

CRISPR-Cas systems for editing, regulating and targeting

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Citation Report

#	ARTICLE	IF	CITATIONS
2	Developments in the Tools and Methodologies of Synthetic Biology. <i>Frontiers in Bioengineering and Biotechnology</i> , 2014, 2, 60.	2.0	78
3	Chapter 3 - Restoring Vision to the Blind: Gene Therapy for Vision Loss. <i>Translational Vision Science and Technology</i> , 2014, 3, 5.	1.1	3
4	International regulatory landscape and integration of corrective genome editing into in vitro fertilization. <i>Reproductive Biology and Endocrinology</i> , 2014, 12, 108.	1.4	108
5	Ethical Issues in Tissue Engineering. , 2014, , 809-838.		2
6	In pursuit of a moving target: nanotherapeutics for the treatment of non-Hodgkin B-cell lymphoma. <i>Expert Opinion on Drug Delivery</i> , 2014, 11, 1923-1937.	2.4	27
7	Parallel Networks. <i>ACM Journal on Emerging Technologies in Computing Systems</i> , 2014, 11, 1-22.	1.8	6
8	Computational and Experimental Approaches to Reveal the Effects of Single Nucleotide Polymorphisms with Respect to Disease Diagnostics. <i>International Journal of Molecular Sciences</i> , 2014, 15, 9670-9717.	1.8	31
9	Genome typing of nonhuman primate models: implications for biomedical research. <i>Trends in Genetics</i> , 2014, 30, 482-487.	2.9	54
10	Efficient CRISPR/Cas9 Plasmids for Rapid and Versatile Genome Editing in <i>Drosophila</i> . <i>G3: Genes, Genomes, Genetics</i> , 2014, 4, 2279-2282.	0.8	98
11	Opening the black box: Chinese hamster ovary research goes genome scale. <i>Pharmaceutical Bioprocessing</i> , 2014, 2, 367-369.	0.8	8
12	Identification of loci that cause phenotypic variation in diverse species with the reciprocal hemizyosity test. <i>Trends in Genetics</i> , 2014, 30, 547-554.	2.9	63
13	The new frontier of genome engineering with CRISPR-Cas9. <i>Science</i> , 2014, 346, 1258096.	6.0	4,828
14	Genome Engineering in Human Cells. <i>Methods in Enzymology</i> , 2014, 546, 93-118.	0.4	13
15	Cas9-Based Genome Editing in Arabidopsis and Tobacco. <i>Methods in Enzymology</i> , 2014, 546, 459-472.	0.4	42
16	Cas9-Based Genome Editing in Zebrafish. <i>Methods in Enzymology</i> , 2014, 546, 377-413.	0.4	41
17	Determining the Specificities of TALENs, Cas9, and Other Genome-Editing Enzymes. <i>Methods in Enzymology</i> , 2014, 546, 47-78.	0.4	59
18	Targeted Genome Editing in Human Cells Using CRISPR/Cas Nucleases and Truncated Guide RNAs. <i>Methods in Enzymology</i> , 2014, 546, 21-45.	0.4	43
19	In Vitro Enzymology of Cas9. <i>Methods in Enzymology</i> , 2014, 546, 1-20.	0.4	97

#	ARTICLE	IF	CITATIONS
20	Live Imaging of Endogenous PSD-95 Using ENABLED: A Conditional Strategy to Fluorescently Label Endogenous Proteins. <i>Journal of Neuroscience</i> , 2014, 34, 16698-16712.	1.7	74
21	Key Applications of Plant Metabolic Engineering. <i>PLoS Biology</i> , 2014, 12, e1001879.	2.6	39
22	Transgenic mouse models in the study of reproduction: insights into GATA protein function. <i>Reproduction</i> , 2014, 148, R1-R14.	1.1	28
23	A high-throughput screening strategy for detecting CRISPR-Cas9 induced mutations using next-generation sequencing. <i>BMC Genomics</i> , 2014, 15, 1002.	1.2	89
24	Functional genetics for all: engineered nucleases, CRISPR and the gene editing revolution. <i>EvoDevo</i> , 2014, 5, 43.	1.3	85
25	Progress in gene therapy for primary immunodeficiencies using lentiviral vectors. <i>Current Opinion in Allergy and Clinical Immunology</i> , 2014, 14, 527-534.	1.1	24
26	Lipid Nanoparticles for Short Interfering RNA Delivery. <i>Advances in Genetics</i> , 2014, 88, 71-110.	0.8	109
27	Understanding Rare Disease Pathogenesis: A Grand Challenge for Model Organisms. <i>Genetics</i> , 2014, 198, 443-445.	1.2	8
28	Role of lncRNAs in prostate cancer development and progression. <i>Biological Chemistry</i> , 2014, 395, 1275-1290.	1.2	27
29	A Versatile Two-Step CRISPR- and RMCE-Based Strategy for Efficient Genome Engineering in <i>Drosophila</i> . <i>G3: Genes, Genomes, Genetics</i> , 2014, 4, 2409-2418.	0.8	109
30	Advances in genome editing technology and its promising application in evolutionary and ecological studies. <i>GigaScience</i> , 2014, 3, 24.	3.3	47
31	Gene editing at CRISPR speed. <i>Nature Biotechnology</i> , 2014, 32, 309-312.	9.4	37
32	Dimeric CRISPR RNA-guided FokI nucleases for highly specific genome editing. <i>Nature Biotechnology</i> , 2014, 32, 569-576.	9.4	852
33	Multiplexed and Programmable Regulation of Gene Networks with an Integrated RNA and CRISPR/Cas Toolkit in Human Cells. <i>Molecular Cell</i> , 2014, 54, 698-710.	4.5	417
34	Reconstructing Complex Tissues from Single-Cell Analyses. <i>Cell</i> , 2014, 157, 771-773.	13.5	16
35	Cas9 Targeting and the CRISPR Revolution. <i>Science</i> , 2014, 344, 707-708.	6.0	77
36	Targeted genome editing in human repopulating haematopoietic stem cells. <i>Nature</i> , 2014, 510, 235-240.	13.7	517
37	Lattice light-sheet microscopy: Imaging molecules to embryos at high spatiotemporal resolution. <i>Science</i> , 2014, 346, 1257998.	6.0	1,567

#	ARTICLE	IF	CITATIONS
38	Efficient Ablation of Genes in Human Hematopoietic Stem and Effector Cells using CRISPR/Cas9. <i>Cell Stem Cell</i> , 2014, 15, 643-652.	5.2	406
39	Host genetic studies in adult pulmonary tuberculosis. <i>Seminars in Immunology</i> , 2014, 26, 445-453.	2.7	36
40	Genome Editing for Human Gene Therapy. <i>Methods in Enzymology</i> , 2014, 546, 273-295.	0.4	17
41	Cas9-Based Genome Editing in <i>Xenopus tropicalis</i> . <i>Methods in Enzymology</i> , 2014, 546, 355-375.	0.4	96
42	Nanotechnology for In Vivo Targeted siRNA Delivery. <i>Advances in Genetics</i> , 2014, 88, 37-69.	0.8	34
43	CRISPR/Cas9-mediated conversion of eGFP- into Gal4-transgenic lines in zebrafish. <i>Nature Protocols</i> , 2014, 9, 2823-2840.	5.5	62
44	Guide RNA Functional Modules Direct Cas9 Activity and Orthogonality. <i>Molecular Cell</i> , 2014, 56, 333-339.	4.5	214
45	An Open-Source System for In Planta Gene Stacking by Bxb1 and Cre Recombinases. <i>Molecular Plant</i> , 2014, 7, 1756-1765.	3.9	46
46	Multiplex CRISPR/Cas9-based genome engineering from a single lentiviral vector. <i>Nucleic Acids Research</i> , 2014, 42, e147-e147.	6.5	301
47	Target specificity of the CRISPR-Cas9 system. <i>Quantitative Biology</i> , 2014, 2, 59-70.	0.3	262
48	Current and upcoming approaches to exploit the reversibility of epigenetic mutations in breast cancer. <i>Breast Cancer Research</i> , 2014, 16, 412.	2.2	38
49	CRISPR-mediated genome editing of <i>Plasmodium falciparum</i> malaria parasites. <i>Genome Medicine</i> , 2014, 6, 63.	3.6	31
50	Delivery of genes into the CF airway. <i>Thorax</i> , 2014, 69, 962-964.	2.7	35
51	CRISPR/Cas9-Based Genome Editing in Mice by Single Plasmid Injection. <i>Methods in Enzymology</i> , 2014, 546, 319-336.	0.4	54
52	Rare and low-frequency variants in human common diseases and other complex traits. <i>Journal of Medical Genetics</i> , 2014, 51, 705-714.	1.5	29
53	Bacteria get vaccinated. <i>Nature</i> , 2014, 513, 175-176.	13.7	2
54	Short Stories on Zebrafish Long Noncoding RNAs. <i>Zebrafish</i> , 2014, 11, 499-508.	0.5	22
55	Genome-Scale CRISPR-Mediated Control of Gene Repression and Activation. <i>Cell</i> , 2014, 159, 647-661.	13.5	2,176

#	ARTICLE	IF	CITATIONS
56	Scalable and Versatile Genome Editing Using Linear DNAs with Microhomology to Cas9 Sites in <i>Caenorhabditis elegans</i> . <i>Genetics</i> , 2014, 198, 1347-1356.	1.2	292
57	Stem cell-based therapies for cancer treatment: separating hope from hype. <i>Nature Reviews Cancer</i> , 2014, 14, 683-691.	12.8	190
58	Incorporating alternative splicing and mRNA editing into the genetic analysis of complex traits. <i>BioEssays</i> , 2014, 36, 1032-1040.	1.2	4
59	Fluorescence fluctuation microscopy: a diversified arsenal of methods to investigate molecular dynamics inside cells. <i>Current Opinion in Structural Biology</i> , 2014, 28, 69-76.	2.6	25
60	Harnessing CRISPR-Cas9 immunity for genetic engineering. <i>Current Opinion in Microbiology</i> , 2014, 19, 114-119.	2.3	67
61	CRISPR-mediated direct mutation of cancer genes in the mouse liver. <i>Nature</i> , 2014, 514, 380-384.	13.7	673
62	Genome Editing: A Tool For Research and Therapy: Towards a functional understanding of variants for molecular diagnostics using genome editing. <i>Nature Medicine</i> , 2014, 20, 1103-1104.	15.2	14
63	Genome modification by CRISPR/Cas9. <i>FEBS Journal</i> , 2014, 281, 5186-5193.	2.2	139
64	The prospect of molecular therapy for Angelman syndrome and other monogenic neurologic disorders. <i>BMC Neuroscience</i> , 2014, 15, 76.	0.8	24
65	Impact of RNA-Guided Technologies for Target Identification and Deconvolution. <i>Journal of Biomolecular Screening</i> , 2014, 19, 1327-1337.	2.6	18
66	Saturation editing of genomic regions by multiplex homology-directed repair. <i>Nature</i> , 2014, 513, 120-123.	13.7	301
67	What's Changed with Genome Editing?. <i>Cell Stem Cell</i> , 2014, 15, 3-4.	5.2	23
68	Genome engineering via TALENs and CRISPR/Cas9 systems: challenges and perspectives. <i>Plant Biotechnology Journal</i> , 2014, 12, 1006-1014.	4.1	110
69	A CRISPR view of development. <i>Genes and Development</i> , 2014, 28, 1859-1872.	2.7	194
70	CRISPR/Cas9-mediated genome engineering: An adeno-associated viral (AAV) vector toolbox. <i>Biotechnology Journal</i> , 2014, 9, 1402-1412.	1.8	235
71	CRISPR-Cas9-assisted recombineering in <i>Lactobacillus reuteri</i> . <i>Nucleic Acids Research</i> , 2014, 42, e131-e131.	6.5	321
72	Human Induced Pluripotent Stem Cells: Now Open to Discovery. <i>Cell Stem Cell</i> , 2014, 15, 4-6.	5.2	9
73	Precision genome editing: A small revolution for glycobiology. <i>Glycobiology</i> , 2014, 24, 663-680.	1.3	47

#	ARTICLE	IF	CITATIONS
74	Development and Applications of CRISPR-Cas9 for Genome Engineering. <i>Cell</i> , 2014, 157, 1262-1278.	13.5	4,607
75	Cytokine therapy reverses NK cell anergy in MHC-deficient tumors. <i>Journal of Clinical Investigation</i> , 2014, 124, 4781-4794.	3.9	161
76	Precision genome engineering in lactic acid bacteria. <i>Microbial Cell Factories</i> , 2014, 13, S10.	1.9	56
77	Asymmetric parental genome engineering by Cas9 during mouse meiotic exit. <i>Scientific Reports</i> , 2014, 4, 7621.	1.6	49
78	Evolution of egg coats: linking molecular biology and ecology. <i>Molecular Ecology</i> , 2015, 24, 4052-4073.	2.0	43
79	Inhibition of nonhomologous end joining to increase the specificity of <sc>CRISPR</sc>/Cas9 genome editing. <i>FEBS Journal</i> , 2015, 282, 4289-4294.	2.2	89
80	Connecting genotypes, phenotypes and fitness: harnessing the power of <sc>CRISPR</sc>/Cas9 genome editing. <i>Molecular Ecology</i> , 2015, 24, 3810-3822.	2.0	49
81	CRISPR/Cas9-mediated genome engineering of CHO cell factories: Application and perspectives. <i>Biotechnology Journal</i> , 2015, 10, 979-994.	1.8	104
83	Genome Editing in Human Cells Using CRISPR/Cas Nucleases. <i>Current Protocols in Molecular Biology</i> , 2015, 112, 31.3.1-31.3.18.	2.9	12
84	Generation of gene-modified goats targeting MSTN and FGF5 via zygote injection of CRISPR/Cas9 system. <i>Scientific Reports</i> , 2015, 5, 13878.	1.6	151
85	The hidden half of crop yields. <i>Nature Plants</i> , 2015, 1, 15117.	4.7	89
86	MLL leukemia induction by genome editing of human CD34+ hematopoietic cells. <i>Blood</i> , 2015, 126, 1683-1694.	0.6	50
87	Reprogramming and transdifferentiation for cardiovascular development and regenerative medicine: where do we stand?. <i>EMBO Molecular Medicine</i> , 2015, 7, 1090-1103.	3.3	38
88	A chemical genetic interaction map of small molecules using high-throughput imaging in cancer cells. <i>Molecular Systems Biology</i> , 2015, 11, 846.	3.2	79
89	Designing overall stoichiometric conversions and intervening metabolic reactions. <i>Scientific Reports</i> , 2015, 5, 16009.	1.6	47
90	CRISPR/gRNA-directed synergistic activation mediator (SAM) induces specific, persistent and robust reactivation of the HIV-1 latent reservoirs. <i>Scientific Reports</i> , 2015, 5, 16277.	1.6	130
91	Microperfusion Technique to Investigate Regulation of Microvessel Permeability in Rat Mesentery. <i>Journal of Visualized Experiments</i> , 2015, , .	0.2	2
92	Tuneable endogenous mammalian target complementation via multiplexed plasmid-based recombineering. <i>Scientific Reports</i> , 2015, 5, 17432.	1.6	4

#	ARTICLE	IF	CITATIONS
93	Draft Genome Sequence of Thermophilic <i>Geobacillus</i> sp. Strain Sah69, Isolated from Saharan Soil, Southeast Algeria. <i>Genome Announcements</i> , 2015, 3, .	0.8	6
94	A newly discovered <i>Bordetella</i> species carries a transcriptionally active CRISPR-Cas with a small Cas9 endonuclease. <i>BMC Genomics</i> , 2015, 16, 863.	1.2	21
95	Making sense of GWAS: using epigenomics and genome engineering to understand the functional relevance of SNPs in non-coding regions of the human genome. <i>Epigenetics and Chromatin</i> , 2015, 8, 57.	1.8	277
96	The search for precision models clinically relevant to human liver cancer. <i>Hepatic Oncology</i> , 2015, 2, 315-319.	4.2	4
97	Infectious Diseases in Transplantation Report of the 20th Nantes Actualit�s Transplantation Meeting. <i>Transplantation</i> , 2015, 99, 2444-2447.	0.5	0
98	Recombinant messenger RNA technology and its application in cancer immunotherapy, transcript replacement therapies, pluripotent stem cell induction, and beyond. <i>Wiley Interdisciplinary Reviews RNA</i> , 2015, 6, 471-499.	3.2	65
99	CrisprGE: a central hub of CRISPR/Cas-based genome editing. <i>Database: the Journal of Biological Databases and Curation</i> , 2015, 2015, bav055.	1.4	32
100	Kinase inhibition, competitive binding and proteasomal degradation: resolving the molecular function of the suppressor of cytokine signaling (<scp>SOCS</scp>) proteins. <i>Immunological Reviews</i> , 2015, 266, 123-133.	2.8	64
101	The Use of Innovative Tools to Reproduce Human Cancer Translocations: Lessons from the CRISPR/Cas System. <i>Current Biotechnology</i> , 2015, 3, 273-278.	0.2	0
102	From Gene Targeting to Genome Editing: Transgenic animals applications and beyond. <i>Anais Da Academia Brasileira De Ciencias</i> , 2015, 87, 1323-1348.	0.3	37
103	Clustered Regularly Interspaced Short Palindromic Repeats/Cas9 Genetic Engineering: Robotic Genetic Surgery. <i>American Journal of Robotic Surgery</i> , 2015, 2, 49-52.	0.2	17
104	Single and Multiple Gene Manipulations in Mouse Models of Human Cancer. <i>Cancer Growth and Metastasis</i> , 2015, 8s1, CGM.S21217.	3.5	4
105	Translational utility of experimental autoimmune encephalomyelitis: recent developments. <i>Journal of Inflammation Research</i> , 2015, 8, 211.	1.6	4
106	Recent advances in gene therapy for lysosomal storage disorders. <i>The Application of Clinical Genetics</i> , 2015, 8, 157.	1.4	36
107	Metabolomics, Standards, and Metabolic Modeling for Synthetic Biology in Plants. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 167.	2.0	15
108	Application of CRISPR/Cas9 Technology to HBV. <i>International Journal of Molecular Sciences</i> , 2015, 16, 26077-26086.	1.8	35
109	Rapid Knockout and Reporter Mouse Line Generation and Breeding Colony Establishment Using EUCOMM Conditional-Ready Embryonic Stem Cells: A Case Study. <i>Frontiers in Endocrinology</i> , 2015, 6, 105.	1.5	27
110	Quantitative affinity purification mass spectrometry: a versatile technology to study protein-protein interactions. <i>Frontiers in Genetics</i> , 2015, 6, 237.	1.1	55

#	ARTICLE	IF	CITATIONS
111	Selection and validation of potato candidate genes for maturity corrected resistance to <i>Phytophthora infestans</i> based on differential expression combined with SNP association and linkage mapping. <i>Frontiers in Genetics</i> , 2015, 6, 294.	1.1	20
112	Genetic Manipulation of NK Cells for Cancer Immunotherapy: Techniques and Clinical Implications. <i>Frontiers in Immunology</i> , 2015, 6, 266.	2.2	184
113	Transcriptional Enhancers in the Regulation of T Cell Differentiation. <i>Frontiers in Immunology</i> , 2015, 6, 462.	2.2	17
114	Imaging Multimodalities for Dissecting Alzheimer's Disease: Advanced Technologies of Positron Emission Tomography and Fluorescence Imaging. <i>Frontiers in Neuroscience</i> , 2015, 9, 482.	1.4	26
115	The potential power of dynamics in epistasis analysis. , 2015, , .		1
116	Progress and Prospects of Anti-HBV Gene Therapy Development. <i>International Journal of Molecular Sciences</i> , 2015, 16, 17589-17610.	1.8	31
117	A High Excision Potential of TALENs for Integrated DNA of HIV-Based Lentiviral Vector. <i>PLoS ONE</i> , 2015, 10, e0120047.	1.1	48
118	Identification of Multiple Metabolic Enzymes from Mice Cochleae Tissue Using a Novel Functional Proteomics Technology. <i>PLoS ONE</i> , 2015, 10, e0121826.	1.1	4
119	A CRISPR-Cas9 System for Genetic Engineering of Filamentous Fungi. <i>PLoS ONE</i> , 2015, 10, e0133085.	1.1	484
120	Cloning Should Be Simple: <i>Escherichia coli</i> DH5 α -Mediated Assembly of Multiple DNA Fragments with Short End Homologies. <i>PLoS ONE</i> , 2015, 10, e0137466.	1.1	104
121	Tunable Protein Stabilization In Vivo Mediated by Shield-1 in Transgenic Medaka. <i>PLoS ONE</i> , 2015, 10, e0131252.	1.1	3
122	CRISPR/Cas system: Novel roles for Evolution and Survival of Bacterial Pathogens and Application for Genome Editing. <i>Japanese Journal of Lactic Acid Bacteria</i> , 2015, 26, 14-21.	0.1	0
123	Function genomics of abiotic stress tolerance in plants: a CRISPR approach. <i>Frontiers in Plant Science</i> , 2015, 6, 375.	1.7	87
124	Coping with drought: stress and adaptive responses in potato and perspectives for improvement. <i>Frontiers in Plant Science</i> , 2015, 6, 542.	1.7	220
125	Targeting Non-Coding RNAs in Plants with the CRISPR-Cas Technology is a Challenge yet Worth Accepting. <i>Frontiers in Plant Science</i> , 2015, 6, 1001.	1.7	53
127	Genome-wide specificity of DNA binding, gene regulation, and chromatin remodeling by TALE- and CRISPR/Cas9-based transcriptional activators. <i>Genome Research</i> , 2015, 25, 1158-1169.	2.4	114
128	Cracking the egg: An insight into egg hypersensitivity. <i>Molecular Immunology</i> , 2015, 66, 375-383.	1.0	51
129	Recognition of Double-Stranded DNA Using Energetically Activated Duplexes Modified with N2 α -Pyrene-, Perylene-, or Coronene-Functionalized 2 α -N-Methyl-2 α -amino-DNA Monomers. <i>Journal of Organic Chemistry</i> , 2015, 80, 5395-5406.	1.7	14

#	ARTICLE	IF	CITATIONS
130	Genetic Engineering for Microalgae Strain Improvement in Relation to Biocrude Production Systems. <i>Biofuel and Biorefinery Technologies</i> , 2015, , 191-249.	0.1	8
131	Lung Stem Cells in the Epithelium and Vasculature. <i>Pancreatic Islet Biology</i> , 2015, , .	0.1	1
132	Structure Principles of CRISPR-Cas Surveillance and Effector Complexes. <i>Annual Review of Biophysics</i> , 2015, 44, 229-255.	4.5	21
133	Cell line development for biomanufacturing processes: recent advances and an outlook. <i>Biotechnology Letters</i> , 2015, 37, 1553-1564.	1.1	26
134	New Cell Sources for T Cell Engineering and Adoptive Immunotherapy. <i>Cell Stem Cell</i> , 2015, 16, 357-366.	5.2	134
135	Selective, rapid and optically switchable regulation of protein function in live mammalian cells. <i>Nature Chemistry</i> , 2015, 7, 554-561.	6.6	136
136	Fluorescent protein biosensors applied to microphysiological systems. <i>Experimental Biology and Medicine</i> , 2015, 240, 795-808.	1.1	29
137	Bionanotechnology and the Future of Glioma. , 2015, 6, 45.		24
138	Engineering Sequence-Specific DNA Binding Proteins for Antiviral Gene Editing. , 2015, , 63-94.		4
139	Dimeric CRISPR RNA-Guided FokI-dCas9 Nucleases Directed by Truncated gRNAs for Highly Specific Genome Editing. <i>Human Gene Therapy</i> , 2015, 26, 425-431.	1.4	127
140	CRISPR/Cas9-mediated reporter knock-in in mouse haploid embryonic stem cells. <i>Scientific Reports</i> , 2015, 5, 10710.	1.6	28
141	The recruitment of chromatin modifiers by long noncoding RNAs: lessons from PRC2. <i>Rna</i> , 2015, 21, 2007-2022.	1.6	248
142	CCR5 Disruption in Induced Pluripotent Stem Cells Using CRISPR/Cas9 Provides Selective Resistance of Immune Cells to CCR5-tropic HIV-1 Virus. <i>Molecular Therapy - Nucleic Acids</i> , 2015, 4, e268.	2.3	122
143	CRISPR/Cas9 system as an innovative genetic engineering tool: Enhancements in sequence specificity and delivery methods. <i>Biochimica Et Biophysica Acta: Reviews on Cancer</i> , 2015, 1856, 234-243.	3.3	19
144	CRISPR/Cas9-mediated genome engineering of the ferret. <i>Cell Research</i> , 2015, 25, 1372-1375.	5.7	40
145	Future of breeding by genome editing is in the hands of regulators. <i>GM Crops and Food</i> , 2015, 6, 223-232.	2.0	39
146	<i>Candida glabrata</i> : new tools and technologiesâ€™ expanding the toolkit. <i>FEMS Yeast Research</i> , 2015, 15, fov066.	1.1	28
147	Phylogenetic Distribution of CRISPR-Cas Systems in Antibiotic-Resistant <i>Pseudomonas aeruginosa</i> . <i>MBio</i> , 2015, 6, e01796-15.	1.8	217

#	ARTICLE	IF	CITATIONS
148	Resources for the design of CRISPR gene editing experiments. <i>Genome Biology</i> , 2015, 16, 260.	3.8	91
149	Co-evolution of strain design methods based on flux balance and elementary mode analysis. <i>Metabolic Engineering Communications</i> , 2015, 2, 85-92.	1.9	66
150	A quick guide to CRISPR sgRNA design tools. <i>GM Crops and Food</i> , 2015, 6, 266-276.	2.0	80
151	Control of developmentally primed erythroid genes by combinatorial co-repressor actions. <i>Nature Communications</i> , 2015, 6, 8893.	5.8	67
152	A Simple CRISPR/Cas9 System for Multiplex Genome Editing in Rice. <i>Journal of Genetics and Genomics</i> , 2015, 42, 703-706.	1.7	112
153	Modified mRNA as a new therapeutic option for pediatric respiratory diseases and hemoglobinopathies. <i>Molecular and Cellular Pediatrics</i> , 2015, 2, 11.	1.0	19
154	Toward metabolic engineering in the context of system biology and synthetic biology: advances and prospects. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 1109-1118.	1.7	31
156	CRISPR-Cas9 Genome Editing of a Single Regulatory Element Nearly Abolishes Target Gene Expression in Mice. <i>Brief Report. Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2015, 35, 312-315.	1.1	48
157	One More Piece Down to Solve the III-A CRISPR Puzzle. <i>Journal of Molecular Biology</i> , 2015, 427, 228-230.	2.0	0
158	Development of a novel method to create double-strand break repair fingerprints using next-generation sequencing. <i>DNA Repair</i> , 2015, 26, 44-53.	1.3	14
159	Germline acquisition of Cas9/RNA-mediated gene modifications in monkeys. <i>Cell Research</i> , 2015, 25, 262-265.	5.7	32
160	Interactions of the orexin/hypocretin neurones and the histaminergic system. <i>Acta Physiologica</i> , 2015, 213, 321-333.	1.8	35
161	Understanding the DNA damage response in order to achieve desired gene editing outcomes in mosquitoes. <i>Chromosome Research</i> , 2015, 23, 31-42.	1.0	11
162	Chromatin regulation at the frontier of synthetic biology. <i>Nature Reviews Genetics</i> , 2015, 16, 159-171.	7.7	89
163	CRISPR genome engineering and viral gene delivery: A case of mutual attraction. <i>Biotechnology Journal</i> , 2015, 10, 258-272.	1.8	73
164	Functional genomic screening approaches in mechanistic toxicology and potential future applications of CRISPR-Cas9. <i>Mutation Research - Reviews in Mutation Research</i> , 2015, 764, 31-42.	2.4	23
165	A pathway from chromosome transfer to engineering resulting in human and mouse artificial chromosomes for a variety of applications to bio-medical challenges. <i>Chromosome Research</i> , 2015, 23, 111-133.	1.0	64
166	Applying superresolution localization-based microscopy to neurons. <i>Synapse</i> , 2015, 69, 283-294.	0.6	19

#	ARTICLE	IF	CITATIONS
167	Harnessing CRISPR-Cas systems for bacterial genome editing. <i>Trends in Microbiology</i> , 2015, 23, 225-232.	3.5	154
168	Multiplex CRISPR/Cas9-based genome editing for correction of dystrophin mutations that cause Duchenne muscular dystrophy. <i>Nature Communications</i> , 2015, 6, 6244.	5.8	383
169	Multiplex metabolic pathway engineering using CRISPR/Cas9 in <i>Saccharomyces cerevisiae</i> . <i>Metabolic Engineering</i> , 2015, 28, 213-222.	3.6	355
170	Path from schizophrenia genomics to biology: gene regulation and perturbation in neurons derived from induced pluripotent stem cells and genome editing. <i>Neuroscience Bulletin</i> , 2015, 31, 113-127.	1.5	12
171	Targeted mutagenesis of aryl hydrocarbon receptor 2a and 2b genes in Atlantic killifish (<i>Fundulus heteroclitus</i>). <i>PLoS ONE</i> , 2015, 10, e0140400.	1.9	40
172	Beyond traditional pharmacology: new tools and approaches. <i>British Journal of Pharmacology</i> , 2015, 172, 3229-3241.	2.7	19
173	Loss-of-function variants of SETD5 cause intellectual disability and the core phenotype of microdeletion 3p25.3 syndrome. <i>European Journal of Human Genetics</i> , 2015, 23, 753-760.	1.4	73
174	CRISPR/Cas9: The Leading Edge of Genome Editing Technology. <i>Genome Biology</i> , 2015, 16, 25-41.		12
175	The roles of CRISPR-Cas systems in adaptive immunity and beyond. <i>Current Opinion in Immunology</i> , 2015, 32, 36-41.	2.4	185
176	Targeted Genome Editing Using Site-Specific Nucleases. <i>Genome Biology</i> , 2015, 16, 25-41.		7
177	Genome editing strategies: potential tools for eradicating HIV-1/AIDS. <i>Journal of NeuroVirology</i> , 2015, 21, 310-321.	1.0	39
178	A CRISPR/Cas9 Vector System for Tissue-Specific Gene Disruption in Zebrafish. <i>Developmental Cell</i> , 2015, 32, 756-764.	3.1	325
179	Boosting CRISPR/Cas9 multiplex editing capability with the endogenous tRNA-processing system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 3570-3575.	3.3	1,129
180	The role of regulatory variation in complex traits and disease. <i>Nature Reviews Genetics</i> , 2015, 16, 197-212.	7.7	864
181	CRISPR Craze Conquers the RNA World: Precise Manipulation of DNA and RNA Based on a Bacterial Defense System. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 4710-4712.	7.2	5
182	The genome as pharmacopeia: Association of genetic dose with phenotypic response. <i>Biochemical Pharmacology</i> , 2015, 94, 229-240.	2.0	3
183	How genetic errors in GPCRs affect their function: Possible therapeutic strategies. <i>Genes and Diseases</i> , 2015, 2, 108-132.	1.5	60
184	How to Measure Molecular Forces in Cells: A Guide to Evaluating Genetically-Encoded FRET-Based Tension Sensors. <i>Cellular and Molecular Bioengineering</i> , 2015, 8, 96-105.	1.0	103

#	ARTICLE	IF	CITATIONS
185	Development of a markerless gene replacement system in <i>Corynebacterium glutamicum</i> using upp as a counter-selection marker. <i>Biotechnology Letters</i> , 2015, 37, 609-617.	1.1	35
186	Manipulating Endogenous Genes. , 2015, , 273-293.		1
187	Dual sgRNA-directed gene knockout using CRISPR/Cas9 technology in <i>Caenorhabditis elegans</i> . <i>Scientific Reports</i> , 2014, 4, 7581.	1.6	121
188	A versatile reporter system for CRISPR-mediated chromosomal rearrangements. <i>Genome Biology</i> , 2015, 16, 111.	13.9	52
189	Genome Editing in Higher Plants. , 2015, , 197-205.		2
190	Adenovirus-Mediated Somatic Genome Editing of <i>Pten</i> by CRISPR/Cas9 in Mouse Liver in Spite of Cas9-Specific Immune Responses. <i>Human Gene Therapy</i> , 2015, 26, 432-442.	1.4	291
191	Baculovirus Insecticides in Latin America: Historical Overview, Current Status and Future Perspectives. <i>Viruses</i> , 2015, 7, 2230-2267.	1.5	147
192	CRISPR-based screening of genomic island excision events in bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 8076-8081.	3.3	125
193	Efficient gene editing in <i>Neurospora crassa</i> with CRISPR technology. <i>Fungal Biology and Biotechnology</i> , 2015, 2, 4.	2.5	176
194	A pre-screening FISH-based method to detect CRISPR/Cas9 off-targets in mouse embryonic stem cells. <i>Scientific Reports</i> , 2015, 5, 12327.	1.6	20
195	Antiangiogenic Eye Gene Therapy. <i>Human Gene Therapy</i> , 2015, 26, 525-537.	1.4	22
196	Modifying an Insect CellN-Glycan Processing Pathway Using CRISPR-Cas Technology. <i>ACS Chemical Biology</i> , 2015, 10, 2199-2208.	1.6	35
197	Pollen feeding proteomics: Salivary proteins of the passion flower butterfly, <i>Heliconius melpomene</i> . <i>Insect Biochemistry and Molecular Biology</i> , 2015, 63, 7-13.	1.2	24
198	Recent strategies and progress in identifying host factors involved in virus replication. <i>Current Opinion in Microbiology</i> , 2015, 26, 79-88.	2.3	22
199	Getting Down to Specifics. <i>Advances in Genetics</i> , 2015, 91, 103-151.	0.8	12
200	Costs of CRISPR-Cas-mediated resistance in <i>Streptococcus thermophilus</i> . <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20151270.	1.2	101
201	Using genetic mouse models to gain insight into glaucoma: Past results and future possibilities. <i>Experimental Eye Research</i> , 2015, 141, 42-56.	1.2	69
202	Microbead models in glaucoma. <i>Experimental Eye Research</i> , 2015, 141, 9-14.	1.2	60

#	ARTICLE	IF	CITATIONS
203	Evolution of host specialization in gut microbes: the bee gut as a model. <i>Gut Microbes</i> , 2015, 6, 214-220.	4.3	86
204	CRISPR/Cas9-mediated endogenous protein tagging for RESOLFT super-resolution microscopy of living human cells. <i>Scientific Reports</i> , 2015, 5, 9592.	1.6	135
205	Precision cancer mouse models through genome editing with CRISPR-Cas9. <i>Genome Medicine</i> , 2015, 7, 53.	3.6	88
206	Haploids: Constraints and opportunities in plant breeding. <i>Biotechnology Advances</i> , 2015, 33, 812-829.	6.0	198
207	Nrf2 and Nrf2-related proteins in development and developmental toxicity: Insights from studies in zebrafish (<i>Danio rerio</i>). <i>Free Radical Biology and Medicine</i> , 2015, 88, 275-289.	1.3	76
208	The Nature of Living Things. <i>Computational Biology</i> , 2015, , 129-174.	0.1	0
209	The Hope for iPSC in Lung Stem Cell Therapy and Disease Modeling. <i>Pancreatic Islet Biology</i> , 2015, , 113-143.	0.1	1
210	Single-Step Generation of Conditional Knockout Mouse Embryonic Stem Cells. <i>Cell Reports</i> , 2015, 12, 709-716.	2.9	76
211	CRISPR-Cas: New Tools for Genetic Manipulations from Bacterial Immunity Systems. <i>Annual Review of Microbiology</i> , 2015, 69, 209-228.	2.9	160
212	Efficient CRISPR-mediated gene targeting and transgene replacement in the beetle <i>Tribolium castaneum</i> . <i>Development (Cambridge)</i> , 2015, 142, 2832-9.	1.2	141
213	Efficient generation of gene-modified pigs via injection of zygote with Cas9/sgRNA. <i>Scientific Reports</i> , 2015, 5, 8256.	1.6	104
214	A genome-wide analysis of Cas9 binding specificity using ChIP-seq and targeted sequence capture. <i>Nucleic Acids Research</i> , 2015, 43, 3389-3404.	6.5	193
216	Synthetic biology in cell-based cancer immunotherapy. <i>Trends in Biotechnology</i> , 2015, 33, 449-461.	4.9	61
217	A unified architecture of transcriptional regulatory elements. <i>Trends in Genetics</i> , 2015, 31, 426-433.	2.9	173
218	Engineered CRISPR-Cas9 nucleases with altered PAM specificities. <i>Nature</i> , 2015, 523, 481-485.	13.7	1,388
219	Production of Î²-ionone by combined expression of carotenogenic and plant CCD1 genes in <i>Saccharomyces cerevisiae</i> . <i>Microbial Cell Factories</i> , 2015, 14, 84.	1.9	71
220	The Convergence of Systems and Reductionist Approaches in Complex Trait Analysis. <i>Cell</i> , 2015, 162, 23-32.	13.5	75
221	Hide and seek: Identification and confirmation of small molecule protein targets. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015, 25, 3079-3086.	1.0	31

#	ARTICLE	IF	CITATIONS
222	The impact of human copy number variation on gene expression: Figure 1. Briefings in Functional Genomics, 2015, 14, 352-357.	1.3	108
223	CRISPR-Cas9-Mediated Single-Gene and Gene Family Disruption in Trypanosoma cruzi. MBio, 2015, 6, e02097-14.	1.8	186
224	The neuronal ceroid lipofuscinoses: Opportunities from model systems. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2015, 1852, 2267-2278.	1.8	32
225	Shaping plant architecture. Frontiers in Plant Science, 2015, 6, 233.	1.7	159
226	Ribosomal proteomics: Strategies, approaches, and perspectives. Biochimie, 2015, 113, 69-77.	1.3	6
227	CRISPR-Cas9 Based Genome Engineering: Opportunities in Agri-Food-Nutrition and Healthcare. OMICS A Journal of Integrative Biology, 2015, 19, 261-275.	1.0	11
228	Organogenesis in deep time: A problem in genomics, development, and paleontology. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4871-4876.	3.3	23
229	CRISPR/Cas9-mediated gene editing in human tripronuclear zygotes. Protein and Cell, 2015, 6, 363-372.	4.8	929
230	Optical Control of CRISPR/Cas9 Gene Editing. Journal of the American Chemical Society, 2015, 137, 5642-5645.	6.6	220
231	Genome Editing: Potential Treatment for Lysosomal Storage Diseases. Current Stem Cell Reports, 2015, 1, 9-15.	0.7	20
232	RNA-guided CRISPR-Cas technologies for genome-scale investigation of disease processes. Journal of Hematology and Oncology, 2015, 8, 31.	6.9	8
233	Synthetic epigeneticsâ€™ towards intelligent control of epigenetic states and cell identity. Clinical Epigenetics, 2015, 7, 18.	1.8	59
234	Epigenetics and locust life phase transitions. Journal of Experimental Biology, 2015, 218, 88-99.	0.8	68
235	Opposing Roles for the lncRNA Haunt and Its Genomic Locus in Regulating HOXA Gene Activation during Embryonic Stem Cell Differentiation. Cell Stem Cell, 2015, 16, 504-516.	5.2	247
236	Mosaic Zebrafish Transgenesis for Functional Genomic Analysis of Candidate Cooperative Genes in Tumor Pathogenesis. Journal of Visualized Experiments, 2015, , .	0.2	6
237	Synthetic biology advances for pharmaceutical production. Current Opinion in Biotechnology, 2015, 35, 46-51.	3.3	59
238	Can cord blood banks transform into induced pluripotent stem cell banks?. Cytotherapy, 2015, 17, 756-764.	0.3	14
239	Increasing the efficiency of precise genome editing with CRISPR-Cas9 by inhibition of nonhomologous end joining. Nature Biotechnology, 2015, 33, 538-542.	9.4	945

