

Zhiguo Zhang

List of Publications by Year in descending order

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77
papers

5,661
citations

109321

35
h-index

82547

72
g-index

81
all docs

81
docs citations

81
times ranked

7605
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | The histone H3.K27M mutation in pediatric glioma reprograms H3K27 methylation and gene expression. <i>Genes and Development</i> , 2013, 27, 985-990. | 5.9 | 570 |
| 2 | Pharmacologic inhibition of histone demethylation as a therapy for pediatric brainstem glioma. <i>Nature Medicine</i> , 2014, 20, 1394-1396. | 30.7 | 411 |
| 3 | Acetylation of Histone H3 Lysine 56 Regulates Replication-Coupled Nucleosome Assembly. <i>Cell</i> , 2008, 134, 244-255. | 28.9 | 406 |
| 4 | Rtt109 Acetylates Histone H3 Lysine 56 and Functions in DNA Replication. <i>Science</i> , 2007, 315, 653-655. | 12.6 | 376 |
| 5 | Histone chaperones in nucleosome assembly and human disease. <i>Nature Structural and Molecular Biology</i> , 2013, 20, 14-22. | 8.2 | 323 |
| 6 | PCNA connects DNA replication to epigenetic inheritance in yeast. <i>Nature</i> , 2000, 408, 221-225. | 27.8 | 273 |
| 7 | The histone H3.K36M mutation reprograms the epigenome of chondroblastomas. <i>Science</i> , 2016, 352, 1344-1348. | 12.6 | 211 |
| 8 | A novel enhancer regulates MGMT expression and promotes temozolomide resistance in glioblastoma. <i>Nature Communications</i> , 2018, 9, 2949. | 12.8 | 183 |
| 9 | A mechanism for preventing asymmetric histone segregation onto replicating DNA strands. <i>Science</i> , 2018, 361, 1386-1389. | 12.6 | 179 |
| 10 | Acetylation of Lysine 56 of Histone H3 Catalyzed by RTT109 and Regulated by ASF1 Is Required for Replisome Integrity. <i>Journal of Biological Chemistry</i> , 2007, 282, 28587-28596. | 3.4 | 157 |
| 11 | Strand-Specific Analysis Shows Protein Binding at Replication Forks and PCNA Unloading from Lagging Strands when Forks Stall. <i>Molecular Cell</i> , 2014, 56, 551-563. | 9.7 | 153 |
| 12 | A Role for Gcn5 in Replication-Coupled Nucleosome Assembly. <i>Molecular Cell</i> , 2010, 37, 469-480. | 9.7 | 148 |
| 13 | The Mcm2-Ctf4-Pol ϵ Axis Facilitates Parental Histone H3-H4 Transfer to Lagging Strands. <i>Molecular Cell</i> , 2018, 72, 140-151.e3. | 9.7 | 129 |
| 14 | A Cul4 E3 Ubiquitin Ligase Regulates Histone Hand-Off during Nucleosome Assembly. <i>Cell</i> , 2013, 155, 817-829. | 28.9 | 116 |
| 15 | BET Inhibitors Suppress ALDH Activity by Targeting <i>ALDH1A1</i> Super-Enhancer in Ovarian Cancer. <i>Cancer Research</i> , 2016, 76, 6320-6330. | 0.9 | 115 |
| 16 | Structure of the variant histone H3-H4 heterodimer in complex with its chaperone DAXX. <i>Nature Structural and Molecular Biology</i> , 2012, 19, 1287-1292. | 8.2 | 104 |
| 17 | Structural basis for recognition of H3K56-acetylated histone H3-H4 by the chaperone Rtt106. <i>Nature</i> , 2012, 483, 104-107. | 27.8 | 99 |
| 18 | Structure and function of the BAH-containing domain of Orc1p in epigenetic silencing. <i>EMBO Journal</i> , 2002, 21, 4600-4611. | 7.8 | 87 |

