# Genome-Scale CRISPR-Mediated Control of Gene Repre

Cell

159, 647-661

DOI: 10.1016/j.cell.2014.09.029

Citation Report

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | CRISPR screening from both ways. Nature Reviews Genetics, 2014, 15, 778-779. | 7.7 | 3 |
| 2 | Synthetic RNAs for Gene Regulation: Design Principles and Computational Tools. Frontiers in Bioengineering and Biotechnology, 2014, 2, 65. | 2.0 | 33 |
| 4 | Connecting genotypes, phenotypes and fitness: harnessing the power of <scp>CRISPR</scp>/Cas9 genome editing. Molecular Ecology, 2015, 24, 3810-3822. | 2.0 | 49 |
| 5 | CRISPR/Cas9â€mediated genome engineering of CHO cell factories: Application and perspectives. Biotechnology Journal, 2015, 10, 979-994. | 1.8 | 104 |
| 7 | Fifty Years After Huxley: The Roadmap of Reproductive Medicine Revisited and Updated. Reproductive Sciences, 2015, 22, 1330-1335. | 1.1 | 0 |
| 8 | The utility of transposon mutagenesis for cancer studies in the era of genome editing. Genome Biology, 2015, 16, 229. | 3.8 | 28 |
| 9 | Applications of Engineered DNA-Binding Molecules Such as TAL Proteins and the CRISPR/Cas System in Biology Research. International Journal of Molecular Sciences, 2015, 16, 23143-23164. | 1.8 | 11 |
| 10 | A new age in functional genomics using CRISPR/Cas9 in arrayed library screening. Frontiers in Genetics, 2015, 6, 300. | 1.1 | 96 |
| 11 | Genome-Wide Screening of Genes Required for Glycosylphosphatidylinositol Biosynthesis. PLoS ONE, 2015, 10, e0138553. | 1.1 | 19 |
| 12 | Genome-wide specificity of DNA binding, gene regulation, and chromatin remodeling by TALE- and CRISPR/Cas9-based transcriptional activators. Genome Research, 2015, 25, 1158-1169. | 2.4 | 114 |
| 13 | Applications of the CRISPRâ€“Cas9 system in cancer biology. Nature Reviews Cancer, 2015, 15, 387-393. | 12.8 | 340 |
| 14 | Expanding the Biologistâ€™s Toolkit with CRISPR-Cas9. Molecular Cell, 2015, 58, 568-574. | 4.5 | 351 |
| 15 | Toward Whole-Transcriptome Editing with CRISPR-Cas9. Molecular Cell, 2015, 58, 560-562. | 4.5 | 11 |
| 16 | Long Noncoding RNA in Hematopoiesis and Immunity. Immunity, 2015, 42, 792-804. | 6.6 | 161 |
| 17 | Rapid and Precise Engineering of theCaenorhabditis elegansGenome with Lethal Mutation Co-Conversion and Inactivation of NHEJ Repair. Genetics, 2015, 199, 363-377. | 1.2 | 194 |
| 18 | High-Throughput Sequencing Technologies. Molecular Cell, 2015, 58, 586-597. | 4.5 | 968 |
| 19 | Choosing the Right Tool for the Job: RNAi, TALEN, or CRISPR. Molecular Cell, 2015, 58, 575-585. | 4.5 | 374 |
| 20 | Inference of transcriptional regulation in cancers. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7731-7736. | 3.3 | 84 |

| # | Article | IF | Citations |
|---|---|---|---|
| 21 | In Vitro Reconstitution and Crystallization of Cas9 Endonuclease Bound to a Guide RNA and a DNA Target. Methods in Enzymology, 2015, 558, 515-537. | 0.4 | 23 |
| 22 | Multiplexable, locus-specific targeting of long RNAs with CRISPR-Display. Nature Methods, 2015, 12, 664-670. | 9.0 | 268 |
| 23 | Functional annotation of cis-regulatory elements in human cells by dCas9/sgRNA. Cell Research, 2015, 25, 877-880. | 5.7 | 5 |
| 24 | High-Throughput Silencing Using the CRISPR-Cas9 System: A Review of the Benefits and Challenges. Journal of Biomolecular Screening, 2015, 20, 1027-1039. | 2.6 | 31 |
| 25 | Sequence determinants of improved CRISPR sgRNA design. Genome Research, 2015, 25, 1147-1157. | 2.4 | 514 |
| 26 | A Perspective on the Future of High-Throughput RNAi Screening: Will CRISPR Cut Out the Competition or Can RNAi Help Guide the Way?. Journal of Biomolecular Screening, 2015, 20, 1040-1051. | 2.6 | 32 |
| 27 | Rendering the Intractable More Tractable: Tools from Caenorhabditis elegans Ripe for Import into Parasitic Nematodes. Genetics, 2015, 201, 1279-1294. | 1.2 | 47 |
| 28 | CRISPR/Cas9 system as an innovative genetic engineering tool: Enhancements in sequence specificity and delivery methods. Biochimica Et Biophysica Acta: Reviews on Cancer, 2015, 1856, 234-243. | 3.3 | 19 |
| 29 | Quality control, modeling, and visualization of CRISPR screens with MAGeCK-VISPR. Genome Biology, 2015, 16, 281. | 3.8 | 330 |
| 30 | Resources for the design of CRISPR gene editing experiments. Genome Biology, 2015, 16, 260. | 3.8 | 91 |
| 31 | Optimizing sgRNA structure to improve CRISPR-Cas9 knockout efficiency. Genome Biology, 2015, 16, 280. | 3.8 | 290 |
| 32 | Meeting report on Synthetic Biology Young Scholar Forum. Quantitative Biology, 2016, 3, 206-211. | 0.3 | 0 |
| 33 | Epigenetic roots of immunologic disease and new methods for examining chromatin regulatory pathways. Immunology and Cell Biology, 2015, 93, 261-270. | 1.0 | 7 |
| 34 | CRISPR genome engineering and viral gene delivery: A case of mutual attraction. Biotechnology Journal, 2015, 10, 258-272. | 1.8 | 73 |
| 35 | Functional genomic screening approaches in mechanistic toxicology and potential future applications of CRISPR-Cas9. Mutation Research - Reviews in Mutation Research, 2015, 764, 31-42. | 2.4 | 23 |
| 36 | Profiling the diversity of innate lymphoid cells. Nature Immunology, 2015, 16, 222-224. | 7.0 | 9 |
| 37 | LincRNA signatures in human lymphocytes. Nature Immunology, 2015, 16, 220-222. | 7.0 | 7 |
| 38 | CRISPR engineering turns on genes. Nature, 2015, 517, 560-562. | 13.7 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 39 | A split-Cas9 architecture for inducible genome editing and transcription modulation. Nature Biotechnology, 2015, 33, 139-142. | 9.4 | 603 |
| 40 | Genome editing-based HIV therapies. Trends in Biotechnology, 2015, 33, 172-179. | 4.9 | 19 |
| 41 | The impact of CRISPRâ€“Cas9 on target identification and validation. Drug Discovery Today, 2015, 20, 450-457. | 3.2 | 56 |
| 42 | Mouse Genome Engineering via CRISPR-Cas9 for Study of Immune Function. Immunity, 2015, 42, 18-27. | 6.6 | 91 |
| 43 | Whole-genome RNAi screen highlights components of the endoplasmic reticulum/Golgi as a source of resistance to immunotoxin-mediated cytotoxicity. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1135-42. | 3.3 | 22 |
| 44 | The KrÃ¼ppel-associated box repressor domain induces reversible and irreversible regulation of endogenous mouse genes by mediating different chromatin states. Nucleic Acids Research, 2015, 43, 1549-1561. | 6.5 | 20 |
| 45 | CRISPR-Cas9: a new and promising player in gene therapy. Journal of Medical Genetics, 2015, 52, 289-296. | 1.5 | 150 |
| 46 | Highâ€throughput screens in mammalian cells using the CRISPRâ€Cas9 system. FEBS Journal, 2015, 282, 2089-2096. | 2.2 | 51 |
| 47 | Nanoparticle-based autoimmune disease therapy. Clinical Immunology, 2015, 160, 3-13. | 1.4 | 84 |
| 48 | Divergent signalling pathways regulate lipopolysaccharideâ€induced eRNA expression in human monocytic THP1 cells. FEBS Letters, 2015, 589, 396-406. | 1.3 | 14 |
| 49 | Genomic Engineering and the Future of Medicine. JAMA - Journal of the American Medical Association, 2015, 313, 791. | 3.8 | 25 |
| 50 | Use of the CRISPR/Cas9 system as an intracellular defense against HIV-1 infection in human cells. Nature Communications, 2015, 6, 6413. | 5.8 | 287 |
| 51 | Genetic screens and functional genomics using <scp>CRISPR</scp>/Cas9 technology. FEBS Journal, 2015, 282, 1383-1393. | 2.2 | 82 |
| 52 | Functional annotation of native enhancers with a Cas9â€“histone demethylase fusion. Nature Methods, 2015, 12, 401-403. | 9.0 | 548 |
| 53 | Genome-wide CRISPR Screen in a Mouse Model of Tumor Growth and Metastasis. Cell, 2015, 160, 1246-1260. | 13.5 | 746 |
| 54 | Adenovirus-Mediated Somatic Genome Editing of Pten by CRISPR/Cas9 in Mouse Liver in Spite of Cas9-Specific Immune Responses. Human Gene Therapy, 2015, 26, 432-442. | 1.4 | 291 |
| 55 | Next-generation libraries for robust RNA interference-based genome-wide screens. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3384-91. | 3.3 | 83 |
| 56 | CRISPR-ERA: a comprehensive design tool for CRISPR-mediated gene editing, repression and activation: Fig. 1.. Bioinformatics, 2015, 31, 3676-3678. | 1.8 | 171 |

| # | Article | IF | Citations |
|---|---|---|---|
| 57 | Lnc ing Epigenetic Control of Transcription to Cardiovascular Development and Disease. Circulation Research, 2015, 117, 192-206. | 2.0 | 56 |
| 58 | Application of CRISPR/Cas9 for biomedical discoveries. Cell and Bioscience, 2015, 5, 33. | 2.1 | 52 |
| 59 | Precision cancer mouse models through genome editing with CRISPR-Cas9. Genome Medicine, 2015, 7, 53. | 3.6 | 88 |
| 60 | A CRISPR-Based Screen Identifies Genes Essential for West-Nile-Virus-Induced Cell Death. Cell Reports, 2015, 12, 673-683. | 2.9 | 207 |
| 61 | STARR-seq â€" Principles and applications. Genomics, 2015, 106, 145-150. | 1.3 | 76 |
| 62 | Enzymatically Generated CRISPR Libraries for Genome Labeling and Screening. Developmental Cell, 2015, 34, 373-378. | 3.1 | 32 |
| 63 | CRISPR-Cas: New Tools for Genetic Manipulations from Bacterial Immunity Systems. Annual Review of Microbiology, 2015, 69, 209-228. | 2.9 | 160 |
| 64 | A Genome-wide CRISPR Screen in Primary Immune Cells to Dissect Regulatory Networks. Cell, 2015, 162, 675-686. | 13.5 | 383 |
| 65 | The nucleotide exchange factors Grp170 and Sil1 induce cholera toxin release from BiP to enable retrotranslocation. Molecular Biology of the Cell, 2015, 26, 2181-2189. | 0.9 | 20 |
| 66 | Cas9-chromatin binding information enables more accurate CRISPR off-target prediction. Nucleic Acids Research, 2015, 43, e118-e118. | 6.5 | 187 |
| 67 | Generating patient-specific induced pluripotent stem cells-derived cardiomyocytes for the treatment of cardiac diseases. Expert Opinion on Biological Therapy, 2015, 15, 1399-1409. | 1.4 | 18 |
| 68 | Chemically modified guide RNAs enhance CRISPR-Cas genome editing in human primary cells. Nature Biotechnology, 2015, 33, 985-989. | 9.4 | 882 |
| 69 | Modeling cancer processes with CRISPR-Cas9. Trends in Biotechnology, 2015, 33, 317-319. | 4.9 | 9 |
| 70 | Application guide for omics approaches to cell signaling. Nature Chemical Biology, 2015, 11, 387-397. | 3.9 | 69 |
| 71 | Applications of CRISPR-Cas9 mediated genome engineering. Military Medical Research, 2015, 2, 11. | 1.9 | 28 |
| 72 | Dramatic Enhancement of Genome Editing by CRISPR/Cas9 Through Improved Guide RNA Design. Genetics, 2015, 199, 959-971. | 1.2 | 210 |
| 73 | Generation of a Knockout Mouse Embryonic Stem Cell Line Using a Paired CRISPR/Cas9 Genome Engineering Tool. Methods in Molecular Biology, 2015, 1341, 321-343. | 0.4 | 20 |
| 74 | Efficient Gene Disruption in Cultured Primary Human Endothelial Cells by CRISPR/Cas9. Circulation Research, 2015, 117, 121-128. | 2.0 | 64 |

| # | Article | IF | Citations |
|---|---|---|---|
| 75 | RAS Synthetic Lethal Screens Revisited: Still Seeking the Elusive Prize?. Clinical Cancer Research, 2015, 21, 1802-1809. | 3.2 | 146 |
| 76 | Advances in CRISPR-Cas9 genome engineering: lessons learned from RNA interference. Nucleic Acids Research, 2015, 43, 3407-3419. | 6.5 | 124 |
| 77 | CRISPR-Cas9 Based Engineering of Actinomycetal Genomes. ACS Synthetic Biology, 2015, 4, 1020-1029. | 1.9 | 365 |
| 78 | LncRNAs in vertebrates: Advances and challenges. Biochimie, 2015, 117, 3-14. | 1.3 | 38 |
| 79 | Inhibition of HIV-1 infection of primary CD4+ T-cells by gene editing of CCR5 using adenovirus-delivered CRISPR/Cas9. Journal of General Virology, 2015, 96, 2381-2393. | 1.3 | 168 |
| 80 | High-throughput functional genomics using CRISPRâ€“Cas9. Nature Reviews Genetics, 2015, 16, 299-311. | 7.7 | 998 |
| 81 | Epigenome editing by a CRISPR-Cas9-based acetyltransferase activates genes from promoters and enhancers. Nature Biotechnology, 2015, 33, 510-517. | 9.4 | 1,487 |
| 82 | The therapeutic application of CRISPR/Cas9 technologies for HIV. Expert Opinion on Biological Therapy, 2015, 15, 819-830. | 1.4 | 66 |
| 83 | Enabling functional genomics with genome engineering. Genome Research, 2015, 25, 1442-1455. | 2.4 | 89 |
| 84 | Linking RNA biology to lncRNAs. Genome Research, 2015, 25, 1456-1465. | 2.4 | 158 |
| 85 | Genomic approaches to studying human-specific developmental traits. Development (Cambridge), 2015, 142, 3100-3112. | 1.2 | 26 |
| 86 | Human Induced Pluripotent Stem CellNEUROG2Dual Knockin Reporter Lines Generated by the CRISPR/Cas9 System. Stem Cells and Development, 2015, 24, 2925-2942. | 1.1 | 24 |
| 87 | Modeling Disease In Vivo With CRISPR/Cas9. Trends in Molecular Medicine, 2015, 21, 609-621. | 3.5 | 91 |
| 88 | Functional Genomics in Pharmaceutical Drug Discovery. Handbook of Experimental Pharmacology, 2015, 232, 25-41. | 0.9 | 4 |
| 89 | Strategies for precision modulation of gene expression by epigenome editing: an overview. Epigenetics and Chromatin, 2015, 8, 34. | 1.8 | 50 |
| 90 | Combining CRISPR/Cas9 and rAAV Templates for Efficient Gene Editing. Nucleic Acid Therapeutics, 2015, 25, 287-296. | 2.0 | 26 |
| 91 | Highly specific epigenome editing by CRISPR-Cas9 repressors for silencing of distal regulatory elements. Nature Methods, 2015, 12, 1143-1149. | 9.0 | 808 |
| 92 | Efficient delivery of nuclease proteins for genome editing in human stem cells and primary cells. Nature Protocols, 2015, 10, 1842-1859. | 5.5 | 113 |

| # | Article | IF | Citations |
|---|---|---|---|
| 93 | Network analysis of gene essentiality in functional genomics experiments. Genome Biology, 2015, 16, 239. | 3.8 | 50 |
| 94 | In Vivo Transcriptional Activation Using CRISPR/Cas9 in Drosophila. Genetics, 2015, 201, 433-442. | 1.2 | 117 |
| 95 | Studying Cellular Signal Transduction with OMIC Technologies. Journal of Molecular Biology, 2015, 427, 3416-3440. | 2.0 | 4 |
| 96 | Epigenetic diagnostics for neuropsychiatric disorders. Neurology, 2015, 84, 1618-1619. | 1.5 | 3 |
| 97 | An Updated Collection of Sequence Barcoded Temperature-Sensitive Alleles of Yeast Essential Genes. G3: Genes, Genomes, Genetics, 2015, 5, 1879-1887. | 0.8 | 38 |
| 98 | Ribosome profiling reveals the what, when, where and how of protein synthesis. Nature Reviews Molecular Cell Biology, 2015, 16, 651-664. | 16.1 | 389 |
| 99 | The emergence of commodity-scale genetic manipulation. Current Opinion in Chemical Biology, 2015, 28, 150-155. | 2.8 | 4 |
| 100 | Massively parallel high-order combinatorial genetics in human cells. Nature Biotechnology, 2015, 33, 952-961. | 9.4 | 50 |
| 101 | Conditionally Stabilized dCas9 Activator for Controlling Gene Expression in Human Cell Reprogramming and Differentiation. Stem Cell Reports, 2015, 5, 448-459. | 2.3 | 158 |
| 102 | The New State of the Art: Cas9 for Gene Activation and Repression. Molecular and Cellular Biology, 2015, 35, 3800-3809. | 1.1 | 197 |
| 103 | ceRNA in cancer: possible functions and clinical implications. Journal of Medical Genetics, 2015, 52, 710-718. | 1.5 | 1,031 |
| 104 | Electroporation Knows No Boundaries: The Use of Electrostimulation for siRNA Delivery in Cells and Tissues. Journal of Biomolecular Screening, 2015, 20, 932-942. | 2.6 | 38 |
| 105 | High-throughput bacterial functional genomics in the sequencing era. Current Opinion in Microbiology, 2015, 27, 86-95. | 2.3 | 35 |
| 106 | Bacterial CRISPR: accomplishments and prospects. Current Opinion in Microbiology, 2015, 27, 121-126. | 2.3 | 74 |
| 107 | Functional genomics to uncover drug mechanism of action. Nature Chemical Biology, 2015, 11, 942-948. | 3.9 | 70 |
| 108 | Synthetic CRISPR RNA-Cas9â€“guided genome editing in human cells. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E7110-7. | 3.3 | 151 |
| 109 | Biological Networks Governing the Acquisition, Maintenance, and Dissolution of Pluripotency: Insights from Functional Genomics Approaches. Cold Spring Harbor Symposia on Quantitative Biology, 2015, 80, 189-198. | 2.0 | 2 |
| 110 | Targeting the AAA ATPase p97 as an Approach to Treat Cancer through Disruption of Protein Homeostasis. Cancer Cell, 2015, 28, 653-665. | 7.7 | 319 |

| # | Article | IF | Citations |
|---|---|---|---|
| 111 | Single-cell and multivariate approaches in genetic perturbation screens. Nature Reviews Genetics, 2015, 16, 18-32. | 7.7 | 80 |
| 112 | Engineering Complex Synthetic Transcriptional Programs with CRISPR RNA Scaffolds. Cell, 2015, 160, 339-350. | 13.5 | 809 |
| 113 | Genome-scale transcriptional activation by an engineered CRISPR-Cas9 complex. Nature, 2015, 517, 583-588. | 13.7 | 2,272 |
| 114 | CRISPR-Cas9: from Genome Editing to Cancer Research. International Journal of Biological Sciences, 2016, 12, 1427-1436. | 2.6 | 31 |
| 115 | Brain tumor modeling using the CRISPR/Cas9 system: state of the art and view to the future. Oncotarget, 2016, 7, 33461-33471. | 0.8 | 19 |
| 116 | A CRISPR-Based Toolbox for Studying T Cell Signal Transduction. BioMed Research International, 2016, 2016, 1-10. | 0.9 | 24 |
| 117 | Chemogenomic Profiling: Past, Present and Beyond. Cellular & Molecular Medicine: Open Access, 2016, 02, . | 0.4 | 1 |
| 118 | CRISPR: gene editing is just the beginning. Nature, 2016, 531, 156-159. | 13.7 | 76 |
| 119 | Compact and highly active next-generation libraries for CRISPR-mediated gene repression and activation. ELife, 2016, 5, . | 2.8 | 609 |
| 120 | Advanced In vivo Use of CRISPR/Cas9 and Anti-sense DNA Inhibition for Gene Manipulation in the Brain. Frontiers in Genetics, 2015, 6, 362. | 1.1 | 25 |
| 121 | Emerging Technologies to Create Inducible and Genetically Defined Porcine Cancer Models. Frontiers in Genetics, 2016, 7, 28. | 1.1 | 17 |
| 122 | RNA Interference in the Age of CRISPR: Will CRISPR Interfere with RNAi?. International Journal of Molecular Sciences, 2016, 17, 291. | 1.8 | 68 |
| 123 | The CRISPR/Cas Genome-Editing Tool: Application in Improvement of Crops. Frontiers in Plant Science, 2016, 7, 506. | 1.7 | 196 |
| 124 | Design, execution, and analysis of pooled inÂvitro <scp>CRISPR</scp>/Cas9 screens. FEBS Journal, 2016, 283, 3170-3180. | 2.2 | 66 |
| 125 | <scp>CRISPR</scp> guide <scp>RNA</scp> design for research applications. FEBS Journal, 2016, 283, 3232-3238. | 2.2 | 74 |
| 126 | Genome Editing by <scp>CRISPR</scp>/Cas9: A Game Change in the Genetic Manipulation of Protists. Journal of Eukaryotic Microbiology, 2016, 63, 679-690. | 0.8 | 55 |
| 127 | Combination of the clustered regularly interspaced short palindromic repeats (CRISPR)â€ssociated 9 technique with the piggybac transposon system for mouse in utero electroporation to study cortical development. Journal of Neuroscience Research, 2016, 94, 814-824. | 1.3 | 10 |
| 128 | Next stop for the CRISPR revolution: RNAâ€guided epigenetic regulators. FEBS Journal, 2016, 283, 3181-3193. | 2.2 | 63 |

| # | Article | IF | Citations |
|---|---|---|---|
| 129 | A comprehensive overview of computational resources to aid in precision genome editing with engineered nucleases. Briefings in Bioinformatics, 2017, 18, bbw052. | 3.2 | 15 |
| 130 | CRISPRâ€Cas9 systems: versatile cancer modelling platforms and promising therapeutic strategies. International Journal of Cancer, 2016, 138, 1328-1336. | 2.3 | 26 |
| 131 | Applying CRISPRâ€“Cas9 tools to identify and characterize transcriptional enhancers. Nature Reviews Molecular Cell Biology, 2016, 17, 597-604. | 16.1 | 54 |
| 132 | Using CRISPR/Cas to study gene function and model disease in vivo. FEBS Journal, 2016, 283, 3194-3203. | 2.2 | 37 |
| 133 | Conversion of embryonic stem cells into extraembryonic lineages by CRISPR-mediated activators. Scientific Reports, 2016, 6, 19648. | 1.6 | 28 |
| 134 | Efficient CRISPR-Mediated Post-Transcriptional Gene Silencing in a Hyperthermophilic Archaeon Using Multiplexed crRNA Expression. G3: Genes, Genomes, Genetics, 2016, 6, 3161-3168. | 0.8 | 25 |
| 135 | Proteomics to study DNA-bound and chromatin-associated gene regulatory complexes. Human Molecular Genetics, 2016, 25, R106-R114. | 1.4 | 59 |
| 136 | A Multiplexed Single-Cell CRISPR Screening Platform Enables Systematic Dissection of the Unfolded Protein Response. Cell, 2016, 167, 1867-1882.e21. | 13.5 | 819 |
| 137 | The mTOR Complex Controls HIV Latency. Cell Host and Microbe, 2016, 20, 785-797. | 5.1 | 179 |
| 138 | Reprogramming cell fate with a genome-scale library of artificial transcription factors. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E8257-E8266. | 3.3 | 23 |
| 139 | Establishment of MAGEC 2â€knockout cells and functional investigation of MAGEC 2 in tumor cells. Cancer Science, 2016, 107, 1888-1897. | 1.7 | 11 |
| 140 | Expansion of CRISPR targeting sites in Bombyx mori. Insect Biochemistry and Molecular Biology, 2016, 72, 31-40. | 1.2 | 45 |
| 141 | Designed nucleases for targeted genome editing. Plant Biotechnology Journal, 2016, 14, 448-462. | 4.1 | 57 |
| 142 | Genome Editing in Human Pluripotent Stem Cells. Cold Spring Harbor Protocols, 2016, 2016, pdb.top086819. | 0.2 | 5 |
| 143 | A Comprehensive, CRISPR-based Functional Analysis of Essential Genes in Bacteria. Cell, 2016, 165, 1493-1506. | 13.5 | 593 |
| 144 | CRISPR/Cas9 for Human Genome Engineering and Disease Research. Annual Review of Genomics and Human Genetics, 2016, 17, 131-154. | 2.5 | 80 |
| 145 | The future of iPS cells in advancing regenerative medicine. Genetical Research, 2016, 98, e4. | 0.3 | 5 |
| 146 | Comparison of Cas9 activators in multiple species. Nature Methods, 2016, 13, 563-567. | 9.0 | 438 |

| # | Article | IF | Citations |
|---|---|---|---|
| 147 | CRISPR-on system for the activation of the endogenous human INS gene. Gene Therapy, 2016, 23, 543-547. | 2.3 | 40 |
| 148 | Single-cell analysis of long non-coding RNAs in the developing human neocortex. Genome Biology, 2016, 17, 67. | 3.8 | 295 |
| 149 | Rapid generation of CRISPR/dCas9-regulated, orthogonally repressible hybrid T7-lac promoters for modular, tuneable control of metabolic pathway fluxes inEscherichia coli. Nucleic Acids Research, 2016, 44, 4472-4485. | 6.5 | 74 |
| 150 | Imaging Specific Genomic DNA in Living Cells. Annual Review of Biophysics, 2016, 45, 1-23. | 4.5 | 67 |
| 151 | Systematic comparison of CRISPR/Cas9 and RNAi screens for essential genes. Nature Biotechnology, 2016, 34, 634-636. | 9.4 | 359 |
| 152 | The expanding footprint of CRISPR/Cas9 in the plant sciences. Plant Cell Reports, 2016, 35, 1451-1468. | 2.8 | 30 |
| 153 | High-Content Screening for Quantitative Cell Biology. Trends in Cell Biology, 2016, 26, 598-611. | 3.6 | 214 |
| 154 | Induced Pluripotent Stem Cells Meet Genome Editing. Cell Stem Cell, 2016, 18, 573-586. | 5.2 | 398 |
| 155 | Network-based approaches for analysis of complex biological systems. Current Opinion in Biotechnology, 2016, 39, 157-166. | 3.3 | 71 |
| 156 | CRISPR knockout screening outperforms shRNA and CRISPRi in identifying essential genes. Nature Biotechnology, 2016, 34, 631-633. | 9.4 | 344 |
| 157 | CRISPR/Cas9 for plant genome editing: accomplishments, problems and prospects. Plant Cell Reports, 2016, 35, 1417-1427. | 2.8 | 72 |
| 158 | Crystal Structure of Cpf1 in Complex with Guide RNA and Target DNA. Cell, 2016, 165, 949-962. | 13.5 | 552 |
| 159 | CRISPR/Cas9 in Genome Editing and Beyond. Annual Review of Biochemistry, 2016, 85, 227-264. | 5.0 | 897 |
| 160 | Golden Gate Assembly of CRISPR gRNA expression array for simultaneously targeting multiple genes. Cellular and Molecular Life Sciences, 2016, 73, 4315-4325. | 2.4 | 52 |
| 161 | A genome editing primer for the hematologist. Blood, 2016, 127, 2525-2535. | 0.6 | 23 |
| 162 | Development of Lightâ€Activated CRISPR Using Guide RNAs with Photocleavable Protectors. Angewandte Chemie, 2016, 128, 12628-12632. | 1.6 | 29 |
| 163 | Directing cellular information flow via CRISPR signal conductors. Nature Methods, 2016, 13, 938-944. | 9.0 | 149 |
| 164 | Applications of CRISPR Genome Engineering in Cell Biology. Trends in Cell Biology, 2016, 26, 875-888. | 3.6 | 68 |

| # | Article | IF | Citations |
|---|---|---|---|
| 165 | Applications of CRISPR technologies in research and beyond. Nature Biotechnology, 2016, 34, 933-941. | 9.4 | 735 |
| 166 | Systematic mapping of functional enhancerâ€“promoter connections with CRISPR interference. Science, 2016, 354, 769-773. | 6.0 | 512 |
| 167 | Identification of oncogenic driver mutations by genome-wide CRISPR-Cas9 dropout screening. BMC Genomics, 2016, 17, 723. | 1.2 | 31 |
| 168 | Challenges of CRISPR/Cas9 applications for long non-coding RNA genes. Nucleic Acids Research, 2017, 45, gkw883. | 6.5 | 138 |
| 169 | Genome-Editing Technologies: Principles and Applications. Cold Spring Harbor Perspectives in Biology, 2016, 8, a023754. | 2.3 | 209 |
| 170 | Deciphering Combinatorial Genetics. Annual Review of Genetics, 2016, 50, 515-538. | 3.2 | 16 |
| 171 | Efficient genome engineering approaches for the short-lived African turquoise killifish. Nature Protocols, 2016, 11, 2010-2028. | 5.5 | 68 |
| 172 | Methods for Optimizing CRISPR-Cas9 Genome Editing Specificity. Molecular Cell, 2016, 63, 355-370. | 4.5 | 247 |
| 173 | Diverse evolutionary roots and mechanistic variations of the CRISPR-Cas systems. Science, 2016, 353, aad5147. | 6.0 | 523 |
| 174 | Working with Stem Cells. , 2016, , . | | 2 |
| 176 | Genome Editing in Stem Cells. , 2016, , 287-309. | | 0 |
| 177 | CRISPR/Cas9 genome editing in human pluripotent stem cells: Harnessing human genetics in a dish. Developmental Dynamics, 2016, 245, 788-806. | 0.8 | 20 |
| 178 | Emerging role of long noncoding RNAs as regulators of innate immune cell development and inflammatory gene expression. European Journal of Immunology, 2016, 46, 504-512. | 1.6 | 125 |
| 179 | Using CRISPR-Cas9 Genome Editing to Enhance Cell Based Therapies for the Treatment of Diabetes Mellitus. , 2016, , 127-147. | | 1 |
| 180 | CRISPR-Cas9 for in vivo Gene Therapy: Promise and Hurdles. Molecular Therapy - Nucleic Acids, 2016, 5, e349. | 2.3 | 120 |
| 181 | Depletion of Undecaprenyl Pyrophosphate Phosphatases Disrupts Cell Envelope Biogenesis in Bacillus subtilis. Journal of Bacteriology, 2016, 198, 2925-2935. | 1.0 | 50 |
| 182 | Development of Lightâ€Activated CRISPR Using Guide RNAs with Photocleavable Protectors. Angewandte Chemie - International Edition, 2016, 55, 12440-12444. | 7.2 | 144 |
| 183 | CRISPR-Cas9 mediated genetic engineering for the purification of the endogenous integrator complex from mammalian cells. Protein Expression and Purification, 2016, 128, 101-108. | 0.6 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 184 | CRISPR interference-guided balancing of a biosynthetic mevalonate pathway increases terpenoid production. Metabolic Engineering, 2016, 38, 228-240. | 3.6 | 132 |
| 185 | Massively Parallel Interrogation of the Effects of Gene Expression Levels on Fitness. Cell, 2016, 166, 1282-1294.e18. | 13.5 | 168 |
| 186 | Quantification of dopaminergic neuron differentiation and neurotoxicity via a genetic reporter. Scientific Reports, 2016, 6, 25181. | 1.6 | 16 |
| 187 | Genetic dissection of mammalian ERAD through comparative haploid and CRISPR forward genetic screens. Nature Communications, 2016, 7, 11786. | 5.8 | 64 |
| 188 | <scp>CRISPR</scp>â€Cas9 technology and its application in haematological disorders. British Journal of Haematology, 2016, 175, 208-225. | 1.2 | 22 |
| 189 | Could CRISPR be the solution for gene editingâ€™s Gordian knot?. Cell Biology and Toxicology, 2016, 32, 465-467. | 2.4 | 22 |
| 190 | Inheritable Silencing of Endogenous Genes by Hit-and-Run Targeted Epigenetic Editing. Cell, 2016, 167, 219-232.e14. | 13.5 | 363 |
| 191 | CRISPR-Cas9 therapeutics in cancer: promising strategies and present challenges. Biochimica Et Biophysica Acta: Reviews on Cancer, 2016, 1866, 197-207. | 3.3 | 45 |
| 192 | TSSC1 is novel component of the endosomal retrieval machinery. Molecular Biology of the Cell, 2016, 27, 2867-2878. | 0.9 | 27 |
| 193 | Synthetic lethality: the road to novel therapies for breast cancer. Endocrine-Related Cancer, 2016, 23, T39-T55. | 1.6 | 17 |
| 194 | Methods of genome engineering: a new era of molecular biology. Biochemistry (Moscow), 2016, 81, 662-677. | 0.7 | 7 |
| 195 | The present and future of genome editing in cancer research. Human Genetics, 2016, 135, 1083-1092. | 1.8 | 13 |
| 196 | Libraries of Synthetic TALE-Activated Promoters. Methods in Enzymology, 2016, 576, 361-378. | 0.4 | 8 |
| 197 | Genome editing: the road of CRISPR/Cas9 from bench to clinic. Experimental and Molecular Medicine, 2016, 48, e265-e265. | 3.2 | 74 |
| 198 | Versatile protein tagging in cells with split fluorescent protein. Nature Communications, 2016, 7, 11046. | 5.8 | 331 |
| 199 | Gene and cellâ€based therapies for inherited retinal disorders: An update. American Journal of Medical Genetics, Part C: Seminars in Medical Genetics, 2016, 172, 349-366. | 0.7 | 60 |
| 200 | Delivery methods for site-specific nucleases: Achieving the full potential of therapeutic gene editing. Journal of Controlled Release, 2016, 244, 83-97. | 4.8 | 17 |
| 201 | Making the cut in the dark genome. Science, 2016, 354, 705-706. | 6.0 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 202 | A Molecular Chipper technology for CRISPR sgRNA library generation and functional mapping of noncoding regions. Nature Communications, 2016, 7, 11178. | 5.8 | 19 |
| 203 | Precision Modulation of Neurodegenerative Disease-Related Gene Expression in Human iPSC-Derived Neurons. Scientific Reports, 2016, 6, 28420. | 1.6 | 67 |
| 204 | CNS disease models with human pluripotent stem cells in the CRISPR age. Current Opinion in Cell Biology, 2016, 43, 96-103. | 2.6 | 19 |
| 205 | Different Effects of sgRNA Length on CRISPR-mediated Gene Knockout Efficiency. Scientific Reports, 2016, 6, 28566. | 1.6 | 77 |
| 206 | Genome-scale deletion screening of human long non-coding RNAs using a paired-guide RNA CRISPRâ€“Cas9 library. Nature Biotechnology, 2016, 34, 1279-1286. | 9.4 | 380 |
| 207 | Ligand-binding domains of nuclear receptors facilitate tight control of split CRISPR activity. Nature Communications, 2016, 7, 12009. | 5.8 | 90 |
| 208 | Directed evolution using dCas9-targeted somatic hypermutation in mammalian cells. Nature Methods, 2016, 13, 1036-1042. | 9.0 | 378 |
| 209 | The functions of long noncoding RNAs in development and stem cells. Development (Cambridge), 2016, 143, 3882-3894. | 1.2 | 180 |
| 210 | Pathway-based network modeling finds hidden genes in shRNA screen for regulators of acute lymphoblastic leukemia. Integrative Biology (United Kingdom), 2016, 8, 761-774. | 0.6 | 5 |
| 211 | Versatile in vivo regulation of tumor phenotypes by dCas9-mediated transcriptional perturbation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3892-900. | 3.3 | 87 |
| 212 | Transcriptional regulation with CRISPR-Cas9: principles, advances, and applications. Current Opinion in Biotechnology, 2016, 40, 177-184. | 3.3 | 69 |
| 213 | Development of a CRISPR-Cas9 Tool Kit for Comprehensive Engineering of Bacillus subtilis. Applied and Environmental Microbiology, 2016, 82, 4876-4895. | 1.4 | 157 |
| 214 | â€œCatâ€™s Cradlingâ€•the 3D Genome by the Act of LncRNA Transcription. Molecular Cell, 2016, 62, 657-664. | 4.5 | 128 |
| 216 | CRISPR/Cas9: From Genome Engineering to Cancer Drug Discovery. Trends in Cancer, 2016, 2, 313-324. | 3.8 | 43 |
| 217 | CRISPR Screens Provide a Comprehensive Assessment of Cancer Vulnerabilities but Generate False-Positive Hits for Highly Amplified Genomic Regions. Cancer Discovery, 2016, 6, 900-913. | 7.7 | 320 |
| 218 | Genomic Copy Number Dictates a Gene-Independent Cell Response to CRISPR/Cas9 Targeting. Cancer Discovery, 2016, 6, 914-929. | 7.7 | 485 |
| 219 | The Chromatin Remodeling Component Arid1a Is a Suppressor of Spontaneous Mammary Tumors in Mice. Genetics, 2016, 203, 1601-1611. | 1.2 | 8 |
| 220 | Cellular Therapies: Gene Editing and Next-Gen CAR T Cells. , 2016, , 203-247. | | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 221 | Optimizing sgRNA position markedly improves the efficiency of CRISPR/dCas9-mediated transcriptional repression. Nucleic Acids Research, 2016, 44, e141-e141. | 6.5 | 118 |
| 222 | Engineering Synthetic Gene Circuits in Living Cells with CRISPR Technology. Trends in Biotechnology, 2016, 34, 535-547. | 4.9 | 111 |
| 223 | Development and potential applications of CRISPR-Cas9 genome editing technology in sarcoma. Cancer Letters, 2016, 373, 109-118. | 3.2 | 30 |
| 224 | Editing the epigenome: technologies for programmable transcription and epigenetic modulation. Nature Methods, 2016, 13, 127-137. | 9.0 | 341 |
| 225 | Expanding the CRISPR imaging toolset withStaphylococcus aureusCas9 for simultaneous imaging of multiple genomic loci. Nucleic Acids Research, 2016, 44, e75-e75. | 6.5 | 155 |
| 226 | Specific Reactivation of Latent HIV-1 by dCas9-SunTag-VP64-mediated Guide RNA Targeting the HIV-1 Promoter. Molecular Therapy, 2016, 24, 508-521. | 3.7 | 67 |
| 227 | Optimized sgRNA design to maximize activity and minimize off-target effects of CRISPR-Cas9. Nature Biotechnology, 2016, 34, 184-191. | 9.4 | 3,168 |
| 228 | Beyond editing: repurposing CRISPRâ€“Cas9 for precision genome regulation and interrogation. Nature Reviews Molecular Cell Biology, 2016, 17, 5-15. | 16.1 | 698 |
| 229 | CRISPR-Cas9 for medical genetic screens: applications and future perspectives. Journal of Medical Genetics, 2016, 53, 91-97. | 1.5 | 45 |
| 230 | Towards a compendium of essential genes â€“ From model organisms to synthetic lethality in cancer cells. Critical Reviews in Biochemistry and Molecular Biology, 2016, 51, 74-85. | 2.3 | 42 |
| 231 | CRISPR library designer (CLD): software for multispecies design of single guide RNA libraries. Genome Biology, 2016, 17, 55. | 3.8 | 68 |
| 232 | Concise review: programming human pluripotent stem cells into blood. British Journal of Haematology, 2016, 173, 671-679. | 1.2 | 14 |
| 233 | Using RNA as Molecular Code for Programming Cellular Function. ACS Synthetic Biology, 2016, 5, 795-809. | 1.9 | 49 |
| 234 | NCG 5.0: updates of a manually curated repository of cancer genes and associated properties from cancer mutational screenings. Nucleic Acids Research, 2016, 44, D992-D999. | 6.5 | 95 |
| 235 | Parallel shRNA and CRISPR-Cas9 screens enable antiviral drug target identification. Nature Chemical Biology, 2016, 12, 361-366. | 3.9 | 157 |
| 236 | Energy biotechnology in the CRISPR-Cas9 era. Current Opinion in Biotechnology, 2016, 38, 79-84. | 3.3 | 26 |
| 237 | Multiplexed barcoded CRISPR-Cas9 screening enabled by CombiGEM. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2544-2549. | 3.3 | 210 |
| 238 | Effective knockdown ofDrosophilalong non-coding RNAs by CRISPR interference. Nucleic Acids Research, 2016, 44, e84-e84. | 6.5 | 54 |

