Jac A Nickoloff

List of Publications by Year
in descending order

62 papers	4,468 citations	147726 31 h-index	149623 56 g-index
63 all docs	63 docs citations	63 times ranked	5785 citing authors

#	Article	IF	Citations
1	Regulation of DNA double-strand break repair pathway choice. Cell Research, 2008, 18, 134-147.	5.7	1,138
2	Methylation of histone H3 lysine 36 enhances DNA repair by nonhomologous end-joining. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 540-545.	3.3	253
3	Distinct roles for DNA-PK, ATM and ATR in RPA phosphorylation and checkpoint activation in response to replication stress. Nucleic Acids Research, 2012, 40, 10780-10794.	6.5	204
4	Synthetic lethality: exploiting the addiction of cancer to DNA repair. Blood, 2011, 117, 6074-6082.	0.6	171
5	XRCC3 Controls the Fidelity of Homologous Recombination. Molecular Cell, 2002, 10, 387-395.	4.5	163
6	DNA-dependent protein kinase suppresses double-strand break-induced and spontaneous homologous recombination. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 3758-3763.	3.3	156
7	XRCC3 is required for efficient repair of chromosome breaks by homologous recombination. Mutation Research DNA Repair, 2000, 459, 89-97.	3.8	149
8	The SET domain protein Metnase mediates foreign DNA integration and links integration to nonhomologous end-joining repair. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 18075-18080.	3.3	145
9	More forks on the road to replication stress recovery. Journal of Molecular Cell Biology, 2011, 3, 4-12.	1.5	131
10	Clustered DNA Double-Strand Breaks: Biological Effects and Relevance to Cancer Radiotherapy. Genes, 2020, 11, 99.	1.0	118
11	DNA-PKcs and ATM co-regulate DNA double-strand break repair. DNA Repair, 2009, 8, 920-929.	1.3	117
12	Drugging the Cancers Addicted to DNA Repair. Journal of the National Cancer Institute, 2017, 109, .	3.0	114
13	DNA-PK phosphorylation of RPA32 Ser4/Ser8 regulates replication stress checkpoint activation, fork restart, homologous recombination and mitotic catastrophe. DNA Repair, 2014, 21, 131-139.	1.3	103
14	Targeted and Nontargeted Effects of Low-Dose Ionizing Radiation on Delayed Genomic Instability in Human Cells. Cancer Research, 2007, 67, 1099-1104.	0.4	91
15	Heavy charged particle radiobiology: Using enhanced biological effectiveness and improved beam focusing to advance cancer therapy. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2011, 711, 150-157.	0.4	77
16	Homologous Recombinational Repair of Double-Strand Breaks in Yeast Is Enhanced by <i>MAT</i> Heterozygosity Through yKU-Dependent and -Independent Mechanisms. Genetics, 2001, 157, 579-589.	1.2	77
17	FOXF1 mediates mesenchymal stem cell fusion-induced reprogramming of lung cancer cells. Oncotarget, 2014, 5, 9514-9529.	0.8	69
18	Sgs1 Regulates Gene Conversion Tract Lengths and Crossovers Independently of Its Helicase Activity. Molecular and Cellular Biology, 2006, 26, 4086-4094.	1.1	67

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19	PARP1 is required for chromosomal translocations. Blood, 2013, 121, 4359-4365.	0.6	67
20	Multiple Heterologies Increase Mitotic Double-Strand Break-Induced Allelic Gene Conversion Tract Lengths in Yeast. Genetics, 1999, 153, 665-679.	1.2	65
21	Metnase/SETMAR: a domesticated primate transposase that enhances DNA repair, replication, and decatenation. Genetica, 2010, 138, 559-566.	0.5	57
22	Distinct RAD51 Associations with RAD52 and BCCIP in Response to DNA Damage and Replication Stress. Cancer Research, 2008, 68, 2699-2707.	0.4	56
23	Metnase mediates chromosome decatenation in acute leukemia cells. Blood, 2009, 114, 1852-1858.	0.6	56
24	The SET and transposase domain protein Metnase enhances chromosome decatenation: regulation by automethylation. Nucleic Acids Research, 2008, 36, 5822-5831.	6.5	54
25	Metnase promotes restart and repair of stalled and collapsed replication forks. Nucleic Acids Research, 2010, 38, 5681-5691.	6.5	54
26	The human set and transposase domain protein Metnase interacts with DNA Ligase IV and enhances the efficiency and accuracy of non-homologous end-joining. DNA Repair, 2008, 7, 1927-1937.	1.3	49
27	EEPD1 Rescues Stressed Replication Forks and Maintains Genome Stability by Promoting End Resection and Homologous Recombination Repair. PLoS Genetics, 2015, 11, e1005675.	1.5	47
28	Efficient Repair of All Types of Single-Base Mismatches in Recombination Intermediates in Chinese Hamster Ovary Cells: Competition Between Long-Patch and G-T Glycosylase-Mediated Repair of G-T Mismatches. Genetics, 1998, 149, 1935-1943.	1.2	46
29	Metnase Mediates Resistance to Topoisomerase II Inhibitors in Breast Cancer Cells. PLoS ONE, 2009, 4, e5323.	1.1	42
30	Ionizing Radiation Induces Delayed Hyperrecombination in Mammalian Cells. Molecular and Cellular Biology, 2004, 24, 5060-5068.	1.1	40
31	Translational research in radiation-induced DNA damage signaling and repair. Translational Cancer Research, 2017, 6, S875-S891.	0.4	40
32	The DDN Catalytic Motif Is Required for Metnase Functions in Non-homologous End Joining (NHEJ) Repair and Replication Restart. Journal of Biological Chemistry, 2014, 289, 10930-10938.	1.6	35
33	The endonuclease EEPD1 mediates synthetic lethality in RAD52-depleted BRCA1 mutant breast cancer cells. Breast Cancer Research, 2017, 19, 122.	2.2	32
34	The transposase domain protein Metnase/SETMAR suppresses chromosomal translocations. Cancer Genetics and Cytogenetics, 2010, 200, 184-190.	1.0	31
35	Targeting the Transposase Domain of the DNA Repair Component Metnase to Enhance Chemotherapy. Cancer Research, 2012, 72, 6200-6208.	0.4	29
36	Endonuclease EEPD1 Is a Gatekeeper for Repair of Stressed Replication Forks. Journal of Biological Chemistry, 2017, 292, 2795-2804.	1.6	29

