

Jin-Soo Kim

List of Publications by Year in descending order

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Version: 2024-02-01

191
papers

25,872
citations

13332

70
h-index

8433

152
g-index

208
all docs

208
docs citations

208
times ranked

24059
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Targeted genome engineering in human cells with the Cas9 RNA-guided endonuclease. <i>Nature Biotechnology</i> , 2013, 31, 230-232. | 9.4 | 1,653 |
| 2 | Cas-OFFinder: a fast and versatile algorithm that searches for potential off-target sites of Cas9 RNA-guided endonucleases. <i>Bioinformatics</i> , 2014, 30, 1473-1475. | 1.8 | 1,651 |
| 3 | Highly efficient RNA-guided genome editing in human cells via delivery of purified Cas9 ribonucleoproteins. <i>Genome Research</i> , 2014, 24, 1012-1019. | 2.4 | 1,470 |
| 4 | Analysis of off-target effects of CRISPR/Cas-derived RNA-guided endonucleases and nickases. <i>Genome Research</i> , 2014, 24, 132-141. | 2.4 | 1,195 |
| 5 | A guide to genome engineering with programmable nucleases. <i>Nature Reviews Genetics</i> , 2014, 15, 321-334. | 7.7 | 990 |
| 6 | DNA-free genome editing in plants with preassembled CRISPR-Cas9 ribonucleoproteins. <i>Nature Biotechnology</i> , 2015, 33, 1162-1164. | 9.4 | 975 |
| 7 | Digenome-seq: genome-wide profiling of CRISPR-Cas9 off-target effects in human cells. <i>Nature Methods</i> , 2015, 12, 237-243. | 9.0 | 850 |
| 8 | Correction of a pathogenic gene mutation in human embryos. <i>Nature</i> , 2017, 548, 413-419. | 13.7 | 781 |
| 9 | Genome-wide analysis reveals specificities of Cpf1 endonucleases in human cells. <i>Nature Biotechnology</i> , 2016, 34, 863-868. | 9.4 | 612 |
| 10 | DNA-Free Genetically Edited Grapevine and Apple Protoplast Using CRISPR/Cas9 Ribonucleoproteins. <i>Frontiers in Plant Science</i> , 2016, 7, 1904. | 1.7 | 550 |
| 11 | In vivo genome editing with a small Cas9 orthologue derived from <i>Campylobacter jejuni</i> . <i>Nature Communications</i> , 2017, 8, 14500. | 5.8 | 539 |
| 12 | Targeted genome editing in human cells with zinc finger nucleases constructed via modular assembly. <i>Genome Research</i> , 2009, 19, 1279-1288. | 2.4 | 403 |
| 13 | CRISPR/Cpf1-mediated DNA-free plant genome editing. <i>Nature Communications</i> , 2017, 8, 14406. | 5.8 | 386 |
| 14 | Directed evolution of CRISPR-Cas9 to increase its specificity. <i>Nature Communications</i> , 2018, 9, 3048. | 5.8 | 357 |
| 15 | Adenine base editing in mouse embryos and an adult mouse model of Duchenne muscular dystrophy. <i>Nature Biotechnology</i> , 2018, 36, 536-539. | 9.4 | 345 |
| 16 | A library of TAL effector nucleases spanning the human genome. <i>Nature Biotechnology</i> , 2013, 31, 251-258. | 9.4 | 344 |
| 17 | Microhomology-based choice of Cas9 nuclease target sites. <i>Nature Methods</i> , 2014, 11, 705-706. | 9.0 | 336 |
| 18 | Highly efficient RNA-guided base editing in mouse embryos. <i>Nature Biotechnology</i> , 2017, 35, 435-437. | 9.4 | 330 |