#	ARTICLE	IF	CITATIONS
240	The pros and cons of vertebrate animal models for functional and therapeutic research on inherited retinal dystrophies. <i>Progress in Retinal and Eye Research</i> , 2015, 48, 137-159.	7.3	81
242	An Enhanced Gene Targeting Toolkit for <i>Drosophila</i> : Golic+. <i>Genetics</i> , 2015, 199, 683-694.	1.2	28
243	Gene targeting by the <i>TAL</i> effector PthXo2 reveals cryptic resistance gene for bacterial blight of rice. <i>Plant Journal</i> , 2015, 82, 632-643.	2.8	409
244	Advances in CRISPR-Cas9 genome engineering: lessons learned from RNA interference. <i>Nucleic Acids Research</i> , 2015, 43, 3407-3419.	6.5	124
245	Application of CRISPR/Cas9 genome editing to the study and treatment of disease. <i>Archives of Toxicology</i> , 2015, 89, 1023-1034.	1.9	47
246	Nuclear sensing of viral DNA, epigenetic regulation of herpes simplex virus infection, and innate immunity. <i>Virology</i> , 2015, 479-480, 153-159.	1.1	76
247	Interaction of plant defense compounds with the insect gut: new insights from genomic and molecular analyses. <i>Current Opinion in Insect Science</i> , 2015, 9, 62-68.	2.2	25
248	Enabling functional genomics with genome engineering. <i>Genome Research</i> , 2015, 25, 1442-1455.	2.4	89
249	Selection and Validation of Spacer Sequences for CRISPR-Cas9 Genome Editing and Transcription Regulation in Bacteria. <i>Methods in Molecular Biology</i> , 2015, 1334, 233-244.	0.4	0
250	From Genomics to Gene Therapy: Induced Pluripotent Stem Cells Meet Genome Editing. <i>Annual Review of Genetics</i> , 2015, 49, 47-70.	3.2	111
251	An updated evolutionary classification of CRISPR-Cas systems. <i>Nature Reviews Microbiology</i> , 2015, 13, 722-736.	13.6	2,081
252	Somatic cell nuclear transfer: origins, the present position and future opportunities. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2015, 370, 20140366.	1.8	42
253	The Molecular Constituents of the Blood-Brain Barrier. <i>Trends in Neurosciences</i> , 2015, 38, 598-608.	4.2	281
255	Broadening the targeting range of <i>Staphylococcus aureus</i> CRISPR-Cas9 by modifying PAM recognition. <i>Nature Biotechnology</i> , 2015, 33, 1293-1298.	9.4	511
257	Functional Genomics in Pharmaceutical Drug Discovery. <i>Handbook of Experimental Pharmacology</i> , 2015, 232, 25-41.	0.9	4
258	Effects of hypoxia-induced neonatal seizures on acute hippocampal injury and later-life seizure susceptibility and anxiety-related behavior in mice. <i>Neurobiology of Disease</i> , 2015, 83, 100-114.	2.1	52
259	Strategies for precision modulation of gene expression by epigenome editing: an overview. <i>Epigenetics and Chromatin</i> , 2015, 8, 34.	1.8	50
260	CRISPR/Cas9 somatic multiplex-mutagenesis for high-throughput functional cancer genomics in mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13982-13987.	3.3	172

#	ARTICLE	IF	CITATIONS
261	ChEC-seq kinetics discriminates transcription factor binding sites by DNA sequence and shape in vivo. <i>Nature Communications</i> , 2015, 6, 8733.	5.8	153
262	A short introduction to acyl-CoA dehydrogenases; deficiencies and novel treatment strategies. <i>Expert Opinion on Orphan Drugs</i> , 2015, 3, 1375-1386.	0.5	3
263	CRISPR/Cas9: molecular tool for gene therapy to target genome and epigenome in the treatment of lung cancer. <i>Cancer Gene Therapy</i> , 2015, 22, 509-517.	2.2	42
264	CRISPR/Cas9: a powerful genetic engineering tool for establishing large animal models of neurodegenerative diseases. <i>Molecular Neurodegeneration</i> , 2015, 10, 35.	4.4	89
265	Novel lentiviral vectors with mutated reverse transcriptase for mRNA delivery of TALE nucleases. <i>Scientific Reports</i> , 2014, 4, 6409.	1.6	55
266	A Single Amino Acid Substitution in an ORANGE Protein Promotes Carotenoid Overaccumulation in Arabidopsis. <i>Plant Physiology</i> , 2015, 169, 421-431.	2.3	91
267	<i>Lucilia cuprina</i> genome unlocks parasitic fly biology to underpin future interventions. <i>Nature Communications</i> , 2015, 6, 7344.	5.8	67
268	DNA-binding-domain fusions enhance the targeting range and precision of Cas9. <i>Nature Methods</i> , 2015, 12, 1150-1156.	9.0	107
269	Recent advances in engineering yeast for pharmaceutical protein production. <i>RSC Advances</i> , 2015, 5, 86665-86674.	1.7	18
270	Expanding the biotechnology potential of lactobacilli through comparative genomics of 213 strains and associated genera. <i>Nature Communications</i> , 2015, 6, 8322.	5.8	488
271	Is CRISPR-based gene drive a biocontrol silver bullet or global conservation threat?. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 10565-10567.	3.3	183
272	CRISPRing into the woods. <i>GM Crops and Food</i> , 2015, 6, 206-215.	2.0	36
273	Demystifying the secret mission of enhancers: linking distal regulatory elements to target genes. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2015, 50, 550-573.	2.3	80
274	Single-cell epigenomics: techniques and emerging applications. <i>Nature Reviews Genetics</i> , 2015, 16, 716-726.	7.7	219
275	Extended-resolution structured illumination imaging of endocytic and cytoskeletal dynamics. <i>Science</i> , 2015, 349, aab3500.	6.0	585
276	Perspectives on the membrane fatty acid unsaturation/pacemaker hypotheses of metabolism and aging. <i>Chemistry and Physics of Lipids</i> , 2015, 191, 48-60.	1.5	14
277	Do stars govern our actions? Astrocyte involvement in rodent behavior. <i>Trends in Neurosciences</i> , 2015, 38, 535-549.	4.2	152
278	Invader probes: harnessing the energy of intercalation to facilitate recognition of chromosomal DNA for diagnostic applications. <i>Chemical Science</i> , 2015, 6, 5006-5015.	3.7	22

#	ARTICLE	IF	CITATIONS
279	Efficient targeted mutagenesis in potato by the CRISPR/Cas9 system. <i>Plant Cell Reports</i> , 2015, 34, 1473-1476.	2.8	242
280	Delivery and therapeutic applications of gene editing technologies ZFNs, TALENs, and CRISPR/Cas9. <i>International Journal of Pharmaceutics</i> , 2015, 494, 180-194.	2.6	94
281	The Evolution of Aggregative Multicellularity and Cell-Cell Communication in the Dictyostelia. <i>Journal of Molecular Biology</i> , 2015, 427, 3722-3733.	2.0	92
282	Cas9-Guide RNA Directed Genome Editing in Soybean. <i>Plant Physiology</i> , 2015, 169, 960-970.	2.3	426
283	Virus-Host Interactions: From Unbiased Genetic Screens to Function. <i>Annual Review of Virology</i> , 2015, 2, 497-524.	3.0	40
284	Engineering of oleaginous organisms for lipid production. <i>Current Opinion in Biotechnology</i> , 2015, 36, 32-39.	3.3	43
285	CETCh-seq: CRISPR epitope tagging ChIP-seq of DNA-binding proteins. <i>Genome Research</i> , 2015, 25, 1581-1589.	2.4	122
286	Metabolic reprogramming and dysregulated metabolism: cause, consequence and/or enabler of environmental carcinogenesis?. <i>Carcinogenesis</i> , 2015, 36, S203-S231.	1.3	93
287	Genetic Discoveries Drive Molecular Analyses and Targeted Therapeutic Options in the Epilepsies. <i>Current Neurology and Neuroscience Reports</i> , 2015, 15, 70.	2.0	12
288	Thrips transmission of tospoviruses. <i>Current Opinion in Virology</i> , 2015, 15, 80-89.	2.6	214
289	Cas9 gRNA engineering for genome editing, activation and repression. <i>Nature Methods</i> , 2015, 12, 1051-1054.	9.0	272
290	Comparative Analysis of Gene Regulatory Networks: From Network Reconstruction to Evolution. <i>Annual Review of Cell and Developmental Biology</i> , 2015, 31, 399-428.	4.0	170
291	Proven and novel strategies for efficient editing of the human genome. <i>Current Opinion in Pharmacology</i> , 2015, 24, 105-112.	1.7	18
292	The evolution of the human genome. <i>Current Opinion in Genetics and Development</i> , 2015, 35, 9-15.	1.5	15
293	CRISPR/Cas9-mediated genome editing and gene replacement in plants: Transitioning from lab to field. <i>Plant Science</i> , 2015, 240, 130-142.	1.7	139
294	Efficient CRISPR/Cas9-mediated multiplex genome editing in CHO cells via high-level sgRNA-Cas9 complex. <i>Biotechnology and Bioprocess Engineering</i> , 2015, 20, 825-833.	1.4	14
295	Diversity of CRISPR-Cas immune systems and molecular machines. <i>Genome Biology</i> , 2015, 16, 247.	3.8	74
296	Improving Biocontainment with Synthetic Biology: Beyond Physical Containment. <i>Springer Protocols</i> , 2015, , 185-199.	0.1	7

#	ARTICLE	IF	CITATIONS
298	MET gene exon 14 deletion created using the CRISPR/Cas9 system enhances cellular growth and sensitivity to a MET inhibitor. Lung Cancer, 2015, 90, 590-597.	0.9	32
299	Unraveling the potential of CRISPR-Cas9 for gene therapy. Expert Opinion on Biological Therapy, 2015, 15, 311-314.	1.4	21
300	A Mouse Geneticist's Practical Guide to CRISPR Applications. Genetics, 2015, 199, 1-15.	1.2	290
301	Engineering Complex Synthetic Transcriptional Programs with CRISPR RNA Scaffolds. Cell, 2015, 160, 339-350.	13.5	809
302	Genome-wide detection of DNA double-stranded breaks induced by engineered nucleases. Nature Biotechnology, 2015, 33, 179-186.	9.4	590
303	GUIDE-seq enables genome-wide profiling of off-target cleavage by CRISPR-Cas nucleases. Nature Biotechnology, 2015, 33, 187-197.	9.4	1,757
304	Stimuli-Responsive Nanomaterials for Biomedical Applications. Journal of the American Chemical Society, 2015, 137, 2140-2154.	6.6	442
305	The immunopathogenesis of birdshot chorioretinopathy; a bird of many feathers. Progress in Retinal and Eye Research, 2015, 44, 99-110.	7.3	59
306	Improving livestock for agriculture – technological progress from random transgenesis to precision genome editing heralds a new era. Biotechnology Journal, 2015, 10, 109-120.	1.8	71
307	Targeting Cdk11 in osteosarcoma cells using the CRISPR-Cas9 system. Journal of Orthopaedic Research, 2015, 33, 199-207.	1.2	64
308	Multiplex genome engineering in human cells using all-in-one CRISPR/Cas9 vector system. Scientific Reports, 2014, 4, 5400.	1.6	318
309	Genome Editing with Engineered Nucleases in Plants. Plant and Cell Physiology, 2015, 56, 389-400.	1.5	204
310	Comparative assessments of CRISPR-Cas nucleases' cleavage efficiency in planta. Plant Molecular Biology, 2015, 87, 143-156.	2.0	70
311	Cationic lipid-mediated delivery of proteins enables efficient protein-based genome editing in vitro and in vivo. Nature Biotechnology, 2015, 33, 73-80.	9.4	1,180
312	Repurposing endogenous type I CRISPR-Cas systems for programmable gene repression. Nucleic Acids Research, 2015, 43, 674-681.	6.5	202
314	Molecular Chipper: Functional Mapping of the Non-Coding Genome with CRISPR. Journal of Next Generation Sequencing & Applications, 2016, 3, .	0.3	1
315	Genetic Engineering and Sustainable Crop Disease Management: Opportunities for Case-by-Case Decision-Making. Sustainability, 2016, 8, 495.	1.6	29
316	CRISPR-dCas9 mediated TET1 targeting for selective DNA demethylation at BRCA1 promoter. Oncotarget, 2016, 7, 46545-46556.	0.8	263

#	ARTICLE	IF	CITATIONS
317	Anthrax Susceptibility: Human Genetic Polymorphisms Modulating ANTXR2 Expression. <i>Toxins</i> , 2016, 8, 1.	1.5	190
318	Biotechnological Strategies for Advanced Biofuel Production. , 2016, , 227-263.		0
319	Remodeling and Control of Homologous Recombination by DNA Helicases and Translocases that Target Recombinases and Synapsis. <i>Genes</i> , 2016, 7, 52.	1.0	8
320	Histone Methylation - A Cornerstone for Plant Responses to Environmental Stresses?. , 2016, , .		14
321	Contributions of genetically-modified animal models to the understanding and intervention in autosomal dominant polycystic kidney disease: present and future. , 2016, 95, 10.	0.0	0
322	Brain tumor modeling using the CRISPR/Cas9 system: state of the art and view to the future. <i>Oncotarget</i> , 2016, 7, 33461-33471.	0.8	19
323	Connexin-Based Therapeutics and Tissue Engineering Approaches to the Amelioration of Chronic Pancreatitis and Type I Diabetes: Construction and Characterization of a Novel Prevascularized Bioartificial Pancreas. <i>Journal of Diabetes Research</i> , 2016, 2016, 1-12.	1.0	6
324	Skin Models for Drug Development and Biopharmaceutical Industry. , 2016, , 357-386.		0
325	Biomaterials and Nanotherapeutics for Enhancing Skin Wound Healing. <i>Frontiers in Bioengineering and Biotechnology</i> , 2016, 4, 82.	2.0	216
326	Plant Virusâ€“Insect Vector Interactions: Current and Potential Future Research Directions. <i>Viruses</i> , 2016, 8, 303.	1.5	161
327	Inducing and Administering Tregs to Treat Human Disease. <i>Frontiers in Immunology</i> , 2015, 6, 654.	2.2	40
328	Elucidating the Role of Effectors in Plant-Fungal Interactions: Progress and Challenges. <i>Frontiers in Microbiology</i> , 2016, 7, 600.	1.5	214
329	CRISPR/Cas9: Implications for Modeling and Therapy of Neurodegenerative Diseases. <i>Frontiers in Molecular Neuroscience</i> , 2016, 9, 30.	1.4	40
330	The Development of a Viral Mediated CRISPR/Cas9 System with Doxycycline Dependent gRNA Expression for Inducible In vitro and In vivo Genome Editing. <i>Frontiers in Molecular Neuroscience</i> , 2016, 9, 70.	1.4	50
331	Targeting Stromal-Cancer Cell Crosstalk Networks in Ovarian Cancer Treatment. <i>Biomolecules</i> , 2016, 6, 3.	1.8	43
332	Random Splicing of Several Exons Caused by a Single Base Change in the Target Exon of CRISPR/Cas9 Mediated Gene Knockout. <i>Cells</i> , 2016, 5, 45.	1.8	57
333	Genome Editing in <i>C. elegans</i> and Other Nematode Species. <i>International Journal of Molecular Sciences</i> , 2016, 17, 295.	1.8	16
334	Autophagy, Innate Immunity and Tissue Repair in Acute Kidney Injury. <i>International Journal of Molecular Sciences</i> , 2016, 17, 662.	1.8	77

#	ARTICLE	IF	CITATIONS
335	Biased and Unbiased Methods for the Detection of Off-Target Cleavage by CRISPR/Cas9: An Overview. <i>International Journal of Molecular Sciences</i> , 2016, 17, 1507.	1.8	74
336	Critical role of miR-125b in lipogenesis by targeting stearoyl-CoA desaturase-1 (SCD-1)1. <i>Journal of Animal Science</i> , 2016, 94, 65-76.	0.2	25
337	Generation of an Oocyte-Specific Cas9 Transgenic Mouse for Genome Editing. <i>PLoS ONE</i> , 2016, 11, e0154364.	1.1	10
338	Ribozyme Mediated gRNA Generation for In Vitro and In Vivo CRISPR/Cas9 Mutagenesis. <i>PLoS ONE</i> , 2016, 11, e0166020.	1.1	31
339	Transgenic Suppression of AGAMOUS Genes in Apple Reduces Fertility and Increases Floral Attractiveness. <i>PLoS ONE</i> , 2016, 11, e0159421.	1.1	28
340	The CRISPR/Cas Genome-Editing Tool: Application in Improvement of Crops. <i>Frontiers in Plant Science</i> , 2016, 7, 506.	1.7	196
341	An Overview of CRISPR-Based Tools and Their Improvements: New Opportunities in Understanding Plant-Pathogen Interactions for Better Crop Protection. <i>Frontiers in Plant Science</i> , 2016, 7, 765.	1.7	49
342	CRISPR-Cas9: Tool for Qualitative and Quantitative Plant Genome Editing. <i>Frontiers in Plant Science</i> , 2016, 7, 1740.	1.7	65
343	Construction of a minimal genome as a chassis for synthetic biology. <i>Essays in Biochemistry</i> , 2016, 60, 337-346.	2.1	23
344	MicroRNA Theranostics in Prostate Cancer Precision Medicine. <i>Clinical Chemistry</i> , 2016, 62, 1318-1333.	1.5	47
345	CRISPR guide RNA design for research applications. <i>FEBS Journal</i> , 2016, 283, 3232-3238.	2.2	74
346	Prospects and challenges of CRISPR/Cas genome editing for the study and control of neglected vector-borne nematode diseases. <i>FEBS Journal</i> , 2016, 283, 3204-3221.	2.2	48
347	Analyzing CRISPR genome-editing experiments with CRISPResso. <i>Nature Biotechnology</i> , 2016, 34, 695-697.	9.4	410
348	Next stop for the CRISPR revolution: RNA-guided epigenetic regulators. <i>FEBS Journal</i> , 2016, 283, 3181-3193.	2.2	63
349	On the Origin of CRISPR-Cas Technology: From Prokaryotes to Mammals. <i>Trends in Microbiology</i> , 2016, 24, 811-820.	3.5	143
350	Microfluidic Cell Deformability Assay for Rapid and Efficient Kinase Screening with the CRISPR-Cas9 System. <i>Angewandte Chemie</i> , 2016, 128, 8703-8707.	1.6	6
351	Microfluidic Cell Deformability Assay for Rapid and Efficient Kinase Screening with the CRISPR-Cas9 System. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8561-8565.	7.2	26
352	TALeored Epigenetics: A DNA-Binding Scaffold for Programmable Epigenome Editing and Analysis. <i>ChemBioChem</i> , 2016, 17, 975-980.	1.3	7

#	ARTICLE	IF	CITATIONS
353	Neural Engineering. , 2016, , .		8
354	Structural and molecular bases of rod photoreceptor morphogenesis and disease. Progress in Retinal and Eye Research, 2016, 55, 32-51.	7.3	45
355	Genome-wide association study of behavioral, physiological and gene expression traits in outbred CFW mice. Nature Genetics, 2016, 48, 919-926.	9.4	119
356	Prediction and Validation of Native and Engineered Cas9 Guide Sequences. Cold Spring Harbor Protocols, 2016, 2016, pdb.prot086785.	0.2	16
357	A Powerful CRISPR/Cas9-Based Method for Targeted Transcriptional Activation. Angewandte Chemie, 2016, 128, 6562-6566.	1.6	2
358	A Powerful CRISPR/Cas9-Based Method for Targeted Transcriptional Activation. Angewandte Chemie - International Edition, 2016, 55, 6452-6456.	7.2	13
359	Phototactic guidance of a tissue-engineered soft-robotic ray. Science, 2016, 353, 158-162.	6.0	534
360	Efficient edition of the bovine PRNP prion gene in somatic cells and IVF embryos using the CRISPR/Cas9 system. Theriogenology, 2016, 86, 1886-1896.e1.	0.9	66
361	In Vitro Modeling of Nervous System: Engineering of the Reflex Arc. , 2016, , 261-298.		1
362	Somatic mutations in disorders with disrupted brain connectivity. Experimental and Molecular Medicine, 2016, 48, e239-e239.	3.2	25
363	Kinetics of Reactive Modules Adds Discriminative Dimensions for Selective Cell Imaging. ChemPhysChem, 2016, 17, 1396-1413.	1.0	12
364	Understanding the Pathogenicity of Noncoding Mismatch Repair Gene Promoter Variants in Lynch Syndrome. Human Mutation, 2016, 37, 417-426.	1.1	10
365	CRISPR/Cas9-AAV Mediated Knock-in at NRL Locus in Human Embryonic Stem Cells. Molecular Therapy - Nucleic Acids, 2016, 5, e393.	2.3	9
366	CRISPR-Cas9D10A nickase-based genotypic and phenotypic screening to enhance genome editing. Scientific Reports, 2016, 6, 24356.	1.6	111
367	GM crops: not the science but the regulatory policy is the problem. Acta Horticulturae, 2016, , 1-10.	0.1	3
368	Editing of the urease gene by CRISPR-Cas in the diatom Thalassiosira pseudonana. Plant Methods, 2016, 12, 49.	1.9	137
369	Searching for better animal models of BPD: a perspective. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2016, 311, L924-L927.	1.3	50
370	Proteomics to study DNA-bound and chromatin-associated gene regulatory complexes. Human Molecular Genetics, 2016, 25, R106-R114.	1.4	59

#	ARTICLE	IF	CITATIONS
371	Efficient Production of Gene-Modified Mice using Staphylococcus aureus Cas9. Scientific Reports, 2016, 6, 32565.	1.6	27
372	ESMO / ASCO Recommendations for a Global Curriculum in Medical Oncology Edition 2016. ESMO Open, 2016, 1, e000097.	2.0	82
374	CRISP-ID: decoding CRISPR mediated indels by Sanger sequencing. Scientific Reports, 2016, 6, 28973.	1.6	180
375	A non-inheritable maternal Cas9-based multiple-gene editing system in mice. Scientific Reports, 2016, 6, 20011.	1.6	26
376	TAEI: A zebrafish-optimized optogenetic gene expression system with fine spatial and temporal control. Development (Cambridge), 2017, 144, 345-355.	1.2	67
377	Cpf1 Is A Versatile Tool for CRISPR Genome Editing Across Diverse Species of Cyanobacteria. Scientific Reports, 2016, 6, 39681.	1.6	228
378	CT-Finder: A Web Service for CRISPR Optimal Target Prediction and Visualization. Scientific Reports, 2016, 6, 25516.	1.6	36
379	Multiplexed pancreatic genome engineering and cancer induction by transfection-based CRISPR/Cas9 delivery in mice. Nature Communications, 2016, 7, 10770.	5.8	145
380	Road to the future of systems biotechnology: CRISPR-Cas-mediated metabolic engineering for recombinant protein production. Biotechnology and Genetic Engineering Reviews, 2016, 32, 74-91.	2.4	14
381	Achieving Plant CRISPR Targeting that Limits Off-Target Effects. Plant Genome, 2016, 9, plantgenome2016.05.0047.	1.6	93
382	Genome editing for targeted improvement of plants. Plant Biotechnology Reports, 2016, 10, 327-343.	0.9	32
383	Future Therapy for Hepatitis B Virus: Role of Immunomodulators. Current Hepatology Reports, 2016, 15, 237-244.	0.4	22
384	Signalling couples hair follicle stem cell quiescence with reduced histone H3 K4/K9/K27me3 for proper tissue homeostasis. Nature Communications, 2016, 7, 11278.	5.8	29
385	CRISPaint allows modular base-specific gene tagging using a ligase-4-dependent mechanism. Nature Communications, 2016, 7, 12338.	5.8	141
386	A native promoter and inclusion of an intron is necessary for efficient expression of GFP or mRFP in Armillaria mellea. Scientific Reports, 2016, 6, 29226.	1.6	25
387	Rapid Screening for CRISPR-Directed Editing of the Drosophila Genome Using white Coconversion. G3: Genes, Genomes, Genetics, 2016, 6, 3197-3206.	0.8	53
388	Let microorganisms do the talking, let us talk more about microorganisms. Fungal Biology and Biotechnology, 2016, 3, 5.	2.5	4
389	Efficient Generation of Gene-Modified Pigs Harboring Precise Orthologous Human Mutation via CRISPR/Cas9-Induced Homology-Directed Repair in Zygotes. Human Mutation, 2016, 37, 110-118.	1.1	63

#	ARTICLE	IF	CITATIONS
390	Expansion of CRISPR targeting sites in <i>Bombyx mori</i> . <i>Insect Biochemistry and Molecular Biology</i> , 2016, 72, 31-40.	1.2	45
391	CRISPR Double Cutting through the Labyrinthine Architecture of 3D Genomes. <i>Journal of Genetics and Genomics</i> , 2016, 43, 273-288.	1.7	17
392	ABC transporters as mediators of drug resistance and contributors to cancer cell biology. <i>Drug Resistance Updates</i> , 2016, 26, 1-9.	6.5	316
393	Focal adhesion kinase regulation in stem cell alignment and spreading on nanofibers. <i>Biochemical and Biophysical Research Communications</i> , 2016, 473, 920-925.	1.0	31
394	Deciphering and shaping bacterial diversity through CRISPR. <i>Current Opinion in Microbiology</i> , 2016, 31, 101-108.	2.3	15
395	Isocitrate Dehydrogenase Mutations Confer Dasatinib Hypersensitivity and SRC Dependence in Intrahepatic Cholangiocarcinoma. <i>Cancer Discovery</i> , 2016, 6, 727-739.	7.7	126
396	Development of an Efficient Genome Editing Method by CRISPR/Cas9 in a Fish Cell Line. <i>Marine Biotechnology</i> , 2016, 18, 449-452.	1.1	49
397	Big insights from small volumes: deciphering complex leukocyte behaviors using microfluidics. <i>Journal of Leukocyte Biology</i> , 2016, 100, 291-304.	1.5	22
398	Multiplexed CRISPR/Cas9- and TAR-Mediated Promoter Engineering of Natural Product Biosynthetic Gene Clusters in Yeast. <i>ACS Synthetic Biology</i> , 2016, 5, 1002-1010.	1.9	85
399	Comparison of Cas9 activators in multiple species. <i>Nature Methods</i> , 2016, 13, 563-567.	9.0	438
400	<i>Kn1</i> gene overexpression drastically improves genetic transformation efficiencies of citrus cultivars. <i>Plant Cell, Tissue and Organ Culture</i> , 2016, 125, 81-91.	1.2	19
401	CRISPR/Cas9 produces anti-hepatitis B virus effect in hepatoma cells and transgenic mouse. <i>Virus Research</i> , 2016, 217, 125-132.	1.1	53
402	Red blood cells: Supercarriers for drugs, biologicals, and nanoparticles and inspiration for advanced delivery systems. <i>Advanced Drug Delivery Reviews</i> , 2016, 106, 88-103.	6.6	273
403	Future Perspectives for the Treatment of Sickle Cell Anemia. , 2016, , 399-429.		4
404	Fast, Efficient, and Gentle Transfection of Human Adherent Cells in Suspension. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 8870-8874.	4.0	9
405	CRISPR/Cas9-mediated target validation of the splicing inhibitor Pladienolide B. <i>Biochimie Open</i> , 2016, 3, 72-75.	3.2	11
406	CRISPR/Cas9 Based Genome Editing of <i>Penicillium chrysogenum</i> . <i>ACS Synthetic Biology</i> , 2016, 5, 754-764.	1.9	258
407	Single-Molecule Studies in Live Cells. <i>Annual Review of Physical Chemistry</i> , 2016, 67, 565-585.	4.8	52

#	ARTICLE	IF	CITATIONS
408	New developments in Silverâ€“Russell syndrome and implications for clinical practice. <i>Epigenomics</i> , 2016, 8, 563-580.	1.0	21
409	Defining and improving the genome-wide specificities of CRISPRâ€“Cas9 nucleases. <i>Nature Reviews Genetics</i> , 2016, 17, 300-312.	7.7	380
410	Sickle Cell Anemia. , 2016, , .		7
411	Programmable editing of a target base in genomic DNA without double-stranded DNA cleavage. <i>Nature</i> , 2016, 533, 420-424.	13.7	3,662
412	Programmed Cell Death. <i>Methods in Molecular Biology</i> , 2016, , .	0.4	8
413	Imaging Specific Genomic DNA in Living Cells. <i>Annual Review of Biophysics</i> , 2016, 45, 1-23.	4.5	67
414	Multiplexed Targeted Genome Engineering Using a Universal Nuclease-Assisted Vector Integration System. <i>ACS Synthetic Biology</i> , 2016, 5, 582-588.	1.9	16
415	Gene Therapy for Coagulation Disorders. <i>Circulation Research</i> , 2016, 118, 1443-1452.	2.0	17
416	Using CRISPR/Cas9 Technology for Manipulating Cell Death Regulators. <i>Methods in Molecular Biology</i> , 2016, 1419, 253-264.	0.4	23
417	Application of whole genome shotgun sequencing for detection and characterization of genetically modified organisms and derived products. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 4595-4614.	1.9	43
418	CRISPR/Cas9 in Genome Editing and Beyond. <i>Annual Review of Biochemistry</i> , 2016, 85, 227-264.	5.0	897
419	Neuroblastoma and Its Zebrafish Model. <i>Advances in Experimental Medicine and Biology</i> , 2016, 916, 451-478.	0.8	16
420	High-Throughput, High-Resolution Mapping of Protein Localization in Mammalian Brain by InÂVivo Genome Editing. <i>Cell</i> , 2016, 165, 1803-1817.	13.5	182
421	Breaking-Casâ€“interactive design of guide RNAs for CRISPR-Cas experiments for ENSEMBL genomes. <i>Nucleic Acids Research</i> , 2016, 44, W267-W271.	6.5	166
422	Assembling Multi-subunit Complexes Using Mammalian Expression. <i>Advances in Experimental Medicine and Biology</i> , 2016, 896, 225-238.	0.8	5
423	Customizing the genome as therapy for the Î²-hemoglobinopathies. <i>Blood</i> , 2016, 127, 2536-2545.	0.6	48
424	A genome editing primer for the hematologist. <i>Blood</i> , 2016, 127, 2525-2535.	0.6	23
425	Screening out irrelevant cell-based models of disease. <i>Nature Reviews Drug Discovery</i> , 2016, 15, 751-769.	21.5	402

#	ARTICLE	IF	CITATIONS
426	Wnt-signalling pathways and microRNAs network in carcinogenesis: experimental and bioinformatics approaches. <i>Molecular Cancer</i> , 2016, 15, 56.	7.9	55
427	Development of Light-Activated CRISPR Using Guide RNAs with Photocleavable Protectors. <i>Angewandte Chemie</i> , 2016, 128, 12628-12632.	1.6	29
428	A Genome-wide CRISPR Screen in <i>Toxoplasma</i> Identifies Essential Apicomplexan Genes. <i>Cell</i> , 2016, 166, 1423-1435.e12.	13.5	667
429	A proposal for validation of antibodies. <i>Nature Methods</i> , 2016, 13, 823-827.	9.0	473
430	CRISPR-mediated genome editing and human diseases. <i>Genes and Diseases</i> , 2016, 3, 244-251.	1.5	70
431	Rapid phenotyping of knockout mice to identify genetic determinants of bone strength. <i>Journal of Endocrinology</i> , 2016, 231, R31-R46.	1.2	30
433	Applications of CRISPR technologies in research and beyond. <i>Nature Biotechnology</i> , 2016, 34, 933-941.	9.4	735
434	Patterns of CRISPR/Cas9 activity in plants, animals and microbes. <i>Plant Biotechnology Journal</i> , 2016, 14, 2203-2216.	4.1	141
435	The importance of gene-environment interactions in human obesity. <i>Clinical Science</i> , 2016, 130, 1571-1597.	1.8	137
436	The Zebrafish as Model for Deciphering the Regulatory Architecture of Vertebrate Genomes. <i>Advances in Genetics</i> , 2016, 95, 195-216.	0.8	1
437	Translating Lung Function Genome-Wide Association Study (GWAS) Findings. <i>Advances in Genetics</i> , 2016, 93, 57-145.	0.8	17
438	Experimental approaches to studying the nature and impact of splicing variation in zebrafish. <i>Methods in Cell Biology</i> , 2016, 135, 259-288.	0.5	2
439	Discovery Proteomics Identifies a Molecular Link between the Coatamer Protein Complex I and Androgen Receptor-dependent Transcription. <i>Journal of Biological Chemistry</i> , 2016, 291, 18818-18842.	1.6	16
440	Altering the Anti-inflammatory Lipoxin Microenvironment: a New Insight into Kaposi's Sarcoma-Associated Herpesvirus Pathogenesis. <i>Journal of Virology</i> , 2016, 90, 11020-11031.	1.5	17
441	Approaches to Study Phosphatases. <i>ACS Chemical Biology</i> , 2016, 11, 2944-2961.	1.6	73
442	Growth factors: the journey continues. <i>Growth Factors</i> , 2016, 34, 1-4.	0.5	3
443	Methods for Optimizing CRISPR-Cas9 Genome Editing Specificity. <i>Molecular Cell</i> , 2016, 63, 355-370.	4.5	247
444	Preclinical models for interrogating drug action in human cancers using Stable Isotope Resolved Metabolomics (SIRM). <i>Metabolomics</i> , 2016, 12, 1.	1.4	24

#	ARTICLE	IF	CITATIONS
445	Working with Stem Cells. , 2016, , .		2
447	Genome Editing in Stem Cells. , 2016, , 287-309.		0
448	Functional genomics in osteoarthritis: Past, present, and future. Journal of Orthopaedic Research, 2016, 34, 1105-1110.	1.2	28
449	CRISPR/Cas9 genome editing in human pluripotent stem cells: Harnessing human genetics in a dish. Developmental Dynamics, 2016, 245, 788-806.	0.8	20
450	The dawn of active genetics. BioEssays, 2016, 38, 50-63.	1.2	114
451	Concise Review: Fluorescent Reporters in Human Pluripotent Stem Cells: Contributions to Cardiac Differentiation and Their Applications in Cardiac Disease and Toxicity. Stem Cells, 2016, 34, 13-26.	1.4	21
452	Virus-inspired nucleic acid delivery system: Linking virus and viral mimicry. Advanced Drug Delivery Reviews, 2016, 106, 3-26.	6.6	63
454	At the Conflux of Human Genome Engineering and Induced Pluripotency. , 2016, , 45-64.		1
455	CRISPR/Cas9: a promising way to exploit genetic variation in plants. Biotechnology Letters, 2016, 38, 1991-2006.	1.1	46
456	Development of Light-Activated CRISPR Using Guide RNAs with Photocleavable Protectors. Angewandte Chemie - International Edition, 2016, 55, 12440-12444.	7.2	144
457	Concise Review: Updated Advances and Current Challenges in Cell Therapy for Inborn Liver Metabolic Defects. Stem Cells Translational Medicine, 2016, 5, 1117-1125.	1.6	34
458	Tools and applications in synthetic biology. Advanced Drug Delivery Reviews, 2016, 105, 20-34.	6.6	46
459	Immunogenomic engineering of a plug-and-(dis)play hybridoma platform. Nature Communications, 2016, 7, 12535.	5.8	50
460	Targeted mutagenesis in chicken using CRISPR/Cas9 system. Scientific Reports, 2016, 6, 23980.	1.6	178
461	Detection of nucleotide-specific CRISPR/Cas9 modified alleles using multiplex ligation detection. Scientific Reports, 2016, 6, 32048.	1.6	23
462	Novel Functional Genomics Approaches: A Promising Future in the Combat Against Plant Viruses. Phytopathology, 2016, 106, 1231-1239.	1.1	17
463	Novel Structures in Animals, Developmental Evolution of. , 2016, , 136-145.		0
464	CRISPR/Cas9: a historical and chemical biology perspective of targeted genome engineering. Chemical Society Reviews, 2016, 45, 6666-6684.	18.7	27

#	ARTICLE	IF	CITATIONS
465	Fungal Applications in Sustainable Environmental Biotechnology. Fungal Biology, 2016, , .	0.3	16
466	Fungi in Consolidated Bioprocessing of Lignocellulosic Materials. Fungal Biology, 2016, , 275-305.	0.3	3
467	<i>Zymomonas mobilis</i> as a model system for production of biofuels and biochemicals. Microbial Biotechnology, 2016, 9, 699-717.	2.0	169
468	Genetic manipulation of cardiac ageing. Journal of Physiology, 2016, 594, 2075-2083.	1.3	8
469	Pathway Design, Engineering, and Optimization. Advances in Biochemical Engineering/Biotechnology, 2016, 162, 77-116.	0.6	7
470	The Bacterial Cell. , 2016, , 3-29.		0
471	Bark Beetle Research in the Postgenomic Era. Advances in Insect Physiology, 2016, 50, 265-293.	1.1	8
472	DNA-guided genome editing using structure-guided endonucleases. Genome Biology, 2016, 17, 187.	3.8	10
473	Gene based therapies for kidney regeneration. European Journal of Pharmacology, 2016, 790, 99-108.	1.7	7
474	High-Efficiency Genome Editing of Streptomyces Species by an Engineered CRISPR/Cas System. Methods in Enzymology, 2016, 575, 271-284.	0.4	24
475	Conjugation and Evaluation of Triazole-Linked Single Guide RNA for CRISPR-Cas9 Gene Editing. ChemBioChem, 2016, 17, 1809-1812.	1.3	15
476	Proteomics and molecular tools for unveiling missing links in the biochemical understanding of schizophrenia. Proteomics - Clinical Applications, 2016, 10, 1148-1158.	0.8	14
477	Noncoding Genome-Wide Association Studies Variant for Obesity: Inroads Into Mechanism. Journal of the American Heart Association, 2016, 5, .	1.6	5
478	Introduction to Gene Editing and Manipulation Using CRISPR/Cas9 Technology. Current Protocols in Molecular Biology, 2016, 115, 31.4.1-31.4.6.	2.9	6
479	Engineering microbes for isoprene production. Metabolic Engineering, 2016, 38, 125-138.	3.6	82
480	Derivation and characterization of putative embryonic stem cells from cloned rabbit embryos. Theriogenology, 2016, 86, 1799-1810.	0.9	4
481	Fast Fluorescence Microscopy with Light Sheets. Biological Bulletin, 2016, 231, 14-25.	0.7	27
482	Sendai virus, an RNA virus with no risk of genomic integration, delivers CRISPR/Cas9 for efficient gene editing. Molecular Therapy - Methods and Clinical Development, 2016, 3, 16057.	1.8	40

#	ARTICLE	IF	CITATIONS
484	Tissue- and time-directed electroporation of CAS9 protein-gRNA complexes in vivo yields efficient multigene knockout for studying gene function in regeneration. <i>Npj Regenerative Medicine</i> , 2016, 1, 16002.	2.5	29
485	Gene and cell-based therapies for inherited retinal disorders: An update. <i>American Journal of Medical Genetics, Part C: Seminars in Medical Genetics</i> , 2016, 172, 349-366.	0.7	60
486	Rapid and efficient CRISPR/Cas9 gene inactivation in human neurons during human pluripotent stem cell differentiation and direct reprogramming. <i>Scientific Reports</i> , 2016, 6, 37540.	1.6	38
487	Rewriting DNA Methylation Signatures at Will: The Curable Genome Within Reach?. <i>Advances in Experimental Medicine and Biology</i> , 2016, 945, 475-490.	0.8	8
488	Genetic and pharmacological inhibition of CDK9 drives neutrophil apoptosis to resolve inflammation in zebrafish in vivo. <i>Scientific Reports</i> , 2016, 6, 36980.	1.6	47
489	A CRISPR/Cas9 system adapted for gene editing in marine algae. <i>Scientific Reports</i> , 2016, 6, 24951.	1.6	324
490	Big Data Analytics in Genomics. , 2016, , .		7
491	A dynamic pathway analysis approach reveals a limiting futile cycle in N-acetylglucosamine overproducing <i>Bacillus subtilis</i> . <i>Nature Communications</i> , 2016, 7, 11933.	5.8	45
492	Computational Approaches to Accelerating Novel Medicine and Better Patient Care from Bedside to Benchtop. <i>Advances in Protein Chemistry and Structural Biology</i> , 2016, 102, 147-179.	1.0	2
493	Emerging cellular and gene therapies for congenital anemias. <i>American Journal of Medical Genetics, Part C: Seminars in Medical Genetics</i> , 2016, 172, 332-348.	0.7	6
494	A Survey of Computational Methods for Protein Function Prediction. , 2016, , 225-298.		42
495	Current status of potential applications of repurposed Cas9 for structural and functional genomics of plants. <i>Biochemical and Biophysical Research Communications</i> , 2016, 480, 499-507.	1.0	22
496	CRISPR RNA-guided FokI nucleases repair a PAH variant in a phenylketonuria model. <i>Scientific Reports</i> , 2016, 6, 35794.	1.6	22
497	Genetic Dissection of Cancer Development, Therapy Response, and Resistance in Mouse Models of Breast Cancer. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 2016, 81, 141-150.	2.0	10
498	Cdkn2a Orchestrates Platelet Production and Reactivity in Atherosclerosis. <i>Circulation: Cardiovascular Genetics</i> , 2016, 9, 203-205.	5.1	1
499	Electric fish genomics: Progress, prospects, and new tools for neuroethology. <i>Journal of Physiology (Paris)</i> , 2016, 110, 259-272.	2.1	10
500	An affinity-directed protein missile system for targeted proteolysis. <i>Open Biology</i> , 2016, 6, 160255.	1.5	67
501	Modeling and Genome-Editing Brugada Syndrome in a Dish —. <i>Journal of the American College of Cardiology</i> , 2016, 68, 2097-2098.	1.2	1

