

John Petrini

List of Publications by Year in descending order

Source: [//exaly.com/author-pdf/49159/publications.pdf](https://exaly.com/author-pdf/49159/publications.pdf)

Version: 2024-02-01

88
papers

10,202
citations

41046

49
h-index

45967

90
g-index

125
all docs

125
docs citations

125
times ranked

11721
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | <i>NBN</i> Pathogenic Germline Variants are Associated with Pan-Cancer Susceptibility and In Vitro DNA Damage Response Defects. <i>Clinical Cancer Research</i> , 2023, 29, 422-431. | 7.2 | 8 |
| 2 | ISG15: A link between innate immune signaling, DNA replication, and genome stability. <i>BioEssays</i> , 2023, 45, . | 2.6 | 5 |
| 3 | ISG15 conjugation to proteins on nascent DNA mitigates DNA replication stress. <i>Nature Communications</i> , 2022, 13, . | 13.2 | 24 |
| 4 | RTEL1 influences the abundance and localization of TERRA RNA. <i>Nature Communications</i> , 2021, 12, 3016. | 13.2 | 34 |
| 5 | RTEL1 suppresses G-quadruplex-associated R-loops at difficult-to-replicate loci in the human genome. <i>Nature Structural and Molecular Biology</i> , 2020, 27, 424-437. | 8.1 | 65 |
| 6 | Tumour predisposition and cancer syndromes as models to study gene-environment interactions. <i>Nature Reviews Cancer</i> , 2020, 20, 533-549. | 28.8 | 101 |
| 7 | Modeling cancer genomic data in yeast reveals selection against ATM function during tumorigenesis. <i>PLoS Genetics</i> , 2020, 16, e1008422. | 3.4 | 18 |
| 8 | A P53-Independent DNA Damage Response Suppresses Oncogenic Proliferation and Genome Instability. <i>Cell Reports</i> , 2020, 30, 1385-1399.e7. | 6.3 | 33 |
| 9 | A Disease-Causing Single Amino Acid Deletion in the Coiled-Coil Domain of RAD50 Impairs MRE11 Complex Functions in Yeast and Humans. <i>Cell Reports</i> , 2020, 33, 108559. | 6.3 | 8 |
| 10 | Oncogene-induced DNA damage: cyclic AMP steps into the ring. <i>Journal of Clinical Investigation</i> , 2020, 130, 5668-5670. | 8.2 | 4 |
| 11 | Nej1 Interacts with Mre11 to Regulate Tethering and Dna2 Binding at DNA Double-Strand Breaks. <i>Cell Reports</i> , 2019, 28, 1564-1573.e3. | 6.3 | 27 |
| 12 | Nbn-Mre11 interaction is required for tumor suppression and genomic integrity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15178-15183. | 7.6 | 10 |
| 13 | The telomere-binding protein Rif2 and ATP-bound Rad50 have opposing roles in the activation of yeast Tel1/ATM kinase. <i>Journal of Biological Chemistry</i> , 2019, 294, 18846-18852. | 3.5 | 20 |
| 14 | Mouse DCUN1D1 (SCCRO) is required for spermatogenetic individualization. <i>PLoS ONE</i> , 2019, 14, e0209995. | 2.5 | 9 |
| 15 | Eukaryotic Rad50 functions as a rod-shaped dimer. <i>Nature Structural and Molecular Biology</i> , 2017, 24, 248-257. | 8.1 | 66 |
| 16 | The Mre11-Nbs1 Interface Is Essential for Viability and Tumor Suppression. <i>Cell Reports</i> , 2017, 18, 496-507. | 6.3 | 40 |
| 17 | Therapeutic targeting of PGBD5-induced DNA repair dependency in pediatric solid tumors. <i>Science Translational Medicine</i> , 2017, 9, . | 13.4 | 51 |
| 18 | Massively parallel sequencing of phyllodes tumours of the breast reveals actionable mutations, and <i>TERT</i> promoter hotspot mutations and <i>TERT</i> gene amplification as likely drivers of progression. <i>Journal of Pathology</i> , 2016, 238, 508-518. | 4.5 | 105 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Generation of a novel, multi-stage, progressive, and transplantable model of plasma cell neoplasms. <i>Scientific Reports</i> , 2016, 6, 22760. | 3.4 | 4 |
| 20 | A Damage-Independent Role for 53BP1 that Impacts Break Order and Igh Architecture during Class Switch Recombination. <i>Cell Reports</i> , 2016, 16, 48-55. | 6.3 | 32 |