| # | ARTICLE | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Knockout mice created by TALEN-mediated gene targeting. <i>Nature Biotechnology</i> , 2013, 31, 23-24. | 9.4 | 326 |
| 20 | CRISPR/Cas9-induced knockout and knock-in mutations in <i>Chlamydomonas reinhardtii</i> . <i>Scientific Reports</i> , 2016, 6, 27810. | 1.6 | 315 |
| 21 | Genome editing reveals a role for OCT4 in human embryogenesis. <i>Nature</i> , 2017, 550, 67-73. | 13.7 | 315 |
| 22 | Cas-analyzer: an online tool for assessing genome editing results using NGS data. <i>Bioinformatics</i> , 2017, 33, 286-288. | 1.8 | 313 |
| 23 | Cas-Designer: a web-based tool for choice of CRISPR-Cas9 target sites. <i>Bioinformatics</i> , 2015, 31, 4014-4016. | 1.8 | 306 |
| 24 | Functional Correction of Large Factor VIII Gene Chromosomal Inversions in Hemophilia A Patient-Derived iPSCs Using CRISPR-Cas9. <i>Cell Stem Cell</i> , 2015, 17, 213-220. | 5.2 | 263 |
| 25 | DNA-free two-gene knockout in <i>Chlamydomonas reinhardtii</i> via CRISPR-Cas9 ribonucleoproteins. <i>Scientific Reports</i> , 2016, 6, 30620. | 1.6 | 253 |
| 26 | Highly efficient gene knockout in mice and zebrafish with RNA-guided endonucleases. <i>Genome Research</i> , 2014, 24, 125-131. | 2.4 | 249 |
| 27 | Genome-wide target specificities of CRISPR RNA-guided programmable deaminases. <i>Nature Biotechnology</i> , 2017, 35, 475-480. | 9.4 | 239 |
| 28 | Heritable Gene Knockout in <i>Caenorhabditis elegans</i> by Direct Injection of Cas9-sgRNA Ribonucleoproteins. <i>Genetics</i> , 2013, 195, 1177-1180. | 1.2 | 237 |
| 29 | Targeted chromosomal deletions in human cells using zinc finger nucleases. <i>Genome Research</i> , 2010, 20, 81-89. | 2.4 | 234 |
| 30 | Precision genome engineering through adenine base editing in plants. <i>Nature Plants</i> , 2018, 4, 427-431. | 4.7 | 227 |
| 31 | Getting a handhold on DNA: Design of poly-zinc finger proteins with femtomolar dissociation constants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998, 95, 2812-2817. | 3.3 | 226 |
| 32 | Surrogate reporters for enrichment of cells with nuclease-induced mutations. <i>Nature Methods</i> , 2011, 8, 941-943. | 9.0 | 192 |
| 33 | Targeted mutagenesis in mice by electroporation of Cpf1 ribonucleoproteins. <i>Nature Biotechnology</i> , 2016, 34, 807-808. | 9.4 | 191 |
| 34 | Site-directed mutagenesis in <i>Petunia hybrida</i> protoplast system using direct delivery of purified recombinant Cas9 ribonucleoproteins. <i>Plant Cell Reports</i> , 2016, 35, 1535-1544. | 2.8 | 186 |
| 35 | Human zinc fingers as building blocks in the construction of artificial transcription factors. <i>Nature Biotechnology</i> , 2003, 21, 275-280. | 9.4 | 184 |
| 36 | Genome-wide target specificities of CRISPR-Cas9 nucleases revealed by multiplex Digenome-seq. <i>Genome Research</i> , 2016, 26, 406-415. | 2.4 | 184 |