#	ARTICLE	IF	CITATIONS
502	Comparative Analysis of piggyBac, CRISPR/Cas9 and TALEN Mediated BAC Transgenesis in the Zygote for the Generation of Humanized SIRPA Rats. <i>Scientific Reports</i> , 2016, 6, 31455.	1.6	29
504	Preparation of rAAV9 to Overexpress or Knockdown Genes in Mouse Hearts. <i>Journal of Visualized Experiments</i> , 2016, , .	0.2	8
505	Using CRISPR-Cas9 to quantify the contributions of O-glycans, N-glycans and Glycosphingolipids to human leukocyte-endothelium adhesion. <i>Scientific Reports</i> , 2016, 6, 30392.	1.6	47
506	Engineering new balancer chromosomes in <i>C. elegans</i> via CRISPR/Cas9. <i>Scientific Reports</i> , 2016, 6, 33840.	1.6	31
507	A Rat Carotid Balloon Injury Model to Test Anti-vascular Remodeling Therapeutics. <i>Journal of Visualized Experiments</i> , 2016, , .	0.2	5
508	Protein-induced DNA linking number change by sequence-specific DNA binding proteins and its biological effects. <i>Biophysical Reviews</i> , 2016, 8, 123-133.	1.5	3
509	Phylogenetic and promoter analysis of islet amyloid polypeptide gene causing type 2 diabetes in mammalian species. <i>International Journal of Diabetes in Developing Countries</i> , 2016, 36, 477-489.	0.3	2
510	Designing, Packaging, and Delivery of High Titer CRISPR Retro and Lentiviruses via Stereotaxic Injection. <i>Journal of Visualized Experiments</i> , 2016, , .	0.2	15
511	Transformation of Probiotic Yeast and Their Recovery from Gastrointestinal Immune Tissues Following Oral Gavage in Mice. <i>Journal of Visualized Experiments</i> , 2016, , e53453.	0.2	2
512	Genome engineering: <i>Drosophila melanogaster</i> and beyond. <i>Wiley Interdisciplinary Reviews: Developmental Biology</i> , 2016, 5, 233-267.	5.9	35
513	Structural reverse genetics study of the PI ^{5P4K} nucleotide complexes reveals the presence of the GTP bioenergetic system in mammalian cells. <i>FEBS Journal</i> , 2016, 283, 3556-3562.	2.2	10
515	Progress in Cancer Immunotherapy. <i>Advances in Experimental Medicine and Biology</i> , 2016, , .	0.8	6
516	Genome editing and the next generation of antiviral therapy. <i>Human Genetics</i> , 2016, 135, 1071-1082.	1.8	40
517	Breeding for plant heat tolerance at vegetative and reproductive stages. <i>Plant Reproduction</i> , 2016, 29, 67-79.	1.3	175
518	Regulation of alternative splicing of Bcl-x by BC200 contributes to breast cancer pathogenesis. <i>Cell Death and Disease</i> , 2016, 7, e2262-e2262.	2.7	127
519	Versatile in vivo regulation of tumor phenotypes by dCas9-mediated transcriptional perturbation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E3892-900.	3.3	87
520	Advancing epilepsy treatment through personalized genetic zebrafish models. <i>Progress in Brain Research</i> , 2016, 226, 195-207.	0.9	43
521	Viral vector-based tools advance knowledge of basal ganglia anatomy and physiology. <i>Journal of Neurophysiology</i> , 2016, 115, 2124-2146.	0.9	17

#	ARTICLE	IF	CITATIONS
522	Engineering of Isogenic Cells Deficient for MR1 with a CRISPR/Cas9 Lentiviral System: Tools To Study Microbial Antigen Processing and Presentation to Human MR1-Restricted T Cells. <i>Journal of Immunology</i> , 2016, 197, 971-982.	0.4	21
523	Treating hemoglobinopathies using gene-correction approaches: promises and challenges. <i>Human Genetics</i> , 2016, 135, 993-1010.	1.8	13
524	Insert, remove or replace: A highly advanced genome editing system using CRISPR/Cas9. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2016, 1863, 2333-2344.	1.9	112
525	CRISPR/Cas9 mediated targeted mutagenesis of the fast growing cyanobacterium <i>Synechococcus elongatus</i> UTEX 2973. <i>Microbial Cell Factories</i> , 2016, 15, 115.	1.9	181
526	Mouse Models of Tumor Immunotherapy. <i>Advances in Immunology</i> , 2016, 130, 1-24.	1.1	30
527	Transcriptional regulation with CRISPR-Cas9: principles, advances, and applications. <i>Current Opinion in Biotechnology</i> , 2016, 40, 177-184.	3.3	69
528	Genome-wide specificities of CRISPR-Cas Cpf1 nucleases in human cells. <i>Nature Biotechnology</i> , 2016, 34, 869-874.	9.4	566
530	The Clustered, Regularly Interspaced, Short Palindromic Repeats-associated Endonuclease 9 (CRISPR/Cas9)-created MDM2 T309G Mutation Enhances Vitreous-induced Expression of MDM2 and Proliferation and Survival of Cells. <i>Journal of Biological Chemistry</i> , 2016, 291, 16339-16347.	1.6	28
531	Precise treatment of cystic fibrosis – current treatments and perspectives for using CRISPR. <i>Expert Review of Precision Medicine and Drug Development</i> , 2016, 1, 169-180.	0.4	5
532	Large-Scale Profiling of Kinase Dependencies in Cancer Cell Lines. <i>Cell Reports</i> , 2016, 14, 2490-2501.	2.9	97
533	Spermatogonial stem cell autotransplantation and germline genomic editing: a future cure for spermatogenic failure and prevention of transmission of genomic diseases. <i>Human Reproduction Update</i> , 2016, 22, 561-573.	5.2	59
534	New Peptides Under the s(ORF)ace of the Genome. <i>Trends in Biochemical Sciences</i> , 2016, 41, 665-678.	3.7	82
536	CRISPR/Cas9-Mediated Genome Editing of Mouse Small Intestinal Organoids. <i>Methods in Molecular Biology</i> , 2016, 1422, 3-11.	0.4	31
537	CRISPR/Cas9 genome editing of rubber producing dandelion <i>Taraxacum kok-saghyz</i> using <i>Agrobacterium rhizogenes</i> without selection. <i>Industrial Crops and Products</i> , 2016, 89, 356-362.	2.5	76
538	Genomic Copy Number Dictates a Gene-Independent Cell Response to CRISPR/Cas9 Targeting. <i>Cancer Discovery</i> , 2016, 6, 914-929.	7.7	485
539	Adaptive evolution and metabolic engineering of a cellobiose- and xylose- negative <i>Corynebacterium glutamicum</i> that co-utilizes cellobiose and xylose. <i>Microbial Cell Factories</i> , 2016, 15, 20.	1.9	34
540	Protein-induced DNA linking number change by sequence-specific DNA binding proteins and its biological effects. <i>Biophysical Reviews</i> , 2016, 8, 197-207.	1.5	4
541	New mechanisms of disease and parasite-host interactions. <i>Medical Hypotheses</i> , 2016, 94, 11-14.	0.8	1

#	ARTICLE	IF	CITATIONS
542	Studying the Dynamics of Chromatin-Binding Proteins in Mammalian Cells Using Single-Molecule Localisation Microscopy. <i>Methods in Molecular Biology</i> , 2016, 1431, 235-263.	0.4	3
543	Cellulases and beyond: the first 70 years of the enzyme producer <i>Trichoderma reesei</i> . <i>Microbial Cell Factories</i> , 2016, 15, 106.	1.9	412
544	A possible aid in targeted insertion of large DNA elements by CRISPR/Cas in mouse zygotes. <i>Genesis</i> , 2016, 54, 65-77.	0.8	29
545	Transcriptomic differences between euryhaline and stenohaline malaria vector sibling species in response to salinity stress. <i>Molecular Ecology</i> , 2016, 25, 2210-2225.	2.0	17
546	Cellular Therapies: Gene Editing and Next-Gen CAR T Cells. , 2016, , 203-247.		1
547	Whole genomic DNA sequencing and comparative genomic analysis of <i>Arthrospira platensis</i> : high genome plasticity and genetic diversity. <i>DNA Research</i> , 2016, 23, 325-338.	1.5	30
548	Engineering Stem Cells for Biomedical Applications. <i>Advanced Healthcare Materials</i> , 2016, 5, 10-55.	3.9	25
549	Engineering Synthetic Gene Circuits in Living Cells with CRISPR Technology. <i>Trends in Biotechnology</i> , 2016, 34, 535-547.	4.9	111
550	Single-Cell Genomics and Epigenomics. <i>Series in Bioengineering</i> , 2016, , 257-301.	0.3	2
551	Synthetic lethal approaches for assessing combinatorial efficacy of chemotherapeutic drugs. , 2016, 162, 69-85.		27
552	Genetic manipulation of brain endothelial cells in vivo. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2016, 1862, 381-394.	1.8	15
553	Generation of artificial sequence-specific nucleases via a preassembled inert-template. <i>Chemical Science</i> , 2016, 7, 2051-2057.	3.7	11
554	Expanding the CRISPR imaging toolset with <i>Staphylococcus aureus</i> Cas9 for simultaneous imaging of multiple genomic loci. <i>Nucleic Acids Research</i> , 2016, 44, e75-e75.	6.5	155
555	Tailored Pig Models for Preclinical Efficacy and Safety Testing of Targeted Therapies. <i>Toxicologic Pathology</i> , 2016, 44, 346-357.	0.9	45
556	The Heroes of CRISPR. <i>Cell</i> , 2016, 164, 18-28.	13.5	391
557	ssODN-mediated knock-in with CRISPR-Cas for large genomic regions in zygotes. <i>Nature Communications</i> , 2016, 7, 10431.	5.8	291
558	Essentials of Single-Cell Analysis. <i>Series in Bioengineering</i> , 2016, , .	0.3	29
559	A human haploid gene trap collection to study lncRNAs with unusual RNA biology. <i>RNA Biology</i> , 2016, 13, 196-220.	1.5	1

#	ARTICLE	IF	CITATIONS
560	Chromatin organization in pluripotent cells: emerging approaches to study and disrupt function. <i>Briefings in Functional Genomics</i> , 2016, 15, 305-314.	1.3	4
561	Beyond editing: repurposing CRISPR-Cas9 for precision genome regulation and interrogation. <i>Nature Reviews Molecular Cell Biology</i> , 2016, 17, 5-15.	16.1	698
562	Genome editing in zebrafish: a practical overview. <i>Briefings in Functional Genomics</i> , 2016, 15, 322-330.	1.3	31
563	Applications of CRISPR-Cas systems in neuroscience. <i>Nature Reviews Neuroscience</i> , 2016, 17, 36-44.	4.9	245
564	Whole-Body Induced Cell Turnover: A Proposed Intervention for Age-Related Damage and Associated Pathology. <i>Rejuvenation Research</i> , 2016, 19, 322-336.	0.9	13
565	Histone H2AX and the small RNA pathway modulate both non-homologous end-joining and homologous recombination in plants. <i>Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis</i> , 2016, 783, 9-14.	0.4	22
566	Modeling Alzheimer's disease with human induced pluripotent stem (iPS) cells. <i>Molecular and Cellular Neurosciences</i> , 2016, 73, 13-31.	1.0	100
567	Atg13 Is Essential for Autophagy and Cardiac Development in Mice. <i>Molecular and Cellular Biology</i> , 2016, 36, 585-595.	1.1	87
568	Targeting PCSK9 for therapeutic gains: Have we addressed all the concerns?. <i>Atherosclerosis</i> , 2016, 248, 62-75.	0.4	42
569	Identification of organ-autonomous constituents of the molecular memory conferred by thyroid hormone exposure in cold temperature-arrested metamorphosing <i>Rana (Lithobates) catesbeiana</i> tadpoles. <i>Comparative Biochemistry and Physiology Part D: Genomics and Proteomics</i> , 2016, 17, 58-65.	0.4	7
570	Programmable RNA Tracking in Live Cells with CRISPR/Cas9. <i>Cell</i> , 2016, 165, 488-496.	13.5	455
571	The Tao survivorship of schistosomes: implications for schistosomiasis control. <i>International Journal for Parasitology</i> , 2016, 46, 453-463.	1.3	19
572	Recent advances in ChIP-seq analysis: from quality management to whole-genome annotation. <i>Briefings in Bioinformatics</i> , 2017, 18, bbw023.	3.2	107
573	Simultaneous knockdown of six non-family genes using a single synthetic RNAi fragment in <i>Arabidopsis thaliana</i> . <i>Plant Methods</i> , 2016, 12, 16.	1.9	12
574	Towards development of new ornamental plants: status and progress in wide hybridization. <i>Planta</i> , 2016, 244, 1-17.	1.6	47
575	Combinatorial optimization of CRISPR/Cas9 expression enables precision genome engineering in the methylotrophic yeast <i>Pichia pastoris</i> . <i>Journal of Biotechnology</i> , 2016, 235, 139-149.	1.9	198
576	Advancements in zebrafish applications for 21st century toxicology. , 2016, 161, 11-21.		199
577	Genome Editing of Structural Variations: Modeling and Gene Correction. <i>Trends in Biotechnology</i> , 2016, 34, 548-561.	4.9	18

#	ARTICLE	IF	CITATIONS
578	Effective screen of CRISPR/Cas9-induced mutants in rice by single-strand conformation polymorphism. <i>Plant Cell Reports</i> , 2016, 35, 1545-1554.	2.8	74
579	Concise review: programming human pluripotent stem cells into blood. <i>British Journal of Haematology</i> , 2016, 173, 671-679.	1.2	14
580	Merging Two Strategies for Mixed-Sequence Recognition of Double-Stranded DNA: Pseudocomplementary Invader Probes. <i>Journal of Organic Chemistry</i> , 2016, 81, 3335-3346.	1.7	11
581	Into new territory: improved microbial synthesis through engineering of the essential metabolic network. <i>Current Opinion in Biotechnology</i> , 2016, 38, 106-111.	3.3	37
582	Gut immunity in Lepidopteran insects. <i>Developmental and Comparative Immunology</i> , 2016, 64, 65-74.	1.0	90
583	Perspectives and Trends in Pharmacological Approaches to the Modulation of Pain. <i>Advances in Pharmacology</i> , 2016, 75, 1-33.	1.2	3
584	Tandem repeat knockout utilizing the CRISPR/Cas9 system in human cells. <i>Gene</i> , 2016, 582, 122-127.	1.0	4
585	Complete Knockout of Endogenous Mdr1 (Abcb1) in MDCK Cells by CRISPR-Cas9. <i>Journal of Pharmaceutical Sciences</i> , 2016, 105, 1017-1021.	1.6	49
586	Advances and perspectives on the use of CRISPR/Cas9 systems in plant genomics research. <i>Current Opinion in Plant Biology</i> , 2016, 30, 70-77.	3.5	94
587	Post-translational Regulation of Cas9 during G1 Enhances Homology-Directed Repair. <i>Cell Reports</i> , 2016, 14, 1555-1566.	2.9	237
588	Targeted Gene Deletion Using DNA-Free RNA-Guided Cas9 Nuclease Accelerates Adaptation of CHO Cells to Suspension Culture. <i>ACS Synthetic Biology</i> , 2016, 5, 1211-1219.	1.9	30
589	Cellular and Molecular Mechanisms of AKI. <i>Journal of the American Society of Nephrology: JASN</i> , 2016, 27, 1288-1299.	3.0	160
590	Establishment of Functional Genomics Pipeline in Mouse Epiblast-Like Tissue by Combining Transcriptomic Analysis and Gene Knockdown/Knockin/Knockout, Using RNA Interference and CRISPR/Cas9. <i>Human Gene Therapy</i> , 2016, 27, 436-450.	1.4	11
591	In synch but not in step: Circadian clock circuits regulating plasticity in daily rhythms. <i>Neuroscience</i> , 2016, 320, 259-280.	1.1	39
592	Site-directed mutagenesis in <i>Petunia hybrida</i> protoplast system using direct delivery of purified recombinant Cas9 ribonucleoproteins. <i>Plant Cell Reports</i> , 2016, 35, 1535-1544.	2.8	186
593	The old and new face of craniofacial research: How animal models inform human craniofacial genetic and clinical data. <i>Developmental Biology</i> , 2016, 415, 171-187.	0.9	61
594	Efficient Restoration of the Dystrophin Gene Reading Frame and Protein Structure in DMD Myoblasts Using the CinDel Method. <i>Molecular Therapy - Nucleic Acids</i> , 2016, 5, e283.	2.3	72
595	Genetic dissection of neural circuits underlying sexually dimorphic social behaviours. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2016, 371, 20150109.	1.8	54

#	ARTICLE	IF	CITATIONS
596	Therapeutic genome editing by combined viral and non-viral delivery of CRISPR system components in vivo. <i>Nature Biotechnology</i> , 2016, 34, 328-333.	9.4	732
597	Engineering microdeletions and microduplications by targeting segmental duplications with CRISPR. <i>Nature Neuroscience</i> , 2016, 19, 517-522.	7.1	72
598	<i>Corynebacterium glutamicum</i> Metabolic Engineering with CRISPR Interference (CRISPRi). <i>ACS Synthetic Biology</i> , 2016, 5, 375-385.	1.9	222
599	Transancestral fine-mapping of four type 2 diabetes susceptibility loci highlights potential causal regulatory mechanisms. <i>Human Molecular Genetics</i> , 2016, 25, 2070-2081.	1.4	21
600	Cas-Database: web-based genome-wide guide RNA library design for gene knockout screens using CRISPR-Cas9. <i>Bioinformatics</i> , 2016, 32, 2017-2023.	1.8	46
601	Kinetics of the CRISPR-Cas9 effector complex assembly and the role of 3' terminal segment of guide RNA. <i>Nucleic Acids Research</i> , 2016, 44, 2837-2845.	6.5	71
602	Systems genetics of wood formation. <i>Current Opinion in Plant Biology</i> , 2016, 30, 94-100.	3.5	46
603	Molecular circuitry of stem cell fate in skeletal muscle regeneration, ageing and disease. <i>Nature Reviews Molecular Cell Biology</i> , 2016, 17, 267-279.	16.1	234
604	Fine-Tuning Patient-Derived Xenograft Models for Precision Medicine Approaches in Leukemia. <i>Journal of Investigative Medicine</i> , 2016, 64, 740-744.	0.7	12
605	Reproductionâ€“Immunity Trade-Offs in Insects. <i>Annual Review of Entomology</i> , 2016, 61, 239-256.	5.7	407
606	CRISPR/Cas9 advances engineering of microbial cell factories. <i>Metabolic Engineering</i> , 2016, 34, 44-59.	3.6	179
607	A Guide to Computational Tools and Design Strategies for Genome Editing Experiments in Zebrafish Using CRISPR/Cas9. <i>Zebrafish</i> , 2016, 13, 70-73.	0.5	16
608	Toward more predictive genetic mouse models of Alzheimer's disease. <i>Brain Research Bulletin</i> , 2016, 122, 1-11.	1.4	140
609	Tissue Engineering and Regenerative Medicine 2015: A Year in Review. <i>Tissue Engineering - Part B: Reviews</i> , 2016, 22, 101-113.	2.5	64
610	High-fidelity CRISPRâ€“Cas9 nucleases with no detectable genome-wide off-target effects. <i>Nature</i> , 2016, 529, 490-495.	13.7	2,126
611	Small fluorescence-activating and absorption-shifting tag for tunable protein imaging in vivo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 497-502.	3.3	186
612	Recent advances in biological production of sugar alcohols. <i>Current Opinion in Biotechnology</i> , 2016, 37, 105-113.	3.3	109
613	Overcoming Gene-Delivery Hurdles: Physiological Considerations for Nonviral Vectors. <i>Trends in Biotechnology</i> , 2016, 34, 91-105.	4.9	132

#	ARTICLE	IF	CITATIONS
614	Attention to Background Strain Is Essential for Metabolic Research: C57BL/6 and the International Knockout Mouse Consortium. <i>Diabetes</i> , 2016, 65, 25-33.	0.3	181
615	Insulator dysfunction and oncogene activation in IDH mutant gliomas. <i>Nature</i> , 2016, 529, 110-114.	13.7	1,048
616	<i>Synthetic Biology.</i> , 2016,, .		7
617	<i>Synthetic Genome Technologies.</i> , 2016,, 185-194.		0
618	Exploiting CRISPR-Cas immune systems for genome editing in bacteria. <i>Current Opinion in Biotechnology</i> , 2016, 37, 61-68.	3.3	57
619	Origins of Programmable Nucleases for Genome Engineering. <i>Journal of Molecular Biology</i> , 2016, 428, 963-989.	2.0	239
620	Hypomorphic mutations in <i>TRNT1</i> cause retinitis pigmentosa with erythrocytic microcytosis. <i>Human Molecular Genetics</i> , 2016, 25, 44-56.	1.4	64
621	Meganucleases Revolutionize the Production of Genetically Engineered Pigs for the Study of Human Diseases. <i>Toxicologic Pathology</i> , 2016, 44, 428-433.	0.9	21
622	Efficient genomic correction methods in human iPS cells using CRISPR-Cas9 system. <i>Methods</i> , 2016, 101, 27-35.	1.9	54
623	Harnessing Type I and Type III CRISPR-Cas systems for genome editing. <i>Nucleic Acids Research</i> , 2016, 44, e34-e34.	6.5	176
624	The changing model of big pharma: impact of key trends. <i>Drug Discovery Today</i> , 2016, 21, 379-384.	3.2	92
625	Model Organisms for Studying the Cell Cycle. <i>Methods in Molecular Biology</i> , 2016, 1342, 21-57.	0.4	3
626	Genome editing in <i>Ustilago maydis</i> using the CRISPR-Cas system. <i>Fungal Genetics and Biology</i> , 2016, 89, 3-9.	0.9	192
627	<i>Synthetic Biology</i> —Toward Therapeutic Solutions. <i>Journal of Molecular Biology</i> , 2016, 428, 945-962.	2.0	27
628	Genetic Moderation of Stress Effects on Corticolimbic Circuitry. <i>Neuropsychopharmacology</i> , 2016, 41, 275-296.	2.8	40
629	Germ line genome editing in clinics: the approaches, objectives and global society. <i>Briefings in Functional Genomics</i> , 2017, 16, 46-56.	1.3	57
630	Antisense technologies in the studying of <i>Toxoplasma gondii</i> . <i>Journal of Microbiological Methods</i> , 2017, 138, 93-99.	0.7	0
631	FGFR3-TACC3 fusion proteins act as naturally occurring drivers of tumor resistance by functionally substituting for EGFR/ERK signaling. <i>Oncogene</i> , 2017, 36, 471-481.	2.6	44

#	ARTICLE	IF	CITATIONS
632	Applications of the CRISPR/Cas9 system in murine cancer modeling. Briefings in Functional Genomics, 2017, 16, 25-33.	1.3	12
633	Targeted genome regulation via synthetic programmable transcriptional regulators. Critical Reviews in Biotechnology, 2017, 37, 429-440.	5.1	22
634	Endoribonuclease-Based Two-Component Repressor Systems for Tight Gene Expression Control in Plants. ACS Synthetic Biology, 2017, 6, 806-816.	1.9	15
635	Programmable Genome Editing Tools and their Regulation for Efficient Genome Engineering. Computational and Structural Biotechnology Journal, 2017, 15, 146-160.	1.9	86
636	CRISPR/Cas9 in insects: Applications, best practices and biosafety concerns. Journal of Insect Physiology, 2017, 98, 245-257.	0.9	104
637	Fully Automated One-Step Synthesis of Single-Transcript TALEN Pairs Using a Biological Foundry. ACS Synthetic Biology, 2017, 6, 678-685.	1.9	46
638	Lowering serum lipids via PCSK9-targeting drugs: current advances and future perspectives. Acta Pharmacologica Sinica, 2017, 38, 301-311.	2.8	17
639	Nicotine reverses hypofrontality in animal models of addiction and schizophrenia. Nature Medicine, 2017, 23, 347-354.	15.2	142
640	RNA interference-based technology: what role in animal agriculture?. Animal Production Science, 2017, 57, 1.	0.6	11
641	“Chip off the old block” Do genetic factors contribute to postoperative heart block?. Heart Rhythm, 2017, 14, 410-411.	0.3	0
642	Gene editing nuclease and its application in tilapia. Science Bulletin, 2017, 62, 165-173.	4.3	29
643	One-step generation of conditional and reversible gene knockouts. Nature Methods, 2017, 14, 287-289.	9.0	72
644	CRISPR-Cas type II-based Synthetic Biology applications in eukaryotic cells. RNA Biology, 2017, 14, 1286-1293.	1.5	10
645	Naturwissenschaft - R&A - Frieden. , 2017, , .		10
647	Baculovirus-based genome editing in primary cells. Plasmid, 2017, 90, 5-9.	0.4	18
648	Genome reprogramming for synthetic biology. Frontiers of Chemical Science and Engineering, 2017, 11, 37-45.	2.3	5
649	Rapid and Efficient Genome Editing in <i>Staphylococcus aureus</i> by Using an Engineered CRISPR/Cas9 System. Journal of the American Chemical Society, 2017, 139, 3790-3795.	6.6	98
650	Genome Editing Reveals Glioblastoma Addiction to MicroRNA-10b. Molecular Therapy, 2017, 25, 368-378.	3.7	76

#	ARTICLE	IF	CITATIONS
651	The Flipside of the Power of Engineered T Cells: Observed and Potential Toxicities of Genetically Modified T Cells as Therapy. <i>Molecular Therapy</i> , 2017, 25, 314-320.	3.7	37
652	Using hiCLIP to identify RNA duplexes that interact with a specific RNA-binding protein. <i>Nature Protocols</i> , 2017, 12, 611-637.	5.5	21
653	Organoid technologies meet genome engineering. <i>EMBO Reports</i> , 2017, 18, 367-376.	2.0	52
654	Genome editing using FACS enrichment of nuclease-expressing cells and indel detection by amplicon analysis. <i>Nature Protocols</i> , 2017, 12, 581-603.	5.5	103
655	Method for Dual Viral Vector Mediated CRISPR-Cas9 Gene Disruption in Primary Human Endothelial Cells. <i>Scientific Reports</i> , 2017, 7, 42127.	1.6	23
656	CRISPR/Cpf1-mediated DNA-free plant genome editing. <i>Nature Communications</i> , 2017, 8, 14406.	5.8	386
657	Molecular Imaging in Synthetic Biology, and Synthetic Biology in Molecular Imaging. <i>Molecular Imaging and Biology</i> , 2017, 19, 373-378.	1.3	27
658	Nonviral Genome Editing Based on a Polymer-Derivatized CRISPR Nanocomplex for Targeting Bacterial Pathogens and Antibiotic Resistance. <i>Bioconjugate Chemistry</i> , 2017, 28, 957-967.	1.8	128
659	Efficient generation of mice carrying homozygous double-floxp alleles using the Cas9-Avidin/Biotin-donor DNA system. <i>Cell Research</i> , 2017, 27, 578-581.	5.7	84
660	Genetics of Migraine: Insights into the Molecular Basis of Migraine Disorders. <i>Headache</i> , 2017, 57, 537-569.	1.8	88
661	Epigenetic Regulation: A New Frontier for Biomedical Engineers. <i>Annual Review of Biomedical Engineering</i> , 2017, 19, 195-219.	5.7	135
662	CRISPR-Cas Technologies and Applications in Food Bacteria. <i>Annual Review of Food Science and Technology</i> , 2017, 8, 413-437.	5.1	44
663	Gene editing in mouse zygotes using the CRISPR/Cas9 system. <i>Methods</i> , 2017, 121-122, 55-67.	1.9	49
664	Promoting Cas9 degradation reduces mosaic mutations in non-human primate embryos. <i>Scientific Reports</i> , 2017, 7, 42081.	1.6	106
665	CRISPR/Cas9-mediated gene manipulation to create single-amino-acid-substituted and floxed mice with a cloning-free method. <i>Scientific Reports</i> , 2017, 7, 42244.	1.6	43
666	In Vivo Delivery of CRISPR/Cas9 for Therapeutic Gene Editing: Progress and Challenges. <i>Bioconjugate Chemistry</i> , 2017, 28, 880-884.	1.8	183
667	Piccolo mediates EGFR signaling and acts as a prognostic biomarker in esophageal squamous cell carcinoma. <i>Oncogene</i> , 2017, 36, 3890-3902.	2.6	27
668	Highly Efficient Cpf1-Mediated Gene Targeting in Mice Following High Concentration Pronuclear Injection. <i>G3: Genes, Genomes, Genetics</i> , 2017, 7, 719-722.	0.8	25

#	ARTICLE	IF	CITATIONS
669	Increasing the genome-targeting scope and precision of base editing with engineered Cas9-cytidine deaminase fusions. <i>Nature Biotechnology</i> , 2017, 35, 371-376.	9.4	609
670	Recent advances in genetic modification systems for Actinobacteria. <i>Applied Microbiology and Biotechnology</i> , 2017, 101, 2217-2226.	1.7	12
671	CRISPR/Cas9-mediated genome editing in wild-derived mice: generation of tamed wild-derived strains by mutation of the a (nonagouti) gene. <i>Scientific Reports</i> , 2017, 7, 42476.	1.6	12
672	Zinc finger protein ZPR9 functions as an activator of AMPK-related serine/threonine kinase MPK38/MELK involved in ASK1/TGF- β 2/p53 signaling pathways. <i>Scientific Reports</i> , 2017, 7, 42502.	1.6	19
673	Therapeutic gene editing: delivery and regulatory perspectives. <i>Acta Pharmacologica Sinica</i> , 2017, 38, 738-753.	2.8	95
674	CRISPR-Cas9 strategy for activation of silent <i>Streptomyces</i> biosynthetic gene clusters. <i>Nature Chemical Biology</i> , 2017, 13, 607-609.	3.9	227
675	It is time to bridge the gap between exploring and exploiting: prospects for utilizing intraspecific genetic variation to optimize arthropods for augmentative pest control – a review. <i>Entomologia Experimentalis Et Applicata</i> , 2017, 162, 108-123.	0.7	64
676	A functional screening of the kinome identifies the Polo-like kinase 4 as a potential therapeutic target for malignant rhabdoid tumors, and possibly, other embryonal tumors of the brain. <i>Pediatric Blood and Cancer</i> , 2017, 64, e26551.	0.8	23
677	Genome editing: a robust technology for human stem cells. <i>Cellular and Molecular Life Sciences</i> , 2017, 74, 3335-3346.	2.4	12
678	CRISPR/Cas9: Transcending the Reality of Genome Editing. <i>Molecular Therapy - Nucleic Acids</i> , 2017, 7, 211-222.	2.3	81
679	Neurobiology of Autism Spectrum Disorders. , 2017, , 29-93.		1
680	Genome-Edited T Cell Therapies. <i>Current Stem Cell Reports</i> , 2017, 3, 124-136.	0.7	13
681	Elimination of the cryptic plasmid in <i>Leuconostoc citreum</i> by CRISPR/Cas9 system. <i>Journal of Biotechnology</i> , 2017, 251, 151-155.	1.9	16
682	Systems Genetic Analysis in GeneNetwork.org. <i>Current Protocols in Neuroscience</i> , 2017, 79, 8.39.1-8.39.20.	2.6	24
683	The Molecular Revolution in Cutaneous Biology: Emerging Landscape in Genomic Dermatology: New Mechanistic Ideas, Gene Editing, and Therapeutic Breakthroughs. <i>Journal of Investigative Dermatology</i> , 2017, 137, e123-e129.	0.3	6
684	Restoring heart function and electrical integrity: closing the circuit. <i>Npj Regenerative Medicine</i> , 2017, 2, 9.	2.5	44
685	Human induced pluripotent stem cells for modelling neurodevelopmental disorders. <i>Nature Reviews Neurology</i> , 2017, 13, 265-278.	4.9	135
686	Enhanced production of enveloped viruses in BST-2-deficient cell lines. <i>Biotechnology and Bioengineering</i> , 2017, 114, 2289-2297.	1.7	11

#	ARTICLE	IF	CITATIONS
687	A lentivirus-free inducible CRISPR-Cas9 system for efficient targeting of human genes. <i>Analytical Biochemistry</i> , 2017, 530, 40-49.	1.1	5
688	Mechanism of duplex DNA destabilization by RNA-guided Cas9 nuclease during target interrogation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 5443-5448.	3.3	67
690	CIRCLE-seq: a highly sensitive in vitro screen for genome-wide CRISPR-Cas9 nuclease off-targets. <i>Nature Methods</i> , 2017, 14, 607-614.	9.0	601
691	Effect of nucleobase change on cytosine deamination through DNA photo-cross-linking reaction via 3-cyanovinylcarbazole nucleoside. <i>Molecular BioSystems</i> , 2017, 13, 1152-1156.	2.9	9
692	Construction of a highly efficient CRISPR/Cas9-mediated duck enteritis virus-based vaccine against H5N1 avian influenza virus and duck Tembusu virus infection. <i>Scientific Reports</i> , 2017, 7, 1478.	1.6	46
693	Everything in moderation, even hype: learning from vaccine controversies to strike a balance with CRISPR. <i>Journal of Medical Ethics</i> , 2017, 43, 819-823.	1.0	9
694	Little Fish, Big Data: Zebrafish as a Model for Cardiovascular and Metabolic Disease. <i>Physiological Reviews</i> , 2017, 97, 889-938.	13.1	250
695	Chimeric Antigen Receptors: A Cell and Gene Therapy Perspective. <i>Molecular Therapy</i> , 2017, 25, 1117-1124.	3.7	79
696	CRISPR-Cas9 technology: applications in genome engineering, development of sequence-specific antimicrobials, and future prospects. <i>Integrative Biology (United Kingdom)</i> , 2017, 9, 109-122.	0.6	47
697	Efficient gene targeting in mouse zygotes mediated by CRISPR/Cas9-protein. <i>Transgenic Research</i> , 2017, 26, 263-277.	1.3	22
698	Development of reproductive engineering techniques at the RIKEN BioResource Center. <i>Experimental Animals</i> , 2017, 66, 1-16.	0.7	3
699	The translational potential of human-induced pluripotent stem cells for clinical neurology. <i>Cell Biology and Toxicology</i> , 2017, 33, 129-144.	2.4	18
700	Coupling immunity and programmed cell suicide in prokaryotes: Life-or-death choices. <i>BioEssays</i> , 2017, 39, 1-9.	1.2	78
701	Polycistronic tRNA and CRISPR guide-RNA enables highly efficient multiplexed genome engineering in human cells. <i>Biochemical and Biophysical Research Communications</i> , 2017, 482, 889-895.	1.0	50
702	CRISPR/Cas9-mediated genome editing induces exon skipping by alternative splicing or exon deletion. <i>Genome Biology</i> , 2017, 18, 108.	3.8	141
703	Developmental history and application of CRISPR in human disease. <i>Journal of Gene Medicine</i> , 2017, 19, e2963.	1.4	9
704	CRISPR system in filamentous fungi: Current achievements and future directions. <i>Gene</i> , 2017, 627, 212-221.	1.0	65
705	Genetic editing of the androgen receptor contributes to impaired male courtship behavior in zebrafish. <i>Journal of Experimental Biology</i> , 2017, 220, 3017-3021.	0.8	26

#	ARTICLE	IF	CITATIONS
706	GUIDEseq: a bioconductor package to analyze GUIDE-Seq datasets for CRISPR-Cas nucleases. BMC Genomics, 2017, 18, 379.	1.2	32
707	Antiviral Goes Viral: Harnessing CRISPR/Cas9 to Combat Viruses in Humans. Trends in Microbiology, 2017, 25, 833-850.	3.5	65
708	Bio-Orthogonal Mediated Nucleic Acid Transfection of Cells via Cell Surface Engineering. ACS Central Science, 2017, 3, 489-500.	5.3	20
709	Safety and Efficacy of Gene-Based Therapeutics for Inherited Disorders. , 2017, , .		3
710	Saccharomyces cerevisiae strains for second-generation ethanol production: from academic exploration to industrial implementation. FEMS Yeast Research, 2017, 17, .	1.1	140
711	A Genome-Wide CRISPR Screen Identifies Genes Critical for Resistance to FLT3 Inhibitor AC220. Cancer Research, 2017, 77, 4402-4413.	0.4	66
712	CRISPR-Cas orthologues and variants: optimizing the repertoire, specificity and delivery of genome engineering tools. Mammalian Genome, 2017, 28, 247-261.	1.0	104
713	Single-molecule analysis of steroid receptor and cofactor action in living cells. Nature Communications, 2017, 8, 15896.	5.8	111
714	State of the art technologies to explore long non-coding RNAs in cancer. Journal of Cellular and Molecular Medicine, 2017, 21, 3120-3140.	1.6	58
715	Whole genome synthesis: from poliovirus to synthetic yeast. Quantitative Biology, 2017, 5, 105-109.	0.3	3
716	CRISPR/Cas9-Based Genome Editing for Disease Modeling and Therapy: Challenges and Opportunities for Nonviral Delivery. Chemical Reviews, 2017, 117, 9874-9906.	23.0	418
718	Why Gene Editors Like CRISPR/Cas May Be a Game-Changer for Neuroweapons. Health Security, 2017, 15, 296-302.	0.9	31
719	Deletion of the Bombyx mori odorant receptor co-receptor (BmOrco) impairs olfactory sensitivity in silkworms. Insect Biochemistry and Molecular Biology, 2017, 86, 58-67.	1.2	80
720	Production of Medium Chain Fatty Acids by <i>Yarrowia lipolytica</i> : Combining Molecular Design and TALEN to Engineer the Fatty Acid Synthase. ACS Synthetic Biology, 2017, 6, 1870-1879.	1.9	71
721	Improving the DNA specificity and applicability of base editing through protein engineering and protein delivery. Nature Communications, 2017, 8, 15790.	5.8	343
722	Regulation of cargo transfer between ESCRT-0 and ESCRT-I complexes by flotillin-1 during endosomal sorting of ubiquitinated cargo. Oncogenesis, 2017, 6, e344-e344.	2.1	36
723	Naming CRISPR alleles: endonuclease-mediated mutation nomenclature across species. Mammalian Genome, 2017, 28, 367-376.	1.0	7
724	Hit and go CAS9 delivered through a lentiviral based self-limiting circuit. Nature Communications, 2017, 8, 15334.	5.8	75

#	ARTICLE	IF	CITATIONS
725	Genome-editing technologies and patent landscape overview. <i>Pharmaceutical Patent Analyst</i> , 2017, 6, 115-134.	0.4	4
726	Nucleus-Translocated ACSS2 Promotes Gene Transcription for Lysosomal Biogenesis and Autophagy. <i>Molecular Cell</i> , 2017, 66, 684-697.e9.	4.5	227
727	Application of CRISPR/Cas9 to the study of brain development and neuropsychiatric disease. <i>Molecular and Cellular Neurosciences</i> , 2017, 82, 157-166.	1.0	25
728	Mouse Genetics - How Does It Inform Male Fertility Research?. , 0, , 280-296.		0
729	Generation of SMURF2 knockout human cells using the CRISPR/Cas9 system. <i>Analytical Biochemistry</i> , 2017, 531, 56-59.	1.1	7
730	Characterization of a major facilitator superfamily transporter in <i>Shiraia bambusicola</i> . <i>Research in Microbiology</i> , 2017, 168, 664-672.	1.0	18
731	Use of the CRISPR-Cas9 system for genome editing in cultured <i>Drosophila</i> ovarian somatic cells. <i>Methods</i> , 2017, 126, 186-192.	1.9	8
732	Engineered CRISPR Systems for Next Generation Gene Therapies. <i>ACS Synthetic Biology</i> , 2017, 6, 1614-1626.	1.9	30
733	Progress and perspective of biosynthetic platform for higher-order biofuels. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 80, 801-826.	8.2	11
734	Antigen Presentation by Individually Transferred HLA Class I Genes in HLA-A, HLA-B, HLA-C Null Human Cell Line Generated Using the Multiplex CRISPR-Cas9 System. <i>Journal of Immunotherapy</i> , 2017, 40, 201-210.	1.2	24
735	Biotechnology of Yeasts and Filamentous Fungi. , 2017, , .		8
736	Use of mariner transposases for one-step delivery and integration of DNA in prokaryotes and eukaryotes by transfection. <i>Nucleic Acids Research</i> , 2017, 45, e89-e89.	6.5	8
737	A novel genetic tool for metabolic optimization of <i>Corynebacterium glutamicum</i> : efficient and repetitive chromosomal integration of synthetic promoter-driven expression libraries. <i>Applied Microbiology and Biotechnology</i> , 2017, 101, 4737-4746.	1.7	15
738	Loss of the Arp2/3 complex component ARPC1B causes platelet abnormalities and predisposes to inflammatory disease. <i>Nature Communications</i> , 2017, 8, 14816.	5.8	176
739	CRISPR/Cas9-mediated efficient genome editing via blastospore-based transformation in entomopathogenic fungus <i>Beauveria bassiana</i> . <i>Scientific Reports</i> , 2017, 7, 45763.	1.6	51
740	Using Morpholinos to Probe Gene Networks in Sea Urchin. <i>Methods in Molecular Biology</i> , 2017, 1565, 87-104.	0.4	7
741	A simple and efficient method for CRISPR/Cas9-induced mutant screening. <i>Journal of Genetics and Genomics</i> , 2017, 44, 207-213.	1.7	75
742	Genetic Engineering and Manufacturing of Hematopoietic Stem Cells. <i>Molecular Therapy - Methods and Clinical Development</i> , 2017, 5, 96-105.	1.8	20

