

# Bin Shen

## List of Publications by Year in descending order

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Version: 2024-02-01

93  
papers

10,897  
citations

70961

41  
h-index

35952

97  
g-index

104  
all docs

104  
docs citations

104  
times ranked

12437  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Generation of Gene-Modified Cynomolgus Monkey via Cas9/RNA-Mediated Gene Targeting in One-Cell Embryos. <i>Cell</i> , 2014, 156, 836-843.   | 13.5 | 930       |
| 2  | YTHDC1 mediates nuclear export of N6-methyladenosine methylated mRNAs. <i>ELife</i> , 2017, 6, .  | 2.8  | 815       |
| 3  | Efficient genome modification by CRISPR-Cas9 nickase with minimal off-target effects. <i>Nature Methods</i> , 2014, 11, 399-402.  | 9.0  | 716       |
| 4  | Ythdc2 is an N6-methyladenosine binding protein that regulates mammalian spermatogenesis. <i>Cell Research</i> , 2017, 27, 1115-1127.   | 5.7  | 696       |
| 5  | Anti-tumour immunity controlled through mRNA m6A methylation and YTHDF1 in dendritic cells. <i>Nature</i> , 2019, 566, 270-274.   | 13.7 | 681       |
| 6  | VIRMA mediates preferential m6A mRNA methylation in 3'UTR and near stop codon and associates with alternative polyadenylation. <i>Cell Discovery</i> , 2018, 4, 10.                 | 3.1  | 643       |
| 7  | Generation of gene-modified mice via Cas9/RNA-mediated gene targeting. <i>Cell Research</i> , 2013, 23, 720-723.  | 5.7  | 504       |
| 8  | m <sup>6</sup> A-methyladenosine of chromosome-associated regulatory RNA regulates chromatin state and transcription. <i>Science</i> , 2020, 367, 580-586.                          | 6.0  | 406       |
| 9  | m6A facilitates hippocampus-dependent learning and memory through YTHDF1. <i>Nature</i> , 2018, 563, 249-253.   | 13.7 | 354       |
| 10 | sgRNAs9: A Software Package for Designing CRISPR sgRNA and Evaluating Potential Off-Target Cleavage Sites. <i>PLoS ONE</i> , 2014, 9, e100448.                                      | 1.1  | 327       |
| 11 | Epitranscriptomic m6A Regulation of Axon Regeneration in the Adult Mammalian Nervous System. <i>Neuron</i> , 2018, 97, 313-325.e6.  | 3.8  | 292       |
| 12 | m6A in mRNA coding regions promotes translation via the RNA helicase-containing YTHDC2. <i>Nature Communications</i> , 2019, 10, 5332.  | 5.8  | 268       |
| 13 | Opposing Roles for the lncRNA Haunt and Its Genomic Locus in Regulating HOXA Gene Activation during Embryonic Stem Cell Differentiation. <i>Cell Stem Cell</i> , 2015, 16, 504-516. | 5.2  | 247       |
| 14 | CRISPR-Cas9 mediated efficient PD-1 disruption on human primary T cells from cancer patients. <i>Scientific Reports</i> , 2016, 6, 20070.   | 1.6  | 237       |
| 15 | YTHDF2 reduction fuels inflammation and vascular abnormalization in hepatocellular carcinoma. <i>Molecular Cancer</i> , 2019, 18, 163.  | 7.9  | 230       |
| 16 | Transfer RNA demethylase ALKBH3 promotes cancer progression via induction of tRNA-derived small RNAs. <i>Nucleic Acids Research</i> , 2019, 47, 2533-2545.                          | 6.5  | 213       |
| 17 | Suppression of m6A reader Ythdf2 promotes hematopoietic stem cell expansion. <i>Cell Research</i> , 2018, 28, 904-917.  | 5.7  | 203       |
| 18 | Off-target mutations are rare in Cas9-modified mice. <i>Nature Methods</i> , 2015, 12, 479-479.   | 9.0  | 171       |