| 21 | TRF2 Recruits RTEL1 to Telomeres in S Phase to Promote T-Loop Unwinding. <i>Molecular Cell</i> , 2016, 61, 788-789. | 9.6 | 16 |
| 22 | Defining ATM-Independent Functions of the Mre11 Complex with a Novel Mouse Model. <i>Molecular Cancer Research</i> , 2016, 14, 185-195. | 3.5 | 10 |
| 23 | Functions of the MRE11 complex in the development and maintenance of oocytes. <i>Chromosoma</i> , 2016, 125, 151-162. | 2.1 | 17 |
| 24 | TRF2 Recruits RTEL1 to Telomeres in S Phase to Promote T-Loop Unwinding. <i>Molecular Cell</i> , 2015, 57, 622-635. | 9.6 | 145 |
| 25 | Interdependence of the Rad50 Hook and Globular Domain Functions. <i>Molecular Cell</i> , 2015, 57, 479-491. | 9.6 | 47 |
| 26 | The Rad50 hook domain regulates DNA damage signaling and tumorigenesis. <i>Genes and Development</i> , 2014, 28, 451-462. | 5.9 | 45 |
| 27 | Synthetic Lethality in ATM-Deficient <i>RAD50</i> -Mutant Tumors Underlies Outlier Response to Cancer Therapy. <i>Cancer Discovery</i> , 2014, 4, 1014-1021. | 14.2 | 114 |
| 28 | Aberrant topoisomerase-1 DNA lesions are pathogenic in neurodegenerative genome instability syndromes. <i>Nature Neuroscience</i> , 2014, 17, 813-821. | 14.5 | 134 |
| 29 | Rad50-CARD9 interactions link cytosolic DNA sensing to IL-1 β production. <i>Nature Immunology</i> , 2014, 15, 538-545. | 13.9 | 135 |
| 30 | The Mre11 Complex Suppresses Oncogene-Driven Breast Tumorigenesis and Metastasis. <i>Molecular Cell</i> , 2013, 52, 353-365. | 9.6 | 48 |
| 31 | The Ku Heterodimer and the Metabolism of Single-Ended DNA Double-Strand Breaks. <i>Cell Reports</i> , 2013, 3, 2033-2045. | 6.3 | 47 |
| 32 | A Recessive Founder Mutation in Regulator of Telomere Elongation Helicase 1, RTEL1, Underlies Severe Immunodeficiency and Features of Hoyeraal Hreidarsson Syndrome. <i>PLoS Genetics</i> , 2013, 9, e1003695. | 3.4 | 108 |
| 33 | Higher Than Expected Carrier Frequency Of The Dyskeratosis Congenita RTEL1 p.Arg1264His recessive Founder In Individuals Of Ashkenazi Jewish Ancestry. <i>Blood</i> , 2013, 122, 1228-1228. | 1.4 | 0 |
| 34 | Chemical Genetics Reveals a Specific Requirement for Cdk2 Activity in the DNA Damage Response and Identifies Nbs1 as a Cdk2 Substrate in Human Cells. <i>PLoS Genetics</i> , 2012, 8, e1002935. | 3.4 | 56 |
| 35 | Loss of ATRX, Genome Instability, and an Altered DNA Damage Response Are Hallmarks of the Alternative Lengthening of Telomeres Pathway. <i>PLoS Genetics</i> , 2012, 8, e1002772. | 3.4 | 502 |
| 36 | Cell cycle- and DNA repair pathway-specific effects of apoptosis on tumor suppression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 9953-9958. | 7.6 | 56 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Cohesin Association to Replication Sites Depends on Rad50 and Promotes Fork Restart. <i>Molecular Cell</i> , 2012, 48, 98-108. | 9.6 | 109 |
| 38 | Whole exome sequencing identifies ATRX mutation as a key molecular determinant in lower-grade glioma. <i>Oncotarget</i> , 2012, 3, 1194-1203. | 2.1 | 247 |
| 39 | Generation of a Novel, Multi-Stage, Progressive, and Transplantable Model of Multiple Myeloma. <i>Blood</i> , 2012, 120, 327-327. | 1.4 | 0 |
| 40 | The MRE11 complex: starting from the ends. <i>Nature Reviews Molecular Cell Biology</i> , 2011, 12, 90-103. | 37.3 | 628 |
| 41 | Functional Interplay of the Mre11 Nuclease and Ku in the Response to Replication-Associated DNA Damage. <i>Molecular and Cellular Biology</i> , 2011, 31, 4379-4389. | 2.5 | 97 |
| 42 | The Rad50 coiled-coil domain is indispensable for Mre11 complex functions. <i>Nature Structural and Molecular Biology</i> , 2011, 18, 1124-1131. | 8.1 | 89 |