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37	Efficient Incorporation of Large (>2 kb) Heterologies Into Heteroduplex DNA: Pms1/Msh2-Dependent and -Independent Large Loop Mismatch Repair in Saccharomyces cerevisiae. Genetics, 2001, 157, 1481-1491.	1.2	25
38	UV Radiation Induces Delayed Hyperrecombination Associated with Hypermutation in Human Cells. Molecular and Cellular Biology, 2006, 26, 6047-6055.	1.1	23
39	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
40	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
41	The Safe Path at the Fork: Ensuring Replication-Associated DNA Double-Strand Breaks are Repaired by Homologous Recombination. Frontiers in Genetics, 2021, 12, 748033.	1.1	21
42	Paths from DNA damage and signaling to genome rearrangements via homologous recombination. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2017, 806, 64-74.	0.4	20
43	Analysis of Recombinational Repair of DNA Double-Strand Breaks in Mammalian Cells With I-<I>Sce</I>I Nuclease. , 2004, 262, 035-052.		19
44	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
45	The homologous recombination component EEPD1 is required for genome stability in response to developmental stress of vertebrate embryogenesis. Cell Cycle, 2016, 15, 957-962.	1.3	16
46	Metnase Mediates Loading of Exonuclease 1 onto Single Strand Overhang DNA for End Resection at Stalled Replication Forks. Journal of Biological Chemistry, 2017, 292, 1414-1425.	1.6	16
47	Exploiting DNA repair pathways for tumor sensitization, mitigation of resistance, and normal tissue protection in radiotherapy. , 2021, 4, 244-263.		14
48	A comparison of calcium phosphate coprecipitation and electroporation. Molecular Biotechnology, 1998, 10, 93-101.	1.3	11
49	Distinct roles of structure-specific endonucleases EEPD1 and Metnase in replication stress responses. NAR Cancer, 2020, 2, zcaa008.	1.6	11
50	Roles of homologous recombination in response to ionizing radiation-induced DNA damage. International Journal of Radiation Biology, 2023, 99, 903-914.	1.0	9
51	Metnase and EEPD1: DNA Repair Functions and Potential Targets in Cancer Therapy. Frontiers in Oncology, 2022, 12, 808757.	1.3	9
52	The DNA repair component Metnase regulates Chk1 stability. Cell Division, 2014, 9, 1.	1.1	8
53	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
54	Photon, light ion, and heavy ion cancer radiotherapy: paths from physics and biology to clinical practice. Annals of Translational Medicine, 2015, 3, 336.	0.7	8

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55	Toward Greater Precision in Cancer Radiotherapy. Cancer Research, 2021, 81, 3156-3157.	0.4	6
56	Nucleases and Co-Factors in DNA Replication Stress Responses. Dna, 2022, 2, 68-85.	0.4	4
57	Improving cancer therapy by combining cell biological, physical, and molecular targeting strategies. Chinese Journal of Cancer Research: Official Journal of China Anti-Cancer Association, Beijing Institute for Cancer Research, 2013, 25, 7-9.	0.7	3
58	PCR Alone is Insufficient for Identifying Structural Modifications to Yeast Chromosomes. BioTechniques, 1999, 26, 238-240.	0.8	2
59	DNA Repair Dysregulation in Cancer: From Molecular Mechanisms to Synthetic Lethal Opportunities. , 2015, , 7-28.		1
60	Radiation-Induced Delayed Genome Instability and Hypermutation in Mammalian Cells. , 2013, , 183-198.		1
61	Assaying DNA double-strand break induction and repair as fast as a speeding comet. Cell Cycle, 2013, 12, 1335-1335.	1.3	0
62	Recombinant cell-detecting RaDR-GFP in mice reveals an association between genomic instability and radiation-induced-thymic lymphoma.. American Journal of Cancer Research, 2022, 12, 562-573.	1.4	0