#	ARTICLE	IF	CITATIONS
743	Identifying genes for neurobehavioural traits in rodents: progress and pitfalls. <i>DMM Disease Models and Mechanisms</i> , 2017, 10, 373-383.	1.2	24
744	Refining strategies to translate genome editing to the clinic. <i>Nature Medicine</i> , 2017, 23, 415-423.	15.2	213
745	Evolutionary tuning of TRPA1 and TRPV1 thermal and chemical sensitivity in vertebrates. <i>Temperature</i> , 2017, 4, 141-152.	1.7	42
746	Marker Recycling in <i>Candida albicans</i> through CRISPR-Cas9-Induced Marker Excision. <i>MSphere</i> , 2017, 2, .	1.3	43
747	Spatiotemporal diversification of inpatient genomic clones and early drug development concepts realize the roadmap of precision cancer medicine. <i>Drug Discovery Today</i> , 2017, 22, 1148-1164.	3.2	30
748	CRISPR-Cas9 Structures and Mechanisms. <i>Annual Review of Biophysics</i> , 2017, 46, 505-529.	4.5	1,289
749	Analysis of Cardiac Myocyte Maturation Using CASA, a Platform for Rapid Dissection of Cardiac Myocyte Gene Function In Vivo. <i>Circulation Research</i> , 2017, 120, 1874-1888.	2.0	106
750	CRISPR/Cas9-Mediated Genome Editing Corrects Dystrophin Mutation in Skeletal Muscle Stem Cells in a Mouse Model of Muscle Dystrophy. <i>Molecular Therapy - Nucleic Acids</i> , 2017, 7, 31-41.	2.3	64
751	Genome editing using CRISPR/Cas9-based knock-in approaches in zebrafish. <i>Methods</i> , 2017, 121-122, 77-85.	1.9	115
752	CRISPR/Cas9 editing of the genome for cancer modeling. <i>Methods</i> , 2017, 121-122, 130-137.	1.9	34
753	Functional interrogation of non-coding DNA through CRISPR genome editing. <i>Methods</i> , 2017, 121-122, 118-129.	1.9	28
754	Can gene editing and silencing technologies play a role in the treatment of head and neck cancer?. <i>Oral Oncology</i> , 2017, 68, 9-19.	0.8	7
755	Quantifying transcription factor binding dynamics at the single-molecule level in live cells. <i>Methods</i> , 2017, 123, 76-88.	1.9	81
756	A Novel Method for Screening Adenosine Receptor Specific Agonists for Use in Adenosine Drug Development. <i>Scientific Reports</i> , 2017, 7, 44816.	1.6	10
757	Introduction to Telomeres and Telomerase. <i>Methods in Molecular Biology</i> , 2017, 1587, 1-13.	0.4	1
758	Microbial biotechnology as an emerging industrial wastewater treatment process for arsenic mitigation: A critical review. <i>Journal of Cleaner Production</i> , 2017, 151, 427-438.	4.6	92
759	Expression and radiolabeling of Cas9 protein. <i>Nuclear Science and Techniques/Hewuli</i> , 2017, 28, 1.	1.3	3
760	Concepts and tools for gene editing. <i>Reproduction, Fertility and Development</i> , 2017, 29, 1.	0.1	6

#	ARTICLE	IF	CITATIONS
762	Detection of on-target and off-target mutations generated by CRISPR/Cas9 and other sequence-specific nucleases. <i>Biotechnology Advances</i> , 2017, 35, 95-104.	6.0	269
763	The essential <i>Drosophila</i> CLAMP protein differentially regulates non-coding roX RNAs in male and females. <i>Chromosome Research</i> , 2017, 25, 101-113.	1.0	32
764	Fast therapeutic DNA internalization – A high potential transfection system based on a peptide mimicking cationic lipid. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2017, 118, 38-47.	2.0	8
765	Application of theoretical methods to increase succinate production in engineered strains. <i>Bioprocess and Biosystems Engineering</i> , 2017, 40, 479-497.	1.7	14
766	A Review of Bacterial Interactions With Blow Flies (Diptera: Calliphoridae) of Medical, Veterinary, and Forensic Importance. <i>Annals of the Entomological Society of America</i> , 2017, 110, 19-36.	1.3	71
767	Mycotoxins: A Fungal Genomics Perspective. <i>Methods in Molecular Biology</i> , 2017, 1542, 367-379.	0.4	2
768	Genetics and Genomics of <i>Setaria</i> . <i>Plant Genetics and Genomics: Crops and Models</i> , 2017, , .	0.3	18
769	Single-Molecule Insight Into Target Recognition by CRISPR–Cas Complexes. <i>Methods in Enzymology</i> , 2017, 582, 239-273.	0.4	20
770	Automated microraft platform to identify and collect non-adherent cells successfully gene-edited with CRISPR-Cas9. <i>Biosensors and Bioelectronics</i> , 2017, 91, 175-182.	5.3	17
771	Targeted genome editing in a quail cell line using a customized CRISPR/Cas9 system. <i>Poultry Science</i> , 2017, 96, 1445-1450.	1.5	16
772	Non-viral CRISPR/Cas Gene Editing In Vitro and In Vivo Enabled by Synthetic Nanoparticle Co-delivery of Cas9 mRNA and sgRNA. <i>Angewandte Chemie</i> , 2017, 129, 1079-1083.	1.6	41
773	Non-viral CRISPR/Cas Gene Editing In Vitro and In Vivo Enabled by Synthetic Nanoparticle Co-delivery of Cas9 mRNA and sgRNA. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 1059-1063.	7.2	411
774	Gene delivery ability of polyethylenimine and polyethylene glycol dual-functionalized nanographene oxide in 11 different cell lines. <i>Royal Society Open Science</i> , 2017, 4, 170822.	1.1	16
775	Systematic analysis of human telomeric dysfunction using inducible telosome/shelterin CRISPR/Cas9 knockout cells. <i>Cell Discovery</i> , 2017, 3, 17034.	3.1	43
776	Systems medicine advances in interstitial lung disease. <i>European Respiratory Review</i> , 2017, 26, 170021.	3.0	4
777	Methods and Applications of CRISPR-Mediated Base Editing in Eukaryotic Genomes. <i>Molecular Cell</i> , 2017, 68, 26-43.	4.5	199
778	The chemistry of Cas9 and its CRISPR colleagues. <i>Nature Reviews Chemistry</i> , 2017, 1, .	13.8	111
779	Current understanding of the molecular mechanisms in Parkinson's disease: Targets for potential treatments. <i>Translational Neurodegeneration</i> , 2017, 6, 28.	3.6	353

#	ARTICLE	IF	CITATIONS
780	Cyber and Chemical, Biological, Radiological, Nuclear, Explosives Challenges. Terrorism, Security and Computation, 2017, , .	0.3	35
781	Gene Therapy Blueprints for NeuroAIDS. , 2017, , 953-993.		1
783	Gene Targeted Mice with Conditional Knock-In (-Out) of NMDAR Mutations. Methods in Molecular Biology, 2017, 1677, 201-230.	0.4	3
785	Quantitative Systems Biology to decipher design principles of a dynamic cell cycle network: the "Maximum Allowable mammalian Trade-Off" Weight (MAmTOW). Npj Systems Biology and Applications, 2017, 3, 26.	1.4	14
786	Clipping Chlamy Genes: Improved Methods for Targeted Gene Editing in Chlamydomonas. Plant Cell, 2017, 29, 2313-2313.	3.1	0
787	Current technics for visualizing RNA in a cell. Russian Journal of Genetics, 2017, 53, 1080-1090.	0.2	2
788	Advancing the design and delivery of CRISPR antimicrobials. Current Opinion in Biomedical Engineering, 2017, 4, 57-64.	1.8	25
789	Virus-Mediated Genome Editing via Homology-Directed Repair in Mitotic and Postmitotic Cells in Mammalian Brain. Neuron, 2017, 96, 755-768.e5.	3.8	174
790	Recognition of mixed-sequence DNA using double-stranded probes with interstrand zipper arrangements of O ² -triphenylene- and coronene-functionalized RNA monomers. Organic and Biomolecular Chemistry, 2017, 15, 9362-9371.	1.5	5
792	Preclinical imaging methods for assessing the safety and efficacy of regenerative medicine therapies. Npj Regenerative Medicine, 2017, 2, 28.	2.5	47
793	Human induced pluripotent stem cell-derived vascular smooth muscle cells: differentiation and therapeutic potential. Cardiovascular Research, 2017, 113, 1282-1293.	1.8	31
794	A simple method based on Sanger sequencing and MS Word wildcard searching to identify Cas9-induced frameshift mutations. Laboratory Investigation, 2017, 97, 1500-1507.	1.7	5
796	Using a novel cellular platform to optimize CRISPR/CAS9 technology for the gene therapy of AIDS. Protein and Cell, 2017, 8, 848-852.	4.8	0
797	miR-322 stabilizes MEK1 expression to inhibit RAF/MEK/ERK pathway activation in cartilage. Development (Cambridge), 2017, 144, 3562-3577.	1.2	25
798	CRISPR/Cas9 mediated G4946E substitution in the ryanodine receptor of Spodoptera exigua confers high levels of resistance to diamide insecticides. Insect Biochemistry and Molecular Biology, 2017, 89, 79-85.	1.2	90
799	Cancer-derived exosomes as a delivery platform of CRISPR/Cas9 confer cancer cell tropism-dependent targeting. Journal of Controlled Release, 2017, 266, 8-16.	4.8	319
800	USH2A Gene Editing Using the CRISPR System. Molecular Therapy - Nucleic Acids, 2017, 8, 529-541.	2.3	56
801	Regulation of Inflammatory Signaling in Health and Disease. Advances in Experimental Medicine and Biology, 2017, , .	0.8	7

#	ARTICLE	IF	CITATIONS
803	Emerging Roles for Epigenetic Programming in the Control of Inflammatory Signaling Integration in Health and Disease. <i>Advances in Experimental Medicine and Biology</i> , 2017, 1024, 63-90.	0.8	7
804	Review: Neuropathology and behavioural features of transgenic murine models of Alzheimer's disease. <i>Neuropathology and Applied Neurobiology</i> , 2017, 43, 553-570.	1.8	46
805	Targeted Genome Replacement via Homology-directed Repair in Non-dividing Cardiomyocytes. <i>Scientific Reports</i> , 2017, 7, 9363.	1.6	35
806	Gene Modified T Cell Therapies for Hematological Malignancies. <i>Hematology/Oncology Clinics of North America</i> , 2017, 31, 913-926.	0.9	4
807	Highly Efficient, Rapid and Co-CRISPR-Independent Genome Editing in <i>Caenorhabditis elegans</i> . <i>G3: Genes, Genomes, Genetics</i> , 2017, 7, 3693-3698.	0.8	45
808	CAPRESI: Chimera Assembly by Plasmid Recovery and Restriction Enzyme Site Insertion. <i>Journal of Visualized Experiments</i> , 2017, , .	0.2	0
809	Recent Advances in Imprinting Disorders. <i>NeoReviews</i> , 2017, 18, e532-e543.	0.4	0
810	RNA-aptamers-in-droplets (RAPID) high-throughput screening for secretory phenotypes. <i>Nature Communications</i> , 2017, 8, 332.	5.8	112
811	Tiny RNAs and their voyage via extracellular vesicles: Secretion of bacterial small RNA and eukaryotic microRNA. <i>Experimental Biology and Medicine</i> , 2017, 242, 1475-1481.	1.1	61
812	Brain microvascular injury and white matter disease provoked by diabetes-associated hyperamylinemia. <i>Annals of Neurology</i> , 2017, 82, 208-222.	2.8	52
813	The Therapeutic Potential of CRISPR/Cas9 Systems in Oncogene-Addicted Cancer Types: Virally Driven Cancers as a Model System. <i>Molecular Therapy - Nucleic Acids</i> , 2017, 8, 56-63.	2.3	18
815	Remaining Challenges in the Treatment of Tyrosinemia from the Clinician's Viewpoint. <i>Advances in Experimental Medicine and Biology</i> , 2017, 959, 205-213.	0.8	8
816	Blockage of Core Fucosylation Reduces Cell-Surface Expression of PD-1 and Promotes Anti-tumor Immune Responses of T Cells. <i>Cell Reports</i> , 2017, 20, 1017-1028.	2.9	156
817	Technical considerations for the use of CRISPR/Cas9 in hematology research. <i>Experimental Hematology</i> , 2017, 54, 4-11.	0.2	18
818	Targeting a global health problem: Vaccine design and challenges for the control of tick-borne diseases. <i>Vaccine</i> , 2017, 35, 5089-5094.	1.7	74
819	Integrated 'omics' approaches to sustain global productivity of major grain legumes under heat stress. <i>Plant Breeding</i> , 2017, 136, 437-459.	1.0	36
821	Genome editing in crop improvement: Present scenario and future prospects. <i>Journal of Crop Improvement</i> , 2017, 31, 453-559.	0.9	57
822	Sugarcane Biotechnology: Challenges and Prospects. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
823	CRISPR-Cas9 System as a Genome Editing Tool in Sugarcane. , 2017, , 155-172.		4
824	Cellular and molecular mechanisms coordinating pancreas development. <i>Development (Cambridge)</i> , 2017, 144, 2873-2888.	1.2	129
825	Single-molecule imaging and tracking of molecular dynamics in living cells. <i>National Science Review</i> , 2017, 4, 739-760.	4.6	37
826	Long dsRNAs promote an anti-viral response in Pacific oyster hampering ostreid herpesvirus 1 replication. <i>Journal of Experimental Biology</i> , 2017, 220, 3671-3685.	0.8	11
827	Suppression of HBV replication by the expression of nickase- and nuclease dead-Cas9. <i>Scientific Reports</i> , 2017, 7, 6122.	1.6	19
828	<i>Industrial Enzymes and Biocatalysis.</i> , 2017, , 1571-1638.		5
829	Chemically Controlled Epigenome Editing through an Inducible dCas9 System. <i>Journal of the American Chemical Society</i> , 2017, 139, 11337-11340.	6.6	54
830	Characterization of noncoding regulatory DNA in the human genome. <i>Nature Biotechnology</i> , 2017, 35, 732-746.	9.4	79
831	CRISPR-Cas9 vectors for genome editing and host engineering in the baculovirusâ€œinsect cell system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 9068-9073.	3.3	49
832	A Simple and Universal System for Gene Manipulation in <i>Aspergillus fumigatus</i> : <i>In Vitro</i> -Assembled Cas9-Guide RNA Ribonucleoproteins Coupled with Microhomology Repair Templates. <i>MSphere</i> , 2017, 2, .	1.3	130
833	Towards safe therapy for immunodeficiency. <i>Nature Biomedical Engineering</i> , 2017, 1, 937-938.	11.6	1
834	Genetic engineering as a powerful tool to improve probiotic strains. <i>Biotechnology and Genetic Engineering Reviews</i> , 2017, 33, 173-189.	2.4	14
836	Emerging Role of CRISPR/Cas9 Technology for MicroRNAs Editing in Cancer Research. <i>Cancer Research</i> , 2017, 77, 6812-6817.	0.4	56
837	Production of knock-in mice in a single generation from embryonic stem cells. <i>Nature Protocols</i> , 2017, 12, 2513-2530.	5.5	21
838	Programmable DNA looping using engineered bivalent dCas9 complexes. <i>Nature Communications</i> , 2017, 8, 1628.	5.8	60
839	CRISPR correction of a homozygous lowâ€œdensity lipoprotein receptor mutation in familial hypercholesterolemia induced pluripotent stem cells. <i>Hepatology Communications</i> , 2017, 1, 886-898.	2.0	67
840	Engineering of a membrane-triggered activity switch in coagulation factor VIIa. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12454-12459.	3.3	6
841	Genome-wide Mapping of Protein-DNA Interactions with ChEC-seq in <i>Saccharomyces cerevisiae</i> . <i>Journal of Visualized Experiments</i> , 2017, , .	0.2	10

#	ARTICLE	IF	CITATIONS
842	Efficient Generation and Editing of Feeder-free iPSCs from Human Pancreatic Cells Using the CRISPR-Cas9 System. <i>Journal of Visualized Experiments</i> , 2017, , .	0.2	4
843	Functional Genomic Approaches in Plant Research: Challenges and Perspectives. , 2017, , 147-160.		0
844	Functional Genomic Approaches in Plant Research. , 2017, , 215-239.		4
846	25 years and still going strong: 2- ^o -(pyren-1-yl)methylribonucleotides – versatile building blocks for applications in molecular biology, diagnostics and materials science. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 9760-9774.	1.5	9
847	Modern biotechnology-based therapeutic approaches against HIV infection (Review). <i>Biomedical Reports</i> , 2017, 7, 504-507.	0.9	8
848	Rapid, Selection-Free, High-Efficiency Genome Editing in Protozoan Parasites Using CRISPR-Cas9 Ribonucleoproteins. <i>MBio</i> , 2017, 8, .	1.8	88
849	Photoactivated In Vivo Proximity Labeling. <i>Current Protocols in Chemical Biology</i> , 2017, 9, 128-146.	1.7	2
850	Effect of substitution of photo-cross-linker in photochemical cytosine to uracil transition in DNA. <i>Biorganic and Medicinal Chemistry Letters</i> , 2017, 27, 3905-3908.	1.0	11
851	Use of RNA-Protein Complexes for Genome Editing in Non- <i>albicans Candida</i> Species. <i>MSphere</i> , 2017, 2, .	1.3	100
852	Fly Models of Human Diseases. <i>Current Topics in Developmental Biology</i> , 2017, 121, 1-27.	1.0	31
853	Genome editing in <i>Shiraia bambusicola</i> using CRISPR-Cas9 system. <i>Journal of Biotechnology</i> , 2017, 259, 228-234.	1.9	50
854	Genetic engineering as a tool for the generation of mouse models to understand disease phenotypes and gene function. <i>Current Opinion in Biotechnology</i> , 2017, 48, 228-233.	3.3	0
855	A Novel Rat Model of Nonalcoholic Fatty Liver Disease Constructed Through CRISPR/Cas-Based Hydrodynamic Injection. <i>Molecular Biotechnology</i> , 2017, 59, 365-373.	1.3	13
856	Type II CRISPR/Cas9 approach in the oncological therapy. <i>Journal of Experimental and Clinical Cancer Research</i> , 2017, 36, 80.	3.5	17
857	Rodent Models of Diabetes. , 2017, , 215-238.		0
858	Next-generation mammalian genetics toward organism-level systems biology. <i>Npj Systems Biology and Applications</i> , 2017, 3, 15.	1.4	16
859	Utility of CRISPR/Cas9 systems in hematology research. <i>Experimental Hematology</i> , 2017, 54, 1-3.	0.2	11
860	Genetic Tools for Self-Organizing Culture of Mouse Embryonic Stem Cells via Small Regulatory RNA-Mediated Technologies, CRISPR/Cas9, and Inducible RNAi. <i>Methods in Molecular Biology</i> , 2017, 1622, 269-292.	0.4	1

#	ARTICLE	IF	CITATIONS
861	Stabilization of Foxp3 expression by CRISPR-dCas9-based epigenome editing in mouse primary T cells. <i>Epigenetics and Chromatin</i> , 2017, 10, 24.	1.8	98
862	Current challenges in the therapeutic use of induced pluripotent stem cells (iPSCs) in cancer therapy. <i>Applied Cancer Research</i> , 2017, 37, .	1.0	4
863	Massively Parallel Biophysical Analysis of CRISPR-Cas Complexes on Next Generation Sequencing Chips. <i>Cell</i> , 2017, 170, 35-47.e13.	13.5	96
864	Mitochondrial cytopathies: Their causes and correction pathways. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , 2017, 11, 87-102.	0.3	1
865	Opportunities to apply manufacturing systems analysis techniques in genetic manufacturing systems. <i>Manufacturing Letters</i> , 2017, 13, 34-38.	1.1	1
866	Comparative analysis of chimeric ZFP-, TALE- and Cas9-piggyBac transposases for integration into a single locus in human cells. <i>Nucleic Acids Research</i> , 2017, 45, 8411-8422.	6.5	37
867	Non-viral delivery of genome-editing nucleases for gene therapy. <i>Gene Therapy</i> , 2017, 24, 144-150.	2.3	88
868	Neurotrophin Signaling and Stem Cellsâ€™ Implications for Neurodegenerative Diseases and Stem Cell Therapy. <i>Molecular Neurobiology</i> , 2017, 54, 7401-7459.	1.9	49
869	Eukaryotic Transcriptional and Post-Transcriptional Gene Expression Regulation. <i>Methods in Molecular Biology</i> , 2017, , .	0.4	3
870	Using an Inducible CRISPR-dCas9-KRAB Effector System to Dissect Transcriptional Regulation in Human Embryonic Stem Cells. <i>Methods in Molecular Biology</i> , 2017, 1507, 221-233.	0.4	31
871	CRISPR-Based Technologies for the Manipulation of Eukaryotic Genomes. <i>Cell</i> , 2017, 168, 20-36.	13.5	783
872	CRISPR/Cas9-The ultimate weapon to battle infectious diseases?. <i>Cellular Microbiology</i> , 2017, 19, e12693.	1.1	56
873	Unraveling the genetic architecture of copy number variants associated with schizophrenia and other neuropsychiatric disorders. <i>Journal of Neuroscience Research</i> , 2017, 95, 1144-1160.	1.3	37
874	Stem Cells for Modeling and Therapy of Parkinson's Disease. <i>Human Gene Therapy</i> , 2017, 28, 85-98.	1.4	35
875	Fundamentals of Recombinant DNA Technology. , 2017, , 23-58.		0
876	Gene Editing and Genetic Lung Disease. Basic Research Meets Therapeutic Application. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2017, 56, 283-290.	1.4	32
877	Tetraiodothyroacetic acid-conjugated polyethylenimine for integrin receptor mediated delivery of the plasmid encoding IL-12 gene. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 150, 426-436.	2.5	29
878	Efficient Screening of CRISPR/Cas9-Induced Events in <i>Drosophila</i> Using a Co-CRISPR Strategy. <i>G3: Genes, Genomes, Genetics</i> , 2017, 7, 87-93.	0.8	58

#	ARTICLE	IF	CITATIONS
879	CRISPR Perturbation of Gene Expression Alters Bacterial Fitness under Stress and Reveals Underlying Epistatic Constraints. <i>ACS Synthetic Biology</i> , 2017, 6, 94-107.	1.9	29
880	An <i>Agrobacterium</i> -delivered CRISPR/Cas9 system for high-frequency targeted mutagenesis in maize. <i>Plant Biotechnology Journal</i> , 2017, 15, 257-268.	4.1	300
881	Validation of Protein Knockout in Mutant Zebrafish Lines Using <i>In Vitro</i> Translation Assays. <i>Zebrafish</i> , 2017, 14, 73-76.	0.5	2
882	A review of genetic engineering biotechnologies for enhanced chronic wound healing. <i>Experimental Dermatology</i> , 2017, 26, 179-185.	1.4	20
883	Advances in the genomics and metabolomics of dairy lactobacilli: A review. <i>Food Microbiology</i> , 2017, 61, 33-49.	2.1	127
884	Integrating cardiomyocytes from human pluripotent stem cells in safety pharmacology: has the time come?. <i>British Journal of Pharmacology</i> , 2017, 174, 3749-3765.	2.7	104
886	CRISPR/Cas9 Genome Editing in Embryonic Stem Cells. <i>Methods in Molecular Biology</i> , 2017, 1468, 221-234.	0.4	20
887	Understanding brain development: a major step. <i>Lancet Neurology</i> , The, 2017, 16, 178-179.	4.9	0
888	Emerging therapies for neuropathic lysosomal storage disorders. <i>Progress in Neurobiology</i> , 2017, 152, 166-180.	2.8	25
889	In Silico Meets In Vivo : Towards Computational CRISPR-Based sgRNA Design. <i>Trends in Biotechnology</i> , 2017, 35, 12-21.	4.9	96
890	Metabolic engineering of <i>Bacillus subtilis</i> fueled by systems biology: Recent advances and future directions. <i>Biotechnology Advances</i> , 2017, 35, 20-30.	6.0	74
891	Alternative Splicing of EZH2 pre-mRNA by SF3B3 Contributes to the Tumorigenic Potential of Renal Cancer. <i>Clinical Cancer Research</i> , 2017, 23, 3428-3441.	3.2	109
892	Induced protein degradation: an emerging drug discovery paradigm. <i>Nature Reviews Drug Discovery</i> , 2017, 16, 101-114.	21.5	971
893	CRISPR/Cas9-based knockouts reveal that CpRLP1 is a negative regulator of the sex pheromone PR-IP in the <i>Closterium peracerosum-strigosum-littorale</i> complex. <i>Scientific Reports</i> , 2017, 7, 17873.	1.6	17
894	Human BCDIN3D monomethylates cytoplasmic histidine transfer RNA. <i>Nucleic Acids Research</i> , 2017, 45, gkx051.	6.5	25
895	4.28 Non-Viral Delivery of Nucleic Acid Complexes $\hat{\sim}$ †. , 2017, , 506-526.		1
896	Somatic Cell Genetics and Its Application in Potato Breeding. <i>Compendium of Plant Genomes</i> , 2017, , 217-268.	0.3	4
897	Enrichment of megabase-sized DNA molecules for single-molecule optical mapping and next-generation sequencing. <i>Scientific Reports</i> , 2017, 7, 17893.	1.6	5

#	ARTICLE	IF	CITATIONS
898	Heterogeneous gene duplications can be adaptive because they permanently associate overdominant alleles. <i>Evolution Letters</i> , 2017, 1, 169-180.	1.6	17
899	CRISPR in Animals and Animal Models. <i>Progress in Molecular Biology and Translational Science</i> , 2017, 152, 95-114.	0.9	39
900	An improved Red/ET recombineering system and mouse ES cells culture conditions for the generation of targeted mutant mice. <i>Experimental Animals</i> , 2017, 66, 125-136.	0.7	4
901	Systems healthcare: a holistic paradigm for tomorrow. <i>BMC Systems Biology</i> , 2017, 11, 142.	3.0	22
902	Prediction of enhancer RNA activity levels from CHIP-seq-derived histone modification combinatorial codes. , 2017, , .		1
903	Epigenetic editing: towards realization of the curable genome concept. <i>Convergent Science Physical Oncology</i> , 2017, 3, 013006.	2.6	3
904	Genetically Engineered Crops Against Bacterial and Fungal Diseases. , 2017, , 125-147.		1
905	Gene therapy in hematopoietic cell transplants. , 0, , 649-656.		0
906	Biology of Seed Vigor in the Light of -omics Tools. , 2017, , .		4
909	Progress and Prospects of CRISPR/Cas Systems in Insects and Other Arthropods. <i>Frontiers in Physiology</i> , 2017, 8, 608.	1.3	126
910	The Search for Resistance to Cassava Mosaic Geminiviruses: How Much We Have Accomplished, and What Lies Ahead. <i>Frontiers in Plant Science</i> , 2017, 8, 408.	1.7	46
911	Major Novel QTL for Resistance to Cassava Bacterial Blight Identified through a Multi-Environmental Analysis. <i>Frontiers in Plant Science</i> , 2017, 8, 1169.	1.7	19
912	Efficient CRISPR/Cas9-Mediated Genome Editing Using a Chimeric Single-Guide RNA Molecule. <i>Frontiers in Plant Science</i> , 2017, 8, 1441.	1.7	107
913	Finger on the Pulse: Pumping Iron into Chickpea. <i>Frontiers in Plant Science</i> , 2017, 8, 1755.	1.7	26
914	Grand Challenge in Psychopharmacology: Setting Priorities to Shape a Bright Future. <i>Frontiers in Psychiatry</i> , 2017, 8, 15.	1.3	8
915	A CRISPR New World: Attitudes in the Public toward Innovations in Human Genetic Modification. <i>Frontiers in Public Health</i> , 2017, 5, 117.	1.3	37
916	The gRNA-miRNA-gRNA Ternary Cassette Combining CRISPR/Cas9 with RNAi Approach Strongly Inhibits Hepatitis B Virus Replication. <i>Theranostics</i> , 2017, 7, 3090-3105.	4.6	39
917	Cancer Biology and the Principles of Targeted Cancer Drug Discovery. , 2017, , 1-38.		1

#	ARTICLE	IF	CITATIONS
918	Regulation of Gene Expression. , 2017, , 525-533.		0
919	Use of a MCL-1 inhibitor alone to de-bulk melanoma and in combination to kill melanoma initiating cells. <i>Oncotarget</i> , 2017, 8, 46801-46817.	0.8	28
920	Genome-Wide Association Mapping of Correlated Traits in Cassava: Dry Matter and Total Carotenoid Content. <i>Plant Genome</i> , 2017, 10, plantgenome2016.09.0094.	1.6	63
921	Targeting MicroRNAs in Prostate Cancer Radiotherapy. <i>Theranostics</i> , 2017, 7, 3243-3259.	4.6	64
922	Fluorescent Lactic Acid Bacteria and Bifidobacteria as Vehicles of DNA Microbial Biosensors. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1728.	1.8	2
923	Forward and Reverse Genetics to Model Human Diseases in the Mouse. , 2017, , 727-752.		1
924	How to Train a Cell – Cutting-Edge Molecular Tools. <i>Frontiers in Chemistry</i> , 2017, 5, 12.	1.8	8
925	Genome Editing Tools in Plants. <i>Genes</i> , 2017, 8, 399.	1.0	63
926	Taming Parasites by Tailoring Them. <i>Frontiers in Cellular and Infection Microbiology</i> , 2017, 7, 292.	1.8	12
927	Role of Natural Killer Cells in HIV-Associated Malignancies. <i>Frontiers in Immunology</i> , 2017, 8, 315.	2.2	5
928	CRISPR-Cas Systems in <i>Bacteroides fragilis</i> , an Important Pathobiont in the Human Gut Microbiome. <i>Frontiers in Microbiology</i> , 2017, 8, 2234.	1.5	31
929	Midbrain-Hindbrain Boundary Morphogenesis: At the Intersection of Wnt and Fgf Signaling. <i>Frontiers in Neuroanatomy</i> , 2017, 11, 64.	0.9	49
930	Potential Value of Genomic Copy Number Variations in Schizophrenia. <i>Frontiers in Molecular Neuroscience</i> , 2017, 10, 204.	1.4	24
931	The Impact of CRISPR/Cas9 Technology on Cardiac Research: From Disease Modelling to Therapeutic Approaches. <i>Stem Cells International</i> , 2017, 2017, 1-13.	1.2	36
932	CRISPR Libraries and Screening. <i>Progress in Molecular Biology and Translational Science</i> , 2017, 152, 69-82.	0.9	12
933	CRISPR/Cas9 and active genetics-based trans-species replacement of the endogenous <i>Drosophila</i> <i>kni-L2</i> CRM reveals unexpected complexity. <i>eLife</i> , 2017, 6, .	2.8	30
934	Importance of Microorganisms to Macroorganisms Invasions. <i>Advances in Ecological Research</i> , 2017, 57, 99-146.	1.4	40
935	Identification of Significant Pathways Induced by PAX5 Haploinsufficiency Based on Protein-Protein Interaction Networks and Cluster Analysis in Raji Cell Line. <i>BioMed Research International</i> , 2017, 2017, 1-9.	0.9	5

#	ARTICLE	IF	CITATIONS
936	Zebrafish Models of Epilepsy and Epileptic Seizures. , 2017, , 369-384.		12
937	Maternal Supply of Cas9 to Zygotes Facilitates the Efficient Generation of Site-Specific Mutant Mouse Models. PLoS ONE, 2017, 12, e0169887.	1.1	12
938	Expectation propagation for large scale Bayesian inference of non-linear molecular networks from perturbation data. PLoS ONE, 2017, 12, e0171240.	1.1	5
939	Generation of murine tumor cell lines deficient in MHC molecule surface expression using the CRISPR/Cas9 system. PLoS ONE, 2017, 12, e0174077.	1.1	16
940	A novel rapid and reproducible flow cytometric method for optimization of transfection efficiency in cells. PLoS ONE, 2017, 12, e0182941.	1.1	14
941	Toward Genome-Based Metabolic Engineering in Bacteria. Advances in Applied Microbiology, 2017, 101, 49-82.	1.3	8
942	Crossing enhanced and high fidelity SpCas9 nucleases to optimize specificity and cleavage. Genome Biology, 2017, 18, 190.	3.8	102
943	Divergent susceptibilities to AAV-SaCas9-gRNA vector-mediated genome-editing in a single-cell-derived cell population. BMC Research Notes, 2017, 10, 720.	0.6	7
944	Small molecules enhance CRISPR/Cas9-mediated homology-directed genome editing in primary cells. Scientific Reports, 2017, 7, 8943.	1.6	104
945	CRISPR/Cas9 Technology: Applications and Human Disease Modeling. Progress in Molecular Biology and Translational Science, 2017, 152, 23-48.	0.9	17
946	Anemias. , 0, , 229-233.		0
947	The Smart Programmable CRISPR Technology: A Next Generation Genome Editing Tool for Investigators. Current Drug Targets, 2017, 18, 1653-1663.	1.0	8
948	Challenges and Advances in Gene Therapy Approaches for Neurodegenerative Disorders. Current Gene Therapy, 2017, 17, 187-193.	0.9	9
949	Heteroduplex cleavage assay for screening of probable zygosity resulting from CRISPR mutations in diploid single cell lines. BioTechniques, 2017, 62, 268-274.	0.8	4
950	Novel Technologies for Plant Functional Genomics. , 2017, , 241-257.		1
951	Future directions in breeding for disease resistance in aquaculture species. Revista Brasileira De Zootecnia, 2017, 46, 545-551.	0.3	104
953	Historical perspective of cell transplantation in Parkinson's disease. World Journal of Transplantation, 2017, 7, 179.	0.6	17
954	CRISPR-Cas9 Mediated Gene-Silencing of the Mutant Huntingtin Gene in an In Vitro Model of Huntington's Disease. International Journal of Molecular Sciences, 2017, 18, 754.	1.8	60

#	ARTICLE	IF	CITATIONS
955	Efficient Generation of Genome-Modified Mice Using Campylobacter jejuni-Derived CRISPR/Cas. International Journal of Molecular Sciences, 2017, 18, 2286.	1.8	5
956	Risk associated with off-target plant genome editing and methods for its limitation. Emerging Topics in Life Sciences, 2017, 1, 231-240.	1.1	56
957	Circulating tumor cells and CDX models as a tool for preclinical drug development. Translational Lung Cancer Research, 2017, 6, 397-408.	1.3	68
958	Current Progress and Future Prospects in Nucleic Acid Based Therapeutics. , 2017, , 280-313.		4
959	Comparative analysis of lipid-mediated CRISPR-Cas9 genome editing techniques. Cell Biology International, 2018, 42, 849-858.	1.4	2
960	Omics: A Gateway Towards Abiotic Stress Tolerance. , 2018, , 1-45.		3
961	Evaluation of FOXC1 as a therapeutic target for basal-like breast cancer. Cancer Gene Therapy, 2018, 25, 84-91.	2.2	6
962	Generation of tumor antigen-specific murine CD8+ T cells with enhanced anti-tumor activity via highly efficient CRISPR/Cas9 genome editing. International Immunology, 2018, 30, 141-154.	1.8	9
963	Biofabrication of multifunctional nanocellulosic 3D structures: a facile and customizable route. Materials Horizons, 2018, 5, 408-415.	6.4	81
964	Assessing sufficiency and necessity of enhancer activities for gene expression and the mechanisms of transcription activation. Genes and Development, 2018, 32, 202-223.	2.7	171
965	How Surrogate and Chemical Genetics in Model Organisms Can Suggest Therapies for Human Genetic Diseases. Genetics, 2018, 208, 833-851.	1.2	16
966	Mini-review on CRISPR-Cas9 and its potential applications to help controlling neglected tropical diseases caused by Trypanosomatidae. Infection, Genetics and Evolution, 2018, 63, 326-331.	1.0	8
967	High Activity Target-Site Identification Using Phenotypic Independent CRISPR-Cas9 Core Functionality. CRISPR Journal, 2018, 1, 182-190.	1.4	43
968	Clustered regularly interspaced short palindromic repeats (CRISPR)/CRISPR-associated protein 9 with improved proof-reading enhances homology-directed repair. Nucleic Acids Research, 2018, 46, 4677-4688.	6.5	65
969	Exploring the natural variation for reproductive thermotolerance in wild tomato species. Euphytica, 2018, 214, 1.	0.6	37
970	CRISPR/Cas9 genome editing technology significantly accelerated herpes simplex virus research. Cancer Gene Therapy, 2018, 25, 93-105.	2.2	41
971	CRISPR/Cas9 genome editing: Fueling the revolution in cancer immunotherapy. Current Research in Translational Medicine, 2018, 66, 39-42.	1.2	43
972	Controlling ticks and tick-borne diseases looking forward. Ticks and Tick-borne Diseases, 2018, 9, 1354-1357.	1.1	99

#	ARTICLE	IF	CITATIONS
973	The Body-wide Transcriptome Landscape of Disease Models. <i>IScience</i> , 2018, 2, 238-268.	1.9	18
974	Metabolic engineering of <i>Escherichia coli</i> for producing adipic acid through the reverse adipate-degradation pathway. <i>Metabolic Engineering</i> , 2018, 47, 254-262.	3.6	105
975	Genome Editing in Induced Pluripotent Stem Cells using CRISPR/Cas9. <i>Stem Cell Reviews and Reports</i> , 2018, 14, 323-336.	5.6	107
976	CRISPR/Cas approach: A new way of looking at plant-abiotic interactions. <i>Journal of Plant Physiology</i> , 2018, 224-225, 156-162.	1.6	66
977	An overview of treatment strategies for Hutchinson-Gilford Progeria syndrome. <i>Nucleus</i> , 2018, 9, 265-276.	0.6	68
978	Genome-wide mutation detection by interclonal genetic variation. <i>Mutation Research - Genetic Toxicology and Environmental Mutagenesis</i> , 2018, 829-830, 61-69.	0.9	11
979	CRISPR/Cas9-mediated resistance to cauliflower mosaic virus. <i>Plant Direct</i> , 2018, 2, e00047.	0.8	61
980	High GC Content Cas9-Mediated Genome-Editing and Biosynthetic Gene Cluster Activation in <i>Saccharopolyspora erythraea</i> . <i>ACS Synthetic Biology</i> , 2018, 7, 1338-1348.	1.9	22
981	Secretion of recombinant proteins from <i>E. coli</i> . <i>Engineering in Life Sciences</i> , 2018, 18, 532-550.	2.0	72
982	Incorporation of bridged nucleic acids into CRISPR RNAs improves Cas9 endonuclease specificity. <i>Nature Communications</i> , 2018, 9, 1448.	5.8	136
983	DR4 mediates the progression, invasion, metastasis and survival of colorectal cancer through the Sp1/NF1 switch axis on genomic locus. <i>International Journal of Cancer</i> , 2018, 143, 289-297.	2.3	15
984	Insights into maize genome editing via CRISPR/Cas9. <i>Physiology and Molecular Biology of Plants</i> , 2018, 24, 175-183.	1.4	37
985	Recent Advances in Therapeutic Genome Editing in China. <i>Human Gene Therapy</i> , 2018, 29, 136-145.	1.4	5
986	Investigating the genetic and epigenetic basis of big biological questions with the parthenogenetic marbled crayfish: A review and perspectives. <i>Journal of Biosciences</i> , 2018, 43, 189-223.	0.5	38
987	Duchenne muscular dystrophy: genome editing gives new hope for treatment. <i>Postgraduate Medical Journal</i> , 2018, 94, 296-304.	0.9	3
988	The Matter Simulation (R)evolution. <i>ACS Central Science</i> , 2018, 4, 144-152.	5.3	88
989	PAX5 haploinsufficiency induce cancer cell dormancy in Raji cells. <i>Experimental Cell Research</i> , 2018, 367, 30-36.	1.2	4
990	Staphylococcal Osteomyelitis: Disease Progression, Treatment Challenges, and Future Directions. <i>Clinical Microbiology Reviews</i> , 2018, 31, .	5.7	270