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Measuring and Reducing Off-Target Activities of Programmable Nucleases Including CRISPR-Cas9. <i>Molecules and Cells</i> , 2015, 38, 475-481. | 1.0 | 181 |
| 38 | Ribonuclease Sâ€ptide as a carrier in fusion proteins. <i>Protein Science</i> , 1993, 2, 348-356. | 3.1 | 178 |
| 39 | CRISPR RNAs trigger innate immune responses in human cells. <i>Genome Research</i> , 2018, 28, 367-373. | 2.4 | 177 |
| 40 | Site-directed mutagenesis in <i>Arabidopsis thaliana</i> using dividing tissue-targeted RGEN of the CRISPR/Cas system to generate heritable null alleles. <i>Planta</i> , 2015, 241, 271-284. | 1.6 | 159 |
| 41 | Targeted chromosomal duplications and inversions in the human genome using zinc finger nucleases. <i>Genome Research</i> , 2012, 22, 539-548. | 2.4 | 155 |
| 42 | Genome-wide target specificity of CRISPR RNA-guided adenine base editors. <i>Nature Biotechnology</i> , 2019, 37, 430-435. | 9.4 | 151 |
| 43 | Direct observation of DNA target searching and cleavage by CRISPR-Cas12a. <i>Nature Communications</i> , 2018, 9, 2777. | 5.8 | 148 |
| 44 | Phenotypic alteration of eukaryotic cells using randomized libraries of artificial transcription factors. <i>Nature Biotechnology</i> , 2003, 21, 1208-1214. | 9.4 | 144 |
| 45 | Genome surgery using Cas9 ribonucleoproteins for the treatment of age-related macular degeneration. <i>Genome Research</i> , 2017, 27, 419-426. | 2.4 | 136 |
| 46 | Targeted gene knockout in chickens mediated by TALENs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 12716-12721. | 3.3 | 135 |
| 47 | ISSCR Guidelines for Stem Cell Research and Clinical Translation: The 2021 update. <i>Stem Cell Reports</i> , 2021, 16, 1398-1408. | 2.3 | 134 |
| 48 | Targeted inversion and reversion of the blood coagulation factor 8 gene in human iPS cells using TALENs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 9253-9258. | 3.3 | 129 |
| 49 | Precision genome engineering with programmable DNA-nicking enzymes. <i>Genome Research</i> , 2012, 22, 1327-1333. | 2.4 | 127 |
| 50 | Web-based design and analysis tools for CRISPR base editing. <i>BMC Bioinformatics</i> , 2018, 19, 542. | 1.2 | 127 |
| 51 | Surrogate reporter-based enrichment of cells containing RNA-guided Cas9 nuclease-induced mutations. <i>Nature Communications</i> , 2014, 5, 3378. | 5.8 | 123 |
| 52 | Evaluating and Enhancing Target Specificity of Gene-Editing Nucleases and Deaminases. <i>Annual Review of Biochemistry</i> , 2019, 88, 191-220. | 5.0 | 120 |
| 53 | The road ahead in genetics and genomics. <i>Nature Reviews Genetics</i> , 2020, 21, 581-596. | 7.7 | 118 |
| 54 | Genotyping with CRISPR-Cas-derived RNA-guided endonucleases. <i>Nature Communications</i> , 2014, 5, 3157. | 5.8 | 117 |

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 55 | Efficient delivery of nuclease proteins for genome editing in human stem cells and primary cells. <i>Nature Protocols</i> , 2015, 10, 1842-1859. | 5.5 | 113 |
| 56 | CRISPR germline engineeringâ€”the community speaks. <i>Nature Biotechnology</i> , 2015, 33, 478-486. | 9.4 | 110 |
| 57 | Gene inactivation using the CRISPR/Cas9 system in the nematode <i>Pristionchus pacificus</i> . <i>Development Genes and Evolution</i> , 2015, 225, 55-62. | 0.4 | 109 |
| 58 | Long Terminal Repeat CRISPR-CAR-Coupled â€œUniversalâ€•T Cells Mediate Potent Anti-leukemic Effects. <i>Molecular Therapy</i> , 2018, 26, 1215-1227. | 3.7 | 104 |
| 59 | Targeted A-to-G base editing in human mitochondrial DNA with programmable deaminases. <i>Cell</i> , 2022, 185, 1764-1776.e12. | 13.5 | 102 |
| 60 | Adenine base editors catalyze cytosine conversions in human cells. <i>Nature Biotechnology</i> , 2019, 37, 1145-1148. | 9.4 | 95 |
| 61 | Structural roles of guide RNAs in the nuclease activity of Cas9 endonuclease. <i>Nature Communications</i> , 2016, 7, 13350. | 5.8 | 94 |
| 62 | Chloroplast and mitochondrial DNA editing in plants. <i>Nature Plants</i> , 2021, 7, 899-905. | 4.7 | 91 |
| 63 | TALENs and ZFNs are associated with different mutation signatures. <i>Nature Methods</i> , 2013, 10, 185-185. | 9.0 | 90 |
| 64 | CRISPR/Cas9-mediated editing of 1â€•aminocyclopropaneâ€•1â€•carboxylate oxidase1 enhances <i>Petunia</i> flower longevity. <i>Plant Biotechnology Journal</i> , 2020, 18, 287-297. | 4.1 | 90 |
| 65 | Mechanism of Ribonuclease Cytotoxicity. <i>Journal of Biological Chemistry</i> , 1995, 270, 31097-31102. | 1.6 | 88 |
| 66 | Genome editing with modularly assembled zinc-finger nucleases. <i>Nature Methods</i> , 2010, 7, 91-91. | 9.0 | 88 |
| 67 | Selective disruption of an oncogenic mutant allele by CRISPR/Cas9 induces efficient tumor regression. <i>Nucleic Acids Research</i> , 2017, 45, 7897-7908. | 6.5 | 87 |
| 68 | Mitochondrial DNA editing in mice with DddA-TALE fusion deaminases. <i>Nature Communications</i> , 2021, 12, 1190. | 5.8 | 86 |
| 69 | Genome editing comes of age. <i>Nature Protocols</i> , 2016, 11, 1573-1578. | 5.5 | 85 |
| 70 | CUT-PCR: CRISPR-mediated, ultrasensitive detection of target DNA using PCR. <i>Oncogene</i> , 2017, 36, 6823-6829. | 2.6 | 84 |
| 71 | DIG-seq: a genome-wide CRISPR off-target profiling method using chromatin DNA. <i>Genome Research</i> , 2018, 28, 1894-1900. | 2.4 | 84 |
| 72 | CRISPR/Cas9 searches for a protospacer adjacent motif by lateral diffusion. <i>EMBO Journal</i> , 2019, 38, . | 3.5 | 80 |

