# Dana Branzei

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 91 papers | 6,125 citations | 94433 37 h-index | 74163 75 g-index |
| 95 all docs | 95 docs citations | 95 times ranked | 6397 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Regulation of DNA repair throughout the cell cycle. Nature Reviews Molecular Cell Biology, 2008, 9, 297-308. | 37.0 | 1,028 |
| 2 | Maintaining genome stability at the replication fork. Nature Reviews Molecular Cell Biology, 2010, 11, 208-219. | 37.0 | 690 |
| 3 | Computed structures of core eukaryotic protein complexes. Science, 2021, 374, eabm4805. | 12.6 | 316 |
| 4 | Ubc9- and Mms21-Mediated Sumoylation Counteracts Recombinogenic Events atÂDamaged Replication Forks. Cell, 2006, 127, 509-522. | 28.9 | 266 |
| 5 | SUMOylation regulates Rad18-mediated template switch. Nature, 2008, 456, 915-920. | 27.8 | 238 |
| 6 | The DNA damage response during DNA replication. Current Opinion in Cell Biology, 2005, 17, 568-575. | 5.4 | 217 |
| 7 | The checkpoint response to replication stress. DNA Repair, 2009, 8, 1038-1046. | 2.8 | 191 |
| 8 | Error-Free DNA Damage Tolerance and Sister Chromatid Proximity during DNA Replication Rely on the PolÎ±/Primase/Ctf4 Complex. Molecular Cell, 2015, 57, 812-823. | 9.7 | 129 |
| 9 | DNA damage tolerance by recombination: Molecular pathways and DNA structures. DNA Repair, 2016, 44, 68-75. | 2.8 | 129 |
| 10 | Visualization of recombination-mediated damage bypass by template switching. Nature Structural and Molecular Biology, 2014, 21, 884-892. | 8.2 | 124 |
| 11 | Replication and Recombination Factors Contributing to Recombination-Dependent Bypass of DNA Lesions by Template Switch. PLoS Genetics, 2010, 6, e1001205. | 3.5 | 115 |
| 12 | Premature Cdk1/Cdc5/Mus81 pathway activation induces aberrant replication and deleterious crossover. EMBO Journal, 2013, 32, 1155-1167. | 7.8 | 114 |
| 13 | The Rad53 signal transduction pathway: Replication fork stabilization, DNA repair, and adaptation. Experimental Cell Research, 2006, 312, 2654-2659. | 2.6 | 106 |
| 14 | Interplay of replication checkpoints and repair proteins at stalled replication forks. DNA Repair, 2007, 6, 994-1003. | 2.8 | 105 |
| 15 | Essential Roles of the Smc5/6 Complex in Replication through Natural Pausing Sites and Endogenous DNA Damage Tolerance. Molecular Cell, 2015, 60, 835-846. | 9.7 | 98 |
| 16 | The<i>Saccharomyces cerevisiae</i>Esc2 and Smc5-6 Proteins Promote Sister Chromatid Junction-mediated Intra-S Repair. Molecular Biology of the Cell, 2009, 20, 1671-1682. | 2.1 | 92 |
| 17 | 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, 21252-21257. | 7.1 | 84 |
| 18 | Noncanonical Role of the 9-1-1 Clamp in the Error-Free DNA Damage Tolerance Pathway. Molecular Cell, 2013, 49, 536-546. | 9.7 | 82 |

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|---|---|---|---|
| 19 | A cell cycle-regulated Slx4â€“Dpb11 complex promotes the resolution of DNA repair intermediates linked to stalled replication. Genes and Development, 2014, 28, 1604-1619. | 5.9 | 79 |
| 20 | The Smc5/6 Complex and Esc2 Influence Multiple Replication-associated Recombination Processes in<i>Saccharomyces cerevisiae</i>. Molecular Biology of the Cell, 2010, 21, 2306-2314. | 2.1 | 74 |
| 21 | Building up and breaking down: mechanisms controlling recombination during replication. Critical Reviews in Biochemistry and Molecular Biology, 2017, 52, 381-394. | 5.2 | 71 |