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|----|---|------|-----------|
| 19 | Replication-Coupled Nucleosome Assembly in the Passage of Epigenetic Information and Cell Identity. <i>Trends in Biochemical Sciences</i> , 2018, 43, 136-148. | 7.5 | 84 |
| 20 | RPA Interacts with HIRA and Regulates H3.3 Deposition at Gene Regulatory Elements in Mammalian Cells. <i>Molecular Cell</i> , 2017, 65, 272-284. | 9.7 | 83 |
| 21 | FACT Remodels the Tetranucleosomal Unit of Chromatin Fibers for Gene Transcription. <i>Molecular Cell</i> , 2016, 64, 120-133. | 9.7 | 74 |
| 22 | USP51 deubiquitylates H2AK13,15ub and regulates DNA damage response. <i>Genes and Development</i> , 2016, 30, 946-959. | 5.9 | 72 |
| 23 | H3.3K27M mutant proteins reprogram epigenome by sequestering the PRC2 complex to poised enhancers. <i>ELife</i> , 2018, 7, . | 6.0 | 72 |
| 24 | Chromatin Assembly Factor 1 Interacts with Histone H3 Methylated at Lysine 79 in the Processes of Epigenetic Silencing and DNA Repair. <i>Biochemistry</i> , 2006, 45, 2852-2861. | 2.5 | 64 |
| 25 | Live-cell single-molecule dynamics of PcG proteins imposed by the DIPG H3.3K27M mutation. <i>Nature Communications</i> , 2018, 9, 2080. | 12.8 | 63 |
| 26 | DNA polymerase δ interacts with H3-H4 and facilitates the transfer of parental histones to lagging strands. <i>Science Advances</i> , 2020, 6, eabb5820. | 10.3 | 62 |
| 27 | Retinoblastoma Binding Protein 4 Modulates Temozolomide Sensitivity in Glioblastoma by Regulating DNA Repair Proteins. <i>Cell Reports</i> , 2016, 14, 2587-2598. | 6.4 | 58 |
| 28 | Ubiquitylation of FACT by the Cullin-E3 ligase Rtt101 connects FACT to DNA replication. <i>Genes and Development</i> , 2010, 24, 1485-1490. | 5.9 | 55 |
| 29 | H3K9me3 demethylase Kdm4d facilitates the formation of pre-initiative complex and regulates DNA replication. <i>Nucleic Acids Research</i> , 2017, 45, 169-180. | 14.5 | 53 |
| 30 | Phosphorylation of H4 Ser 47 promotes HIRA-mediated nucleosome assembly. <i>Genes and Development</i> , 2011, 25, 1359-1364. | 5.9 | 52 |
| 31 | A lesson learned from the H3.3K27M mutation found in pediatric glioma. <i>Cell Cycle</i> , 2013, 12, 2546-2552. | 2.6 | 50 |
| 32 | Checkpoint Kinase Rad53 Couples Leading- and Lagging-Strand DNA Synthesis under Replication Stress. <i>Molecular Cell</i> , 2017, 68, 446-455.e3. | 9.7 | 49 |
| 33 | Diverse factors are involved in maintaining X chromosome inactivation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 16699-16704. | 7.1 | 44 |
| 34 | Multisite Substrate Recognition in Asf1-Dependent Acetylation of Histone H3 K56 by Rtt109. <i>Cell</i> , 2018, 174, 818-830.e11. | 28.9 | 44 |
| 35 | Focused Ultrasound-Mediated Blood-Brain Barrier Opening Increases Delivery and Efficacy of Etoposide for Glioblastoma Treatment. <i>International Journal of Radiation Oncology Biology Physics</i> , 2021, 110, 539-550. | 0.8 | 44 |
| 36 | A DNA binding winged helix domain in CAF-1 functions with PCNA to stabilize CAF-1 at replication forks. <i>Nucleic Acids Research</i> , 2016, 44, 5083-5094. | 14.5 | 42 |

