Advances in genome editing through control of DNA rep

Nature Cell Biology 21, 1468-1478 DOI: 10.1038/s41556-019-0425-z

Citation Report

#	Article	IF	CITATIONS
1	Base editing: advances and therapeutic opportunities. Nature Reviews Drug Discovery, 2020, 19, 839-859.	21.5	218
2	Genome Editing for CNS Disorders. Frontiers in Neuroscience, 2020, 14, 579062.	1.4	18
3	Base Editing in Human Cells to Produce Singleâ€Nucleotideâ€Variant Clonal Cell Lines. Current Protocols in Molecular Biology, 2020, 133, e129.	2.9	4
4	INDEL detection, the â€~Achilles heel' of precise genome editing: a survey of methods for accurate profiling of gene editing induced indels. Nucleic Acids Research, 2020, 48, 11958-11981.	6.5	51
5	NHEJ inhibitor SCR7 and its different forms: Promising CRISPR tools for genome engineering. Gene, 2020, 763, 144997.	1.0	11
6	A multiplexed bioluminescent reporter for sensitive and non-invasive tracking of DNA double strand break repair dynamics in vitro and in vivo. Nucleic Acids Research, 2020, 48, e100-e100.	6.5	10
7	Interface of DNA Repair and Metabolism. Current Tissue Microenvironment Reports, 2020, 1, 209-220.	1.3	1
8	Protecting Linear DNA Templates in Cell-Free Expression Systems from Diverse Bacteria. ACS Synthetic Biology, 2020, 9, 2851-2855.	1.9	24
9	Novel Therapeutic Approaches for the Treatment of Retinal Degenerative Diseases: Focus on CRISPR/Cas-Based Gene Editing. Frontiers in Neuroscience, 2020, 14, 838.	1.4	12
10	Global and Local Manipulation of DNA Repair Mechanisms to Alter Site-Specific Gene Editing Outcomes in Hematopoietic Stem Cells. Frontiers in Genome Editing, 2020, 2, 601541.	2.7	8
11	Yeast Rpn4 Links the Proteasome and DNA Repair via RAD52 Regulation. International Journal of Molecular Sciences, 2020, 21, 8097.	1.8	5
12	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
13	Pipeline for the Generation and Characterization of Transgenic Human Pluripotent Stem Cells Using the CRISPR/Cas9 Technology. Cells, 2020, 9, 1312.	1.8	7
14	Genome editing with CRISPR–Cas nucleases, base editors, transposases and prime editors. Nature Biotechnology, 2020, 38, 824-844.	9.4	1,277
15	A Siteâ€Specific Integration Reporter System That Enables Rapid Evaluation of CRISPR/Cas9â€Mediated Genome Editing Strategies in CHO Cells. Biotechnology Journal, 2020, 15, e2000057.	1.8	6
16	Gene Therapy in Cancer Treatment: Why Go Nano?. Pharmaceutics, 2020, 12, 233.	2.0	127
17	RSâ€1 enhances CRISPRâ€mediated targeted knockâ€in in bovine embryos. Molecular Reproduction and Development, 2020, 87, 542-549.	1.0	19
18	Efficient gene editing of human long-term hematopoietic stem cells validated by clonal tracking. Nature Biotechnology, 2020, 38, 1298-1308.	9.4	116

ATION REDO

#	Article	IF	CITATIONS
19	Cas9 Cuts and Consequences; Detecting, Predicting, and Mitigating CRISPR/Cas9 On―and Offâ€Target Damage. BioEssays, 2020, 42, e2000047.	1.2	9
20	Current trends in gene recovery mediated by the CRISPR-Cas system. Experimental and Molecular Medicine, 2020, 52, 1016-1027.	3.2	30
21	Using Transcriptomic Analysis to Assess Double-Strand Break Repair Activity: Towards Precise in Vivo Genome Editing. International Journal of Molecular Sciences, 2020, 21, 1380.	1.8	11
22	Prime Editing: Precision Genome Editing by Reverse Transcription. Molecular Cell, 2020, 77, 210-212.	4.5	21
23	CRISPR-Based Therapeutic Genome Editing: Strategies and InÂVivo Delivery by AAV Vectors. Cell, 2020, 181, 136-150.	13.5	289