| 22 | Ubiquitin family modifications and template switching. FEBS Letters, 2011, 585, 2810-2817. | 2.8 | 68 |
| 23 | DNA damage tolerance. Current Opinion in Cell Biology, 2016, 40, 137-144. | 5.4 | 67 |
| 24 | Smc5/6 Mediated Sumoylation of the Sgs1-Top3-Rmi1 Complex Promotes Removal of Recombination Intermediates. Cell Reports, 2016, 16, 368-378. | 6.4 | 66 |
| 25 | Combined deficiency of Senataxin and DNA-PKcs causes DNA damage accumulation and neurodegeneration in spinal muscular atrophy. Nucleic Acids Research, 2018, 46, 8326-8346. | 14.5 | 66 |
| 26 | A Novel Protein Interacts with the Werner's Syndrome Gene Product Physically and Functionally. Journal of Biological Chemistry, 2001, 276, 20364-20369. | 3.4 | 63 |
| 27 | Sgs1 function in the repair of DNA replication intermediates is separable from its role in homologous recombinational repair. EMBO Journal, 2009, 28, 915-925. | 7.8 | 60 |
| 28 | DNA bending facilitates the error-free DNA damage tolerance pathway and upholds genome integrity. EMBO Journal, 2014, 33, 327-340. | 7.8 | 59 |
| 29 | S-phase checkpoint regulations that preserve replication and chromosome integrity upon dNTP depletion. Cellular and Molecular Life Sciences, 2017, 74, 2361-2380. | 5.4 | 57 |
| 30 | Rad18/Rad5/Mms2-mediated polyubiquitination of PCNA is implicated in replication completion during replication stress. Genes To Cells, 2004, 9, 1031-1042. | 1.2 | 53 |
| 31 | The product of Saccharomyces cerevisiae WHIP/MGS1, a gene related to replication factor C genes, interacts functionally with DNA polymerase Î´. Molecular Genetics and Genomics, 2002, 268, 371-386. | 2.1 | 52 |
| 32 | 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, 2067-2080. | 5.9 | 52 |
| 33 | Timeless couples Gâ€quadruplex detection with processing by <scp>DDX</scp> 11 helicase during <scp>DNA</scp> replication. EMBO Journal, 2020, 39, e104185. | 7.8 | 52 |
| 34 | Rad5 Recruits Error-Prone DNA Polymerases for Mutagenic Repair of ssDNA Gaps on Undamaged Templates. Molecular Cell, 2019, 73, 900-914.e9. | 9.7 | 49 |
| 35 | 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, 11374-11383. | 3.4 | 46 |
| 36 | AND-1 fork protection function prevents fork resection and is essential for proliferation. Nature Communications, 2018, 9, 3091. | 12.8 | 46 |

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|---|---|---|---|
| 37 | Template Switching: From Replication Fork Repair to Genome Rearrangements. Cell, 2007, 131, 1228-1230. | 28.9 | 45 |
| 38 | Concerted and differential actions of two enzymatic domains underlie Rad5 contributions to DNA damage tolerance. Nucleic Acids Research, 2015, 43, 2666-2677. | 14.5 | 43 |
| 39 | RecQ helicases queuing with Srs2 to disrupt Rad51 filaments and suppress recombination. Genes and Development, 2007, 21, 3019-3026. | 5.9 | 42 |
| 40 | Exploring and exploiting the systemic effects of deregulated replication licensing. Seminars in Cancer Biology, 2016, 37-38, 3-15. | 9.6 | 41 |
| 41 | SUMO-Chain-Regulated Proteasomal Degradation Timing Exemplified in DNA Replication Initiation. Molecular Cell, 2019, 76, 632-645.e6. | 9.7 | 39 |
| 42 | Rad52 sumoylation and its involvement in the efficient induction of homologous recombination. DNA Repair, 2008, 7, 879-889. | 2.8 | 36 |
| 43 | Characterization of the slow-growth phenotype of S. cerevisiae whip/mgs1 sgs1 double deletion mutants. DNA Repair, 2002, 1, 671-682. | 2.8 | 35 |