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|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Preassembled zinc-finger arrays for rapid construction of ZFNs. <i>Nature Methods</i> , 2011, 8, 7-7. | 9.0 | 77 |
| 74 | TALEN-based knockout library for human microRNAs. <i>Nature Structural and Molecular Biology</i> , 2013, 20, 1458-1464. | 3.6 | 74 |
| 75 | Rescue of high-specificity Cas9 variants using sgRNAs with matched 5' nucleotides. <i>Genome Biology</i> , 2017, 18, 218. | 3.8 | 73 |
| 76 | Improving CRISPR Genome Editing by Engineering Guide RNAs. <i>Trends in Biotechnology</i> , 2019, 37, 870-881. | 4.9 | 73 |
| 77 | CRISPR-Cas9 mediated therapeutic editing of <i>Rpe65</i> ameliorates the disease phenotypes in a mouse model of Leber congenital amaurosis. <i>Science Advances</i> , 2019, 5, eaax1210. | 4.7 | 72 |
| 78 | CRISPR-LbCpf1 prevents choroidal neovascularization in a mouse model of age-related macular degeneration. <i>Nature Communications</i> , 2018, 9, 1855. | 5.8 | 71 |
| 79 | Precision genome engineering through adenine and cytosine base editing. <i>Nature Plants</i> , 2018, 4, 148-151. | 4.7 | 69 |
| 80 | Bypassing GMO regulations with CRISPR gene editing. <i>Nature Biotechnology</i> , 2016, 34, 1014-1015. | 9.4 | 67 |
| 81 | Functional Rescue of Dystrophin Deficiency in Mice Caused by Frameshift Mutations Using <i>Campylobacter jejuni</i> Cas9. <i>Molecular Therapy</i> , 2018, 26, 1529-1538. | 3.7 | 67 |
| 82 | Structural Basis for the Biological Activities of Bovine Seminal Ribonuclease. <i>Journal of Biological Chemistry</i> , 1995, 270, 10525-10530. | 1.6 | 66 |
| 83 | Non-GMO genetically edited crop plants. <i>Trends in Biotechnology</i> , 2015, 33, 489-491. | 4.9 | 66 |
| 84 | A simple, flexible and high-throughput cloning system for plant genome editing via CRISPR-Cas system. <i>Journal of Integrative Plant Biology</i> , 2016, 58, 705-712. | 4.1 | 61 |
| 85 | Cyclase-associated protein 1 is a binding partner of proprotein convertase subtilisin/kexin type-9 and is required for the degradation of low-density lipoprotein receptors by proprotein convertase subtilisin/kexin type-9. <i>European Heart Journal</i> , 2020, 41, 239-252. | 1.0 | 61 |
| 86 | Lipid-Gold Nanoparticle Hybrid-Based Gene Delivery. <i>Small</i> , 2008, 4, 1651-1655. | 5.2 | 60 |
| 87 | Fine-Tuning Next-Generation Genome Editing Tools. <i>Trends in Biotechnology</i> , 2016, 34, 562-574. | 4.9 | 60 |
| 88 | Zinc Finger Proteins as Designer Transcription Factors. <i>Journal of Biological Chemistry</i> , 2000, 275, 8742-8748. | 1.6 | 57 |
| 89 | PE-Designer and PE-Analyzer: web-based design and analysis tools for CRISPR prime editing. <i>Nucleic Acids Research</i> , 2021, 49, W499-W504. | 6.5 | 57 |
| 90 | Design of TATA box-binding protein/zinc finger fusions for targeted regulation of gene expression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997, 94, 3616-3620. | 3.3 | 56 |