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|----|--|-----|-----------|
| 19 | Generating rats with conditional alleles using CRISPR/Cas9. <i>Cell Research</i> , 2014, 24, 122-125.  | 5.7 | 169       |
| 20 | Efficient in vivo deletion of a large imprinted lncRNA by CRISPR/Cas9. <i>RNA Biology</i> , 2014, 11, 829-835.   | 1.5 | 148       |
| 21 | Systematic identification of genes with a cancer-testis expression pattern in 19 cancer types. <i>Nature Communications</i> , 2016, 7, 10499.  | 5.8 | 124       |
| 22 | VEGFR-3 ligand-binding and kinase activity are required for lymphangiogenesis but not for angiogenesis. <i>Cell Research</i> , 2010, 20, 1319-1331.  | 5.7 | 123       |
| 23 | Dual sgRNAs facilitate CRISPR/Cas9-mediated mouse genome targeting. <i>FEBS Journal</i> , 2014, 281, 1717-1725.  | 2.2 | 122       |
| 24 | One-step generation of different immunodeficient mice with multiple gene modifications by CRISPR/Cas9 mediated genome engineering. <i>International Journal of Biochemistry and Cell Biology</i> , 2014, 46, 49-55.                                | 1.2 | 110       |
| 25 | Efficient generation of gene-modified pigs via injection of zygote with Cas9/sgRNA. <i>Scientific Reports</i> , 2015, 5, 8256.   | 1.6 | 104       |
| 26 | Akt/Protein Kinase B Is Required for Lymphatic Network Formation, Remodeling, and Valve Development. <i>American Journal of Pathology</i> , 2010, 177, 2124-2133.  | 1.9 | 95        |
| 27 | Loss of YTHDF2-mediated m6A-dependent mRNA clearance facilitates hematopoietic stem cell regeneration. <i>Cell Research</i> , 2018, 28, 1035-1038.   | 5.7 | 95        |
| 28 | Heritable Multiplex Genetic Engineering in Rats Using CRISPR/Cas9. <i>PLoS ONE</i> , 2014, 9, e89413.  | 1.1 | 90        |
| 29 | Nuclear m6A reader YTHDC1 regulates the scaffold function of LINE1 RNA in mouse ESCs and early embryos. <i>Protein and Cell</i> , 2021, 12, 455-474.   | 4.8 | 84        |
| 30 | A critical role of nuclear m6A reader YTHDC1 in leukemogenesis by regulating MCM complex-mediated DNA replication. <i>Blood</i> , 2021, 138, 2838-2852.  | 0.6 | 83        |
| 31 | TCTE1 is a conserved component of the dynein regulatory complex and is required for motility and metabolism in mouse spermatozoa. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E5370-E5378. | 3.3 | 74        |
| 32 | The N <sup>6</sup> -methyladenosine RNA-binding protein YTHDF1 modulates the translation of TRAF6 to mediate the intestinal immune response. <i>Nucleic Acids Research</i> , 2021, 49, 5537-5552.  | 6.5 | 74        |
| 33 | An essential role for PNLDC1 in piRNA 3' end trimming and male fertility in mice. <i>Cell Research</i> , 2017, 27, 1392-1396.  | 5.7 | 73        |
| 34 | CRISPR/Cas9-mediated Dax1 knockout in the monkey recapitulates human AHC-HH. <i>Human Molecular Genetics</i> , 2015, 24, 7255-7264.  | 1.4 | 71        |
| 35 | Oocyte competence is maintained by m6A methyltransferase KIAA1429-mediated RNA metabolism during mouse follicular development. <i>Cell Death and Differentiation</i> , 2020, 27, 2468-2483.  | 5.0 | 70        |
| 36 | Generation of eGFP and Cre knockin rats by CRISPR/Cas9. <i>FEBS Journal</i> , 2014, 281, 3779-3790.  | 2.2 | 66        |

