Dana Branzei

List of Publications by Citations

89 papers	4,801 citations	35 h-index	69 g-index
95 ext. papers	5,591 ext. citations	12.3 avg, IF	6.08 L-index

#	Paper	IF	Citations
89	Regulation of DNA repair throughout the cell cycle. *Nature Reviews Molecular Cell Biology*, **2008**, 9, 297-308	48.7	874
88	Maintaining genome stability at the replication fork. *Nature Reviews Molecular Cell Biology*, **2010**, 11, 208-19	48.7	608
87	Ubc9- and mms21-mediated sumoylation counteracts recombinogenic events at damaged replication forks. *Cell*, **2006**, 127, 509-22	56.2	243
86	SUMOylation regulates Rad18-mediated template switch. *Nature*, **2008**, 456, 915-20	50.4	208
85	The DNA damage response during DNA replication. *Current Opinion in Cell Biology*, **2005**, 17, 568-75	9	193
84	The checkpoint response to replication stress. *DNA Repair*, **2009**, 8, 1038-46	4.3	160
83	Premature Cdk1/Cdc5/Mus81 pathway activation induces aberrant replication and deleterious crossover. *EMBO Journal*, **2013**, 32, 1155-67	13	106
82	Error-free DNA damage tolerance and sister chromatid proximity during DNA replication rely on the Polζ/Primase/Ctf4 Complex. *Molecular Cell*, **2015**, 57, 812-823	17.6	102
81	Visualization of recombination-mediated damage bypass by template switching. *Nature Structural and Molecular Biology*, **2014**, 21, 884-92	17.6	101
80	Interplay of replication checkpoints and repair proteins at stalled replication forks. *DNA Repair*, **2007**, 6, 994-1003	4.3	96
79	DNA damage tolerance by recombination: Molecular pathways and DNA structures. *DNA Repair*, **2016**, 44, 68-75	4.3	96
78	The Rad53 signal transduction pathway: Replication fork stabilization, DNA repair, and adaptation. *Experimental Cell Research*, **2006**, 312, 2654-9	4.2	92
77	Replication and recombination factors contributing to recombination-dependent bypass of DNA lesions by template switch. *PLoS Genetics*, **2010**, 6, e1001205	6	91
76	The Saccharomyces cerevisiae Esc2 and Smc5-6 proteins promote sister chromatid junction-mediated intra-S repair. *Molecular Biology of the Cell*, **2009**, 20, 1671-82	3.5	85
75	Noncanonical role of the 9-1-1 clamp in the error-free DNA damage tolerance pathway. *Molecular Cell*, **2013**, 49, 536-46	17.6	75
74	Essential Roles of the Smc5/6 Complex in Replication through Natural Pausing Sites and Endogenous DNA Damage Tolerance. *Molecular Cell*, **2015**, 60, 835-46	17.6	75
73	Interplay between the Smc5/6 complex and the Mph1 helicase in recombinational repair. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 21252-7	11.5	72

72	A cell cycle-regulated Slx4-Dpb11 complex promotes the resolution of DNA repair intermediates linked to stalled replication. *Genes and Development*, **2014**, 28, 1604-19	12.6	70
71	The Smc5/6 complex and Esc2 influence multiple replication-associated recombination processes in Saccharomyces cerevisiae. *Molecular Biology of the Cell*, **2010**, 21, 2306-14	3.5	64
70	Ubiquitin family modifications and template switching. *FEBS Letters*, **2011**, 585, 2810-7	3.8	59
69	Sgs1 function in the repair of DNA replication intermediates is separable from its role in homologous recombinational repair. *EMBO Journal*, **2009**, 28, 915-25	13	55
68	Building up and breaking down: mechanisms controlling recombination during replication. *Critical Reviews in Biochemistry and Molecular Biology*, **2017**, 52, 381-394	8.7	54
67	Computed structures of core eukaryotic protein complexes. *Science*, **2021**, 374, eabm4805	33.3	51
66	A novel protein interacts with the Werner's syndrome gene product physically and functionally. *Journal of Biological Chemistry*, **2001**, 276, 20364-9	5.4	50
65	DNA bending facilitates the error-free DNA damage tolerance pathway and upholds genome integrity. *EMBO Journal*, **2014**, 33, 327-40	13	48
64	The product of Saccharomyces cerevisiae WHIP/MGS1, a gene related to replication factor C genes, interacts functionally with DNA polymerase delta. *Molecular Genetics and Genomics*, **2002**, 268, 371-86	3.1	48
63	DNA damage tolerance. *Current Opinion in Cell Biology*, **2016**, 40, 137-144	9	47
62	Rad18/Rad5/Mms2-mediated polyubiquitination of PCNA is implicated in replication completion during replication stress. *Genes To Cells*, **2004**, 9, 1031-42	2.3	46
61	Smc5/6 Mediated Sumoylation of the Sgs1-Top3-Rmi1 Complex Promotes Removal of Recombination Intermediates. *Cell Reports*, **2016**, 16, 368-378	10.6	45
60	Local regulation of the Srs2 helicase by the SUMO-like domain protein Esc2 promotes recombination at sites of stalled replication. *Genes and Development*, **2015**, 29, 2067-80	12.6	42
59	S-phase checkpoint regulations that preserve replication and chromosome integrity upon dNTP depletion. *Cellular and Molecular Life Sciences*, **2017**, 74, 2361-2380	10.3	41
58	During replication stress, non-SMC element 5 (NSE5) is required for Smc5/6 protein complex functionality at stalled forks. *Journal of Biological Chemistry*, **2012**, 287, 11374-83	5.4	40
57	RecQ helicases queuing with Srs2 to disrupt Rad51 filaments and suppress recombination. *Genes and Development*, **2007**, 21, 3019-26	12.6	40
56	Template switching: from replication fork repair to genome rearrangements. *Cell*, **2007**, 131, 1228-30	56.2	39
55	Combined deficiency of Senataxin and DNA-PKcs causes DNA damage accumulation and neurodegeneration in spinal muscular atrophy. *Nucleic Acids Research*, **2018**, 46, 8326-8346	20.1	36