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|----|---|------|-----------|
| 37 | Noncoding Transcription Is a Driving Force for Nucleosome Instability in <i>spt16</i> Mutant Cells. <i>Molecular and Cellular Biology</i> , 2016, 36, 1856-1867. | 2.3 | 39 |
| 38 | Leucine-rich Repeat and WD Repeat-containing Protein 1 Is Recruited to Pericentric Heterochromatin by Trimethylated Lysine 9 of Histone H3 and Maintains Heterochromatin Silencing. <i>Journal of Biological Chemistry</i> , 2012, 287, 15024-15033. | 3.4 | 38 |
| 39 | Chromatin Assembly Factor 1 (CAF-1) facilitates the establishment of facultative heterochromatin during pluripotency exit. <i>Nucleic Acids Research</i> , 2019, 47, 11114-11131. | 14.5 | 35 |
| 40 | Structure and Histone Binding Properties of the Vps75-Rtt109 Chaperone-Lysine Acetyltransferase Complex. <i>Journal of Biological Chemistry</i> , 2011, 286, 15625-15629. | 3.4 | 34 |
| 41 | Purification of nanogram-range immunoprecipitated DNA in ChIP-seq application. <i>BMC Genomics</i> , 2017, 18, 985. | 2.8 | 34 |
| 42 | Histones, histone chaperones and nucleosome assembly. <i>Protein and Cell</i> , 2010, 1, 607-612. | 11.0 | 33 |
| 43 | Acute Depletion Redefines the Division of Labor among DNA Methyltransferases in Methylating the Human Genome. <i>Cell Reports</i> , 2014, 9, 1554-1566. | 6.4 | 33 |
| 44 | Pak2 kinase promotes cellular senescence and organismal aging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 13311-13319. | 7.1 | 30 |
| 45 | O-linked <i>N</i> -acetylglucosamine transferase (OGT) interacts with the histone chaperone HIRA complex and regulates nucleosome assembly and cellular senescence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E3213-20. | 7.1 | 26 |
| 46 | Asf1a resolves bivalent chromatin domains for the induction of lineage-specific genes during mouse embryonic stem cell differentiation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E6162-E6171. | 7.1 | 26 |
| 47 | The progeroid gene <i>BubR1</i> regulates axon myelination and motor function. <i>Aging</i> , 2016, 8, 2667-2688. | 3.1 | 23 |
| 48 | Linking DNA replication to heterochromatin silencing and epigenetic inheritance. <i>Acta Biochimica Et Biophysica Sinica</i> , 2012, 44, 3-13. | 2.0 | 19 |
| 49 | Enhanced and controlled chromatin extraction from FFPE tissues and the application to ChIP-seq. <i>BMC Genomics</i> , 2019, 20, 249. | 2.8 | 16 |
| 50 | Mechanisms of chromatin-based epigenetic inheritance. <i>Science China Life Sciences</i> , 2022, 65, 2162-2190. | 4.9 | 16 |
| 51 | Post-HTS case report and structural alert: Promiscuous 4-aryl-1,5-disubstituted-3-hydroxy-2 H-pyrrol-2-one actives verified by ALARM NMR. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015, 25, 4740-4752. | 2.2 | 15 |
| 52 | Spt5 histone binding activity preserves chromatin during transcription by RNA polymerase II. <i>EMBO Journal</i> , 2022, 41, e109783. | 7.8 | 14 |
| 53 | H3K4me3 recognition by the COMPASS complex facilitates the restoration of this histone mark following DNA replication. <i>Science Advances</i> , 2022, 8, eabm6246. | 10.3 | 14 |
| 54 | Oncohistone Mutations in Diffuse Intrinsic Pontine Glioma. <i>Trends in Cancer</i> , 2019, 5, 799-808. | 7.4 | 13 |