#	ARTICLE	IF	CITATIONS
991	Modulating Cellâ€Surface Receptor Signaling and Ion Channel Functions by Inâ€Situ Glycan Editing. <i>Angewandte Chemie</i> , 2018, 130, 979-983.	1.6	4
992	Genome editing technologies and their applications in crop improvement. <i>Plant Biotechnology Reports</i> , 2018, 12, 57-68.	0.9	41
993	A highly specific SpCas9 variant is identified by in vivo screening in yeast. <i>Nature Biotechnology</i> , 2018, 36, 265-271.	9.4	377
994	Exosomeâ€Liposome Hybrid Nanoparticles Deliver CRISPR/Cas9 System in MSCs. <i>Advanced Science</i> , 2018, 5, 1700611.	5.6	373
995	Genome editing of bread wheat using biolistic delivery of CRISPR/Cas9 in vitro transcripts or ribonucleoproteins. <i>Nature Protocols</i> , 2018, 13, 413-430.	5.5	179
996	CRISPR/Cas9â€Mediated Genome Editing in Epsteinâ€Barr Virusâ€Transformed Lymphoblastoid Bâ€Cell Lines. <i>Current Protocols in Molecular Biology</i> , 2018, 121, 31.12.1-31.12.23.	2.9	27
997	CRISPRâ€Cas9â€Edited Site Sequencing (CRESâ€Seq): An Efficient and Highâ€Throughput Method for the Selection of CRISPRâ€Cas9â€Edited Clones. <i>Current Protocols in Molecular Biology</i> , 2018, 121, 31.14.1-31.14.11.	2.9	10
998	Guidance of super-enhancers in regulation of IL-9 induction and airway inflammation. <i>Journal of Experimental Medicine</i> , 2018, 215, 559-574.	4.2	51
999	<i>In Vivo</i> Ovarian Cancer Gene Therapy Using CRISPR-Cas9. <i>Human Gene Therapy</i> , 2018, 29, 223-233.	1.4	60
1000	The evolution of CRISPR/Cas9 and their cousins: hope or hype?. <i>Biotechnology Letters</i> , 2018, 40, 465-477.	1.1	20
1001	CRISPR/Cas9: A tool for immunological research. <i>European Journal of Immunology</i> , 2018, 48, 576-583.	1.6	19
1002	Gene Therapies for Polyglutamine Diseases. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1049, 395-438.	0.8	16
1003	Chromatin remodeler CHD7 regulates the stem cell identity of human neural progenitors. <i>Genes and Development</i> , 2018, 32, 165-180.	2.7	28
1004	Reprint of: Building a Safer and Faster CAR: Seatbelts, Airbags, and CRISPR. <i>Biology of Blood and Marrow Transplantation</i> , 2018, 24, S15-S19.	2.0	12
1005	Targeted knock-in of CreER T2 in zebrafish using CRISPR/Cas9. <i>Cell and Tissue Research</i> , 2018, 372, 41-50.	1.5	33
1006	Implementing genome-driven personalized cardiology in clinical practice. <i>Journal of Molecular and Cellular Cardiology</i> , 2018, 115, 142-157.	0.9	21
1007	Active Intracellular Delivery of a Cas9/sgRNA Complex Using Ultrasoundâ€Propelled Nanomotors. <i>Angewandte Chemie</i> , 2018, 130, 2687-2691.	1.6	20
1008	Transgenesis by microparticle bombardment for live imaging of fluorescent proteins in <i>Pristionchus pacificus</i> germline and early embryos. <i>Development Genes and Evolution</i> , 2018, 228, 75-82.	0.4	11

#	ARTICLE	IF	CITATIONS
1009	Optimization of a "bump-and-hole" approach to allele-selective BET bromodomain inhibition. <i>Chemical Science</i> , 2018, 9, 2452-2468.	3.7	34
1010	A simple and rapid approach to develop recombinant avian herpesvirus vectored vaccines using CRISPR/Cas9 system. <i>Vaccine</i> , 2018, 36, 716-722.	1.7	48
1011	Wheat genome editing expedited by efficient transformation techniques: Progress and perspectives. <i>Crop Journal</i> , 2018, 6, 22-31.	2.3	29
1012	Mapping the dynamical organization of the cell nucleus through fluorescence correlation spectroscopy. <i>Methods</i> , 2018, 140-141, 10-22.	1.9	8
1013	Combined shRNA over CRISPR/cas9 as a methodology to detect off-target effects and a potential compensatory mechanism. <i>Scientific Reports</i> , 2018, 8, 93.	1.6	27
1014	Gene therapy comes of age. <i>Science</i> , 2018, 359, .	6.0	936
1015	Fundamental principles in bacterial physiology—history, recent progress, and the future with focus on cell size control: a review. <i>Reports on Progress in Physics</i> , 2018, 81, 056601.	8.1	136
1016	Generation of Optogenetically Modified Adenovirus Vector for Spatiotemporally Controllable Gene Therapy. <i>ACS Chemical Biology</i> , 2018, 13, 449-454.	1.6	13
1017	Verification of <sc>DNA</sc> motifs <i>in Arabidopsis</i> using <sc>CRISPR</sc>/Cas9-mediated mutagenesis. <i>Plant Biotechnology Journal</i> , 2018, 16, 1446-1451.	4.1	19
1018	Using CRISPR/Cas9 Gene Editing to Investigate the Oncogenic Activity of Mutant Calreticulin in Cytokine Dependent Hematopoietic Cells. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	2
1019	Macrophage-Specific <i>in Vivo</i> Gene Editing Using Cationic Lipid-Assisted Polymeric Nanoparticles. <i>ACS Nano</i> , 2018, 12, 994-1005.	7.3	163
1020	Implementing CRISPR-Cas technologies in conventional and non-conventional yeasts: Current state and future prospects. <i>Biotechnology Advances</i> , 2018, 36, 641-665.	6.0	120
1021	Efficient oligo nucleotide mediated CRISPR-Cas9 gene editing in <i>Aspergilli</i> . <i>Fungal Genetics and Biology</i> , 2018, 115, 78-89.	0.9	142
1023	Active Intracellular Delivery of a Cas9/sgRNA Complex Using Ultrasound-Propelled Nanomotors. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2657-2661.	7.2	187
1024	Cpf1-Database: web-based genome-wide guide RNA library design for gene knockout screens using CRISPR-Cpf1. <i>Bioinformatics</i> , 2018, 34, 1077-1079.	1.8	22
1025	Modulating Cell-Surface Receptor Signaling and Ion Channel Functions by In-Situ Glycan Editing. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 967-971.	7.2	26
1026	An Aneuploidy-Free and Structurally Defined Balancer Chromosome Toolkit for <i>Caenorhabditis elegans</i> . <i>Cell Reports</i> , 2018, 22, 232-241.	2.9	74
1027	Progress in understanding <i>Pseudocercospora</i> banana pathogens and the development of resistant <i>Musa</i> germplasm. <i>Plant Pathology</i> , 2018, 67, 759-770.	1.2	38

#	ARTICLE	IF	CITATIONS
1028	Modeling rare diseases with induced pluripotent stem cell technology. <i>Molecular and Cellular Probes</i> , 2018, 40, 52-59.	0.9	26
1029	Loss of Pten synergizes with c-Met to promote hepatocellular carcinoma development via mTORC2 pathway. <i>Experimental and Molecular Medicine</i> , 2018, 50, e417-e417.	3.2	39
1030	CRISPR/Cas9: the Jedi against the dark empire of diseases. <i>Journal of Biomedical Science</i> , 2018, 25, 29.	2.6	27
1031	Identifying and detecting potentially adverse ecological outcomes associated with the release of gene-drive modified organisms. <i>Journal of Responsible Innovation</i> , 2018, 5, S139-S158.	2.3	43
1032	High expression of Aurora-B is correlated with poor prognosis and drug resistance in non-small cell lung cancer. <i>International Journal of Biological Markers</i> , 2018, 33, 215-221.	0.7	49
1033	Advances in therapeutic targeting of the DNA damage response in cancer. <i>DNA Repair</i> , 2018, 66-67, 24-29.	1.3	46
1034	Validating the concept of mutational signatures with isogenic cell models. <i>Nature Communications</i> , 2018, 9, 1744.	5.8	128
1035	Telobox motifs recruit CLF/SWN-PRC2 for H3K27me3 deposition via TRB factors in Arabidopsis. <i>Nature Genetics</i> , 2018, 50, 638-644.	9.4	123
1036	A Cloning-Free Method for CRISPR/Cas9-Mediated Genome Editing in Fission Yeast. <i>G3: Genes, Genomes, Genetics</i> , 2018, 8, 2067-2077.	0.8	29
1037	CRISPR-Cas9-mediated generation of obese and diabetic mouse models. <i>Experimental Animals</i> , 2018, 67, 229-237.	0.7	33
1038	CRISPR-based genomic tools for the manipulation of genetically intractable microorganisms. <i>Nature Reviews Microbiology</i> , 2018, 16, 333-339.	13.6	88
1039	CRISPR/Cas9 editing genome of extremophile <i>Halomonas</i> spp.. <i>Metabolic Engineering</i> , 2018, 47, 219-229.	3.6	105
1040	Optimized Target-AID system efficiently induces single base changes in zebrafish. <i>Journal of Genetics and Genomics</i> , 2018, 45, 215-217.	1.7	6
1041	Chemical Inducible dCas9-Guided Editing of H3K27 Acetylation in Mammalian Cells. <i>Methods in Molecular Biology</i> , 2018, 1767, 429-445.	0.4	5
1042	Detection of target DNA with a novel Cas9/sgRNAs-associated reverse PCR (CARP) technique. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 2889-2900.	1.9	54
1043	Highly efficient heritable targeted deletions of gene clusters and non-coding regulatory regions in Arabidopsis using CRISPR/Cas9. <i>Scientific Reports</i> , 2018, 8, 4443.	1.6	63
1044	A Huntingtin Knockin Pig Model Recapitulates Features of Selective Neurodegeneration in Huntington's Disease. <i>Cell</i> , 2018, 173, 989-1002.e13.	13.5	231
1045	Genome-Wide Association Studies and Heritability Estimation in the Functional Genomics Era. <i>Population Genomics</i> , 2018, , 361-425.	0.2	6

#	ARTICLE	IF	CITATIONS
1046	Bottom-up approaches in synthetic biology and biomaterials for tissue engineering applications. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2018, 45, 599-614.	1.4	15
1047	CRISPR/Cas9 Mediated Disruption of the Swedish APP Allele as a Therapeutic Approach for Early-Onset Alzheimer's Disease. <i>Molecular Therapy - Nucleic Acids</i> , 2018, 11, 429-440.	2.3	116
1048	Challenges and opportunities in stroke genetics. <i>Cardiovascular Research</i> , 2018, 114, 1226-1240.	1.8	26
1049	Cameo: A Python Library for Computer Aided Metabolic Engineering and Optimization of Cell Factories. <i>ACS Synthetic Biology</i> , 2018, 7, 1163-1166.	1.9	52
1050	Programmable Single and Multiplex Base-Editing in <i>Bombyx mori</i> Using RNA-Guided Cytidine Deaminases. <i>G3: Genes, Genomes, Genetics</i> , 2018, 8, 1701-1709.	0.8	19
1051	CRISPR-Cas9 genome engineering: Treating inherited retinal degeneration. <i>Progress in Retinal and Eye Research</i> , 2018, 65, 28-49.	7.3	64
1052	Combinatorial library of chalcogen-containing lipidoids for intracellular delivery of genome-editing proteins. <i>Biomaterials</i> , 2018, 178, 652-662.	5.7	63
1053	Zinc Fingers, TALEs, and CRISPR Systems: A Comparison of Tools for Epigenome Editing. <i>Methods in Molecular Biology</i> , 2018, 1767, 19-63.	0.4	73
1054	High efficient multisites genome editing in allotetraploid cotton (<i>Gossypium hirsutum</i>) using CRISPR/Cas9 system. <i>Plant Biotechnology Journal</i> , 2018, 16, 137-150.	4.1	202
1055	Dynamics in Epistasis Analysis. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2018, 15, 878-891.	1.9	0
1056	CRISPR-Cas9 system-driven site-specific selection pressure on Herpes simplex virus genomes. <i>Virus Research</i> , 2018, 244, 286-295.	1.1	13
1057	Gene therapy and editing: Novel potential treatments for neuronal channelopathies. <i>Neuropharmacology</i> , 2018, 132, 108-117.	2.0	39
1058	Toward a CRISPR Picture: Use of CRISPR/Cas9 to Model Diseases in Human Stem Cells In Vitro. <i>Journal of Cellular Biochemistry</i> , 2018, 119, 62-68.	1.2	11
1059	Prokaryotic Argonaute proteins: novel genome-editing tools?. <i>Nature Reviews Microbiology</i> , 2018, 16, 5-11.	13.6	134
1060	Application of the gene editing tool, CRISPR-Cas9, for treating neurodegenerative diseases. <i>Neurochemistry International</i> , 2018, 112, 187-196.	1.9	28
1061	Trust in Science: CRISPR-Cas9 and the Ban on Human Germline Editing. <i>Science and Engineering Ethics</i> , 2018, 24, 1077-1096.	1.7	18
1062	Modelling diabetic nephropathy in mice. <i>Nature Reviews Nephrology</i> , 2018, 14, 48-56.	4.1	143
1063	Upregulation of IRS1 Enhances IGF1 Response in Y537S and D538G ESR1 Mutant Breast Cancer Cells. <i>Endocrinology</i> , 2018, 159, 285-296.	1.4	32

#	ARTICLE	IF	CITATIONS
1064	Enhanced guide-RNA design and targeting analysis for precise CRISPR genome editing of single and consortia of industrially relevant and non-model organisms. <i>Bioinformatics</i> , 2018, 34, 16-23.	1.8	36
1065	Expanding the CRISPR/Cas9 toolkit for <i>Pichia pastoris</i> with efficient donor integration and alternative resistance markers. <i>Journal of Cellular Biochemistry</i> , 2018, 119, 3183-3198.	1.2	96
1066	Erythropoiesis. <i>Methods in Molecular Biology</i> , 2018, , .	0.4	0
1067	Quantitatively Predictable Control of Cellular Protein Levels through Proteasomal Degradation. <i>ACS Synthetic Biology</i> , 2018, 7, 540-552.	1.9	19
1068	Immunity to CRISPR Cas9 and Cas12a therapeutics. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2018, 10, e1408.	6.6	96
1069	Molecular approaches to diagnose Diamond-Blackfan anemia: The EuroDBA experience. <i>European Journal of Medical Genetics</i> , 2018, 61, 664-673.	0.7	59
1070	Genome Editing of Food-Grade Lactobacilli To Develop Therapeutic Probiotics. <i>Microbiology Spectrum</i> , 2017, 5, .	1.2	25
1071	Emerging and evolving concepts in gene essentiality. <i>Nature Reviews Genetics</i> , 2018, 19, 34-49.	7.7	230
1072	Stem cells and genome editing: approaches to tissue regeneration and regenerative medicine. <i>Journal of Human Genetics</i> , 2018, 63, 165-178.	1.1	18
1073	Building a Safer and Faster CAR: Seatbelts, Airbags, and CRISPR. <i>Biology of Blood and Marrow Transplantation</i> , 2018, 24, 27-31.	2.0	49
1074	An Akt3 Splice Variant Lacking the Serine 472 Phosphorylation Site Promotes Apoptosis and Suppresses Mammary Tumorigenesis. <i>Cancer Research</i> , 2018, 78, 103-114.	0.4	13
1075	Role of graph architecture in controlling dynamical networks with applications to neural systems. <i>Nature Physics</i> , 2018, 14, 91-98.	6.5	96
1076	The potential for targeted rewriting of epigenetic marks in COPD as a new therapeutic approach. , 2018, 182, 1-14.		36
1077	CRISPR/Cpf1 enables fast and simple genome editing of <i>Saccharomyces cerevisiae</i> . <i>Yeast</i> , 2018, 35, 201-211.	0.8	100
1078	Cellular Biosensors with Engineered Genetic Circuits. <i>ACS Sensors</i> , 2018, 3, 13-26.	4.0	73
1079	Induced mutation and epigenetics modification in plants for crop improvement by targeting CRISPR/Cas9 technology. <i>Journal of Cellular Physiology</i> , 2018, 233, 4578-4594.	2.0	19
1080	Next-Generation Sequencing of Genome-Wide CRISPR Screens. <i>Methods in Molecular Biology</i> , 2018, 1712, 203-216.	0.4	36
1081	CRISPR/Cas9-mediated knockout of two eye pigmentation genes in the brown planthopper, <i>Nilaparvata lugens</i> (Hemiptera: Delphacidae). <i>Insect Biochemistry and Molecular Biology</i> , 2018, 93, 19-26.	1.2	91

#	ARTICLE	IF	CITATIONS
1082	APOBEC3 induces mutations during repair of CRISPR-Cas9-generated DNA breaks. <i>Nature Structural and Molecular Biology</i> , 2018, 25, 45-52.	3.6	42
1083	Selection is required for efficient Cas9-mediated genome editing in <i>Fusarium graminearum</i> . <i>Fungal Biology</i> , 2018, 122, 131-137.	1.1	41
1084	GSDME mediates caspase-3-dependent pyroptosis in gastric cancer. <i>Biochemical and Biophysical Research Communications</i> , 2018, 495, 1418-1425.	1.0	212
1085	Modulating DNA Repair Pathways to Improve Precision Genome Engineering. <i>ACS Chemical Biology</i> , 2018, 13, 389-396.	1.6	99
1086	CRISPR/Cas9-edited NSG mice as PDX models of human leukemia to address the role of niche-derived SPARC. <i>Leukemia</i> , 2018, 32, 1048-1051.	3.3	8
1087	Revolutionizing male fertility factor research in mice by using the genome editing tool CRISPR/Cas9. <i>Reproductive Medicine and Biology</i> , 2018, 17, 3-10.	1.0	28
1088	Molecular breeding technologies and strategies for rust resistance in wheat (<i>Triticum</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 502 Td (1.2	40
1089	A Comparison of Techniques to Evaluate the Effectiveness of Genome Editing. <i>Trends in Biotechnology</i> , 2018, 36, 147-159.	4.9	38
1090	EYSmutation update: In silico assessment of 271 reported and 26 novel variants in patients with retinitis pigmentosa. <i>Human Mutation</i> , 2018, 39, 177-186.	1.1	23
1091	Multiplexed CRISPR/Cas9 Genome Editing and Gene Regulation Using Csy4 in <i>Saccharomyces cerevisiae</i> . <i>ACS Synthetic Biology</i> , 2018, 7, 10-15.	1.9	82
1092	A heart-enriched antisense long non-coding RNA regulates the balance between cardiac and skeletal muscle triadin. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2018, 1865, 247-258.	1.9	15
1093	Bacteriophages. <i>Methods in Molecular Biology</i> , 2018, , .	0.4	21
1094	Genome Editing of Erythroid Cell Culture Model Systems. <i>Methods in Molecular Biology</i> , 2018, 1698, 245-257.	0.4	3
1095	Transposable Bacteriophages as Genetic Tools. <i>Methods in Molecular Biology</i> , 2018, 1681, 263-278.	0.4	2
1096	Nanomedicine and advanced technologies for burns: Preventing infection and facilitating wound healing. <i>Advanced Drug Delivery Reviews</i> , 2018, 123, 33-64.	6.6	339
1097	Editierung induzierter pluripotenter Stammzellen mittels CRISPR/Cas9. <i>BioSpektrum</i> , 2018, 24, 707-708.	0.0	0
1098	Molecular Biology in Tardigrades. <i>Zoological Monographs</i> , 2018, , 331-347.	1.1	2
1099	Technoscience and Biodiversity Conservation. <i>Asian Bioethics Review</i> , 2018, 10, 245-259.	0.9	2

#	ARTICLE	IF	CITATIONS
1100	Water Bears: The Biology of Tardigrades. Zoological Monographs, 2018, , .	1.1	24
1101	Generation of knockout mouse models of cyclin-dependent kinase inhibitors by engineered nuclease-mediated genome editing. Laboratory Animal Research, 2018, 34, 264.	1.1	3
1102	Growth-restricting effects of siRNA transfections: a largely deterministic combination of off-target binding and hybridization-independent competition. Nucleic Acids Research, 2018, 46, 9309-9320.	6.5	7
1105	Self-cloning CRISPR/Cpf1 facilitated genome editing in Saccharomyces cerevisiae. Bioresources and Bioprocessing, 2018, 5, .	2.0	18
1106	Advancement of Metabolic Engineering Assisted by Synthetic Biology. Catalysts, 2018, 8, 619.	1.6	17
1107	Bioinoculant capability enhancement through metabolomics and systems biology approaches. Briefings in Functional Genomics, 2018, 18, 159-168.	1.3	22
1108	CRISPR/Cas9 System: A Breakthrough in Genome Editing. Molecular Biology (Los Angeles, Calif), 2018, 07, .	0.0	5
1109	Class 2 CRISPR/Cas: an expanding biotechnology toolbox for and beyond genome editing. Cell and Bioscience, 2018, 8, 59.	2.1	66
1110	Site-Specific Integration by Recruitment of a Complex of λ C31 Integrase and Donor DNA to a Target Site by Using a Tandem, Artificial Zinc-Finger Protein. Biochemistry, 2018, 57, 6868-6877.	1.2	1
1111	A Review on Electroporation-Based Intracellular Delivery. Molecules, 2018, 23, 3044.	1.7	170
1112	Stearyl polyethylenimine complexed with plasmids as the core of human serum albumin nanoparticles noncovalently bound to CRISPR/Cas9 plasmids or siRNA for disrupting or silencing PD-L1 expression for immunotherapy. International Journal of Nanomedicine, 2018, Volume 13, 7079-7094.	3.3	44
1113	Genomic Analysis of the Recent Viral Isolate vB_BthP-Goe4 Reveals Increased Diversity of λ 29-Like Phages. Viruses, 2018, 10, 624.	1.5	13
1114	Phosphate Lock Residues of <i>Acidothermus cellulolyticus</i> Cas9 Are Critical to Its Substrate Specificity. ACS Synthetic Biology, 2018, 7, 2908-2917.	1.9	7
1115	On the reconstruction of the ancestral bacterial genomes in genus Mycobacterium and Brucella. BMC Systems Biology, 2018, 12, 100.	3.0	5
1116	Application and optimization of CRISPR-Cas9-mediated genome engineering in axolotl (<i>Ambystoma</i>) Tj ETQq0 0.0rgBT /Overlock 10	5.5	34
1117	Neural Regulation of Metabolism. Advances in Experimental Medicine and Biology, 2018, , .	0.8	1
1118	Functional Interrogation of the AgRP Neural Circuits in Control of Appetite, Body Weight, and Behaviors. Advances in Experimental Medicine and Biology, 2018, 1090, 1-16.	0.8	6
1120	Allograft Inflammatory Factor 1 as an Immunohistochemical Marker for Macrophages in Multiple Tissues and Laboratory Animal Species. Comparative Medicine, 2018, 68, 341-348.	0.4	22

#	ARTICLE	IF	CITATIONS
1121	Type 1 Diabetes Mellitus-Associated Genetic Variants Contribute to Overlapping Immune Regulatory Networks. <i>Frontiers in Genetics</i> , 2018, 9, 535.	1.1	39
1122	Web-based design and analysis tools for CRISPR base editing. <i>BMC Bioinformatics</i> , 2018, 19, 542.	1.2	127
1123	Safe Harbor Targeted CRISPR-Cas9 Tools for Molecular-Genetic Imaging of Cells in Living Subjects. <i>CRISPR Journal</i> , 2018, 1, 440-449.	1.4	8
1124	Genome Editing Using Crispr/Cas System: New Era Genetic Technology in Agriculture to Boost Crop Output. <i>European Journal of Experimental Biology</i> , 2018, 07, .	0.3	3
1125	Illuminating the genome-wide activity of genome editors for safe and effective therapeutics. <i>Genome Biology</i> , 2018, 19, 226.	3.8	28
1126	Genetically Encoded Fluorescent Biosensors Illuminate the Spatiotemporal Regulation of Signaling Networks. <i>Chemical Reviews</i> , 2018, 118, 11707-11794.	23.0	351
1127	Delivery of genome editing tools by bacterial extracellular vesicles. <i>Microbial Biotechnology</i> , 2019, 12, 71-73.	2.0	12
1128	Advances in the Use of Zebrafish in Developmental Toxicology: Linking Genetics, Behavior, and High-Throughput Testing Strategies. , 2018, , 298-326.		1
1129	Modeling Genetic Susceptibility to Disease. , 2018, , 484-497.		0
1130	Emerging Concepts and Techniques. , 2018, , 729-743.		0
1131	Monitored eCLIP: high accuracy mapping of RNA-protein interactions. <i>Nucleic Acids Research</i> , 2018, 46, 11553-11565.	6.5	11
1132	Genetic Transformation of Pineapple. <i>Plant Genetics and Genomics: Crops and Models</i> , 2018, , 69-86.	0.3	2
1133	CRISPR-Cas system in regulation of immunity and virulence of bacterial pathogens. <i>Gene Reports</i> , 2018, 13, 151-157.	0.4	11
1134	Emerging ways to treat breast cancer: will promises be met?. <i>Cellular Oncology (Dordrecht)</i> , 2018, 41, 605-621.	2.1	43
1135	What have we learned recently from transgenic mouse models about neurodegeneration? The most promising discoveries of this millennium. <i>Pharmacological Reports</i> , 2018, 70, 1105-1115.	1.5	7
1136	Recombinant Protein Expression in Mammalian Cells. <i>Methods in Molecular Biology</i> , 2018, , .	0.4	3
1137	Application of the CRISPR/Cas9 Gene Editing Method for Modulating Antibody Fucosylation in CHO Cells. <i>Methods in Molecular Biology</i> , 2018, 1850, 237-257.	0.4	7
1138	Genome Engineering of Hybridomas to Generate Stable Cell Lines for Antibody Expression. <i>Methods in Molecular Biology</i> , 2018, 1850, 79-111.	0.4	3

#	ARTICLE	IF	CITATIONS
1139	Study of Photochemical Cytosine to Uracil Transition via Ultrafast Photo-Cross-Linking Using Vinylcarbazole Derivatives in Duplex DNA. <i>Molecules</i> , 2018, 23, 828.	1.7	7
1140	Transgene-free genome editing in marine algae by bacterial conjugation – comparison with biolistic CRISPR/Cas9 transformation. <i>Scientific Reports</i> , 2018, 8, 14401.	1.6	63
1141	Membrane proteomics of cervical cancer cell lines reveal insights on the process of cervical carcinogenesis. <i>International Journal of Oncology</i> , 2018, 53, 2111-2122.	1.4	6
1142	Functional Analyses of Cassette Chromosome Recombinase C2 (CcrC2) and Its Use in Eliminating Methicillin Resistance by Combining CRISPR-Cas9. <i>ACS Synthetic Biology</i> , 2018, 7, 2590-2599.	1.9	9
1143	Double Selection Enhances the Efficiency of Target-AID and Cas9-Based Genome Editing in Yeast. G3: Genes, Genomes, Genetics, 2018, 8, 3163-3171.	0.8	19
1144	A Human Polymorphism in CHRNA5 Is Linked to Relapse to Nicotine Seeking in Transgenic Rats. <i>Current Biology</i> , 2018, 28, 3244-3253.e7.	1.8	36
1145	Targeting of NLRP3 inflammasome with gene editing for the amelioration of inflammatory diseases. <i>Nature Communications</i> , 2018, 9, 4092.	5.8	142
1146	CRISPR/Cas9-mediated genome editing induces gene knockdown by altering the pre-mRNA splicing in mice. <i>BMC Biotechnology</i> , 2018, 18, 61.	1.7	17
1147	Optimizing regulatory T cells for therapeutic application in human organ transplantation. <i>Current Opinion in Organ Transplantation</i> , 2018, 23, 516-523.	0.8	6
1148	Viable Mice with Extensive Gene Humanization (25-kbp) Created Using Embryonic Stem Cell/Blastocyst and CRISPR/Zygote Injection Approaches. <i>Scientific Reports</i> , 2018, 8, 15028.	1.6	12
1149	CRISPR/Cas9 System: A Bacterial Tailor for Genomic Engineering. <i>Genetics Research International</i> , 2018, 2018, 1-17.	2.0	19
1150	Ultra-acceleration of Photochemical Cytosine Deamination by Using a 5'-Phosphate-Substituted Oligodeoxyribonucleotide Probe Containing a 3'-Cyanovinylcarbazole Nucleotide at Its 5'-End. <i>ChemBioChem</i> , 2018, 19, 2257-2261.	1.3	3
1151	GNE Myopathy: Etiology, Diagnosis, and Therapeutic Challenges. <i>Neurotherapeutics</i> , 2018, 15, 900-914.	2.1	63
1152	Efficient and Orthogonal Transcription Regulation by Chemically Inducible Artificial Transcription Factors. <i>Biochemistry</i> , 2018, 57, 6452-6459.	1.2	10
1153	Defining CRISPR-Cas9 genome-wide nuclease activities with CIRCLE-seq. <i>Nature Protocols</i> , 2018, 13, 2615-2642.	5.5	69
1154	Physiology Based Approaches for Breeding of Next-Generation Food Legumes. <i>Plants</i> , 2018, 7, 72.	1.6	16
1155	A limited number of double-strand DNA breaks is sufficient to delay cell cycle progression. <i>Nucleic Acids Research</i> , 2018, 46, 10132-10144.	6.5	67
1156	The Safe Recipient of SSC Transplantation Prepared by Heat Shock With Busulfan Treatment in Mice. <i>Cell Transplantation</i> , 2018, 27, 1451-1458.	1.2	13

#	ARTICLE	IF	CITATIONS
1157	Epigenetic Regulation of Skin Development and Regeneration. <i>Pancreatic Islet Biology</i> , 2018, , .	0.1	0
1158	Enhancer-Promoter Interactions and Their Role in the Control of Epidermal Differentiation. <i>Contributions To Management Science</i> , 2018, , 231-262.	0.4	0
1159	Comprehensive off-target analysis of dCas9-SAM-mediated HIV reactivation via long noncoding RNA and mRNA profiling. <i>BMC Medical Genomics</i> , 2018, 11, 78.	0.7	15
1160	Highly multiplexed genome engineering using CRISPR/Cas9 gRNA arrays. <i>PLoS ONE</i> , 2018, 13, e0198714.	1.1	46
1161	Detecting and typing target DNA with a novel CRISPR-typing PCR (ctPCR) technique. <i>Analytical Biochemistry</i> , 2018, 561-562, 37-46.	1.1	35
1162	A novel integrase-mediated seamless vector transgenesis platform for therapeutic protein expression. <i>Nucleic Acids Research</i> , 2018, 46, e99-e99.	6.5	7
1163	Autocyclized and oxidized forms of <i>SCR7</i> induce cancer cell death by inhibiting nonhomologous DNA end joining in a Ligase IV dependent manner. <i>FEBS Journal</i> , 2018, 285, 3959-3976.	2.2	38
1164	Efficient Production and Identification of CRISPR/Cas9-generated Gene Knockouts in the Model System <i>Danio rerio</i> . <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	16
1165	Delivery approaches for CRISPR/Cas9 therapeutics <i>in vivo</i> : advances and challenges. <i>Expert Opinion on Drug Delivery</i> , 2018, 15, 905-913.	2.4	98
1166	A genome editing vector that enables easy selection and identification of knockout cells. <i>Plasmid</i> , 2018, 98, 37-44.	0.4	9
1167	STAT3 Cooperates With Phospholipid Scramblase 2 to Suppress Type I Interferon Response. <i>Frontiers in Immunology</i> , 2018, 9, 1886.	2.2	19
1168	ANNOgesic: a Swiss army knife for the RNA-seq based annotation of bacterial/archaeal genomes. <i>GigaScience</i> , 2018, 7, .	3.3	60
1169	Unraveling of Central Nervous System Disease Mechanisms Using CRISPR Genome Manipulation. <i>Journal of Central Nervous System Disease</i> , 2018, 10, 117957351878746.	0.7	7
1170	Genome Editing in Mice Using CRISPR/Cas9 Technology. <i>Current Protocols in Cell Biology</i> , 2018, 81, e57.	2.3	20
1171	Debugging the genetic code: Non-viral <i>in vivo</i> delivery of therapeutic genome editing technologies. <i>Current Opinion in Biomedical Engineering</i> , 2018, 7, 24-32.	1.8	12
1172	Design and Application of 6mA-Specific Zinc-Finger Proteins for the Readout of DNA Methylation. <i>Methods in Molecular Biology</i> , 2018, 1867, 29-41.	0.4	7
1173	Engineering RNA-Binding Proteins by Modular Assembly of RanBP2-Type Zinc Fingers. <i>Methods in Molecular Biology</i> , 2018, 1867, 57-74.	0.4	1
1174	Engineering plant architecture via CRISPR/Cas9-mediated alteration of strigolactone biosynthesis. <i>BMC Plant Biology</i> , 2018, 18, 174.	1.6	106

#	ARTICLE	IF	CITATIONS
1175	CRISPR/Cas9 gene editing for the creation of an MGAT1-deficient CHO cell line to control HIV-1 vaccine glycosylation. <i>PLoS Biology</i> , 2018, 16, e2005817.	2.6	25
1176	Craft in Biomedical Research. , 2018, , .		13
1177	From lipid locus to drug target through human genomics. <i>Cardiovascular Research</i> , 2018, 114, 1258-1270.	1.8	17
1178	CRISPR/Cas9-mediated specific integration of <i>fat1</i> at the goat <i>MSTN</i> locus. <i>FEBS Journal</i> , 2018, 285, 2828-2839.	2.2	30
1179	Endothelium and Genetics. , 2018, , 153-169.		0
1180	High-throughput detection and screening of plants modified by gene editing using quantitative real-time polymerase chain reaction. <i>Plant Journal</i> , 2018, 95, 557-567.	2.8	39
1181	Curative <i>Ex Vivo</i> Hepatocyte-Directed Gene Editing in a Mouse Model of Hereditary Tyrosinemia Type 1. <i>Human Gene Therapy</i> , 2018, 29, 1315-1326.	1.4	31
1182	Optimising experimental research in respiratory diseases: an ERS statement. <i>European Respiratory Journal</i> , 2018, 51, 1702133.	3.1	98
1183	A Rapid and Facile Pipeline for Generating Genomic Point Mutants in <i>C. elegans</i> Using CRISPR/Cas9 Ribonucleoproteins. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	0
1184	Generation of genetically-engineered animals using engineered endonucleases. <i>Archives of Pharmacal Research</i> , 2018, 41, 885-897.	2.7	24
1185	Generation and validation of homozygous fluorescent knock-in cells using CRISPR-Cas9 genome editing. <i>Nature Protocols</i> , 2018, 13, 1465-1487.	5.5	99
1186	Visualizing structure-mediated interactions in supercoiled DNA molecules. <i>Nucleic Acids Research</i> , 2018, 46, 4622-4631.	6.5	21
1187	New Modalities, Technologies, and Partnerships in Probe and Lead Generation: Enabling a Mode-of-Action Centric Paradigm. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 9004-9029.	2.9	39
1188	The CRISPR tool kit for genome editing and beyond. <i>Nature Communications</i> , 2018, 9, 1911.	5.8	1,159
1189	Kinetics and Fidelity of the Repair of Cas9-Induced Double-Strand DNA Breaks. <i>Molecular Cell</i> , 2018, 70, 801-813.e6.	4.5	194
1190	When the research is not reproducible: the importance of author-initiated and institution-driven responses and investigations. <i>Accountability in Research</i> , 2018, 25, 273-289.	1.6	1
1191	Advances in bio-based production of dicarboxylic acids longer than C4. <i>Engineering in Life Sciences</i> , 2018, 18, 668-681.	2.0	11
1192	Characterization of the essential role of bone morphogenetic protein 9 (BMP9) in osteogenic differentiation of mesenchymal stem cells (MSCs) through RNA interference. <i>Genes and Diseases</i> , 2018, 5, 172-184.	1.5	31

#	ARTICLE	IF	CITATIONS
1193	An efficient and scalable pipeline for epitope tagging in mammalian stem cells using Cas9 ribonucleoprotein. <i>ELife</i> , 2018, 7, .	2.8	45
1195	Pooled CRISPR interference screening enables genome-scale functional genomics study in bacteria with superior performance. <i>Nature Communications</i> , 2018, 9, 2475.	5.8	168
1196	Physicochemical properties of cationic nanoemulsions and liposomes obtained by microfluidization complexed with a single plasmid or along with an oligonucleotide: Implications for CRISPR/Cas technology. <i>Journal of Colloid and Interface Science</i> , 2018, 530, 243-255.	5.0	13
1197	Progress in Gene Therapy to Prevent Retinal Ganglion Cell Loss in Glaucoma and Leberâ€™s Hereditary Optic Neuropathy. <i>Neural Plasticity</i> , 2018, 2018, 1-11.	1.0	31
1198	Introduction of Large Sequence Inserts by CRISPR-Cas9 To Create Pathogenicity Mutants in the Multinucleate Filamentous Pathogen <i>Sclerotinia sclerotiorum</i> . <i>MBio</i> , 2018, 9, .	1.8	89
1199	Cracking â€™Economies of Scaleâ€™ Biomanufacturing on Methane-Rich Feedstock. , 2018, , 271-292.		2
1200	Robust imaging and gene delivery to study human lymphoblastoid cell lines. <i>Journal of Human Genetics</i> , 2018, 63, 945-955.	1.1	2
1201	T315I mutation of BCR-ABL1 into human Philadelphia chromosome-positive leukemia cell lines by homologous recombination using the CRISPR/Cas9 system. <i>Scientific Reports</i> , 2018, 8, 9966.	1.6	17
1202	The CRISPR/Cas9 System as a Tool to Engineer Chromosomal Translocation In Vivo. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1044, 39-48.	0.8	12
1203	An APOBEC3A-Cas9 base editor with minimized bystander and off-target activities. <i>Nature Biotechnology</i> , 2018, 36, 977-982.	9.4	328
1204	Emerging applications of genome-editing technology to examine functionality of GWAS-associated variants for complex traits. <i>Physiological Genomics</i> , 2018, 50, 510-522.	1.0	17
1205	Quantitative Biology of Endocytosis. <i>Colloquium Series on Quantitative Cell Biology</i> , 2018, 4, i-74.	0.5	6
1206	Production of Transgenic Livestock: Overview of Transgenic Technologies. , 2018, , 95-121.		5
1207	Design of synthetic materials for intracellular delivery of RNAs: From siRNA-mediated gene silencing to CRISPR/Cas gene editing. <i>Nano Research</i> , 2018, 11, 5310-5337.	5.8	31
1208	Comparative analysis of single-stranded DNA donors to generate conditional null mouse alleles. <i>BMC Biology</i> , 2018, 16, 69.	1.7	64
1209	Whole-genome sequencing reveals highly specific gene targeting by in vitro assembled Cas9-ribonucleoprotein complexes in <i>Aspergillus fumigatus</i> . <i>Fungal Biology and Biotechnology</i> , 2018, 5, 11.	2.5	34
1210	Preclinical Animal Models for Dravet Syndrome: Seizure Phenotypes, Comorbidities and Drug Screening. <i>Frontiers in Pharmacology</i> , 2018, 9, 573.	1.6	77
1211	Cell Line Techniques and Gene Editing Tools for Antibody Production: A Review. <i>Frontiers in Pharmacology</i> , 2018, 9, 630.	1.6	51