24	Efficient production of large deletion and gene fragment knock-in mice mediated by genome editing with Cas9-mouse Cdt1 in mouse zygotes. Methods, 2021, 191, 23-31.	1.9	23
25	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
26	Rational Selection of CRISPR-Cas9 Guide RNAs for Homology-Directed Genome Editing. Molecular Therapy, 2021, 29, 1057-1069.	3.7	29
27	Establishment of human fetal hepatocyte organoids and CRISPR–Cas9-based gene knockin and knockout in organoid cultures from human liver. Nature Protocols, 2021, 16, 182-217.	5.5	73
28	Tagging Proteins with Fluorescent Reporters Using the CRISPR/Cas9 System and Double-Stranded DNA Donors. Methods in Molecular Biology, 2021, 2247, 39-57.	0.4	1
29	Current progress with mammalian models of mitochondrial <scp>DNA</scp> disease. Journal of Inherited Metabolic Disease, 2021, 44, 325-342.	1.7	19
30	CRISPR/Cas9-based genome engineering in HIV gene therapy. E3S Web of Conferences, 2021, 233, 02004.	0.2	1
31	Target binding and residence: a new determinant of DNA double-strand break repair pathway choice in CRISPR/Cas9 genome editing. Journal of Zhejiang University: Science B, 2021, 22, 73-86.	1.3	16
32	Precision genome editing using cytosine and adenine base editors in mammalian cells. Nature Protocols, 2021, 16, 1089-1128.	5.5	90
33	CRISPR-mediated Labeling of Cells in Chick Embryos Based on Selectively Expressed Genes. Bio-protocol, 2021, 11, e4105.	0.2	3
34	Novel Approaches for Genome Editing to Develop Climate Smart Crops. , 2021, , 267-291.		5
35	Microbial single-strand annealing proteins enable CRISPR gene-editing tools with improved knock-in efficiencies and reduced off-target effects. Nucleic Acids Research, 2021, 49, e36-e36.	6.5	17
36	Development of CRISPR technology for precise single-base genome editing: a brief review. BMB Reports, 2021, 54, 98-105.	1.1	10

#	Article	IF	CITATIONS
37	Advances and Obstacles in Homology-Mediated Gene Editing of Hematopoietic Stem Cells. Journal of Clinical Medicine, 2021, 10, 513.	1.0	11
38	In vivo Genome Editing Therapeutic Approaches for Neurological Disorders: Where Are We in the Translational Pipeline?. Frontiers in Neuroscience, 2021, 15, 632522.	1.4	11
39	Enhancing CRISPR deletion via pharmacological delay of DNA-PKcs. Genome Research, 2021, 31, 461-471.	2.4	9
41	CRISPR-mediated host genomic DNA damage is efficiently repaired through microhomology-mediated end joining in Zymomonas mobilis. Journal of Genetics and Genomics, 2021, 48, 115-122.	1.7	15
42	CRISPR/Cas: Advances, Limitations, and Applications for Precision Cancer Research. Frontiers in Medicine, 2021, 8, 649896.	1.2	48
43	PnB Designer: a web application to design prime and base editor guide RNAs for animals and plants. BMC Bioinformatics, 2021, 22, 101.	1.2	254
45	Gene Editing of Hematopoietic Stem Cells: Hopes and Hurdles Toward Clinical Translation. Frontiers in Genome Editing, 2021, 3, 618378.	2.7	27
46	Editing GWAS: experimental approaches to dissect and exploit disease-associated genetic variation. Genome Medicine, 2021, 13, 41.	3.6	32
47	A CRISPR Landing for Genome Rewriting at Locus-Scale. CRISPR Journal, 2021, 4, 163-166.	1.4	0
48	Cas9 deactivation with photocleavable guide RNAs. Molecular Cell, 2021, 81, 1553-1565.e8.	4.5	30
49	An Optimized Preparation Method for Long ssDNA Donors to Facilitate Quick Knock-In Mouse Generation. Cells, 2021, 10, 1076.	1.8	9
50	Advances in Genome Editing and Application to the Generation of Genetically Modified Rat Models. Frontiers in Genetics, 2021, 12, 615491.	1.1	24