| # | Article | IF | Citations |
|---|---|---|---|
| 239 | Post-translational Regulation of Cas9 during G1 Enhances Homology-Directed Repair. Cell Reports, 2016, 14, 1555-1566. | 2.9 | 237 |
| 240 | TSGene 2.0: an updated literature-based knowledgebase for tumor suppressor genes. Nucleic Acids Research, 2016, 44, D1023-D1031. | 6.5 | 332 |
| 241 | Chemical and Biophysical Modulation of Cas9 for Tunable Genome Engineering. ACS Chemical Biology, 2016, 11, 681-688. | 1.6 | 83 |
| 242 | Transcriptional silencing of long noncoding RNA GNG12-AS1 uncouples its transcriptional and product-related functions. Nature Communications, 2016, 7, 10406. | 5.8 | 77 |
| 243 | Harnessing the Prokaryotic Adaptive Immune System as a Eukaryotic Antiviral Defense. Trends in Microbiology, 2016, 24, 294-306. | 3.5 | 25 |
| 244 | Pseudogene transcripts: Participants in tumorigenicity and promising therapeutic targets. Leukemia Research, 2016, 42, 105-106. | 0.4 | 1 |
| 245 | Cas-Database: web-based genome-wide guide RNA library design for gene knockout screens using CRISPR-Cas9. Bioinformatics, 2016, 32, 2017-2023. | 1.8 | 46 |
| 246 | CRISPR/Cas9: A powerful tool for crop genome editing. Crop Journal, 2016, 4, 75-82. | 2.3 | 150 |
| 247 | Functional Genomic Strategies for Elucidating Humanâ€“Virus Interactions. Advances in Virus Research, 2016, 94, 1-51. | 0.9 | 27 |
| 248 | Chemical Biology Approaches to Genome Editing: Understanding, Controlling, and Delivering Programmable Nucleases. Cell Chemical Biology, 2016, 23, 57-73. | 2.5 | 42 |
| 250 | CRISPR Interference Efficiently Induces Specific and Reversible Gene Silencing in Human iPSCs. Cell Stem Cell, 2016, 18, 541-553. | 5.2 | 418 |
| 251 | Quantitative CRISPR interference screens in yeast identify chemical-genetic interactions and new rules for guide RNA design. Genome Biology, 2016, 17, 45. | 3.8 | 165 |
| 252 | CRISPR/Cas9 advances engineering of microbial cell factories. Metabolic Engineering, 2016, 34, 44-59. | 3.6 | 179 |
| 253 | Protein Delivery of an Artificial Transcription Factor Restores Widespread Ube3a Expression in an Angelman Syndrome Mouse Brain. Molecular Therapy, 2016, 24, 548-555. | 3.7 | 67 |
| 254 | CRISPR Technology for Genome Activation and Repression in Mammalian Cells. Cold Spring Harbor Protocols, 2016, 2016, pdb.prot090175. | 0.2 | 20 |
| 255 | An Introduction to CRISPR Technology for Genome Activation and Repression in Mammalian Cells. Cold Spring Harbor Protocols, 2016, 2016, pdb.top086835. | 0.2 | 7 |
| 256 | CRISPR/dCas9-mediated Transcriptional Inhibition Ameliorates the Epigenetic Dysregulation at D4Z4 and Represses DUX4-fl in FSH Muscular Dystrophy. Molecular Therapy, 2016, 24, 527-535. | 3.7 | 73 |
| 258 | Stimulus-specific combinatorial functionality of neuronal c-fos enhancers. Nature Neuroscience, 2016, 19, 75-83. | 7.1 | 187 |

| # | Article | IF | Citations |
|---|---|---|---|
| 259 | CRISPR-mediated Activation of Latent HIV-1 Expression. Molecular Therapy, 2016, 24, 499-507. | 3.7 | 89 |
| 260 | Synthetic Biologyâ€"Toward Therapeutic Solutions. Journal of Molecular Biology, 2016, 428, 945-962. | 2.0 | 27 |
| 261 | Transcriptional Regulation with CRISPR/Cas9 Effectors in Mammalian Cells. Methods in Molecular Biology, 2016, 1358, 43-57. | 0.4 | 28 |
| 262 | Application of CRISPR-mediated genome engineering in cancer research. Cancer Letters, 2017, 387, 10-17. | 3.2 | 16 |
| 263 | Neurofibromatosis as a gateway to better treatment for a variety of malignancies. Progress in Neurobiology, 2017, 152, 149-165. | 2.8 | 10 |
| 264 | Genome-scale CRISPR pooled screens. Analytical Biochemistry, 2017, 532, 95-99. | 1.1 | 52 |
| 265 | Update of neurotrophic factors in neurobiology of addiction and future directions. Neurobiology of Disease, 2017, 97, 189-200. | 2.1 | 48 |
| 266 | Targeted genome regulation via synthetic programmable transcriptional regulators. Critical Reviews in Biotechnology, 2017, 37, 429-440. | 5.1 | 22 |
| 267 | <sup />CRISPR-Based Epigenome Editing of Cytokine Receptors for the Promotion of Cell Survival and Tissue Deposition in Inflammatory Environments. Tissue Engineering - Part A, 2017, 23, 738-749. | 1.6 | 68 |
| 268 | Genome engineering of stem cell organoids for disease modeling. Protein and Cell, 2017, 8, 315-327. | 4.8 | 30 |
| 269 | Induced pluripotent stem cell technology: A window for studying the pathogenesis of acquired aplastic anemia and possible applications. Experimental Hematology, 2017, 49, 9-18. | 0.2 | 4 |
| 270 | GB3.0: a platform for plant bio-design that connects functional DNA elements with associated biological data. Nucleic Acids Research, 2017, 45, gkw1326. | 6.5 | 70 |
| 271 | Development of a genome-editing CRISPR/Cas9 system in thermophilic fungal Myceliophthora species and its application to hyper-cellulase production strain engineering. Biotechnology for Biofuels, 2017, 10, 1. | 6.2 | 518 |
| 272 | Single-cell epigenomic variability reveals functional cancer heterogeneity. Genome Biology, 2017, 18, 15. | 3.8 | 92 |
| 273 | Gene therapy for diabetic retinopathy: Are we ready to make the leap from bench to bedside?. , 2017, 173, 1-18. | | 34 |
| 274 | CRISPR-Cas type II-based Synthetic Biology applications in eukaryotic cells. RNA Biology, 2017, 14, 1286-1293. | 1.5 | 10 |
| 275 | Cas9, Cpf1 and C2c1/2/3â€•What's next?. Bioengineered, 2017, 8, 265-273. | 1.4 | 80 |
| 276 | Gene Essentiality Profiling Reveals Gene Networks and Synthetic Lethal Interactions with Oncogenic Ras. Cell, 2017, 168, 890-903.e15. | 13.5 | 535 |

| # | Article | IF | Citations |
|---|---|---|---|
| 277 | Future of rAAV Gene Therapy: Platform for RNAi, Gene Editing, and Beyond. Human Gene Therapy, 2017, 28, 361-372. | 1.4 | 40 |
| 278 | Painting a specific chromosome with CRISPR/Cas9 for live-cell imaging. Cell Research, 2017, 27, 298-301. | 5.7 | 53 |
| 279 | Application of the <scp>CRISPR</scp> geneâ€editing technique in insect functional genome studies â€“ a review. Entomologia Experimentalis Et Applicata, 2017, 162, 124-132. | 0.7 | 20 |
| 280 | Strain Development by Whole-Cell Directed Evolution. , 2017, , 173-200. | | 2 |
| 281 | A stable but reversible integrated surrogate reporter for assaying CRISPR/Cas9-stimulated homology-directed repair. Journal of Biological Chemistry, 2017, 292, 6148-6162. | 1.6 | 13 |
| 282 | Marked for death: targeting epigenetic changes in cancer. Nature Reviews Drug Discovery, 2017, 16, 241-263. | 21.5 | 244 |
| 283 | Integration of metabolic, regulatory and signaling networks towards analysis of perturbation and dynamic responses. Current Opinion in Systems Biology, 2017, 2, 59-66. | 1.3 | 13 |
| 284 | Linking Protein and RNA Function within the Same Gene. Cell, 2017, 168, 753-755. | 13.5 | 2 |
| 285 | Genetic screening enters the single-cell era. Nature Methods, 2017, 14, 237-238. | 9.0 | 8 |
| 286 | An inducible CRISPR-ON system for controllable gene activation in human pluripotent stem cells. Protein and Cell, 2017, 8, 379-393. | 4.8 | 36 |
| 287 | What rheumatologists need to know about CRISPR/Cas9. Nature Reviews Rheumatology, 2017, 13, 205-216. | 3.5 | 18 |
| 288 | Gene Editing With CRISPR/Cas9 RNA-Directed Nuclease. Circulation Research, 2017, 120, 876-894. | 2.0 | 61 |
| 289 | Genome Editing in Cardiovascular Biology. Circulation Research, 2017, 120, 778-780. | 2.0 | 40 |
| 290 | Metabolic gatekeeper function of B-lymphoid transcription factors. Nature, 2017, 542, 479-483. | 13.7 | 175 |
| 291 | Therapeutic genome engineering via <scp>CRISPR</scp>â€Cas systems. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2017, 9, e1380. | 6.6 | 22 |
| 292 | Defining Functional Genic Regions in the Human Genome through Integration of Biochemical, Evolutionary, and Genetic Evidence. Molecular Biology and Evolution, 2017, 34, 1788-1798. | 3.5 | 8 |
| 293 | Gene Regulatory Elements, Major Drivers of Human Disease. Annual Review of Genomics and Human Genetics, 2017, 18, 45-63. | 2.5 | 115 |
| 294 | Single-molecule and super-resolution imaging of transcription in living bacteria. Methods, 2017, 120, 103-114. | 1.9 | 54 |

| # | Article | IF | Citations |
|---|---|---|---|
| 295 | A CRISPR toolbox to study virusâ€“host interactions. Nature Reviews Microbiology, 2017, 15, 351-364. | 13.6 | 147 |
| 296 | Locus-specific histone deacetylation using a synthetic CRISPR-Cas9-based HDAC. Nature Communications, 2017, 8, 15315. | 5.8 | 176 |
| 297 | Use of CRISPR/Cas9 for Symbiotic Nitrogen Fixation Research in Legumes. Progress in Molecular Biology and Translational Science, 2017, 149, 187-213. | 0.9 | 24 |
| 298 | Genetic interaction mapping in mammalian cells using CRISPR interference. Nature Methods, 2017, 14, 577-580. | 9.0 | 142 |
| 299 | Proline metabolism supports metastasis formation and could be inhibited to selectively target metastasizing cancer cells. Nature Communications, 2017, 8, 15267. | 5.8 | 297 |
| 300 | Elucidating drug targets and mechanisms of action by genetic screens in mammalian cells. Chemical Communications, 2017, 53, 7162-7167. | 2.2 | 26 |
| 301 | CRISPR Editing in Biological and Biomedical Investigation. Journal of Cellular Biochemistry, 2017, 118, 4152-4162. | 1.2 | 6 |
| 302 | Mouse Mammary Tumor Virus Signal Peptide Uses a Novel p97-Dependent and Derlin-Independent Retrotranslocation Mechanism To Escape Proteasomal Degradation. MBio, 2017, 8, . | 1.8 | 12 |
| 303 | A CRISPR Approach to Neurodegenerative Diseases. Trends in Molecular Medicine, 2017, 23, 483-485. | 3.5 | 41 |
| 304 | Genome-scale measurement of off-target activity using Cas9 toxicity in high-throughput screens. Nature Communications, 2017, 8, 15178. | 5.8 | 284 |
| 305 | Dramatic Improvement of CRISPR/Cas9 Editing in Candida albicans by Increased Single Guide RNA Expression. MSphere, 2017, 2, . | 1.3 | 83 |
| 306 | CRISPRiâ€“sRNA: Transcriptionalâ€“Translational Regulation of Extracellular Electron Transfer in Shewanella oneidensis. ACS Synthetic Biology, 2017, 6, 1679-1690. | 1.9 | 76 |
| 307 | Green listedâ€”a CRISPR screen tool. Bioinformatics, 2017, 33, 1099-1100. | 1.8 | 12 |
| 308 | CRISPR system in filamentous fungi: Current achievements and future directions. Gene, 2017, 627, 212-221. | 1.0 | 65 |
| 309 | Chromatin-enriched lncRNAs can act as cell-type specific activators of proximal gene transcription. Nature Structural and Molecular Biology, 2017, 24, 596-603. | 3.6 | 70 |
| 310 | Widespread Influence of 3â€²-End Structures on Mammalian mRNA Processing and Stability. Cell, 2017, 169, 905-917.e11. | 13.5 | 123 |
| 311 | RNA Activation. Advances in Experimental Medicine and Biology, 2017, , . | 0.8 | 1 |
| 312 | One-Step piggyBac Transposon-Based CRISPR/Cas9 Activation of Multiple Genes. Molecular Therapy - Nucleic Acids, 2017, 8, 64-76. | 2.3 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 313 | CRISPRcloud: a secure cloud-based pipeline for CRISPR pooled screen deconvolution. Bioinformatics, 2017, 33, 2963-2965. | 1.8 | 22 |
| 314 | Mammalian Synthetic Biology: Engineering Biological Systems. Annual Review of Biomedical Engineering, 2017, 19, 249-277. | 5.7 | 47 |
| 315 | Progress and Application of CRISPR/Cas Technology in Biological and Biomedical Investigation. Journal of Cellular Biochemistry, 2017, 118, 3061-3071. | 1.2 | 10 |
| 316 | Challenges and progress in interpretation of non-coding genetic variants associated with human disease. Experimental Biology and Medicine, 2017, 242, 1325-1334. | 1.1 | 44 |
| 317 | Multiplex gene regulation by CRISPR-ddCpf1. Cell Discovery, 2017, 3, 17018. | 3.1 | 151 |
| 318 | Complementary information derived from CRISPR Cas9 mediated gene deletion and suppression. Nature Communications, 2017, 8, 15403. | 5.8 | 93 |
| 319 | Recent advances in functional perturbation and genome editing techniques in studying sea urchin development. Briefings in Functional Genomics, 2017, 16, 309-318. | 1.3 | 11 |
| 320 | System-level perturbations of cell metabolism using CRISPR/Cas9. Current Opinion in Biotechnology, 2017, 46, 134-140. | 3.3 | 25 |
| 321 | CRISPRâ€“Cas9 epigenome editing enables high-throughput screening for functional regulatory elements in the human genome. Nature Biotechnology, 2017, 35, 561-568. | 9.4 | 362 |
| 322 | Purified Cas9 Fusion Proteins for Advanced Genome Manipulation. Small Methods, 2017, 1, 1600052. | 4.6 | 11 |
| 323 | Genome-scale CRISPR-Cas9 knockout and transcriptional activation screening. Nature Protocols, 2017, 12, 828-863. | 5.5 | 858 |
| 325 | A method for highâ€throughput production of sequenceâ€verified <scp>DNA</scp> libraries and strain collections. Molecular Systems Biology, 2017, 13, 913. | 3.2 | 41 |
| 326 | Applications of CRISPR genome editing technology in drug target identification and validation. Expert Opinion on Drug Discovery, 2017, 12, 541-552. | 2.5 | 15 |
| 327 | Slow Chromatin Dynamics Allow Polycomb Target Genes to Filter Fluctuations in Transcription Factor Activity. Cell Systems, 2017, 4, 445-457.e8. | 2.9 | 99 |
| 328 | Imaging Translational and Post-Translational Gene Regulatory Dynamics in Living Cells with Antibody-Based Probes. Trends in Genetics, 2017, 33, 322-335. | 2.9 | 30 |
| 329 | Functional interrogation of non-coding DNA through CRISPR genome editing. Methods, 2017, 121-122, 118-129. | 1.9 | 28 |
| 330 | Re-engineered RNA-Guided FokI-Nucleases for Improved Genome Editing in Human Cells. Molecular Therapy, 2017, 25, 342-355. | 3.7 | 25 |
| 331 | Live cell imaging of low- and non-repetitive chromosome loci using CRISPR-Cas9. Nature Communications, 2017, 8, 14725. | 5.8 | 199 |

| # | Article | IF | Citations |
|---|---|---|---|
| 332 | Guide Picker is a comprehensive design tool for visualizing and selecting guides for CRISPR experiments. BMC Bioinformatics, 2017, 18, 167. | 1.2 | 23 |
| 333 | Editing the genome of hiPSC with CRISPR/Cas9: disease models. Mammalian Genome, 2017, 28, 348-364. | 1.0 | 72 |
| 334 | CRISPR/Cas9-mediated genome editing in plants. Methods, 2017, 121-122, 94-102. | 1.9 | 46 |
| 335 | Synergistic drug combinations for cancer identified in a CRISPR screen for pairwise genetic interactions. Nature Biotechnology, 2017, 35, 463-474. | 9.4 | 408 |
| 336 | Combinatorial CRISPRâ€“Cas9 screens for de novo mapping of genetic interactions. Nature Methods, 2017, 14, 573-576. | 9.0 | 287 |
| 337 | Cornerstones of CRISPRâ€“Cas in drug discovery and therapy. Nature Reviews Drug Discovery, 2017, 16, 89-100. | 21.5 | 370 |
| 338 | Design and Experimental Validation of Small Activating RNAs Targeting an Exogenous Promoter in Human Cells. ACS Synthetic Biology, 2017, 6, 628-637. | 1.9 | 2 |
| 339 | Genome-wide mapping of mutations at single-nucleotide resolution for protein, metabolic and genome engineering. Nature Biotechnology, 2017, 35, 48-55. | 9.4 | 298 |
| 340 | Molecular basis, applications and challenges of CRISPR/Cas9: a continuously evolving tool for genome editing. Briefings in Functional Genomics, 2017, 16, elw038. | 1.3 | 9 |
| 341 | CRISPRi-based genome-scale identification of functional long noncoding RNA loci in human cells. Science, 2017, 355, . | 6.0 | 566 |
| 342 | Inducible and multiplex gene regulation using CRISPRâ€“Cpf1-based transcription factors. Nature Methods, 2017, 14, 1163-1166. | 9.0 | 170 |
| 343 | Key elements for designing and performing a CRISPR/Cas9-based genetic screen. Journal of Genetics and Genomics, 2017, 44, 439-449. | 1.7 | 16 |
| 344 | High-Throughput Approaches to Pinpoint Function within the Noncoding Genome. Molecular Cell, 2017, 68, 44-59. | 4.5 | 54 |
| 345 | Methods and Applications of CRISPR-Mediated Base Editing in Eukaryotic Genomes. Molecular Cell, 2017, 68, 26-43. | 4.5 | 199 |
| 346 | CRISPR/Cas9-Based Engineering of the Epigenome. Cell Stem Cell, 2017, 21, 431-447. | 5.2 | 215 |
| 347 | The role of long non-coding RNAs in rheumatic diseases. Nature Reviews Rheumatology, 2017, 13, 657-669. | 3.5 | 65 |
| 348 | The chemistry of Cas9 and its CRISPR colleagues. Nature Reviews Chemistry, 2017, 1, . | 13.8 | 111 |
| 349 | Drug-tunable multidimensional synthetic gene control using inducible degron-tagged dCas9 effectors. Nature Communications, 2017, 8, 1191. | 5.8 | 49 |

| # | Article | IF | Citations |
|---|---|---|---|
| 350 | Genome editing technologies to fight infectious diseases. Expert Review of Anti-Infective Therapy, 2017, 15, 1001-1013. | 2.0 | 10 |
| 351 | Transcription control engineering and applications in synthetic biology. Synthetic and Systems Biotechnology, 2017, 2, 176-191. | 1.8 | 70 |
| 352 | Randomized CRISPR-Cas Transcriptional Perturbation Screening Reveals Protective Genes against Alpha-Synuclein Toxicity. Molecular Cell, 2017, 68, 247-257.e5. | 4.5 | 31 |
| 353 | CRISPR/Cas9 screening using unique molecular identifiers. Molecular Systems Biology, 2017, 13, 945. | 3.2 | 51 |
| 354 | Combined CRISPRi/a-Based Chemical Genetic Screens Reveal that Rigosertib Is a Microtubule-Destabilizing Agent. Molecular Cell, 2017, 68, 210-223.e6. | 4.5 | 197 |
| 355 | Enhancer connectome in primary human cells identifies target genes of disease-associated DNA elements. Nature Genetics, 2017, 49, 1602-1612. | 9.4 | 419 |
| 356 | A B Cell Regulome Links Notch to Downstream Oncogenic Pathways in Small B Cell Lymphomas. Cell Reports, 2017, 21, 784-797. | 2.9 | 65 |
| 357 | Impeding Transcription of Expanded Microsatellite Repeats by Deactivated Cas9. Molecular Cell, 2017, 68, 479-490.e5. | 4.5 | 99 |
| 358 | DNA-binding of the Tet-transactivator curtails antigen-induced lymphocyte activation in mice. Nature Communications, 2017, 8, 1028. | 5.8 | 8 |
| 359 | CRISPR/Cas-based screening of long non-coding RNAs (lncRNAs) in macrophages with an NF-Î²B reporter. Journal of Biological Chemistry, 2017, 292, 20911-20920. | 1.6 | 60 |
| 360 | The REMOTE-control system: a system for reversible and tunable control of endogenous gene expression in mice. Nucleic Acids Research, 2017, 45, 12256-12269. | 6.5 | 10 |
| 361 | A Broad-Spectrum Inhibitor of CRISPR-Cas9. Cell, 2017, 170, 1224-1233.e15. | 13.5 | 211 |
| 362 | Genome and Epigenome Editing to Treat Disorders of the Hematopoietic System. Human Gene Therapy, 2017, 28, 1105-1115. | 1.4 | 20 |
| 363 | Long Non Coding RNA Biology. Advances in Experimental Medicine and Biology, 2017, , . | 0.8 | 18 |
| 364 | Emerging Gene Therapies for Genetic Hearing Loss. JARO - Journal of the Association for Research in Otolaryngology, 2017, 18, 649-670. | 0.9 | 86 |
| 365 | Discovery of stimulation-responsive immune enhancers with CRISPR activation. Nature, 2017, 549, 111-115. | 13.7 | 247 |
| 366 | The Role of KRAB-ZFPs in Transposable Element Repression and Mammalian Evolution. Trends in Genetics, 2017, 33, 871-881. | 2.9 | 156 |
| 367 | Lenalidomide modulates gene expression in human ABC-DLBCL cells by regulating IKAROS interaction with an intronic control region of SPIB. Experimental Hematology, 2017, 56, 46-57.e1. | 0.2 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 368 | Variant Interpretation: Functional Assays to the Rescue. American Journal of Human Genetics, 2017, 101, 315-325. | 2.6 | 275 |
| 369 | APOBEC: From mutator to editor. Journal of Genetics and Genomics, 2017, 44, 423-437. | 1.7 | 54 |
| 370 | RABIF/MSS4 is a Rab-stabilizing holdase chaperone required for GLUT4 exocytosis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8224-E8233. | 3.3 | 52 |
| 371 | Determination of the physiological and pathological roles of E2F3 in adult tissues. Scientific Reports, 2017, 7, 9932. | 1.6 | 5 |
| 372 | Systems-level interference strategies to decipher host factors involved in bacterial pathogen interaction: from RNAi to CRISPRi. Current Opinion in Microbiology, 2017, 39, 34-41. | 2.3 | 10 |
| 373 | The non-coding RNA landscape of human hematopoiesis and leukemia. Nature Communications, 2017, 8, 218. | 5.8 | 131 |
| 374 | A Landscape of Therapeutic Cooperativity in KRAS Mutant Cancers Reveals Principles for Controlling Tumor Evolution. Cell Reports, 2017, 20, 999-1015. | 2.9 | 77 |
| 375 | Synthetic essentiality: Targeting tumor suppressor deficiencies in cancer. BioEssays, 2017, 39, 1700076. | 1.2 | 22 |
| 376 | Bidirectional manipulation of gene expression in adipocytes using CRISPRa and siRNA. Molecular Metabolism, 2017, 6, 1313-1320. | 3.0 | 38 |
| 377 | A CRISPR/Cas9 guidance RNA screen platform for HIV provirus disruption and HIV/AIDS gene therapy in astrocytes. Scientific Reports, 2017, 7, 5955. | 1.6 | 20 |
| 378 | Prioritising Causal Genes at Type 2 Diabetes Risk Loci. Current Diabetes Reports, 2017, 17, 76. | 1.7 | 25 |
| 379 | Technical considerations for the use of CRISPR/Cas9 in hematology research. Experimental Hematology, 2017, 54, 4-11. | 0.2 | 18 |
| 380 | Evaluating Synthetic Activation and Repression of Neuropsychiatric-Related Genes in hiPSC-Derived NPCs, Neurons, and Astrocytes. Stem Cell Reports, 2017, 9, 615-628. | 2.3 | 76 |
| 381 | RNA Polymerase Tags To Monitor Multidimensional Proteinâ€"Protein Interactions Reveal Pharmacological Engagement of Bcl-2 Proteins. Journal of the American Chemical Society, 2017, 139, 11964-11972. | 6.6 | 16 |
| 382 | Optimised metrics for CRISPR-KO screens with second-generation gRNA libraries. Scientific Reports, 2017, 7, 7384. | 1.6 | 37 |
| 383 | Recent advances in CRISPR/Cas mediated genome editing for crop improvement. Plant Biotechnology Reports, 2017, 11, 193-207. | 0.9 | 37 |
| 384 | Targeted genome editing in Caenorhabditis elegans using <scp>CRISPR</scp>/Cas9. Wiley Interdisciplinary Reviews: Developmental Biology, 2017, 6, e287. | 5.9 | 15 |
| 385 | Application of genomeâ€editing technology in crop improvement. Cereal Chemistry, 2018, 95, 35-48. | 1.1 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 386 | Technological Developments in lncRNA Biology. Advances in Experimental Medicine and Biology, 2017, 1008, 283-323. | 0.8 | 296 |
| 387 | Mapping a diversity of genetic interactions in yeast. Current Opinion in Systems Biology, 2017, 6, 14-21. | 1.3 | 20 |
| 388 | Optimized strategy for in vivo Cas9-activation in Drosophila. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9409-9414. | 3.3 | 75 |
| 389 | Characterization of noncoding regulatory DNA in the human genome. Nature Biotechnology, 2017, 35, 732-746. | 9.4 | 79 |
| 390 | InÂVivo Target Gene Activation via CRISPR/Cas9-Mediated Trans-epigenetic Modulation. Cell, 2017, 171, 1495-1507.e15. | 13.5 | 334 |
| 391 | Techniques and strategies employing engineered transcription factors. Current Opinion in Biomedical Engineering, 2017, 4, 152-162. | 1.8 | 1 |
| 392 | Combinatorial metabolic engineering using an orthogonal tri-functional CRISPR system. Nature Communications, 2017, 8, 1688. | 5.8 | 244 |
| 393 | Genome Editing. Journal of the American College of Cardiology, 2017, 70, 2808-2821. | 1.2 | 27 |
| 394 | A potent Cas9-derived gene activator for plant and mammalian cells. Nature Plants, 2017, 3, 930-936. | 4.7 | 187 |
| 395 | Targeted Gene Editing in Human Pluripotent Stem Cells Using Site-Specific Nucleases. Advances in Biochemical Engineering/Biotechnology, 2017, 163, 169-186. | 0.6 | 4 |
| 396 | Precision Medicine, CRISPR, and Genome Engineering. Advances in Experimental Medicine and Biology, 2017, , . | 0.8 | 2 |
| 397 | From Reductionism to Holism: Toward a More Complete View of Development Through Genome Engineering. Advances in Experimental Medicine and Biology, 2017, 1016, 45-74. | 0.8 | 7 |
| 398 | Target Discovery for Precision Medicine Using High-Throughput Genome Engineering. Advances in Experimental Medicine and Biology, 2017, 1016, 123-145. | 0.8 | 6 |
| 399 | Functional roles of intrinsic disorder in CRISPR-associated protein Cas9. Molecular BioSystems, 2017, 13, 1770-1780. | 2.9 | 5 |
| 400 | Synthetic lethality and cancer. Nature Reviews Genetics, 2017, 18, 613-623. | 7.7 | 444 |
| 401 | Identifying synthetic lethal targets using CRISPR/Cas9 system. Methods, 2017, 131, 66-73. | 1.9 | 24 |
| 402 | Enabling Graded and Large-Scale Multiplex of Desired Genes Using a Dual-Mode dCas9 Activator in Saccharomyces cerevisiae. ACS Synthetic Biology, 2017, 6, 1931-1943. | 1.9 | 53 |
| 403 | A convenient method to pre-screen candidate guide RNAs for CRISPR/Cas9 gene editing by NHEJ-mediated integration of a â€˜self-cleavingâ€™ GFP-expression plasmid. DNA Research, 2017, 24, 609-621. | 1.5 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 404 | A decade of discovery: CRISPR functions and applications. Nature Microbiology, 2017, 2, 17092. | 5.9 | 238 |
| 405 | The applications and advances of CRISPR-Cas9 in medical research. Briefings in Functional Genomics, 2017, 16, 1-3. | 1.3 | 0 |
| 406 | Loss-of-function genetic tools for animal models: cross-species and cross-platform differences. Nature Reviews Genetics, 2017, 18, 24-40. | 7.7 | 159 |
| 407 | GenomeCRISPR - a database for high-throughput CRISPR/Cas9 screens. Nucleic Acids Research, 2017, 45, D679-D686. | 6.5 | 65 |
| 408 | Eukaryotic Transcriptional and Post-Transcriptional Gene Expression Regulation. Methods in Molecular Biology, 2017, , . | 0.4 | 3 |
| 409 | Using an Inducible CRISPR-dCas9-KRAB Effector System to Dissect Transcriptional Regulation in Human Embryonic Stem Cells. Methods in Molecular Biology, 2017, 1507, 221-233. | 0.4 | 31 |
| 410 | Applications of genome editing by programmable nucleases to the metabolic engineering of secondary metabolites. Journal of Biotechnology, 2017, 241, 50-60. | 1.9 | 9 |
| 411 | CRISPR-Based Technologies for the Manipulation of Eukaryotic Genomes. Cell, 2017, 168, 20-36. | 13.5 | 783 |
| 412 | CRISPR/Cas9-The ultimate weapon to battle infectious diseases?. Cellular Microbiology, 2017, 19, e12693. | 1.1 | 56 |
| 413 | CRISPR/Cas9 in allergic and immunologic diseases. Expert Review of Clinical Immunology, 2017, 13, 5-9. | 1.3 | 8 |
| 414 | Adaptation of CRISPR nucleases for eukaryotic applications. Analytical Biochemistry, 2017, 532, 90-94. | 1.1 | 8 |
| 415 | Genome editing in cardiovascular diseases. Nature Reviews Cardiology, 2017, 14, 11-20. | 6.1 | 76 |
| 417 | Targeted Gene Activation Using RNA-Guided Nucleases. Methods in Molecular Biology, 2017, 1468, 235-250. | 0.4 | 5 |
| 418 | Precision genome editing in the CRISPR era. Biochemistry and Cell Biology, 2017, 95, 187-201. | 0.9 | 120 |
| 419 | Largeâ€scale imageâ€based screening and profiling of cellular phenotypes. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2017, 91, 115-125. | 1.1 | 55 |
| 420 | A vital sugar code for ricin toxicity. Cell Research, 2017, 27, 1351-1364. | 5.7 | 20 |
| 421 | Dual direction CRISPR transcriptional regulation screening uncovers gene networks driving drug resistance. Scientific Reports, 2017, 7, 17693. | 1.6 | 43 |
| 422 | Role of the CRISPR system in controlling gene transcription and monitoring cell fate (Review). Molecular Medicine Reports, 2017, 17, 1421-1427. | 1.1 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 423 | Human evolution: the non-coding revolution. BMC Biology, 2017, 15, 89. | 1.7 | 67 |
| 424 | ENCoRE: an efficient software for CRISPR screens identifies new players in extrinsic apoptosis. BMC Genomics, 2017, 18, 905. | 1.2 | 15 |
| 425 | Correction of Monogenic and Common Retinal Disorders with Gene Therapy. Genes, 2017, 8, 53. | 1.0 | 37 |
| 426 | CRISPR Genome Engineering for Human Pluripotent Stem Cell Research. Theranostics, 2017, 7, 4445-4469. | 4.6 | 22 |
| 427 | CRISPRâ€“Cas9. , 2017, , . | | 0 |
| 428 | Elucidating the Role of Host Long Non-Coding RNA during Viral Infection: Challenges and Paths Forward. Vaccines, 2017, 5, 37. | 2.1 | 12 |
| 429 | How to Train a Cellâ€“Cutting-Edge Molecular Tools. Frontiers in Chemistry, 2017, 5, 12. | 1.8 | 8 |
| 430 | A permutation-based non-parametric analysis of CRISPR screen data. BMC Genomics, 2017, 18, 545. | 1.2 | 26 |
| 431 | Mechanisms of Long Non-Coding RNAs in the Assembly and Plasticity of Neural Circuitry. Frontiers in Neural Circuits, 2017, 11, 76. | 1.4 | 37 |
| 432 | CRISPR Libraries and Screening. Progress in Molecular Biology and Translational Science, 2017, 152, 69-82. | 0.9 | 12 |
| 433 | Epigenetics in Chronic Pain. , 2017, , 185-226. | | 1 |
| 434 | When Long Noncoding RNAs Meet Genome Editing in Pluripotent Stem Cells. Stem Cells International, 2017, 2017, 1-13. | 1.2 | 3 |
| 435 | New Insights Into Cellular Stress Responses to Environmental Metal Toxicants. International Review of Cell and Molecular Biology, 2017, 331, 55-82. | 1.6 | 6 |
| 436 | CRISPRi is not strand-specific at all loci and redefines the transcriptional landscape. ELife, 2017, 6, . | 2.8 | 27 |
| 437 | MELK is not necessary for the proliferation of basal-like breast cancer cells. ELife, 2017, 6, . | 2.8 | 86 |
| 438 | CRISPR History: Discovery, Characterization, and Prosperity. Progress in Molecular Biology and Translational Science, 2017, 152, 1-21. | 0.9 | 20 |
| 439 | Systematic analysis of transcription start sites in avian development. PLoS Biology, 2017, 15, e2002887. | 2.6 | 68 |
| 440 | CRISPulator: a discrete simulation tool for pooled genetic screens. BMC Bioinformatics, 2017, 18, 347. | 1.2 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 441 | Crossing enhanced and high fidelity SpCas9 nucleases to optimize specificity and cleavage. Genome Biology, 2017, 18, 190. | 3.8 | 102 |
| 442 | Current status and perspectives of genome editing technology for microalgae. Biotechnology for Biofuels, 2017, 10, 267. | 6.2 | 102 |
| 443 | CRISPR/Cas9 Technology: Applications and Human Disease Modeling. Progress in Molecular Biology and Translational Science, 2017, 152, 23-48. | 0.9 | 17 |
| 444 | Genetic and epigenetic control of gene expression by CRISPRâ€“Cas systems. F1000Research, 2017, 6, 747. | 0.8 | 58 |
| 445 | Drug Discovery Technologies: Current and Future Trends. , 2017, , 1-32. | | 4 |
| 446 | Current Progress and Future Prospects in Nucleic Acid Based Therapeutics. , 2017, , 280-313. | | 4 |
| 447 | Recent developments in genome editing for potential use in plants. Bioscience Horizons, 2017, 10, . | 0.6 | 6 |
| 448 | Dissecting super-enhancer hierarchy based on chromatin interactions. Nature Communications, 2018, 9, 943. | 5.8 | 179 |
| 449 | Knockdown of Human AMPK Using the CRISPR/Cas9 Genome-Editing System. Methods in Molecular Biology, 2018, 1732, 171-194. | 0.4 | 8 |
| 450 | Editing of DNA Methylation Using dCas9-Peptide Repeat and scFv-TET1 Catalytic Domain Fusions. Methods in Molecular Biology, 2018, 1767, 419-428. | 0.4 | 14 |
| 451 | Engineering and Application of Pluripotent Stem Cells. Advances in Biochemical Engineering/Biotechnology, 2018, , . | 0.6 | 0 |
| 452 | CRISPR-based methods for high-throughput annotation of regulatory DNA. Current Opinion in Biotechnology, 2018, 52, 32-41. | 3.3 | 13 |
| 453 | New tools for old drugs: Functional genetic screens to optimize current chemotherapy. Drug Resistance Updates, 2018, 36, 30-46. | 6.5 | 33 |
| 454 | CRISPRâ€“Cas9 screens in human cells and primary neurons identify modifiers of C9ORF72 dipeptide-repeat-protein toxicity. Nature Genetics, 2018, 50, 603-612. | 9.4 | 178 |
| 455 | The potential of CRISPR/Cas9 genome editing for the study and treatment of intervertebral disc pathologies. JOR Spine, 2018, 1, e1003. | 1.5 | 26 |
| 456 | Recent advances in metabolic engineering of Saccharomyces cerevisiae: New tools and their applications. Metabolic Engineering, 2018, 50, 85-108. | 3.6 | 228 |
| 457 | Tau Internalization is Regulated by 6-O Sulfation on Heparan Sulfate Proteoglycans (HSPGs). Scientific Reports, 2018, 8, 6382. | 1.6 | 162 |
| 458 | An Integrated Genome-wide CRISPRa Approach to Functionalize lncRNAs in Drug Resistance. Cell, 2018, 173, 649-664.e20. | 13.5 | 238 |

