining and are sensitive to combined PARP inhibitor and radiation therapy. *Cancer Letters*, **2018**, 423, 60-70	9.9	16
107	Radiation-induced bystander and systemic effects serve as a unifying model system for genotoxic stress responses. *Mutation Research - Reviews in Mutation Research*, **2018**, 778, 13-22	7	29
106	EP-1618: Monoubiquitinylated histone H2B as a potential target in treatment resistant germ cell tumors. *Radiotherapy and Oncology*, **2018**, 127, S871	5.3	2
105	The RENEB operational basis: complement of established biodosimetric assays. *International Journal of Radiation Biology*, **2017**, 93, 15-19	2.9	21
104	G2-checkpoint targeting and radiosensitization of HPV/p16-positive HNSCC cells through the inhibition of Chk1 and Wee1. *Radiotherapy and Oncology*, **2017**, 122, 260-266	5.3	32

103	Web based scoring is useful for validation and harmonisation of scoring criteria within RENEB. *International Journal of Radiation Biology*, **2017**, 93, 110-117	2.9	11
102	The second gamma-H2AX assay inter-comparison exercise carried out in the framework of the European biodosimetry network (RENEB). *International Journal of Radiation Biology*, **2017**, 93, 58-64	2.9	34
101	Capabilities of the RENEB network for research and large scale radiological and nuclear emergency situations. *International Journal of Radiation Biology*, **2017**, 93, 136-141	2.9	7
100	Uncertainty of fast biological radiation dose assessment for emergency response scenarios. *International Journal of Radiation Biology*, **2017**, 93, 127-135	2.9	15
99	Analyzing the influence of kinase inhibitors on DNA repair by differential proteomics of chromatin-interacting proteins and nuclear phospho-proteins. *Oncotarget*, **2017**, 8, 110983-110993	3.3	2
98	P06.20 EGFRvIII: a predictive marker for Temozolomide response in O6-methylguanine-DNA methyltransferase negative glioblastoma cells and tumor xenografts. *Neuro-Oncology*, **2016**, 18, iv33-iv33	7	1
97	DNA Repair. *Recent Results in Cancer Research*, **2016**, 198, 1-24	1.5	9
96	Correlation between DNA damage responses of skin to a test dose of radiation and late adverse effects of earlier breast radiotherapy. *Radiotherapy and Oncology*, **2016**, 119, 244-9	5.3	9
95	Correlation between the radiation responses of fibroblasts cultured from individual patients and the risk of late reaction after breast radiotherapy. *Cancer Letters*, **2016**, 374, 324-30	9.9	6
94	A new Bayesian model applied to cytogenetic partial body irradiation estimation. *Radiation Protection Dosimetry*, **2016**, 168, 330-6	0.9	17
93	Impaired 53BP1/RIF1 DSB mediated end-protection stimulates CtIP-dependent end resection and switches the repair to PARP1-dependent end joining in G1. *Oncotarget*, **2016**, 7, 57679-57693	3.3	15
92	Sorafenib inhibits cell growth but fails to enhance radio- and chemosensitivity of glioblastoma cell lines. *Oncotarget*, **2016**, 7, 61988-61995	3.3	9
91	Effect of sorafenib on cisplatin-based chemoradiation in head and neck cancer cells. *Oncotarget*, **2016**, 7, 23542-51	3.3	16
90	Radiosensitization of HNSCC cells by EGFR inhibition depends on the induction of cell cycle arrests. *Oncotarget*, **2016**, 7, 45122-45133	3.3	15
89	Similar cisplatin sensitivity of HPV-positive and -negative HNSCC cell lines. *Oncotarget*, **2016**, 7, 35832-35842	3.3	24
88	Radiation DNA damage and use in cancer/therapeutics-translation of radiation modifiers **2016**, 329-352		
87	Targeted nanoparticles for tumour radiotherapy enhancement-the long dawn of a golden era?. *Annals of Translational Medicine*, **2016**, 4, 523	3.2	8
86	Zero-inflated regression models for radiation-induced chromosome aberration data: A comparative study. *Biometrical Journal*, **2016**, 58, 259-79	1.5	27

85	Functional crosstalk between DNA damage response proteins 53BP1 and BRCA1 regulates double strand break repair choice. *Radiotherapy and Oncology*, **2016**, 119, 276-81	5.3	14
84	radir package: an R implementation for cytogenetic biodosimetry dose estimation. *Journal of Radiological Protection*, **2015**, 35, 557-69	1.2	9
83	DNA damage foci: Meaning and significance. *Environmental and Molecular Mutagenesis*, **2015**, 56, 491-504	3.2	183
82	Direct involvement of retinoblastoma family proteins in DNA repair by non-homologous end-joining. *Cell Reports*, **2015**, 10, 2006-18	10.6	45