51	Attaining the promise of plant gene editing at scale. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	51
52	The NIH Somatic Cell Genome Editing program. Nature, 2021, 592, 195-204.	13.7	84
53	Addressing the dark matter of gene therapy: technical and ethical barriers to clinical application. Human Genetics, 2021, , 1.	1.8	4
54	Genome-wide programmable transcriptional memory by CRISPR-based epigenome editing. Cell, 2021, 184, 2503-2519.e17.	13.5	312
55	CRISPR Co-Editing Strategy for Scarless Homology-Directed Genome Editing. International Journal of Molecular Sciences, 2021, 22, 3741.	1.8	9
56	A molecular Rosetta Stone to decipher the impact of chromatin features on the repair of Cas9-mediated DNA double-strand breaks. Molecular Cell, 2021, 81, 2059-2060.	4.5	1

#	Article	IF	CITATIONS
57	Impact of chromatin context on Cas9-induced DNA double-strand break repair pathway balance. Molecular Cell, 2021, 81, 2216-2230.e10.	4.5	106
59	Polymeric Delivery of Therapeutic Nucleic Acids. Chemical Reviews, 2021, 121, 11527-11652.	23.0	138
60	BAR-Seq clonal tracking of gene-edited cells. Nature Protocols, 2021, 16, 2991-3025.	5.5	11
62	Homology-based repair induced by CRISPR-Cas nucleases in mammalian embryo genome editing. Protein and Cell, 2022, 13, 316-335.	4.8	17
63	Marker-free quantification of repair pathway utilization at Cas9-induced double-strand breaks. Nucleic Acids Research, 2021, 49, 5095-5105.	6.5	14
64	Allâ€Inâ€One Dendrimerâ€Based Lipid Nanoparticles Enable Precise HDRâ€Mediated Gene Editing In Vivo. Advanced Materials, 2021, 33, e2006619.	11.1	52
65	Stem cell-based therapy for hirschsprung disease, do we have the guts to treat?. Gene Therapy, 2022, 29, 578-587.	2.3	7
66	Multiplexed bioluminescence-mediated tracking of DNA double-strand break repairs in vitro and in vivo. Nature Protocols, 2021, 16, 3933-3953.	5.5	6
67	Diversification of the CRISPR Toolbox: Applications of CRISPR-Cas Systems Beyond Genome Editing. CRISPR Journal, 2021, 4, 400-415.	1.4	5
68	Base editors: Expanding the types of DNA damage products harnessed for genome editing. Gene and Genome Editing, 2021, 1, 100005.	1.3	19
69	DNA repair genes are associated with tumor tissue differentiation and immune environment in lung adenocarcinoma: a bioinformatics analysis based on big data. Journal of Thoracic Disease, 2021, 13, 4464-4475.	0.6	2
70	Proteins from the DNA Damage Response: Regulation, Dysfunction, and Anticancer Strategies. Cancers, 2021, 13, 3819.	1.7	23
72	Vector Strategies to Actualize B Cell–Based Gene Therapies. Journal of Immunology, 2021, 207, 755-764.	0.4	5
73	Targeting the Highly Expressed microRNA miR-146b with CRISPR/Cas9n Gene Editing System in Thyroid Cancer. International Journal of Molecular Sciences, 2021, 22, 7992.	1.8	11
74	Gene Editing and Modulation: the Holy Grail for the Genetic Epilepsies?. Neurotherapeutics, 2021, 18, 1515-1523.	2.1	7
75	Paving the way towards precise and safe CRISPR genome editing. Biotechnology Advances, 2021, 49, 107737.	6.0	19
76	DNA Repair Pathway Choices in CRISPR-Cas9-Mediated Genome Editing. Trends in Genetics, 2021, 37, 639-656.	2.9	126
77	Global detection of DNA repair outcomes induced by CRISPR–Cas9. Nucleic Acids Research, 2021, 49, 8732-8742.	6.5	52

#	Article	IF	CITATIONS
79	Chromatin Alterations in Neurological Disorders and Strategies of (Epi)Genome Rescue. Pharmaceuticals, 2021, 14, 765.	1.7	3