| # | Article | IF | Citations |
|---|---|---|---|
| 459 | Development and application of CRISPR/Cas9 technologies in genomic editing. Human Molecular Genetics, 2018, 27, R79-R88. | 1.4 | 47 |
| 460 | Rapid identification of unknown carboxyl esterase activity in Corynebacterium glutamicum using RNA-guided CRISPR interference. Enzyme and Microbial Technology, 2018, 114, 63-68. | 1.6 | 19 |
| 461 | Proteome-Wide Evaluation of Two Common Protein Quantification Methods. Journal of Proteome Research, 2018, 17, 1934-1942. | 1.8 | 143 |
| 462 | High GC Content Cas9-Mediated Genome-Editing and Biosynthetic Gene Cluster Activation in Saccharopolyspora erythraea. ACS Synthetic Biology, 2018, 7, 1338-1348. | 1.9 | 22 |
| 463 | High-throughput genetic screens using CRISPRâ€“Cas9 system. Archives of Pharmacal Research, 2018, 41, 875-884. | 2.7 | 23 |
| 464 | Review of CRISPR/Cas9 sgRNA Design Tools. Interdisciplinary Sciences, Computational Life Sciences, 2018, 10, 455-465. | 2.2 | 180 |
| 465 | Integrated design, execution, and analysis of arrayed and pooled CRISPR genome-editing experiments. Nature Protocols, 2018, 13, 946-986. | 5.5 | 70 |
| 466 | CRISPR/Cas9 Inhibits Multiple Steps of HIV-1 Infection. Human Gene Therapy, 2018, 29, 1264-1276. | 1.4 | 33 |
| 467 | Multigene delivery in mammalian cells: Recent advances and applications. Biotechnology Advances, 2018, 36, 871-879. | 6.0 | 10 |
| 468 | CRISPR interference-based specific and efficient gene inactivation in the brain. Nature Neuroscience, 2018, 21, 447-454. | 7.1 | 133 |
| 469 | Hallmarks of cancer: The CRISPR generation. European Journal of Cancer, 2018, 93, 10-18. | 1.3 | 54 |
| 470 | Therapeutic Targeting of Long Non-Coding RNAs in Cancer. Trends in Molecular Medicine, 2018, 24, 257-277. | 3.5 | 453 |
| 471 | Boosting, Not Breaking: CRISPR Activators Treat Disease Models. Molecular Therapy, 2018, 26, 334-336. | 3.7 | 3 |
| 472 | Rescue of Fragile X Syndrome Neurons by DNA Methylation Editing of the FMR1 Gene. Cell, 2018, 172, 979-992.e6. | 13.5 | 351 |
| 473 | Distinct roles for phosphoinositide 3-kinases Î³ and Î´ in malignant B cell migration. Leukemia, 2018, 32, 1958-1969. | 3.3 | 40 |
| 474 | Pooled in vivo screens for cancer immunotherapy target discovery. Immunotherapy, 2018, 10, 167-170. | 1.0 | 3 |
| 475 | Reprogramming cell fate with artificial transcription factors. FEBS Letters, 2018, 592, 888-900. | 1.3 | 13 |
| 476 | Modulating Gene Expression in Epsteinâ€Barr Virus (EBV)â€Positive B Cell Lines with CRISPRa and CRISPRi. Current Protocols in Molecular Biology, 2018, 121, 31.13.1-31.13.18. | 2.9 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 477 | CRISPR/Cas9: A tool for immunological research. European Journal of Immunology, 2018, 48, 576-583. | 1.6 | 19 |
| 478 | CRISPR-Cas9: a promising genetic engineering approach in cancer research. Therapeutic Advances in Medical Oncology, 2018, 10, 175883401875508. | 1.4 | 31 |
| 479 | Advancing biotechnology with CRISPR/Cas9: recent applications and patent landscape. Journal of Industrial Microbiology and Biotechnology, 2018, 45, 467-480. | 1.4 | 23 |
| 480 | Orthologous CRISPRâ€“Cas9 enzymes for combinatorial genetic screens. Nature Biotechnology, 2018, 36, 179-189. | 9.4 | 216 |
| 481 | CRISPR Approaches to Small Molecule Target Identification. ACS Chemical Biology, 2018, 13, 366-375. | 1.6 | 68 |
| 482 | CRISPR-Cas9-based genome-wide screening of Toxoplasma gondii. Nature Protocols, 2018, 13, 307-323. | 5.5 | 46 |
| 483 | Use of CRISPR/Cas9 gene-editing tools for developing models in drug discovery. Drug Discovery Today, 2018, 23, 519-533. | 3.2 | 31 |
| 484 | Dual gene activation and knockout screen reveals directional dependencies in genetic networks. Nature Biotechnology, 2018, 36, 170-178. | 9.4 | 120 |
| 485 | A small-molecule inhibitor of the ubiquitin activating enzyme for cancer treatment. Nature Medicine, 2018, 24, 186-193. | 15.2 | 258 |
| 486 | In vivo simultaneous transcriptional activation of multiple genes in the brain using CRISPRâ€“dCas9-activator transgenic mice. Nature Neuroscience, 2018, 21, 440-446. | 7.1 | 218 |
| 487 | Split Cas9, Not Hairs â˜’ Advancing the Therapeutic Index of CRISPR Technology. Biotechnology Journal, 2018, 13, e1700432. | 1.8 | 26 |
| 488 | Multimode drug inducible CRISPR/Cas9 devices for transcriptional activation and genome editing. Nucleic Acids Research, 2018, 46, e25-e25. | 6.5 | 38 |
| 489 | Rapid and Scalable Characterization of CRISPR Technologies Using an E.Âcoli Cell-Free Transcription-Translation System. Molecular Cell, 2018, 69, 146-157.e3. | 4.5 | 165 |
| 490 | Promoter of lncRNA Gene PVT1 Is a Tumor-Suppressor DNA Boundary Element. Cell, 2018, 173, 1398-1412.e22. | 13.5 | 362 |
| 491 | Pulling the genome in opposite directions to dissect gene networks. Genome Biology, 2018, 19, 42. | 3.8 | 1 |
| 492 | Emerging Approaches for the Identification of Protein Targets of Small Molecules - A Practitionersâ€™ Perspective. Journal of Medicinal Chemistry, 2018, 61, 8504-8535. | 2.9 | 55 |
| 493 | Arrayed CRISPR screen with image-based assay reliably uncovers host genes required for coxsackievirus infection. Genome Research, 2018, 28, 859-868. | 2.4 | 45 |
| 494 | A Mixed-Effects Model for Powerful Association Tests in Integrative Functional Genomics. American Journal of Human Genetics, 2018, 102, 904-919. | 2.6 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 495 | RNA-guided transcriptional silencing in vivo with S. aureus CRISPR-Cas9 repressors. Nature Communications, 2018, 9, 1674. | 5.8 | 123 |
| 496 | CRISPR-based genomic tools for the manipulation of genetically intractable microorganisms. Nature Reviews Microbiology, 2018, 16, 333-339. | 13.6 | 88 |
| 497 | The long noncoding RNA lncZic2 drives the self-renewal of liver tumorâ€“initiating cells via the protein kinase C substrates MARCKS and MARCKSL1. Journal of Biological Chemistry, 2018, 293, 7982-7992. | 1.6 | 36 |
| 498 | Cancer CRISPR Screens In Vivo. Trends in Cancer, 2018, 4, 349-358. | 3.8 | 70 |
| 499 | Combinatorial pathway engineering using type Iâ€ CRISPR interference. Biotechnology and Bioengineering, 2018, 115, 1878-1883. | 1.7 | 23 |
| 500 | Transcriptome Engineering with RNA-Targeting Type VI-D CRISPR Effectors. Cell, 2018, 173, 665-676.e14. | 13.5 | 789 |
| 501 | Chemically Modified Cpf1-CRISPR RNAs Mediate Efficient Genome Editing in Mammalian Cells. Molecular Therapy, 2018, 26, 1228-1240. | 3.7 | 60 |
| 502 | Off and back-on again: a tumor suppressorâ€™s tale. Oncogene, 2018, 37, 3058-3069. | 2.6 | 12 |
| 503 | The physicistâ€™s guide to one of biotechnologyâ€™s hottest new topics: CRISPR-Cas. Physical Biology, 2018, 15, 041002. | 0.8 | 13 |
| 504 | Mouse Embryogenesis. Methods in Molecular Biology, 2018, , . | 0.4 | 0 |
| 505 | Genome Editing During Development Using the CRISPR-Cas Technology. Methods in Molecular Biology, 2018, 1752, 177-190. | 0.4 | 0 |
| 506 | Screening Regulatory Element Function with CRISPR/Cas9-based Epigenome Editing. Methods in Molecular Biology, 2018, 1767, 447-480. | 0.4 | 5 |
| 507 | Designing Epigenome Editors: Considerations of Biochemical and Locus Specificities. Methods in Molecular Biology, 2018, 1767, 65-87. | 0.4 | 2 |
| 508 | High efficient multisites genome editing in allotetraploid cotton (Gossypium hirsutum) using CRISPR/Cas9 system. Plant Biotechnology Journal, 2018, 16, 137-150. | 4.1 | 202 |
| 509 | CRISPR Editing in Biological and Biomedical Investigation. Journal of Cellular Biochemistry, 2018, 119, 52-61. | 1.2 | 17 |
| 510 | Combinatorial genetics in liver repopulation and carcinogenesis with a in vivo CRISPR activation platformâ€. Hepatology, 2018, 68, 663-676. | 3.6 | 63 |
| 511 | Genomes in Focus: Development and Applications of CRISPRâ€Cas9 Imaging Technologies. Angewandte Chemie - International Edition, 2018, 57, 4329-4337. | 7.2 | 67 |
| 512 | CRISPR-Cas9 based plant genome editing: Significance, opportunities and recent advances. Plant Physiology and Biochemistry, 2018, 131, 2-11. | 2.8 | 46 |

| # | Article | IF | Citations |
|---|---|---|---|
| 513 | PICKLES: the database of pooled in-vitro CRISPR knockout library essentiality screens. Nucleic Acids Research, 2018, 46, D776-D780. | 6.5 | 74 |
| 514 | Somatic Superenhancer Duplications and Hotspot Mutations Lead to Oncogenic Activation of the KLF5 Transcription Factor. Cancer Discovery, 2018, 8, 108-125. | 7.7 | 99 |
| 515 | CRISPR/Cas9-mediated noncoding RNA editing in human cancers. RNA Biology, 2018, 15, 35-43. | 1.5 | 78 |
| 516 | Emerging and evolving concepts in gene essentiality. Nature Reviews Genetics, 2018, 19, 34-49. | 7.7 | 230 |
| 517 | CRISPRi and CRISPRa Screens in Mammalian Cells for Precision Biology and Medicine. ACS Chemical Biology, 2018, 13, 406-416. | 1.6 | 248 |
| 518 | Genome Editing: Insights from Chemical Biology to Support Safe and Transformative Therapeutic Applications. ACS Chemical Biology, 2018, 13, 333-342. | 1.6 | 7 |
| 519 | A CRISPR reimagining: New twists and turns of CRISPR beyond the genomeâ€engineering revolution. Journal of Cellular Biochemistry, 2018, 119, 1299-1308. | 1.2 | 7 |
| 520 | Synthetic Lethal Vulnerabilities in KRAS-Mutant Cancers. Cold Spring Harbor Perspectives in Medicine, 2018, 8, a031518. | 2.9 | 63 |
| 521 | Harnessing CRISPR/Cas systems for programmable transcriptional and post-transcriptional regulation. Biotechnology Advances, 2018, 36, 295-310. | 6.0 | 87 |
| 522 | Next-Generation Sequencing of Genome-Wide CRISPR Screens. Methods in Molecular Biology, 2018, 1712, 203-216. | 0.4 | 36 |
| 523 | Next Generation Sequencing. Methods in Molecular Biology, 2018, , . | 0.4 | 2 |
| 524 | Identification of BABY BOOM homolog in bread wheat. Agri Gene, 2018, 7, 43-51. | 1.9 | 11 |
| 525 | Genome im Fokus: Entwicklung und Anwendungen von CRISPRâ€Cas9â€Bildgebungstechnologien. Angewandte Chemie, 2018, 130, 4412-4420. | 1.6 | 7 |
| 526 | Modeling Cancer in the CRISPR Era. Annual Review of Cancer Biology, 2018, 2, 111-131. | 2.3 | 15 |
| 527 | CRISPR/Cas9 library screening for drug target discovery. Journal of Human Genetics, 2018, 63, 179-186. | 1.1 | 70 |
| 528 | Multiplexed CRISPR/Cas9 Genome Editing and Gene Regulation Using Csy4 in Saccharomyces cerevisiae. ACS Synthetic Biology, 2018, 7, 10-15. | 1.9 | 82 |
| 529 | A heart-enriched antisense long non-coding RNA regulates the balance between cardiac and skeletal muscle triadin. Biochimica Et Biophysica Acta - Molecular Cell Research, 2018, 1865, 247-258. | 1.9 | 15 |
| 530 | CRISPR-Cas based antiviral strategies against HIV-1. Virus Research, 2018, 244, 321-332. | 1.1 | 69 |

| # | Article | IF | Citations |
|---|---|---|---|
| 531 | CRISPR editing in biological and biomedical investigation. Journal of Cellular Physiology, 2018, 233, 3875-3891. | 2.0 | 19 |
| 532 | Genome modularity and synthetic biology: Engineering systems. Progress in Biophysics and Molecular Biology, 2018, 132, 43-51. | 1.4 | 11 |
| 533 | Development of an integrated CRISPRi targeting Î”Np63 for treatment of squamous cell carcinoma. Oncotarget, 2018, 9, 29220-29232. | 0.8 | 27 |
| 534 | Centromere and Pericentromere Transcription: Roles and Regulation â€¦ in Sickness and in Health. Frontiers in Genetics, 2018, 9, 674. | 1.1 | 69 |
| 535 | Targeting Non-coding RNA in Vascular Biology and Disease. Frontiers in Physiology, 2018, 9, 1655. | 1.3 | 50 |
| 536 | Pooled extracellular receptor-ligand interaction screening using CRISPR activation. Genome Biology, 2018, 19, 205. | 3.8 | 44 |
| 537 | Noncoding RNAs as therapeutic targets in early stage diabetic kidney disease. Kidney Research and Clinical Practice, 2018, 37, 197-209. | 0.9 | 47 |
| 538 | Modulating the expression of long nonâ€coding <scp>RNA</scp> s for functional studies. EMBO Reports, 2018, 19, . | 2.0 | 57 |
| 539 | Genome-wide CRISPR Screens in Primary Human T Cells Reveal Key Regulators of Immune Function. Cell, 2018, 175, 1958-1971.e15. | 13.5 | 378 |
| 540 | CRISPR/Cas9 for Cancer Therapy: Hopes and Challenges. Biomedicines, 2018, 6, 105. | 1.4 | 76 |
| 541 | Long Non-coding RNAs as Local Regulators of Pancreatic Islet Transcription Factor Genes. Frontiers in Genetics, 2018, 9, 524. | 1.1 | 26 |
| 542 | Optimized libraries for CRISPR-Cas9 genetic screens with multiple modalities. Nature Communications, 2018, 9, 5416. | 5.8 | 535 |
| 543 | Applications of CRISPR-Cas in Bioengineering, Biotechnology, and Translational Research. CRISPR Journal, 2018, 1, 379-404. | 1.4 | 17 |
| 544 | Highâ€resolution mapping of cancer cell networks using coâ€functional interactions. Molecular Systems Biology, 2018, 14, e8594. | 3.2 | 61 |
| 545 | New Developments in CRISPR Technology: Improvements in Specificity and Efficiency. Current Pharmaceutical Biotechnology, 2018, 18, 1038-1054. | 0.9 | 12 |
| 546 | Chromatin Accessibility and Interactions in the Transcriptional Regulation of T Cells. Frontiers in Immunology, 2018, 9, 2738. | 2.2 | 36 |
| 547 | Pathway sensor-based functional genomics screening identifies modulators of neuronal activity. Scientific Reports, 2018, 8, 17597. | 1.6 | 7 |
| 548 | Blank spots on the map: some current questions on nuclear organization and genome architecture. Histochemistry and Cell Biology, 2018, 150, 579-592. | 0.8 | 24 |

| # | Article | IF | Citations |
|---|---|---|---|
| 549 | CBP Modulates Sensitivity to Dasatinib in Pre-BCR+ Acute Lymphoblastic Leukemia. Cancer Research, 2018, 78, 6497-6508. | 0.4 | 10 |
| 550 | Towards quantitative and multiplexed in vivo functional cancer genomics. Nature Reviews Genetics, 2018, 19, 741-755. | 7.7 | 45 |
| 551 | CRISPR/Cas9 gene-editing: Research technologies, clinical applications and ethical considerations. Seminars in Perinatology, 2018, 42, 487-500. | 1.1 | 50 |
| 552 | A Druggable Genome Screen Identifies Modifiers of Î±-Synuclein Levels via a Tiered Cross-Species Validation Approach. Journal of Neuroscience, 2018, 38, 9286-9301. | 1.7 | 49 |
| 553 | CRISPhieRmix: a hierarchical mixture model for CRISPR pooled screens. Genome Biology, 2018, 19, 159. | 3.8 | 36 |
| 554 | CRISPR-Mediated Programmable 3D Genome Positioning and Nuclear Organization. Cell, 2018, 175, 1405-1417.e14. | 13.5 | 164 |
| 555 | CRISPR Activation Screens Systematically Identify Factors that Drive Neuronal Fate and Reprogramming. Cell Stem Cell, 2018, 23, 758-771.e8. | 5.2 | 161 |
| 556 | Genome-wide screening for functional long noncoding RNAs in human cells by Cas9 targeting of splice sites. Nature Biotechnology, 2018, 36, 1203-1210. | 9.4 | 120 |
| 557 | CRISPR/Cas9 System: A Bacterial Tailor for Genomic Engineering. Genetics Research International, 2018, 2018, 1-17. | 2.0 | 19 |
| 558 | Stem Cells, Genome Editing, and the Path to Translational Medicine. Cell, 2018, 175, 615-632. | 13.5 | 105 |
| 559 | LncGata6 maintains stemness of intestinal stem cells and promotes intestinal tumorigenesis. Nature Cell Biology, 2018, 20, 1134-1144. | 4.6 | 101 |
| 560 | L1 retrotransposition in the soma: a field jumping ahead. Mobile DNA, 2018, 9, 22. | 1.3 | 63 |
| 562 | Microfluidic Flow Cell Array for Controlled Cell Deposition in Engineered Musculoskeletal Tissues. Tissue Engineering - Part C: Methods, 2018, 24, 546-556. | 1.1 | 8 |
| 563 | Robust Approaches to Generating Reliable Predictive Models in Systems Biology. RNA Technologies, 2018, , 301-312. | 0.2 | 1 |
| 564 | A Genetic Interaction Map of Insulin Production Identifies Mfi as an Inhibitor of Mitochondrial Fission. Endocrinology, 2018, 159, 3321-3330. | 1.4 | 1 |
| 565 | Targeted Genome Editing for Cotton Improvement. , 0, , . | | 8 |
| 566 | Synthetic transcription factors for cell fate reprogramming. Current Opinion in Genetics and Development, 2018, 52, 13-21. | 1.5 | 29 |
| 567 | Delivering CRISPR: a review of the challenges and approaches. Drug Delivery, 2018, 25, 1234-1257. | 2.5 | 776 |

| # | Article | IF | Citations |
|---|---|---|---|
| 568 | Metabolic Engineering of Saccharomyces cerevisiae Using a Trifunctional CRISPR/Cas System for Simultaneous Gene Activation, Interference, and Deletion. Methods in Enzymology, 2018, 608, 265-276. | 0.4 | 6 |
| 569 | Editing the Epigenome: Reshaping the Genomic Landscape. Annual Review of Genomics and Human Genetics, 2018, 19, 43-71. | 2.5 | 109 |
| 570 | Application of the CRISPR/Cas9 System to Drug Resistance in Breast Cancer. Advanced Science, 2018, 5, 1700964. | 5.6 | 61 |
| 571 | Identification of Epigenetic Regulators of DUX4-fl for Targeted Therapy of Facioscapulohumeral Muscular Dystrophy. Molecular Therapy, 2018, 26, 1797-1807. | 3.7 | 29 |
| 572 | Programmable sequential mutagenesis by inducible Cpf1 crRNA array inversion. Nature Communications, 2018, 9, 1903. | 5.8 | 9 |
| 573 | A CRISPRi screen in E. coli reveals sequence-specific toxicity of dCas9. Nature Communications, 2018, 9, 1912. | 5.8 | 203 |
| 574 | Novel internal regulators and candidate miRNAs within miR-379/miR-656 miRNA cluster can alter cellular phenotype of human glioblastoma. Scientific Reports, 2018, 8, 7673. | 1.6 | 25 |
| 575 | Applications of the CRISPR/Cas system beyond gene editing. Biology Methods and Protocols, 2018, 3, bpy002. | 1.0 | 21 |
| 576 | NuRD and CAF-1-mediated silencing of the D4Z4 array is modulated by DUX4-induced MBD3L proteins. ELife, 2018, 7, . | 2.8 | 47 |
| 577 | Genome Editing Redefines Precision Medicine in the Cardiovascular Field. Stem Cells International, 2018, 2018, 1-11. | 1.2 | 8 |
| 578 | Emerging Roles of Non-Coding RNA Transcription. Trends in Biochemical Sciences, 2018, 43, 654-667. | 3.7 | 116 |
| 579 | Pooled CRISPR interference screening enables genome-scale functional genomics study in bacteria with superior performance. Nature Communications, 2018, 9, 2475. | 5.8 | 168 |
| 580 | Is Pooled CRISPR-Screening the Dawn of a New Era for Functional Genomics. Advances in Experimental Medicine and Biology, 2018, 1068, 171-176. | 0.8 | 3 |
| 581 | Mouse medulloblastoma driven by CRISPR activation of cellular Myc. Scientific Reports, 2018, 8, 8733. | 1.6 | 17 |
| 582 | Platforms for Investigating LncRNA Functions. SLAS Technology, 2018, 23, 493-506. | 1.0 | 136 |
| 584 | Exploration of Benzothiazole Rhodacyanines as Allosteric Inhibitors of Proteinâ€“Protein Interactions with Heat Shock Protein 70 (Hsp70). Journal of Medicinal Chemistry, 2018, 61, 6163-6177. | 2.9 | 84 |
| 585 | Synthetic CRISPR-Cas gene activators for transcriptional reprogramming in bacteria. Nature Communications, 2018, 9, 2489. | 5.8 | 140 |
| 586 | Live-Cell Imaging of Chromatin Condensation Dynamics by CRISPR. IScience, 2018, 4, 216-235. | 1.9 | 23 |

| # | Article | IF | Citations |
|---|---|---|---|
| 587 | Identification of a transporter complex responsible for the cytosolic entry of nitrogen-containing bisphosphonates. ELife, 2018, 7, . | 2.8 | 42 |
| 588 | Targeting RAS-driven human cancer cells with antibodies to upregulated and essential cell-surface proteins. ELife, 2018, 7, . | 2.8 | 72 |
| 589 | RNA-dependent RNA targeting by CRISPR-Cas9. ELife, 2018, 7, . | 2.8 | 152 |
| 590 | CRISPR-Cas systems: ushering in the new genome editing era. Bioengineered, 2018, 9, 214-221. | 1.4 | 30 |
| 591 | Guiding Lights in Genome Editing for Inherited Retinal Disorders: Implications for Gene and Cell Therapy. Neural Plasticity, 2018, 2018, 1-15. | 1.0 | 29 |
| 592 | Functional Genomics. , 2018, , 77-88. | | 0 |
| 593 | Synthetic Lethal Networks for Precision Oncology: Promises and Pitfalls. Journal of Molecular Biology, 2018, 430, 2900-2912. | 2.0 | 21 |
| 594 | Targeted Genome Editing Techniques in C. elegans and Other Nematode Species. , 0, , 3-21. | | 0 |
| 595 | Development of Toolboxes for Precision Genome/Epigenome Editing and Imaging of Epigenetics. Chemical Record, 2018, 18, 1717-1726. | 2.9 | 5 |
| 596 | Developments in lncRNA drug discovery: where are we heading?. Expert Opinion on Drug Discovery, 2018, 13, 837-849. | 2.5 | 54 |
| 597 | CRISPRâ€“Cas9 genome editing in human cells occurs via the Fanconi anemia pathway. Nature Genetics, 2018, 50, 1132-1139. | 9.4 | 187 |
| 598 | Epigenome editing of microsatellite repeats defines tumor-specific enhancer functions and dependencies. Genes and Development, 2018, 32, 1008-1019. | 2.7 | 56 |
| 599 | Neuro-Immuno-Gene- and Genome-Editing-Therapy for Alzheimerâ€™s Disease: Are We There Yet?. Journal of Alzheimer's Disease, 2018, 65, 321-344. | 1.2 | 17 |
| 600 | Cell division cycle 7 kinase is a negative regulator of cell-mediated collagen degradation. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2018, 315, L360-L370. | 1.3 | 3 |
| 601 | Application of CRISPR for Pooled, Vector-based Functional Genomic Screening in Mammalian Cell Lines. , 0, , 209-222. | | 0 |
| 602 | Generation and Utilization of CRISPR/Cas9 Screening Libraries in Mammalian Cells. , 0, , 223-234. | | 1 |
| 603 | CRISPR/Cas9-based In Vivo Models of Cancer. , 0, , 315-336. | | 1 |
| 604 | Use of the CRISPR/Cas9 System for Genome Editing of Immune System Cells, Defense Against HIV-1 and Cancer Therapies. , 0, , 401-413. | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 605 | CRISPR-Based Perturbation of Gene Function in Drosophila Cells. , 2018, , 193-206. | | 0 |
| 606 | Small RNA-mediated prevention, diagnosis and therapies of cancer. , 2018, , 341-436. | | 0 |
| 607 | Applications of CRISPR/Cas System to Bacterial Metabolic Engineering. International Journal of Molecular Sciences, 2018, 19, 1089. | 1.8 | 108 |
| 608 | Genome Editing Weds CRISPR: What Is in It for Phytoremediation?. Plants, 2018, 7, 51. | 1.6 | 69 |
| 609 | CRISPRâ€“Cas9 Genetic Analysis of Virusâ€“Host Interactions. Viruses, 2018, 10, 55. | 1.5 | 20 |
| 610 | An enhanced CRISPR repressor for targeted mammalian gene regulation. Nature Methods, 2018, 15, 611-616. | 9.0 | 361 |
| 611 | Functional Interrogation of Primary Human T Cells via CRISPR Genetic Editing. Journal of Immunology, 2018, 201, 1586-1598. | 0.4 | 27 |
| 612 | An automated microfluidic gene-editing platform for deciphering cancer genes. Lab on A Chip, 2018, 18, 2300-2312. | 3.1 | 31 |
| 613 | Single-Cell Multi-omics: An Engine for New Quantitative Models of Gene Regulation. Trends in Genetics, 2018, 34, 653-665. | 2.9 | 86 |
| 614 | Mapping the Genetic Landscape of Human Cells. Cell, 2018, 174, 953-967.e22. | 13.5 | 226 |
| 615 | CRISPR-based reagents to study the influence of the epigenome on gene expression. Clinical and Experimental Immunology, 2018, 194, 9-16. | 1.1 | 9 |
| 616 | The KAT5-Acetyl-Histone4-Brd4 axis silences HIV-1 transcription and promotes viral latency. PLoS Pathogens, 2018, 14, e1007012. | 2.1 | 38 |
| 617 | Rapid Control of Genome Editing in Human Cells by Chemical-Inducible CRISPR-Cas Systems. Methods in Molecular Biology, 2018, 1772, 267-288. | 0.4 | 2 |
| 618 | Construction of CRISPR Libraries for Functional Screening. Methods in Molecular Biology, 2018, 1772, 139-150. | 0.4 | 2 |
| 619 | Novel Genetic Activation Screening in Liver Repopulation and Cancer: Now CRISPR Than Ever!. Hepatology, 2018, 68, 408-411. | 3.6 | 1 |
| 620 | CRISPR/dCas9-mediated transcriptional improvement of the biosynthetic gene cluster for the epothilone production in Myxococcus xanthus. Microbial Cell Factories, 2018, 17, 15. | 1.9 | 47 |
| 621 | Design principles for nuclease-deficient CRISPR-based transcriptional regulators. FEMS Yeast Research, 2018, 18, . | 1.1 | 34 |
| 622 | Carvacrol and human health: A comprehensive review. Phytotherapy Research, 2018, 32, 1675-1687. | 2.8 | 330 |

| # | Article | IF | Citations |
|---|---|---|---|
| 623 | Prospects for engineering dynamic CRISPRâ€“Cas transcriptional circuits to improve bioproduction. Journal of Industrial Microbiology and Biotechnology, 2018, 45, 481-490. | 1.4 | 14 |
| 625 | Atlastins remodel the endoplasmic reticulum for selective autophagy. Journal of Cell Biology, 2018, 217, 3354-3367. | 2.3 | 110 |
| 626 | A high-throughput screen of real-time ATP levels in individual cells reveals mechanisms of energy failure. PLoS Biology, 2018, 16, e2004624. | 2.6 | 47 |
| 627 | Anti-CRISPR-based biosensors in the yeast S. cerevisiae. Journal of Biological Engineering, 2018, 12, 11. | 2.0 | 24 |
| 628 | CRISPR Technology for Breast Cancer: Diagnostics, Modeling, and Therapy. Advanced Biology, 2018, 2, 1800132. | 3.0 | 11 |
| 629 | Improved sgRNA design in bacteria via genome-wide activity profiling. Nucleic Acids Research, 2018, 46, 7052-7069. | 6.5 | 73 |
| 630 | Exploring Long Noncoding RNAs in Glioblastoma: Regulatory Mechanisms and Clinical Potentials. International Journal of Genomics, 2018, 2018, 1-13. | 0.8 | 39 |
| 631 | Specificity of RNAi, LNA and CRISPRi as loss-of-function methods in transcriptional analysis. Nucleic Acids Research, 2018, 46, 5950-5966. | 6.5 | 101 |
| 632 | Genetic Epidemiology. Methods in Molecular Biology, 2018, , . | 0.4 | 1 |
| 633 | A Network of Noncoding Regulatory RNAs Acts in the Mammalian Brain. Cell, 2018, 174, 350-362.e17. | 13.5 | 485 |
| 634 | Unpackaging the genetics of mammalian fertility: strategies to identify the â€œreproductive genomeâ€â€. Biology of Reproduction, 2018, 99, 1119-1128. | 1.2 | 18 |
| 635 | NF-ÎºBâ€“Dependent Lymphoid Enhancer Co-option Promotes Renal Carcinoma Metastasis. Cancer Discovery, 2018, 8, 850-865. | 7.7 | 41 |
| 636 | Applications of CRISPR-Cas Enzymes in Cancer Therapeutics and Detection. Trends in Cancer, 2018, 4, 499-512. | 3.8 | 89 |
| 637 | From Identification to Function: Current Strategies to Prioritise and Follow-Up GWAS Results. Methods in Molecular Biology, 2018, 1793, 259-275. | 0.4 | 2 |
| 638 | Genome Editing. , 2018, , 19-31. | | 1 |
| 639 | CRISPR therapeutic tools for complex genetic disorders and cancer (Review). International Journal of Oncology, 2018, 53, 443-468. | 1.4 | 28 |
| 640 | Long Noncoding RNAs in the Immune Response. , 2018, , 107-131. | | 0 |
| 641 | CRISPRâ€Enabled Tools for Engineering Microbial Genomes and Phenotypes. Biotechnology Journal, 2018, 13, e1700586. | 1.8 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 642 | Straightforward Delivery of Linearized Double-Stranded DNA Encoding sgRNA and Donor DNA for the Generation of Single Nucleotide Variants Based on the CRISPR/Cas9 System. ACS Synthetic Biology, 2018, 7, 1651-1659. | 1.9 | 1 |
| 643 | 5â€² capped and 3â€² polyA-tailed sgRNAs enhance the efficiency of CRISPR-Cas9 system. Protein and Cell, 2019, 10, 223-228. | 4.8 | 17 |
| 644 | Genome editing in the mammalian brain using the CRISPRâ€“Cas system. Neuroscience Research, 2019, 141, 4-12. | 1.0 | 21 |
| 645 | Ribosome Profiling: Global Views of Translation. Cold Spring Harbor Perspectives in Biology, 2019, 11, a032698. | 2.3 | 205 |
| 646 | Functional Genomics via CRISPRâ€“Cas. Journal of Molecular Biology, 2019, 431, 48-65. | 2.0 | 62 |
| 647 | A CRISPRâ€“dCas Toolbox for Genetic Engineering and Synthetic Biology. Journal of Molecular Biology, 2019, 431, 34-47. | 2.0 | 225 |
| 648 | Temporal and Spatial Epigenome Editing Allows Precise Gene Regulation in Mammalian Cells. Journal of Molecular Biology, 2019, 431, 111-121. | 2.0 | 31 |
| 649 | Programmable activation of Bombyx gene expression using CRISPR/dCas9 fusion systems. Insect Science, 2019, 26, 983-990. | 1.5 | 9 |
| 650 | Exploring genetic interaction manifolds constructed from rich single-cell phenotypes. Science, 2019, 365, 786-793. | 6.0 | 155 |
| 651 | Systematic Evaluation of CRISPRa and CRISPRi Modalities Enables Development of a Multiplexed, Orthogonal Gene Activation and Repression System. ACS Synthetic Biology, 2019, 8, 1998-2006. | 1.9 | 41 |
| 652 | CRISPR Interference-Based Platform for Multimodal Genetic Screens in Human iPSC-Derived Neurons. Neuron, 2019, 104, 239-255.e12. | 3.8 | 288 |
| 653 | The Intricate Interplay between Epigenetic Events, Alternative Splicing and Noncoding RNA Deregulation in Colorectal Cancer. Cells, 2019, 8, 929. | 1.8 | 28 |
| 654 | Establishment of Primary Transgenic Human Airway Epithelial Cell Cultures to Study Respiratory Virusâ€“Host Interactions. Viruses, 2019, 11, 747. | 1.5 | 9 |
| 655 | CRISPR Tools for Systematic Studies of RNA Regulation. Cold Spring Harbor Perspectives in Biology, 2019, 11, a035386. | 2.3 | 22 |
| 656 | CRISPR/Cas9-mediated gfp gene inactivation in Arabidopsis suspension cells. Molecular Biology Reports, 2019, 46, 5735-5743. | 1.0 | 9 |
| 657 | Genomic Resolution of DLX-Orchestrated Transcriptional Circuits Driving Development of Forebrain GABAergic Neurons. Cell Reports, 2019, 28, 2048-2063.e8. | 2.9 | 68 |
| 658 | Strategies for in vivo reprogramming. Current Opinion in Cell Biology, 2019, 61, 9-15. | 2.6 | 19 |
| 659 | The emerging and uncultivated potential of CRISPR technology in plant science. Nature Plants, 2019, 5, 778-794. | 4.7 | 294 |