#	ARTICLE	IF	CITATIONS
1212	Application of CRISPR/Cas9 Genome Editing Technology for the Improvement of Crops Cultivated in Tropical Climates: Recent Progress, Prospects, and Challenges. <i>Frontiers in Plant Science</i> , 2018, 9, 617.	1.7	149
1213	Optimizing CRISPR/Cas9 for the Diatom <i>Phaeodactylum tricornutum</i> . <i>Frontiers in Plant Science</i> , 2018, 9, 740.	1.7	73
1214	The Application of a Meioocyte-Specific CRISPR/Cas9 (MSC) System and a Suicide-MSC System in Generating Inheritable and Stable Mutations in Arabidopsis. <i>Frontiers in Plant Science</i> , 2018, 9, 1007.	1.7	13
1215	CRISPR-Cas9 genome editing in human cells occurs via the Fanconi anemia pathway. <i>Nature Genetics</i> , 2018, 50, 1132-1139.	9.4	187
1216	Genome-editing applications of CRISPR-Cas9 to promote in vitro studies of Alzheimer's disease. <i>Clinical Interventions in Aging</i> , 2018, Volume 13, 221-233.	1.3	37
1217	A beginner's guide to understanding and implementing the genetic modification of zebrafish. <i>Progress in Biophysics and Molecular Biology</i> , 2018, 138, 3-19.	1.4	66
1218	Agrobacterium: A Genome-Editing Tool-Delivery System. <i>Current Topics in Microbiology and Immunology</i> , 2018, 418, 463-488.	0.7	14
1220	Woody Ornamentals of the Temperate Zone. <i>Handbook of Plant Breeding</i> , 2018, , 803-887.	0.1	9
1221	Engineering Clostridium organisms as microbial cell-factories: challenges & opportunities. <i>Metabolic Engineering</i> , 2018, 50, 173-191.	3.6	56
1223	Application of CRISPR for Pooled, Vector-based Functional Genomic Screening in Mammalian Cell Lines. , 0, , 209-222.		0
1224	Manipulation of Long Non-coding RNAs in Cardiovascular Disease Using Genome Editing Technology. , 0, , 371-388.		1
1225	CRISPR-Cas System: History and Prospects as a Genome Editing Tool in Microorganisms. <i>Current Microbiology</i> , 2018, 75, 1675-1683.	1.0	40
1226	Commentary: Programmable base editing of A-T to G-C in genomic DNA without DNA cleavage. <i>Frontiers in Genetics</i> , 2018, 9, 21.	1.1	14
1227	Targeted Approaches for In Situ Gut Microbiome Manipulation. <i>Genes</i> , 2018, 9, 351.	1.0	36
1228	CRISPR Crops: Plant Genome Editing Toward Disease Resistance. <i>Annual Review of Phytopathology</i> , 2018, 56, 479-512.	3.5	197
1229	65 YEARS OF THE DOUBLE HELIX: The advancements of gene editing and potential application to hereditary cancer. <i>Endocrine-Related Cancer</i> , 2018, 25, T141-T158.	1.6	3
1230	CRISPR/Cas9 Technology as an Emerging Tool for Targeting Amyotrophic Lateral Sclerosis (ALS). <i>International Journal of Molecular Sciences</i> , 2018, 19, 906.	1.8	19
1231	Genome Editing Weds CRISPR: What Is in It for Phytoremediation?. <i>Plants</i> , 2018, 7, 51.	1.6	69

#	ARTICLE	IF	CITATIONS
1232	Concepts in Light Microscopy of Viruses. <i>Viruses</i> , 2018, 10, 202.	1.5	44
1233	How epigenome drives chromatin folding and dynamics, insights from efficient coarse-grained models of chromosomes. <i>PLoS Computational Biology</i> , 2018, 14, e1006159.	1.5	72
1234	The Coming Age of Insect Cells for Manufacturing and Development of Protein Therapeutics. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 10061-10070.	1.8	44
1235	Impact of Drosophila Models in the Study and Treatment of Friedreich's Ataxia. <i>International Journal of Molecular Sciences</i> , 2018, 19, 1989.	1.8	16
1236	Functional Interrogation of Primary Human T Cells via CRISPR Genetic Editing. <i>Journal of Immunology</i> , 2018, 201, 1586-1598.	0.4	27
1237	Generation of Mutants of Nuclear-Encoded Plastid Proteins Using CRISPR/Cas9 in the Diatom <i>Phaeodactylum tricornutum</i> . <i>Methods in Molecular Biology</i> , 2018, 1829, 367-378.	0.4	6
1238	Making ends meet: targeted integration of DNA fragments by genome editing. <i>Chromosoma</i> , 2018, 127, 405-420.	1.0	35
1239	Plastids. <i>Methods in Molecular Biology</i> , 2018, , .	0.4	1
1240	Single Copy Transgene Integration in a Transcriptionally Active Site for Recombinant Protein Synthesis. <i>Biotechnology Journal</i> , 2018, 13, e1800226.	1.8	24
1241	User-Friendly Genetic Conditional Knockout Strategies by CRISPR/Cas9. <i>Stem Cells International</i> , 2018, 2018, 1-10.	1.2	1
1242	A Modified Monomeric Red Fluorescent Protein Reporter for Assessing CRISPR Activity. <i>Frontiers in Cell and Developmental Biology</i> , 2018, 6, 54.	1.8	6
1243	Engineering microbes for targeted strikes against human pathogens. <i>Cellular and Molecular Life Sciences</i> , 2018, 75, 2719-2733.	2.4	24
1244	Targeted Genome Editing Using DNA-Free RNA-Guided Cas9 Ribonucleoprotein for CHO Cell Engineering. <i>Methods in Molecular Biology</i> , 2018, 1772, 151-169.	0.4	7
1245	Heterologous and endogenous U6 snRNA promoters enable CRISPR/Cas9 mediated genome editing in <i>Aspergillus niger</i> . <i>Fungal Biology and Biotechnology</i> , 2018, 5, 2.	2.5	38
1246	Inconclusive studies on possible CRISPR-Cas off-targets should moderate expectations about enzymes that have evolved to be non-specific. <i>Journal of Biosciences</i> , 2018, 43, 225-228.	0.5	3
1247	Recurrent complete hydatidiform mole: where we are, is there a safe gestational horizon? Opinion and mini-review. <i>Journal of Assisted Reproduction and Genetics</i> , 2018, 35, 967-973.	1.2	29
1248	Regulation of cofilin phosphorylation in glomerular podocytes by testis specific kinase 1 (TESK1). <i>Scientific Reports</i> , 2018, 8, 12286.	1.6	9
1249	Synthetic Biology to Improve the Production of Lipases and Esterases (Review). <i>Methods in Molecular Biology</i> , 2018, 1835, 229-242.	0.4	2

#	ARTICLE	IF	CITATIONS
1250	Auxotrophy to Xeno-DNA: an exploration of combinatorial mechanisms for a high-fidelity biosafety system for synthetic biology applications. <i>Journal of Biological Engineering</i> , 2018, 12, 13.	2.0	26
1251	Efficient genome editing using tRNA promoter-driven CRISPR/Cas9 gRNA in <i>Aspergillus niger</i> . <i>PLoS ONE</i> , 2018, 13, e0202868.	1.1	90
1252	Mouse models in the era of large human tumour sequencing studies. <i>Open Biology</i> , 2018, 8, .	1.5	7
1253	World Management of Geminiviruses. <i>Annual Review of Phytopathology</i> , 2018, 56, 637-677.	3.5	247
1255	i-GONAD (improved genome-editing via oviductal nucleic acids delivery), a convenient in vivo tool to produce genome-edited rats. <i>Scientific Reports</i> , 2018, 8, 12059.	1.6	34
1256	Biosensor libraries harness large classes of binding domains for construction of allosteric transcriptional regulators. <i>Nature Communications</i> , 2018, 9, 3101.	5.8	48
1257	High doses of CRISPR/Cas9 ribonucleoprotein efficiently induce gene knockout with low mosaicism in the hydrozoan <i>Clytia hemisphaerica</i> through microhomology-mediated deletion. <i>Scientific Reports</i> , 2018, 8, 11734.	1.6	33
1258	Genetic tool development and systemic regulation in biosynthetic technology. <i>Biotechnology for Biofuels</i> , 2018, 11, 152.	6.2	20
1259	Application of CRISPR/Cas9 to <i>Tragopogon</i> (Asteraceae), an evolutionary model for the study of polyploidy. <i>Molecular Ecology Resources</i> , 2018, 18, 1427-1443.	2.2	31
1260	Ex Vivo COL7A1 Correction for Recessive Dystrophic Epidermolysis Bullosa Using CRISPR/Cas9 and Homology-Directed Repair. <i>Molecular Therapy - Nucleic Acids</i> , 2018, 12, 554-567.	2.3	53
1261	CRISPR-Cas9: A New Addition to the Drug Metabolism and Disposition Tool Box. <i>Drug Metabolism and Disposition</i> , 2018, 46, 1776-1786.	1.7	28
1262	Improved sgRNA design in bacteria via genome-wide activity profiling. <i>Nucleic Acids Research</i> , 2018, 46, 7052-7069.	6.5	73
1263	Efficient generation of goats with defined point mutation (I397V) in GDF9 through CRISPR/Cas9. <i>Reproduction, Fertility and Development</i> , 2018, 30, 307.	0.1	36
1264	In vivo base editing of post-mitotic sensory cells. <i>Nature Communications</i> , 2018, 9, 2184.	5.8	166
1265	Fungal Genomics. <i>Methods in Molecular Biology</i> , 2018, . .	0.4	3
1266	Recent advances in activating silent biosynthetic gene clusters in bacteria. <i>Current Opinion in Microbiology</i> , 2018, 45, 156-163.	2.3	89
1267	Genome Editing: CRISPR-Cas9. <i>Methods in Molecular Biology</i> , 2018, 1775, 119-132.	0.4	7
1268	Novel Approaches for the Treatment of Familial Hypercholesterolemia: Current Status and Future Challenges. <i>Journal of Atherosclerosis and Thrombosis</i> , 2018, 25, 665-673.	0.9	11

#	ARTICLE	IF	CITATIONS
1269	Transgenerational Epigenetics of Traumatic Stress. <i>Progress in Molecular Biology and Translational Science</i> , 2018, 158, 273-298.	0.9	76
1270	CRISPR/Cas9 system in <i>Plasmodium falciparum</i> using the centromere plasmid. <i>Parasitology International</i> , 2018, 67, 605-608.	0.6	10
1271	Genomics of Actinobacteria With a Focus on Natural Product Biosynthetic Genes. , 2018, , 325-335.		0
1272	Two Distinct Approaches for CRISPR-Cas9-Mediated Gene Editing in <i>Cryptococcus neoformans</i> and Related Species. <i>MSphere</i> , 2018, 3, .	1.3	36
1273	CRISPR-Enabled Tools for Engineering Microbial Genomes and Phenotypes. <i>Biotechnology Journal</i> , 2018, 13, e1700586.	1.8	30
1274	Application of CRISPR-Cas9 for Long Noncoding RNA Genes in Cancer Research. <i>Human Gene Therapy</i> , 2019, 30, 3-9.	1.4	33
1275	Gene therapy strategies in the treatment of hypertrophic cardiomyopathy. <i>Pflugers Archiv European Journal of Physiology</i> , 2019, 471, 807-815.	1.3	52
1276	Regulatory variants: from detection to predicting impact. <i>Briefings in Bioinformatics</i> , 2019, 20, 1639-1654.	3.2	82
1277	Applications and advances of CRISPR-Cas9 in cancer immunotherapy. <i>Journal of Medical Genetics</i> , 2019, 56, 4-9.	1.5	39
1278	Activities and specificities of <sc>CRISPR</sc>/Cas9 and Cas12a nucleases for targeted mutagenesis in maize. <i>Plant Biotechnology Journal</i> , 2019, 17, 362-372.	4.1	192
1279	The implication of CRISPR/Cas9 genome editing technology in combating human oncoviruses. <i>Journal of Medical Virology</i> , 2019, 91, 1-13.	2.5	11
1280	The advances in CRISPR technology and 3D genome. <i>Seminars in Cell and Developmental Biology</i> , 2019, 90, 54-61.	2.3	10
1281	Induced Expression of Endogenous CXCR4 in iPSCs by Targeted CpG Demethylation Enhances Cell Migration Toward the Ligand CXCL12. <i>Inflammation</i> , 2019, 42, 20-34.	1.7	5
1282	Defining the seed sequence of the Cas12b CRISPR-Cas effector complex. <i>RNA Biology</i> , 2019, 16, 413-422.	1.5	22
1283	CRISPR/Cas9-mediated homologous recombination in tobacco. <i>Plant Cell Reports</i> , 2019, 38, 463-473.	2.8	10
1284	Expanding CÁT base editing toolkit with diversified cytidine deaminases. <i>Nature Communications</i> , 2019, 10, 3612.	5.8	49
1285	Conformational Dynamics and Cleavage Sites of Cas12a Are Modulated by Complementarity between crRNA and DNA. <i>IScience</i> , 2019, 19, 492-503.	1.9	33
1286	Understanding Agriculture within the Frameworks of Cumulative Cultural Evolution, Gene-Culture Co-Evolution, and Cultural Niche Construction. <i>Human Ecology</i> , 2019, 47, 483-497.	0.7	40

#	ARTICLE	IF	CITATIONS
1287	Lotus japonicus Triterpenoid Profile and Characterization of the CYP716A51 and LjCYP93E1 Genes Involved in Their Biosynthesis In Planta. <i>Plant and Cell Physiology</i> , 2019, 60, 2496-2509.	1.5	21
1288	Transcriptional Bursting and Co-bursting Regulation by Steroid Hormone Release Pattern and Transcription Factor Mobility. <i>Molecular Cell</i> , 2019, 75, 1161-1177.e11.	4.5	86
1289	Multiplexed genome engineering by Cas12a and CRISPR arrays encoded on single transcripts. <i>Nature Methods</i> , 2019, 16, 887-893.	9.0	187
1290	<i>VHL</i>Synthetic Lethality Signatures Uncovered by Genotype-Specific CRISPR-Cas9 Screens. <i>CRISPR Journal</i> , 2019, 2, 230-245.	1.4	8
1291	Drug Inducible CRISPR/Cas Systems. <i>Computational and Structural Biotechnology Journal</i> , 2019, 17, 1171-1177.	1.9	40
1292	Genome editing of potato using CRISPR technologies: current development and future prospective. <i>Plant Cell, Tissue and Organ Culture</i> , 2019, 139, 403-416.	1.2	29
1293	Strategies to Increase On-Target and Reduce Off-Target Effects of the CRISPR/Cas9 System in Plants. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3719.	1.8	61
1294	Thiourea-Functional Bioreducible Poly(amido amine)s in Gene Delivery. <i>ACS Symposium Series</i> , 2019, , 93-117.	0.5	3
1295	Programmable RNA manipulation in living cells. <i>Cellular and Molecular Life Sciences</i> , 2019, 76, 4861-4867.	2.4	10
1296	Insertion/deletion-activated frame-shift fluorescence protein is a sensitive reporter for genomic DNA editing. <i>BMC Genomics</i> , 2019, 20, 609.	1.2	5
1297	CRISPR Disruption of BmOvo Resulted in the Failure of Emergence and Affected the Wing and Gonad Development in the Silkworm <i>Bombyx mori</i> . <i>Insects</i> , 2019, 10, 254.	1.0	12
1298	Nanotechnology-based siRNA delivery strategies for metastatic colorectal cancer therapy. <i>International Journal of Pharmaceutics</i> , 2019, 568, 118530.	2.6	24
1299	Integrative Biology and Big-Data-Centrism: Mapping out a Bioscience Ethics Perspective with a S.W.O.T. Matrix. <i>OMICS A Journal of Integrative Biology</i> , 2019, 23, 371-379.	1.0	2
1300	CRISPR/Cas9 genome editing technology in filamentous fungi: progress and perspective. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 6919-6932.	1.7	102
1301	Liver-specific androgen receptor knockout attenuates early liver tumor development in zebrafish. <i>Scientific Reports</i> , 2019, 9, 10645.	1.6	22
1302	WeReview: CRISPR Toolsâ€™ Live Repository of Computational Tools for Assisting CRISPR/Cas Experiments. <i>Bioengineering</i> , 2019, 6, 63.	1.6	19
1304	Inhibition of ubiquitinâ€™specific protease 2 causes accumulation of reactive oxygen species, mitochondria dysfunction, and intracellular ATP decrement in C2C12 myoblasts. <i>Physiological Reports</i> , 2019, 7, e14193.	0.7	14
1305	Engineering nucleic acid chemistry for precise and controllable CRISPR/Cas9 genome editing. <i>Science Bulletin</i> , 2019, 64, 1841-1849.	4.3	15

#	ARTICLE	IF	CITATIONS
1306	<p>Cholesterol-rich lipid-mediated nanoparticles boost of transfection efficiency, utilized for gene editing by CRISPR-Cas9</p>. International Journal of Nanomedicine, 2019, Volume 14, 4353-4366.	3.3	40
1307	Bridged Nucleic Acids Reloaded. Molecules, 2019, 24, 2297.	1.7	21
1308	Cardiac tissue engineering: state-of-the-art methods and outlook. Journal of Biological Engineering, 2019, 13, 57.	2.0	89
1309	Epigenetics and addiction. Current Opinion in Neurobiology, 2019, 59, 128-136.	2.0	85
1310	Super-Resolution Microscopy of Chromatin. Genes, 2019, 10, 493.	1.0	17
1311	CRISPR/Cas9-Mediated Gene Replacement in the Fungal Keratitis Pathogen <i>Fusarium solani</i> var. <i>petroliphilum</i> . Microorganisms, 2019, 7, 457.	1.6	15
1312	Duplex-Forming Oligonucleotide of Triazole-Linked RNA. Chemistry - an Asian Journal, 2019, 14, 3380-3385.	1.7	6
1313	Gene editing of PKLR gene in human hematopoietic progenitors through 5'UTR and 3'UTR modified TALEN mRNA. PLoS ONE, 2019, 14, e0223775.	1.1	23
1314	Highly efficient DSB-free base editing for streptomycetes with CRISPR-BEST. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 20366-20375.	3.3	119
1315	Simple and large-scale chromosomal engineering of mouse zygotes via in vitro and in vivo electroporation. Scientific Reports, 2019, 9, 14713.	1.6	9
1316	Lorentz TEM Imaging of Topological Magnetic Features in Asymmetric [Pt/(Co/Ni)M/Ir]N based Multi-Layers. Microscopy and Microanalysis, 2019, 25, 24-25.	0.2	0
1317	Pluripotent Stem Cells in Eye Disease Therapy. Advances in Experimental Medicine and Biology, 2019, , .	0.8	4
1318	CRISPR-Cas9-mediated therapeutic editing of <i>Rpe65</i> ameliorates the disease phenotypes in a mouse model of Leber congenital amaurosis. Science Advances, 2019, 5, eaax1210.	4.7	72
1319	The technical risks of human gene editing. Human Reproduction, 2019, 34, 2104-2111.	0.4	21
1320	WheatCRISPR: a web-based guide RNA design tool for CRISPR/Cas9-mediated genome editing in wheat. BMC Plant Biology, 2019, 19, 474.	1.6	34
1321	Mutagenesis in Rice: The Basis for Breeding a New Super Plant. Frontiers in Plant Science, 2019, 10, 1326.	1.7	82
1322	Genome-scale CRISPR screens are efficient in non-homologous end-joining deficient cells. Scientific Reports, 2019, 9, 15751.	1.6	11
1323	gRNA validation for wheat genome editing with the CRISPR-Cas9 system. BMC Biotechnology, 2019, 19, 71.	1.7	55

#	ARTICLE	IF	CITATIONS
1324	Efficient CRISPR/Cas9 Disruption of Autoimmune-Associated Genes Reveals Key Signaling Programs in Primary Human T Cells. <i>Journal of Immunology</i> , 2019, 203, 3166-3178.	0.4	17
1326	Single molecule analysis of effects of non-canonical guide RNAs and specificity-enhancing mutations on Cas9-induced DNA unwinding. <i>Nucleic Acids Research</i> , 2019, 47, 11880-11888.	6.5	33
1327	Gene Editing in Human Pluripotent Stem Cells: Recent Advances for Clinical Therapies. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1237, 17-28.	0.8	3
1328	Novel peptides screened by phage display peptide library can mimic epitopes of the FnBPA protein and induce protective immunity against <i>Staphylococcus aureus</i> in mice. <i>MicrobiologyOpen</i> , 2019, 8, e910.	1.2	7
1329	Efficient and modular CRISPR-Cas9 vector system for <i>Physcomitrella patens</i> . <i>Plant Direct</i> , 2019, 3, e00168.	0.8	39
1330	Recent metabolomics and gene editing approaches for synthesis of microbial secondary metabolites for drug discovery and development. <i>World Journal of Microbiology and Biotechnology</i> , 2019, 35, 166.	1.7	19
1331	Biological plasticity rescues target activity in CRISPR knock outs. <i>Nature Methods</i> , 2019, 16, 1087-1093.	9.0	159
1332	Survival Impact of Delaying Postoperative Chemoradiotherapy in Newly Diagnosed High-Grade Glioma Patients. <i>International Journal of Radiation Oncology Biology Physics</i> , 2019, 105, E112-E113.	0.4	0
1333	Advances in the Differentiation of Retinal Ganglion Cells from Human Pluripotent Stem Cells. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1186, 121-140.	0.8	8
1334	New insights of CRISPR technology in human pathogenic fungi. <i>Future Microbiology</i> , 2019, 14, 1243-1255.	1.0	14
1335	Generating mouse models for biomedical research: technological advances. <i>DMM Disease Models and Mechanisms</i> , 2019, 12, .	1.2	93
1336	RNA-Guided Recombinase-Cas9 Fusion Targets Genomic DNA Deletion and Integration. <i>CRISPR Journal</i> , 2019, 2, 209-222.	1.4	14
1337	In Vivo Editing of Macrophages through Systemic Delivery of CRISPR-Cas9-Ribonucleoprotein Nanoparticle Nanoassemblies. <i>Advanced Therapeutics</i> , 2019, 2, 1900041.	1.6	32
1338	Blockade of MDM2 with inactive Cas9 prevents epithelial to mesenchymal transition in retinal pigment epithelial cells. <i>Laboratory Investigation</i> , 2019, 99, 1874-1886.	1.7	11
1339	Antibody discovery and engineering by enhanced CRISPR-Cas9 integration of variable gene cassette libraries in mammalian cells. <i>MAbs</i> , 2019, 11, 1367-1380.	2.6	24
1340	The application of genome editing technology. <i>Biotarget</i> , 0, 3, 15-15.	0.5	1
1341	Current advances in engineering tools for <i>Pichia pastoris</i> . <i>Current Opinion in Biotechnology</i> , 2019, 59, 175-181.	3.3	66
1342	Efficient generation of Knock-in/Knock-out marmoset embryo via CRISPR/Cas9 gene editing. <i>Scientific Reports</i> , 2019, 9, 12719.	1.6	42

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1343	Deep sequencing analysis of CRISPR/Cas9 induced mutations by two delivery methods in target model genes and the CENH3 region of red cabbage (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>rubra</i>). <i>Plant Cell, Tissue and Organ Culture</i> , 2019, 139, 227-235.	1.2	18
1344	Generation of genetically modified mice using SpCas9-NG engineered nuclease. <i>Scientific Reports</i> , 2019, 9, 12878.	1.6	15
1345	Iterative, multiplexed CRISPR-mediated gene editing for functional analysis of complex protease gene clusters. <i>Journal of Biological Chemistry</i> , 2019, 294, 15987-15996.	1.6	8
1346	Imaging endogenous synaptic proteins in primary neurons at single-cell resolution using CRISPR/Cas9. <i>Molecular Biology of the Cell</i> , 2019, 30, 2838-2855.	0.9	5
1347	Endogenous Fluorescence Tagging by CRISPR. <i>Trends in Cell Biology</i> , 2019, 29, 912-928.	3.6	54
1348	Single-molecule localization to study cytoskeletal structures, membrane complexes, and mechanosensors. <i>Biophysical Reviews</i> , 2019, 11, 745-756.	1.5	5
1349	Generation of early-flowering Chinese cabbage (<i>Brassica rapa</i> spp. <i>pekinensis</i>) through CRISPR/Cas9-mediated genome editing. <i>Plant Biotechnology Reports</i> , 2019, 13, 491-499.	0.9	32
1350	CRISPR/Cas9-Based Mutagenesis of Starch Biosynthetic Genes in Sweet Potato (<i>Ipomoea Batatas</i>) for the Improvement of Starch Quality. <i>International Journal of Molecular Sciences</i> , 2019, 20, 4702.	1.8	77
1351	Current status of genetic & metabolic engineering and novel QTL mapping-based strategic approach in bioethanol production. <i>Gene Reports</i> , 2019, 17, 100497.	0.4	2
1352	Engineered materials for in vivo delivery of genome-editing machinery. <i>Nature Reviews Materials</i> , 2019, 4, 726-737.	23.3	139
1353	Time origin and structural analysis of the induced CRISPR/cas9 megabase-sized deletions and duplications involving the <i>Cntn6</i> gene in mice. <i>Scientific Reports</i> , 2019, 9, 14161.	1.6	7
1354	Knockout of TRPC6 promotes insulin resistance and exacerbates glomerular injury in Akita mice. <i>Kidney International</i> , 2019, 95, 321-332.	2.6	41
1355	Directed evolution studies of a thermophilic Type II-C Cas9. <i>Methods in Enzymology</i> , 2019, 616, 265-288.	0.4	9
1356	Multiple Knockout of Classical HLA Class II β -Chains by CRISPR/Cas9 Genome Editing Driven by a Single Guide RNA. <i>Journal of Immunology</i> , 2019, 202, 1895-1903.	0.4	9
1357	Genome Engineering Tools in Plant Synthetic Biology. , 2019, , 47-73.		12
1358	The CRISPR/Cas9 System for Targeted Genome Engineering in Free-Living Fungi: Advances and Opportunities for Lichenized Fungi. <i>Frontiers in Microbiology</i> , 2019, 10, 62.	1.5	13
1359	Generating Recombinant Avian Herpesvirus Vectors with CRISPR/Cas9 Gene Editing. <i>Journal of Visualized Experiments</i> , 2019, , .	0.2	9
1360	CRISPR-Cas9 for cancer therapy: Opportunities and challenges. <i>Cancer Letters</i> , 2019, 447, 48-55.	3.2	135

#	ARTICLE	IF	CITATIONS
1361	Alternatives to Conventional Antibiotics in the Era of Antimicrobial Resistance. <i>Trends in Microbiology</i> , 2019, 27, 323-338.	3.5	438
1362	Gene drives as a response to infection and resistance. <i>Infection and Drug Resistance</i> , 2019, Volume 12, 229-234.	1.1	7
1363	Development of a Bicistronic Vector for the Expression of a CRISPR/Cas9-mCherry System in Fish Cell Lines. <i>Cells</i> , 2019, 8, 75.	1.8	18
1364	Rapid micro-assays for amylolytic activities determination: customization and validation of the tests. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 2367-2379.	1.7	11
1365	The Application of Pre-clinical Animal Models to Optimise Nanoparticulate Drug Delivery for Hepatocellular Carcinoma. <i>Pharmaceutical Nanotechnology</i> , 2019, 6, 221-231.	0.6	4
1366	Systems metabolic engineering for citric acid production by <i>Aspergillus niger</i> in the post-genomic era. <i>Microbial Cell Factories</i> , 2019, 18, 28.	1.9	71
1367	Edit at will: Genotype independent plant transformation in the era of advanced genomics and genome editing. <i>Plant Science</i> , 2019, 281, 186-205.	1.7	57
1368	A universal method for sensitive and cell-free detection of CRISPR-associated nucleases. <i>Chemical Science</i> , 2019, 10, 2653-2662.	3.7	14
1369	An overview of designing and selection of sgRNAs for precise genome editing by the CRISPR-Cas9 system in plants. <i>3 Biotech</i> , 2019, 9, 223.	1.1	39
1370	Single nucleotide editing: From principle, optimization to application. <i>Human Mutation</i> , 2019, 40, 2171-2183.	1.1	7
1371	The protean world of non-coding RNAs in glioblastoma. <i>Journal of Molecular Medicine</i> , 2019, 97, 909-925.	1.7	20
1372	CRISPR/Cas9-mediated efficient genome editing via protoplast-based transformation in yeast-like fungus <i>Aureobasidium pullulans</i> . <i>Gene</i> , 2019, 709, 8-16.	1.0	16
1373	CRISPR/Cas9 applications in gene therapy for primary immunodeficiency diseases. <i>Emerging Topics in Life Sciences</i> , 2019, 3, 277-287.	1.1	8
1374	Identification of a genomic enhancer that enforces proper apoptosis induction in thymic negative selection. <i>Nature Communications</i> , 2019, 10, 2603.	5.8	11
1375	Strategies for gene disruption and expression in filamentous fungi. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 6041-6059.	1.7	27
1376	CRISPR/Cas9 guided genome and epigenome engineering and its therapeutic applications in immune mediated diseases. <i>Seminars in Cell and Developmental Biology</i> , 2019, 96, 32-43.	2.3	9
1377	Technical advances contribute to the study of genomic imprinting. <i>PLoS Genetics</i> , 2019, 15, e1008151.	1.5	16
1378	Advances in genetics of migraine. <i>Journal of Headache and Pain</i> , 2019, 20, 72.	2.5	136

#	ARTICLE	IF	CITATIONS
1379	Imaging with Optogenetically Engineered Living Cells as a Photodetector. <i>Advanced Biology</i> , 2019, 3, 1800319.	3.0	5
1380	Novel Microbial Modification Tools to Convert Lipids into Other Value-Added Products. <i>Methods in Molecular Biology</i> , 2019, 1995, 161-171.	0.4	0
1381	Magnetic iron oxide nanoparticles for disease detection and therapy. <i>Materials Today</i> , 2019, 31, 86-99.	8.3	114
1382	Delivery of CRISPR/Cas9 for therapeutic genome editing. <i>Journal of Gene Medicine</i> , 2019, 21, e3107.	1.4	93
1383	Bioanalysis “but not as we knew it: an AstraZeneca perspective of the last 10 years evolution to meet a diversifying portfolio. <i>Bioanalysis</i> , 2019, 11, 595-599.	0.6	3
1384	Harnessing the potential of gene editing technology using CRISPR in inflammatory bowel disease. <i>World Journal of Gastroenterology</i> , 2019, 25, 2177-2187.	1.4	6
1385	CRISPR-Cas9 System for Genome Engineering of Photosynthetic Microalgae. <i>Molecular Biotechnology</i> , 2019, 61, 541-561.	1.3	54
1386	Mesothelial cell transplantation: history, challenges and future directions. <i>Pleura and Peritoneum</i> , 2019, 1, 135-143.	0.5	4
1387	Microhomologies are prevalent at Cas9-induced larger deletions. <i>Nucleic Acids Research</i> , 2019, 47, 7402-7417.	6.5	100
1388	Expanding Metabolic Capabilities Using Novel Pathway Designs: Computational Tools and Case Studies. <i>Biotechnology Journal</i> , 2019, 14, 1800734.	1.8	7
1389	Ramanome technology platform for label-free screening and sorting of microbial cell factories at single-cell resolution. <i>Biotechnology Advances</i> , 2019, 37, 107388.	6.0	55
1390	Enhancing the Therapeutic Potential of Mesenchymal Stem Cells with the CRISPR-Cas System. <i>Stem Cell Reviews and Reports</i> , 2019, 15, 463-473.	5.6	25
1391	Chromatin modification and remodeling in schizophrenia. , 2019, , 303-330.		1
1392	Advancements in CRISPR/Cas9 technology—Focusing on cancer therapeutics and beyond. <i>Seminars in Cell and Developmental Biology</i> , 2019, 96, 13-21.	2.3	19
1393	Bread wheat: a role model for plant domestication and breeding. <i>Hereditas</i> , 2019, 156, 16.	0.5	66
1394	The Lamprey as a Model Vertebrate in Evolutionary Developmental Biology. , 2019, , 481-526.		10
1395	Interrogating Parkinson's disease associated redox targets: Potential application of CRISPR editing. <i>Free Radical Biology and Medicine</i> , 2019, 144, 279-292.	1.3	18
1396	Genome Editing of <i>Babesia bovis</i> Using the CRISPR/Cas9 System. <i>MSphere</i> , 2019, 4, .	1.3	18

#	ARTICLE	IF	CITATIONS
1397	Marine Microbe Stress Responses to Bacteriophage Infection. , 2019, , 141-174.		0
1398	CRISPR mediated genome engineering to develop climate smart rice: Challenges and opportunities. Seminars in Cell and Developmental Biology, 2019, 96, 100-106.	2.3	32
1399	Genetic circuits to engineer tissues with alternative functions. Journal of Biological Engineering, 2019, 13, 39.	2.0	39
1400	Imaging of CAR T-Cells in Cancer Patients: Paving the Way to Treatment Monitoring and Outcome Prediction. Journal of Nuclear Medicine, 2019, 60, 879-881.	2.8	11
1401	Biological Characteristics of Severe Combined Immunodeficient Mice Produced by CRISPR/Cas9-Mediated Rag2 and IL2rg Mutation. Frontiers in Genetics, 2019, 10, 401.	1.1	14
1402	Knockdown of hypoxia-inducible factor-1 alpha by tumor targeted delivery of CRISPR/Cas9 system suppressed the metastasis of pancreatic cancer. Journal of Controlled Release, 2019, 304, 204-215.	4.8	87
1403	Engineering blood vessels and vascularized tissues: technology trends and potential clinical applications. Clinical Science, 2019, 133, 1115-1135.	1.8	68
1404	CRISPR/Cas9 as a tool to dissect cancer mutations. Methods, 2019, 164-165, 36-48.	1.9	5
1405	Next Generation Precision Medicine: CRISPR-mediated Genome Editing for the Treatment of Neurodegenerative Disorders. Journal of NeuroImmune Pharmacology, 2019, 14, 608-641.	2.1	22
1406	Programmable targeted epigenetic editing using CRISPR system in Bombyx mori. Insect Biochemistry and Molecular Biology, 2019, 110, 105-111.	1.2	15
1407	CRISPR in Parasitology: Not Exactly Cut and Dried!. Trends in Parasitology, 2019, 35, 409-422.	1.5	43
1408	The role of pyroptosis in gastrointestinal cancer and immune responses to intestinal microbial infection. Biochimica Et Biophysica Acta: Reviews on Cancer, 2019, 1872, 1-10.	3.3	98
1409	Targeted deletion of BCL11A gene by CRISPR-Cas9 system for fetal hemoglobin reactivation: A promising approach for gene therapy of beta thalassemia disease. European Journal of Pharmacology, 2019, 854, 398-405.	1.7	53
1410	Cpf1 enables fast and efficient genome editing in Aspergilli. Fungal Biology and Biotechnology, 2019, 6, 6.	2.5	52
1411	Targeted Epigenome Editing of Plant Defense Genes via CRISPR Activation (CRISPRa). , 2019, , 267-289.		1
1412	Unified energetics analysis unravels SpCas9 cleavage activity for optimal gRNA design. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8693-8698.	3.3	46
1413	Pharmaceuticals and personal care products mediated antimicrobial resistance: future challenges. , 2019, , 409-428.		7
1414	CRISPRa-Cas ribonucleoprotein mediated homology-directed repair for efficient targeted genome editing in microalgae Nannochloropsis oceanica IMET1. Biotechnology for Biofuels, 2019, 12, 66.	6.2	66

#	ARTICLE	IF	CITATIONS
1415	Perspectives on gene expression regulation techniques in <i>Drosophila</i> . <i>Journal of Genetics and Genomics</i> , 2019, 46, 213-220.	1.7	6
1417	The protein kinase activity of fructokinase A specifies the antioxidant responses of tumor cells by phosphorylating p62. <i>Science Advances</i> , 2019, 5, eaav4570.	4.7	52
1418	Simplified pipelines for genetic engineering of mammalian embryos by CRISPR-Cas9 electroporation. <i>Biology of Reproduction</i> , 2019, 101, 177-187.	1.2	36
1419	CRISPR/Cas9-modified hematopoietic stem cells—present and future perspectives for stem cell transplantation. <i>Bone Marrow Transplantation</i> , 2019, 54, 1940-1950.	1.3	26
1420	Application of CRISPR/Cas9-Based Gene Editing in HIV-1/AIDS Therapy. <i>Frontiers in Cellular and Infection Microbiology</i> , 2019, 9, 69.	1.8	112
1421	The genomics of schizophrenia: Shortcomings and solutions. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2019, 93, 71-76.	2.5	27
1422	A novel undifferentiated spermatogonia-specific surface protein 1 (USSP1) in neonatal mice. <i>Science Bulletin</i> , 2019, 64, 524-533.	4.3	2
1423	Genome editing: A perspective on the application of CRISPR/Cas9 to study human diseases (Review). <i>International Journal of Molecular Medicine</i> , 2019, 43, 1559-1574.	1.8	67
1424	Establishment of gene-edited pigs expressing human blood coagulation factor VII and albumin for bioartificial liver use. <i>Journal of Gastroenterology and Hepatology (Australia)</i> , 2019, 34, 1851-1859.	1.4	13
1425	Generation and characterization of a novel knockin minipig model of Hutchinson-Gilford progeria syndrome. <i>Cell Discovery</i> , 2019, 5, 16.	3.1	43
1426	Evasion of Pre-Existing Immunity to Cas9: a Prerequisite for Successful Genome Editing In Vivo?. <i>Current Transplantation Reports</i> , 2019, 6, 127-133.	0.9	13
1427	Advances in CRISPR/Cas9 Technology for <i>in Vivo</i> Translation. <i>Biological and Pharmaceutical Bulletin</i> , 2019, 42, 304-311.	0.6	4
1428	Mechanism-Based Precision Therapy for the Treatment of Primary Immunodeficiency and Primary Immunodysregulatory Diseases. <i>Journal of Allergy and Clinical Immunology: in Practice</i> , 2019, 7, 761-773.	2.0	37
1429	CRISPR/Cas9-mediated knockout of <i>Ms1</i> enables the rapid generation of male-sterile hexaploid wheat lines for use in hybrid seed production. <i>Plant Biotechnology Journal</i> , 2019, 17, 1905-1913.	4.1	125
1430	Chemical Epigenetics: The Impact of Chemical and Chemical Biology Techniques on Bromodomain Target Validation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 17930-17952.	7.2	31
1431	Potential Natural Food Preservatives and Their Sustainable Production in Yeast: Terpenoids and Polyphenols. <i>Journal of Agricultural and Food Chemistry</i> , 2019, 67, 4397-4417.	2.4	47
1432	PCNT is critical for the association and conversion of centrioles to centrosomes during mitosis. <i>Journal of Cell Science</i> , 2019, 132, .	1.2	21
1433	Delivering on the promise of gene editing for cystic fibrosis. <i>Genes and Diseases</i> , 2019, 6, 97-108.	1.5	40

#	ARTICLE	IF	CITATIONS
1434	Programmable Base Editing of the Sheep Genome Revealed No Genome-Wide Off-Target Mutations. <i>Frontiers in Genetics</i> , 2019, 10, 215.	1.1	28
1436	CRISPR-gRNA Design. <i>Methods in Molecular Biology</i> , 2019, 1961, 3-11.	0.4	11
1437	CRISPR/Cas9-mediated genome editing of splicing mutation causing congenital hearing loss. <i>Gene</i> , 2019, 703, 83-90.	1.0	6
1438	Establishment of CRISPR/Cas9-Mediated Knock-in System for Porcine Cells with High Efficiency. <i>Applied Biochemistry and Biotechnology</i> , 2019, 189, 26-36.	1.4	5
1439	Preclinical Organotypic Models for the Assessment of Novel Cancer Therapeutics and Treatment. <i>Current Topics in Microbiology and Immunology</i> , 2019, , 225.	0.7	1
1440	A Practical Guide to Genome Editing Using Targeted Nuclease Technologies. , 2019, 9, 665-714.		7
1441	Lineage tracing using a Cas9-deaminase barcoding system targeting endogenous L1 elements. <i>Nature Communications</i> , 2019, 10, 1234.	5.8	36
1442	A simple genotyping method to detect small CRISPR-Cas9 induced indels by agarose gel electrophoresis. <i>Scientific Reports</i> , 2019, 9, 4437.	1.6	38
1443	2017 Student Debates: The Anthropocene: Implications for Arthropods and Biodiversity. <i>American Entomologist</i> , 2019, 65, 50-60.	0.1	0
1444	Review of the scientific evolution of gene therapy for the treatment of homozygous familial hypercholesterolaemia: past, present and future perspectives. <i>Journal of Medical Genetics</i> , 2019, 56, 711-717.	1.5	10
1445	CRISPR-Cas based targeting of host and viral genes as an antiviral strategy. <i>Seminars in Cell and Developmental Biology</i> , 2019, 96, 53-64.	2.3	22
1446	Chemische Epigenetik: der Einfluss chemischer und chemo- <i>biologischer</i> Techniken auf die Zielstruktur-Validierung von Bromodomänen. <i>Angewandte Chemie</i> , 2019, 131, 18096-18120.	1.6	3
1447	Genome Editing in Mammalian Cell Lines using CRISPR-Cas. <i>Journal of Visualized Experiments</i> , 2019, , .	0.2	3
1448	Regulation of Microtubule Nucleation in Mouse Bone Marrow-Derived Mast Cells by Protein Tyrosine Phosphatase SHP-1. <i>Cells</i> , 2019, 8, 345.	1.8	13
1449	Mutagenesis of seed storage protein genes in Soybean using CRISPR/Cas9. <i>BMC Research Notes</i> , 2019, 12, 176.	0.6	61
1451	CRISPR-based genome editing in wheat: a comprehensive review and future prospects. <i>Molecular Biology Reports</i> , 2019, 46, 3557-3569.	1.0	48
1452	New Possibilities on the Horizon: Genome Editing Makes the Whole Genome Accessible for Changes. <i>Frontiers in Plant Science</i> , 2019, 10, 525.	1.7	32
1453	Transcriptome Analysis Identified Genes for Growth and Omega-3/6 Ratio in Saline Tilapia. <i>Frontiers in Genetics</i> , 2019, 10, 244.	1.1	20