| 43 | Loss of ATM/Chk2/p53 Pathway Components Accelerates Tumor Development and Contributes to Radiation Resistance in Gliomas. <i>Cancer Cell</i> , 2010, 18, 619-629. | 16.8 | 212 |
| 44 | Rad50 Is Dispensable for the Maintenance and Viability of Postmitotic Tissues. <i>Molecular and Cellular Biology</i> , 2009, 29, 483-492. | 2.5 | 41 |
| 45 | Division of labor: DNA repair and the cell cycle specific functions of the Mre11 complex. <i>Cell Cycle</i> , 2009, 8, 1510-1514. | 2.8 | 7 |
| 46 | The Mre11 Complex and the Response to Dysfunctional Telomeres. <i>Molecular and Cellular Biology</i> , 2009, 29, 5540-5551. | 2.5 | 61 |
| 47 | Differential DNA damage signaling accounts for distinct neural apoptotic responses in ATLD and NBS. <i>Genes and Development</i> , 2009, 23, 171-180. | 5.9 | 93 |
| 48 | Artemis and Nonhomologous End Joining-Independent Influence of DNA-Dependent Protein Kinase Catalytic Subunit on Chromosome Stability. <i>Molecular and Cellular Biology</i> , 2009, 29, 503-514. | 2.5 | 18 |
| 49 | Taking the time to make important decisions: The checkpoint effector kinases Chk1 and Chk2 and the DNA damage response. <i>DNA Repair</i> , 2009, 8, 1047-1054. | 2.9 | 203 |
| 50 | Checkpoint response to DNA damage. <i>DNA Repair</i> , 2009, 8, 973-973. | 2.9 | 3 |
| 51 | NBS1 cooperates with homologous recombination to counteract chromosome breakage during replication. <i>DNA Repair</i> , 2009, 8, 1363-1370. | 2.9 | 8 |
| 52 | DNA Replication Reaches the Breaking Point. <i>Cell</i> , 2009, 137, 211-212. | 27.8 | 2 |
| 53 | Maintenance of the DNA-Damage Checkpoint Requires DNA-Damage-Induced Mediator Protein Oligomerization. <i>Molecular Cell</i> , 2009, 33, 147-159. | 9.6 | 58 |
| 54 | Roles for NBS1 in Alternative Nonhomologous End-Joining of V(D)J Recombination Intermediates. <i>Molecular Cell</i> , 2009, 34, 13-25. | 9.6 | 98 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Chk2 Suppresses the Oncogenic Potential of DNA Replication-Associated DNA Damage. <i>Molecular Cell</i> , 2008, 31, 21-32. | 9.6 | 58 |
| 56 | Functional Interactions Between Sae2 and the Mre11 Complex. <i>Genetics</i> , 2008, 178, 711-723. | 2.9 | 53 |
| 57 | ZIP4H (TEX11) Deficiency in the Mouse Impairs Meiotic Double Strand Break Repair and the Regulation of Crossing Over. <i>PLoS Genetics</i> , 2008, 4, e1000042. | 3.4 | 107 |
| 58 | The <i>Saccharomyces cerevisiae</i> 14-3-3 proteins Bmh1 and Bmh2 directly influence the DNA damage-dependent functions of Rad53. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 2797-2802. | 7.6 | 42 |
| 59 | CELL SIGNALING: A Touching Response to Damage. <i>Science</i> , 2007, 316, 1138-1139. | 20.9 | 25 |
| 60 | Mre11 and Ku regulation of double-strand break repair by gene conversion and break-induced replication. <i>DNA Repair</i> , 2007, 6, 797-808. | 2.9 | 26 |
| 61 | The carboxy terminus of NBS1 is required for induction of apoptosis by the MRE11 complex. <i>Nature</i> , 2007, 447, 218-221. | 36.2 | 110 |
| 62 | The Mre11 Complex Influences DNA Repair, Synapsis, and Crossing Over in Murine Meiosis. <i>Current Biology</i> , 2007, 17, 373-378. | 4.0 | 181 |
| 63 | Rad50S alleles of the Mre11 complex: Questions answered and questions raised. <i>Experimental Cell Research</i> , 2006, 312, 2694-2699. | 2.6 | 24 |
| 64 | Modeling disease in the mouse: Lessons from DNA damage response and cell cycle control genes. <i>Journal of Cellular Biochemistry</i> , 2006, 97, 459-473. | 2.6 | 8 |
| 65 | Methods for Studying the Cellular Response to DNA Damage: Influence of the Mre11 Complex on Chromosome Metabolism. <i>Methods in Enzymology</i> , 2006, 409, 251-284. | 1.7 | 28 |