81	Where Do We Look for Markers of Radiotherapy Fraction Size Sensitivity?. *Clinical Oncology*, **2015**, 27, 570-8	2.8	6
80	Development of a retrospective/fortuitous accident dosimetry service based on OSL of mobile phones. *Radiation Protection Dosimetry*, **2015**, 164, 89-92	0.9	5
79	Quantitative proteomics unveiled: Regulation of DNA double strand break repair by EGFR involves PARP1. *Radiotherapy and Oncology*, **2015**, 116, 423-30	5.3	11
78	The lens of the eye: exposures in the UK medical sector and mechanistic studies of radiation effects. *Annals of the ICRP*, **2015**, 44, 84-90	2.4	7
77	BRCA1, FANCD2 and Chk1 are potential molecular targets for the modulation of a radiation-induced DNA damage response in bystander cells. *Cancer Letters*, **2015**, 356, 454-61	9.9	33
76	The first gamma-H2AX biodosimetry intercomparison exercise of the developing European biodosimetry network RENEB. *Radiation Protection Dosimetry*, **2015**, 164, 265-70	0.9	49
75	Nonlinear ionizing radiation-induced changes in eye lens cell proliferation, cyclin D1 expression and lens shape. *Open Biology*, **2015**, 5, 150011	7	33
74	Realising the European network of biodosimetry: RENEB-status quo. *Radiation Protection Dosimetry* , **2015**, 164, 42-5	0.9	33
73	Operational guidance for radiation emergency response organisations in Europe for using biodosimetric tools developed in EU MULTIBIODOSE project. *Radiation Protection Dosimetry*, **2015**, 164, 165-9	0.9	36
72	A new inverse regression model applied to radiation biodosimetry. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2015**, 471, 20140588	2.4	15
71	EGFRvIII does not affect radiosensitivity with or without gefitinib treatment in glioblastoma cells. *Oncotarget*, **2015**, 6, 33867-77	3.3	16
70	Web-based scoring of the dicentric assay, a collaborative biodosimetric scoring strategy for population triage in large scale radiation accidents. *Radiation and Environmental Biophysics*, **2014**, 53, 241-54	2	22
69	DNA double-strand break repair and induction of apoptosis in ex vivo irradiated blood lymphocytes in relation to late normal tissue reactions following breast radiotherapy. *Radiation and Environmental Biophysics*, **2014**, 53, 355-64	2	25
68	What radiation dose does the FISH translocation assay measure in cases of incorporated radionuclides for the Southern Urals populations?. *Radiation Protection Dosimetry*, **2014**, 159, 26-33	0.9	15

67	Impact of long-term exposure to sodium arsenite on cytogenetic radiation damage. *Mutagenesis*, **2014**, 29, 123-9	2.8	3
66	Inter- and intra-laboratory comparison of a multibiodosimetric approach to triage in a simulated, large scale radiation emergency. *International Journal of Radiation Biology*, **2014**, 90, 193-202	2.9	37
65	Is a semi-automated approach indicated in the application of the automated micronucleus assay for triage purposes?. *Radiation Protection Dosimetry*, **2014**, 159, 87-94	0.9	23
64	Multibiodose radiation emergency triage categorization software. *Health Physics*, **2014**, 107, 83-9	2.3	7
63	Validation of semi-automatic scoring of dicentric chromosomes after simulation of three different irradiation scenarios. *Health Physics*, **2014**, 106, 764-71	2.3	18
62	Review of Bayesian statistical analysis methods for cytogenetic radiation biodosimetry, with a practical example. *Radiation Protection Dosimetry*, **2014**, 162, 185-96	0.9	17
61	Gamma-H2AX biodosimetry for use in large scale radiation incidents: comparison of a rapid '96 well lyse/fix' protocol with a routine method. *PeerJ*, **2014**, 2, e282	3.1	33
60	Established and Emerging Methods of Biological Dosimetry **2014**, 289-310		1
59	The shape of the radiation dose response for DNA double-strand break induction and repair. *Genome Integrity*, **2013**, 4, 1	0.8	54
58	Biomarkers of radiation exposure: can they predict normal tissue radiosensitivity?. *Clinical Oncology* , **2013**, 25, 610-6	2.8	36
57	Laboratory intercomparison of gene expression assays. *Radiation Research*, **2013**, 180, 138-48	3.1	53
56	Manual versus automated H2AX foci analysis across five European laboratories: can this assay be used for rapid biodosimetry in a large scale radiation accident?. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis*, **2013**, 756, 170-3	3	53