#	ARTICLE	IF	CITATIONS
1454	A simple dual-inducible CRISPR interference system for multiple gene targeting in <i>Corynebacterium glutamicum</i> . <i>Plasmid</i> , 2019, 103, 25-35.	0.4	28
1455	A large CRISPR-induced bystander mutation causes immune dysregulation. <i>Communications Biology</i> , 2019, 2, 70.	2.0	19
1456	CRISPR-cas gene-editing as plausible treatment of neuromuscular and nucleotide-repeat-expansion diseases: A systematic review. <i>PLoS ONE</i> , 2019, 14, e0212198.	1.1	25
1457	Emerging Trends and Tools in Transgenic Plant Technology for Phytoremediation of Toxic Metals and Metalloids. , 2019, , 63-88.		13
1458	DNA stretching induces Cas9 off-target activity. <i>Nature Structural and Molecular Biology</i> , 2019, 26, 185-192.	3.6	105
1459	Diversity, versatility and complexity of bacterial gene regulation mechanisms: opportunities and drawbacks for applications in synthetic biology. <i>FEMS Microbiology Reviews</i> , 2019, 43, 304-339.	3.9	111
1460	Improved CRISPR-Cas12a-assisted one-pot DNA editing method enables seamless DNA editing. <i>Biotechnology and Bioengineering</i> , 2019, 116, 1463-1474.	1.7	18
1461	Effects of concentration of CRISPR/Cas9 components on genetic mosaicism in cytoplasmic microinjected porcine embryos. <i>Journal of Reproduction and Development</i> , 2019, 65, 209-214.	0.5	35
1462	Neuron-Specific Genome Modification in the Adult Rat Brain Using CRISPR-Cas9 Transgenic Rats. <i>Neuron</i> , 2019, 102, 105-119.e8.	3.8	62
1463	Identification and Genetic Characterization of Soybean Accessions Exhibiting Antibiosis and Antixenosis Resistance to <i>Aphis glycines</i> (Hemiptera: Aphididae). <i>Journal of Economic Entomology</i> , 2019, 112, 1428-1438.	0.8	14
1464	Towards understanding the biosynthetic pathway for ustilaginoidin mycotoxins in <i>Ustilago virens</i> . <i>Environmental Microbiology</i> , 2019, 21, 2629-2643.	1.8	46
1465	Bead-based assay for spatiotemporal gene expression control in cell-free transcription-translation systems. <i>BioTechniques</i> , 2019, 66, 29-33.	0.8	9
1466	Biosynthetic Technology and Bioprocess Engineering. , 2019, , 207-232.		3
1468	Impaired neural differentiation and glymphatic CSF flow in the <i>Cdcd39</i> rat model of neonatal hydrocephalus: genetic interaction with <i>Llcam</i> . <i>DMM Disease Models and Mechanisms</i> , 2019, 12, .	1.2	19
1469	Reduction-dependent siderophore assimilation in a model pennate diatom. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 23609-23617.	3.3	51
1470	Human Pluripotent Stem Cells: Applications and Challenges for Regenerative Medicine and Disease Modeling. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2019, 171, 189-224.	0.6	2
1471	Advances in Plant Transgenics: Methods and Applications. , 2019, , .		2
1472	Highly Efficient CRISPR-Cas9-Based Methods for Generating Deletion Mutations and F0 Embryos that Lack Gene Function in Zebrafish. <i>Developmental Cell</i> , 2019, 51, 645-657.e4.	3.1	188

#	ARTICLE	IF	CITATIONS
1473	The Horizon of Gene Therapy in Modern Medicine: Advances and Challenges. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1247, 33-64.	0.8	22
1475	Advances in detecting and reducing off-target effects generated by CRISPR-mediated genome editing. <i>Journal of Genetics and Genomics</i> , 2019, 46, 513-521.	1.7	45
1476	Double-Check Base Editing for Efficient A to G Conversions. <i>ACS Synthetic Biology</i> , 2019, 8, 2629-2634.	1.9	14
1477	Disease modelling in human organoids. <i>DMM Disease Models and Mechanisms</i> , 2019, 12, .	1.2	254
1478	Concurrent genome and epigenome editing by CRISPR-mediated sequence replacement. <i>BMC Biology</i> , 2019, 17, 90.	1.7	9
1479	Synthetic chimeric nucleases function for efficient genome editing. <i>Nature Communications</i> , 2019, 10, 5524.	5.8	24
1480	Efficient methods for determining folding free energies in single-molecule pulling experiments. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2019, 2019, 124001.	0.9	10
1481	Long Non-coding RNA DANCR as an Emerging Therapeutic Target in Human Cancers. <i>Frontiers in Oncology</i> , 2019, 9, 1225.	1.3	64
1482	Immunogold Labeling to Detect <i>Streptococcus pyogenes</i> Cas9 in Cell Culture and Tissues by Electron Microscopy. <i>CRISPR Journal</i> , 2019, 2, 395-405.	1.4	0
1483	Simultaneous Deletion of Virulence Factors and Insertion of Antigens into the Infectious Laryngotracheitis Virus Using NHEJ-CRISPR/Cas9 and Cre ⁺ Lox System for Construction of a Stable Vaccine Vector. <i>Vaccines</i> , 2019, 7, 207.	2.1	22
1484	A ligand-based system for receptor-specific delivery of proteins. <i>Scientific Reports</i> , 2019, 9, 19214.	1.6	8
1485	The cell-based approach in neurosurgery: ongoing trends and future perspectives. <i>Heliyon</i> , 2019, 5, e02818.	1.4	29
1486	A qPCR method for genome editing efficiency determination and single-cell clone screening in human cells. <i>Scientific Reports</i> , 2019, 9, 18877.	1.6	23
1487	CRISPR. <i>Current Opinion in Lipidology</i> , 2019, 30, 172-176.	1.2	7
1488	CRISPR-Cas3 induces broad and unidirectional genome editing in human cells. <i>Nature Communications</i> , 2019, 10, 5302.	5.8	127
1489	Variation in zygotic CRISPR/Cas9 gene editing outcomes generates novel reporter and deletion alleles at the <i>Gdf11</i> locus. <i>Scientific Reports</i> , 2019, 9, 18613.	1.6	5
1490	CRISPR/Cas9-mediated gene deletion of the <i>ompA</i> gene in symbiotic <i>Cedecea neteri</i> impairs biofilm formation and reduces gut colonization of <i>Aedes aegypti</i> mosquitoes. <i>PLoS Neglected Tropical Diseases</i> , 2019, 13, e0007883.	1.3	34
1491	Non-viral delivery of CRISPR/Cas9 complex using CRISPR-GPS nanocomplexes. <i>Nanoscale</i> , 2019, 11, 21317-21323.	2.8	34

#	ARTICLE	IF	CITATIONS
1492	CRISPR-Cas Technology as a Tool to Create Animal Models for Biomedical Research. , 2019, , 141-153.		1
1493	Gene therapy for visual loss: Opportunities and concerns. <i>Progress in Retinal and Eye Research</i> , 2019, 68, 31-53.	7.3	78
1494	Zinc finger nuclease-mediated targeting of multiple transgenes to an endogenous soybean genomic locus via non-homologous end joining. <i>Plant Biotechnology Journal</i> , 2019, 17, 750-761.	4.1	48
1495	Pipeline for the generation of gene knockout mice using dual sgRNA CRISPR/Cas9-mediated gene editing. <i>Analytical Biochemistry</i> , 2019, 568, 31-40.	1.1	5
1496	CRISPR-Cas9 induces point mutation in the mucormycosis fungus <i>Rhizopus delemar</i> . <i>Fungal Genetics and Biology</i> , 2019, 124, 1-7.	0.9	28
1497	High-Throughput Sequencing in Respiratory, Critical Care, and Sleep Medicine Research. An Official American Thoracic Society Workshop Report. <i>Annals of the American Thoracic Society</i> , 2019, 16, 1-16.	1.5	9
1498	Plant Genome Editing with CRISPR Systems. <i>Methods in Molecular Biology</i> , 2019, , .	0.4	12
1499	CRISPR/Cas9 editing of APP C-terminus attenuates β -cleavage and promotes γ -cleavage. <i>Nature Communications</i> , 2019, 10, 53.	5.8	81
1500	Photons in - numbers out: perspectives in quantitative fluorescence microscopy for in situ protein counting. <i>Methods and Applications in Fluorescence</i> , 2019, 7, 012003.	1.1	20
1501	Spatial control of in vivo CRISPR-Cas9 genome editing via nanomagnets. <i>Nature Biomedical Engineering</i> , 2019, 3, 126-136.	11.6	107
1502	DNA/RNA hybrid mesoscopic model shows strong stability dependence with deoxypyrimidine content and stacking interactions similar to RNA/RNA. <i>Chemical Physics Letters</i> , 2019, 715, 14-19.	1.2	18
1503	CRISPR/Cas9 Methodology for the Generation of Knockout Deletions in <i>Caenorhabditis elegans</i> . <i>G3: Genes, Genomes, Genetics</i> , 2019, 9, 135-144.	0.8	75
1504	Desensitizing plant EPSP synthase to glyphosate: Optimized global sequence context accommodates a glycine-to-alanine change in the active site. <i>Journal of Biological Chemistry</i> , 2019, 294, 716-725.	1.6	18
1505	<i>TCF</i> / <i>LEF</i> dependent and independent transcriptional regulation of <i>Wnt</i> -catenin target genes. <i>EMBO Journal</i> , 2019, 38, .	3.5	142
1506	Recent Advances in Anti-cancer Protein/Peptide Delivery. <i>Bioconjugate Chemistry</i> , 2019, 30, 305-324.	1.8	113
1507	Virus-Mediated Genome Editing in Plants Using the CRISPR/Cas9 System. <i>Methods in Molecular Biology</i> , 2019, 1917, 311-326.	0.4	16
1508	CRISPR/Cas9-Based Genome Editing and its Applications for Functional Genomic Analyses in Plants. <i>Small Methods</i> , 2019, 3, 1800473.	4.6	24
1509	Allele-specific genome editing using CRISPR-Cas9 is associated with loss of heterozygosity in diploid yeast. <i>Nucleic Acids Research</i> , 2019, 47, 1362-1372.	6.5	32

#	ARTICLE	IF	CITATIONS
1510	CRISPR/Cas9-mediated targeted T-DNA integration in rice. <i>Plant Molecular Biology</i> , 2019, 99, 317-328.	2.0	37
1511	Deep learning image recognition enables efficient genome editing in zebrafish by automated injections. <i>PLoS ONE</i> , 2019, 14, e0202377.	1.1	20
1512	Reducing phenolic off-flavors through CRISPR-based gene editing of the FDC1 gene in <i>Saccharomyces cerevisiae</i> x <i>Saccharomyces eubayanus</i> hybrid lager beer yeasts. <i>PLoS ONE</i> , 2019, 14, e0209124.	1.1	24
1514	Gene Disruption Using CRISPR-Cas9 Technology. <i>Methods in Molecular Biology</i> , 2019, 1881, 201-209.	0.4	1
1515	CRISPR-Cas9 in genome editing: Its function and medical applications. <i>Journal of Cellular Physiology</i> , 2019, 234, 5751-5761.	2.0	29
1516	Somatic Gene Editing of <i>GUCY2D</i> by AAV-CRISPR/Cas9 Alters Retinal Structure and Function in Mouse and Macaque. <i>Human Gene Therapy</i> , 2019, 30, 571-589.	1.4	67
1517	Gene Therapy for Neurologic Disease: A Neurosurgical Review. <i>World Neurosurgery</i> , 2019, 121, 261-273.	0.7	11
1518	Cellular and Molecular Aspects of Parkinson Treatment: Future Therapeutic Perspectives. <i>Molecular Neurobiology</i> , 2019, 56, 4799-4811.	1.9	28
1519	CRISPR-Cpf1-mediated genome editing and gene regulation in human cells. <i>Biotechnology Advances</i> , 2019, 37, 21-27.	6.0	21
1520	Development and application of a CRISPR/Cas9 system for <i>Bacillus licheniformis</i> genome editing. <i>International Journal of Biological Macromolecules</i> , 2019, 122, 329-337.	3.6	29
1521	Genome editing opens a new era of genetic improvement in polyploid crops. <i>Crop Journal</i> , 2019, 7, 141-150.	2.3	67
1522	Genome editing in plants by engineered CRISPR-Cas9 recognizing NG PAM. <i>Nature Plants</i> , 2019, 5, 14-17.	4.7	154
1523	New CRISPR-Cas9 vectors for genetic modifications of <i>Bacillus</i> species. <i>FEMS Microbiology Letters</i> , 2019, 366, .	0.7	27
1524	DNA methylation correlates of PTSD: Recent findings and technical challenges. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2019, 90, 223-234.	2.5	28
1525	Current strategies for Site-Directed RNA Editing using ADARs. <i>Methods</i> , 2019, 156, 16-24.	1.9	49
1526	Modelling the endocrine pancreas in health and disease. <i>Nature Reviews Endocrinology</i> , 2019, 15, 155-171.	4.3	71
1527	Gene Therapy for Nonmalignant Hematology. <i>Advances and Controversies in Hematopoietic Transplantation and Cell Therapy</i> , 2019, , 265-288.	0.0	0
1528	New Breeding Techniques: Detection and Identification of the Techniques and Derived Products. , 2019, , 320-336.		3

#	ARTICLE	IF	CITATIONS
1529	Harnessing CRISPR/Cas 9 System for manipulation of DNA virus genome. <i>Reviews in Medical Virology</i> , 2019, 29, e2009.	3.9	16
1530	Genetic and genomic resources of sorghum to connect genotype with phenotype in contrasting environments. <i>Plant Journal</i> , 2019, 97, 19-39.	2.8	88
1531	Liver diseases in the dish: iPSC and organoids as a new approach to modeling liver diseases. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2019, 1865, 920-928.	1.8	53
1532	Genetic Improvement of Food Animals: Past and Future. , 2019, , 171-180.		1
1533	Therapeutic Oligonucleotides: State of the Art. <i>Annual Review of Pharmacology and Toxicology</i> , 2019, 59, 605-630.	4.2	208
1534	Gene-edited CRISPy Critters for alcohol research. <i>Alcohol</i> , 2019, 74, 11-19.	0.8	7
1535	5S rRNA Promoter for Guide RNA Expression Enabled Highly Efficient CRISPR/Cas9 Genome Editing in <i>Aspergillus niger</i> . <i>ACS Synthetic Biology</i> , 2019, 8, 1568-1574.	1.9	96
1536	Messenger RNA Delivery for Tissue Engineering and Regenerative Medicine Applications. <i>Tissue Engineering - Part A</i> , 2019, 25, 91-112.	1.6	68
1537	Minor collagens of the skin with not so minor functions. <i>Journal of Anatomy</i> , 2019, 235, 418-429.	0.9	20
1538	Nuevos modelos transgÃ©nicos para el estudio de la enfermedad de Parkinson basados en sistemas de ediciÃ³n con nucleasas. <i>NeurologÃ­a</i> , 2020, 35, 486-499.	0.3	2
1539	Bacterial Type II Polyketide Synthases. , 2020, , 198-249.		2
1540	Molecular Modulation of Root Development by Ethylene. <i>Small Methods</i> , 2020, 4, 1900067.	4.6	3
1541	Genome editing-based approaches for imaging protein localization and dynamics in the mammalian brain. <i>Neuroscience Research</i> , 2020, 150, 2-7.	1.0	6
1542	Gene therapy and genome editing for primary immunodeficiency diseases. <i>Genes and Diseases</i> , 2020, 7, 38-51.	1.5	26
1543	CRISPR/Cas9 gene-editing strategies in cardiovascular cells. <i>Cardiovascular Research</i> , 2020, 116, 894-907.	1.8	40
1545	dCas9-Based Scn1a Gene Activation Restores Inhibitory Interneuron Excitability and Attenuates Seizures in Dravet Syndrome Mice. <i>Molecular Therapy</i> , 2020, 28, 235-253.	3.7	135
1546	Use of genome editing technologies for genetic improvement of crops of tropical origin. <i>Plant Cell, Tissue and Organ Culture</i> , 2020, 140, 215-244.	1.2	13
1547	Targeted knock-in into the OVA locus of chicken cells using CRISPR/Cas9 system with homology-independent targeted integration. <i>Journal of Bioscience and Bioengineering</i> , 2020, 129, 363-370.	1.1	6

#	ARTICLE	IF	CITATIONS
1548	CRISPR-Cas bioinformatics. <i>Methods</i> , 2020, 172, 3-11.	1.9	45
1549	Disruption of splicing-regulatory elements using CRISPR/Cas9 to rescue spinal muscular atrophy in human iPSCs and mice. <i>National Science Review</i> , 2020, 7, 92-101.	4.6	22
1550	Transgenic Mouse. <i>Methods in Molecular Biology</i> , 2020, , .	0.4	2
1551	New insights on human essential genes based on integrated analysis and the construction of the HEGIAP web-based platform. <i>Briefings in Bioinformatics</i> , 2020, 21, 1397-1410.	3.2	51
1552	Characterization of a novel rat model of X-linked hydrocephalus by CRISPR-mediated mutation in <i>L1cam</i> . <i>Journal of Neurosurgery</i> , 2020, 132, 945-958.	0.9	10
1553	New transgenic models of Parkinson's disease using genome editing technology. <i>NeurologÃa (English) Tj ETQq1 1 0.784314 fgBT /Over</i>	0.2	1
1554	Transcriptomic analyses of gene expression by CRISPR knockout of miR-214 in cervical cancer cells. <i>Genomics</i> , 2020, 112, 1490-1499.	1.3	14
1555	CRISPR/Cas9: Nature's gift to prokaryotes and an auspicious tool in genome editing. <i>Journal of Basic Microbiology</i> , 2020, 60, 91-102.	1.8	19
1556	A glance at genome editing with CRISPRâ€Cas9 technology. <i>Current Genetics</i> , 2020, 66, 447-462.	0.8	57
1557	CRISPR-associated nucleases: the Dawn of a new age of efficient crop improvement. <i>Transgenic Research</i> , 2020, 29, 1-35.	1.3	31
1558	Proteome editing using engineered proteins that hijack cellular quality control machinery. <i>AICHE Journal</i> , 2020, 66, e16854.	1.8	2
1559	Humanized mice are precious tools for evaluation of hematopoietic gene therapies and preclinical modeling to move towards a clinical trial. <i>Biochemical Pharmacology</i> , 2020, 174, 113711.	2.0	21
1560	Recent developments and applications of genetic transformation and genome editing technologies in wheat. <i>Theoretical and Applied Genetics</i> , 2020, 133, 1603-1622.	1.8	28
1561	A simple and efficient workflow for generation of knockâ€n mutations in Jurkat T cells using CRISPR/Cas9. <i>Scandinavian Journal of Immunology</i> , 2020, 91, e12862.	1.3	9
1562	Understanding off-target effects through hybridization kinetics and thermodynamics. <i>Cell Biology and Toxicology</i> , 2020, 36, 11-15.	2.4	10
1563	Targeted Editing of Zebrafish Genes to Understand Gene Function and Human Disease Pathology. , 2020, , 637-647.		3
1564	Enhancement of Germplasm. , 2020, , 129-148.		1
1565	Monitoring of <i>Lactobacillus sanfranciscensis</i> strains during wheat and rye sourdough fermentations by CRISPR locus length polymorphism PCR. <i>International Journal of Food Microbiology</i> , 2020, 316, 108475.	2.1	17

#	ARTICLE	IF	CITATIONS
1566	Identifying Readers for (hydroxy)methylated DNA Using Quantitative Interaction Proteomics: Advances and Challenges Ahead. <i>Journal of Molecular Biology</i> , 2020, 432, 1792-1800.	2.0	7
1568	Hematopoietic stem cell gene therapy: The optimal use of lentivirus and gene editing approaches. <i>Blood Reviews</i> , 2020, 40, 100641.	2.8	14
1569	Anti-CRISPR proteins targeting the CRISPR-Cas system enrich the toolkit for genetic engineering. <i>FEBS Journal</i> , 2020, 287, 626-644.	2.2	25
1570	Regulation of gene expression by cis-acting long non-coding RNAs. <i>Nature Reviews Genetics</i> , 2020, 21, 102-117.	7.7	479
1571	Rapid and sensitive screening and identification of CRISPR/Cas9 edited rice plants using quantitative real-time PCR coupled with high resolution melting analysis. <i>Food Control</i> , 2020, 112, 107088.	2.8	13
1572	Multiplexed Knockouts in the Model Diatom <i>Phaeodactylum</i> by Episomal Delivery of a Selectable Cas9. <i>Frontiers in Microbiology</i> , 2020, 11, 5.	1.5	36
1573	Computational approaches for effective CRISPR guide RNA design and evaluation. <i>Computational and Structural Biotechnology Journal</i> , 2020, 18, 35-44.	1.9	119
1574	Cancer's epigenetic drugs: where are they in the cancer medicines?. <i>Pharmacogenomics Journal</i> , 2020, 20, 367-379.	0.9	49
1575	Synthetic biology technologies for beta cell generation. , 2020, , 407-420.		0
1576	Advances in therapeutic application of CRISPR-Cas9. <i>Briefings in Functional Genomics</i> , 2020, 19, 164-174.	1.3	9
1577	Quality Control Strategy for CRISPR-Cas9-Based Gene Editing Complicated by a Pseudogene. <i>Frontiers in Genetics</i> , 2019, 10, 1297.	1.1	5
1578	Immediate, multiplexed and sequential genome engineering facilitated by CRISPR/Cas9 in <i>Saccharomyces cerevisiae</i> . <i>Journal of Industrial Microbiology and Biotechnology</i> , 2020, 47, 83-96.	1.4	14
1579	Silencing integrated SIV proviral DNA with TAR-specific CRISPR tools. <i>Journal of Medical Primatology</i> , 2020, 49, 269-279.	0.3	1
1580	Vps13 is required for timely removal of nurse cell corpses. <i>Development (Cambridge)</i> , 2020, 147, .	1.2	6
1581	Sensing through Non-Sensing Ocular Ion Channels. <i>International Journal of Molecular Sciences</i> , 2020, 21, 6925.	1.8	11
1582	Cocoonase is indispensable for Lepidoptera insects breaking the sealed cocoon. <i>PLoS Genetics</i> , 2020, 16, e1009004.	1.5	13
1583	CRISPR-PCDup: a novel approach for simultaneous segmental chromosomal duplication in <i>Saccharomyces cerevisiae</i> . <i>AMB Express</i> , 2020, 10, 27.	1.4	0
1584	CAR Chase: Where Do Engineered Cells Go in Humans?. <i>Frontiers in Oncology</i> , 2020, 10, 577773.	1.3	7

#	ARTICLE	IF	CITATIONS
1585	Delivery of Tissue-Targeted Scalpels: Opportunities and Challenges for <i>In Vivo</i> CRISPR/Cas-Based Genome Editing. <i>ACS Nano</i> , 2020, 14, 9243-9262.	7.3	69
1586	Terminal Uridyl Transferase Mediated Site-Directed Access to Clickable Chromatin Employing CRISPR-dCas9. <i>Journal of the American Chemical Society</i> , 2020, 142, 13954-13965.	6.6	13
1587	Inducible Degradation of Target Proteins through a Tractable Affinity-Directed Protein Missile System. <i>Cell Chemical Biology</i> , 2020, 27, 1164-1180.e5.	2.5	42
1588	A Novel Chemically Differentiated Mouse Embryonic Stem Cell-Based Model to Study Liver Stages of <i>Plasmodium berghei</i> . <i>Stem Cell Reports</i> , 2020, 14, 1123-1134.	2.3	4
1589	Applying functional genomics to the study of lamprey development and sea lamprey population control. <i>Journal of Great Lakes Research</i> , 2021, 47, S639-S649.	0.8	13
1590	Development of a Single Construct System for Site-Directed RNA Editing Using MS2-ADAR. <i>International Journal of Molecular Sciences</i> , 2020, 21, 4943.	1.8	15
1591	Knockout of butyrophilin subfamily 1 member A1 (BTN1A1) alters lipid droplet formation and phospholipid composition in bovine mammary epithelial cells. <i>Journal of Animal Science and Biotechnology</i> , 2020, 11, 72.	2.1	19
1592	Genome editing technologies for value-added traits in plants. , 2020, , 51-67.		0
1593	Adequacy and sufficiency evaluation of existing EFSA guidelines for the molecular characterisation, environmental risk assessment and post-market environmental monitoring of genetically modified insects containing engineered gene drives. <i>EFSA Journal</i> , 2020, 18, e06297.	0.9	23
1594	Broadening the GMO risk assessment in the EU for genome editing technologies in agriculture. <i>Environmental Sciences Europe</i> , 2020, 32, .	2.6	43
1596	Proteomics Answers Which Yeast Genes Are Specific for Baking, Brewing, and Ethanol Production. <i>Bioengineering</i> , 2020, 7, 147.	1.6	6
1597	Neurons under genetic control: What are the next steps towards the treatment of movement disorders?. <i>Computational and Structural Biotechnology Journal</i> , 2020, 18, 3577-3589.	1.9	2
1598	A cassava protoplast system for screening genes associated with the response to South African cassava mosaic virus. <i>Virology Journal</i> , 2020, 17, 184.	1.4	15
1599	Application of CRISPR/Cas9 in Understanding Avian Viruses and Developing Poultry Vaccines. <i>Frontiers in Cellular and Infection Microbiology</i> , 2020, 10, 581504.	1.8	13
1600	Application of CRISPR-Cas9-Mediated Genome Editing for the Treatment of Myotonic Dystrophy Type 1. <i>Molecular Therapy</i> , 2020, 28, 2527-2539.	3.7	15
1601	RNAi and CRISPR/Cas9 as Functional Genomics Tools in the Neotropical Stink Bug, <i>Euschistus heros</i> . <i>Insects</i> , 2020, 11, 838.	1.0	14
1602	Artificial intelligence and synthetic biology approaches for human gut microbiome. <i>Critical Reviews in Food Science and Nutrition</i> , 2020, , 1-19.	5.4	8
1603	First Steps toward Uncovering Gene Doping with CRISPR/Cas by Identifying SpCas9 in Plasma via HPLC- ¹³ C- ¹⁵ N-MS. <i>Analytical Chemistry</i> , 2020, 92, 16322-16328.	3.2	13

#	ARTICLE	IF	CITATIONS
1604	CRISPR-Cas deployment in non-small cell lung cancer for target screening, validations, and discoveries. <i>Cancer Gene Therapy</i> , 2021, 28, 566-580.	2.2	4
1605	CRISPR/Cas9-Mediated Gene Knockout and Knockin Human iPSCs. <i>Methods in Molecular Biology</i> , 2020, , 559-574.	0.4	7
1606	Recent Advances of In Vitro Culture for the Application of New Breeding Techniques in Citrus. <i>Plants</i> , 2020, 9, 938.	1.6	23
1607	Programmable Live-Cell CRISPR Imaging with Toehold-Switch-Mediated Strand Displacement. <i>Angewandte Chemie</i> , 2020, 132, 20793-20799.	1.6	9
1608	Overcoming the delivery problem for therapeutic genome editing: Current status and perspective of non-viral methods. <i>Biomaterials</i> , 2020, 258, 120282.	5.7	58
1609	A Revolution toward Gene-Editing Technology and Its Application to Crop Improvement. <i>International Journal of Molecular Sciences</i> , 2020, 21, 5665.	1.8	62
1610	Advances on systems metabolic engineering of <i>Bacillus subtilis</i> as a chassis cell. <i>Synthetic and Systems Biotechnology</i> , 2020, 5, 245-251.	1.8	29
1611	Current Status and Challenges of DNA Base Editing Tools. <i>Molecular Therapy</i> , 2020, 28, 1938-1952.	3.7	72
1612	Host as a Unique Ethical Dimension of Germline Interventions. <i>American Journal of Bioethics</i> , 2020, 20, 51-53.	0.5	1
1613	Tropism-facilitated delivery of CRISPR/Cas9 system with chimeric antigen receptor-extracellular vesicles against B-cell malignancies. <i>Journal of Controlled Release</i> , 2020, 326, 455-467.	4.8	54
1614	Optical Control of a CRISPR/Cas9 System for Gene Editing by Using Photolabile crRNA. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 20895-20899.	7.2	31
1615	CRISPR-Cas9 System for Plant Genome Editing: Current Approaches and Emerging Developments. <i>Agronomy</i> , 2020, 10, 1033.	1.3	47
1616	The polyketide synthase PKS15 has a crucial role in cell wall formation in <i>Beauveria bassiana</i> . <i>Scientific Reports</i> , 2020, 10, 12630.	1.6	9
1617	Optical Control of a CRISPR/Cas9 System for Gene Editing by Using Photolabile crRNA. <i>Angewandte Chemie</i> , 2020, 132, 21081-21085.	1.6	25
1618	Programmable Live-Cell CRISPR Imaging with Toehold-Switch-Mediated Strand Displacement. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 20612-20618.	7.2	48
1619	CRISPR-Cas9 Genome Editing Tool for the Production of Industrial Biopharmaceuticals. <i>Molecular Biotechnology</i> , 2020, 62, 401-411.	1.3	3
1620	Improving CRISPR/Cas9-mediated genome editing efficiency in <i>Yarrowia lipolytica</i> using direct tRNA-sgRNA fusions. <i>Metabolic Engineering</i> , 2020, 62, 106-115.	3.6	31
1621	CRISPR-based metabolic editing: Next-generation metabolic engineering in plants. <i>Gene</i> , 2020, 759, 144993.	1.0	31

#	ARTICLE	IF	CITATIONS
1622	CRISPR/Cas9 in Male Factor Infertility. <i>Current Tissue Microenvironment Reports</i> , 2020, 1, 89-97.	1.3	3
1623	Modular engineering of <i>Shiraia bambusicola</i> for hypocrellin production through an efficient CRISPR system. <i>International Journal of Biological Macromolecules</i> , 2020, 165, 796-803.	3.6	11
1624	Functional genetic analysis in a jawless vertebrate, the sea lamprey: insights into the developmental evolution of early vertebrates. <i>Journal of Experimental Biology</i> , 2020, 223, .	0.8	13
1625	TriTag: an integrative tool to correlate chromatin dynamics and gene expression in living cells. <i>Nucleic Acids Research</i> , 2020, 48, e127-e127.	6.5	7
1626	Breeding, Genetics, and Genomics Approaches for Improving Fusarium Wilt Resistance in Major Grain Legumes. <i>Frontiers in Genetics</i> , 2020, 11, 1001.	1.1	30
1627	<i>In Vitro</i> Validation of Transgene Expression in Gene-Edited Pigs Using CRISPR Transcriptional Activators. <i>CRISPR Journal</i> , 2020, 3, 409-418.	1.4	3
1628	Treating primary immunodeficiencies with defects in NK cells: from stem cell therapy to gene editing. <i>Stem Cell Research and Therapy</i> , 2020, 11, 453.	2.4	3
1629	<i>In silico</i> Method in CRISPR/Cas System: An Expedite and Powerful Booster. <i>Frontiers in Oncology</i> , 2020, 10, 584404.	1.3	7
1630	<i>Brassica rapa</i> orphan genes largely affect soluble sugar metabolism. <i>Horticulture Research</i> , 2020, 7, 181.	2.9	19
1631	Efficient Transfection of Large Plasmids Encoding HIV-1 into Human Cells—A High Potential Transfection System Based on a Peptide Mimicking Cationic Lipid. <i>Pharmaceutics</i> , 2020, 12, 805.	2.0	2
1632	CRISPR-Cas9 enrichment and long read sequencing for fine mapping in plants. <i>Plant Methods</i> , 2020, 16, 121.	1.9	31
1633	CRISPR-Cas9 DNA Base-Editing and Prime-Editing. <i>International Journal of Molecular Sciences</i> , 2020, 21, 6240.	1.8	179
1634	Genome-wide CRISPR screens for the identification of therapeutic targets for cancer treatment. <i>Expert Opinion on Therapeutic Targets</i> , 2020, 24, 1147-1158.	1.5	4
1635	Adeno-associated virus-mediated gene delivery promotes S-phase entry-independent precise targeted integration in cardiomyocytes. <i>Scientific Reports</i> , 2020, 10, 15348.	1.6	20
1636	CRISPR-CBEI: a Designing and Analyzing Tool Kit for Cytosine Base Editor-Mediated Gene Inactivation. <i>MSystems</i> , 2020, 5, .	1.7	20
1637	Adenoviral vectors for <i>in vivo</i> delivery of CRISPR-Cas gene editors. <i>Journal of Controlled Release</i> , 2020, 327, 788-800.	4.8	26
1638	CAR-NK cells: A promising cellular immunotherapy for cancer. <i>EBioMedicine</i> , 2020, 59, 102975.	2.7	425
1639	Human Autoinflammatory Diseases Mediated by NLRP3-, Pyrin-, NLRP1-, and NLRC4-Inflammasome Dysregulation Updates on Diagnosis, Treatment, and the Respective Roles of IL-1 and IL-18. <i>Frontiers in Immunology</i> , 2020, 11, 1840.	2.2	67

#	ARTICLE	IF	CITATIONS
1640	CRISPR-mediated gene modification of hematopoietic stem cells with beta-thalassemia IVS-1-110 mutation. <i>Stem Cell Research and Therapy</i> , 2020, 11, 390.	2.4	9
1641	CRISPR/Cas technology promotes the various application of <i>Dunaliella salina</i> system. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 8621-8630.	1.7	14
1642	CRISPR and transposon in vivo screens for cancer drivers and therapeutic targets. <i>Genome Biology</i> , 2020, 21, 204.	3.8	14
1643	CRISPR-Assisted DNA Detection: A Novel dCas9-Based DNA Detection Technique. <i>CRISPR Journal</i> , 2020, 3, 487-502.	1.4	21
1644	Investigation of Brain Functions Using Genetically Encoded Tools. <i>Neuroscience and Behavioral Physiology</i> , 2020, 50, 1051-1056.	0.2	1
1645	CRISPR/Cas Genome Editing. <i>Concepts and Strategies in Plant Sciences</i> , 2020, , .	0.6	4
1646	Alcohol Sensitivity as an Endophenotype of Alcohol Use Disorder: Exploring Its Translational Utility between Rodents and Humans. <i>Brain Sciences</i> , 2020, 10, 725.	1.1	12
1647	Discovery of Nucleic Acid Binding Molecules from Combinatorial Biohybrid Nucleobase Peptide Libraries. <i>Journal of the American Chemical Society</i> , 2020, 142, 19642-19651.	6.6	22
1648	Reduced thermal tolerance in a coral carrying CRISPR-induced mutations in the gene for a heat-shock transcription factor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 28899-28905.	3.3	58
1649	CRISPR/Cas9 nickase-mediated efficient and seamless knock-in of lethal genes in the medaka fish <i>Oryzias latipes</i> . <i>Development Growth and Differentiation</i> , 2020, 62, 554-567.	0.6	11
1650	Systemic Delivery Technologies in Anti-Aging Medicine: Methods and Applications. <i>Healthy Ageing and Longevity</i> , 2020, , .	0.2	2
1651	Molecular mechanisms, off-target activities, and clinical potentials of genome editing systems. <i>Clinical and Translational Medicine</i> , 2020, 10, 412-426.	1.7	31
1652	Protein Engineering of DNA-Dependent Enzymes. <i>Advances in Experimental Medicine and Biology</i> , 2020, 1241, 19-33.	0.8	1
1653	Synergetic performance of isothermal amplification techniques and lateral flow approach for nucleic acid diagnostics. <i>Analytical Biochemistry</i> , 2020, 600, 113762.	1.1	23
1654	<i>Ustilaginoidea virens</i> : Insights into an Emerging Rice Pathogen. <i>Annual Review of Phytopathology</i> , 2020, 58, 363-385.	3.5	112
1655	Epithelial cell -derived microvesicles: A safe delivery platform of CRISPR/Cas9 conferring synergistic anti-tumor effect with sorafenib. <i>Experimental Cell Research</i> , 2020, 392, 112040.	1.2	30
1656	A versatile depigmentation, clearing, and labeling method for exploring nervous system diversity. <i>Science Advances</i> , 2020, 6, eaba0365.	4.7	56
1657	Development and Application of CRISPR/Cas in Microbial Biotechnology. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 711.	2.0	37

#	ARTICLE	IF	CITATIONS
1658	Genome Editing in Cereals: Approaches, Applications and Challenges. International Journal of Molecular Sciences, 2020, 21, 4040.	1.8	82
1659	CRISPR artificial splicing factors. Nature Communications, 2020, 11, 2973.	5.8	70
1660	Photochemical RNA Editing of C to U by Using Ultrafast Reversible RNA Photo-crosslinking in DNA/RNA Duplexes. ChemBioChem, 2020, 21, 3067-3070.	1.3	6
1661	Gene Therapy for Cystic Fibrosis: Progress and Challenges of Genome Editing. International Journal of Molecular Sciences, 2020, 21, 3903.	1.8	39
1663	CRISPR-mediated knockdown of miR-214 modulates cell fate in response to anti-cancer drugs in HPV-negative and HPV-positive cervical cancer cells. Journal of Biosciences, 2020, 45, 1.	0.5	5
1664	Oncology Scan: Radiation Biology and Genomic Predictors of Response. International Journal of Radiation Oncology Biology Physics, 2020, 107, 393-397.	0.4	0
1665	Synergistic gene editing in human iPS cells via cell cycle and DNA repair modulation. Nature Communications, 2020, 11, 2876.	5.8	31
1666	ITR-Seq, a next-generation sequencing assay, identifies genome-wide DNA editing sites in vivo following adeno-associated viral vector-mediated genome editing. BMC Genomics, 2020, 21, 239.	1.2	35
1667	Rapid and precise genome editing in a marine diatom, Thalassiosira pseudonana by Cas9 nickase (D10A). Algal Research, 2020, 47, 101855.	2.4	18
1668	Microbial biotechnology. , 2020, , 182-221.		2
1669	Brassica Improvement. , 2020, , .		4
1670	Applying CRISPR-Cas12a as a Signal Amplifier to Construct Biosensors for Non-DNA Targets in Ultralow Concentrations. ACS Sensors, 2020, 5, 970-977.	4.0	117
1671	Blackjack mutations improve the on-target activities of increased fidelity variants of SpCas9 with 5'-G-extended sgRNAs. Nature Communications, 2020, 11, 1223.	5.8	28
1672	The position of the target site for engineered nucleases improves the aberrant mRNA clearance in in vivo genome editing. Scientific Reports, 2020, 10, 4173.	1.6	3
1673	Mitigating off-target effects in CRISPR/Cas9-mediated in vivo gene editing. Journal of Molecular Medicine, 2020, 98, 615-632.	1.7	66
1674	Metabolic pathway engineering: Perspectives and applications. Computer Methods and Programs in Biomedicine, 2020, 192, 105436.	2.6	18
1675	Emerging approaches for restoration of hearing and vision. Physiological Reviews, 2020, 100, 1467-1525.	13.1	45
1676	Modeling tick vaccines: a key tool to improve protection efficacy. Expert Review of Vaccines, 2020, 19, 217-225.	2.0	10