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|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 91 | Imaging inflammation using an activated macrophage probe with Slc18b1 as the activation-selective gating target. <i>Nature Communications</i> , 2019, 10, 1111. | 5.8 | 56 |
| 92 | Generation of cloned adult muscular pigs with β -myostatin gene mutation by genetic engineering. <i>RSC Advances</i> , 2017, 7, 12541-12549. | 1.7 | 55 |
| 93 | Magnetic Separation and Antibiotics Selection Enable Enrichment of Cells with ZFN/TALEN-Induced Mutations. <i>PLoS ONE</i> , 2013, 8, e56476. | 1.1 | 55 |
| 94 | Novel Cancer Antiangiotherapy Using the VEGF Promoter-targeted Artificial Zinc-finger Protein and Oncolytic Adenovirus. <i>Molecular Therapy</i> , 2008, 16, 1033-1040. | 3.7 | 53 |
| 95 | Transcriptional Repression by Zinc Finger Peptides. <i>Journal of Biological Chemistry</i> , 1997, 272, 29795-29800. | 1.6 | 51 |
| 96 | Failure to detect DNA-guided genome editing using <i>Natronobacterium gregoryi</i> Argonaute. <i>Nature Biotechnology</i> , 2017, 35, 17-18. | 9.4 | 50 |
| 97 | dCas9-mediated Nanoelectrokinetic Direct Detection of Target Gene for Liquid Biopsy. <i>Nano Letters</i> , 2018, 18, 7642-7650. | 4.5 | 50 |
| 98 | Adenine base editor engineering reduces editing of bystander cytosines. <i>Nature Biotechnology</i> , 2021, 39, 1426-1433. | 9.4 | 50 |
| 99 | Efficient genome editing in hematopoietic stem cells with helper-dependent Ad5/35 vectors expressing site-specific endonucleases under microRNA regulation. <i>Molecular Therapy - Methods and Clinical Development</i> , 2015, 2, 14057. | 1.8 | 49 |
| 100 | Phenotypic Alteration and Target Gene Identification Using Combinatorial Libraries of Zinc Finger Proteins in Prokaryotic Cells. <i>Journal of Bacteriology</i> , 2005, 187, 5496-5499. | 1.0 | 48 |
| 101 | Long-Term Effects of In Vivo Genome Editing in the Mouse Retina Using <i>Campylobacter jejuni</i> Cas9 Expressed via Adeno-Associated Virus. <i>Molecular Therapy</i> , 2019, 27, 130-136. | 3.7 | 48 |
| 102 | Cas-Database: web-based genome-wide guide RNA library design for gene knockout screens using CRISPR-Cas9. <i>Bioinformatics</i> , 2016, 32, 2017-2023. | 1.8 | 46 |
| 103 | Arrayed CRISPR screen with image-based assay reliably uncovers host genes required for coxsackievirus infection. <i>Genome Research</i> , 2018, 28, 859-868. | 2.4 | 45 |
| 104 | RNA-Guided Genome Editing in <i>Drosophila</i> with the Purified Cas9 Protein. <i>G3: Genes, Genomes, Genetics</i> , 2014, 4, 1291-1295. | 0.8 | 44 |
| 105 | Nuclear and mitochondrial DNA editing in human cells with zinc finger deaminases. <i>Nature Communications</i> , 2022, 13, 366. | 5.8 | 43 |
| 106 | Hematopoietic Signaling Mechanism Revealed from a Stem/Progenitor Cell Cistrome. <i>Molecular Cell</i> , 2015, 59, 62-74. | 4.5 | 40 |
| 107 | Targeted knockout of a chemokine-like gene increases anxiety and fear responses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E1041-E1050. | 3.3 | 39 |
| 108 | Dibromobimane as a Fluorescent Crosslinking Reagent. <i>Analytical Biochemistry</i> , 1995, 225, 174-176. | 1.1 | 38 |