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|----|---|-----|-----------|
| 37 | YTHDF1 Regulates Pulmonary Hypertension through Translational Control of MAGED1. American Journal of Respiratory and Critical Care Medicine, 2021, 203, 1158-1172.  | 2.5 | 62        |
| 38 | A cancer-testis non-coding RNA LIN28B-AS1 activates driver gene LIN28B by interacting with IGF2BP1 in lung adenocarcinoma. Oncogene, 2019, 38, 1611-1624.   | 2.6 | 61        |
| 39 | Angiopoietin receptor Tie2 is required for vein specification and maintenance via regulating COUP-TFII. ELife, 2016, 5, .   | 2.8 | 59        |
| 40 | Genetic Dissection of Tie Pathway in Mouse Lymphatic Maturation and Valve Development. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 1221-1230.   | 1.1 | 53        |
| 41 | The Heat-Induced Reversible Change in the Blood-Testis Barrier (BTB) Is Regulated by the Androgen Receptor (AR) via the Partitioning-Defective Protein (Par) Polarity Complex in the Mouse1. Biology of Reproduction, 2013, 89, 12. | 1.2 | 49        |
| 42 | APOBEC3 induces mutations during repair of CRISPR-Cas9-generated DNA breaks. Nature Structural and Molecular Biology, 2018, 25, 45-52.  | 3.6 | 42        |
| 43 | Precision modeling of mitochondrial diseases in zebrafish via DdCBE-mediated mtDNA base editing. Cell Discovery, 2021, 7, 78.   | 3.1 | 42        |
| 44 | The 18S rRNA m <sup>6</sup> A methyltransferase METTL5 promotes mouse embryonic stem cell differentiation. EMBO Reports, 2020, 21, e49863.  | 2.0 | 42        |
| 45 | DdCBE mediates efficient and inheritable modifications in mouse mitochondrial genome. Molecular Therapy - Nucleic Acids, 2022, 27, 73-80.   | 2.3 | 38        |
| 46 | Sox30 initiates transcription of haploid genes during late meiosis and spermiogenesis in mouse testes. Development (Cambridge), 2018, 145, .  | 1.2 | 36        |
| 47 | Germline acquisition of Cas9/RNA-mediated gene modifications in monkeys. Cell Research, 2015, 25, 262-265.  | 5.7 | 32        |
| 48 | Precision modeling of mitochondrial disease in rats via DdCBE-mediated mtDNA editing. Cell Discovery, 2021, 7, 95.  | 3.1 | 30        |
| 49 | The post-PAM interaction of RNA-guided spCas9 with DNA dictates its target binding and dissociation. Science Advances, 2019, 5, eaaw9807.   | 4.7 | 29        |
| 50 | Gene knockout of Zmym3 in mice arrests spermatogenesis at meiotic metaphase with defects in spindle assembly checkpoint. Cell Death and Disease, 2017, 8, e2910-e2910.  | 2.7 | 28        |
| 51 | Nuclear Exosome Targeting Complex Core Factor Zcchc8 Regulates the Degradation of LINE1 RNA in Early Embryos and Embryonic Stem Cells. Cell Reports, 2019, 29, 2461-2472.e6.  | 2.9 | 28        |
| 52 | LncRNA MEG3 negatively modified osteosarcoma development through regulation of miR-361-5p and FoxM1. Journal of Cellular Physiology, 2019, 234, 13464-13480.  | 2.0 | 28        |
| 53 | N6-methyladenosine regulates maternal RNA maintenance in oocytes and timely RNA decay during mouse maternal-to-zygotic transition. Nature Cell Biology, 2022, 24, 917-927.  | 4.6 | 28        |
| 54 | The inherited variations of a p53-responsive enhancer in 13q12.12 confer lung cancer risk by attenuating TNFRSF19 expression. Genome Biology, 2019, 20, 103.  | 3.8 | 27        |