| # | Article | IF | Citations |
|---|---|---|---|
| 660 | Long Non-Coding RNA Function in CD4+ T Cells: What We Know and What Next?. Non-coding RNA, 2019, 5, 43. | 1.3 | 16 |
| 661 | Integrated analyses of murine breast cancer models reveal critical parallels with human disease. Nature Communications, 2019, 10, 3261. | 5.8 | 43 |
| 662 | Importance of genetic screens in precision oncology. ESMO Open, 2019, 4, e000505. | 2.0 | 10 |
| 663 | Cutting back malaria: CRISPR/Cas9 genome editing of Plasmodium. Briefings in Functional Genomics, 2019, 18, 281-289. | 1.3 | 38 |
| 664 | CRISPRâ€“Cas Gene Editing for Neurological Disease. , 2019, , 365-376. | | 1 |
| 665 | SOX4 regulates invasion of bladder cancer cells via repression of WNT5a. International Journal of Oncology, 2019, 55, 359-370. | 1.4 | 20 |
| 666 | Optical Pooled Screens in Human Cells. Cell, 2019, 179, 787-799.e17. | 13.5 | 170 |
| 667 | CRISPR-Cas12a Nucleases Bind Flexible DNA Duplexes without RNA/DNA Complementarity. ACS Omega, 2019, 4, 17140-17147. | 1.6 | 14 |
| 668 | Compromised function of the ESCRT pathway promotes endolysosomal escape of tau seeds and propagation of tau aggregation. Journal of Biological Chemistry, 2019, 294, 18952-18966. | 1.6 | 103 |
| 670 | CRISPR-Cas9-mediated loss-of-function screens. Frontiers in Life Science: Frontiers of Interdisciplinary Research in the Life Sciences, 2019, 12, 1-13. | 1.1 | 3 |
| 671 | PRMT5 methylome profiling uncovers a direct link to splicing regulation in acute myeloid leukemia. Nature Structural and Molecular Biology, 2019, 26, 999-1012. | 3.6 | 105 |
| 672 | STING-Mediated IFI16 Degradation Negatively Controls Type I Interferon Production. Cell Reports, 2019, 29, 1249-1260.e4. | 2.9 | 52 |
| 673 | Structural mechanism of a Rag GTPase activation checkpoint by the lysosomal folliculin complex. Science, 2019, 366, 971-977. | 6.0 | 108 |
| 674 | Reprogramming of Fibroblasts to Oligodendrocyte Progenitor-like Cells Using CRISPR/Cas9-Based Synthetic Transcription Factors. Stem Cell Reports, 2019, 13, 1053-1067. | 2.3 | 21 |
| 675 | Anti-CRISPR AcrIIA5 Potently Inhibits All Cas9 Homologs Used for Genome Editing. Cell Reports, 2019, 29, 1739-1746.e5. | 2.9 | 35 |
| 676 | Review of high-content screening applications in toxicology. Archives of Toxicology, 2019, 93, 3387-3396. | 1.9 | 54 |
| 677 | Prediction of sgRNA on-target activity in bacteria by deep learning. BMC Bioinformatics, 2019, 20, 517. | 1.2 | 19 |
| 678 | Mitochondria in Health and in Sickness. Advances in Experimental Medicine and Biology, 2019, , . | 0.8 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 679 | Microbial CRISPRi and CRISPRa Systems for Metabolic Engineering. Biotechnology and Bioprocess Engineering, 2019, 24, 579-591. | 1.4 | 31 |
| 680 | Genomically informed small-molecule drugs overcome resistance to a sustained-release formulation of an engineered death receptor agonist in patient-derived tumor models. Science Advances, 2019, 5, eaaw9162. | 4.7 | 11 |
| 681 | Functional Dissection of pri-miR-290~295 in Dgcr8 Knockout Mouse Embryonic Stem Cells. International Journal of Molecular Sciences, 2019, 20, 4345. | 1.8 | 3 |
| 682 | Targeted delivery of CRISPR interference system against Fabp4 to white adipocytes ameliorates obesity, inflammation, hepatic steatosis, and insulin resistance. Genome Research, 2019, 29, 1442-1452. | 2.4 | 54 |
| 683 | Targeting HIV-1 proviral transcription. Current Opinion in Virology, 2019, 38, 89-96. | 2.6 | 5 |
| 684 | Mitigation of off-target toxicity in CRISPR-Cas9 screens for essential non-coding elements. Nature Communications, 2019, 10, 4063. | 5.8 | 104 |
| 685 | SLC19A1 transports immunoreactive cyclic dinucleotides. Nature, 2019, 573, 434-438. | 13.7 | 230 |
| 686 | Off-target toxicity is a common mechanism of action of cancer drugs undergoing clinical trials. Science Translational Medicine, 2019, 11, . | 5.8 | 418 |
| 687 | Genetically Engineered Mouse Models of Gliomas: Technological Developments for Translational Discoveries. Cancers, 2019, 11, 1335. | 1.7 | 31 |
| 688 | Molecular mechanism for the multiple sclerosis risk variant rs17594362. Human Molecular Genetics, 2019, 28, 3600-3609. | 1.4 | 5 |
| 689 | Cooperation of cancer drivers with regulatory germline variants shapes clinical outcomes. Nature Communications, 2019, 10, 4128. | 5.8 | 51 |
| 690 | Enhanced CRISPR-based DNA demethylation by Casilio-ME-mediated RNA-guided coupling of methylcytosine oxidation and DNA repair pathways. Nature Communications, 2019, 10, 4296. | 5.8 | 41 |
| 691 | A Broad Application of CRISPR Cas9 in Infectious Diseases of Central Nervous System. Journal of NeuroImmune Pharmacology, 2019, 14, 578-594. | 2.1 | 5 |
| 692 | CRISPR technologies for stem cell engineering and regenerative medicine. Biotechnology Advances, 2019, 37, 107447. | 6.0 | 59 |
| 693 | Mapping human cell phenotypes to genotypes with single-cell genomics. Science, 2019, 365, 1401-1405. | 6.0 | 71 |
| 694 | Targeted genomic CRISPR-Cas9 screen identifies MAP4K4 as essential for glioblastoma invasion. Scientific Reports, 2019, 9, 14020. | 1.6 | 38 |
| 695 | Functions and Regulatory Mechanisms of lncRNAs in Skeletal Myogenesis, Muscle Disease and Meat Production. Cells, 2019, 8, 1107. | 1.8 | 71 |
| 696 | A Brief Overview of lncRNAs in Endothelial Dysfunction-Associated Diseases: From Discovery to Characterization. Epigenomes, 2019, 3, 20. | 0.8 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 697 | Validation of a Miniaturized Permeability Assay Compatible with CRISPR-Mediated Genome-Wide Screen. Scientific Reports, 2019, 9, 14238. | 1.6 | 1 |
| 698 | A CRISPR Screen Identifies LAPTM4A and TM9SF Proteins as Glycolipid-Regulating Factors. IScience, 2019, 11, 409-424. | 1.9 | 53 |
| 699 | CRISPRâ€“Cas: a tool for cancer research and therapeutics. Nature Reviews Clinical Oncology, 2019, 16, 281-295. | 12.5 | 127 |
| 700 | Integrative single-cell analysis. Nature Reviews Genetics, 2019, 20, 257-272. | 7.7 | 932 |
| 701 | CRISPR-Based Tools in Immunity. Annual Review of Immunology, 2019, 37, 571-597. | 9.5 | 38 |
| 702 | Integrative analysis of pooled CRISPR genetic screens using MAGeCKFlute. Nature Protocols, 2019, 14, 756-780. | 5.5 | 260 |
| 703 | CRISPR-Cas9 for cancer therapy: Opportunities and challenges. Cancer Letters, 2019, 447, 48-55. | 3.2 | 135 |
| 704 | Guide RNAs with embedded barcodes boost CRISPR-pooled screens. Genome Biology, 2019, 20, 20. | 3.8 | 50 |
| 705 | Improved n -Butanol Production from Clostridium cellulovorans by Integrated Metabolic and Evolutionary Engineering. Applied and Environmental Microbiology, 2019, 85, . | 1.4 | 67 |
| 707 | Progress and Challenges: Development and Implementation of CRISPR/Cas9 Technology in Filamentous Fungi. Computational and Structural Biotechnology Journal, 2019, 17, 761-769. | 1.9 | 53 |
| 708 | CRISPR/Cas9 guided genome and epigenome engineering and its therapeutic applications in immune mediated diseases. Seminars in Cell and Developmental Biology, 2019, 96, 32-43. | 2.3 | 9 |
| 709 | A CRISPR Interference of CBP and p300 Selectively Induced Synthetic Lethality in Bladder Cancer Cells In Vitro. International Journal of Biological Sciences, 2019, 15, 1276-1286. | 2.6 | 24 |
| 710 | Targeted DNA transposition in vitro using a dCas9-transposase fusion protein. Nucleic Acids Research, 2019, 47, 8126-8135. | 6.5 | 22 |
| 711 | Development of CRISPR-Cas systems for genome editing and beyond. Quarterly Reviews of Biophysics, 2019, 52, . | 2.4 | 108 |
| 712 | Transcriptional States and Chromatin Accessibility Underlying Human Erythropoiesis. Cell Reports, 2019, 27, 3228-3240.e7. | 2.9 | 122 |
| 713 | Large scale control and programming of gene expression using CRISPR. Seminars in Cell and Developmental Biology, 2019, 96, 124-132. | 2.3 | 5 |
| 714 | KRAS <sup>G12C</sup> inhibition produces a driver-limited state revealing collateral dependencies. Science Signaling, 2019, 12, . | 1.6 | 123 |
| 715 | Genome Editing as a Treatment for the Most Prevalent Causative Genes of Autosomal Dominant Retinitis Pigmentosa. International Journal of Molecular Sciences, 2019, 20, 2542. | 1.8 | 40 |

| # | Article | IF | Citations |
|---|---|---|---|
| 716 | Role of long non-coding RNAs in lymphoma: A systematic review and clinical perspectives. Critical Reviews in Oncology/Hematology, 2019, 141, 13-22. | 2.0 | 10 |
| 717 | Lentiviral CRISPR Epigenome Editing of Inflammatory Receptors as a Gene Therapy Strategy for Disc Degeneration. Human Gene Therapy, 2019, 30, 1161-1175. | 1.4 | 44 |
| 718 | The giant titin: how to evaluate its role in cardiomyopathies. Journal of Muscle Research and Cell Motility, 2019, 40, 159-167. | 0.9 | 11 |
| 719 | Improved drought stress tolerance in Arabidopsis by CRISPR/dCas9 fusion with a Histone AcetylTransferase. Scientific Reports, 2019, 9, 8080. | 1.6 | 157 |
| 720 | A CRISPR Activation Screen Identifies Genes That Protect against Zika Virus Infection. Journal of Virology, 2019, 93, . | 1.5 | 50 |
| 721 | Identification of Renal Long Non-coding RNA RP11-2B6.2 as a Positive Regulator of Type I Interferon Signaling Pathway in Lupus Nephritis. Frontiers in Immunology, 2019, 10, 975. | 2.2 | 52 |
| 722 | Gene editing based hearing impairment research and therapeutics. Neuroscience Letters, 2019, 709, 134326. | 1.0 | 3 |
| 723 | CRISPR/Cas9-based epigenome editing: An overview of dCas9-based tools with special emphasis on off-target activity. Methods, 2019, 164-165, 109-119. | 1.9 | 42 |
| 724 | A CRISPR Screen Using Subtilase Cytotoxin Identifies SLC39A9 as a Glycan-Regulating Factor. IScience, 2019, 15, 407-420. | 1.9 | 34 |
| 725 | Ezh2-dCas9 and KRAB-dCas9 enable engineering of epigenetic memory in a context-dependent manner. Epigenetics and Chromatin, 2019, 12, 26. | 1.8 | 101 |
| 726 | Computational Methods for Mapping, Assembly and Quantification for Coding and Non-coding Transcripts. Computational and Structural Biotechnology Journal, 2019, 17, 628-637. | 1.9 | 25 |
| 727 | Imaging-based pooled CRISPR screening reveals regulators of lncRNA localization. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10842-10851. | 3.3 | 79 |
| 728 | Transcriptional repression of endogenous genes in BmE cells using CRISPRi system. Insect Biochemistry and Molecular Biology, 2019, 111, 103172. | 1.2 | 4 |
| 729 | â€˜Artificial spermatidâ€™-mediated genome editingâ€. Biology of Reproduction, 2019, 101, 538-548. | 1.2 | 8 |
| 730 | Molecular recording of mammalian embryogenesis. Nature, 2019, 570, 77-82. | 13.7 | 257 |
| 731 | The <scp>CRIPSR</scp>/Cas geneâ€editing systemâ€”an immature but useful toolkit for experimental and clinical medicine. Animal Models and Experimental Medicine, 2019, 2, 5-8. | 1.3 | 7 |
| 732 | In vivo Application of the REMOTE-control System for the Manipulation of Endogenous Gene Expression. Journal of Visualized Experiments, 2019, , . | 0.2 | 2 |
| 733 | CRISPRai for simultaneous gene activation and inhibition to promote stem cell chondrogenesis and calvarial bone regeneration. Nucleic Acids Research, 2019, 47, e74-e74. | 6.5 | 48 |

| # | Article | IF | Citations |
|---|---|---|---|
| 734 | Discovery of a stable expression hot spot in the genome of Chinese hamster ovary cells using lentivirus-based random integration. Biotechnology and Biotechnological Equipment, 2019, 33, 605-612. | 0.5 | 10 |
| 735 | Beta-binomial modeling of CRISPR pooled screen data identifies target genes with greater sensitivity and fewer false negatives. Genome Research, 2019, 29, 999-1008. | 2.4 | 32 |
| 736 | Molecular dissection of box jellyfish venom cytotoxicity highlights an effective venom antidote. Nature Communications, 2019, 10, 1655. | 5.8 | 35 |
| 737 | Reversible Disruption of Specific Transcription Factor-DNA Interactions Using CRISPR/Cas9. Molecular Cell, 2019, 74, 622-633.e4. | 4.5 | 45 |
| 738 | ETV6-RUNX1 interacts with a region in SPIB intron 1 to regulate gene expression in pre-B-cell acute lymphoblastic leukemia. Experimental Hematology, 2019, 73, 50-63.e2. | 0.2 | 6 |
| 739 | Single-Cell RNA-Sequencing-Based CRISPRi Screening Resolves Molecular Drivers of Early Human Endoderm Development. Cell Reports, 2019, 27, 708-718.e10. | 2.9 | 81 |
| 740 | Perspectives on gene expression regulation techniques in Drosophila. Journal of Genetics and Genomics, 2019, 46, 213-220. | 1.7 | 6 |
| 741 | Genome-wide CRISPR-Cas9 screening in mammalian cells. Methods, 2019, 164-165, 29-35. | 1.9 | 49 |
| 742 | CRISPR/Cas9 â€“ An evolving biological tool kit for cancer biology and oncology. Npj Precision Oncology, 2019, 3, 8. | 2.3 | 61 |
| 743 | Application of CRISPR/Cas9-Based Gene Editing in HIV-1/AIDS Therapy. Frontiers in Cellular and Infection Microbiology, 2019, 9, 69. | 1.8 | 112 |
| 744 | Reduced apoptosis in Chinese hamster ovary cells via optimized CRISPR interference. Biotechnology and Bioengineering, 2019, 116, 1813-1819. | 1.7 | 39 |
| 745 | Applications of CRISPR Technologies Across the Food Supply Chain. Annual Review of Food Science and Technology, 2019, 10, 133-150. | 5.1 | 38 |
| 746 | Genome Editing with mRNA Encoding ZFN, TALEN, and Cas9. Molecular Therapy, 2019, 27, 735-746. | 3.7 | 148 |
| 747 | Applications of CRISPR systems in respiratory health: Entering a new â€˜red penâ€™ era in genome editing. Respirology, 2019, 24, 628-637. | 1.3 | 13 |
| 748 | CRISPR genomic screening informs geneâ€“environment interactions. Current Opinion in Toxicology, 2019, 18, 46-53. | 2.6 | 6 |
| 749 | Overexpressing Long Noncoding RNAs Using Gene-activating CRISPR. Journal of Visualized Experiments, 2019, , . | 0.2 | 5 |
| 750 | Epigenetics and epigenomics in diabetic kidney disease and metabolic memory. Nature Reviews Nephrology, 2019, 15, 327-345. | 4.1 | 327 |
| 751 | Big science and big data in nephrology. Kidney International, 2019, 95, 1326-1337. | 2.6 | 56 |

| # | Article | IF | Citations |
|---|---|---|---|
| 752 | Site-specific integration of light chain and heavy chain genes of antibody into CHO-K1 stable hot spot and detection of antibody and fusion protein expression level. Preparative Biochemistry and Biotechnology, 2019, 49, 384-390. | 1.0 | 11 |
| 753 | CRISPR links to long noncoding RNA function in mice: A practical approach. Vascular Pharmacology, 2019, 114, 1-12. | 1.0 | 9 |
| 755 | Rapid and Simple Screening of CRISPR Guide RNAs (gRNAs) in Cultured Cells Using Adeno-Associated Viral (AAV) Vectors. Methods in Molecular Biology, 2019, 1961, 111-126. | 0.4 | 10 |
| 756 | Single-Cell Heterogeneity Analysis and CRISPR Screen Identify Key Î²-Cell-Specific Disease Genes. Cell Reports, 2019, 26, 3132-3144.e7. | 2.9 | 90 |
| 757 | Systems immunology: Integrating multi-omics data to infer regulatory networks and hidden drivers of immunity. Current Opinion in Systems Biology, 2019, 15, 19-29. | 1.3 | 32 |
| 758 | A KLF6-driven transcriptional network links lipid homeostasis and tumour growth in renal carcinoma. Nature Communications, 2019, 10, 1152. | 5.8 | 60 |
| 759 | CRISPR-mediated activation of endogenous BST-2/tetherin expression inhibits wild-type HIV-1 production. Scientific Reports, 2019, 9, 3134. | 1.6 | 17 |
| 760 | The lncRNA TP73-AS1 is linked to aggressiveness in glioblastoma and promotes temozolomide resistance in glioblastoma cancer stem cells. Cell Death and Disease, 2019, 10, 246. | 2.7 | 129 |
| 761 | A Practical Guide to Genome Editing Using Targeted Nuclease Technologies. , 2019, 9, 665-714. | | 7 |
| 762 | Cellular response to small molecules that selectively stall protein synthesis by the ribosome. PLoS Genetics, 2019, 15, e1008057. | 1.5 | 31 |
| 763 | Applications of Lgr5-Positive Cochlear Progenitors (LCPs) to the Study of Hair Cell Differentiation. Frontiers in Cell and Developmental Biology, 2019, 7, 14. | 1.8 | 32 |
| 764 | Genomic and epigenomic mapping of leptin-responsive neuronal populations involved in body weight regulation. Nature Metabolism, 2019, 1, 475-484. | 5.1 | 17 |
| 765 | Molecular mechanism of the RNA helicase DHX37 and its activation by UTP14A in ribosome biogenesis. Rna, 2019, 25, 685-701. | 1.6 | 33 |
| 766 | Targeted Transcriptional Activation in Plants Using a Potent Dead Cas9â€“Derived Synthetic Gene Activator. Current Protocols in Molecular Biology, 2019, 127, e89. | 2.9 | 10 |
| 767 | Toxins Utilize the Endoplasmic Reticulum-Associated Protein Degradation Pathway in Their Intoxication Process. International Journal of Molecular Sciences, 2019, 20, 1307. | 1.8 | 32 |
| 768 | Increasing the specificity of CRISPR systems with engineered RNA secondary structures. Nature Biotechnology, 2019, 37, 657-666. | 9.4 | 252 |
| 769 | Lentiviral Vector Platform for the Efficient Delivery of Epigenome-editing Tools into Human Induced Pluripotent Stem Cell-derived Disease Models. Journal of Visualized Experiments, 2019, , . | 0.2 | 9 |
| 770 | CRISPR-mediated gene editing for the surgeon scientist. Surgery, 2019, 166, 129-137. | 1.0 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 771 | Liver Cancer Gene Discovery Using Gene Targeting, Sleeping Beauty, and CRISPR/Cas9. Seminars in Liver Disease, 2019, 39, 261-274. | 1.8 | 21 |
| 772 | MicroRNAs tame CRISPRâ€“Cas9. Nature Cell Biology, 2019, 21, 416-417. | 4.6 | 3 |
| 773 | Endothelial cells revealed as chondroclasts. Nature Cell Biology, 2019, 21, 417-419. | 4.6 | 2 |
| 774 | Multiplexed and tunable transcriptional activation by promoter insertion using nuclease-assisted vector integration. Nucleic Acids Research, 2019, 47, e67-e67. | 6.5 | 8 |
| 775 | Disruptive Technology: CRISPR/Cas-Based Tools and Approaches. Molecular Diagnosis and Therapy, 2019, 23, 187-200. | 1.6 | 22 |
| 776 | Targeted Therapeutic Genome Engineering: Opportunities and Bottlenecks in Medical Translation. ACS Symposium Series, 2019, , 1-34. | 0.5 | 0 |
| 777 | Functional-genetic approaches to understanding drug response and resistance. Current Opinion in Genetics and Development, 2019, 54, 41-47. | 1.5 | 3 |
| 778 | Unique features in the intracellular transport of typhoid toxin revealed by a genome-wide screen. PLoS Pathogens, 2019, 15, e1007704. | 2.1 | 33 |
| 779 | DNA stretching induces Cas9 off-target activity. Nature Structural and Molecular Biology, 2019, 26, 185-192. | 3.6 | 105 |
| 780 | Identification of Novel Regulatory Genes in APAP Induced Hepatocyte Toxicity by a Genome-Wide CRISPR-Cas9 Screen. Scientific Reports, 2019, 9, 1396. | 1.6 | 8 |
| 781 | Evidence for an Integrated Gene Repression Mechanism Based on mRNA Isoform Toggling in Human Cells. G3: Genes, Genomes, Genetics, 2019, 9, 1045-1053. | 0.8 | 25 |
| 782 | Tracing cellular heterogeneity in pooled genetic screens via multi-level barcoding. BMC Genomics, 2019, 20, 107. | 1.2 | 15 |
| 784 | A microRNA-inducible CRISPRâ€“Cas9 platform serves as a microRNA sensor and cell-type-specific genome regulation tool. Nature Cell Biology, 2019, 21, 522-530. | 4.6 | 117 |
| 785 | Breast cancer cells rely on environmental pyruvate to shape the metastatic niche. Nature, 2019, 568, 117-121. | 13.7 | 213 |
| 786 | A CRISPR Interference Platform for Efficient Genetic Repression in Candida albicans. MSphere, 2019, 4, . | 1.3 | 49 |
| 787 | Protocols for CRISPR-Cas9 Screening in Lymphoma Cell Lines. Methods in Molecular Biology, 2019, 1956, 337-350. | 0.4 | 11 |
| 788 | Site-specific manipulation of Arabidopsis loci using CRISPR-Cas9 SunTag systems. Nature Communications, 2019, 10, 729. | 5.8 | 215 |
| 789 | Heterochromatin anomalies and double-stranded RNA accumulation underlie C9orf72 poly(PR) toxicity. Science, 2019, 363, . | 6.0 | 181 |

| # | Article | IF | Citations |
|---|---|---|---|
| 790 | New factors for protein transport identified by a genome-wide CRISPRi screen in mammalian cells. Journal of Cell Biology, 2019, 218, 3861-3879. | 2.3 | 25 |
| 791 | Beyond classic editing: innovative CRISPR approaches for functional studies of long non-coding RNA. Biology Methods and Protocols, 2019, 4, bpz017. | 1.0 | 16 |
| 793 | microRNA-22 promotes megakaryocyte differentiation through repression of its target, GFI1. Blood Advances, 2019, 3, 33-46. | 2.5 | 14 |
| 794 | Advances in Plant Transgenics: Methods and Applications. , 2019, , . | | 2 |
| 795 | Circ-HuR suppresses HuR expression and gastric cancer progression by inhibiting CNBP transactivation. Molecular Cancer, 2019, 18, 158. | 7.9 | 157 |
| 796 | Application of CRISPR genetic screens to investigate neurological diseases. Molecular Neurodegeneration, 2019, 14, 41. | 4.4 | 25 |
| 797 | Chemogenetic interactions in human cancer cells. Computational and Structural Biotechnology Journal, 2019, 17, 1318-1325. | 1.9 | 8 |
| 798 | Multi-functional genome-wide CRISPR system for high throughput genotypeâ€“phenotype mapping. Nature Communications, 2019, 10, 5794. | 5.8 | 104 |
| 799 | Novel gRNA design pipeline to develop broad-spectrum CRISPR/Cas9 gRNAs for safe targeting of the HIV-1 quasispecies in patients. Scientific Reports, 2019, 9, 17088. | 1.6 | 23 |
| 800 | CRISPR-based Activation of Endogenous Neurotrophic Genes in Adipose Stem Cell Sheets to Stimulate Peripheral Nerve Regeneration. Theranostics, 2019, 9, 6099-6111. | 4.6 | 44 |
| 802 | Transcriptional control by enhancers and enhancer RNAs. Transcription, 2019, 10, 171-186. | 1.7 | 49 |
| 803 | Effective CRISPR interference of an endogenous gene via a single transgene in mice. Scientific Reports, 2019, 9, 17312. | 1.6 | 25 |
| 804 | Advancing CRISPR-Based Programmable Platforms beyond Genome Editing in Mammalian Cells. ACS Synthetic Biology, 2019, 8, 2607-2619. | 1.9 | 5 |
| 805 | Long Non-coding RNA DANCR as an Emerging Therapeutic Target in Human Cancers. Frontiers in Oncology, 2019, 9, 1225. | 1.3 | 64 |
| 806 | The MITF-SOX10 regulated long non-coding RNA DIRC3 is a melanoma tumour suppressor. PLoS Genetics, 2019, 15, e1008501. | 1.5 | 52 |
| 807 | Dead Cas Systems: Types, Principles, and Applications. International Journal of Molecular Sciences, 2019, 20, 6041. | 1.8 | 74 |
| 809 | Reading and writing: the evolution of molecular pain genetics. Pain, 2019, 160, 2177-2185. | 2.0 | 2 |
| 810 | Functional genomic approaches to elucidate the role of enhancers during development. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2019, 12, e1467. | 6.6 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 811 | Leaky endosomes push tau over the seed limit. Journal of Biological Chemistry, 2019, 294, 18967-18968. | 1.6 | 5 |
| 812 | Understanding CRISPR/Cas9: A Magnificent Tool for Plant Genome Editing. , 2019, , . | | 1 |
| 813 | The Biology of mRNA: Structure and Function. Advances in Experimental Medicine and Biology, 2019, , . | 0.8 | 3 |
| 814 | Gene therapy for visual loss: Opportunities and concerns. Progress in Retinal and Eye Research, 2019, 68, 31-53. | 7.3 | 78 |
| 815 | RNAi/CRISPR Screens: from a Pool to a Valid Hit. Trends in Biotechnology, 2019, 37, 38-55. | 4.9 | 90 |
| 816 | Systematic genetic mapping of necroptosis identifies SLC39A7 as modulator of death receptor trafficking. Cell Death and Differentiation, 2019, 26, 1138-1155. | 5.0 | 26 |
| 817 | Creation of versatile cloning platforms for transgene expression and dCas9-based epigenome editing. Nucleic Acids Research, 2019, 47, e23-e23. | 6.5 | 27 |
| 819 | Cancer Gene Discovery: Past to Present. Methods in Molecular Biology, 2019, 1907, 1-15. | 0.4 | 1 |
| 820 | CRISPR/Cas9-Based Positive Screens for Cancer-Related Traits. Methods in Molecular Biology, 2019, 1907, 137-144. | 0.4 | 4 |
| 821 | CRISPRâ€“Cas9 genome engineering of primary CD4+ T cells for the interrogation of HIVâ€“host factor interactions. Nature Protocols, 2019, 14, 1-27. | 5.5 | 98 |
| 822 | CRISPR RNA-guided autonomous delivery of Cas9. Nature Structural and Molecular Biology, 2019, 26, 14-24. | 3.6 | 27 |
| 823 | CRISPR-Mediated Approaches to Regulate YAP/TAZ Levels. Methods in Molecular Biology, 2019, 1893, 203-214. | 0.4 | 0 |
| 824 | To kill a piroplasm: genetic technologies to advance drug discovery and target identification in Babesia. International Journal for Parasitology, 2019, 49, 153-163. | 1.3 | 15 |
| 825 | <scp>CRISPR</scp>/Casâ€based screening of a gene activation library in Saccharomyces cerevisiae identifies a crucial role of <scp>OLE</scp>1 in thermotolerance. Microbial Biotechnology, 2019, 12, 1154-1163. | 2.0 | 34 |
| 826 | CRISPR-DT: designing gRNAs for the CRISPR-Cpf1 system with improved target efficiency and specificity. Bioinformatics, 2019, 35, 2783-2789. | 1.8 | 62 |
| 827 | Metabolic engineering of bacterial strains using CRISPR/Cas9 systems for biosynthesis of value-added products. Food Bioscience, 2019, 28, 125-132. | 2.0 | 32 |
| 828 | Enabling genetic analysis of diverse bacteria with Mobile-CRISPRi. Nature Microbiology, 2019, 4, 244-250. | 5.9 | 163 |
| 829 | Reiterative Enrichment and Authentication of CRISPRi Targets (REACT) identifies the proteasome as a key contributor to HIV-1 latency. PLoS Pathogens, 2019, 15, e1007498. | 2.1 | 46 |

| # | Article | IF | Citations |
|---|---|---|---|
| 830 | CRISPR-Cas9 Circular Permutants as Programmable Scaffolds for Genome Modification. Cell, 2019, 176, 254-267.e16. | 13.5 | 73 |
| 831 | The histone H3 Lys 27 demethylase KDM6B promotes migration and invasion of glioma cells partly by regulating the expression of SNAI1. Neurochemistry International, 2019, 124, 123-129. | 1.9 | 24 |
| 832 | Precision Control of CRISPR-Cas9 Using Small Molecules and Light. Biochemistry, 2019, 58, 234-244. | 1.2 | 92 |
| 833 | CRISPRâ€“Cas9 a boon or bane: the bumpy road ahead to cancer therapeutics. Cancer Cell International, 2019, 19, 12. | 1.8 | 46 |
| 834 | Multistage Delivery Nanoparticle Facilitates Efficient CRISPR/dCas9 Activation and Tumor Growth Suppression In Vivo. Advanced Science, 2019, 6, 1801423. | 5.6 | 128 |
| 835 | CRISPRâ€“Cas9 in genome editing: Its function and medical applications. Journal of Cellular Physiology, 2019, 234, 5751-5761. | 2.0 | 29 |
| 836 | Efficient CRISPR/Cas9â€Mediated Mutagenesis in Primary Murine T Lymphocytes. Current Protocols in Immunology, 2019, 124, e62. | 3.6 | 13 |
| 838 | A New Tool for Inducible Gene Expression in Caenorhabditis elegans. Genetics, 2019, 211, 419-430. | 1.2 | 18 |
| 839 | New Technologies To Enhance In Vivo Reprogramming for Regenerative Medicine. Trends in Biotechnology, 2019, 37, 604-617. | 4.9 | 23 |
| 840 | A Road Map to Personalizing Targeted Cancer Therapies Using Synthetic Lethality. Trends in Cancer, 2019, 5, 11-29. | 3.8 | 21 |
| 841 | A revolutionary tool: CRISPR technology plays an important role in construction of intelligentized gene circuits. Cell Proliferation, 2019, 52, e12552. | 2.4 | 7 |
| 842 | Functional Genomics for Cancer Research: Applications In Vivo and In Vitro. Annual Review of Cancer Biology, 2019, 3, 345-363. | 2.3 | 9 |
| 843 | Prediction of CRISPR sgRNA Activity Using a Deep Convolutional Neural Network. Journal of Chemical Information and Modeling, 2019, 59, 615-624. | 2.5 | 64 |
| 844 | Transcriptional activation of fucosyltransferase (FUT) genes using the CRISPR-dCas9-VPR technology reveals potent N-glycome alterations in colorectal cancer cells. Glycobiology, 2019, 29, 137-150. | 1.3 | 27 |
| 845 | Quantitative proteomics analysis identifies MUC1 as an effect sensor of EGFR inhibition. Oncogene, 2019, 38, 1477-1488. | 2.6 | 11 |
| 846 | Identification of Antinorovirus Genes in Human Cells Using Genome-Wide CRISPR Activation Screening. Journal of Virology, 2019, 93, . | 1.5 | 40 |
| 847 | Yeast genetic interaction screens in the age of CRISPR/Cas. Current Genetics, 2019, 65, 307-327. | 0.8 | 29 |
| 848 | Fluorescence Activated Cell Sorting (FACS) in Genomeâ€Wide Genetic Screening of Membrane Trafficking. Current Protocols in Cell Biology, 2019, 82, e68. | 2.3 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 849 | Modeling genetic epilepsies in a dish. Developmental Dynamics, 2020, 249, 56-75. | 0.8 | 27 |
| 850 | Translatable gene therapy for lung cancer using Crispr CAS9â€"an exploratory review. Cancer Gene Therapy, 2020, 27, 116-124. | 2.2 | 20 |
| 851 | CRISPRi as an efficient tool for gene repression in archaea. Methods, 2020, 172, 76-85. | 1.9 | 17 |
| 852 | Genome editing-based approaches for imaging protein localization and dynamics in the mammalian brain. Neuroscience Research, 2020, 150, 2-7. | 1.0 | 6 |
| 853 | Tailored chromatin modulation to promote tissue regeneration. Seminars in Cell and Developmental Biology, 2020, 97, 3-15. | 2.3 | 10 |
| 854 | CRISPR/Cas9 gene-editing strategies in cardiovascular cells. Cardiovascular Research, 2020, 116, 894-907. | 1.8 | 40 |
| 855 | Positional effects on efficiency of CRISPR/Cas9-based transcriptional activation in rice plants. ABIOTECH, 2020, 1, 1-5. | 1.8 | 13 |
| 856 | The working dead: repurposing inactive CRISPR-associated nucleases as programmable transcriptional regulators in plants. ABIOTECH, 2020, 1, 32-40. | 1.8 | 8 |
| 857 | The how and why of lncRNA function: An innate immune perspective. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2020, 1863, 194419. | 0.9 | 196 |
| 858 | The Impact of CRISPR-Cas9 on Age-related Disorders: From Pathology to Therapy. , 2020, 11, 895. | | 8 |
| 859 | A glance at genome editing with CRISPRâ€"Cas9 technology. Current Genetics, 2020, 66, 447-462. | 0.8 | 57 |
| 860 | Modelling the Cancer Phenotype in the Era of CRISPR-Cas9 Gene Editing. Clinical Oncology, 2020, 32, 69-74. | 0.6 | 2 |
| 861 | Synthetic lethality as an engine for cancer drug target discovery. Nature Reviews Drug Discovery, 2020, 19, 23-38. | 21.5 | 295 |
| 862 | Awakening dormant glycosyltransferases in CHO cells with CRISPRa. Biotechnology and Bioengineering, 2020, 117, 593-598. | 1.7 | 27 |
| 863 | Plant gene expression control using genome- and epigenome-editing technologies. Journal of Crop Improvement, 2020, 34, 1-63. | 0.9 | 14 |
| 864 | Artificial escape from XCI by DNA methylation editing of the CDKL5 gene. Nucleic Acids Research, 2020, 48, 2372-2387. | 6.5 | 30 |
| 865 | Advances in high-throughput methods for the identification of virus receptors. Medical Microbiology and Immunology, 2020, 209, 309-323. | 2.6 | 14 |
| 866 | Ultrasound-activated particles as CRISPR/Cas9 delivery system for androgenic alopecia therapy. Biomaterials, 2020, 232, 119736. | 5.7 | 68 |