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|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 109 | Ma et al. reply. Nature, 2018, 560, E10-E23. | 13.7 | 37 |
| 110 | Fusion guide RNAs for orthogonal gene manipulation with Cas9 and Cpf1. Nature Communications, 2017, 8, 1723. | 5.8 | 36 |
| 111 | Unexpected CRISPR on-target effects. Nature Biotechnology, 2018, 36, 703-704. | 9.4 | 36 |
| 112 | Recent advances in genome editing of stem cells for drug discovery and therapeutic application. , 2020, 209, 107501. | | 36 |
| 113 | Cooperativity and Specificity of Cys2His2 Zinc Finger Protein~DNA Interactions: A Molecular Dynamics Simulation Study. Journal of Physical Chemistry B, 2010, 114, 7662-7671. | 1.2 | 35 |
| 114 | CRISPR-Pass: Gene Rescue of Nonsense Mutations Using Adenine Base Editors. Molecular Therapy, 2019, 27, 1364-1371. | 3.7 | 34 |
| 115 | CRISPR/Cas9-mediated gene knockout screens and target identification via whole-genome sequencing uncover host genes required for picornavirus infection. Journal of Biological Chemistry, 2017, 292, 10664-10671. | 1.6 | 33 |
| 116 | Myofibroblast in the ligamentum flavum hypertrophic activity. European Spine Journal, 2017, 26, 2021-2030. | 1.0 | 32 |
| 117 | Generation of early-flowering Chinese cabbage (<i>Brassica rapa</i> spp. <i>pekinensis</i>) through CRISPR/Cas9-mediated genome editing. Plant Biotechnology Reports, 2019, 13, 491-499. | 0.9 | 32 |
| 118 | Digenome-seq web tool for profiling CRISPR specificity. Nature Methods, 2017, 14, 548-549. | 9.0 | 31 |
| 119 | Peptide Tags for a Dual Affinity Fusion System. Analytical Biochemistry, 1994, 219, 165-166. | 1.1 | 30 |
| 120 | Custom DNA-Binding Proteins and Artificial Transcription Factors. Current Topics in Medicinal Chemistry, 2003, 3, 645-657. | 1.0 | 30 |
| 121 | Suppression of vascular endothelial growth factor expression at the transcriptional and post-transcriptional levels. Nucleic Acids Research, 2005, 33, e74-e74. | 6.5 | 30 |
| 122 | Hepatitis C Virus Entry Is Impaired by Claudin-1 Downregulation in Diacylglycerol Acyltransferase-1-Deficient Cells. Journal of Virology, 2014, 88, 9233-9244. | 1.5 | 30 |
| 123 | GATA Factor-Regulated Samd14 Enhancer Confers Red Blood Cell Regeneration and Survival in Severe Anemia. Developmental Cell, 2017, 42, 213-225.e4. | 3.1 | 29 |
| 124 | Mouse genetics: Catalogue and scissors. BMB Reports, 2012, 45, 686-692. | 1.1 | 28 |
| 125 | Analysis of the effect of aging on the response to hypoxia by cDNA microarray. Mechanisms of Ageing and Development, 2003, 124, 941-949. | 2.2 | 27 |
| 126 | Identification and Use of Zinc Finger Transcription Factors That Increase Production of Recombinant Proteins in Yeast and Mammalian Cells. Biotechnology Progress, 2008, 21, 664-670. | 1.3 | 26 |

