Jac A Nickoloff

List of Publications by Year in Descending Order

62 papers	3,679 citations	30 h-index	60 g-index
63 ext. papers	4,141 ext. citations	6.1 avg, IF	5.36 L-index

#	Paper	IF	Citations
62	Metnase and EEPD1: DNA Repair Functions and Potential Targets in Cancer Therapy.. *Frontiers in Oncology*, **2022**, 12, 808757	5.3	1
61	Nucleases and Co-Factors in DNA Replication Stress Responses. *Dna*, **2022**, 2, 68-85		0
60	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	4.4	
59	Toward Greater Precision in Cancer Radiotherapy. *Cancer Research*, **2021**, 81, 3156-3157	10.1	2
58	Exploiting DNA repair pathways for tumor sensitization, mitigation of resistance, and normal tissue protection in radiotherapy. *Cancer Drug Resistance (Alhambra, Calif)*, **2021**, 4, 244-263	4.5	4
57	Roles of homologous recombination in response to ionizing radiation-induced DNA damage. *International Journal of Radiation Biology*, **2021**, 1-12	2.9	3
56	The Safe Path at the Fork: Ensuring Replication-Associated DNA Double-Strand Breaks are Repaired by Homologous Recombination. *Frontiers in Genetics*, **2021**, 12, 748033	4.5	4
55	Clustered DNA Double-Strand Breaks: Biological Effects and Relevance to Cancer Radiotherapy. *Genes*, **2020**, 11,	4.2	66
54	Distinct roles of structure-specific endonucleases EEPD1 and Metnase in replication stress responses. *NAR Cancer*, **2020**, 2, zcaa008	5.2	8
53	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	6.1	19
52	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	5.4	13
51	Drugging the Cancers Addicted to DNA Repair. *Journal of the National Cancer Institute*, **2017**, 109,	9.7	87
50	Endonuclease EEPD1 Is a Gatekeeper for Repair of Stressed Replication Forks. *Journal of Biological Chemistry*, **2017**, 292, 2795-2804	5.4	24
49	The endonuclease EEPD1 mediates synthetic lethality in RAD52-depleted BRCA1 mutant breast cancer cells. *Breast Cancer Research*, **2017**, 19, 122	8.3	22
48	Paths from DNA damage and signaling to genome rearrangements via homologous recombination. *Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis*, **2017**, 806, 64-74	3.3	18
47	Low- and High-LET Ionizing Radiation Induces Delayed Homologous Recombination that Persists for Two Weeks before Resolving. *Radiation Research*, **2017**, 188, 82-93	3.1	5
46	Translational research in radiation-induced DNA damage signaling and repair. *Translational Cancer Research*, **2017**, 6, S875-S891	0.3	29

45	The homologous recombination component EEPD1 is required for genome stability in response to developmental stress of vertebrate embryogenesis. *Cell Cycle*, **2016**, 15, 957-62	4.7	13
44	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	5.3	16
43	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	5.3	13
42	EEPD1 Rescues Stressed Replication Forks and Maintains Genome Stability by Promoting End Resection and Homologous Recombination Repair. *PLoS Genetics*, **2015**, 11, e1005675	6	37
41	Photon, light ion, and heavy ion cancer radiotherapy: paths from physics and biology to clinical practice. *Annals of Translational Medicine*, **2015**, 3, 336	3.2	6
40	DNA Repair Dysregulation in Cancer: From Molecular Mechanisms to Synthetic Lethal Opportunities **2015**, 7-28		1
39	The DNA repair component Metnase regulates Chk1 stability. *Cell Division*, **2014**, 9, 1	2.8	6
38	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	5.4	24
37	DNA-PK phosphorylation of RPA32 Ser4/Ser8 regulates replication stress checkpoint activation, fork restart, homologous recombination and mitotic catastrophe. *DNA Repair*, **2014**, 21, 131-9	4.3	73
36	FOXF1 mediates mesenchymal stem cell fusion-induced reprogramming of lung cancer cells. *Oncotarget*, **2014**, 5, 9514-29	3.3	57
35	PARP1 is required for chromosomal translocations. *Blood*, **2013**, 121, 4359-65	2.2	56
34	Assaying DNA double-strand break induction and repair as fast as a speeding comet. *Cell Cycle*, **2013**, 12, 1335-6	4.7	
33	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	3.8	3
32	Radiation-Induced Delayed Genome Instability and Hypermutation in Mammalian Cells **2013**, 183-198		
31	Targeting the transposase domain of the DNA repair component Metnase to enhance chemotherapy. *Cancer Research*, **2012**, 72, 6200-8	10.1	27
30	Distinct roles for DNA-PK, ATM and ATR in RPA phosphorylation and checkpoint activation in response to replication stress. *Nucleic Acids Research*, **2012**, 40, 10780-94	20.1	159
29	Synthetic lethality: exploiting the addiction of cancer to DNA repair. *Blood*, **2011**, 117, 6074-82	2.2	144
28	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, 150-7	3.3	66