80	An insight into understanding the coupling between homologous recombination mediated DNA repair and chromatin remodeling mechanisms in plant genome: an update. Cell Cycle, 2021, 20, 1760-1784.	1.3	11
81	Methods and cell-based strategies to produce antibody libraries: current state. Applied Microbiology and Biotechnology, 2021, 105, 7215-7224.	1.7	1
82	Homology-directed gene-editing approaches for hematopoietic stem and progenitor cell gene therapy. Stem Cell Research and Therapy, 2021, 12, 500.	2.4	15
83	A new era in functional genomics screens. Nature Reviews Genetics, 2022, 23, 89-103.	7.7	104
85	Tissue Specific DNA Repair Outcomes Shape the Landscape of Genome Editing. Frontiers in Genetics, 2021, 12, 728520.	1.1	11
88	Efficient biallelic knock-in in mouse embryonic stem cells by in vivo-linearization of donor and transient inhibition of DNA polymerase Î, DNA-PK. Scientific Reports, 2021, 11, 18132.	1.6	16
89	Recent progress in genome editing for gene therapy applications: the French perspective. Human Gene Therapy, 2021, 32, 1059-1075.	1.4	0
90	Effects of RAD51-stimulatory compound 1 (RS-1) and its vehicle, DMSO, on pig embryo culture. Reproductive Toxicology, 2021, 105, 44-52.	1.3	3
91	Improvements in Gene Editing Technology Boost Its Applications in Livestock. Frontiers in Genetics, 2020, 11, 614688.	1.1	34
92	Dynamics and competition of CRISPR–Cas9 ribonucleoproteins and AAV donor-mediated NHEJ, MMEJ and HDR editing. Nucleic Acids Research, 2021, 49, 969-985.	6.5	90
93	Wide Horizons of CRISPR-Cas-Derived Technologies for Basic Biology, Agriculture, and Medicine. Springer Protocols, 2020, , 1-23.	0.1	15
94	Functional Genomics for Cancer Drug Target Discovery. Cancer Cell, 2020, 38, 31-43.	7.7	46
95	Toward precise CRISPR DNA fragment editing and predictable 3D genome engineering. Journal of Molecular Cell Biology, 2021, 12, 828-856.	1.5	9
99	A DNA Repair-Based Model of Cell Survival with Important Clinical Consequences. Radiation Research, 2020, 194, 202.	0.7	7
100	Genome editing enables reverse genetics of multicellular development in the choanoflagellate Salpingoeca rosetta. ELife, 2020, 9, .	2.8	29
101	Prime Editing, a Novel Genome-Editing Tool That May Surpass Conventional CRISPR-Cas9. Re:GEN Open, 2021, 1, 75-82.	0.7	4
102	Deletion and replacement of long genomic sequences using prime editing. Nature Biotechnology, 2022, 40, 227-234.	9.4	90

#	Article	IF	CITATIONS
103	Current and Future Prospects for Gene Therapy for Rare Genetic Diseases Affecting the Brain and Spinal Cord. Frontiers in Molecular Neuroscience, 2021, 14, 695937.	1.4	39
104	Engineering interventions in industrial filamentous fungal cell factories for biomass valorization. Bioresource Technology, 2022, 344, 126209.	4.8	24
107	Self-inactivating, all-in-one AAV vectors for precision Cas9 genome editing via homology-directed repair in vivo. Nature Communications, 2021, 12, 6267.	5.8	52
112	Orthogonal CRISPR-Cas tools for genome editing, inhibition, and CRISPR recording in zebrafish embryos. Genetics, 2022, 220, .	1.2	11
114	Targeting Non-homologous and Alternative End Joining Repair to Enhance Cancer Radiosensitivity. Seminars in Radiation Oncology, 2022, 32, 29-41.	1.0	11
115	Singleâ€strand annealing: Molecular mechanisms and potential applications in CRISPR asâ€based precision genome editing. Biotechnology Journal, 2022, 17, e2100413.	1.8	9
116	The Clinical Significance and Transcription Regulation of a DNA Damage Repair Gene, SMC4, in Low-Grade Glioma via Integrated Bioinformatic Analysis. Frontiers in Oncology, 2021, 11, 761693.	1.3	7