| # | Article | IF | Citations |
|---|---|---|---|
| 867 | Target Discovery of Selective Non-Small-Cell Lung Cancer Toxins Reveals Inhibitors of Mitochondrial Complex I. ACS Chemical Biology, 2020, 15, 158-170. | 1.6 | 18 |
| 868 | Heat-Triggered Remote Control of CRISPR-dCas9 for Tunable Transcriptional Modulation. ACS Chemical Biology, 2020, 15, 533-542. | 1.6 | 23 |
| 869 | Computational approaches for effective CRISPR guide RNA design and evaluation. Computational and Structural Biotechnology Journal, 2020, 18, 35-44. | 1.9 | 119 |
| 870 | Cas9 Protein Triggers Differential Expression of Inherent Genes Especially NGFR Expression in 293T Cells. Cellular and Molecular Bioengineering, 2020, 13, 61-72. | 1.0 | 3 |
| 871 | Genome-wide synthetic lethal CRISPR screen identifies FIS1 as a genetic interactor of ALS-linked C9ORF72. Brain Research, 2020, 1728, 146601. | 1.1 | 16 |
| 872 | Overcoming challenges and dogmas to understand the functions of pseudogenes. Nature Reviews Genetics, 2020, 21, 191-201. | 7.7 | 151 |
| 873 | Coactivation of Endogenous Wnt10b and Foxc2 by CRISPR Activation Enhances BMSC Osteogenesis and Promotes Calvarial Bone Regeneration. Molecular Therapy, 2020, 28, 441-451. | 3.7 | 37 |
| 874 | Prostate cancer research: The next generation; report from the 2019 Coffeyâ€Holden Prostate Cancer Academy Meeting. Prostate, 2020, 80, 113-132. | 1.2 | 25 |
| 875 | A genome-wide long noncoding RNA CRISPRi screen identifies PRANCR as a novel regulator of epidermal homeostasis. Genome Research, 2020, 30, 22-34. | 2.4 | 59 |
| 876 | Wholeâ€Genome Regulation for Yeast Metabolic Engineering. Small Methods, 2020, 4, 1900640. | 4.6 | 12 |
| 877 | Experimental Approaches to Identify Host Factors Important for Influenza Virus. Cold Spring Harbor Perspectives in Medicine, 2020, 10, a038521. | 2.9 | 9 |
| 878 | An Improved CRISPR/dCas9 Interference Tool for Neuronal Gene Suppression. Frontiers in Genome Editing, 2020, 2, 9. | 2.7 | 23 |
| 879 | Mismatch-CRISPRi Reveals the Co-varying Expression-Fitness Relationships of Essential Genes in Escherichia coli and Bacillus subtilis. Cell Systems, 2020, 11, 523-535.e9. | 2.9 | 72 |
| 880 | Conditional guide RNA through two intermediate hairpins for programmable CRISPR/Cas9 function: building regulatory connections between endogenous RNA expressions. Nucleic Acids Research, 2020, 48, 11773-11784. | 6.5 | 25 |
| 881 | The Interplay between Long Noncoding RNAs and Proteins of the Epigenetic Machinery in Ovarian Cancer. Cancers, 2020, 12, 2701. | 1.7 | 6 |
| 882 | Efficient Genome Editing in Multiple Salmonid Cell Lines Using Ribonucleoprotein Complexes. Marine Biotechnology, 2020, 22, 717-724. | 1.1 | 15 |
| 883 | Illuminating Host-Mycobacterial Interactions with Genome-wide CRISPR Knockout and CRISPRi Screens. Cell Systems, 2020, 11, 239-251.e7. | 2.9 | 23 |
| 884 | A High-Efficacy CRISPR Interference System for Gene Function Discovery in Zymomonas mobilis. Applied and Environmental Microbiology, 2020, 86, . | 1.4 | 26 |

| # | Article | IF | Citations |
|---|---|---|---|
| 885 | The present and potential future methods for delivering CRISPR/Cas9 components in plants. Journal of Genetic Engineering and Biotechnology, 2020, 18, 25. | 1.5 | 75 |
| 886 | ALS Genetics: Gains, Losses, and Implications for Future Therapies. Neuron, 2020, 108, 822-842. | 3.8 | 212 |
| 887 | A high-throughput CRISPR interference screen for dissecting functional regulators of GPCR/cAMP signaling. PLoS Genetics, 2020, 16, e1009103. | 1.5 | 15 |
| 888 | In Vivo Cancer-Based Functional Genomics. Trends in Cancer, 2020, 6, 1002-1017. | 3.8 | 5 |
| 889 | Conserved Functions of Ether Lipids and Sphingolipids in the Early Secretory Pathway. Current Biology, 2020, 30, 3775-3787.e7. | 1.8 | 59 |
| 890 | Wnt-regulated lncRNA discovery enhanced by in vivo identification and CRISPRi functional validation. Genome Medicine, 2020, 12, 89. | 3.6 | 12 |
| 891 | Gene Editing by Extracellular Vesicles. International Journal of Molecular Sciences, 2020, 21, 7362. | 1.8 | 30 |
| 892 | Pharmaceutical-Grade Rigosertib Is a Microtubule-Destabilizing Agent. Molecular Cell, 2020, 79, 191-198.e3. | 4.5 | 22 |
| 893 | Autophagy Assays for Biological Discovery and Therapeutic Development. Trends in Biochemical Sciences, 2020, 45, 1080-1093. | 3.7 | 100 |
| 894 | Strategies and technologies for exploring long noncoding RNAs in heart failure. Biomedicine and Pharmacotherapy, 2020, 131, 110572. | 2.5 | 6 |
| 895 | DNA Processing in the Context of Noncoding Transcription. Trends in Biochemical Sciences, 2020, 45, 1009-1021. | 3.7 | 20 |
| 896 | Modulating gene regulation to treat genetic disorders. Nature Reviews Drug Discovery, 2020, 19, 757-775. | 21.5 | 41 |
| 897 | An efficient KRAB domain for CRISPRi applications in human cells. Nature Methods, 2020, 17, 1093-1096. | 9.0 | 116 |
| 898 | Computational Methods for Analysis of Large-Scale CRISPR Screens. Annual Review of Biomedical Data Science, 2020, 3, 137-162. | 2.8 | 4 |
| 900 | CRISPR/Cas9 technologies in epigenetics research. , 2020, , 537-567. | | 1 |
| 901 | Critical cancer vulnerabilities identified by unbiased CRISPR/Cas9 screens inform on efficient cancer Immunotherapy. European Journal of Immunology, 2020, 50, 1871-1884. | 1.6 | 6 |
| 902 | Genome Editing for CNS Disorders. Frontiers in Neuroscience, 2020, 14, 579062. | 1.4 | 18 |
| 903 | Understanding and Engineering Chromatin as a Dynamical System across Length and Timescales. Cell Systems, 2020, 11, 424-448. | 2.9 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 904 | Is microfluidics the â€œassembly lineâ€•for CRISPR-Cas9 gene-editing?. Biomicrofluidics, 2020, 14, 061301. | 1.2 | 4 |
| 905 | Comprehensive Mapping of Key Regulatory Networks that Drive Oncogene Expression. Cell Reports, 2020, 33, 108426. | 2.9 | 14 |
| 906 | Novel Prokaryotic CRISPR-Cas12a-Based Tool for Programmable Transcriptional Activation and Repression. ACS Synthetic Biology, 2020, 9, 3353-3363. | 1.9 | 19 |
| 907 | First Steps toward Uncovering Gene Doping with CRISPR/Cas by Identifying SpCas9 in Plasma via HPLCâ€“HRMS/MS. Analytical Chemistry, 2020, 92, 16322-16328. | 3.2 | 13 |
| 908 | An inducible CRISPR interference library for genetic interrogation of Saccharomyces cerevisiae biology. Communications Biology, 2020, 3, 723. | 2.0 | 24 |
| 909 | Photocontrol of CRISPR/Cas9 function by site-specific chemical modification of guide RNA. Chemical Science, 2020, 11, 11478-11484. | 3.7 | 22 |
| 910 | Master Regulators and Cofactors of Human Neuronal Cell Fate Specification Identified by CRISPR Gene Activation Screens. Cell Reports, 2020, 33, 108460. | 2.9 | 38 |
| 911 | The hexosamine biosynthesis pathway is a targetable liability in KRAS/LKB1 mutant lung cancer. Nature Metabolism, 2020, 2, 1401-1412. | 5.1 | 82 |
| 912 | The ZSWIM8 ubiquitin ligase mediates target-directed microRNA degradation. Science, 2020, 370, . | 6.0 | 138 |
| 913 | Epigenome engineering: new technologies for precision medicine. Nucleic Acids Research, 2020, 48, 12453-12482. | 6.5 | 34 |
| 914 | Network Approaches for Dissecting the Immune System. IScience, 2020, 23, 101354. | 1.9 | 28 |
| 915 | CRISPR/Cas systems to overcome challenges in developing the next generation of T cells for cancer therapy. Advanced Drug Delivery Reviews, 2020, 158, 17-35. | 6.6 | 14 |
| 916 | Cell Reprogramming With CRISPR/Cas9 Based Transcriptional Regulation Systems. Frontiers in Bioengineering and Biotechnology, 2020, 8, 882. | 2.0 | 29 |
| 917 | Critical Roles of Translation Initiation and RNA Uridylation in Endogenous Retroviral Expression and Neural Differentiation in Pluripotent Stem Cells. Cell Reports, 2020, 31, 107715. | 2.9 | 21 |
| 918 | Integration of CRISPR-engineering and hiPSC-based models of psychiatric genomics. Molecular and Cellular Neurosciences, 2020, 107, 103532. | 1.0 | 8 |
| 919 | A Cellular Stress Response Induced by the CRISPR-dCas9 Activation System Is Not Heritable Through Cell Divisions. CRISPR Journal, 2020, 3, 188-197. | 1.4 | 2 |
| 920 | Aspects of Gene Therapy Products Using Current Genome-Editing Technology in Japan. Human Gene Therapy, 2020, 31, 1043-1053. | 1.4 | 8 |
| 921 | Cohesin-Dependent and -Independent Mechanisms Mediate Chromosomal Contacts between Promoters and Enhancers. Cell Reports, 2020, 32, 107929. | 2.9 | 106 |

| # | Article | IF | Citations |
|---|---|---|---|
| 922 | GIGYF2 and 4EHP Inhibit Translation Initiation of Defective Messenger RNAs to Assist Ribosome-Associated Quality Control. Molecular Cell, 2020, 79, 950-962.e6. | 4.5 | 119 |
| 923 | High-Throughput Screening: todayâ€™s biochemical and cell-based approaches. Drug Discovery Today, 2020, 25, 1807-1821. | 3.2 | 119 |
| 924 | Controlling metabolic flux by toehold-mediated strand displacement. Current Opinion in Biotechnology, 2020, 66, 150-157. | 3.3 | 13 |
| 925 | CRISPR/Cas9 in Male Factor Infertility. Current Tissue Microenvironment Reports, 2020, 1, 89-97. | 1.3 | 3 |
| 926 | Functional genetic analysis in a jawless vertebrate, the sea lamprey: insights into the developmental evolution of early vertebrates. Journal of Experimental Biology, 2020, 223, . | 0.8 | 13 |
| 927 | CRISPR-Cas Activators for Engineering Gene Expression in Higher Eukaryotes. CRISPR Journal, 2020, 3, 350-364. | 1.4 | 32 |
| 928 | Replication stress conferred by POT1 dysfunction promotes telomere relocalization to the nuclear pore. Genes and Development, 2020, 34, 1619-1636. | 2.7 | 36 |
| 929 | In silico Method in CRISPR/Cas System: An Expedite and Powerful Booster. Frontiers in Oncology, 2020, 10, 584404. | 1.3 | 7 |
| 930 | Kaposiâ€™s Sarcoma-Associated Herpesvirus Reactivation by Targeting of a dCas9-Based Transcription Activator to the ORF50 Promoter. Viruses, 2020, 12, 952. | 1.5 | 3 |
| 931 | Synthetic immunomodulation with a CRISPR super-repressor in vivo. Nature Cell Biology, 2020, 22, 1143-1154. | 4.6 | 27 |
| 932 | Lentiviral delivery of combinatorial CAR/CRISPRi circuit into human primary T cells is enhanced by TBK1/IKKÉ› complex inhibitor BX795. Journal of Translational Medicine, 2020, 18, 363. | 1.8 | 12 |
| 933 | Designing custom CRISPR libraries for hypothesis-driven drug target discovery. Computational and Structural Biotechnology Journal, 2020, 18, 2237-2246. | 1.9 | 10 |
| 934 | The era of editing plant genomes using CRISPR/Cas: A critical appraisal. Journal of Biotechnology, 2020, 324, 34-60. | 1.9 | 12 |
| 935 | Interrogating genome function using CRISPR tools: a narrative review. Journal of Bio-X Research, 2020, 3, 83-91. | 0.3 | 0 |
| 936 | CrisPam: SNP-Derived PAM Analysis Tool for Allele-Specific Targeting of Genetic Variants Using CRISPR-Cas Systems. Frontiers in Genetics, 2020, 11, 851. | 1.1 | 16 |
| 937 | A Single Cas9-VPR Nuclease for Simultaneous Gene Activation, Repression, and Editing in ‹i›Saccharomyces cerevisiae‹/i›. ACS Synthetic Biology, 2020, 9, 2252-2257. | 1.9 | 24 |
| 938 | Mapping cancer genetics at single-cell resolution. Science Translational Medicine, 2020, 12, . | 5.8 | 3 |
| 939 | Defining the ATPome reveals cross-optimization of metabolic pathways. Nature Communications, 2020, 11, 4319. | 5.8 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 940 | Back to the Future: Rethinking the Great Potential of lncRNAS for Optimizing Chemotherapeutic Response in Ovarian Cancer. Cancers, 2020, 12, 2406. | 1.7 | 17 |
| 941 | Generation of Inducible CRISPRi and CRISPRa Human Stromal/Stem Cell Lines for Controlled Target Gene Transcription during Lineage Differentiation. Stem Cells International, 2020, 2020, 1-11. | 1.2 | 6 |
| 942 | Discovering functional sequences with RELICS, an analysis method for CRISPR screens. PLoS Computational Biology, 2020, 16, e1008194. | 1.5 | 7 |
| 943 | Pooled analysis of radiation hybrids identifies loci for growth and drug action in mammalian cells. Genome Research, 2020, 30, 1458-1467. | 2.4 | 6 |
| 944 | Therapeutic Target Discovery Using High-Throughput Genetic Screens in Acute Myeloid Leukemia. Cells, 2020, 9, 1888. | 1.8 | 4 |
| 945 | CRISPR and transposon in vivo screens for cancer drivers and therapeutic targets. Genome Biology, 2020, 21, 204. | 3.8 | 14 |
| 946 | Methodologies and Challenges for CRISPR/Cas9 Mediated Genome Editing of the Mammalian Brain. Frontiers in Genome Editing, 2020, 2, 602970. | 2.7 | 17 |
| 947 | Programmable Gene Knockdown in Diverse Bacteria Using Mobileâ€CRISPRi. Current Protocols in Microbiology, 2020, 59, e130. | 6.5 | 16 |
| 948 | Interphotoreceptor Retinoid-Binding Protein (IRBP) in Retinal Health and Disease. Frontiers in Cellular Neuroscience, 2020, 14, 577935. | 1.8 | 15 |
| 949 | Emerging Role and Therapeutic Potential of lncRNAs in Colorectal Cancer. Cancers, 2020, 12, 3843. | 1.7 | 29 |
| 950 | From Phenotypic Hit to Chemical Probe: Chemical Biology Approaches to Elucidate Small Molecule Action in Complex Biological Systems. Molecules, 2020, 25, 5702. | 1.7 | 14 |
| 951 | Functional Screening Techniques to Identify Long Non-Coding RNAs as Therapeutic Targets in Cancer. Cancers, 2020, 12, 3695. | 1.7 | 11 |
| 952 | High-Throughput Discovery and Characterization of Human Transcriptional Effectors. Cell, 2020, 183, 2020-2035.e16. | 13.5 | 71 |
| 953 | Crisprâ€Cas9 in der Anwendung â€“ wo wir heute stehen. Nachrichten Aus Der Chemie, 2020, 68, 62-64. | 0.0 | 0 |
| 954 | Functional Genomics in Pancreatic Î² Cells: Recent Advances in Gene Deletion and Genome Editing Technologies for Diabetes Research. Frontiers in Endocrinology, 2020, 11, 576632. | 1.5 | 13 |
| 955 | LncRNAs in Cancer: From garbage to Junk. Cancers, 2020, 12, 3220. | 1.7 | 41 |
| 956 | Self-adaptive biosystems through tunable genetic parts and circuits. Current Opinion in Systems Biology, 2020, 24, 78-85. | 1.3 | 17 |
| 957 | CRISPR-Cas Tools and Their Application in Genetic Engineering of Human Stem Cells and Organoids. Cell Stem Cell, 2020, 27, 705-731. | 5.2 | 95 |

| # | Article | IF | Citations |
|---|---|---|---|
| 958 | Specificity and application of SOX2 antibody. Poultry Science, 2020, 99, 2385-2394. | 1.5 | 1 |
| 959 | A redox-based electrogenetic CRISPR system to connect with and control biological information networks. Nature Communications, 2020, 11, 2427. | 5.8 | 46 |
| 960 | Genome editing technology and application in soybean improvement. Oil Crop Science, 2020, 5, 31-40. | 0.9 | 32 |
| 961 | Generation and Profiling of 2,135 Human ESC Lines for the Systematic Analyses of Cell States Perturbed by Inducing Single Transcription Factors. Cell Reports, 2020, 31, 107655. | 2.9 | 28 |
| 962 | Zika Virus. Methods in Molecular Biology, 2020, , . | 0.4 | 0 |
| 963 | Programming PAM antennae for efficient CRISPR-Cas9 DNA editing. Science Advances, 2020, 6, eaay9948. | 4.7 | 17 |
| 964 | Automated 3D light-sheet screening with high spatiotemporal resolution reveals mitotic phenotypes. Journal of Cell Science, 2020, 133, . | 1.2 | 21 |
| 965 | CLUE: a bioinformatic and wet-lab pipeline for multiplexed cloning of custom sgRNA libraries. Nucleic Acids Research, 2020, 48, e78. | 6.5 | 2 |
| 966 | Single-cell transcriptional landscapes reveal HIV-1â€“driven aberrant host gene transcription as a potential therapeutic target. Science Translational Medicine, 2020, 12, . | 5.8 | 75 |
| 967 | CRISPR screen in mechanism and target discovery for cancer immunotherapy. Biochimica Et Biophysica Acta: Reviews on Cancer, 2020, 1874, 188378. | 3.3 | 25 |
| 968 | CRISPR-mediated transcriptional activation with synthetic guide RNA. Journal of Biotechnology, 2020, 319, 25-35. | 1.9 | 12 |
| 969 | Synergistic CRISPRa-Regulated Chondrogenic Extracellular Matrix Deposition Without Exogenous Growth Factors. Tissue Engineering - Part A, 2020, 26, 1169-1179. | 1.6 | 11 |
| 970 | Genome Editing Fidelity in the Context of DNA Sequence and Chromatin Structure. Frontiers in Cell and Developmental Biology, 2020, 8, 319. | 1.8 | 11 |
| 971 | Development and Application of CRISPR/Cas in Microbial Biotechnology. Frontiers in Bioengineering and Biotechnology, 2020, 8, 711. | 2.0 | 37 |
| 972 | Towards systems tissue engineering: Elucidating the dynamics, spatial coordination, and individual cells driving emergent behaviors. Biomaterials, 2020, 255, 120189. | 5.7 | 8 |
| 973 | FOXO1 promotes HIV latency by suppressing ER stress in T cells. Nature Microbiology, 2020, 5, 1144-1157. | 5.9 | 18 |
| 974 | Getting back on track: exploiting canalization to uncover the mechanisms of developmental robustness. Current Opinion in Genetics and Development, 2020, 63, 53-60. | 1.5 | 2 |
| 975 | Recommended Guidelines for Developing, Qualifying, and Implementing Complex In Vitro Models (CIVMs) for Drug Discovery. SLAS Discovery, 2020, 25, 1174-1190. | 1.4 | 33 |

| # | Article | IF | Citations |
|---|---|---|---|
| 976 | Gene regulatory programmes of tissue regeneration. Nature Reviews Genetics, 2020, 21, 511-525. | 7.7 | 99 |
| 977 | Genomic resources for dissecting the role of non-protein coding variation in gene-environment interactions. Toxicology, 2020, 441, 152505. | 2.0 | 2 |
| 978 | Gain-of-function genetic screen of the kinome reveals BRSK2 as an inhibitor of the NRF2 transcription factor. Journal of Cell Science, 2020, 133, . | 1.2 | 17 |
| 979 | AP-1 imprints a reversible transcriptional programme of senescent cells. Nature Cell Biology, 2020, 22, 842-855. | 4.6 | 114 |
| 980 | CRISPR/Cas system of prokaryotic extremophiles and its applications. , 2020, , 155-168. | | 1 |
| 981 | Tumor Interferon Signaling Is Regulated by a lncRNA INCR1 Transcribed from the PD-L1 Locus. Molecular Cell, 2020, 78, 1207-1223.e8. | 4.5 | 43 |
| 982 | CRISPR-CAS Replacing Antiviral Drugs against HIV: An Update. Critical Reviews in Eukaryotic Gene Expression, 2020, 30, 77-83. | 0.4 | 8 |
| 983 | Synthetic Biology Speeds Up Drug Target Discovery. Frontiers in Pharmacology, 2020, 11, 119. | 1.6 | 13 |
| 984 | Spatiotemporal Control of CRISPR/Cas9 Function in Cells and Zebrafish using Lightâ€Activated Guide RNA. Angewandte Chemie - International Edition, 2020, 59, 8998-9003. | 7.2 | 90 |
| 985 | A Genome-wide ER-phagy Screen Highlights Key Roles of Mitochondrial Metabolism and ER-Resident UFMylation. Cell, 2020, 180, 1160-1177.e20. | 13.5 | 163 |
| 986 | Development and challenges of using CRISPR-Cas9 system in mammalians. , 2020, , 83-93. | | 2 |
| 987 | CRISPR screens in cancer spheroids identify 3D growth-specific vulnerabilities. Nature, 2020, 580, 136-141. | 13.7 | 203 |
| 988 | Pervasive functional translation of noncanonical human open reading frames. Science, 2020, 367, 1140-1146. | 6.0 | 400 |
| 989 | gscreend: modelling asymmetric count ratios in CRISPR screens to decrease experiment size and improve phenotype detection. Genome Biology, 2020, 21, 53. | 3.8 | 34 |
| 990 | CAMIO: a transgenic CRISPR pipeline to create diverse targeted genome deletions in Drosophila. Nucleic Acids Research, 2020, 48, 4344-4356. | 6.5 | 3 |
| 991 | FAM13A affects body fat distribution and adipocyte function. Nature Communications, 2020, 11, 1465. | 5.8 | 36 |
| 992 | Establishment of CRISPR interference in Methylorubrum extorquens and application of rapidly mining a new phytoene desaturase involved in carotenoid biosynthesis. Applied Microbiology and Biotechnology, 2020, 104, 4515-4532. | 1.7 | 32 |
| 994 | Combinatorial single-cell CRISPR screens by direct guide RNA capture and targeted sequencing. Nature Biotechnology, 2020, 38, 954-961. | 9.4 | 232 |