| 44 | 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. | 7.1 | 34 |
| 45 | ESCO1/2's roles in chromosome structure and interphase chromatin organization. Genes and Development, 2017, 31, 2136-2150. | 5.9 | 32 |
| 46 | Mgs1 and Rad18/Rad5/Mms2 are required for survival of Saccharomyces cerevisiae mutants with novel temperature/cold sensitive alleles of the DNA polymerase Î´ subunit, Pol31. DNA Repair, 2006, 5, 1459-1474. | 2.8 | 31 |
| 47 | Rad5-dependent DNA Repair Functions of the Saccharomyces cerevisiae FANCM Protein Homolog Mph1. Journal of Biological Chemistry, 2012, 287, 26563-26575. | 3.4 | 31 |
| 48 | The Smc5-Smc6 Complex Regulates Recombination at Centromeric Regions and Affects Kinetochore Protein Sumoylation during Normal Growth. PLoS ONE, 2012, 7, e51540. | 2.5 | 31 |
| 49 | Ubc9 is required for damage-tolerance and damage-induced interchromosomal homologous recombination in S. cerevisiae. DNA Repair, 2004, 3, 335-341. | 2.8 | 30 |
| 50 | Rtt107 Is a Multi-functional Scaffold Supporting Replication Progression with Partner SUMO and Ubiquitin Ligases. Molecular Cell, 2015, 60, 268-279. | 9.7 | 26 |
| 51 | Esc2 promotes Mus81 complex-activity via its SUMO-like and DNA binding domains. Nucleic Acids Research, 2017, 45, 215-230. | 14.5 | 26 |
| 52 | Chromatin determinants of the inner-centromere rely on replication factors with functions that impart cohesion. Oncotarget, 2016, 7, 67934-67947. | 1.8 | 26 |
| 53 | Integrating Rio1 activities discloses its nutrient-activated network in Saccharomyces cerevisiae. Nucleic Acids Research, 2018, 46, 7586-7611. | 14.5 | 19 |
| 54 | 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. | 14.5 | 18 |

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|---|---|---|---|
| 55 | Mus81-Mms4 endonuclease is an Esc2-STUbL-Cullin8 mitotic substrate impacting on genome integrity. Nature Communications, 2020, 11, 5746. | 12.8 | 18 |
| 56 | 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, 153-164. | 2.8 | 17 |
| 57 | Selective modulation of the functions of a conserved DNA motor by a histone fold complex. Genes and Development, 2015, 29, 1000-1005. | 5.9 | 17 |
| 58 | The Swr1 chromatin-remodeling complex prevents genome instability induced by replication fork progression defects. Nature Communications, 2018, 9, 3680. | 12.8 | 17 |
| 59 | Smc5/6 functions with Sgs1-Top3-Rmi1 to complete chromosome replication at natural pause sites. Nature Communications, 2021, 12, 2111. | 12.8 | 17 |
| 60 | Vertebrate CTF18 and DDX11 essential function in cohesion is bypassed by preventing WAPL-mediated cohesin release. Genes and Development, 2021, 35, 1368-1382. | 5.9 | 16 |
| 61 | <scp>SMC</scp>5/6 acts jointly with Fanconi anemia factors to support <scp>DNA</scp> repair and genome stability. EMBO Reports, 2020, 21, e48222. | 4.5 | 16 |
| 62 | DNA damage checkpoint and recombinational repair differentially affect the replication stress tolerance of smc6 mutants. Molecular Biology of the Cell, 2013, 24, 2431-2441. | 2.1 | 15 |
| 63 | SMC complexes are guarded by the SUMO protease Ulp2 against SUMO-chain-mediated turnover. Cell Reports, 2021, 36, 109485. | 6.4 | 15 |
| 64 | Errorâ€free <scp>DNA</scp> damage tolerance pathway is facilitated by the Irc5 translocase through cohesin. EMBO Journal, 2018, 37, . | 7.8 | 14 |