117	Applications of Genome Editing Tools in Stem Cells Towards Regenerative Medicine: An Update. Current Stem Cell Research and Therapy, 2022, 17, 267-279.	0.6	4
118	A detection method for the capture of genomic signatures: From disease diagnosis to genome editing. Methods in Enzymology, 2021, 661, 251-282.	0.4	2
120	Improved and Flexible HDR Editing by Targeting Introns in iPSCs. Stem Cell Reviews and Reports, 2022, 18, 1822-1833.	1.7	6
121	CRISPR-based genome editing through the lens of DNA repair. Molecular Cell, 2022, 82, 348-388.	4.5	90
122	DAJIN enables multiplex genotyping to simultaneously validate intended and unintended target genome editing outcomes. PLoS Biology, 2022, 20, e3001507.	2.6	9
123	pHâ€Responsive Polymer Nanoparticles for Efficient Delivery of Cas9 Ribonucleoprotein With or Without Donor DNA. Advanced Materials, 2022, 34, e2110618.	11.1	26
124	Prime editing efficiency and fidelity are enhanced in the absence of mismatch repair. Nature Communications, 2022, 13, 760.	5.8	74
125	Human embryonic genome activation initiates at the one-cell stage. Cell Stem Cell, 2022, 29, 209-216.e4.	5.2	71
126	The use of new CRISPR tools in cardiovascular research and medicine. Nature Reviews Cardiology, 2022, 19, 505-521.	6.1	21
127	dCas9-based gene editing for cleavage-free genomic knock-in of long sequences. Nature Cell Biology, 2022, 24, 268-278.	4.6	24
128	3D Genome Organization: Causes and Consequences for DNA Damage and Repair. Genes, 2022, 13, 7.	1.0	8

#	Article	IF	CITATIONS
129	The history of Salpingoeca rosetta as a model for reconstructing animal origins. Current Topics in Developmental Biology, 2022, 147, 73-91.	1.0	6
130	Development of transgenic Daphnia magna for visualizing homology-directed repair of DNA. Scientific Reports, 2022, 12, 2497.	1.6	1
131	Genomic Reporter Constructs to Monitor Pathway-Specific Repair of DNA Double-Strand Breaks. Frontiers in Genetics, 2021, 12, 809832.	1.1	8
132	Ligation-assisted homologous recombination enables precise genome editing by deploying both MMEJ and HDR. Nucleic Acids Research, 2022, 50, e62-e62.	6.5	7
135	Transposase-CRISPR mediated targeted integration (TransCRISTI) in the human genome. Scientific Reports, 2022, 12, 3390.	1.6	4
136	CRISPR–Cas9 gene editing induced complex on-target outcomes in human cells. Experimental Hematology, 2022, 110, 13-19.	0.2	6
137	Efficient In Vivo Homology-Directed Repair Within Cardiomyocytes. Circulation, 2022, 145, 787-789.	1.6	5
138	Harnessing DSB repair to promote efficient homology-dependent and -independent prime editing. Nature Communications, 2022, 13, 1240.	5.8	18
140	Cas9-mediated gene editing in the black-legged tick, Ixodes scapularis, by embryo injection and ReMOT Control. IScience, 2022, 25, 103781.	1.9	35
142	Target residence of Cas9: challenges and opportunities in genome editing. Genome Instability & Disease, 2022, 3, 57-69.	0.5	1
143	From DNA break repair pathways to CRISPR/Cas-mediated gene knock-in methods. Life Sciences, 2022, 295, 120409.	2.0	5
144	CRISPR/Cas-based Human T cell Engineering: Basic Research and Clinical Application. Immunology Letters, 2022, 245, 18-28.	1.1	5
145	Context-dependant enhancers as a reservoir of functional polymorphisms and epigenetic markers linked to alcohol use disorders and comorbidities. Addiction Neuroscience, 2022, 2, 100014.	0.4	0