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|----|--|------|-----------|
| 55 | Pneumocystis jirovecii Rtt109, a Novel Drug Target for Pneumocystis Pneumonia in Immunosuppressed Humans. <i>Antimicrobial Agents and Chemotherapy</i> , 2014, 58, 3650-3659. | 3.2 | 11 |
| 56 | Stable inheritance of H3.3-containing nucleosomes during mitotic cell divisions. <i>Nature Communications</i> , 2022, 13, 2514. | 12.8 | 11 |
| 57 | Detecting the H3F3A mutant allele found in high-grade pediatric glioma by real-time PCR. <i>Journal of Neuro-Oncology</i> , 2016, 126, 27-36. | 2.9 | 10 |
| 58 | A mechanism for Rad53 to couple leading- and lagging-strand DNA synthesis under replication stress in budding yeast. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 7.1 | 10 |
| 59 | Efficient and strand-specific profiling of replicating chromatin with enrichment and sequencing of protein-associated nascent DNA in mammalian cells. <i>Nature Protocols</i> , 2021, 16, 2698-2721. | 12.0 | 8 |
| 60 | The histone H3K9M mutation synergizes with H3K14 ubiquitylation to selectively sequester histone H3K9 methyltransferase Clr4 at heterochromatin. <i>Cell Reports</i> , 2021, 35, 109137. | 6.4 | 8 |
| 61 | Probe the function of histone lysine 36 methylation using histone H3 lysine 36 to methionine mutant transgene in mammalian cells. <i>Cell Cycle</i> , 2017, 16, 1781-1789. | 2.6 | 7 |
| 62 | Both DNA Polymerases $\hat{\nu}$ and $\hat{\mu}$ Contact Active and Stalled Replication Forks Differently. <i>Molecular and Cellular Biology</i> , 2017, 37, . | 2.3 | 6 |
| 63 | An unexpected role for Dicer as a reader of the unacetylated DNA binding domain of p53 in transcriptional regulation. <i>Science Advances</i> , 2021, 7, eabi6684. | 10.3 | 5 |
| 64 | The Ddc1-Mec3-Rad17 Sliding Clamp Regulates Histone-Histone Chaperone Interactions and DNA Replication-coupled Nucleosome Assembly in Budding Yeast. <i>Journal of Biological Chemistry</i> , 2014, 289, 10518-10529. | 3.4 | 3 |
| 65 | Yeast CAF-1 assembles histone (H3-H4) 2 tetramers prior to DNA deposition. <i>Nucleic Acids Research</i> , 2017, 45, 9811-9812. | 14.5 | 3 |
| 66 | Strand-Specific Analysis of DNA Synthesis and Proteins Association with DNA Replication Forks in Budding Yeast. <i>Methods in Molecular Biology</i> , 2018, 1672, 227-238. | 0.9 | 3 |
| 67 | CHAF1B Overexpression: A Brake for the Differentiation of Leukemia Cells. <i>Cancer Cell</i> , 2018, 34, 693-694. | 16.8 | 2 |
| 68 | Probing the Function of Oncohistones Using Mutant Transgenes and Knock-In Mutations. <i>Methods in Molecular Biology</i> , 2018, 1832, 339-356. | 0.9 | 2 |
| 69 | All roads lead to chromatin: multiple pathways for histone deposition. <i>Biochimica Et Biophysica Acta</i> , 2013, 1819, 238-46. | 1.3 | 2 |
| 70 | Lrwd1 impacts cell proliferation and the silencing of repetitive <sc>DNA</sc> elements. <i>Genesis</i> , 2022, , e23475. | 1.6 | 2 |
| 71 | Rad53 arrests leading and lagging strand DNA synthesis via distinct mechanisms in response to DNA replication stress. <i>BioEssays</i> , 0, , 2200061. | 2.5 | 2 |
| 72 | EPCT-23 PRE-CLINICAL STUDY OF FOCUSED ULTRASOUND-MEDIATED BLOOD-BRAIN BARRIER OPENING AND PANOBINOSTAT FOR DIFFUSE INTRINSIC PONTINE GLIOMA TREATMENT. <i>Neuro-Oncology</i> , 2021, 23, i52-i52. | 1.2 | 1 |

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|----|--|-----|-----------|
| 73 | 91â€¦Impact of ultra-fast â€œFLASHâ€™ radiotherapy on single cell immunogenomics in diffuse intrinsic pontine glioma (DIPG). , 2021, 9, A100-A100. | | 1 |
| 74 | GENE-20. A NOVEL K-M ENHANCER REGULATES TEMOZOLOMIDE RESISTANCE AND TUMOR GROWTH IN GLIOBLASTOMA. Neuro-Oncology, 2018, 20, vi107-vi107. | 1.2 | 0 |
| 75 | DIPG-45. Radiation induces a robust interferon response in Diffuse Midline Glioma (DMG), improving the potential for combination immunotherapy. Neuro-Oncology, 2022, 24, i28-i29. | 1.2 | 0 |
| 76 | MODL-24. Focused ultrasound-mediated blood-brain barrier opening and panobinostat in a thalamic syngeneic murine DMG model is feasible and safe.. Neuro-Oncology, 2022, 24, i174-i174. | 1.2 | 0 |
| 77 | MODL-25. Radiation and focused ultrasoundâ€“mediated bloodâ€“brain barrier opening for DMG: safety and feasibility of combinatorial therapy. Neuro-Oncology, 2022, 24, i174-i174. | 1.2 | 0 |