55	Automatic scoring of dicentric chromosomes as a tool in large scale radiation accidents. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis*, **2013**, 756, 174-83	3	55
54	Laboratory intercomparison on the H2AX foci assay. *Radiation Research*, **2013**, 180, 149-55	3.1	46
53	Laboratory intercomparison of the cytokinesis-block micronucleus assay. *Radiation Research*, **2013**, 180, 120-8	3.1	35
52	Laboratory intercomparison of the dicentric chromosome analysis assay. *Radiation Research*, **2013**, 180, 129-37	3.1	47
51	Homologous recombination mediates cellular resistance and fraction size sensitivity to radiation therapy. *Radiotherapy and Oncology*, **2013**, 108, 155-61	5.3	24
50	CytoBayesJ: software tools for Bayesian analysis of cytogenetic radiation dosimetry data. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis*, **2013**, 756, 184-91	3	13

49	Deoxyribonucleic acid damage-associated biomarkers of ionising radiation: current status and future relevance for radiology and radiotherapy. *British Journal of Radiology*, **2013**, 86, 20130173	3.4	20
48	A comparison of six statistical distributions for analysis of chromosome aberration data for radiation biodosimetry. *Radiation Protection Dosimetry*, **2013**, 155, 253-67	0.9	9
47	Comparison of established and emerging biodosimetry assays. *Radiation Research*, **2013**, 180, 111-9	3.1	101
46	Combined analysis of gamma-H2AX/53BP1 foci and caspase activation in lymphocyte subsets detects recent and more remote radiation exposures. *Radiation Research*, **2013**, 180, 603-9	3.1	23
45	Massively parallel sequencing reveals the complex structure of an irradiated human chromosome on a mouse background in the Tc1 model of Down syndrome. *PLoS ONE*, **2013**, 8, e60482	3.7	69
44	Ionizing radiation biomarkers for potential use in epidemiological studies. *Mutation Research - Reviews in Mutation Research*, **2012**, 751, 258-286	7	143
43	In situ biological dose mapping estimates the radiation burden delivered to 'spared' tissue between synchrotron X-ray microbeam radiotherapy tracks. *PLoS ONE*, **2012**, 7, e29853	3.7	22
42	The relationship between homologous recombination repair and the sensitivity of human epidermis to the size of daily doses over a 5-week course of breast radiotherapy. *Clinical Cancer Research*, **2012**, 18, 5479-88	12.9	20
41	Realising the European Network of Biodosimetry (RENEB). *Radiation Protection Dosimetry*, **2012**, 151, 621-5	0.9	46
40	Review of retrospective dosimetry techniques for external ionising radiation exposures. *Radiation Protection Dosimetry*, **2011**, 147, 573-92	0.9	175
39	Ionizing radiation-induced DNA strand breaks and H2AXH2AX foci in cells exposed to nitric oxide. *Methods in Molecular Biology*, **2011**, 704, 17-25	1.4	2
38	Inter-individual and inter-cell type variation in residual DNA damage after in vivo irradiation of human skin. *Radiotherapy and Oncology*, **2011**, 99, 225-30	5.3	17
37	Residual DNA and chromosomal damage in ex vivo irradiated blood lymphocytes correlated with late normal tissue response to breast radiotherapy. *Radiotherapy and Oncology*, **2011**, 99, 362-6	5.3	47
36	Candidate protein biomarkers as rapid indicators of radiation exposure. *Radiation Measurements*, **2011**, 46, 903-906	1.5	18
35	Difficult cases for chromosomal dosimetry: Statistical considerations. *Radiation Measurements*, **2011**, 46, 1004-1008	1.5	5
34	A portable microfluidic fluorescence spectrometer device for H2AX-based biological dosimetry. *Radiation Measurements*, **2011**, 46, 907-911	1.5	12
33	Cohesin phosphorylation and mobility of SMC1 at ionizing radiation-induced DNA double-strand breaks in human cells. *Experimental Cell Research*, **2011**, 317, 330-7	4.2	23
32	Triage, monitoring and dose assessment for people exposed to ionising radiation following a malevolent act. *Radiation Protection Dosimetry*, **2011**, 144, 534-9	0.9	7

31	Gamma-H2AX-based dose estimation for whole and partial body radiation exposure. *PLoS ONE*, **2011**, 6, e25113	3.7	111
30	Cohesin promotes the repair of ionizing radiation-induced DNA double-strand breaks in replicated chromatin. *Nucleic Acids Research*, **2010**, 38, 477-87	20.1	73
29	Limitations associated with analysis of cytogenetic data for biological dosimetry. *Radiation Research*, **2010**, 174, 403-14	3.1	33
28	Radiotherapy fraction size sensitivity is modulated by DNA repair systems. *Breast Cancer Research*, **2010**, 12,	8.3	78