146	Improved loss-of-function CRISPR-Cas9 genome editing in human cells concomitant with inhibition of TGF-β signaling. Molecular Therapy - Nucleic Acids, 2022, 28, 202-218.	2.3	2
148	Improvement of base editors and prime editors advances precision genome engineering in plants. Plant Physiology, 2022, 188, 1795-1810.	2.3	24
149	Meiotic Cas9 expression mediates gene conversion in the male and female mouse germline. PLoS Biology, 2021, 19, e3001478.	2.6	29
150	Innovative Approaches to Genome Editing in Chickens. Cytology and Genetics, 2022, 56, 196-207.	0.2	0
151	CRISPR-Cas Technology a New Era in Genomic Engineering. Biotechnology Reports (Amsterdam,) Tj ETQq1 1 0.76	84314 rgB	T Qverlock

#	Article	IF	Citations
153	Gene-independent therapeutic interventions to maintain and restore light sensitivity in degenerating photoreceptors. Progress in Retinal and Eye Research, 2022, 90, 101065.	7.3	4
154	CRISPR-Cas Assisted Shotgun Mutagenesis Method for Evolutionary Genome Engineering. ACS Synthetic Biology, 2022, 11, 1958-1970.	1.9	3
155	Targeting double-strand break indel byproducts with secondary guide RNAs improves Cas9 HDR-mediated genome editing efficiencies. Nature Communications, 2022, 13, 2351.	5.8	11
156	Abiotic Stress Tolerance in Cereals Through Genome Editing. , 2022, , 295-319.		2
157	Speciation and adaptation research meets genome editing. Philosophical Transactions of the Royal Society B: Biological Sciences, 2022, 377, .	1.8	7
159	Tools for Efficient Genome Editing; ZFN, TALEN, and CRISPR. Methods in Molecular Biology, 2022, , 29-46.	0.4	16
160	Small-molecule enhancers of CRISPR-induced homology-directed repair in gene therapy: A medicinal chemist's perspective. Drug Discovery Today, 2022, 27, 2510-2525.	3.2	4
161	CRISPR Modeling and Correction of Cardiovascular Disease. Circulation Research, 2022, 130, 1827-1850.	2.0	32
162	Bi-PE: bi-directional priming improves CRISPR/Cas9 prime editing in mammalian cells. Nucleic Acids Research, 2022, 50, 6423-6434.	6.5	31
163	Genetic quality: a complex issue for experimental study reproducibility. Transgenic Research, 2022, 31, 413-430.	1.3	4
164	Frequency and mechanisms of LINE-1 retrotransposon insertions at CRISPR/Cas9 sites. Nature Communications, 2022, 13, .	5.8	30
165	DNA base editing in nuclear and organellar genomes. Trends in Genetics, 2022, 38, 1147-1169.	2.9	14
166	A Curative DNA Code for Hematopoietic Defects. Hematology/Oncology Clinics of North America, 2022, 36, 647-665.	0.9	6
167	Recursive Editing improves homology-directed repair through retargeting of undesired outcomes. Nature Communications, 2022, 13, .	5.8	7
168	Editorial: Protecting the code: DNA double-strand break repair pathway choice. Frontiers in Genetics, 0, 13, .	1.1	1
169	Regulatory T-cell therapy approaches. Clinical and Experimental Immunology, 2023, 211, 96-107.	1.1	7
170	High-yield genome engineering in primary cells using a hybrid ssDNA repair template and small-molecule cocktails. Nature Biotechnology, 2023, 41, 521-531.	9.4	77
171	Target residence of Cas9-sgRNA influences DNA double-strand break repair pathway choices in CRISPR/Cas9 genome editing. Genome Biology, 2022, 23, .	3.8	9

#	Article	IF	CITATIONS
172	CRISPR/Cas9 genome editing to create nonhuman primate models for studying stem cell therapies for HIV infection. Retrovirology, 2022, 19, .	0.9	5
173	Fusing an exonuclease with Cas9 enhances homologous recombination in Pichia pastoris. Microbial Cell Factories, 2022, 21, .	1.9	7