27	More forks on the road to replication stress recovery. *Journal of Molecular Cell Biology*, **2011**, 3, 4-12	6.3	118
26	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, 540-5	11.5	201
25	Metnase promotes restart and repair of stalled and collapsed replication forks. *Nucleic Acids Research*, **2010**, 38, 5681-91	20.1	49
24	Metnase/SETMAR: a domesticated primate transposase that enhances DNA repair, replication, and decatenation. *Genetica*, **2010**, 138, 559-66	1.5	49
23	The transposase domain protein Metnase/SETMAR suppresses chromosomal translocations. *Cancer Genetics and Cytogenetics*, **2010**, 200, 184-90		24
22	DNA-PKcs and ATM co-regulate DNA double-strand break repair. *DNA Repair*, **2009**, 8, 920-9	4.3	100
21	Metnase mediates chromosome decatenation in acute leukemia cells. *Blood*, **2009**, 114, 1852-8	2.2	48
20	Metnase mediates resistance to topoisomerase II inhibitors in breast cancer cells. *PLoS ONE*, **2009**, 4, e5323	3.7	37
19	Regulation of DNA double-strand break repair pathway choice. *Cell Research*, **2008**, 18, 134-47	24.7	952
18	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, 1927-37	4.3	43
17	Distinct RAD51 associations with RAD52 and BCCIP in response to DNA damage and replication stress. *Cancer Research*, **2008**, 68, 2699-707	10.1	49
16	The SET and transposase domain protein Metnase enhances chromosome decatenation: regulation by automethylation. *Nucleic Acids Research*, **2008**, 36, 5822-31	20.1	47
15	Targeted and nontargeted effects of low-dose ionizing radiation on delayed genomic instability in human cells. *Cancer Research*, **2007**, 67, 1099-104	10.1	82
14	Sgs1 regulates gene conversion tract lengths and crossovers independently of its helicase activity. *Molecular and Cellular Biology*, **2006**, 26, 4086-94	4.8	65
13	UV radiation induces delayed hyperrecombination associated with hypermutation in human cells. *Molecular and Cellular Biology*, **2006**, 26, 6047-55	4.8	22
12	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, 18075-80	11.5	127
11	Analysis of recombinational repair of DNA double-strand breaks in mammalian cells with I-SceI nuclease. *Methods in Molecular Biology*, **2004**, 262, 35-52	1.4	14
10	Ionizing radiation induces delayed hyperrecombination in Mammalian cells. *Molecular and Cellular Biology*, **2004**, 24, 5060-8	4.8	38

9	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, 3758-63	11.5	140
8	XRCC3 controls the fidelity of homologous recombination: roles for XRCC3 in late stages of recombination. *Molecular Cell*, **2002**, 10, 387-95	17.6	154
7	Homologous recombinational repair of double-strand breaks in yeast is enhanced by MAT heterozygosity through yKU-dependent and -independent mechanisms. *Genetics*, **2001**, 157, 579-89	4	64
6	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, 1481-91	4	20
5	XRCC3 is required for efficient repair of chromosome breaks by homologous recombination. *Mutation Research DNA Repair*, **2000**, 459, 89-97		127
4	PCR alone is insufficient for identifying structural modifications to yeast chromosomes. *BioTechniques*, **1999**, 26, 238-40	2.5	1
3	Multiple heterologies increase mitotic double-strand break-induced allelic gene conversion tract lengths in yeast. *Genetics*, **1999**, 153, 665-79	4	57
2	A comparison of calcium phosphate coprecipitation and electroporation. Implications for studies on the genetic effects of DNA damage. *Molecular Biotechnology*, **1998**, 10, 93-101	3	8
1	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, 1935-43	4	37