27	Tumor cell response to synchrotron microbeam radiation therapy differs markedly from cells in normal tissues. *International Journal of Radiation Oncology Biology Physics*, **2010**, 77, 886-94	4	117
26	DNA and chromosomal damage in response to intermittent extremely low-frequency magnetic fields. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis*, **2009**, 672, 82-9	3	23
25	Interlaboratory variation in scoring dicentric chromosomes in a case of partial-body x-ray exposure: implications for biodosimetry networking and cytogenetic "triage mode" scoring. *Radiation Research*, **2009**, 172, 746-52	3.1	26
24	gamma-H2AX as protein biomarker for radiation exposure. *Annali Dell'Istituto Superiore Di Sanita*, **2009**, 45, 265-71	1.6	120
23	ATM acts downstream of ATR in the DNA damage response signaling of bystander cells. *Cancer Research*, **2008**, 68, 7059-65	10.1	98
22	Radiation-induced HPRT mutations resulting from misrejoined DNA double-strand breaks. *Radiation Research*, **2008**, 169, 639-48	3.1	15
21	ATR-dependent bystander effects in nontargeted cells. *International Journal of Low Radiation*, **2008** , 5, 22	1	2
20	Radiosensitization by nitric oxide at low radiation doses. *Radiation Research*, **2007**, 167, 475-84	3.1	55
19	ATR-dependent radiation-induced gamma H2AX foci in bystander primary human astrocytes and glioma cells. *Oncogene*, **2007**, 26, 993-1002	9.2	163
18	Gamma-H2AX foci counting: image processing and control software for high-content screening **2007**, 6441, 424		15
17	Leukocyte DNA damage after multi-detector row CT: a quantitative biomarker of low-level radiation exposure. *Radiology*, **2007**, 242, 244-51	20.5	191
16	Radiation-induced transgenerational alterations in genome stability and DNA damage. *Oncogene*, **2006**, 25, 7336-42	9.2	113
15	A double-strand break repair defect in ATM-deficient cells contributes to radiosensitivity. *Cancer Research*, **2004**, 64, 500-8	10.1	293
14	Enhanced fidelity for rejoining radiation-induced DNA double-strand breaks in the G2 phase of Chinese hamster ovary cells. *Nucleic Acids Research*, **2004**, 32, 2677-84	20.1	28

13	Different Means to an End: DNA Double-Strand Break Repair **2004**, 179-186		1
12	Evidence for a lack of DNA double-strand break repair in human cells exposed to very low x-ray doses. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 5057-62	11.5	1295
11	Pathways of DNA double-strand break repair during the mammalian cell cycle. *Molecular and Cellular Biology*, **2003**, 23, 5706-15	4.8	940
10	Misrepair of radiation-induced DNA double-strand breaks and its relevance for tumorigenesis and cancer treatment (Review) **2002**, 21, 433		11
9	Physical and biological parameters affecting DNA double strand break misrejoining in mammalian cells. *Radiation Protection Dosimetry*, **2002**, 99, 129-32	0.9	12
8	Misrepair of radiation-induced DNA double-strand breaks and its relevance for tumorigenesis and cancer treatment (review). *International Journal of Oncology*, **2002**, 21, 433-40	1	20
7	Radiation-induced genomic rearrangements formed by nonhomologous end-joining of DNA double-strand breaks. *Cancer Research*, **2001**, 61, 3886-93	10.1	96
6	Joining of correct and incorrect DNA double-strand break ends in normal human and ataxia telangiectasia fibroblasts. *Genes Chromosomes and Cancer*, **2000**, 27, 59-68	5	53
5	Comments on the Paper "No Detectable Misrejoining in Double-Minute Chromosomes" by Nevaldineet al. (Radiat. Res.152, 154–159, 1999). *Radiation Research*, **2000**, 153, 239-240	3.1	
4	Formation and repair of DNA double-strand breaks in gamma-irradiated K562 cells undergoing erythroid differentiation. *Mutation Research DNA Repair*, **2000**, 461, 71-82		13
3	No dose-dependence of DNA double-strand break misrejoining following alpha-particle irradiation. *International Journal of Radiation Biology*, **2000**, 76, 891-900	2.9	44
2	Joining of correct and incorrect DNA double-strand break ends in normal human and ataxia telangiectasia fibroblasts. *Genes Chromosomes and Cancer*, **2000**, 27, 59-68	5	13
1	Misrejoining of DNA double-strand breaks in primary and transformed human and rodent cells: a comparison between the HPRT region and other genomic locations. *Mutation Research DNA Repair*, **1999**, 433, 193-205		34