174	Implications of CRISPR-Cas9 in Developing Next Generation Biofuel: A Mini-review. Current Protein and Peptide Science, 2022, 23, 574-584.	0.7	9
175	Multi-pathway DNA-repair reporters reveal competition between end-joining, single-strand annealing and homologous recombination at Cas9-induced DNA double-strand breaks. Nature Communications, 2022, 13, .	5.8	21
176	Transposons and CRISPR: Rewiring Gene Editing. Biochemistry, 2023, 62, 3521-3532.	1.2	3
177	Massively parallel genomic perturbations with multi-target CRISPR interrogates Cas9 activity and DNA repair at endogenous sites. Nature Cell Biology, 2022, 24, 1433-1444.	4.6	14
178	Small Molecules for Enhancing the Precision and Safety of Genome Editing. Molecules, 2022, 27, 6266.	1.7	6
179	CRISPR-Based Therapeutic Gene Editing for Duchenne Muscular Dystrophy: Advances, Challenges and Perspectives. Cells, 2022, 11, 2964.	1.8	8
180	Recent Advances in Double-Strand Break-Free Kilobase-Scale Genome Editing Technologies. Biochemistry, 2023, 62, 3493-3499.	1.2	5
181	The expanding CRISPR toolbox for natural product discovery and engineering in filamentous fungi. Natural Product Reports, 2023, 40, 158-173.	5.2	6
182	Selecting for CRISPR-Edited Knock-In Cells. International Journal of Molecular Sciences, 2022, 23, 11919.	1.8	5
183	In vivo application of base and prime editing to treat inherited retinal diseases. Progress in Retinal and Eye Research, 2023, 94, 101132.	7.3	3
185	CRISPR Gene Editing of Hematopoietic Stem and Progenitor Cells. Methods in Molecular Biology, 2023, , 39-62.	0.4	1
186	CRISPR nuclease off-target activity and mitigation strategies. Frontiers in Genome Editing, 0, 4, .	2.7	14
187	Site-specific genome editing in treatment of inherited diseases: possibility, progress, and perspectives. Medical Review, 2022, 2, 471-500.	0.3	6
188	Genome editing is induced in a binary manner in single human cells. IScience, 2022, 25, 105619.	1.9	1
189	Characterization of homozygous Foxn1 mutations induced in rat embryos by different delivery forms of Cas9 nuclease. Molecular Biology Reports, 0, , .	1.0	0
190	CRISPR/Cas9-Mediated Editing of AGAMOUS-like Genes Results in a Late-Bolting Phenotype in Chinese Cabbage (Brassica rapa ssp. pekinensis). International Journal of Molecular Sciences, 2022, 23, 15009.	1.8	5

#	Article	IF	CITATIONS
191	CRISPR-Based Tools for Fighting Rare Diseases. Life, 2022, 12, 1968.	1.1	2
192	Efficient single copy integration via homology-directed repair (scHDR) by 5′modification of large DNA donor fragments in mice. Nucleic Acids Research, 2023, 51, e14-e14.	6.5	5
193	Maximizing the Efficacy of CRISPR/Cas Homology-Directed Repair Gene Targeting. , 0, , .		0
194	Polarity of the CRISPR roadblock to transcription. Nature Structural and Molecular Biology, 2022, 29, 1217-1227.	3.6	9
195	Highly Efficient One-Step Tagging of Endogenous Genes in Primary Cells Using CRISPR-Cas Ribonucleoproteins. CRISPR Journal, 2022, 5, 843-853.	1.4	1
196	Prime Editing in Mammals: The Next Generation of Precision Genome Editing. CRISPR Journal, 2022, 5, 746-768.	1.4	0
198	Assessing and advancing the safety of CRISPR-Cas tools: from DNA to RNA editing. Nature Communications, 2023, 14, .	5.8	36
199	Efficient CRISPR-Cas9 based cytosine base editors for phytopathogenic bacteria. Communications Biology, 2023, 6, .	2.0	5
200	CRISPR/Cas9-mediated precision integration of fat-1 and fat-2 from Caenorhabditis elegans at long repeated sequence in channel catfish (Ictalurus punctatus) and the impact on n-3 fatty acid level. Aquaculture, 2023, 567, 739229.	1.7	4