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|----|---|-----|-----------|
| 55 | Expression of the RNA methyltransferase Nsun5 is essential for developing cerebral cortex. <i>Molecular Brain</i> , 2019, 12, 74.   | 1.3 | 23        |
| 56 | Depletion of m <sup>6</sup> A reader protein YTHDC1 induces dilated cardiomyopathy by abnormal splicing of <i>Titin</i> . <i>Journal of Cellular and Molecular Medicine</i> , 2021, 25, 10879-10891.  | 1.6 | 21        |
| 57 | DdCBE-mediated mitochondrial base editing in human 3PN embryos. <i>Cell Discovery</i> , 2022, 8, 8.   | 3.1 | 21        |
| 58 | Cognitive deficits in mice lacking Nsun5, a cytosine <sup>5</sup> RNA methyltransferase, with impairment of oligodendrocyte precursor cells. <i>Glia</i> , 2019, 67, 688-702.   | 2.5 | 20        |
| 59 | Dynamics of <i>Staphylococcus aureus</i> Cas9 in <i>scp</i> DNA target Association and Dissociation. <i>EMBO Reports</i> , 2020, 21, e50184.  | 2.0 | 20        |
| 60 | Multivariate analysis of airway obstruction and reintubation after anterior cervical surgery: A Retrospective Cohort Study of 774 patients. <i>International Journal of Surgery</i> , 2017, 41, 28-33.  | 1.1 | 18        |
| 61 | m <sup>6</sup> A reader protein YTHDF2 regulates spermatogenesis by timely clearance of phase-specific transcripts. <i>Cell Proliferation</i> , 2022, 55, e13164.   | 2.4 | 18        |
| 62 | Generation of fertile offspring from Kitw/Kitwv mice through differentiation of gene corrected nuclear transfer embryonic stem cells. <i>Cell Research</i> , 2015, 25, 851-863.   | 5.7 | 17        |
| 63 | Effects of perinatal dioxin exposure on development of children: a 3-year follow-up study of China cohort. <i>Environmental Science and Pollution Research</i> , 2019, 26, 20780-20786.   | 2.7 | 17        |
| 64 | Efficient Knockin Mouse Generation by ssDNA Oligonucleotides and Zinc-Finger Nuclease Assisted Homologous Recombination in Zygotes. <i>PLoS ONE</i> , 2013, 8, e77696.  | 1.1 | 15        |
| 65 | A lipidomics study reveals hepatic lipid signatures associating with deficiency of the LDL receptor in a rat model. <i>Biology Open</i> , 2016, 5, 979-986.   | 0.6 | 15        |
| 66 | Agensis and Hypomyelination of Corpus Callosum in Mice Lacking Nsun5, an RNA Methyltransferase. <i>Cells</i> , 2019, 8, 552.  | 1.8 | 15        |
| 67 | Rational cyclization-based minimization of entropy penalty upon the binding of Nrf2-derived linear peptides to Keap1: A new strategy to improve therapeutic peptide activity against sepsis. <i>Biophysical Chemistry</i> , 2019, 244, 22-28. | 1.5 | 15        |
| 68 | Single-cell RNA-seq reveals a highly coordinated transcriptional program in mouse germ cells during primordial follicle formation. <i>Aging Cell</i> , 2021, 20, e13424.  | 3.0 | 15        |
| 69 | USP15 promotes the apoptosis of degenerative nucleus pulposus cells by suppressing the PI3K/AKT signalling pathway. <i>Journal of Cellular and Molecular Medicine</i> , 2020, 24, 13813-13823.  | 1.6 | 14        |
| 70 | Transforaminal endoscopic system technique for discogenic low back pain: A prospective Cohort study. <i>International Journal of Surgery</i> , 2016, 35, 134-138.   | 1.1 | 13        |
| 71 | Preoperative vitamin D status and its effects on short-term clinical outcomes in lumbar spine surgery. <i>Journal of Orthopaedic Science</i> , 2020, 25, 787-792.   | 0.5 | 12        |
| 72 | &lt;i>PINK1</i> gene mutation by pair truncated sgRNA/Cas9-D10A in cynomolgus monkeys. <i>Zoological Research</i> , 2021, 42, 469-477.  | 0.9 | 12        |