| 65 | The SUMO protease SENP1 is required for cohesion maintenance and mitotic arrest following spindle poison treatment. Biochemical and Biophysical Research Communications, 2012, 426, 310-316. | 2.1 | 13 |
| 66 | Prevention of unwanted recombination at damaged replication forks. Current Genetics, 2020, 66, 1045-1051. | 1.7 | 13 |
| 67 | 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, . | 7.1 | 12 |
| 68 | Leaping forks at inverted repeats: Figure 1.. Genes and Development, 2010, 24, 5-9. | 5.9 | 11 |
| 69 | The Budding Yeast Ubiquitin Protease Ubp7 Is a Novel Component Involved in S Phase Progression. Journal of Biological Chemistry, 2016, 291, 4442-4452. | 3.4 | 11 |
| 70 | SPARTAN promotes genetic diversification of the immunoglobulin-variable gene locus in avian DT40 cells. DNA Repair, 2018, 68, 50-57. | 2.8 | 11 |
| 71 | The Mgs1/WRNIP1 ATPase is required to prevent a recombination salvage pathway at damaged replication forks. Science Advances, 2020, 6, eaaz3327. | 10.3 | 11 |
| 72 | DNA Damage Tolerance Mechanisms Revealed from the Analysis of Immunoglobulin V Gene Diversification in Avian DT40 Cells. Genes, 2018, 9, 614. | 2.4 | 9 |

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| 73 | 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. | 2.8 | 8 |
| 74 | Priming for tolerance and cohesion at replication forks. Nucleus, 2016, 7, 8-12. | 2.2 | 8 |
| 75 | Stefan Jentsch (1955â€"2016)â€"Maestro of the ubiquitin family. EMBO Journal, 2017, 36, 1-2. | 7.8 | 8 |
| 76 | DNA Replication Through Strand Displacement During Lagging Strand DNA Synthesis in Saccharomyces cerevisiae. Genes, 2019, 10, 167. | 2.4 | 8 |
| 77 | DNA helicases in homologous recombination repair. Current Opinion in Genetics and Development, 2021, 71, 27-33. | 3.3 | 8 |
| 78 | Cohesion by topology: sister chromatids interlocked by DNA: Figure 1.. Genes and Development, 2008, 22, 2297-2301. | 5.9 | 7 |
| 79 | Parental histone deposition on the replicated strands promotes error-free DNA damage tolerance and regulates drug resistance. Genes and Development, 2022, 36, 167-179. | 5.9 | 6 |
| 80 | SUMO-mediated global and local control of recombination. Cell Cycle, 2016, 15, 160-161. | 2.6 | 5 |
| 81 | G2/M chromosome transactions essentially relying on Smc5/6. Cell Cycle, 2016, 15, 611-612. | 2.6 | 3 |
| 82 | The three SMC sisters. Nature Reviews Molecular Cell Biology, 2011, 12, 343-343. | 37.0 | 2 |
| 83 | DNA damage tolerance branches out toward sister chromatid cohesion. Molecular and Cellular Oncology, 2016, 3, e1035478. | 0.7 | 2 |
| 84 | Not all roads lead to Cdk1. Cell Cycle, 2017, 16, 395-396. | 2.6 | 2 |
| 85 | Rad51-mediated replication of damaged templates relies on monoSUMOylated DDK kinase. Nature Communications, 2022, 13, 2480. | 12.8 | 2 |
| 86 | SIRFing the replication fork: Assessing protein interactions with nascent DNA. Journal of Cell Biology, 2018, 217, 1177-1179. | 5.2 | 1 |
| 87 | Replication forks and replication checkpoints in repair. , 2006, , 201-219. | | 0 |
| 88 | Cell scientist to watch â€" Dana Branzei. Journal of Cell Science, 2017, 130, 3193-3195. | 2.0 | 0 |
| 89 | 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. | 0.9 | 0 |
| 90 | Proteins That Interact with the Werner Syndrome Gene Product. , 2004, , 44-61. | | 0 |

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| 91 | Replication forks and replication checkpoints in repair. Topics in Current Genetics, 2007, , 201-219. | 0.7 | 0 |