54	Rad52 sumoylation and its involvement in the efficient induction of homologous recombination. *DNA Repair*, **2008**, 7, 879-89	4.3	34
53	Characterization of the slow-growth phenotype of S. cerevisiae Whip/Mgs1 Sgs1 double deletion mutants. *DNA Repair*, **2002**, 1, 671-82	4.3	31
52	Concerted and differential actions of two enzymatic domains underlie Rad5 contributions to DNA damage tolerance. *Nucleic Acids Research*, **2015**, 43, 2666-77	20.1	30
51	Ubc9 is required for damage-tolerance and damage-induced interchromosomal homologous recombination in S. cerevisiae. *DNA Repair*, **2004**, 3, 335-41	4.3	28
50	Rad5 Recruits Error-Prone DNA Polymerases for Mutagenic Repair of ssDNA Gaps on Undamaged Templates. *Molecular Cell*, **2019**, 73, 900-914.e9	17.6	27
49	Exploring and exploiting the systemic effects of deregulated replication licensing. *Seminars in Cancer Biology*, **2016**, 37-38, 3-15	12.7	27
48	Timeless couples G-quadruplex detection with processing by DDX11 helicase during DNA replication. *EMBO Journal*, **2020**, 39, e104185	13	27
47	Mgs1 and Rad18/Rad5/Mms2 are required for survival of Saccharomyces cerevisiae mutants with novel temperature/cold sensitive alleles of the DNA polymerase delta subunit, Pol31. *DNA Repair*, **2006**, 5, 1459-74	4.3	26
46	Warsaw breakage syndrome DDX11 helicase acts jointly with RAD17 in the repair of bulky lesions and replication through abasic sites. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 8412-8417	11.5	24
45	The Smc5-Smc6 complex regulates recombination at centromeric regions and affects kinetochore protein sumoylation during normal growth. *PLoS ONE*, **2012**, 7, e51540	3.7	24
44	Rtt107 Is a Multi-functional Scaffold Supporting Replication Progression with Partner SUMO and Ubiquitin Ligases. *Molecular Cell*, **2015**, 60, 268-79	17.6	23
43	Rad5-dependent DNA repair functions of the Saccharomyces cerevisiae FANCM protein homolog Mph1. *Journal of Biological Chemistry*, **2012**, 287, 26563-75	5.4	23
42	AND-1 fork protection function prevents fork resection and is essential for proliferation. *Nature Communications*, **2018**, 9, 3091	17.4	21
41	SUMO-Chain-Regulated Proteasomal Degradation Timing Exemplified in DNA Replication Initiation. *Molecular Cell*, **2019**, 76, 632-645.e6	17.6	20
40	Esc2 promotes Mus81 complex-activity via its SUMO-like and DNA binding domains. *Nucleic Acids Research*, **2017**, 45, 215-230	20.1	20
39	ESCO1/2's roles in chromosome structure and interphase chromatin organization. *Genes and Development*, **2017**, 31, 2136-2150	12.6	18
38	Chromatin determinants of the inner-centromere rely on replication factors with functions that impart cohesion. *Oncotarget*, **2016**, 7, 67934-67947	3.3	18
37	A minimal threshold of FANCJ helicase activity is required for its response to replication stress or double-strand break repair. *Nucleic Acids Research*, **2018**, 46, 6238-6256	20.1	15