| 66 | At the end, remodeling leads to eviction. <i>Nature Structural and Molecular Biology</i> , 2005, 12, 1028-1029. | 8.1 | 8 |
| 67 | The Rad50 hook domain is a critical determinant of Mre11 complex functions. <i>Nature Structural and Molecular Biology</i> , 2005, 12, 403-407. | 8.1 | 135 |
| 68 | The BRCA1-interacting helicase BRIP1 is deficient in Fanconi anemia. <i>Nature Genetics</i> , 2005, 37, 931-933. | 20.4 | 342 |
| 69 | Srs2 and Sgs1 DNA Helicases Associate with Mre11 in Different Subcomplexes following Checkpoint Activation and CDK1-Mediated Srs2 Phosphorylation. <i>Molecular and Cellular Biology</i> , 2005, 25, 5738-5751. | 2.5 | 83 |
| 70 | The <i>Rad50^S</i> allele promotes ATM-dependent DNA damage responses and suppresses ATM deficiency: implications for the Mre11 complex as a DNA damage sensor. <i>Genes and Development</i> , 2005, 19, 3043-3054. | 5.9 | 79 |
| 71 | RAD50 and NBS1 are breast cancer susceptibility genes associated with genomic instability. <i>Carcinogenesis</i> , 2005, 27, 1593-1599. | 2.8 | 182 |
| 72 | The Telomeric Protein TRF2 Binds the ATM Kinase and Can Inhibit the ATM-Dependent DNA Damage Response. <i>PLoS Biology</i> , 2004, 2, e240. | 5.4 | 312 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 73 | Distribution and Dynamics of Chromatin Modification Induced by a Defined DNA Double-Strand Break. <i>Current Biology</i> , 2004, 14, 1703-1711. | 4.0 | 464 |
| 74 | The Mre11 complex and the metabolism of chromosome breaks: the importance of communicating and holding things together. <i>DNA Repair</i> , 2004, 3, 845-854. | 2.9 | 237 |
| 75 | Association of Mre11p with Double-Strand Break Sites during Yeast Meiosis. <i>Molecular Cell</i> , 2004, 13, 389-401. | 9.6 | 129 |
| 76 | The cellular response to DNA double-strand breaks: defining the sensors and mediators. <i>Trends in Cell Biology</i> , 2003, 13, 458-462. | 8.1 | 308 |
| 77 | Checkpoint Failure and Chromosomal Instability without Lymphomagenesis in Mre11ATLD1/ATLD1 Mice. <i>Molecular Cell</i> , 2003, 12, 1511-1523. | 9.6 | 160 |
| 78 | Cancer predisposition and hematopoietic failure in <i>Rad50^{S/S}</i> mice. <i>Genes and Development</i> , 2002, 16, 2237-2251. | 5.9 | 181 |
| 79 | The DNA damage-dependent intra-S phase checkpoint is regulated by parallel pathways. <i>Nature Genetics</i> , 2002, 30, 290-294. | 20.4 | 350 |
| 80 | Complementation between N-terminal <i>Saccharomyces cerevisiae</i> mre11 alleles in DNA repair and telomere length maintenance. <i>DNA Repair</i> , 2002, 1, 27-40. | 2.9 | 67 |
| 81 | A Murine Model of Nijmegen Breakage Syndrome. <i>Current Biology</i> , 2002, 12, 648-653. | 4.0 | 192 |
| 82 | The Rad50 zinc-hook is a structure joining Mre11 complexes in DNA recombination and repair. <i>Nature</i> , 2002, 418, 562-566. | 36.2 | 488 |
| 83 | Mre11 Complex and DNA Replication: Linkage to E2F and Sites of DNA Synthesis. <i>Molecular and Cellular Biology</i> , 2001, 21, 6006-6016. | 2.5 | 199 |
| 84 | DNA Damage-Dependent Nuclear Dynamics of the Mre11 Complex. <i>Molecular and Cellular Biology</i> , 2001, 21, 281-288. | 2.5 | 369 |
| 85 | When more is better. <i>Nature Genetics</i> , 2000, 26, 257-258. | 20.4 | 6 |
| 86 | The Mre11-Rad50-Xrs2 Protein Complex Facilitates Homologous Recombination-Based Double-Strand Break Repair in <i>Saccharomyces cerevisiae</i> . <i>Molecular and Cellular Biology</i> , 1999, 19, 7681-7687. | 2.5 | 252 |
| 87 | Alteration of N-Terminal Phosphoesterase Signature Motifs Inactivates <i>Saccharomyces cerevisiae</i> Mre11. <i>Genetics</i> , 1998, 150, 591-600. | 2.9 | 132 |
| 88 | Nej1 Interacts with Mre11 to Regulate-Tethering and Dna2 Binding at DNA Double-Strand Breaks. <i>SSRN Electronic Journal</i> , 0, , . | 0.3 | 0 |