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|----|---|-----|-----------|
| 73 | Prioritized cervical or lumbar surgery for coexisting cervical and lumbar stenosis: Prognostic analysis of 222 case. <i>International Journal of Surgery</i> , 2017, 44, 344-349.   | 1.1 | 10        |
| 74 | Human biodistribution and radiation dosimetry of [18F]DASA-23, a PET probe targeting pyruvate kinase M2. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2020, 47, 2123-2130.   | 3.3 | 10        |
| 75 | BLZ945 derivatives for PET imaging of colony stimulating factor-1 receptors in the brain. <i>Nuclear Medicine and Biology</i> , 2021, 100-101, 44-51.   | 0.3 | 10        |
| 76 | Intracellular XBP1-IL-24 axis dismantles cytotoxic unfolded protein response in the liver. <i>Cell Death and Disease</i> , 2020, 11, 17.  | 2.7 | 9         |
| 77 | Combined Effects of Single Nucleotide Polymorphisms (SNPs) within C-reactive Protein (CRP) and Environmental Parameters on Risk and Prognosis for Diabetic Foot Osteomyelitis Patients. <i>Experimental and Clinical Endocrinology and Diabetes</i> , 2020, 128, 528-539. | 0.6 | 9         |
| 78 | Efficient DNA interrogation of SpCas9 governed by its electrostatic interaction with DNA beyond the PAM and protospacer. <i>Nucleic Acids Research</i> , 2021, 49, 12433-12444.   | 6.5 | 9         |
| 79 | Efficient targeting of FATS at a common fragile site in mice through TALEN-mediated double-hit genome modification. <i>Biotechnology Letters</i> , 2014, 36, 471-479.   | 1.1 | 8         |
| 80 | Evaluation of carbon-11 labeled 5-(1-methyl-1H-pyrazol-4-yl)-N-(2-methyl-5-(3-(trifluoromethyl)benzamido)phenyl)nicotinamide as PET tracer for imaging of CSF-1R expression in the brain. <i>Bioorganic and Medicinal Chemistry</i> , 2021, 42, 116245.                   | 1.4 | 8         |
| 81 | UdgX-Mediated Uracil Sequencing at Single-Nucleotide Resolution. <i>Journal of the American Chemical Society</i> , 2022, 144, 1323-1331.  | 6.6 | 8         |
| 82 | RNA 5-methylcytosine regulates YBX2-dependent liquid-liquid phase separation. <i>Fundamental Research</i> , 2022, 2, 48-55.   | 1.6 | 8         |
| 83 | Mutations in RNA Methyltransferase Gene NSUN5 Confer High Risk of Outflow Tract Malformation. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 623394.   | 1.8 | 6         |
| 84 | Comparison of different surgical approaches of functional endoscopic sinus surgery on patients with chronic rhinosinusitis. <i>International Journal of Clinical and Experimental Medicine</i> , 2014, 7, 1585-91.  | 1.3 | 6         |
| 85 | Functional annotation of cis-regulatory elements in human cells by dCas9/sgRNA. <i>Cell Research</i> , 2015, 25, 877-880.   | 5.7 | 5         |
| 86 | A [ <sup>11</sup> C] CO dispensing system for rapid screening of carbonylation reactions. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2018, 61, 1110-1114.  | 0.5 | 4         |
| 87 | Lumbar Spinal Tuberculosis Presenting as Abdominal Pain: Case Report. <i>The Surgery Journal</i> , 2015, 01, e44-e46.   | 0.3 | 3         |
| 88 | Application of molybdenum target X-ray photography in imaging analysis of caudal intervertebral disc degeneration in rats. <i>World Journal of Clinical Cases</i> , 2020, 8, 3431-3439.   | 0.3 | 3         |
| 89 | Sigma-1 Receptor Changes Observed in Chronic Pelvic Pain Patients: A Pilot PET/MRI Study. <i>Frontiers in Pain Research</i> , 2021, 2, 711748.  | 0.9 | 3         |
| 90 | Extensive humoral immune response to AAVs and Cas proteins in nonhuman primates. <i>Science Bulletin</i> , 2021, 66, 2061-2064.   | 4.3 | 1         |

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|----|--|-----|-----------|
| 91 | Preparing Platelet-Rich Plasma with Whole Blood Harvested Intraoperatively During Spinal Fusion. Medical Science Monitor, 2017, 23, 3578-3584. | 0.5 | 1         |
| 92 | The enhancer rare germline variation rs548071605 contributes to lung cancer development. Human Mutation, 2022, 43, 200-214.                    | 1.1 | 1         |
| 93 | Abstract 4319: Hypoxia regulates m6A-reader YTHDF2 to fuel cancer-promoting inflammation in hepatocellular carcinoma. , 2019, , .              |     | 0         |