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|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 127 | Therapeutic applications of CRISPR RNA-guided genome editing. <i>Briefings in Functional Genomics</i> , 2017, 16, 38-45. | 1.3 | 26 |
| 128 | ISM1 protects lung homeostasis via cell-surface GRP78-mediated alveolar macrophage apoptosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, . | 3.3 | 26 |
| 129 | Artificial Transcription Factors Increase Production of Recombinant Antibodies in Chinese Hamster Ovary Cells. <i>Biotechnology Letters</i> , 2006, 28, 9-15. | 1.1 | 25 |
| 130 | Small-molecule inhibitors of histone deacetylase improve CRISPR-based adenine base editing. <i>Nucleic Acids Research</i> , 2021, 49, 2390-2399. | 6.5 | 24 |
| 131 | Adenine Base Editor Ribonucleoproteins Delivered by Lentivirus-Like Particles Show High On-Target Base Editing and Undetectable RNA Off-Target Activities. <i>CRISPR Journal</i> , 2021, 4, 69-81. | 1.4 | 24 |
| 132 | Targeted genome engineering via zinc finger nucleases. <i>Plant Biotechnology Reports</i> , 2011, 5, 9-17. | 0.9 | 23 |
| 133 | Production of <i>MSTN</i> mutated cattle without exogenous gene integration using CRISPR-Cas9. <i>Biotechnology Journal</i> , 2022, 17, e2100198. | 1.8 | 23 |
| 134 | Response to unexpected mutations after CRISPR-Cas9 editing in vivo. <i>Nature Methods</i> , 2018, 15, 239-240. | 9.0 | 22 |
| 135 | Enrichment of cells with TALEN-induced mutations using surrogate reporters. <i>Methods</i> , 2014, 69, 108-117. | 1.9 | 21 |
| 136 | Knockout of the Ribonuclease Inhibitor Gene Leaves Human Cells Vulnerable to Secretory Ribonucleases. <i>Biochemistry</i> , 2016, 55, 6359-6362. | 1.2 | 21 |
| 137 | Targeted Genome Editing for Crop Improvement. <i>Plant Breeding and Biotechnology</i> , 2015, 3, 283-290. | 0.3 | 21 |
| 138 | Artificial Zinc Finger Fusions Targeting Sp1-binding Sites and the trans-Activator-responsive Element Potently Repress Transcription and Replication of HIV-1. <i>Journal of Biological Chemistry</i> , 2005, 280, 21545-21552. | 1.6 | 20 |
| 139 | CRISPR-Cas9 Screening of Kaposi's Sarcoma-Associated Herpesvirus-Transformed Cells Identifies XPO1 as a Vulnerable Target of Cancer Cells. <i>MBio</i> , 2019, 10, . | 1.8 | 20 |
| 140 | The efficacy of CRISPR-mediated cytosine base editing with the RPS5a promoter in <i>Arabidopsis thaliana</i> . <i>Scientific Reports</i> , 2021, 11, 8087. | 1.6 | 20 |
| 141 | A Misfolded but Active Dimer of Bovine Seminal Ribonuclease. <i>FEBS Journal</i> , 1994, 224, 109-114. | 0.2 | 19 |
| 142 | Induction and characterization of taxol-resistance phenotypes with a transiently expressed artificial transcriptional activator library. <i>Nucleic Acids Research</i> , 2004, 32, e116-e116. | 6.5 | 19 |
| 143 | SIRT1-mediated downregulation of p27Kip1 is essential for overcoming contact inhibition of Kaposi's sarcoma-associated herpesvirus transformed cells. <i>Oncotarget</i> , 2016, 7, 75698-75711. | 0.8 | 18 |
| 144 | CRISPR-sub: Analysis of DNA substitution mutations caused by CRISPR-Cas9 in human cells. <i>Computational and Structural Biotechnology Journal</i> , 2020, 18, 1686-1694. | 1.9 | 17 |

| # | ARTICLE | IF | CITATIONS |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 145 | Genome-wide specificity of dCpf1 cytidine base editors. <i>Nature Communications</i> , 2020, 11, 4072. | 5.8 | 17 |
| 146 | The Functional Association of ACQOS/VICTR with Salt Stress Resistance in <i>Arabidopsis thaliana</i> Was Confirmed by CRISPR-Mediated Mutagenesis. <i>International Journal of Molecular Sciences</i> , 2021, 22, 11389. | 1.8 | 17 |
| 147 | Base editing in human cells with monomeric DddA-TALE fusion deaminases. <i>Nature Communications</i> , 2022, 13, . | 5.8 | 17 |
| 148 | Efficient PRNP deletion in bovine genome using gene-editing technologies in bovine cells. <i>Prion</i> , 2015, 9, 278-291. | 0.9 | 16 |
| 149 | Protein Kinase A Catalytic Subunit Is a Molecular Switch that Promotes the Pro-tumoral Function of Macrophages. <i>Cell Reports</i> , 2020, 31, 107643. | 2.9 | 16 |
| 150 | Identifying genome-wide off-target sites of CRISPR RNA-guided nucleases and deaminases with Digenome-seq. <i>Nature Protocols</i> , 2021, 16, 1170-1192. | 5.5 | 16 |
| 151 | Toward a Functional Annotation of the Human Genome Using Artificial Transcription Factors. <i>Genome Research</i> , 2003, 13, 2708-2716. | 2.4 | 15 |
| 152 | Transduction of artificial transcriptional regulatory proteins into human cells. <i>Nucleic Acids Research</i> , 2008, 36, e103. | 6.5 | 14 |
| 153 | Web-Based CRISPR Toolkits: Cas-OFFinder, Cas-Designer, and Cas-Analyzer. <i>Methods in Molecular Biology</i> , 2021, 2162, 23-33. | 0.4 | 14 |
| 154 | Genome Engineering in Human Cells. <i>Methods in Enzymology</i> , 2014, 546, 93-118. | 0.4 | 13 |
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