| # | Article | IF | Citations |
|---|---|---|---|
| 995 | Genome-Scale CRISPR Screening in Human Intestinal Organoids Identifies Drivers of TGF-Î² Resistance. Cell Stem Cell, 2020, 26, 431-440.e8. | 5.2 | 103 |
| 996 | Mitochondrial stress is relayed to the cytosol by an OMA1â€“DELE1â€“HRI pathway. Nature, 2020, 579, 427-432. | 13.7 | 343 |
| 997 | Technologies and Computational Analysis Strategies for CRISPR Applications. Molecular Cell, 2020, 79, 11-29. | 4.5 | 28 |
| 998 | Targeting MEF2D-fusion Oncogenic Transcriptional Circuitries in B-cell Precursor Acute Lymphoblastic Leukemia. Blood Cancer Discovery, 2020, 1, 82-95. | 2.6 | 12 |
| 999 | A Tale of Two Moieties: Rapidly Evolving CRISPR/Cas-Based Genome Editing. Trends in Biochemical Sciences, 2020, 45, 874-888. | 3.7 | 23 |
| 1000 | A Single-Cell Transcriptomics CRISPR-Activation Screen Identifies Epigenetic Regulators of the Zygotic Genome Activation Program. Cell Systems, 2020, 11, 25-41.e9. | 2.9 | 59 |
| 1001 | CRISPR-based functional genomics for neurological disease. Nature Reviews Neurology, 2020, 16, 465-480. | 4.9 | 89 |
| 1002 | How Crisp is CRISPR? CRISPR-Cas-mediated crop improvement with special focus on nutritional traits. , 2020, , 159-197. | | 5 |
| 1003 | Application of Various Delivery Methods for CRISPR/dCas9. Molecular Biotechnology, 2020, 62, 355-363. | 1.3 | 11 |
| 1004 | Klotho and the Treatment of Human Malignancies. Cancers, 2020, 12, 1665. | 1.7 | 23 |
| 1005 | CRISPR-based screens uncover determinants of immunotherapy response in multiple myeloma. Blood Advances, 2020, 4, 2899-2911. | 2.5 | 36 |
| 1006 | The novel insight into the outcomes of CRISPR/Cas9 editing intra- and inter-species. International Journal of Biological Macromolecules, 2020, 163, 711-717. | 3.6 | 7 |
| 1007 | Challenges and opportunities with CRISPR activation in bacteria for data-driven metabolic engineering. Current Opinion in Biotechnology, 2020, 64, 190-198. | 3.3 | 29 |
| 1008 | Selective monitoring of insulin secretion after CRISPR interference in intact pancreatic islets despite submaximal infection. Islets, 2020, 12, 59-69. | 0.9 | 2 |
| 1009 | Cancer Cellâ€“Derived Matrisome Proteins Promote Metastasis in Pancreatic Ductal Adenocarcinoma. Cancer Research, 2020, 80, 1461-1474. | 0.4 | 99 |
| 1010 | Systematic functional identification of cancer multi-drug resistance genes. Genome Biology, 2020, 21, 27. | 3.8 | 26 |
| 1011 | Chemical and Light Inducible Epigenome Editing. International Journal of Molecular Sciences, 2020, 21, 998. | 1.8 | 10 |
| 1012 | rAAV-Mediated Cochlear Gene Therapy: Prospects and Challenges for Clinical Application. Journal of Clinical Medicine, 2020, 9, 589. | 1.0 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1013 | Comprehensive Genome-wide Perturbations via CRISPR Adaptation Reveal Complex Genetics of Antibiotic Sensitivity. Cell, 2020, 180, 1002-1017.e31. | 13.5 | 36 |
| 1014 | Dual threshold optimization and network inference reveal convergent evidence from TF binding locations and TF perturbation responses. Genome Research, 2020, 30, 459-471. | 2.4 | 24 |
| 1015 | Systematic identification of silencers in human cells. Nature Genetics, 2020, 52, 254-263. | 9.4 | 119 |
| 1016 | The rapidly advancing Class 2 CRISPRâ€Cas technologies: A customizable toolbox for molecular manipulations. Journal of Cellular and Molecular Medicine, 2020, 24, 3256-3270. | 1.6 | 39 |
| 1017 | Recent Advances of CRISPR/Cas9-Based Genetic Engineering and Transcriptional Regulation in Industrial Biology. Frontiers in Bioengineering and Biotechnology, 2019, 7, 459. | 2.0 | 42 |
| 1018 | Therapeutic targeting of YY1/MZF1 axis by MZF1-uPEP inhibits aerobic glycolysis and neuroblastoma progression. Theranostics, 2020, 10, 1555-1571. | 4.6 | 21 |
| 1019 | The promise and challenge of therapeutic genome editing. Nature, 2020, 578, 229-236. | 13.7 | 599 |
| 1020 | Titrating gene expression using libraries of systematically attenuated CRISPR guide RNAs. Nature Biotechnology, 2020, 38, 355-364. | 9.4 | 108 |
| 1021 | Interrogation of enhancer function by enhancer-targeting CRISPR epigenetic editing. Nature Communications, 2020, 11, 485. | 5.8 | 139 |
| 1022 | Sensitive detection of a bacterial pathogen using allosteric probe-initiated catalysis and CRISPR-Cas13a amplification reaction. Nature Communications, 2020, 11, 267. | 5.8 | 200 |
| 1023 | A multiplexed gRNA piggyBac transposon system facilitates efficient induction of CRISPRi and CRISPRa in human pluripotent stem cells. Scientific Reports, 2020, 10, 635. | 1.6 | 28 |
| 1024 | EMT signaling: potential contribution of CRISPR/Cas gene editing. Cellular and Molecular Life Sciences, 2020, 77, 2701-2722. | 2.4 | 22 |
| 1025 | CRISPR screen in regulatory T cells reveals modulators of Foxp3. Nature, 2020, 582, 416-420. | 13.7 | 141 |
| 1026 | Multiplex Generation, Tracking, and Functional Screening of Substitution Mutants Using a CRISPR/Retron System. ACS Synthetic Biology, 2020, 9, 1003-1009. | 1.9 | 17 |
| 1027 | A Universal, Genomewide GuideFinder for CRISPR/Cas9 Targeting in Microbial Genomes. MSphere, 2020, 5, . | 1.3 | 13 |
| 1028 | Spatiotemporal Control of CRISPR/Cas9 Function in Cells and Zebrafish using Lightâ€Activated Guide RNA. Angewandte Chemie, 2020, 132, 9083-9088. | 1.6 | 23 |
| 1029 | Gene delivery into cells and tissues. , 2020, , 519-554. | | 3 |
| 1030 | CRISPR-Based Therapeutic Genome Editing: Strategies and InÂVivo Delivery by AAV Vectors. Cell, 2020, 181, 136-150. | 13.5 | 289 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1031 | Medical applications of clustered regularly interspaced short palindromic repeats (CRISPR/Cas) tool: A comprehensive overview. Gene, 2020, 745, 144636. | 1.0 | 17 |
| 1032 | Photoswitchable gRNAs for Spatiotemporally Controlled CRISPR-Cas-Based Genomic Regulation. ACS Central Science, 2020, 6, 695-703. | 5.3 | 69 |
| 1033 | Genome-Wide CRISPRi-Based Identification of Targets for Decoupling Growth from Production. ACS Synthetic Biology, 2020, 9, 1030-1040. | 1.9 | 29 |
| 1034 | Effective CRISPRa-mediated control of gene expression in bacteria must overcome strict target site requirements. Nature Communications, 2020, 11, 1618. | 5.8 | 65 |
| 1035 | Design and analysis of CRISPRâ€“Cas experiments. Nature Biotechnology, 2020, 38, 813-823. | 9.4 | 127 |
| 1036 | Transgenic Breeding Approaches for Improving Abiotic Stress Tolerance: Recent Progress and Future Perspectives. International Journal of Molecular Sciences, 2020, 21, 2695. | 1.8 | 86 |
| 1037 | Innovative Precision Geneâ€Editing Tools in Personalized Cancer Medicine. Advanced Science, 2020, 7, 1902552. | 5.6 | 9 |
| 1038 | Modeling Psychiatric Disorder Biology with Stem Cells. Current Psychiatry Reports, 2020, 22, 24. | 2.1 | 25 |
| 1039 | Pooled Knockin Targeting for Genome Engineering of Cellular Immunotherapies. Cell, 2020, 181, 728-744.e21. | 13.5 | 131 |
| 1040 | The integrated stress response: From mechanism to disease. Science, 2020, 368, . | 6.0 | 715 |
| 1041 | CRISPR/Cas9 Epigenome Editing Potential for Rare Imprinting Diseases: A Review. Cells, 2020, 9, 993. | 1.8 | 33 |
| 1042 | CGD: Comprehensive guide designer for CRISPR-Cas systems. Computational and Structural Biotechnology Journal, 2020, 18, 814-820. | 1.9 | 6 |
| 1043 | MicroRNA Clustering Assists Processing of Suboptimal MicroRNA Hairpins through the Action of the ERH Protein. Molecular Cell, 2020, 78, 289-302.e6. | 4.5 | 48 |
| 1044 | CRISPR/Cas9 Based Knockout of miR-145 Affects Intracellular Fatty Acid Metabolism by Targeting INSIG1 in Goat Mammary Epithelial Cells. Journal of Agricultural and Food Chemistry, 2020, 68, 5138-5146. | 2.4 | 11 |
| 1045 | A high-content RNAi screen reveals multiple roles for long noncoding RNAs in cell division. Nature Communications, 2020, 11, 1851. | 5.8 | 43 |
| 1046 | A Tandem Guide RNA-Based Strategy for Efficient CRISPR Gene Editing of Cell Populations with Low Heterogeneity of Edited Alleles. CRISPR Journal, 2020, 3, 123-134. | 1.4 | 10 |
| 1047 | Systematic in vitro profiling of off-target affinity, cleavage and efficiency for CRISPR enzymes. Nucleic Acids Research, 2020, 48, 5037-5053. | 6.5 | 26 |
| 1048 | Inference of single-cell phylogenies from lineage tracing data using Cassiopeia. Genome Biology, 2020, 21, 92. | 3.8 | 61 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1049 | Placental imprinting: Emerging mechanisms and functions. PLoS Genetics, 2020, 16, e1008709. | 1.5 | 50 |
| 1050 | Human cytomegalovirus long noncoding RNA4.9 regulates viral DNA replication. PLoS Pathogens, 2020, 16, e1008390. | 2.1 | 31 |
| 1051 | Mouse Î³-Synuclein Promoter-Mediated Gene Expression and Editing in Mammalian Retinal Ganglion Cells. Journal of Neuroscience, 2020, 40, 3896-3914. | 1.7 | 46 |
| 1052 | Noncoding Variants Connect Enhancer Dysregulation with Nuclear Receptor Signaling in Hematopoietic Malignancies. Cancer Discovery, 2020, 10, 724-745. | 7.7 | 25 |
| 1053 | CRISPRi-based radiation modifier screen identifies long non-coding RNA therapeutic targets in glioma. Genome Biology, 2020, 21, 83. | 3.8 | 76 |
| 1054 | CRISPR Interferenceâ€“Potential Application in Retinal Disease. International Journal of Molecular Sciences, 2020, 21, 2329. | 1.8 | 22 |
| 1055 | Second Generation Genome Editing Technologies in Drug Discovery. , 2020, , 213-242. | | 0 |
| 1056 | Targeting cancer epigenetics with CRISPR-dCAS9: Principles and prospects. Methods, 2021, 187, 77-91. | 1.9 | 16 |
| 1057 | CRISPR/Cas9 for the treatment of haematological diseases: a journey from bacteria to the bedside. British Journal of Haematology, 2021, 192, 33-49. | 1.2 | 4 |
| 1058 | Isolating live cell clones from barcoded populations using CRISPRa-inducible reporters. Nature Biotechnology, 2021, 39, 174-178. | 9.4 | 63 |
| 1059 | Technologies for targeting DNA methylation modifications: Basic mechanism and potential application in cancer. Biochimica Et Biophysica Acta: Reviews on Cancer, 2021, 1875, 188454. | 3.3 | 23 |
| 1060 | Revisiting gene delivery to the brain: silencing and editing. Biomaterials Science, 2021, 9, 1065-1087. | 2.6 | 14 |
| 1061 | Transformative Network Modeling of Multi-omics Data Reveals Detailed Circuits, Key Regulators, and Potential Therapeutics for Alzheimerâ€™s Disease. Neuron, 2021, 109, 257-272.e14. | 3.8 | 108 |
| 1062 | Machine learning for metabolic engineering: A review. Metabolic Engineering, 2021, 63, 34-60. | 3.6 | 135 |
| 1063 | Repeat RNA expansion disorders of the nervous system: post-transcriptional mechanisms and therapeutic strategies. Critical Reviews in Biochemistry and Molecular Biology, 2021, 56, 31-53. | 2.3 | 20 |
| 1064 | Lipid nanoparticles loaded with ribonucleoproteinâ€“oligonucleotide complexes synthesized using a microfluidic device exhibit robust genome editing and hepatitis B virus inhibition. Journal of Controlled Release, 2021, 330, 61-71. | 4.8 | 54 |
| 1066 | Promoter-interacting expression quantitative trait loci are enriched for functional genetic variants. Nature Genetics, 2021, 53, 110-119. | 9.4 | 62 |
| 1067 | CRISPR-based metabolic pathway engineering. Metabolic Engineering, 2021, 63, 148-159. | 3.6 | 24 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1068 | Transcriptional enhancers: from prediction to functional assessment on a genome-wide scale. Genome, 2021, 64, 426-448. | 0.9 | 12 |
| 1069 | Massively parallel kinetic profiling of natural and engineered CRISPR nucleases. Nature Biotechnology, 2021, 39, 84-93. | 9.4 | 80 |
| 1070 | CRISPR Guide RNA Design. Methods in Molecular Biology, 2021, , . | 0.4 | 2 |
| 1071 | Strategies to Study the Functions of Pseudogenes in Mouse Models of Cancer. Methods in Molecular Biology, 2021, 2324, 287-304. | 0.4 | 1 |
| 1073 | Functional Genomics Approaches to Elucidate Vulnerabilities of Intrinsic and Acquired Chemotherapy Resistance. Cells, 2021, 10, 260. | 1.8 | 4 |
| 1074 | CRISPR/Cas9 in epigenetics studies of health and disease. Progress in Molecular Biology and Translational Science, 2021, 181, 309-343. | 0.9 | 6 |
| 1075 | Functional genomics of psychiatric disease risk using genome engineering. , 2021, , 711-734. | | 0 |
| 1076 | Development of Hostâ€Orthogonal Genetic Systems for Synthetic Biology. Advanced Biology, 2021, 5, 2000252. | 1.4 | 7 |
| 1078 | CRISPRâ€“Cas systems in bioactive peptide research. , 2021, , 285-307. | | 0 |
| 1079 | Identification of Drug Resistance Genes Using a Pooled Lentiviral CRISPR/Cas9 Screening Approach. Methods in Molecular Biology, 2021, 2381, 227-242. | 0.4 | 5 |
| 1080 | CRISPR genome engineering for retinal diseases. Progress in Molecular Biology and Translational Science, 2021, 182, 29-79. | 0.9 | 13 |
| 1081 | New Technologies to Study Functional Genomics of Age-Related Macular Degeneration. Frontiers in Cell and Developmental Biology, 2020, 8, 604220. | 1.8 | 10 |
| 1082 | Alternative types of editing. , 2021, , 123-143. | | 1 |
| 1083 | Fungi endophytes for biofactory of secondary metabolites: Genomics and metabolism. , 2021, , 1-21. | | 2 |
| 1085 | CRISPR-Cas9 in cancer therapeutics. Progress in Molecular Biology and Translational Science, 2021, 181, 129-163. | 0.9 | 2 |
| 1086 | Strategies for site-specific recombination with high efficiency and precise spatiotemporal resolution. Journal of Biological Chemistry, 2021, 296, 100509. | 1.6 | 38 |
| 1087 | Genome editing for plant research and crop improvement. Journal of Integrative Plant Biology, 2021, 63, 3-33. | 4.1 | 70 |
| 1088 | Using CRISPR-Cas9-based genome engineering tools in Drosophila melanogaster. Progress in Molecular Biology and Translational Science, 2021, 180, 85-121. | 0.9 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1089 | Large remodeling of the Myc-induced cell surface proteome in B cells and prostate cells creates new opportunities for immunotherapy. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 3.3 | 8 |
| 1090 | Reprogramming translation for gene therapy. Progress in Molecular Biology and Translational Science, 2021, 182, 439-476. | 0.9 | 5 |
| 1091 | Levels of sgRNA as a Major Factor Affecting CRISPRi Knockdown Efficiency in K562 Cells. Molecular Biology, 2021, 55, 75-82. | 0.4 | 1 |
| 1092 | Targeted genome editing. , 2021, , 75-89. | | 7 |
| 1093 | Genome Editing Technologies for Plant Improvement: Advances, Applications and Challenges. , 2021, , 213-240. | | 0 |
| 1094 | Epidermal progenitors suppress GRHL3-mediated differentiation through intronic polyadenylation promoted by CPSF-HNRNPA3 collaboration. Nature Communications, 2021, 12, 448. | 5.8 | 14 |
| 1095 | CRISPR/Cas9 technologies to manipulate human induced pluripotent stem cells. , 2021, , 249-287. | | 0 |
| 1096 | CRISPR technologies and the search for the PAM-free nuclease. Nature Communications, 2021, 12, 555. | 5.8 | 148 |
| 1097 | Nanobody-mediated control of gene expression and epigenetic memory. Nature Communications, 2021, 12, 537. | 5.8 | 25 |
| 1098 | Genetic transformation methods and advancement of CRISPR/Cas9 technology in wheat. , 2021, , 253-275. | | 0 |
| 1099 | Guide-target mismatch effects on dCas9â€“sgRNA binding activity in living bacterial cells. Nucleic Acids Research, 2021, 49, 1263-1277. | 6.5 | 16 |
| 1100 | Applications of CRISPR/Cas Beyond Simple Traits in Crops. , 2021, , 231-260. | | 0 |
| 1101 | CRISPR/dCas system as the modulator of gene expression. Progress in Molecular Biology and Translational Science, 2021, 178, 99-122. | 0.9 | 10 |
| 1102 | CRISPRi screens reveal genes modulating yeast growth in lignocellulose hydrolysate. Biotechnology for Biofuels, 2021, 14, 41. | 6.2 | 15 |
| 1105 | A Simple and Efficient Method to Generate Gene-Knockout and Transgenic Cell Lines. DNA and Cell Biology, 2021, 40, 239-246. | 0.9 | 0 |
| 1106 | RSPO4-CRISPR alleviates liver injury and restores gut microbiota in a rat model of liver fibrosis. Communications Biology, 2021, 4, 230. | 2.0 | 15 |
| 1107 | Genetic Mechanisms Underlying Cortical Evolution in Mammals. Frontiers in Cell and Developmental Biology, 2021, 9, 591017. | 1.8 | 15 |
| 1108 | Applications of CRISPR/Cas9 in the Synthesis of Secondary Metabolites in Filamentous Fungi. Frontiers in Microbiology, 2021, 12, 638096. | 1.5 | 42 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1109 | Evolving AAV-delivered therapeutics towards ultimate cures. Journal of Molecular Medicine, 2021, 99, 593-617. | 1.7 | 41 |
| 1110 | Understanding How Genetic Mutations Collaborate with Genomic Instability in Cancer. Cells, 2021, 10, 342. | 1.8 | 5 |
| 1112 | AAV-Mediated CRISPRi and RNAi Based Gene Silencing in Mouse Hippocampal Neurons. Cells, 2021, 10, 324. | 1.8 | 5 |
| 1113 | Evaluating Capture Sequence Performance for Single-Cell CRISPR Activation Experiments. ACS Synthetic Biology, 2021, 10, 640-645. | 1.9 | 3 |
| 1114 | Imaging-based screens of pool-synthesized cell libraries. Nature Methods, 2021, 18, 358-365. | 9.0 | 15 |
| 1116 | Single-cell lineages reveal the rates, routes, and drivers of metastasis in cancer xenografts. Science, 2021, 371, . | 6.0 | 166 |
| 1118 | Baboon Envelope Pseudotyped â€œNanobladesâ€•Carrying Cas9/gRNA Complexes Allow Efficient Genome Editing in Human T, B, and CD34+ Cells and Knock-in of AAV6-Encoded Donor DNA in CD34+ Cells. Frontiers in Genome Editing, 2021, 3, 604371. | 2.7 | 25 |
| 1119 | Identification of a long non-coding RNA regulator of liver carcinoma cell survival. Cell Death and Disease, 2021, 12, 178. | 2.7 | 4 |
| 1120 | Implementation of dCas9-mediated CRISPRi in the fission yeast Schizosaccharomyces pombe. G3: Genes, Genomes, Genetics, 2021, 11, . | 0.8 | 10 |
| 1121 | CRISPR-cas9 genome editing delivery systems for targeted cancer therapy. Life Sciences, 2021, 267, 118969. | 2.0 | 31 |
| 1122 | A Curious Case for Development of Kinase Inhibitors as Antigiardiasis Treatments Using Advanced Drug Techniques. ACS Infectious Diseases, 2021, 7, 943-947. | 1.8 | 4 |
| 1123 | The role of hypoxia-induced long noncoding RNAs (lncRNAs) in tumorigenesis and metastasis. Biomedical Journal, 2021, 44, 521-533. | 1.4 | 16 |
| 1124 | Synthetic biology-driven microbial production of folates: Advances and perspectives. Bioresource Technology, 2021, 324, 124624. | 4.8 | 4 |
| 1125 | CRISPR/Cas: Advances, Limitations, and Applications for Precision Cancer Research. Frontiers in Medicine, 2021, 8, 649896. | 1.2 | 48 |
| 1126 | Nonâ€‘coding RNAs (miRNAs and lncRNAs) and their roles in lymphogenesis in all types of lymphomas and lymphoid malignancies (Review). Oncology Letters, 2021, 21, 393. | 0.8 | 2 |
| 1127 | Epigenetic editing: Dissecting chromatin function in context. BioEssays, 2021, 43, e2000316. | 1.2 | 22 |
| 1129 | Nuclease-Deficient Clustered Regularly Interspaced Short Palindromic Repeat-Based Approaches for In Vitro and In Vivo Gene Activation. Human Gene Therapy, 2021, 32, 260-274. | 1.4 | 2 |
| 1131 | Long-lasting analgesia via targeted in situ repression of Na <sub>V</sub> 1.7 in mice. Science Translational Medicine, 2021, 13, . | 5.8 | 56 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1132 | A genome-scale CRISPR interference guide library enables comprehensive phenotypic profiling in yeast. BMC Genomics, 2021, 22, 205. | 1.2 | 22 |
| 1133 | Application of CRISPR/Cas System in the Metabolic Engineering of Small Molecules. Molecular Biotechnology, 2021, 63, 459-476. | 1.3 | 6 |
| 1135 | An interdependent network of functional enhancers regulates transcription and EZH2 loading at the INK4a/ARF locus. Cell Reports, 2021, 34, 108898. | 2.9 | 19 |
| 1137 | eIF2B conformation and assembly state regulate the integrated stress response. ELife, 2021, 10, . | 2.8 | 46 |
| 1138 | Selective Activation of CNS and Reference PPARGC1A Promoters Is Associated with Distinct Gene Programs Relevant for Neurodegenerative Diseases. International Journal of Molecular Sciences, 2021, 22, 3296. | 1.8 | 5 |
| 1139 | Surface Proteomics Reveals CD72 as a Target for In Vitroâ€“Evolved Nanobody-Based CAR-T Cells in KMT2A/MLL1-Rearranged B-ALL. Cancer Discovery, 2021, 11, 2032-2049. | 7.7 | 37 |
| 1141 | Neuronal enhancers are hotspots for DNA single-strand break repair. Nature, 2021, 593, 440-444. | 13.7 | 126 |
| 1142 | Harnessing the central dogma for stringent multi-level control of gene expression. Nature Communications, 2021, 12, 1738. | 5.8 | 26 |
| 1143 | Expanding the Toolbox and Targets for Gene Editing. Trends in Molecular Medicine, 2021, 27, 203-206. | 3.5 | 4 |
| 1144 | An In Vivo Proposal of Cell Computing Inspired by Membrane Computing. Processes, 2021, 9, 511. | 1.3 | 3 |
| 1145 | Proteome dynamics at broken replication forks reveal a distinct ATM-directed repair response suppressing DNA double-strand break ubiquitination. Molecular Cell, 2021, 81, 1084-1099.e6. | 4.5 | 57 |
| 1146 | Editing GWAS: experimental approaches to dissect and exploit disease-associated genetic variation. Genome Medicine, 2021, 13, 41. | 3.6 | 32 |
| 1147 | CRISPRi screens reveal a DNA methylation-mediated 3D genome dependent causal mechanism in prostate cancer. Nature Communications, 2021, 12, 1781. | 5.8 | 32 |
| 1149 | Functional annotation of lncRNA in high-throughput screening. Essays in Biochemistry, 2021, 65, 761-773. | 2.1 | 14 |
| 1150 | Perspectives for epigenetic editing in crops. Transgenic Research, 2021, 30, 381-400. | 1.3 | 13 |
| 1151 | Emerging Roles of Long Non-coding RNAs in Uterine Leiomyoma Pathogenesis: a Review. Reproductive Sciences, 2022, 29, 1086-1101. | 1.1 | 9 |
| 1152 | Dead Cas9â€“sgRNA Complex Shelters Vulnerable DNA Restriction Enzyme Sites from Cleavage for Cloning Applications. CRISPR Journal, 2021, 4, 275-289. | 1.4 | 7 |
| 1154 | Using CRISPR to understand and manipulate gene regulation. Development (Cambridge), 2021, 148, . | 1.2 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1155 | Role of lncRNAs in the Development of Ischemic Stroke and Their Therapeutic Potential. Molecular Neurobiology, 2021, 58, 3712-3728. | 1.9 | 18 |
| 1156 | CRISPR Interference Efficiently Silences Latent and Lytic Viral Genes in Kaposiâ€™s Sarcoma-Associated Herpesvirus-Infected Cells. Viruses, 2021, 13, 783. | 1.5 | 6 |
| 1157 | Frontiers of CRISPR-Cas9 for Cancer Research and Therapy. Journal of Exploratory Research in Pharmacology, 2021, 000, 000-000. | 0.2 | 1 |
| 1158 | SIGNAL: A web-based iterative analysis platform integrating pathway and network approaches optimizes hit selection from genome-scale assays. Cell Systems, 2021, 12, 338-352.e5. | 2.9 | 7 |
| 1160 | The World of Stable Ribonucleoproteins and Its Mapping With Grad-Seq and Related Approaches. Frontiers in Molecular Biosciences, 2021, 8, 661448. | 1.6 | 18 |
| 1161 | Dynamic post-transcriptional regulation by Mrn1 links cell wall homeostasis to mitochondrial structure and function. PLoS Genetics, 2021, 17, e1009521. | 1.5 | 7 |
| 1162 | CRISPR/dCas-mediated transcriptional and epigenetic regulation in plants. Current Opinion in Plant Biology, 2021, 60, 101980. | 3.5 | 50 |
| 1163 | CRISPER/CAS System, a Novel Tool of Targeted Therapy of Drug-resistant Lung Cancer. Advanced Pharmaceutical Bulletin, 2021, , . | 0.6 | 4 |
| 1164 | High-throughput functional variant screens via in vivo production of single-stranded DNA. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 3.3 | 53 |
| 1167 | STING enhances cell death through regulation of reactive oxygen species and DNA damage. Nature Communications, 2021, 12, 2327. | 5.8 | 78 |
| 1168 | Here to stay: Writing lasting epigenetic memories. Cell, 2021, 184, 2281-2283. | 13.5 | 3 |
| 1169 | Identification of X-chromosomal genes that drive sex differences in embryonic stem cells through a hierarchical CRISPR screening approach. Genome Biology, 2021, 22, 110. | 3.8 | 28 |
| 1170 | CRISPR/Cas: a Nobel Prize award-winning precise genome editing technology for gene therapy and crop improvement. Journal of Zhejiang University: Science B, 2021, 22, 253-284. | 1.3 | 97 |
| 1171 | Genome-wide programmable transcriptional memory by CRISPR-based epigenome editing. Cell, 2021, 184, 2503-2519.e17. | 13.5 | 312 |
| 1173 | Long non-coding RNAs in recurrent ovarian cancer: Theranostic perspectives. Cancer Letters, 2021, 502, 97-107. | 3.2 | 14 |
| 1174 | Integrating Biomaterials and Genome Editing Approaches to Advance Biomedical Science. Annual Review of Biomedical Engineering, 2021, 23, 493-516. | 5.7 | 4 |
| 1175 | CRISPR Screens in Toxicology Research: An Overview. Current Protocols, 2021, 1, e136. | 1.3 | 5 |
| 1178 | In vivo CRISPR screening for novel noncoding RNA functional targets in glioblastoma models. Journal of Neuroscience Research, 2021, 99, 2029-2045. | 1.3 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1179 | DNA and the Administrative State. , 2021, , 287-329. | | 0 |
| 1180 | The application of genome editing technology in fish. Marine Life Science and Technology, 2021, 3, 326-346. | 1.8 | 9 |
| 1182 | Genome-wide CRISPRi/a screens in human neurons link lysosomal failure to ferroptosis. Nature Neuroscience, 2021, 24, 1020-1034. | 7.1 | 170 |
| 1183 | Genome-wide CRISPRi screening identifies OCIAD1 as a prohibitin client and regulatory determinant of mitochondrial Complex III assembly in human cells. ELife, 2021, 10, . | 2.8 | 20 |
| 1184 | High-throughput single-cell chromatin accessibility CRISPR screens enable unbiased identification of regulatory networks in cancer. Nature Communications, 2021, 12, 2969. | 5.8 | 73 |
| 1185 | CRISPR-Cas system: a precise tool for plant genome editing. Nucleus (India), 0, , 1. | 0.9 | 2 |
| 1186 | Exploring liver cancer biology through functional genetic screens. Nature Reviews Gastroenterology and Hepatology, 2021, 18, 690-704. | 8.2 | 31 |
| 1188 | Development of synthetic biology tools to engineer Pichia pastoris as a chassis for the production of natural products. Synthetic and Systems Biotechnology, 2021, 6, 110-119. | 1.8 | 46 |
| 1189 | Timing without coding: How do long non-coding RNAs regulate circadian rhythms?. Seminars in Cell and Developmental Biology, 2022, 126, 79-86. | 2.3 | 11 |
| 1190 | CRISPR-Cas System: The Powerful Modulator of Accessory Genomes in Prokaryotes. Microbial Physiology, 2022, 32, 2-17. | 1.1 | 12 |
| 1191 | The Inducible lac Operator-Repressor System Is Functional in Zebrafish Cells. Frontiers in Genetics, 2021, 12, 683394. | 1.1 | 0 |
| 1193 | Genome engineering and disease modeling via programmable nucleases for insulin gene therapy; promises of CRISPR/Cas9 technology. World Journal of Stem Cells, 2021, 13, 485-502. | 1.3 | 3 |
| 1195 | An extensive review to facilitate understanding of CRISPR technology as a gene editing possibility for enhanced therapeutic applications. Gene, 2021, 785, 145615. | 1.0 | 9 |
| 1196 | LncRNAs associated with glioblastoma: From transcriptional noise to novel regulators with a promising role in therapeutics. Molecular Therapy - Nucleic Acids, 2021, 24, 728-742. | 2.3 | 45 |
| 1197 | Efficient Câ€¢G-to-Gâ€¢C base editors developed using CRISPRi screens, target-library analysis, and machine learning. Nature Biotechnology, 2021, 39, 1414-1425. | 9.4 | 118 |
| 1198 | BACH1 Binding Links the Genetic Risk for Severe Periodontitis with ST8SIA1. Journal of Dental Research, 2022, 101, 93-101. | 2.5 | 5 |
| 1200 | Computational pipeline for designing guide RNAs for mismatch-CRISPRi. STAR Protocols, 2021, 2, 100521. | 0.5 | 9 |
| 1201 | CRISPRâ€“Act3.0 for highly efficient multiplexed gene activation in plants. Nature Plants, 2021, 7, 942-953. | 4.7 | 99 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1202 | Exploiting DNA Endonucleases to Advance Mechanisms of DNA Repair. Biology, 2021, 10, 530. | 1.3 | 7 |
| 1203 | Diversification of the CRISPR Toolbox: Applications of CRISPR-Cas Systems Beyond Genome Editing. CRISPR Journal, 2021, 4, 400-415. | 1.4 | 5 |
| 1204 | Revealing molecular pathways for cancer cell fitness through a genetic screen of the cancer translatome. Cell Reports, 2021, 35, 109321. | 2.9 | 8 |
| 1205 | An Overview of the Role of Long Non-Coding RNAs in Human Choriocarcinoma. International Journal of Molecular Sciences, 2021, 22, 6506. | 1.8 | 8 |
| 1206 | CRISPR screens in physiologic medium reveal conditionally essential genes in human cells. Cell Metabolism, 2021, 33, 1248-1263.e9. | 7.2 | 77 |
| 1207 | Diagnosis and Intervention of Genetic Hearing Loss. Journal of Clinical Otolaryngology, 2021, 32, 5-19. | 0.1 | 0 |
| 1208 | Identification of potential chemical compounds enhancing generation of enucleated cells from immortalized human erythroid cell lines. Communications Biology, 2021, 4, 677. | 2.0 | 7 |
| 1209 | Spatiotemporal control of CRISPR/Cas9 gene editing. Signal Transduction and Targeted Therapy, 2021, 6, 238. | 7.1 | 73 |
| 1210 | Challenges in delivery systems for CRISPR-based genome editing and opportunities of nanomedicine. Biomedical Engineering Letters, 2021, 11, 217-233. | 2.1 | 11 |
| 1211 | A metabolic CRISPR-Cas9 screen in Chinese hamster ovary cells identifies glutamine-sensitive genes. Metabolic Engineering, 2021, 66, 114-122. | 3.6 | 17 |
| 1212 | Portable bacterial CRISPR transcriptional activation enables metabolic engineering in Pseudomonas putida. Metabolic Engineering, 2021, 66, 283-295. | 3.6 | 30 |
| 1213 | dCas9 techniques for transcriptional repression in mammalian cells: Progress, applications and challenges. BioEssays, 2021, 43, 2100086. | 1.2 | 3 |
| 1214 | Extracellular vesicles from neurons promote neural induction of stem cells through cyclin D1. Journal of Cell Biology, 2021, 220, . | 2.3 | 20 |
| 1215 | Efficient multiplexed gene regulation inSaccharomyces cerevisiaeusing dCas12a. Nucleic Acids Research, 2021, 49, 7775-7790. | 6.5 | 24 |
| 1216 | Synaptotagmin-7â€“mediated activation of spontaneous NMDAR currents is disrupted in bipolar disorder susceptibility variants. PLoS Biology, 2021, 19, e3001323. | 2.6 | 3 |
| 1217 | Direct characterization of cis-regulatory elements and functional dissection of complex genetic associations using HCRâ€“FlowFISH. Nature Genetics, 2021, 53, 1166-1176. | 9.4 | 36 |
| 1218 | Identifying oligodendrocyte enhancers governing Plp1 expression. Human Molecular Genetics, 2021, 30, 2225-2239. | 1.4 | 14 |
| 1219 | An integrated functional and clinical genomics approach reveals genes driving aggressive metastatic prostate cancer. Nature Communications, 2021, 12, 4601. | 5.8 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1220 | Durable CRISPR-Based Epigenetic Silencing. Biodesign Research, 2021, 2021, . | 0.8 | 14 |
| 1221 | From Junk to Function: LncRNAs in CNS Health and Disease. Frontiers in Molecular Neuroscience, 2021, 14, 714768. | 1.4 | 27 |
| 1222 | Inducible CRISPRa screen identifies putative enhancers. Journal of Genetics and Genomics, 2021, 48, 917-927. | 1.7 | 13 |
| 1223 | Methodologies for Measuring Protein Trafficking across Cellular Membranes. ChemPlusChem, 2021, 86, 1397-1415. | 1.3 | 4 |
| 1226 | Targeted regulation of transcription in primary cells using CRISPRa and CRISPRi. Genome Research, 2021, 31, 2120-2130. | 2.4 | 29 |
| 1227 | Cost-Effective Mapping of Genetic Interactions in Mammalian Cells. Frontiers in Genetics, 2021, 12, 703738. | 1.1 | 1 |
| 1228 | Approaches to Enhance Precise CRISPR/Cas9-Mediated Genome Editing. International Journal of Molecular Sciences, 2021, 22, 8571. | 1.8 | 9 |
| 1230 | CRISPR-Mediated Gene Activation (CRISPRa) of pp38/pp24 Orchestrates Events Triggering Lytic Infection in Mareká€™s Disease Virus-Transformed Cell Lines. Microorganisms, 2021, 9, 1681. | 1.6 | 5 |
| 1231 | Augmenting and directing long-range CRISPR-mediated activation in human cells. Nature Methods, 2021, 18, 1075-1081. | 9.0 | 17 |
| 1232 | Establishment of two homozygous CRISPR interference (CRISPRi) knock-in human induced pluripotent stem cell (hiPSC) lines for titratable endogenous gene repression. Stem Cell Research, 2021, 55, 102473. | 0.3 | 3 |
| 1233 | Forward and Reverse Genetics of B Cell Malignancies: From Insertional Mutagenesis to CRISPR-Cas. Frontiers in Immunology, 2021, 12, 670280. | 2.2 | 1 |
| 1235 | Bi-directional gene activation and repression promote ASC differentiation and enhance bone healing in osteoporotic rats. Molecular Therapy, 2022, 30, 92-104. | 3.7 | 5 |
| 1239 | Harnessing model organism genomics to underpin the machine learning-based prediction of essential genes in eukaryotes â€“ Biotechnological implications. Biotechnology Advances, 2022, 54, 107822. | 6.0 | 9 |
| 1240 | Genome-wide gene expression tuning reveals diverse vulnerabilities of M.Âtuberculosis. Cell, 2021, 184, 4579-4592.e24. | 13.5 | 131 |
| 1241 | Applications of the versatile <scp>CRISPRâ€Cas13 RNA</scp> targeting system. Wiley Interdisciplinary Reviews RNA, 2022, 13, e1694. | 3.2 | 26 |
| 1242 | CRAGE-CRISPR facilitates rapid activation of secondary metabolite biosynthetic gene clusters in bacteria. Cell Chemical Biology, 2022, 29, 696-710.e4. | 2.5 | 15 |
| 1243 | Deficiency of the Lysosomal Protein CLN5 Alters Lysosomal Function and Movement. Biomolecules, 2021, 11, 1412. | 1.8 | 13 |
| 1244 | CRISPR-Cas Gene Perturbation and Editing in Human Induced Pluripotent Stem Cells. CRISPR Journal, 2021, 4, 634-655. | 1.4 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1246 | CRISPR-based peptide library display and programmable microarray self-assembly for rapid quantitative protein binding assays. Molecular Cell, 2021, 81, 3650-3658.e5. | 4.5 | 13 |
| 1247 | A new era in functional genomics screens. Nature Reviews Genetics, 2022, 23, 89-103. | 7.7 | 104 |
| 1248 | A simple and rapid method for enzymatic synthesis of CRISPR-Cas9 sgRNA libraries. Nucleic Acids Research, 2021, 49, e131-e131. | 6.5 | 4 |
| 1249 | Enhanced Cas12a multi-gene regulation using a CRISPR array separator. ELife, 2021, 10, . | 2.8 | 25 |
| 1250 | KRAS-related long noncoding RNAs in human cancers. Cancer Gene Therapy, 2022, 29, 418-427. | 2.2 | 8 |
| 1251 | A CRISPR knockout screen reveals new regulators of canonical Wnt signaling. Oncogenesis, 2021, 10, 63. | 2.1 | 4 |
| 1253 | InÂvivo somatic cell base editing and prime editing. Molecular Therapy, 2021, 29, 3107-3124. | 3.7 | 87 |
| 1254 | ERÎ± is an RNA-binding protein sustaining tumor cell survival and drug resistance. Cell, 2021, 184, 5215-5229.e17. | 13.5 | 76 |
| 1255 | Application of CHyMErA Cas9-Cas12a combinatorial genome-editing platform for genetic interaction mapping and gene fragment deletion screening. Nature Protocols, 2021, 16, 4722-4765. | 5.5 | 8 |
| 1256 | The adaptive immune system is a major driver of selection for tumor suppressor gene inactivation. Science, 2021, 373, 1327-1335. | 6.0 | 83 |
| 1257 | Using CRISPR Interference as a Therapeutic Approach to Treat TGFÎ²2-Induced Ocular Hypertension and Glaucoma. , 2021, 62, 7. | | 8 |
| 1259 | Roadmap for the use of base editors to decipher drug mechanism of action. PLoS ONE, 2021, 16, e0257537. | 1.1 | 1 |
| 1260 | Optical Control of Base Editing and Transcription through Lightâ€Activated Guide RNA. ChemPhotoChem, 0, , . | 1.5 | 8 |