201	Strategies for generation of mice via CRISPR/HDR-mediated knock-in. Molecular Biology Reports, 2023, 50, 3189-3204.	1.0	5
202	Development of a versatile nuclease prime editor with upgraded precision. Nature Communications, 2023, 14, .	5.8	8
203	Roles of innovative genome editing technologies in stem cell engineering, rheumatic diseases and other joint/bone diseases. , 2023, , 53-77.		0
204	Genome Editing Using CRISPR. , 2023, , 1-26.		0
205	Toward the Development of Epigenome Editing-Based Therapeutics: Potentials and Challenges. International Journal of Molecular Sciences, 2023, 24, 4778.	1.8	10
206	Improving the sensitivity of in vivo CRISPR off-target detection with DISCOVER-Seq+. Nature Methods, 2023, 20, 706-713.	9.0	5
207	CRISPR/Cas9 system and its applications in nervous system diseases. Genes and Diseases, 2023, , .	1.5	0
208	Research development and the prospect of animal models of mitochondrial DNA-related mitochondrial diseases. Analytical Biochemistry, 2023, 669, 115122.	1.1	1
209	CRISPR technology: A decade of genome editing is only the beginning. Science, 2023, 379, .	6.0	233

#	Article	IF	CITATIONS
210	Modulating mutational outcomes and improving precise gene editing at CRISPR-Cas9-induced breaks by chemical inhibition of end-joining pathways. Cell Reports, 2023, 42, 112019.	2.9	11
211	Computational modeling and a Geant4-DNA study of the rejoining of direct and indirect DNA damage induced by low energy electrons and carbon ions. International Journal of Radiation Biology, 2023, 99, 1391-1404.	1.0	1
212	Rare immune diseases paving the road for genome editing-based precision medicine. Frontiers in Genome Editing, 0, 5, .	2.7	5
213	Revolutionizing DNA repair research and cancer therapy with CRISPR–Cas screens. Nature Reviews Molecular Cell Biology, 2023, 24, 477-494.	16.1	17
215	In search of an ideal template for therapeutic genome editing: A review of current developments for structure optimization. Frontiers in Genome Editing, 0, 5, .	2.7	1
216	New advances in CRISPR/Cas-mediated precise gene-editing techniques. DMM Disease Models and Mechanisms, 2023, 16, .	1.2	6
217	Nucleases in gene-editing technologies: past and prologue. , 2023, , .		1
218	Recent advances in CRISPR-based genome editing technology and its applications in cardiovascular research. Military Medical Research, 2023, 10, .	1.9	5
223	Targeted DNA integration in human cells without double-strand breaks using CRISPR-associated transposases. Nature Biotechnology, 2024, 42, 87-98.	9.4	27
224	CRISPR-Cas System: The Current and Emerging Translational Landscape. Cells, 2023, 12, 1103.	1.8	7
225	Highâ€efficiency and multilocus targeted integration in CHO cells using CRISPRâ€mediated donor nicking and DNA repair inhibitors. Biotechnology and Bioengineering, 2023, 120, 2419-2440.	1.7	1
226	Application of new technologies in embryos: From gene editing to synthetic embryos. , 2023, , 853-886.		0
240	Genome Editing Using CRISPR. , 2023, , 2511-2536.		0
243	Advances in bread wheat production through CRISPR/Cas9 technology: a comprehensive review of quality and other aspects. Planta, 2023, 258, .	1.6	2
247	Gene Editing and Gene Therapy in Oncology. , 2023, , 155-180.		4
252	Endogenous Tagging of Ciliary Genes in Human RPE1 Cells for Live-Cell Imaging. Methods in Molecular Biology, 2024, , 147-166.	0.4	0
263	Genome editing technologies. , 2024, , 397-423.		0