36	Selective modulation of the functions of a conserved DNA motor by a histone fold complex. *Genes and Development*, **2015**, 29, 1000-5	12.6	14
35	High levels of BRC4 induced by a Tet-On 3G system suppress DNA repair and impair cell proliferation in vertebrate cells. *DNA Repair*, **2014**, 22, 153-64	4.3	14
34	The Swr1 chromatin-remodeling complex prevents genome instability induced by replication fork progression defects. *Nature Communications*, **2018**, 9, 3680	17.4	14
33	DNA damage checkpoint and recombinational repair differentially affect the replication stress tolerance of Smc6 mutants. *Molecular Biology of the Cell*, **2013**, 24, 2431-41	3.5	13
32	Mus81-Mms4 endonuclease is an Esc2-STUbL-Cullin8 mitotic substrate impacting on genome integrity. *Nature Communications*, **2020**, 11, 5746	17.4	12
31	The SUMO protease SENP1 is required for cohesion maintenance and mitotic arrest following spindle poison treatment. *Biochemical and Biophysical Research Communications*, **2012**, 426, 310-6	3.4	11
30	Integrating Rio1 activities discloses its nutrient-activated network in Saccharomyces cerevisiae. *Nucleic Acids Research*, **2018**, 46, 7586-7611	20.1	10
29	Leaping forks at inverted repeats. *Genes and Development*, **2010**, 24, 5-9	12.6	9
28	Priming for tolerance and cohesion at replication forks. *Nucleus*, **2016**, 7, 8-12	3.9	8
27	SPARTAN promotes genetic diversification of the immunoglobulin-variable gene locus in avian DT40 cells. *DNA Repair*, **2018**, 68, 50-57	4.3	8
26	Error-free DNA damage tolerance pathway is facilitated by the Irc5 translocase through cohesin. *EMBO Journal*, **2018**, 37,	13	7
25	Structures of core eukaryotic protein complexes		7
24	Prevention of unwanted recombination at damaged replication forks. *Current Genetics*, **2020**, 66, 1045-1051	2.5	7
23	Stefan Jentsch (1955-2016)-Maestro of the ubiquitin family. *EMBO Journal*, **2017**, 36, 1-2	13	6
22	DNA Replication Through Strand Displacement During Lagging Strand DNA Synthesis in. *Genes*, **2019**, 10,	4.2	6
21	Swi2/Snf2-like protein Uls1 functions in the Sgs1-dependent pathway of maintenance of rDNA stability and alleviation of replication stress. *DNA Repair*, **2014**, 21, 24-35	4.3	6
20	Cohesion by topology: sister chromatids interlocked by DNA. *Genes and Development*, **2008**, 22, 2297-301	12.6	6
19	SMC5/6 acts jointly with Fanconi anemia factors to support DNA repair and genome stability. *EMBO Reports*, **2020**, 21, e48222	6.5	6

18	Smc5/6 functions with Sgs1-Top3-Rmi1 to complete chromosome replication at natural pause sites. *Nature Communications*, **2021**, 12, 2111	17.4	6
17	The Budding Yeast Ubiquitin Protease Ubp7 Is a Novel Component Involved in S Phase Progression. *Journal of Biological Chemistry*, **2016**, 291, 4442-52	5.4	6
16	The Mgs1/WRNIP1 ATPase is required to prevent a recombination salvage pathway at damaged replication forks. *Science Advances*, **2020**, 6, eaaz3327	14.3	6
15	DNA Damage Tolerance Mechanisms Revealed from the Analysis of Immunoglobulin V Gene Diversification in Avian DT40 Cells. *Genes*, **2018**, 9,	4.2	6
14	DDX11 loss causes replication stress and pharmacologically exploitable DNA repair defects. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4
13	SMC complexes are guarded by the SUMO protease Ulp2 against SUMO-chain-mediated turnover. *Cell Reports*, **2021**, 36, 109485	10.6	3
12	Not all roads lead to Cdk1. *Cell Cycle*, **2017**, 16, 395-396	4.7	2
11	DNA damage tolerance branches out toward sister chromatid cohesion. *Molecular and Cellular Oncology*, **2016**, 3, e1035478	1.2	2
10	Parental histone deposition on the replicated strands promotes error-free DNA damage tolerance and regulates drug resistance.. *Genes and Development*, **2022**,	12.6	2
9	Vertebrate CTF18 and DDX11 essential function in cohesion is bypassed by preventing WAPL-mediated cohesin release. *Genes and Development*, **2021**, 35, 1368-1382	12.6	2
8	DNA helicases in homologous recombination repair. *Current Opinion in Genetics and Development*, **2021**, 71, 27-33	4.9	2
7	SIRFing the replication fork: Assessing protein interactions with nascent DNA. *Journal of Cell Biology*, **2018**, 217, 1177-1179	7.3	1
6	The three SMC sisters. *Nature Reviews Molecular Cell Biology*, **2011**, 12, 343	48.7	1
5	Rad51-mediated replication of damaged templates relies on monoSUMOylated DDK kinase.. *Nature Communications*, **2022**, 13, 2480	17.4	0
4	Using Cell Cycle-Restricted Alleles to Study the Chromatin Dynamics and Functions of the Structural Maintenance of Chromosomes (SMC) Complexes In Vivo. *Methods in Molecular Biology*, **2019**, 2004, 3-16	1.4	
3	Replication forks and replication checkpoints in repair **2006**, 201-219		
2	Proteins That Interact with the Werner Syndrome Gene Product **2004**, 44-61		
1	Replication forks and replication checkpoints in repair. *Topics in Current Genetics*, **2007**, 201-219		