| 1261 | p113 isoform encoded by CUX1 circular RNA drives tumor progression via facilitating ZRF1/BRD4 transactivation. Molecular Cancer, 2021, 20, 123. | 7.9 | 31 |
| 1264 | Lipid- and polymer-based nanoparticle systems for the delivery of CRISPR/Cas9. Journal of Drug Delivery Science and Technology, 2021, 65, 102728. | 1.4 | 19 |
| 1265 | Application of the CRISPR/Cas9-based gene editing technique in basic research, diagnosis, and therapy of cancer. Molecular Cancer, 2021, 20, 126. | 7.9 | 86 |
| 1266 | Gene-Targeted, CREB-Mediated Induction of Î”FosB Controls Distinct Downstream Transcriptional Patterns Within D1 and D2 Medium Spiny Neurons. Biological Psychiatry, 2021, 90, 540-549. | 0.7 | 17 |
| 1267 | Of form and function: Early cardiac morphogenesis across classical and emerging model systems. Seminars in Cell and Developmental Biology, 2021, 118, 107-118. | 2.3 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1268 | Toward the Treatment of Inherited Diseases of the Retina Using CRISPR-Based Gene Editing. Frontiers in Medicine, 2021, 8, 698521. | 1.2 | 6 |
| 1269 | Genetical engineering for NK and T cell immunotherapy with CRISPR/Cas9 technology: Implications and challenges. Cellular Immunology, 2021, 369, 104436. | 1.4 | 5 |
| 1270 | A CRISPR/dCas9-assisted system to clone toxic genes in Escherichia coli. Biochimica Et Biophysica Acta - General Subjects, 2021, 1865, 129994. | 1.1 | 0 |
| 1271 | Moving from in vitro to in vivo CRISPR screens. Gene and Genome Editing, 2021, 2, 100008. | 1.3 | 25 |
| 1272 | Fourth generation biofuel from genetically modified algal biomass: Challenges and future directions. Chemosphere, 2021, 285, 131535. | 4.2 | 57 |
| 1273 | Towards a CRISPeR understanding of homologous recombination with high-throughput functional genomics. Current Opinion in Genetics and Development, 2021, 71, 171-181. | 1.5 | 6 |
| 1274 | The African turquoise killifish (Nothobranchius furzeri): biology and research applications. , 2022, , 245-287. | | 15 |
| 1275 | CRISPR/Cas-Based Techniques in Plants. , 2021, , 37-61. | | 3 |
| 1276 | CRISPR/Cas Technologies Applied to Pseudogenes. Methods in Molecular Biology, 2021, 2324, 265-284. | 0.4 | 0 |
| 1277 | In Vivo Silencing/Overexpression of lncRNAs by CRISPR/Cas System. Methods in Molecular Biology, 2021, 2348, 205-220. | 0.4 | 3 |
| 1278 | CRISPR Interference (CRISPRi) and CRISPR Activation (CRISPRa) to Explore the Oncogenic lncRNA Network. Methods in Molecular Biology, 2021, 2348, 189-204. | 0.4 | 12 |
| 1280 | Genome-wide CRISPR screening reveals nucleotide synthesis negatively regulates autophagy. Journal of Biological Chemistry, 2021, 296, 100780. | 1.6 | 9 |
| 1281 | High-content imaging-based pooled CRISPR screens in mammalian cells. Journal of Cell Biology, 2021, 220, . | 2.3 | 53 |
| 1282 | Targeted attenuation of elevated histone marks at SNCA alleviates Î±â€synuclein in Parkinson's disease. EMBO Molecular Medicine, 2021, 13, e12188. | 3.3 | 43 |
| 1283 | Elucidation of the BMI1 interactome identifies novel regulatory roles in glioblastoma. NAR Cancer, 2021, 3, zcab009. | 1.6 | 4 |
| 1284 | CRISPR interference and its applications. Progress in Molecular Biology and Translational Science, 2021, 180, 123-140. | 0.9 | 8 |
| 1285 | CRISPR/Cas-mediated genome editing for improved stress tolerance in plants. , 2021, , 259-291. | | 6 |
| 1286 | Image-based pooled whole-genome CRISPRi screening for subcellular phenotypes. Journal of Cell Biology, 2021, 220, . | 2.3 | 48 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1287 | Genetic manipulation of pathogenic Leptospira: CRISPR interference (CRISPRi)-mediated gene silencing and rapid mutant recovery at 37ÂÂ°C. Scientific Reports, 2021, 11, 1768. | 1.6 | 27 |
| 1288 | Genome-Wide CRISPRi/a Screening in an In Vitro Coculture Assay of Human Immune Cells with Tumor Cells. Methods in Molecular Biology, 2020, 2097, 231-252. | 0.4 | 2 |
| 1289 | Genome-Wide CRISPR Off-Target DNA Break Detection by the BLISS Method. Methods in Molecular Biology, 2021, 2162, 261-281. | 0.4 | 4 |
| 1290 | Genome-Scale Perturbation of Long Noncoding RNA Expression Using CRISPR Interference. Methods in Molecular Biology, 2021, 2254, 323-338. | 0.4 | 5 |
| 1291 | CRISPR-Cas RNA Scaffolds for Transcriptional Programming in Yeast. Methods in Molecular Biology, 2017, 1632, 341-357. | 0.4 | 3 |
| 1292 | CRISPR/Cas9 Editing in Induced Pluripotent Stem Cells: A Way Forward for Treating Cystic Fibrosis?. , 2019, , 153-178. | | 2 |
| 1293 | DivergingÂRNPs: Toward Understanding lncRNA-Protein Interactions and Functions. Advances in Experimental Medicine and Biology, 2019, 1203, 285-312. | 0.8 | 14 |
| 1294 | Repurposing CRISPR System for Transcriptional Activation. Advances in Experimental Medicine and Biology, 2017, 983, 147-157. | 0.8 | 25 |
| 1295 | Application of CRISPR-Cas9 Screening Technologies to Study Mitochondrial Biology in Healthy and Disease States. Advances in Experimental Medicine and Biology, 2019, 1158, 269-277. | 0.8 | 2 |
| 1296 | CRISPR Applications in Plant Genetic Engineering and Biotechnology. , 2019, , 429-459. | | 3 |
| 1297 | MicroRNAs (miRNAs) and Long Non-Coding RNAs (lncRNAs) as New Tools for Cancer Therapy: First Steps from Bench to Bedside. Targeted Oncology, 2020, 15, 261-278. | 1.7 | 183 |
| 1298 | CRISPR interference-mediated noggin knockdown promotes BMP2-induced osteogenesis and calvarial bone healing. Biomaterials, 2020, 252, 120094. | 5.7 | 32 |
| 1299 | Functional Genomics for Cancer Drug Target Discovery. Cancer Cell, 2020, 38, 31-43. | 7.7 | 46 |
| 1300 | CRISPR screens in the era of microbiomes. Current Opinion in Microbiology, 2020, 57, 70-77. | 2.3 | 15 |
| 1301 | Am I ready for CRISPR? A user's guide to genetic screens. Nature Reviews Genetics, 2018, 19, 67-80. | 7.7 | 325 |
| 1302 | Rewiring of endogenous signaling pathways to genomic targets for therapeutic cell reprogramming. Nature Communications, 2020, 11, 608. | 5.8 | 32 |
| 1303 | Gene editing and CRISPR in the clinic: current and future perspectives. Bioscience Reports, 2020, 40, . | 1.1 | 122 |
| 1304 | CRISPR-based gene expression control for synthetic gene circuits. Biochemical Society Transactions, 2020, 48, 1979-1993. | 1.6 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1305 | A simplified strategy for titrating gene expression reveals new relationships between genotype, environment, and bacterial growth. Nucleic Acids Research, 2021, 49, e6-e6. | 6.5 | 14 |
| 1361 | Gene therapy in wound healing using nanotechnology. Wound Repair and Regeneration, 2021, 29, 225-239. | 1.5 | 11 |
| 1362 | DNA methyltransferase inhibition overcomes diphthamide pathway deficiencies underlying CD123-targeted treatment resistance. Journal of Clinical Investigation, 2019, 129, 5005-5019. | 3.9 | 59 |
| 1363 | CRISPR/Cas: a potential gene-editing tool in the nervous system. Cell Regeneration, 2020, 9, 12. | 1.1 | 8 |
| 1364 | Recent advances in lineage differentiation from stem cells: hurdles and opportunities?. F1000Research, 2018, 7, 220. | 0.8 | 16 |
| 1365 | Evaluation of RNAi and CRISPR technologies by large-scale gene expression profiling in the Connectivity Map. PLoS Biology, 2017, 15, e2003213. | 2.6 | 136 |
| 1366 | Generation and validation of versatile inducible CRISPRi embryonic stem cell and mouse model. PLoS Biology, 2020, 18, e3000749. | 2.6 | 12 |
| 1367 | Wnt/Tcf1 pathway restricts embryonic stem cell cycle through activation of the Ink4/Arf locus. PLoS Genetics, 2017, 13, e1006682. | 1.5 | 43 |
| 1368 | A High-Throughput Strategy for Dissecting Mammalian Genetic Interactions. PLoS ONE, 2016, 11, e0167617. | 1.1 | 4 |
| 1369 | Tailor-made gene silencing of Staphylococcus aureus clinical isolates by CRISPR interference. PLoS ONE, 2018, 13, e0185987. | 1.1 | 28 |
| 1370 | CRISPR/Cas-based customization of pooled CRISPR libraries. PLoS ONE, 2018, 13, e0199473. | 1.1 | 6 |
| 1371 | Bacterial genome editing by coupling Cre-lox and CRISPR-Cas9 systems. PLoS ONE, 2020, 15, e0241867. | 1.1 | 7 |
| 1372 | Identification of unrecognized host factors promoting HIV-1 latency. PLoS Pathogens, 2020, 16, e1009055. | 2.1 | 16 |
| 1373 | The big bang of genome editing technology: development and application of the CRISPR/Cas9 system in disease animal models. Zoological Research, 2016, 37, 191-204. | 0.6 | 13 |
| 1374 | Generation of genetically modified mice using CRISPR/Cas9 and haploid embryonic stem cell systems. Zoological Research, 2016, 37, 205-13. | 0.6 | 9 |
| 1376 | Narrowing the focus: a toolkit to systematically connect oncogenic signaling pathways with cancer phenotypes. Genes and Cancer, 2016, 7, 218-228. | 0.6 | 5 |
| 1377 | TUBB3 overexpression has a negligible effect on the sensitivity to taxol in cultured cell lines. Oncotarget, 2017, 8, 71536-71547. | 0.8 | 17 |
| 1378 | Targeted silencing of SOX2 by an artificial transcription factor showed antitumor effect in lung and esophageal squamous cell carcinoma. Oncotarget, 2017, 8, 103063-103076. | 0.8 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1379 | Drugs in a Curative Combination Therapy for Lymphoma Exhibit Low Cross-Resistance But Not Pharmacological Synergy. SSRN Electronic Journal, 0, , . | 0.4 | 3 |
| 1380 | Engineered Probiotic and Prebiotic Nutraceutical Supplementations in Combating Non-communicable Disorders: A Review. Current Pharmaceutical Biotechnology, 2022, 23, 72-97. | 0.9 | 3 |
| 1382 | dCas9: A Versatile Tool for Epigenome Editing. Current Issues in Molecular Biology, 2018, 26, 15-32. | 1.0 | 70 |
| 1383 | multicrispr: gRNA design for prime editing and parallel targeting of thousands of targets. Life Science Alliance, 2020, 3, e202000757. | 1.3 | 21 |
| 1384 | The CRISPR/Cas9 system for gene editing and its potential application in pain research. Translational Perioperative and Pain Medicine, 2016, 3, . | 0.0 | 6 |
| 1385 | Genetic and epigenetic editing inâ€¨nervous system. Dialogues in Clinical Neuroscience, 2019, 21, 359-368. | 1.8 | 7 |
| 1386 | Up-Regulated Expression of Pro-Apoptotic Long Noncoding RNA lincRNA-p21 with Enhanced Cell Apoptosis in Lupus Nephritis. International Journal of Molecular Sciences, 2021, 22, 301. | 1.8 | 11 |
| 1387 | Diagnostic and prognostic potential of tissue and circulating long non-coding RNAs in colorectal tumors. World Journal of Gastroenterology, 2019, 25, 5026-5048. | 1.4 | 81 |
| 1388 | An Overview Of The Crispr-Based Genomic- And Epigenome-Editing System: Function, Applications, And Challenges. Advanced Biomedical Research, 2019, 8, 49. | 0.2 | 5 |
| 1389 | A forward genetic screen reveals novel independent regulators of ULBP1, an activating ligand for natural killer cells. ELife, 2015, 4, . | 2.8 | 36 |
| 1390 | Nucleosomes impede Cas9 access to DNA in vivo and in vitro. ELife, 2016, 5, . | 2.8 | 349 |
| 1391 | The anticancer natural product ophiobolin A induces cytotoxicity by covalent modification of phosphatidylethanolamine. ELife, 2016, 5, . | 2.8 | 44 |
| 1392 | Rewiring MAP kinases in Saccharomyces cerevisiae to regulate novel targets through ubiquitination. ELife, 2016, 5, . | 2.8 | 11 |
| 1393 | Comparative genetic screens in human cells reveal new regulatory mechanisms in WNT signaling. ELife, 2016, 5, . | 2.8 | 49 |
| 1394 | Pooled genome-wide CRISPR screening for basal and context-specific fitness gene essentiality in Drosophila cells. ELife, 2018, 7, . | 2.8 | 64 |
| 1395 | Ceapins block the unfolded protein response sensor ATF6Î± by inducing a neomorphic inter-organelle tether. ELife, 2019, 8, . | 2.8 | 46 |
| 1396 | Distinct mechanisms of microRNA sorting into cancer cell-derived extracellular vesicle subtypes. ELife, 2019, 8, . | 2.8 | 164 |
| 1397 | Retro-2 protects cells from ricin toxicity by inhibiting ASNA1-mediated ER targeting and insertion of tail-anchored proteins. ELife, 2019, 8, . | 2.8 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1398 | A curative combination cancer therapy achieves high fractional cell killing through low cross-resistance and drug additivity. ELife, 2019, 8, . | 2.8 | 78 |
| 1399 | Discovery of a molecular glue promoting CDK12-DDB1 interaction to trigger cyclin K degradation. ELife, 2020, 9, . | 2.8 | 114 |
| 1400 | Simultaneous quantification of mRNA and protein in single cells reveals post-transcriptional effects of genetic variation. ELife, 2020, 9, . | 2.8 | 33 |
| 1401 | Structural and mechanistic basis of the EMC-dependent biogenesis of distinct transmembrane clients. ELife, 2020, 9, . | 2.8 | 66 |
| 1402 | CRISPR screening identifies M1AP as a new MYC regulator with a promoter-reporter system. PeerJ, 2020, 8, e9046. | 0.9 | 5 |
| 1403 | A programmable hierarchical-responsive nanoCRISPR elicits robust activation of endogenous target to treat cancer. Theranostics, 2021, 11, 9833-9846. | 4.6 | 13 |
| 1405 | Interrogating Mitochondrial Biology and Disease Using CRISPR/Cas9 Gene Editing. Genes, 2021, 12, 1604. | 1.0 | 10 |
| 1406 | Integrative epigenomic and high-throughput functional enhancer profiling reveals determinants of enhancer heterogeneity in gastric cancer. Genome Medicine, 2021, 13, 158. | 3.6 | 7 |
| 1407 | Glioblastoma pharmacotherapy: A multifaceted perspective of conventional and emerging treatments (Review). Experimental and Therapeutic Medicine, 2021, 22, 1408. | 0.8 | 16 |
| 1409 | Functional single-cell genomics of human cytomegalovirus infection. Nature Biotechnology, 2022, 40, 391-401. | 9.4 | 60 |
| 1410 | CRISPR-Mediated Transcriptional Repression in Toxoplasma gondii. MSphere, 2021, 6, e0047421. | 1.3 | 4 |
| 1411 | Fine-tuning gene expression for improved biosynthesis of natural products: From transcriptional to post-translational regulation. Biotechnology Advances, 2022, 54, 107853. | 6.0 | 10 |
| 1412 | A mechanistic view of long noncoding <scp>RNAs</scp> in cancer. Wiley Interdisciplinary Reviews RNA, 2022, 13, e1699. | 3.2 | 24 |
| 1413 | Enhanced prime editing systems by manipulating cellular determinants of editing outcomes. Cell, 2021, 184, 5635-5652.e29. | 13.5 | 332 |
| 1414 | CRISPR activation of endogenous genes reprograms fibroblasts into cardiovascular progenitor cells for myocardial infarction therapy. Molecular Therapy, 2022, 30, 54-74. | 3.7 | 22 |
| 1416 | Current Status and Perspectives on the Application of CRISPR/Cas9 Gene-Editing System to Develop a Low-Gluten, Non-Transgenic Wheat Variety. Foods, 2021, 10, 2351. | 1.9 | 14 |
| 1418 | Mapping the genetic landscape of DNA double-strand break repair. Cell, 2021, 184, 5653-5669.e25. | 13.5 | 98 |
| 1421 | Advances in Genome Directional Editing Technologies of CRISPR/Cas9. Hans Journal of Agricultural Sciences, 2014, 04, 142-150. | 0.0 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1423 | Genome Editing in Human Pluripotent Stem Cells. Pancreatic Islet Biology, 2016, , 43-67. | 0.1 | 0 |
| 1425 | Making better CRISPR libraries. ELife, 2016, 5, . | 2.8 | 0 |
| 1429 | 4 CRISPR-Based Genome Engineering in Human Stem Cells. , 2017, , 87-100. | | 0 |
| 1431 | Optimizing Crispr Cas9 Genome Editing System:A Review. International Journal of Endorsing Health Science Research (ijehsr), 2017, 5, 48. | 0.0 | 0 |
| 1435 | Genome Editing with Crispr-Cas9 Systems: Basic Research and Clinical Applications. Indonesian Biomedical Journal, 2017, 9, 1. | 0.2 | 4 |
| 1446 | Applications of CRSIPR/Cas9 in Cancer Research. Journal of Cancer Science and Research, 2018, 01, . | 0.1 | 0 |
| 1462 | Current Trends in Biotechnology: From Genome Sequence to Crop Improvement. , 2019, , 91-108. | | 0 |
| 1463 | Applications of Genome Engineering/Editing Tools in Plants. , 2019, , 143-165. | | 1 |
| 1465 | Construction of Microbial Cell Factories by Systems and Synthetic Biotechnology. , 2019, , 9-43. | | 1 |
| 1466 | CRISPR-based Technologies for Genome Engineering: Properties, Current Improvements and Applications in Medicine. RSC Drug Discovery Series, 2019, , 400-433. | 0.2 | 1 |
| 1467 | One Anti-CRISPR to Rule Them All: Potent Inhibition of Cas9 Homologs Used for Genome Editing. SSRN Electronic Journal, 0, , . | 0.4 | 1 |
| 1469 | Genomic Resolution of DLX-Orchestrated Transcriptional Circuits Driving Development of Forebrain GABAergic Neurons. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 1470 | An Update on the Applications of CRISPR/Cas9 Technology in Tomato. Energy, Environment, and Sustainability, 2019, , 249-263. | 0.6 | 0 |
| 1483 | The Synergy between CRISPR and Chemical Engineering. Current Gene Therapy, 2019, 19, 147-171. | 0.9 | 3 |
| 1493 | Discovery of Zika Virus Dependency and Restriction Factors Using Flow-Based Arrayed CRISPR Screening for Identification of Targets (FACS-IT). Methods in Molecular Biology, 2020, 2142, 215-234. | 0.4 | 1 |
| 1494 | Evolving Roles of Long Noncoding RNAs. RNA Technologies, 2020, , 59-84. | 0.2 | 1 |
| 1497 | Novel Approaches to Profile Functional Long Noncoding RNAs Associated with Stem Cell Pluripotency. Current Genomics, 2020, 21, 37-45. | 0.7 | 2 |
| 1502 | Inhibitory Studies of Tamarindus indica Seed Extract and Fractions on Hematological Activities of Bitis arietans Venom. Journal of Advances in Biology & Biotechnology, 0, , 48-57. | 0.2 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1510 | CRISPR approach in environmental chemical screening focusing on population variability. Journal of Toxicological Sciences, 2021, 46, 499-507. | 0.7 | 0 |
| 1511 | CRISPR/Cas9 in lepidopteran insects: Progress, application and prospects. Journal of Insect Physiology, 2021, 135, 104325. | 0.9 | 29 |
| 1512 | Establishment of a pig CRISPR/Cas9 knockout library for functional gene screening in pig cells. Biotechnology Journal, 2022, 17, e2100408. | 1.8 | 6 |
| 1513 | CRISPR Tackles Emerging Viral Pathogens. Viruses, 2021, 13, 2157. | 1.5 | 6 |
| 1514 | CRISPR/Cas9 Screening to Identify Conditionally Essential Genes in Human Cell Lines. Methods in Molecular Biology, 2022, 2377, 29-42. | 0.4 | 0 |
| 1515 | An Outlook on Global Regulatory Landscape for Genome-Edited Crops. International Journal of Molecular Sciences, 2021, 22, 11753. | 1.8 | 43 |
| 1516 | CRISPR/Cas-based Functional Genomic Approaches to Phenotypic Screening. RSC Drug Discovery Series, 2020, , 58-82. | 0.2 | 0 |
| 1519 | High-Throughput CRISPR Screening Identifies Genes Involved in Macrophage Viability and Inflammatory Pathways. Cell Reports, 2020, 33, 108541. | 2.9 | 25 |
| 1522 | Computer Designed PRC2 Inhibitor, EBdCas9, Reveals Functional TATA Boxes in Distal Promoter Regions. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 1524 | Application of mouse genetics to human disease: generation and analysis of mouse models. , 2020, , 95-108. | | 0 |
| 1525 | Recent Advances in Genetic Engineering Tools for Metabolic Engineering. , 2020, , 93-109. | | 0 |
| 1526 | Tumorigenesis-Related Long Noncoding RNAs and Their Targeting as Therapeutic Approach in Cancer. RNA Technologies, 2020, , 277-303. | 0.2 | 0 |
| 1527 | Tuning the Expression of Long Noncoding RNA Loci with CRISPR Interference. Methods in Molecular Biology, 2020, 2161, 1-16. | 0.4 | 2 |
| 1530 | Genome Engineering Tools in Immunotherapy. , 2020, , 73-102. | | 0 |
| 1539 | Prostate cancer research in the 21st century; report from the 2021 Coffeyâ€Holden prostate cancer academy meeting. Prostate, 2021, , . | 1.2 | 2 |
| 1540 | Genome-wide CRISPR interference screen identifies long non-coding RNA loci required for differentiation and pluripotency. PLoS ONE, 2021, 16, e0252848. | 1.1 | 12 |
| 1541 | CRISPR interference and activation of the microRNA-3662-HBP1 axis control progression of triple-negative breast cancer. Oncogene, 2022, 41, 268-279. | 2.6 | 10 |
| 1542 | Contextual reprogramming of CAR-T cells for treatment of HER2+ cancers. Journal of Translational Medicine, 2021, 19, 459. | 1.8 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1543 | Human iPSC-Derived Neurons as A Platform for Deciphering the Mechanisms behind Brain Aging. Biomedicines, 2021, 9, 1635. | 1.4 | 5 |
| 1544 | Competitive dCas9 binding as a mechanism for transcriptional control. Molecular Systems Biology, 2021, 17, e10512. | 3.2 | 13 |
| 1545 | Transposable elements that have recently been mobile in the human genome. BMC Genomics, 2021, 22, 789. | 1.2 | 12 |
| 1551 | Controlling the Activity of CRISPR Transcriptional Regulators with Inducible sgRNAs. Methods in Molecular Biology, 2021, 2162, 153-184. | 0.4 | 0 |
| 1555 | The CRISPR/Cas9 system for gene editing and its potential application in pain research. Translational Perioperative and Pain Medicine, 2016, 1, 22-33. | 0.0 | 12 |
| 1556 | Editing the Neuronal Genome: a CRISPR View of Chromatin Regulation in Neuronal Development, Function, and Plasticity. Yale Journal of Biology and Medicine, 2016, 89, 457-470. | 0.2 | 4 |
| 1557 | CRISPR-Mediated Epigenome Editing. Yale Journal of Biology and Medicine, 2016, 89, 471-486. | 0.2 | 30 |
| 1559 | Emerging roles of lncRNA in cancer and therapeutic opportunities. American Journal of Cancer Research, 2019, 9, 1354-1366. | 1.4 | 162 |
| 1560 | Gene surgery: Potential applications for human diseases. EXCLI Journal, 2019, 18, 908-930. | 0.5 | 4 |
| 1562 | CRISPR screen in cancer: status quo and future perspectives. American Journal of Cancer Research, 2021, 11, 1031-1050. | 1.4 | 4 |
| 1563 | Using Multiplexed CRISPR/Cas9 for Suppression of Cotton Leaf Curl Virus. International Journal of Molecular Sciences, 2021, 22, 12543. | 1.8 | 16 |
| 1564 | CRISPR/Cas System and Factors Affecting Its Precision and Efficiency. Frontiers in Cell and Developmental Biology, 2021, 9, 761709. | 1.8 | 20 |
| 1565 | Long Non-Coding RNAs (lncRNAs) in Response and Resistance to Cancer Immunosurveillance and Immunotherapy. Cells, 2021, 10, 3313. | 1.8 | 24 |
| 1567 | Engineering a PAM-flexible SpdCas9 variant as a universal gene repressor. Nature Communications, 2021, 12, 6916. | 5.8 | 17 |
| 1568 | Mammalian chemical genomics towards identifying targets and elucidating modesâ€ofâ€action of bioactive compounds. ChemBioChem, 2021, , . | 1.3 | 2 |
| 1569 | CRISPR-Cas Technology: Emerging Applications in Clinical Microbiology and Infectious Diseases. Pharmaceuticals, 2021, 14, 1171. | 1.7 | 11 |
| 1570 | Click chemistryâ€“enabled CRISPR screening reveals GSK3 as a regulator of PLD signaling. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 3.3 | 14 |
| 1572 | Comprehensive Genome Engineering Toolbox for Microalgae Nannochloropsis oceanica Based on CRISPR-Cas Systems. ACS Synthetic Biology, 2021, 10, 3369-3378. | 1.9 | 29 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1573 | Building Endogenous Gene Connections through RNA Self-Assembly Controlled CRISPR/Cas9 Function. Journal of the American Chemical Society, 2021, 143, 19834-19843. | 6.6 | 17 |
| 1574 | CRISPR Screen Contributes to Novel Target Discovery in Prostate Cancer. International Journal of Molecular Sciences, 2021, 22, 12777. | 1.8 | 16 |
| 1575 | CRISPR Screening: Molecular Tools for Studying Virusâ€“Host Interactions. Viruses, 2021, 13, 2258. | 1.5 | 7 |
| 1576 | Evolution of metastasis: new tools and insights. Trends in Cancer, 2022, 8, 98-109. | 3.8 | 40 |
| 1577 | Development of Lipid Nanoparticles for the Delivery of Macromolecules Based on the Molecular Design of pH-Sensitive Cationic Lipids. Chemical and Pharmaceutical Bulletin, 2021, 69, 1141-1159. | 0.6 | 14 |
| 1578 | Integrated genome and tissue engineering enables screening of cancer vulnerabilities in physiologically relevant perfusable ex vivo cultures. Biomaterials, 2022, 280, 121276. | 5.7 | 5 |
| 1579 | Applications of CRISPR-Cas System in Tumor Biology. Oncologie, 2021, 23, 463-492. | 0.2 | 1 |
| 1580 | Moving toward genome-editing therapies for cardiovascular diseases. Journal of Clinical Investigation, 2022, 132, . | 3.9 | 22 |
| 1581 | Delivery of CRISPR-Cas tools for in vivo genome editing therapy: Trends and challenges. Journal of Controlled Release, 2022, 342, 345-361. | 4.8 | 82 |
| 1582 | Preparation and Evaluation of Multistage Delivery Nanoparticle for Efficient CRISPR Activation In Vivo. Biomaterial Engineering, 2021, , 1-27. | 0.1 | 0 |
| 1583 | How to find genomic regions relevant for gene regulation. Medizinische Genetik, 2021, 33, 157-165. | 0.1 | 0 |
| 1584 | Editing the Epigenome in Neurodegenerative Diseases. Neurochemical Journal, 2021, 15, 359-366. | 0.2 | 0 |
| 1585 | NudC guides client transfer between the Hsp40/70 and Hsp90 chaperone systems. Molecular Cell, 2022, 82, 555-569.e7. | 4.5 | 20 |
| 1586 | BRD2 inhibition blocks SARS-CoV-2 infection by reducing transcription of the host cell receptor ACE2. Nature Cell Biology, 2022, 24, 24-34. | 4.6 | 47 |
| 1587 | The CRISPR-Cas toolbox and gene editing technologies. Molecular Cell, 2022, 82, 333-347. | 4.5 | 151 |
| 1588 | High-throughput methods for genome editing: the more the better. Plant Physiology, 2022, 188, 1731-1745. | 2.3 | 10 |
| 1589 | Applications of CRISPR/Cas System in Plants. , 2022, , 285-309. | | 1 |
| 1590 | Cure and Long-Term Remission Strategies. Methods in Molecular Biology, 2022, 2407, 391-428. | 0.4 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1593 | High-throughput navigation of the sequence space. , 2022, , 123-146. | | 0 |
| 1594 | Targeting S100A9â€“ALDH1A1â€“Retinoic Acid Signaling to Suppress Brain Relapse inEGFR-Mutant Lung Cancer. Cancer Discovery, 2022, 12, 1002-1021. | 7.7 | 22 |
| 1596 | Classification of CRISPR/Cas system and its application in tomato breeding. Theoretical and Applied Genetics, 2022, 135, 367-387. | 1.8 | 29 |
| 1597 | Therapy development for spinal muscular atrophy: perspectives for muscular dystrophies and neurodegenerative disorders. Neurological Research and Practice, 2022, 4, 2. | 1.0 | 27 |
| 1598 | Applications of CRISPR/Cas9 technology for modification of the plant genome. Genetica, 2022, 150, 1-12. | 0.5 | 8 |
| 1599 | An in vivo Cell-Based Delivery Platform for Zinc Finger Artificial Transcription Factors in Pre-clinical Animal Models. Frontiers in Molecular Neuroscience, 2021, 14, 789913. | 1.4 | 2 |
| 1600 | InÂvivo CRISPR screening identifies BAZ2 chromatin remodelers as druggable regulators of mammalian liver regeneration. Cell Stem Cell, 2022, 29, 372-385.e8. | 5.2 | 18 |
| 1601 | Tailoring Cardiac Synthetic Transcriptional Modulation Towards Precision Medicine. Frontiers in Cardiovascular Medicine, 2021, 8, 783072. | 1.1 | 1 |
| 1602 | Advances and application of CRISPR-Cas systems. , 2022, , 331-348. | | 0 |
| 1603 | Application of CRISPR/Cas system in iPSC-based disease model of hereditary deafness. , 2022, , 225-245. | | 0 |
| 1604 | Lysosomal dysfunction in neurodegeneration: emerging concepts and methods. Trends in Neurosciences, 2022, 45, 184-199. | 4.2 | 54 |
| 1605 | Key sequence features of CRISPR RNA for dual-guide CRISPR-Cas9 ribonucleoprotein complexes assembled with wild-type or HiFi Cas9. Nucleic Acids Research, 2022, 50, 2854-2871. | 6.5 | 2 |
| 1606 | Bacterial Retrons Enable Precise Gene Editing in Human Cells. CRISPR Journal, 2022, 5, 31-39. | 1.4 | 22 |
| 1607 | Systematic decomposition of sequence determinants governing CRISPR/Cas9 specificity. Nature Communications, 2022, 13, 474. | 5.8 | 23 |
| 1608 | shRNAs targeting mouseAdam10diminish cell response to proinflammatory stimuli independently ofAdam10silencing. Biology Open, 2022, 11, . | 0.6 | 1 |
| 1609 | Microbial DNA Enrichment Promotes Adrenomedullary Inflammation, Catecholamine Secretion, and Hypertension in Obese Mice. Journal of the American Heart Association, 2022, , e024561. | 1.6 | 5 |
| 1610 | CRISPR-based therapeutics: current challenges and future applications. Trends in Pharmacological Sciences, 2022, 43, 151-161. | 4.0 | 32 |
| 1611 | Time-resolved single-cell sequencing identifies multiple waves of mRNA decay during the mitosis-to-G1 phase transition. ELife, 2022, 11, . | 2.8 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1613 | High-content CRISPR screening. Nature Reviews Methods Primers, 2022, 2, . | 11.8 | 155 |
| 1614 | Identification of an endoplasmic reticulum proteostasis modulator that enhances insulin production in pancreatic Î² cells. Cell Chemical Biology, 2022, , . | 2.5 | 4 |
| 1615 | High-content CRISPR screening. Nature Reviews Methods Primers, 2022, 2, . | 11.8 | 24 |
| 1616 | The use of new CRISPR tools in cardiovascular research and medicine. Nature Reviews Cardiology, 2022, 19, 505-521. | 6.1 | 21 |
| 1617 | How to train your cell - Towards controlling phenotypes by harnessing the epigenome of Chinese hamster ovary production cell lines. Biotechnology Advances, 2022, 56, 107924. | 6.0 | 9 |
| 1618 | dCas9-VPR-mediated transcriptional activation of functionally equivalent genes for gene therapy. Nature Protocols, 2022, 17, 781-818. | 5.5 | 11 |
| 1619 | Insights into gene manipulation techniques for Acari functional genomics. Insect Biochemistry and Molecular Biology, 2022, 143, 103705. | 1.2 | 3 |
| 1621 | Activation of melatonin receptor 1 by CRISPRâ€Cas9 activator ameliorates cognitive deficits in an Alzheimer's disease mouse model. Journal of Pineal Research, 2022, 72, . | 3.4 | 12 |
| 1623 | CRISPR Guide RNA Library Screens in Human Induced Pluripotent Stem Cells. Methods in Molecular Biology, 2022, , 1. | 0.4 | 1 |
| 1624 | LncRNAs and Cardiovascular Disease. Advances in Experimental Medicine and Biology, 2022, 1363, 71-95. | 0.8 | 4 |
| 1625 | Dissecting Molecular Phenotypes Through FACS-Based Pooled CRISPR Screens. Methods in Molecular Biology, 2022, , 1-24. | 0.4 | 7 |
| 1626 | TDP-43 loss and ALS-risk SNPs drive mis-splicing and depletion of UNC13A. Nature, 2022, 603, 131-137. | 13.7 | 188 |
| 1627 | IQCELL: A platform for predicting the effect of gene perturbations on developmental trajectories using single-cell RNA-seq data. PLoS Computational Biology, 2022, 18, e1009907. | 1.5 | 13 |
| 1628 | CRISPR in cancer biology and therapy. Nature Reviews Cancer, 2022, 22, 259-279. | 12.8 | 157 |
| 1629 | Genome-wide functional screens enable the prediction of high activity CRISPR-Cas9 and -Cas12a guides in Yarrowia lipolytica. Nature Communications, 2022, 13, 922. | 5.8 | 25 |
| 1630 | GeneTargeter: Automated In Silico Design for Genome Editing in the Malaria Parasite, Plasmodium falciparum. CRISPR Journal, 2022, 5, 155-164. | 1.4 | 3 |
| 1632 | CRISPR based therapeutics: a new paradigm in cancer precision medicine. Molecular Cancer, 2022, 21, 85. | 7.9 | 15 |
| 1633 | Epigenetic basis and targeting of cancer metastasis. Trends in Cancer, 2022, 8, 226-241. | 3.8 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1635 | CRISPR-Cas gene editing technology and its application prospect in medicinal plants. Chinese Medicine, 2022, 17, 33. | 1.6 | 19 |
| 1636 | CRISPR signal conductor 2.0 for redirecting cellular information flow. Cell Discovery, 2022, 8, 26. | 3.1 | 2 |
| 1637 | Precise tumor immune rewiring via synthetic CRISPRa circuits gated by concurrent gain/loss of transcription factors. Nature Communications, 2022, 13, 1454. | 5.8 | 6 |
| 1638 | Preclinical Evaluation of CAR T Cell Function: In Vitro and In Vivo Models. International Journal of Molecular Sciences, 2022, 23, 3154. | 1.8 | 15 |
| 1639 | Therapeutic targeting of the USP2-E2F4 axis inhibits autophagic machinery essential for zinc homeostasis in cancer progression. Autophagy, 2022, 18, 2615-2635. | 4.3 | 16 |
| 1640 | <scp>CRISPR</scp>/Cas9â€Based Functional Genomics in Human Induced Pluripotent Stem Cellâ€“Derived Models: Can â€œthe Stars Alignâ€•for Neurodegenerative Diseases?. Movement Disorders, 2022, 37, 886-890. | 2.2 | 1 |
| 1641 | dCas9 fusion to computer-designed PRC2 inhibitor reveals functional TATA box in distal promoter region. Cell Reports, 2022, 38, 110457. | 2.9 | 12 |
| 1642 | Engineering the next-generation of CAR T-cells with CRISPR-Cas9 gene editing. Molecular Cancer, 2022, 21, 78. | 7.9 | 88 |
| 1643 | Cas13d: A New Molecular Scissor for Transcriptome Engineering. Frontiers in Cell and Developmental Biology, 2022, 10, 866800. | 1.8 | 21 |
| 1644 | Avian influenza viruses suppress innate immunity by inducing trans-transcriptional readthrough via SSU72. , 2022, 19, 702-714. | | 5 |
| 1646 | New Advances of CRISPR/Cas9 Technique and its Application in Disease Treatment and Medicinal Plants Research. Current Pharmaceutical Biotechnology, 2022, 23, 1678-1690. | 0.9 | 1 |
| 1648 | Principles and Applications of CRISPR Toolkit in Virus Manipulation, Diagnosis, and Virus-Host Interactions. Cells, 2022, 11, 999. | 1.8 | 3 |
| 1651 | Leucyl-tRNA synthetase is a tumour suppressor in breast cancer and regulates codon-dependent translation dynamics. Nature Cell Biology, 2022, 24, 307-315. | 4.6 | 25 |
| 1652 | Predicting base editing outcomes using position-specific sequence determinants. Nucleic Acids Research, 2022, 50, 3551-3564. | 6.5 | 15 |
| 1653 | The physiology and genetics of bacterial responses to antibiotic combinations. Nature Reviews Microbiology, 2022, 20, 478-490. | 13.6 | 54 |
| 1654 | Small molecule C381 targets the lysosome to reduce inflammation and ameliorate disease in models of neurodegeneration. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2121609119. | 3.3 | 14 |
| 1659 | Robust, Durable Gene Activation In Vivo via mRNA-Encoded Activators. ACS Nano, 2022, 16, 5660-5671. | 7.3 | 10 |
| 1661 | Development and Application of CRISPR-Cas Based Tools. Frontiers in Cell and Developmental Biology, 2022, 10, 834646. | 1.8 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1662 | CRISPR and cardiovascular diseases. Cardiovascular Research, 2023, 119, 79-93. | 1.8 | 10 |
| 1663 | Patient-Derived Tumor Organoids: New Progress and Opportunities to Facilitate Precision Cancer Immunotherapy. Frontiers in Oncology, 2022, 12, 872531. | 1.3 | 16 |
| 1665 | A genome-scale gain-of-function CRISPR screen in CD8 TÂcells identifies proline metabolism as a means to enhance CAR-T therapy. Cell Metabolism, 2022, 34, 595-614.e14. | 7.2 | 70 |
| 1666 | Refactoring transcription factors for metabolic engineering. Biotechnology Advances, 2022, 57, 107935. | 6.0 | 35 |
| 1667 | CRISPR-Based Genetic Switches and Other Complex Circuits: Research and Application. Life, 2021, 11, 1255. | 1.1 | 5 |
| 1670 | Systematic identification of genomic elements that regulateFCGR2Aexpression and harbor variants linked with autoimmune disease. Human Molecular Genetics, 2022, 31, 1946-1961. | 1.4 | 7 |
| 1671 | CRISPRi-mediated knock-down of PRDM1/BLIMP1 programs central memory differentiation in ex vivo-expanded human T cells. BioImpacts, 2021, , . | 0.7 | 0 |
| 1672 | Improving CRISPR tools by elucidating DNA repair. Nature Biotechnology, 2021, 39, 1512-1514. | 9.4 | 1 |
| 1674 | CRISPR-Based Approaches for the High-Throughput Characterization of Long Non-Coding RNAs. Non-coding RNA, 2021, 7, 79. | 1.3 | 6 |
| 1675 | Increase in Phytoextraction Potential by Genome Editing and Transformation: A Review. Plants, 2022, 11, 86. | 1.6 | 18 |
| 1676 | CRISPR Screens to Identify Regulators of Tumor Immunity. Annual Review of Cancer Biology, 2022, 6, 103-122. | 2.3 | 5 |
| 1677 | State-of-the-art CRISPR for in vivo and cell-based studies in Drosophila. Trends in Genetics, 2022, 38, 437-453. | 2.9 | 26 |
| 1678 | Multiplexed activation in mammalian cells using a split-intein CRISPR/Cas12a based synthetic transcription factor. Nucleic Acids Research, 2022, 50, 549-560. | 6.5 | 8 |
| 1679 | The use of base editing technology to characterize single nucleotide variants. Computational and Structural Biotechnology Journal, 2022, 20, 1670-1680. | 1.9 | 4 |
| 1680 | CRISPRâ€Act3.0â€Based Highly Efficient Multiplexed Gene Activation in Plants. Current Protocols, 2022, 2, e365. | 1.3 | 1 |
| 1681 | CRISPR-Mediated Activation of Î±V Integrin Subtypes Promotes Neuronal Differentiation of Neuroblastoma Neuro2a Cells. Frontiers in Genome Editing, 2022, 4, 846669. | 2.7 | 5 |
| 1682 | Oncogenic inspiration for programmable activators. Cell Genomics, 2022, 2, 100122. | 3.0 | 0 |
| 1683 | Ferroptosis Biology and Implication in Cancers. Frontiers in Molecular Biosciences, 2022, 9, 892957. | 1.6 | 15 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1685 | Genome editing: An essential technology for cancer treatment. Medicine in Omics, 2022, , 100015. | 0.6 | 3 |
| 1686 | CRISPR-Based Genome Editing: Advancements and Opportunities for Rice Improvement. International Journal of Molecular Sciences, 2022, 23, 4454. | 1.8 | 14 |
| 1696 | Preparation and Evaluation of Multistage Delivery Nanoparticle for Efficient CRISPR Activation In Vivo. Biomaterial Engineering, 2022, , 155-180. | 0.1 | 0 |
| 1697 | CRISPR-Cas9 library screening approach for anti-cancer drug discovery: overview and perspectives. Theranostics, 2022, 12, 3329-3344. | 4.6 | 16 |
| 1698 | Stepwise-edited, human melanoma models reveal mutationsâ€™ effect on tumor and microenvironment. Science, 2022, 376, eabi8175. | 6.0 | 24 |
| 1700 | The microRNA-3622 family at the 8p21 locus exerts oncogenic effects by regulating the p53-downstream gene network in prostate cancer progression. Oncogene, 2022, , . | 2.6 | 3 |
| 1701 | CRISPR/Cas therapeutic strategies for autosomal dominant disorders. Journal of Clinical Investigation, 2022, 132, . | 3.9 | 8 |
| 1702 | CRISPR/Cas9 in Chronic Lymphocytic Leukemia. Encyclopedia, 2022, 2, 928-936. | 2.4 | 1 |
| 1703 | Understanding astrocyte differentiation: Clinical relevance, technical challenges, and new opportunities in the omics era. WIREs Mechanisms of Disease, 2022, 14, e1557. | 1.5 | 7 |
| 1704 | Signaling by the integrated stress response kinase PKR is fine-tuned by dynamic clustering. Journal of Cell Biology, 2022, 221, . | 2.3 | 17 |
| 1705 | Meningioma DNA methylation groups identify biological drivers and therapeutic vulnerabilities. Nature Genetics, 2022, 54, 649-659. | 9.4 | 93 |
| 1706 | Development and expansion of the CRISPR/Cas9 toolboxes for powerful genome engineering in yeast. Enzyme and Microbial Technology, 2022, 159, 110056. | 1.6 | 4 |
| 1707 | Coupling CRISPR interference with FACS enrichment: New approach in glycoengineering of CHO cell lines for therapeutic glycoprotein production. Biotechnology Journal, 2022, , 2100499. | 1.8 | 2 |
| 1708 | A CRISPR view on autophagy. Trends in Cell Biology, 2022, , . | 3.6 | 2 |
| 1709 | Specific High-Sensitivity Enzymatic Molecular Detection System Termed RPA-Based CRISPR-Cas13a for Duck Tembusu Virus Diagnostics. Bioconjugate Chemistry, 2022, 33, 1232-1240. | 1.8 | 5 |
| 1710 | Targeting CISH enhances natural cytotoxicity receptor signaling and reduces NK cell exhaustion to improve solid tumor immunity. , 2022, 10, e004244. | | 23 |
| 1712 | Pediatric Sarcomas: The Next Generation of Molecular Studies. Cancers, 2022, 14, 2515. | 1.7 | 0 |
| 1713 | CRISPR/Cas Genome Editing in Engineering Plant Secondary Metabolites of Therapeutic Benefits. , 2022, , 187-208. | | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1716 | PAM-flexible dual base editor-mediated random mutagenesis and self-activation strategies to improve CRISPRa potency. Molecular Therapy - Methods and Clinical Development, 2022, 26, 26-37. | 1.8 | 1 |
| 1717 | <scp>Siteâ€directed</scp> integration of exogenous <scp>DNA</scp> into the soybean genome by <scp>LbCas12a</scp> fused to a plant viral <scp>HUH</scp> endonuclease. Plant Journal, 2022, 111, 905-916. | 2.8 | 2 |
| 1718 | Ingestion of single guide RNAs induces gene overexpression and extends lifespan in Caenorhabditis elegans via CRISPR activation. Journal of Biological Chemistry, 2022, 298, 102085. | 1.6 | 5 |
| 1719 | XIST loss impairs mammary stem cell differentiation and increases tumorigenicity through Mediator hyperactivation. Cell, 2022, 185, 2164-2183.e25. | 13.5 | 22 |
| 1721 | Epigenetic regulation of T cell exhaustion. Nature Immunology, 2022, 23, 848-860. | 7.0 | 82 |
| 1722 | Finding meaning in chaos: a selection signature for functional interactions and its use in molecular biology. FEBS Journal, 2023, 290, 3914-3927. | 2.2 | 1 |
| 1724 | Histone editing elucidates the functional roles of H3K27 methylation and acetylation in mammals. Nature Genetics, 2022, 54, 754-760. | 9.4 | 59 |
| 1725 | Using population selection and sequencing to characterize natural variation of starvation resistance in Caenorhabditis elegans. ELife, 0, 11, . | 2.8 | 4 |
| 1726 | CRISPR activation screen identifies TGFÎ²-associated PEG10 as a crucial tumor suppressor in Ewing sarcoma. Scientific Reports, 2022, 12, . | 1.6 | 0 |
| 1727 | Advancement in CRISPR/Cas9 Technology to Better Understand and Treat Neurological Disorders. Cellular and Molecular Neurobiology, 2023, 43, 1019-1035. | 1.7 | 3 |
| 1728 | Oncofusion-driven de novo enhancer assembly promotes malignancy in Ewing sarcoma via aberrant expression of the stereociliary protein LOXHD1. Cell Reports, 2022, 39, 110971. | 2.9 | 6 |
| 1729 | Bridging Glycomics and Genomics: New Uses of Functional Genetics in the Study of Cellular Glycosylation. Frontiers in Molecular Biosciences, 0, 9, . | 1.6 | 3 |
| 1730 | T cell stimulation remodels the latently HIV-1 infected cell population by differential activation of proviral chromatin. PLoS Pathogens, 2022, 18, e1010555. | 2.1 | 5 |
| 1731 | Chromatin interaction maps identify Wnt responsive cis-regulatory elements coordinating Paupar-Pax6 expression in neuronal cells. PLoS Genetics, 2022, 18, e1010230. | 1.5 | 6 |
| 1732 | Genome-wide CRISPR screens of TÂcell exhaustion identify chromatin remodeling factors that limit TÂcell persistence. Cancer Cell, 2022, 40, 768-786.e7. | 7.7 | 104 |
| 1733 | Integrated screens uncover a cell surface tumor suppressor gene KIRREL involved in Hippo pathway. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 3.3 | 10 |
| 1734 | Dissecting Plant Gene Functions Using CRISPR Toolsets for Crop Improvement. Journal of Agricultural and Food Chemistry, 2022, 70, 7343-7359. | 2.4 | 4 |
| 1736 | Ablation of cDC2 development by triple mutations within the Zeb2 enhancer. Nature, 2022, 607, 142-148. | 13.7 | 34 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1738 | Innovative cancer nanomedicine based on immunology, gene editing, intracellular trafficking control. Journal of Controlled Release, 2022, 348, 357-369. | 4.8 | 3 |
| 1739 | dCas9-mediated dysregulation of gene expression in human induced pluripotent stem cells during primitive streak differentiation. Metabolic Engineering, 2022, 73, 70-81. | 3.6 | 1 |
| 1740 | Mapping information-rich genotype-phenotype landscapes with genome-scale Perturb-seq. Cell, 2022, 185, 2559-2575.e28. | 13.5 | 169 |
| 1741 | Enhancing Animal Disease Resistance, Production Efficiency, and Welfare through Precise Genome Editing. International Journal of Molecular Sciences, 2022, 23, 7331. | 1.8 | 2 |
| 1743 | A Genome-Wide Screen Identifies PDPK1 as a Target to Enhance the Efficacy of MEK1/2 Inhibitors in NRAS Mutant Melanoma. Cancer Research, 2022, 82, 2625-2639. | 0.4 | 11 |
| 1744 | A Special Phenotype of Aconidial Aspergillus niger SH2 and Its Mechanism of Formation via CRISPRi. Journal of Fungi (Basel, Switzerland), 2022, 8, 679. | 1.5 | 4 |
| 1747 | A campaign targeting a conserved Hsp70 binding site uncovers how subcellular localization is linked to distinct biological activities. Cell Chemical Biology, 2022, 29, 1303-1316.e3. | 2.5 | 7 |
| 1749 | Transcriptional Activation of Biosynthetic Gene Clusters in Filamentous Fungi. Frontiers in Bioengineering and Biotechnology, 0, 10, . | 2.0 | 14 |
| 1750 | Tutorial: design and execution of CRISPR in vivo screens. Nature Protocols, 2022, 17, 1903-1925. | 5.5 | 12 |
| 1752 | Message in hand: the application of CRISPRi, RNAi, and LncRNA in adenocarcinoma. , 2022, 39, . | | 0 |
| 1753 | Programmable Transcriptional Modulation with a Structured RNA-Mediated CRISPR-dCas9 Complex. Journal of the American Chemical Society, 2022, 144, 12690-12697. | 6.6 | 4 |
| 1757 | Ras-mutant cancers are sensitive to small molecule inhibition of V-type ATPases in mice. Nature Biotechnology, 2022, 40, 1834-1844. | 9.4 | 13 |
| 1758 | High-Throughput CRISPR Screening in Hematological Neoplasms. Cancers, 2022, 14, 3612. | 1.7 | 3 |
| 1760 | Modular safe-harbor transgene insertion for targeted single-copy and extrachromosomal array integration in Caenorhabditis elegans. G3: Genes, Genomes, Genetics, 2022, 12, . | 0.8 | 15 |
| 1761 | Small noncoding RNAs play superior roles in maintaining hematopoietic stem cell homeostasis. Blood Science, 2022, 4, 125-132. | 0.4 | 0 |
| 1762 | RISC-y Business: Limitations of Short Hairpin RNA-Mediated Gene Silencing in the Brain and a Discussion of CRISPR/Cas-Based Alternatives. Frontiers in Molecular Neuroscience, 0, 15, . | 1.4 | 10 |
| 1763 | Inducible expression of large gRNA arrays for multiplexed CRISPRai applications. Nature Communications, 2022, 13, . | 5.8 | 21 |
| 1764 | Nested epistasis enhancer networks for robust genome regulation. Science, 2022, 377, 1077-1085. | 6.0 | 40 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1766 | A CRISPRi/a platform in human iPSC-derived microglia uncovers regulators of disease states. Nature Neuroscience, 2022, 25, 1149-1162. | 7.1 | 79 |
| 1767 | The CRISPR Revolution in the Drug Discovery Workflow: An Industry Perspective. CRISPR Journal, 2022, 5, 634-641. | 1.4 | 2 |
| 1769 | PIWI-Interacting RNA (piRNA) and Epigenetic Editing in Environmental Health Sciences. Current Environmental Health Reports, 2022, 9, 650-660. | 3.2 | 4 |
| 1771 | Translational potential of base-editing tools for gene therapy of monogenic diseases. Frontiers in Bioengineering and Biotechnology, 0, 10, . | 2.0 | 5 |
| 1772 | Selective Polyprotein Processing Determines Norovirus Sensitivity to Trim7. Journal of Virology, 2022, 96, . | 1.5 | 1 |
| 1773 | Generation of a CRISPR activation mouse that enables modelling of aggressive lymphoma and interrogation of venetoclax resistance. Nature Communications, 2022, 13, . | 5.8 | 12 |
| 1774 | CRISPR-RNAa: targeted activation of translation using dCas13 fusions to translation initiation factors. Nucleic Acids Research, 2022, 50, 8986-8998. | 6.5 | 17 |
| 1777 | Generation of dual-gRNA library for combinatorial CRISPR screening of synthetic lethal gene pairs. STAR Protocols, 2022, 3, 101556. | 0.5 | 1 |
| 1778 | Short open reading frame genes in innate immunity: from discovery to characterization. Trends in Immunology, 2022, 43, 741-756. | 2.9 | 9 |
| 1779 | <scp>SOX9</scp> maintains human foetal lung tip progenitor state by enhancing <scp>WNT</scp> and <scp>RTK</scp> signalling. EMBO Journal, 2022, 41, . | 3.5 | 15 |
| 1781 | CRISPR/Cas9 Technology and Its Utility for Crop Improvement. International Journal of Molecular Sciences, 2022, 23, 10442. | 1.8 | 12 |
| 1782 | Defining and targeting patterns of T cell dysfunction in inborn errors of immunity. Frontiers in Immunology, 0, 13, . | 2.2 | 3 |
| 1783 | Capturing nucleic acid variants with precision using CRISPR diagnostics. Biosensors and Bioelectronics, 2022, 217, 114712. | 5.3 | 4 |
| 1784 | Improving isoprenol productionviasystematic CRISPRi screening in engineeredEscherichia coli. Green Chemistry, 2022, 24, 6955-6964. | 4.6 | 7 |
| 1785 | Mechanobiology of immune cells: Messengers, receivers and followers in leishmaniasis aiding synthetic devices. Current Research in Immunology, 2022, 3, 186-198. | 1.2 | 4 |
| 1786 | CRISPR-Cas Technology: A Genome-Editing Powerhouse for Molecular Plant Breeding. , 2022, , 803-879. | | 4 |
| 1787 | Long non-coding RNA in Non-alcoholic fatty liver disease. Advances in Clinical Chemistry, 2022, , 1-35. | 1.8 | 4 |
| 1788 | Genome-Wide CRISPR Screening to Identify Mammalian Factors that Regulate Intron Retention. Methods in Molecular Biology, 2022, , 263-284. | 0.4 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1789 | Identification of Genes Regulating Hepatocyte Injury by a Genome-Wide CRISPR-Cas9 Screen. Methods in Molecular Biology, 2022, , 227-251. | 0.4 | 0 |
| 1790 | CRISPR/Cas-Mediated Functional Gene Editing for Improvement in Bioremediation: An Emerging Strategy. , 2022, , 635-664. | | 1 |
| 1791 | Phytoremediation using CRISPR-Cas9 technology. , 2022, , 39-53. | | 0 |
| 1792 | Enhancing Cardiomyocyte Transcription Using In Vivo CRISPR/Cas9 Systems. Methods in Molecular Biology, 2022, , 53-61. | 0.4 | 2 |
| 1794 | Emerging CRISPR Technologies. , 0, , . | | 0 |
| 1796 | CRISPR/Cas9 system: a reliable and facile genome editing tool in modern biology. Molecular Biology Reports, 2022, 49, 12133-12150. | 1.0 | 9 |
| 1797 | Adaptive exchange sustains cullinâ€“RING ubiquitin ligase networks and proper licensing of DNA replication. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 3.3 | 8 |
| 1800 | Gain-of-function genetic screens in human cells identify SLC transporters overcoming environmental nutrient restrictions. Life Science Alliance, 2022, 5, e202201404. | 1.3 | 8 |
| 1801 | A comprehensive overview of CRISPR/Cas 9 technology and application thereof in drug discovery. Journal of Cellular Biochemistry, 2022, 123, 1674-1698. | 1.2 | 7 |
| 1802 | Scalable Functional Assays for the Interpretation of Human Genetic Variation. Annual Review of Genetics, 2022, 56, 441-465. | 3.2 | 18 |
| 1805 | Dual genome-wide coding and lncRNA screens in neural induction of induced pluripotent stem cells. Cell Genomics, 2022, 2, 100177. | 3.0 | 10 |
| 1807 | Identification of orphan ligand-receptor relationships using a cell-based CRISPRa enrichment screening platform. ELife, 0, 11, . | 2.8 | 9 |
| 1808 | New Players in Neuronal Iron Homeostasis: Insights from CRISPRi Studies. Antioxidants, 2022, 11, 1807. | 2.2 | 1 |
| 1809 | Primary and metastatic tumors exhibit systems-level differences in dependence on mitochondrial respiratory function. PLoS Biology, 2022, 20, e3001753. | 2.6 | 2 |
| 1810 | Big data in basic and translational cancer research. Nature Reviews Cancer, 2022, 22, 625-639. | 12.8 | 67 |
| 1811 | Resurrecting essential amino acid biosynthesis in mammalian cells. ELife, 0, 11, . | 2.8 | 9 |
| 1812 | CRISPR/Cas9 in the era of nanomedicine and synthetic biology. Drug Discovery Today, 2023, 28, 103375. | 3.2 | 2 |
| 1813 | Accounting for small variations in the tracrRNA sequence improves sgRNA activity predictions for CRISPR screening. Nature Communications, 2022, 13, . | 5.8 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1814 | A competitive precision CRISPR method to identify the fitness effects of transcription factor binding sites. Nature Biotechnology, 0, , . | 9.4 | 3 |
| 1815 | Cold shock domainâ€“containing protein E1 is a posttranscriptional regulator of the LDL receptor. Science Translational Medicine, 2022, 14, . | 5.8 | 8 |
| 1816 | Targeted demethylation at ZNF154 promotor upregulates ZNF154 expression and inhibits the proliferation and migration of Esophageal Squamous Carcinoma cells. Oncogene, 2022, 41, 4537-4546. | 2.6 | 7 |
| 1817 | Design, Construction, and Validation of Targeted Gene Activation with TREE System in Human Cells. Methods in Molecular Biology, 2023, , 211-226. | 0.4 | 0 |
| 1818 | Lineage-coupled clonal capture identifies clonal evolution mechanisms and vulnerabilities of BRAFV600E inhibition resistance in melanoma. Cell Discovery, 2022, 8, . | 3.1 | 2 |
| 1819 | Identifying an oligodendrocyte enhancer that regulates Olig2 expression. Human Molecular Genetics, 0, , . | 1.4 | 2 |
| 1822 | Long non-coding RNAs (lncRNAs) signaling in cancer chemoresistance: From prediction to druggability. Drug Resistance Updates, 2022, 65, 100866. | 6.5 | 21 |
| 1823 | How to detect CRISPR with CRISPR â€“ employing SHERLOCK for doping control purposes. Analyst, The, 2022, 147, 5528-5536. | 1.7 | 5 |
| 1824 | Flavivirusâ€“Host Interaction Landscape Visualized through Genome-Wide CRISPR Screens. Viruses, 2022, 14, 2164. | 1.5 | 5 |
| 1825 | Quantitative Framework for Bench-to-Bedside Cancer Research. Cancers, 2022, 14, 5254. | 1.7 | 0 |
| 1826 | CasPlay provides a gRNA-barcoded CRISPR-based display platform for antibody repertoire profiling. Cell Reports Methods, 2022, 2, 100318. | 1.4 | 1 |
| 1827 | CRISPRi screens in human iPSC-derived astrocytes elucidate regulators of distinct inflammatory reactive states. Nature Neuroscience, 2022, 25, 1528-1542. | 7.1 | 35 |
| 1828 | Eco-Friendly Biocontrol Strategies of Alternaria Phytopathogen Fungus: A Focus on Gene-Editing Techniques. Agriculture (Switzerland), 2022, 12, 1722. | 1.4 | 4 |
| 1830 | A Novel CRISPR Interference Effector Enabling Functional Gene Characterization with Synthetic Guide RNAs. CRISPR Journal, 2022, 5, 769-786. | 1.4 | 2 |
| 1831 | Perturbation of Gene Regulation by Genome Editing. Methods in Molecular Biology, 2023, , 59-68. | 0.4 | 0 |
| 1833 | Identification of acetic acid sensitive strains through biosensor-based screening of a Saccharomyces cerevisiae CRISPRi library. Microbial Cell Factories, 2022, 21, . | 1.9 | 2 |
| 1834 | Development and Applications of CRISPR/Cas9-Based Genome Editing in Lactobacillus. International Journal of Molecular Sciences, 2022, 23, 12852. | 1.8 | 6 |
| 1836 | MTCH2 is a mitochondrial outer membrane protein insertase. Science, 2022, 378, 317-322. | 6.0 | 53 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1837 | CRISPR Activation/Interference Screen to Identify Genetic Networks in HDAC-Inhibitor-Resistant Cells. Methods in Molecular Biology, 2023, , 429-454. | 0.4 | 1 |
| 1838 | CRISPRi screening identifies CASP8AP2 as an essential viability factor in lung cancer controlling tumor cell death via the AP-1 pathway. Cancer Letters, 2023, 552, 215958. | 3.2 | 6 |
| 1839 | Pooled image-base screening of mitochondria with microraft isolation distinguishes pathogenic mitofusin 2 mutations. Communications Biology, 2022, 5, . | 2.0 | 1 |
| 1840 | GATOR2-dependent mTORC1 activity is a therapeutic vulnerability in FOXO1 fusionâ€“positive rhabdomyosarcoma. JCI Insight, 2022, 7, . | 2.3 | 6 |
| 1841 | The N6-methyladenosine methyltransferase METTL16 enables erythropoiesis through safeguarding genome integrity. Nature Communications, 2022, 13, . | 5.8 | 13 |
| 1842 | In silico design of CMV promoter binding oligonucleotides and their impact on inhibition of gene expression in Chinese hamster ovary cells. Journal of Biotechnology, 2022, 359, 185-193. | 1.9 | 0 |
| 1844 | A comprehensive Bioconductor ecosystem for the design of CRISPR guide RNAs across nucleases and technologies. Nature Communications, 2022, 13, . | 5.8 | 10 |
| 1845 | The evaluation of active transcriptional repressor domain for CRISPRi in plants. Gene, 2023, 851, 146967. | 1.0 | 5 |
| 1846 | Transcriptomics and genetic engineering. , 2023, , 43-65. | | 0 |
| 1847 | Genome Editing: A Review of the Challenges and Approaches. , 2022, , 71-101. | | 0 |
| 1848 | Biosensor-assisted titratable CRISPRi high-throughput (BATCH) screening for over-production phenotypes. Metabolic Engineering, 2023, 75, 58-67. | 3.6 | 14 |
| 1849 | Antibody-mediated delivery of CRISPR-Cas9 ribonucleoproteins in human cells. Protein Engineering, Design and Selection, 2022, 35, . | 1.0 | 3 |
| 1850 | Studying Virus-Host Interactions with CRISPR Technology. Methods in Molecular Biology, 2023, , 105-117. | 0.4 | 0 |
| 1851 | Pooled genetic screens with imageâ€based profiling. Molecular Systems Biology, 2022, 18, . | 3.2 | 8 |
| 1853 | Genetic tools to dissect functions of long noncoding <scp>RNAs</scp>. IUBMB Life, 2023, 75, 458-470. | 1.5 | 0 |
| 1854 | Structure and functional mapping of the KRABâ€KAP1 repressor complex. EMBO Journal, 2022, 41, . | 3.5 | 9 |
| 1855 | Applying CRISPR-Cas9 screens to dissect hematological malignancies. Blood Advances, 2023, 7, 2252-2270. | 2.5 | 2 |
| 1856 | EpiCas-DL: Predicting sgRNA activity for CRISPR-mediated epigenome editing by deep learning. Computational and Structural Biotechnology Journal, 2023, 21, 202-211. | 1.9 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1857 | Integration of CRISPR/Cas9 with artificial intelligence for improved cancer therapeutics. Journal of Translational Medicine, 2022, 20, . | 1.8 | 11 |
| 1859 | Towards elucidating disease-relevant states of neurons and glia by CRISPR-based functional genomics. Genome Medicine, 2022, 14, . | 3.6 | 1 |
| 1860 | Recent advances in machine learning applications in metabolic engineering. Biotechnology Advances, 2023, 62, 108069. | 6.0 | 18 |
| 1861 | Forward Genetic Screens as Tools to Investigate Role and Mechanisms of EMT in Cancer. Cancers, 2022, 14, 5928. | 1.7 | 3 |
| 1863 | Gene activation guided by nascent RNA-bound transcription factors. Nature Communications, 2022, 13, . | 5.8 | 2 |
| 1865 | Multiplexed engineering and precision gene editing in cellular immunotherapy. Frontiers in Immunology, 0, 13, . | 2.2 | 4 |
| 1866 | CRISPR-Based Tools for Fighting Rare Diseases. Life, 2022, 12, 1968. | 1.1 | 2 |
| 1867 | SUMO conjugation regulates the activity of the Integrator complex. Nucleic Acids Research, 2022, 50, 12444-12461. | 6.5 | 4 |
| 1868 | Transcription regulation strategies in methylotrophs: progress and challenges. Bioresources and Bioprocessing, 2022, 9, . | 2.0 | 3 |
| 1869 | CRISPR screens for functional interrogation of immunity. Nature Reviews Immunology, 2023, 23, 363-380. | 10.6 | 11 |
| 1870 | Genomic characterization and therapeutic utilization of IL-13-responsive sequences in asthma. Cell Genomics, 2023, 3, 100229. | 3.0 | 5 |
| 1871 | Development and applications of a CRISPR activation system for facile genetic overexpression in Candida albicans. G3: Genes, Genomes, Genetics, 2023, 13, . | 0.8 | 5 |
| 1872 | An Optogeneticâ€Controlled Cell Reprogramming System for Driving Cell Fate and Lightâ€Responsive Chimeric Mice. Advanced Science, 2023, 10, . | 5.6 | 2 |
| 1874 | IFITM proteins assist cellular uptake of diverse linked chemotypes. Science, 2022, 378, 1097-1104. | 6.0 | 12 |
| 1875 | Shifting the focus of zebrafish toward a model of the tumor microenvironment. ELife, 0, 11, . | 2.8 | 6 |
| 1877 | Viewing AML through a New Lens: Technological Advances in the Study of Epigenetic Regulation. Cancers, 2022, 14, 5989. | 1.7 | 0 |
| 1878 | An Overview of Genome Editing in Cardiovascular and Metabolic Diseases. Advances in Experimental Medicine and Biology, 2023, , 3-16. | 0.8 | 1 |
| 1880 | ACTR5 controls CDKN2A and tumor progression in an INO80-independent manner. Science Advances, 2022, 8, . | 4.7 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1882 | From DNA-protein interactions to the genetic circuit design using CRISPR-dCas systems. Frontiers in Molecular Biosciences, 0, 9, . | 1.6 | 1 |
| 1883 | Large-Scale CRISPRi and Transcriptomics of Staphylococcus epidermidis Identify Genetic Factors Implicated in Lifestyle Versatility. MBio, 2022, 13, . | 1.8 | 4 |
| 1884 | CRISPR activation and interference as investigative tools in the cardiovascular system. International Journal of Biochemistry and Cell Biology, 2023, 155, 106348. | 1.2 | 1 |
| 1885 | A Tet-Inducible CRISPR Platform for High-Fidelity Editing of Human Pluripotent Stem Cells. Genes, 2022, 13, 2363. | 1.0 | 2 |
| 1887 | Entry receptors â€" the gateway to alphavirus infection. Journal of Clinical Investigation, 2023, 133, . | 3.9 | 14 |
| 1889 | Single-cell profiling of lncRNAs in human germ cells and molecular analysis reveals transcriptional regulation of LNC1845 on LHX8. ELife, 0, 12, . | 2.8 | 0 |
| 1891 | CRISPR interference for sequence-specific regulation of fibroblast growth factor receptor A in Schistosoma mansoni. Frontiers in Immunology, 0, 13, . | 2.2 | 2 |
| 1892 | CRISPR/Cas9-based genome editing for multimodal synergistic cancer nanotherapy. Nano Today, 2023, 48, 101734. | 6.2 | 5 |
| 1893 | Maximizing CRISPRi efficacy and accessibility with dual-sgRNA libraries and optimal effectors. ELife, 0, 11, . | 2.8 | 27 |
| 1894 | Construction of a Set of Novel Transposon Vectors for Efficient Silencing of Protein and lncRNA Genes via CRISPR Interference. Molecular Biotechnology, 0, , . | 1.3 | 0 |
| 1896 | A universal deep-learning model for zinc finger design enables transcription factor reprogramming. Nature Biotechnology, 2023, 41, 1117-1129. | 9.4 | 13 |
| 1897 | T-REX17 is a transiently expressed non-coding RNA essential for human endoderm formation. ELife, 0, 12, . | 2.8 | 1 |
| 1898 | Rapid Multiplexed Flow Cytometric Validation of CRISPRi sgRNAs in Tissue Culture. Bio-protocol, 2023, 13, . | 0.2 | 0 |
| 1900 | MS0621, a novel small-molecule modulator of Ewing sarcoma chromatin accessibility, interacts with an RNA-associated macromolecular complex and influences RNA splicing. Frontiers in Oncology, 0, 13, . | 1.3 | 1 |
| 1901 | The genome editing revolution. Trends in Biotechnology, 2023, 41, 396-409. | 4.9 | 22 |
| 1904 | Enhancement of protein translation by CRISPR/dCasRx coupled with SINEB2 repeat of noncoding RNAs. Nucleic Acids Research, 2023, 51, e33-e33. | 6.5 | 9 |
| 1908 | Identifying Genetic Regulators of Proteinâ€Glycan Interactions with Genomeâ€Wide CRISPR Screening. Current Protocols, 2023, 3, . | 1.3 | 0 |
| 1909 | Gene Modulation with CRISPR-based Tools in Human iPSC-Cardiomyocytes. Stem Cell Reviews and Reports, 0, , . | 1.7 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1910 | Roles of innovative genome editing technologies in stem cell engineering, rheumatic diseases and other joint/bone diseases. , 2023, , 53-77. | | 0 |
| 1911 | Toward the Development of Epigenome Editing-Based Therapeutics: Potentials and Challenges. International Journal of Molecular Sciences, 2023, 24, 4778. | 1.8 | 10 |
| 1913 | Translating non-coding genetic associations into a better understanding of immune-mediated disease. DMM Disease Models and Mechanisms, 2023, 16, . | 1.2 | 0 |
| 1914 | Targeting epigenetic aberrations of sarcoma in <scp>CRISPR</scp> era. Genes Chromosomes and Cancer, 2023, 62, 510-525. | 1.5 | 0 |
| 1915 | The landscape of cryptic antisense transcription in human cancers reveals an oncogenic noncoding RNA in lung cancer. Science Advances, 2023, 9, . | 4.7 | 0 |
| 1916 | Enrichment of transgene integrations by transient CRISPR activation of a silent reporter gene. Molecular Therapy - Methods and Clinical Development, 2023, 29, 1-16. | 1.8 | 1 |
| 1917 | Production of CRISPRi-engineered primary human mammary epithelial cells with baboon envelope pseudotyped lentiviral vectors. STAR Protocols, 2023, 4, 102055. | 0.5 | 0 |
| 1918 | Rare immune diseases paving the road for genome editing-based precision medicine. Frontiers in Genome Editing, 0, 5, . | 2.7 | 5 |
| 1919 | Development of a CRISPRi Human Retinal Pigmented Epithelium Model for Functional Study of Age-Related Macular Degeneration Genes. International Journal of Molecular Sciences, 2023, 24, 3417. | 1.8 | 3 |
| 1920 | Revolutionizing DNA repair research and cancer therapy with CRISPRâ€“Cas screens. Nature Reviews Molecular Cell Biology, 2023, 24, 477-494. | 16.1 | 17 |
| 1921 | Histone malonylation is regulated by SIRT5 and KAT2A. IScience, 2023, 26, 106193. | 1.9 | 6 |
| 1922 | Recent advances in nanocomposite-based delivery systems for targeted CRISPR/Cas delivery and therapeutic genetic manipulation. Journal of Materials Chemistry B, 2023, 11, 5251-5271. | 2.9 | 5 |
| 1923 | New Target Gene Screening Using Shortened and Random sgRNA Libraries in Microbial CRISPR Interference. ACS Synthetic Biology, 2023, 12, 800-808. | 1.9 | 1 |
| 1924 | Transplantation of Adipose-Tissue-Engineered Constructs with CRISPR-Mediated UCP1 Activation. International Journal of Molecular Sciences, 2023, 24, 3844. | 1.8 | 1 |
| 1925 | A versatile, high-efficiency platform for CRISPR-based gene activation. Nature Communications, 2023, 14, . | 5.8 | 9 |
| 1926 | Applications of CRISPR/Cas9 in the field of microbiology. Methods in Microbiology, 2023, , . | 0.4 | 0 |
| 1927 | Hacking hematopoiesis â€“ emerging tools for examining variant effects. DMM Disease Models and Mechanisms, 2023, 16, . | 1.2 | 0 |
| 1928 | Interstrand crosslinking of homologous repair template DNA enhances gene editing in human cells. Nature Biotechnology, 2023, 41, 1398-1404. | 9.4 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1929 | Nanoscale, antigen encounter-dependent, IL-12 delivery by CAR T cells plus PD-L1 blockade for cancer treatment. Journal of Translational Medicine, 2023, 21, . | 1.8 | 3 |
| 1930 | ATM-SPARK: A GFP phase separationâ€“based activity reporter of ATM. Science Advances, 2023, 9, . | 4.7 | 4 |
| 1932 | Synthetic biology tools for engineering Corynebacterium glutamicum. Computational and Structural Biotechnology Journal, 2023, 21, 1955-1965. | 1.9 | 5 |
| 1933 | Induced Pluripotent Stem Cells in the Era of Precise Genome Editing. Current Stem Cell Research and Therapy, 2024, 19, 307-315. | 0.6 | 0 |
| 1934 | Oxygen toxicity causes cyclic damage by destabilizing specific Fe-S cluster-containing protein complexes. Molecular Cell, 2023, 83, 942-960.e9. | 4.5 | 8 |
| 1935 | Lipid peroxidation increases membrane tension, Piezo1 gating, and cation permeability to execute ferroptosis. Current Biology, 2023, 33, 1282-1294.e5. | 1.8 | 44 |
| 1936 | Syncytin-mediated open-ended membrane tubular connections facilitate the intercellular transfer of cargos including Cas9 protein. ELife, 0, 12, . | 2.8 | 7 |
| 1937 | Remodeling Tumor Immunogenicity with Dual-Activatable Binary CRISPR Nanomedicine for Cancer Immunotherapy. ACS Nano, 2023, 17, 5713-5726. | 7.3 | 5 |
| 1938 | CRISPR-assisted transcription activation by phase-separation proteins. Protein and Cell, 2023, 14, 874-887. | 4.8 | 4 |
| 1941 | Seedlessness Trait and Genome Editingâ€”A Review. International Journal of Molecular Sciences, 2023, 24, 5660. | 1.8 | 3 |
| 1942 | Biomaterial-assisted targeted and controlled delivery of CRISPR/Cas9 for precise gene editing. Biomaterials Science, 2023, 11, 3762-3783. | 2.6 | 16 |
| 1943 | Methyltransferase Inhibition Enables TgfÎ² Driven Induction of CDKN2A and B in Cancer Cells. Molecular and Cellular Biology, 2023, 43, 115-129. | 1.1 | 0 |
| 1944 | CRISPR-Cas-mediated transcriptional modulation: The therapeutic promises of CRISPRa and CRISPRi. Molecular Therapy, 2023, 31, 1920-1937. | 3.7 | 15 |
| 1945 | MORF2-mediated plastidial retrograde signaling is involved in stress response and skotomorphogenesis beyond RNA editing. Frontiers in Plant Science, 0, 14, . | 1.7 | 4 |
| 1946 | Collateral activity of the CRISPR/RfxCas13d system in human cells. Communications Biology, 2023, 6, . | 2.0 | 16 |
| 1949 | <scp>CRISPR</scp>â€Based <scp>KCC2</scp> Upregulation Attenuates Drugâ€Resistant Seizure in Mouse Models of Epilepsy. Annals of Neurology, 2023, 94, 91-105. | 2.8 | 2 |
| 1950 | Plant Mutagenesis Tools for Precision Breeding: Conventional CRISPR/Cas9 Tools and Beyond. , 2023, , 269-291. | | 0 |
| 1951 | Optimized whole-genome CRISPR interference screens identify ARID1A-dependent growth regulators in human induced pluripotent stem cells. Stem Cell Reports, 2023, , . | 2.3 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 1952 | Lnc-ing epigenetic mechanisms with autophagy and cancer drug resistance. Advances in Cancer Research, 2023, , . | 1.9 | 0 |
| 1953 | CRISPR-Cas System: The Current and Emerging Translational Landscape. Cells, 2023, 12, 1103. | 1.8 | 7 |
| 1954 | Understanding neural development and diseases using CRISPR screens in human pluripotent stem cell-derived cultures. Frontiers in Cell and Developmental Biology, 0, 11, . | 1.8 | 1 |
| 1955 | Targeted Modulation of Chicken Genes In Vitro Using CRISPRa and CRISPRi Toolkit. Genes, 2023, 14, 906. | 1.0 | 1 |
| 1957 | KaryoCreate: A CRISPR-based technology to study chromosome-specific aneuploidy by targeting human centromeres. Cell, 2023, 186, 1985-2001.e19. | 13.5 | 16 |
| 1958 | Validation of CRISPR activation system in Aedes cells using multicistronic plasmid vectors. Frontiers in Bioengineering and Biotechnology, 0, 11, . | 2.0 | 0 |
| 1959 | Genome-scale CRISPRi screening: A powerful tool in engineering microbiology. Engineering Microbiology, 2023, 3, 100089. | 2.2 | 7 |
| 1960 | Using traditional machine learning and deep learning methods for on- and off-target prediction in CRISPR/Cas9: a review. Briefings in Bioinformatics, 2023, 24, . | 3.2 | 8 |
| 1961 | CRISPR technology and its potential role in treating rare imprinting diseases. , 2023, , 273-300. | | 0 |
| 1962 | Necessity of HuR/ELAVL1 for the activation-induced cytidine deaminase-dependent decrease in topoisomerase 1 in antibody diversification. International Immunology, 2023, 35, 361-375. | 1.8 | 1 |
| 1975 | Long noncoding RNA in human cancers: to be or not to be, that is the question. , 2023, , 109-127. | | 0 |
| 1997 | Devices and genomic therapies. , 2024, , 207-218. | | 0 |
| 2011 | Genome-Wide CRISPR Screening for the Identification of Therapy Resistance-Associated Genes in Urothelial Carcinoma. Methods in Molecular Biology, 2023, , 155-165. | 0.4 | 0 |
| 2037 | Modeling specific aneuploidies: from karyotype manipulations to biological insights. Chromosome Research, 2023, 31, . | 1.0 | 2 |
| 2046 | Metastasis suppressor genes in clinical practice: are they druggable?. Cancer and Metastasis Reviews, 2023, 42, 1169-1188. | 2.7 | 1 |
| 2053 | Sequencing-based methods for single-cell multi-omics studies. Science China Chemistry, 0, , . | 4.2 | 0 |
| 2056 | Design principles for synthetic control systems to engineer plants. Plant Cell Reports, 2023, 42, 1875-1889. | 2.8 | 1 |
| 2078 | Investigating Pseudomonas aeruginosa Gene Function During Pathogenesis Using Mobile-CRISPRi. Methods in Molecular Biology, 2024, , 13-32. | 0.4 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 2109 | Modern Tools of Genome Engineering and Their Applications. , 2023, , 193-232. | | 0 |
| 2110 | CRISPR-Cas Fundamentals and Advancements in Translational Biotechnology. , 2023, , 281-291. | | 0 |
| 2142 | CRISPR/Cas-mediated germplasm improvement and new strategies for crop protection. , 2024, 2, . | | 0 |