#	ARTICLE	IF	CITATIONS
1677	Efficient SNP editing in haploid human pluripotent stem cells. <i>Journal of Assisted Reproduction and Genetics</i> , 2020, 37, 735-745.	1.2	4
1678	Genome editing of algal species by CRISPR Cas9 for biofuels. , 2020, , 163-176.		3
1679	Studying human and nonhuman primate evolutionary biology with powerful in vitro and in vivo functional genomics tools. <i>Evolutionary Anthropology</i> , 2020, 29, 143-158.	1.7	9
1680	Modulation of DNA and RNA by PNA. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2020, 30, 127064.	1.0	28
1681	Gene editing and central nervous system regeneration. , 2020, , 399-433.		0
1682	CRISPR/Cas9 Editing: Sparking Discussion on Safety in Light of the Need for New Therapeutics. <i>Human Gene Therapy</i> , 2020, 31, 794-807.	1.4	2
1683	Designing sgRNAs for CRISPR-BEST base editing applications with CRISPy-web 2.0. <i>Synthetic and Systems Biotechnology</i> , 2020, 5, 99-102.	1.8	20
1684	Transformation of naked mole-rat cells. <i>Nature</i> , 2020, 583, E1-E7.	13.7	31
1685	Reply to: Transformation of naked mole-rat cells. <i>Nature</i> , 2020, 583, E8-E13.	13.7	11
1686	Highly efficient generation of sheep with a defined FecBB mutation via adenine base editing. <i>Genetics Selection Evolution</i> , 2020, 52, 35.	1.2	21
1687	Gene Therapy Intervention in Neovascular Eye Disease: A Recent Update. <i>Molecular Therapy</i> , 2020, 28, 2120-2138.	3.7	38
1688	How Crisp is CRISPR? CRISPR-Cas-mediated crop improvement with special focus on nutritional traits. , 2020, , 159-197.		5
1689	Targeted genome editing using CRISPR-Cas9: Applications in fruit quality and stress resilience. , 2020, , 199-207.		0
1690	Development of a Self-Restricting CRISPR-Cas9 System to Reduce Off-Target Effects. <i>Molecular Therapy - Methods and Clinical Development</i> , 2020, 18, 390-401.	1.8	13
1691	Application of Various Delivery Methods for CRISPR/dCas9. <i>Molecular Biotechnology</i> , 2020, 62, 355-363.	1.3	11
1692	Systemic nanoparticle delivery of CRISPR-Cas9 ribonucleoproteins for effective tissue specific genome editing. <i>Nature Communications</i> , 2020, 11, 3232.	5.8	328
1693	A Handbook of Gene and Cell Therapy. , 2020, , .		9
1694	CRISPR-Cas9, CRISPRi and CRISPR-BEST-mediated genetic manipulation in streptomycetes. <i>Nature Protocols</i> , 2020, 15, 2470-2502.	5.5	50

#	ARTICLE	IF	CITATIONS
1695	Universal and Naked-Eye Gene Detection Platform Based on the Clustered Regularly Interspaced Short Palindromic Repeats/Cas12a/13a System. <i>Analytical Chemistry</i> , 2020, 92, 4029-4037.	3.2	184
1696	NipahVR: a resource of multi-targeted putative therapeutics and epitopes for the Nipah virus. <i>Database: the Journal of Biological Databases and Curation</i> , 2020, 2020, .	1.4	9
1697	Integration, abundance, and transmission of mutations and transgenes in a series of CRISPR/Cas9 soybean lines. <i>BMC Biotechnology</i> , 2020, 20, 10.	1.7	21
1698	Determining the Biological Mechanisms of Action for Environmental Exposures: Applying CRISPR/Cas9 to Toxicological Assessments. <i>Toxicological Sciences</i> , 2020, 175, 5-18.	1.4	11
1699	Protein engineering approaches for lignocellulosic ethanol biorefinery. , 2020, , 243-260.		2
1700	An importin β -like protein mediates lignin ϵ -modification ϵ -induced dwarfism in <i>Arabidopsis</i> . <i>Plant Journal</i> , 2020, 102, 1281-1293.	2.8	23
1701	Rewriting Human History and Empowering Indigenous Communities with Genome Editing Tools. <i>Genes</i> , 2020, 11, 88.	1.0	9
1702	Applications and explorations of CRISPR/Cas9 in CAR T-cell therapy. <i>Briefings in Functional Genomics</i> , 2020, 19, 175-182.	1.3	59
1703	Nanoparticles-mediated CRISPR/Cas9 delivery: Recent advances in cancer treatment. <i>Journal of Drug Delivery Science and Technology</i> , 2020, 56, 101533.	1.4	32
1704	The construction of a new oncolytic herpes simplex virus expressing murine interleukin ϵ 15 with gene ϵ -editing technology. <i>Journal of Medical Virology</i> , 2020, 92, 3617-3627.	2.5	15
1705	CRISPR-Cas9 Triggered Two-Step Isothermal Amplification Method for <i>E. coli</i> O157:H7 Detection Based on a Metal ϵ -Organic Framework Platform. <i>Analytical Chemistry</i> , 2020, 92, 3032-3041.	3.2	102
1706	Good guide, bad guide: spacer sequence-dependent cleavage efficiency of Cas12a. <i>Nucleic Acids Research</i> , 2020, 48, 3228-3243.	6.5	62
1707	Insight into Nephrocan Function in Mouse Endoderm Patterning. <i>International Journal of Molecular Sciences</i> , 2020, 21, 8.	1.8	14
1708	EMT signaling: potential contribution of CRISPR/Cas gene editing. <i>Cellular and Molecular Life Sciences</i> , 2020, 77, 2701-2722.	2.4	22
1709	Novel Approaches for Identifying the Molecular Background of Schizophrenia. <i>Cells</i> , 2020, 9, 246.	1.8	13
1710	Single-Molecule Kinetics Show DNA Pyrimidine Content Strongly Affects RNA:DNA and TNA:DNA Heteroduplex Dissociation Rates. <i>ACS Synthetic Biology</i> , 2020, 9, 249-253.	1.9	4
1711	CRISPR-mediated gene correction links the ATP7A M1311V mutations with amyotrophic lateral sclerosis pathogenesis in one individual. <i>Communications Biology</i> , 2020, 3, 33.	2.0	6
1712	Transplantation of hMSCs Genome Edited with LEF1 Improves Cardio-Protective Effects in Myocardial Infarction. <i>Molecular Therapy - Nucleic Acids</i> , 2020, 19, 1186-1197.	2.3	25

#	ARTICLE	IF	CITATIONS
1713	Considerations in adapting CRISPR/Cas9 in nongenetic model plant systems. <i>Applications in Plant Sciences</i> , 2020, 8, e11314.	0.8	56
1714	Biolistic DNA Delivery in Plants. <i>Methods in Molecular Biology</i> , 2020, , .	0.4	9
1715	Yeast metabolic engineering for the production of pharmaceutically important secondary metabolites. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 4659-4674.	1.7	36
1716	Selective organ targeting (SORT) nanoparticles for tissue-specific mRNA delivery and CRISPR-Cas gene editing. <i>Nature Nanotechnology</i> , 2020, 15, 313-320.	15.6	932
1717	The gluconeogenic enzyme PCK1 phosphorylates INSIG1/2 for lipogenesis. <i>Nature</i> , 2020, 580, 530-535.	13.7	171
1718	Methodological approaches to understand the molecular mechanism of structural plasticity of dendritic spines. <i>European Journal of Neuroscience</i> , 2021, 54, 6902-6911.	1.2	5
1719	How I curate: applying American Society of Hematology-Clinical Genome Resource Myeloid Malignancy Variant Curation Expert Panel rules for RUNX1 variant curation for germline predisposition to myeloid malignancies. <i>Haematologica</i> , 2020, 105, 870-887.	1.7	23
1720	CRISPR-Cas9-mediated pinpoint microbial genome editing aided by target-mismatched sgRNAs. <i>Genome Research</i> , 2020, 30, 768-775.	2.4	20
1721	Combinatorial Modular Pathway Engineering for Guanosine 5'-Diphosphate-fucose Production in Recombinant <i>Escherichia coli</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 5668-5675.	2.4	24
1722	Successive cleavage of A β -amyloid precursor protein by A β -secretase. <i>Seminars in Cell and Developmental Biology</i> , 2020, 105, 64-74.	2.3	29
1723	Livestock Gene Editing by One-step Embryo Manipulation. <i>Journal of Equine Veterinary Science</i> , 2020, 89, 103025.	0.4	22
1724	Perturbing proteomes at single residue resolution using base editing. <i>Nature Communications</i> , 2020, 11, 1871.	5.8	49
1725	Crosstalk Between Immunity System Cells and Pancreas. Transformation of Stem Cells Used in the 3D Bioprinting Process as a Personalized Treatment Method for Type 1 Diabetes. <i>Archivum Immunologiae Et Therapiae Experimentalis</i> , 2020, 68, 13.	1.0	3
1726	Gene Therapy Clinical Trials. , 2020, , 285-301.		3
1727	Dietary lipids fuel GPX4-restricted enteritis resembling Crohn's disease. <i>Nature Communications</i> , 2020, 11, 1775.	5.8	143
1728	In vitro transcribed mRNA for expression of designer nucleases: Advantages as a novel therapeutic for the management of chronic HBV infection. <i>Advanced Drug Delivery Reviews</i> , 2021, 168, 134-146.	6.6	11
1729	Animal models of psoriasis highlights and drawbacks. <i>Journal of Allergy and Clinical Immunology</i> , 2021, 147, 439-455.	1.5	51
1730	Core Hairpin Structure of SpCas9 sgRNA Functions in a Sequence- and Spatial Conformation-Dependent Manner. <i>SLAS Technology</i> , 2021, 26, 92-102.	1.0	4

#	ARTICLE	IF	CITATIONS
1731	CRISPR Tools for Physiology and Cell State Changes: Potential of Transcriptional Engineering and Epigenome Editing. <i>Physiological Reviews</i> , 2021, 101, 177-211.	13.1	13
1732	Combi-CRISPR: combination of NHEJ and HDR provides efficient and precise plasmid-based knock-ins in mice and rats. <i>Human Genetics</i> , 2021, 140, 277-287.	1.8	31
1733	Two VOZ transcription factors link an E3 ligase and an NLR immune receptor to modulate immunity in rice. <i>Molecular Plant</i> , 2021, 14, 253-266.	3.9	43
1734	Phytoremediation using genetically engineered plants to remove metals: a review. <i>Environmental Chemistry Letters</i> , 2021, 19, 669-698.	8.3	55
1735	A versatile biosensing platform coupling CRISPR-Cas12a and aptamers for detection of diverse analytes. <i>Science Bulletin</i> , 2021, 66, 69-77.	4.3	47
1736	Antiviral therapies: advances and perspectives. <i>Fundamental and Clinical Pharmacology</i> , 2021, 35, 305-320.	1.0	30
1737	The governance of genome editing techniques for the European bio-based industry. <i>Journal of Environmental Policy and Planning</i> , 2021, 23, 165-180.	1.5	1
1738	Metabolic Engineering Approaches for Improvement of Probiotics Functionality. <i>Microorganisms for Sustainability</i> , 2021, , 225-240.	0.4	1
1739	Advances in Probiotics for Sustainable Food and Medicine. <i>Microorganisms for Sustainability</i> , 2021, , .	0.4	3
1740	Web-Based Base Editing Toolkits: BE-Designer and BE-Analyzer. <i>Methods in Molecular Biology</i> , 2021, 2189, 81-88.	0.4	9
1741	Strategies in the delivery of Cas9 ribonucleoprotein for CRISPR/Cas9 genome editing. <i>Theranostics</i> , 2021, 11, 614-648.	4.6	200
1742	Impact of Parental Exposure on Offspring Health in Humans. <i>Trends in Genetics</i> , 2021, 37, 373-388.	2.9	50
1743	Tools for experimental and computational analyses of off-target editing by programmable nucleases. <i>Nature Protocols</i> , 2021, 16, 10-26.	5.5	52
1744	An Ultralocalized Cas13a Assay Enables Universal and Nucleic Acid Amplification-Free Single-Molecule RNA Diagnostics. <i>ACS Nano</i> , 2021, 15, 1167-1178.	7.3	187
1745	Highly efficient multiplex genetic engineering of porcine primary fetal fibroblasts. <i>Surgery Open Science</i> , 2021, 4, 26-31.	0.5	0
1747	Using Interactome Big Data to Crack Genetic Mysteries and Enhance Future Crop Breeding. <i>Molecular Plant</i> , 2021, 14, 77-94.	3.9	34
1748	A One-Pot CRISPR/Cas9-Typing PCR for DNA Detection and Genotyping. <i>Journal of Molecular Diagnostics</i> , 2021, 23, 46-60.	1.2	16
1749	Application of genomics and transcriptomics to accelerate development of clubroot resistant canola. <i>Canadian Journal of Plant Pathology</i> , 2021, 43, 189-208.	0.8	9

#	ARTICLE	IF	CITATIONS
1750	Gene editing in filamentous fungi and oomycetes using CRISPR-Cas technology. , 2021, , 723-753.		1
1751	CRISPR/Cas-Mediated Abiotic Stress Tolerance in Crops. , 2021, , 177-211.		4
1752	Development of insect cell line using CRISPR technology. Progress in Molecular Biology and Translational Science, 2021, 180, 1-20.	0.9	3
1753	Epigenetics and regenerative medicine. , 2021, , 853-872.		0
1754	CRISPR/Cas System: An Introduction. , 2021, , 1-35.		5
1755	Alternatives for obtaining a continuous cell line from Apis mellifera. Ciencia Rural, 2021, 51, .	0.3	1
1756	Imaging of nanoparticle uptake and kinetics of intracellular trafficking in individual cells. Nanoscale, 2021, 13, 10436-10446.	2.8	28
1757	Functional Genomics Approaches to Elucidate Vulnerabilities of Intrinsic and Acquired Chemotherapy Resistance. Cells, 2021, 10, 260.	1.8	4
1758	Is subretinal AAV gene replacement still the only viable treatment option for choroideremia?. Expert Opinion on Orphan Drugs, 2021, 9, 13-24.	0.5	4
1759	Bovine iPSC and applications in precise genome engineering. , 2021, , 129-148.		0
1760	CRISPR-Cas epigenome editing: improving crop resistance to pathogens. , 2021, , 65-106.		0
1761	CRISPR-Based Genetic Manipulation of Candida Species: Historical Perspectives and Current Approaches. Frontiers in Genome Editing, 2020, 2, 606281.	2.7	22
1762	Postnatal therapeutic approaches in genetic neurodevelopmental disorders. Neural Regeneration Research, 2021, 16, 414.	1.6	5
1763	CRISPR genome engineering for retinal diseases. Progress in Molecular Biology and Translational Science, 2021, 182, 29-79.	0.9	13
1764	CRISPR-mediated Labeling of Cells in Chick Embryos Based on Selectively Expressed Genes. Bio-protocol, 2021, 11, e4105.	0.2	3
1765	Generation of an Allelic Series at the Ahr Locus Using an Edited Recombinant Approach. Toxicological Sciences, 2021, 180, 239-251.	1.4	6
1766	Flexibly bounded rationality. , 2021, , 47-59.		0
1767	Genome editing of immune cells using CRISPR/Cas9. BMB Reports, 2021, 54, 59-69.	1.1	8

#	ARTICLE	IF	CITATIONS
1769	Functional Comparison between VP64-dCas9-VP64 and dCas9-VP192 CRISPR Activators in Human Embryonic Kidney Cells. <i>International Journal of Molecular Sciences</i> , 2021, 22, 397.	1.8	5
1770	A Highly Specific DNA Aptamer for RNase H2 from <i>Clostridium difficile</i> . <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 9464-9471.	4.0	17
1771	CRISPR/dCas9-mediated transposition with specificity and efficiency of site-directed genomic insertions. <i>FASEB Journal</i> , 2021, 35, e21359.	0.2	4
1772	Approach for in vivo delivery of CRISPR/Cas system: a recent update and future prospect. <i>Cellular and Molecular Life Sciences</i> , 2021, 78, 2683-2708.	2.4	29
1773	Genome Editing: A Tool from the Vault of Science for Engineering Climate-Resilient Cereals. , 2021, , 45-72.		11
1774	Genome Editing in Human Induced Pluripotent Stem Cells (hiPSCs). <i>Methods in Molecular Biology</i> , 2021, 2320, 235-245.	0.4	8
1775	Genome-wide detection and analysis of CRISPR-Cas off-targets. <i>Progress in Molecular Biology and Translational Science</i> , 2021, 181, 31-43.	0.9	11
1776	Modulating Cas9 activity for precision gene editing. <i>Progress in Molecular Biology and Translational Science</i> , 2021, 181, 89-127.	0.9	2
1777	CRISPR/Cas-Based Insect Resistance in Crops. , 2021, , 117-149.		3
1778	Magnetic Forces Enable Control of Biological Processes In Vivo. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2021, 88, 030801.	1.1	2
1779	Aberrant regulation of a poison exon caused by a non-coding variant in a mouse model of Scn1a-associated epileptic encephalopathy. <i>PLoS Genetics</i> , 2021, 17, e1009195.	1.5	18
1780	Fungal genome editing using CRISPR-Cas nucleases: a new tool for the management of plant diseases. , 2021, , 333-360.		1
1781	Strain Improvement and Genetic Engineering of <i>Trichoderma</i> for Industrial Applications. , 2021, , 505-517.		4
1782	CRISPR-Cas9-based genetic engineering for crop improvement under drought stress. <i>Bioengineered</i> , 2021, 12, 5814-5829.	1.4	17
1783	CRISPR/Cas9 mediated knock-out of VPREB1 gene induces a cytotoxic effect in myeloma cells. <i>PLoS ONE</i> , 2021, 16, e0245349.	1.1	4
1784	Microbial single-strand annealing proteins enable CRISPR gene-editing tools with improved knock-in efficiencies and reduced off-target effects. <i>Nucleic Acids Research</i> , 2021, 49, e36-e36.	6.5	17
1785	Improving lignocellulosic biofuel production by CRISPR/Cas9-mediated lignin modification in barley. <i>GCB Bioenergy</i> , 2021, 13, 742-752.	2.5	32
1786	Genome-editing approaches and applications: a brief review on CRISPR technology and its role in cancer. <i>3 Biotech</i> , 2021, 11, 146.	1.1	7

#	ARTICLE	IF	CITATIONS
1787	Mini-Review Regarding the Applicability of Genome Editing Techniques Developed for Studying Infertility. <i>Diagnostics</i> , 2021, 11, 246.	1.3	3
1788	Precise base editing for the in vivo study of developmental signaling and human pathologies in zebrafish. <i>ELife</i> , 2021, 10, .	2.8	26
1789	CRISPR Takes the Front Seat in CART-Cell Development. <i>BioDrugs</i> , 2021, 35, 113-124.	2.2	10
1790	Innovative Therapeutic Approaches for Duchenne Muscular Dystrophy. <i>Journal of Clinical Medicine</i> , 2021, 10, 820.	1.0	40
1791	Gene-based therapies for neurodegenerative diseases. <i>Nature Neuroscience</i> , 2021, 24, 297-311.	7.1	83
1792	Efficient CRISPR/Cas9 mediated Pooled-sgRNAs assembly accelerates targeting multiple genes related to male sterility in cotton. <i>Plant Methods</i> , 2021, 17, 16.	1.9	26
1793	Developing models of cholangiocarcinoma to close the translational gap in cancer research. <i>Expert Opinion on Investigational Drugs</i> , 2021, 30, 439-450.	1.9	3
1794	Enhancement and Identification of Microbial Secondary Metabolites. , 0, , .		2
1795	Baboon Envelope Pseudotyped "Nanoblades" 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. <i>Frontiers in Genome Editing</i> , 2021, 3, 604371.	2.7	25
1796	Updates in <i>Paracoccidioides</i> Biology and Genetic Advances in Fungus Manipulation. <i>Journal of Fungi (Basel, Switzerland)</i> , 2021, 7, 116.	1.5	10
1797	Accurate deep learning off-target prediction with novel sgRNA-DNA sequence encoding in CRISPR-Cas9 gene editing. <i>Bioinformatics</i> , 2021, 37, 2299-2307.	1.8	25
1798	The CRISPR revolution and its potential impact on global health security. <i>Pathogens and Global Health</i> , 2021, 115, 80-92.	1.0	8
1800	Thermophilic microbial deconstruction and conversion of natural and transgenic lignocellulose. <i>Environmental Microbiology Reports</i> , 2021, 13, 272-293.	1.0	9
1801	DIVERSIFY: A Fungal Multispecies Gene Expression Platform. <i>ACS Synthetic Biology</i> , 2021, 10, 579-588.	1.9	19
1802	Genome editing of avian species: implications for animal use and welfare. <i>Laboratory Animals</i> , 2021, , 002367722199840.	0.5	8
1803	CRISPR/Cas: Advances, Limitations, and Applications for Precision Cancer Research. <i>Frontiers in Medicine</i> , 2021, 8, 649896.	1.2	48
1804	Genome-Editing Strategies for Treating Human Retinal Degenerations. <i>Human Gene Therapy</i> , 2021, 32, 247-259.	1.4	23
1805	Epigenetic editing: Dissecting chromatin function in context. <i>BioEssays</i> , 2021, 43, e2000316.	1.2	22

#	ARTICLE	IF	CITATIONS
1806	Genome editing reagent delivery in plants. <i>Transgenic Research</i> , 2021, 30, 321-335.	1.3	35
1807	Application of CRISPR/Cas System in the Metabolic Engineering of Small Molecules. <i>Molecular Biotechnology</i> , 2021, 63, 459-476.	1.3	6
1808	An optimized CRISPR/Cas9 approach for precise genome editing in neurons. <i>ELife</i> , 2021, 10, .	2.8	39
1809	Recent trends in cancer therapy: A review on the current state of gene delivery. <i>Life Sciences</i> , 2021, 269, 119087.	2.0	108
1810	MiniCAFE, a CRISPR/Cas9-based compact and potent transcriptional activator, elicits gene expression <i>in vivo</i> . <i>Nucleic Acids Research</i> , 2021, 49, 4171-4185.	6.5	28
1811	Development and application of a highly efficient CRISPR-Cas9 system for genome engineering in <i>Bacillus megaterium</i> . <i>Journal of Biotechnology</i> , 2021, 329, 170-179.	1.9	16
1812	Glial insulin regulates cooperative or antagonistic Golden goal/Flamingo interactions during photoreceptor axon guidance. <i>ELife</i> , 2021, 10, .	2.8	4
1813	The effect of 5-substituent in cytosine to the photochemical C to U transition in DNA strand. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2021, 35, 127812.	1.0	0
1814	<i>Ex vivo</i> gene modification therapy for genetic skin diseases—recent advances in gene modification technologies and delivery. <i>Experimental Dermatology</i> , 2021, 30, 887-896.	1.4	11
1815	Genome Editing Strategies Towards Enhancement of Rice Disease Resistance. <i>Rice Science</i> , 2021, 28, 133-145.	1.7	14
1816	CRISPR-Cas12a System for Biosensing and Gene Regulation. <i>Chemistry - an Asian Journal</i> , 2021, 16, 857-867.	1.7	19
1817	Development of a CRISPR-Cas9 system for genome editing in <i>Escherichia coli</i> . <i>Biotechnology Letters</i> , 2021, 43, 123-128.	1.3	11
1818	Chemical Modification and Transformation Strategies of Guide RNAs in CRISPR-Cas9 Gene Editing Systems. <i>ChemPlusChem</i> , 2021, 86, 587-600.	1.3	5
1819	Progress of genome editing technology and developmental biology useful for radiation research. <i>Journal of Radiation Research</i> , 2021, 62, i53-i63.	0.8	1
1820	CRISPR-Cas13a mediated targeting of hepatitis C virus internal-ribosomal entry site (IRES) as an effective antiviral strategy. <i>Biomedicine and Pharmacotherapy</i> , 2021, 136, 111239.	2.5	22
1821	CRISPR/Cas9 Technology as a Modern Genetic Manipulation Tool for Recapitulating of Neurodegenerative Disorders in Large Animal Models. <i>Current Gene Therapy</i> , 2021, 21, 130-148.	0.9	6
1822	Simultaneous knockout of multiple <i>LHCf</i> genes using single sgRNAs and engineering of a high-fidelity Cas9 for precise genome editing in marine algae. <i>Plant Biotechnology Journal</i> , 2021, 19, 1658-1669.	4.1	19
1823	CRISPR/CAS System, a Novel Tool of Targeted Therapy of Drug-resistant Lung Cancer. <i>Advanced Pharmaceutical Bulletin</i> , 2021, , .	0.6	4

#	ARTICLE	IF	CITATIONS
1825	Delivery technologies to engineer natural killer cells for cancer immunotherapy. <i>Cancer Gene Therapy</i> , 2021, 28, 947-959.	2.2	20
1826	Microbial Arsenal of Antiviral Defenses. Part II. <i>Biochemistry (Moscow)</i> , 2021, 86, 449-470.	0.7	32
1828	A Consensus Model of Homology-Directed Repair Initiated by CRISPR/Cas Activity. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3834.	1.8	3
1829	Novel approaches to liver disease diagnosis and modeling. <i>Translational Gastroenterology and Hepatology</i> , 2021, 6, 19-19.	1.5	7
1831	PE-Designer and PE-Analyzer: web-based design and analysis tools for CRISPR prime editing. <i>Nucleic Acids Research</i> , 2021, 49, W499-W504.	6.5	57
1832	GTR 2.0: gRNA-tRNA Array and Cas9-NG Based Genome Disruption and Single-Nucleotide Conversion in <i>Saccharomyces cerevisiae</i> . <i>ACS Synthetic Biology</i> , 2021, 10, 1328-1337.	1.9	10
1833	Integration of multiplex PCR and CRISPR-Cas allows highly specific detection of multidrug-resistant <i>Acinetobacter Baumannii</i> . <i>Sensors and Actuators B: Chemical</i> , 2021, 334, 129600.	4.0	23
1834	Understanding DNA organization, damage, and repair with super-resolution fluorescence microscopy. <i>Methods and Applications in Fluorescence</i> , 2021, 9, 032002.	1.1	10
1835	Constraints in Clinical Cardiology and Personalized Medicine: Interrelated Concepts in Clinical Cardiology. <i>Neurology International</i> , 2021, 11, 50-67.	0.2	1
1836	Evaluating the cleavage efficacy of CRISPR-Cas9 sgRNAs targeting ineffective regions of <i>Arabidopsis thaliana</i> genome. <i>PeerJ</i> , 2021, 9, e11409.	0.9	5
1837	T-complex protein 1 subunit zeta-2 (CCT6B) deficiency induces murine teratospermia. <i>PeerJ</i> , 2021, 9, e11545.	0.9	7
1838	All- <i>One</i> Dendrimer-Based Lipid Nanoparticles Enable Precise HDR-Mediated Gene Editing In Vivo. <i>Advanced Materials</i> , 2021, 33, e2006619.	11.1	52
1839	Human iPSCs and Genome Editing Technologies for Precision Cardiovascular Tissue Engineering. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 639699.	1.8	16
1840	Valosin-Containing Protein Stabilizes Mutant p53 to Promote Pancreatic Cancer Growth. <i>Cancer Research</i> , 2021, 81, 4041-4053.	0.4	10
1841	Loss of Deacetylation Enzymes Hdac6 and Sirt2 Promotes Acetylation of Cytoplasmic Tubulin, but Suppresses Axonemal Acetylation in Zebrafish Cilia. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 676214.	1.8	5
1842	Tools and Techniques for Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)/COVID-19 Detection. <i>Clinical Microbiology Reviews</i> , 2021, 34, .	5.7	205
1843	CRISPR/Cas9-mediated correction of MITF homozygous point mutation in a Waardenburg syndrome 2A pig model. <i>Molecular Therapy - Nucleic Acids</i> , 2021, 24, 986-999.	2.3	10
1844	Structure-based functional mechanisms and biotechnology applications of anti-CRISPR proteins. <i>Nature Reviews Molecular Cell Biology</i> , 2021, 22, 563-579.	16.1	56

#	ARTICLE	IF	CITATIONS
1845	Genetic Manipulation as a Tool to Unravel <i>Candida parapsilosis</i> Species Complex Virulence and Drug Resistance: State of the Art. <i>Journal of Fungi (Basel, Switzerland)</i> , 2021, 7, 459.	1.5	6
1846	Specialized Metabolites and Valuable Molecules in Crop and Medicinal Plants: The Evolution of Their Use and Strategies for Their Production. <i>Genes</i> , 2021, 12, 936.	1.0	20
1848	CRISPR-Cas genome-editing tool in plant abiotic stress-tolerance. <i>Plant Gene</i> , 2021, 26, 100286.	1.4	13
1850	<i>Streptomyces</i> : host for refactoring of diverse bioactive secondary metabolites. <i>3 Biotech</i> , 2021, 11, 340.	1.1	10
1851	Modeling pancreatic pathophysiology using genome editing of adult stem cell-derived and induced pluripotent stem cell (iPSC)-derived organoids. <i>American Journal of Physiology - Renal Physiology</i> , 2021, 320, G1142-G1150.	1.6	4
1852	Applications and developments of gene therapy drug delivery systems for genetic diseases. <i>Asian Journal of Pharmaceutical Sciences</i> , 2021, 16, 687-703.	4.3	45
1853	Impact of CRISPR-Cas9-Based Genome Engineering in Farm Animals. <i>Veterinary Sciences</i> , 2021, 8, 122.	0.6	16
1855	Highly Photoluminescent Nitrogen- and Zinc-Doped Carbon Dots for Efficient Delivery of CRISPR/Cas9 and mRNA. <i>Bioconjugate Chemistry</i> , 2021, 32, 1875-1887.	1.8	17
1858	Metabolic engineering for the synthesis of steviol glycosides: current status and future prospects. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 5367-5381.	1.7	12
1859	Cell detachment from monolayer- and bilayer-type gold nanoparticle-containing collagen coatings by visible laser irradiation for cell sorting applications. <i>Polymer Journal</i> , 0, , .	1.3	0
1860	Site-Specific Scissors Based on Myeloperoxidase for Phosphorothioate DNA. <i>Journal of the American Chemical Society</i> , 2021, 143, 12361-12368.	6.6	14
1861	Lipid Nanoparticle Spherical Nucleic Acids for Intracellular DNA and RNA Delivery. <i>Nano Letters</i> , 2021, 21, 6584-6591.	4.5	50
1862	Targeted mutagenesis in <i>Nicotiana tabacum</i> ADF gene using shockwave-mediated ribonucleoprotein delivery increases osmotic stress tolerance. <i>Physiologia Plantarum</i> , 2021, 173, 993-1007.	2.6	6
1863	Rodent genetic models of Ah receptor signaling. <i>Drug Metabolism Reviews</i> , 2021, 53, 350-374.	1.5	7
1864	Three-dimensional CRISPR screening reveals epigenetic interaction with anti-angiogenic therapy. <i>Communications Biology</i> , 2021, 4, 878.	2.0	6
1865	Splice-switching as cancer therapy. <i>Current Opinion in Pharmacology</i> , 2021, 59, 140-148.	1.7	10
1866	Synthesis and characterization of vitamin D ₃ -functionalized carbon dots for CRISPR/Cas9 delivery. <i>Nanomedicine</i> , 2021, 16, 1673-1690.	1.7	6
1867	Multiplex Genome Editing in Yeast by CRISPR/Cas9 – A Potent and Agile Tool to Reconstruct Complex Metabolic Pathways. <i>Frontiers in Plant Science</i> , 2021, 12, 719148.	1.7	26

#	ARTICLE	IF	CITATIONS
1868	Ferroptosis: A Trigger of Proinflammatory State Progression to Immunogenicity in Necroinflammatory Disease. <i>Frontiers in Immunology</i> , 2021, 12, 701163.	2.2	34
1869	Genome editing of a hybridoma cell line via the CRISPR/Cas9 system: A new approach for constitutive high-level expression of heterologous proteins in eukaryotic system. <i>Veterinary Immunology and Immunopathology</i> , 2021, 238, 110286.	0.5	1
1870	Enhanced genome editing efficiency of CRISPR PLUS: Cas9 chimeric fusion proteins. <i>Scientific Reports</i> , 2021, 11, 16199.	1.6	12
1871	Non-Coding Variants in Cancer: Mechanistic Insights and Clinical Potential for Personalized Medicine. <i>Non-coding RNA</i> , 2021, 7, 47.	1.3	6
1872	Harnessing model organism genomics to underpin the machine learning-based prediction of essential genes in eukaryotes – Biotechnological implications. <i>Biotechnology Advances</i> , 2022, 54, 107822.	6.0	9
1873	Challenges and Approaches to Crop Improvement Through C3-to-C4 Engineering. <i>Frontiers in Plant Science</i> , 2021, 12, 715391.	1.7	37
1874	Designing libraries for pooled CRISPR functional screens of long noncoding RNAs. <i>Mammalian Genome</i> , 2022, 33, 312-327.	1.0	2
1875	In vitro genome editing rescues parkinsonism phenotypes in induced pluripotent stem cells-derived dopaminergic neurons carrying LRRK2 p.G2019S mutation. <i>Stem Cell Research and Therapy</i> , 2021, 12, 508.	2.4	16
1876	Applications of CRISPR-Cas9 Technology to Genome Editing in Glioblastoma Multiforme. <i>Cells</i> , 2021, 10, 2342.	1.8	12
1877	Sono – Controllable and ROS – Sensitive CRISPR – Cas9 Genome Editing for Augmented/Synergistic Ultrasound Tumor Nanotherapy. <i>Advanced Materials</i> , 2021, 33, e2104641.	11.1	85
1878	CRISPR-Cas9 Genome Engineering: Trends in Medicine and Health. <i>Mini-Reviews in Medicinal Chemistry</i> , 2022, 22, 410-421.	1.1	10
1879	Stem cell therapy in liver regeneration: Focus on mesenchymal stem cells and induced pluripotent stem cells. , 2022, 232, 108004.		31
1880	Efficient genome editing using endogenous U6 snRNA promoter-driven CRISPR/Cas9 sgRNA in <i>Sclerotinia sclerotiorum</i> . <i>Fungal Genetics and Biology</i> , 2021, 154, 103598.	0.9	7
1881	A Methylation-Directed, Synthetic Pap Switch Based on Self-Complementary Regulatory DNA Reconstituted in an All <i>E. coli</i> Cell-Free Expression System. <i>ACS Synthetic Biology</i> , 2021, 10, 2725-2739.	1.9	1
1882	MULTIPLEXED SIV-SPECIFIC PAIRED RNA-GUIDED CAS9 NICKASES INACTIVATE PROVIRAL DNA. <i>Journal of Virology</i> , 2021, 95, e0088221.	1.5	2
1883	ZBED6 regulates <i>Igf2</i> expression partially through its regulation of miR483 expression. <i>Scientific Reports</i> , 2021, 11, 19484.	1.6	5
1884	Biotechnological interventions for inducing abiotic stress tolerance in crops. <i>Plant Gene</i> , 2021, 27, 100315.	1.4	17
1885	Advanced mesoporous silica nanocarriers in cancer theranostics and gene editing applications. <i>Journal of Controlled Release</i> , 2021, 337, 193-211.	4.8	45

#	ARTICLE	IF	CITATIONS
1886	A versatile genetic engineering toolkit for E. coli based on CRISPR-prime editing. Nature Communications, 2021, 12, 5206.	5.8	49
1887	Spectroscopic, thermodynamic and kinetic analysis of selective triplex formation by peptide nucleic acid with double-stranded RNA over its DNA counterpart. Biopolymers, 2022, 113, e23474.	1.2	3
1888	Advances in base editing with an emphasis on an AAV-based strategy. Methods, 2021, 194, 56-64.	1.9	1
1889	On computational classification of genetic cardiac diseases applying iPSC cardiomyocytes. Computer Methods and Programs in Biomedicine, 2021, 210, 106367.	2.6	4
1890	Latest progress in the study of nanoparticle-based delivery of the CRISPR/Cas9 system. Methods, 2021, 194, 48-55.	1.9	6
1891	Genetical engineering for NK and T cell immunotherapy with CRISPR/Cas9 technology: Implications and challenges. Cellular Immunology, 2021, 369, 104436.	1.4	5
1892	A CRISPR/dCas9-assisted system to clone toxic genes in Escherichia coli. Biochimica Et Biophysica Acta - General Subjects, 2021, 1865, 129994.	1.1	0
1893	Engineering acetogens for biofuel production: From cellular biology to process improvement. Renewable and Sustainable Energy Reviews, 2021, 151, 111563.	8.2	7
1894	CRISPR-Cas9-mediated genome editing technology for abiotic stress tolerance in crop plant. , 2022, , 331-354.		4
1895	CRISPR-Cas9: A fascinating journey from bacterial immune system to human gene editing. Progress in Molecular Biology and Translational Science, 2021, 178, 63-83.	0.9	6
1896	Base editing: a brief review and a practical example. Journal of Biomedical Research, 2021, 35, 107.	0.7	0
1897	CRISPR-based tools for microbial cell factories. , 2021, , 95-113.		0
1898	CRISPR/Cas-Based Techniques in Plants. , 2021, , 37-61.		3
1899	Applications of innovative gene-editing technologies in respiratory diseases. , 2021, , 45-59.		0
1900	Expanding the Knowledge on the Skillful Yeast Cyberlindnera jadinii. Journal of Fungi (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tj 50 182 T	1.5	15
1901	enAsCas12a Enables CRISPR-Directed Evolution to Screen for Functional Drug Resistance Mutations in Sequences Inaccessible to SpCas9. Molecular Therapy, 2021, 29, 208-224.	3.7	8
1902	A genome-wide CRISPR-based screen identifies <i>KAT7</i> as a driver of cellular senescence. Science Translational Medicine, 2021, 13, .	5.8	79
1903	Versatile CRISPR/Cas9-mediated mosaic analysis by gRNA-induced crossing-over for unmodified genomes. PLoS Biology, 2021, 19, e3001061.	2.6	15

#	ARTICLE	IF	CITATIONS
1904	CRISPR/Cas system for the development of disease resistance in horticulture crops. , 2021, , 107-128.		1
1906	Multiplexed CRISPR-Cas9 system in a single adeno-associated virus to simultaneously knock out redundant clock genes. <i>Scientific Reports</i> , 2021, 11, 2575.	1.6	6
1907	The <i>Epichloa festucae</i> Antifungal Protein Efe-AfpA Is also a Possible Effector Protein Required for the Interaction of the Fungus with Its Host Grass <i>Festuca rubra</i> subsp. <i>rubra</i> . <i>Microorganisms</i> , 2021, 9, 140.	1.6	9
1908	Functional genomics approaches for combating the effect of abiotic stresses. , 2021, , 119-135.		1
1909	Genetic Transformation in <i>Cryptococcus</i> Species. <i>Journal of Fungi</i> (Basel, Switzerland), 2021, 7, 56.	1.5	5
1910	Genetic Modification and Sequence Analysis of Probiotic Microorganisms. , 2021, , 101-112.		1
1911	Generation of <i>Fam83h</i> knockout mice by CRISPR/Cas9-mediated gene engineering. <i>Journal of Cellular Biochemistry</i> , 2019, 120, 11033-11043.	1.2	8
1912	Laboratory Culture and Mutagenesis of <i>Amphioxus</i> (<i>Branchiostoma floridae</i>). <i>Methods in Molecular Biology</i> , 2021, 2219, 1-29.	0.4	5
1913	TAL Effector DNA-Binding Principles and Specificity. <i>Methods in Molecular Biology</i> , 2016, 1338, 9-25.	0.4	13
1914	The Development of TALE Nucleases for Biotechnology. <i>Methods in Molecular Biology</i> , 2016, 1338, 27-42.	0.4	31
1915	Complex Genetics of Cardiovascular Traits in Mice: F2-Mapping of QTLs and Their Underlying Genes. <i>Methods in Molecular Biology</i> , 2017, 1488, 431-454.	0.4	4
1916	Computational Prediction of CRISPR/Cas9 Target Sites Reveals Potential Off-Target Risks in Human and Mouse. <i>Methods in Molecular Biology</i> , 2017, 1630, 43-53.	0.4	11
1917	CRISPR/Cas9-Based Genome Editing of HSV. <i>Methods in Molecular Biology</i> , 2020, 2060, 169-183.	0.4	9
1918	Therapeutic Options for Metastatic Breast Cancer. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1152, 131-172.	0.8	20
1919	Cardiac Repolarization and Stem Cells: An Emerging Path Toward Precision Medicine. , 2020, , 87-107.		1
1920	CRISPR/Cas9 Editing in Induced Pluripotent Stem Cells: A Way Forward for Treating Cystic Fibrosis?. , 2019, , 153-178.		2
1921	TALEN-Based Genome Editing in Yeast. <i>Fungal Biology</i> , 2015, , 289-307.	0.3	4
1923	Gene Expression Engineering. , 2016, , 7-30.		1

#	ARTICLE	IF	CITATIONS
1924	Transposon Tagging in <i>Setaria viridis</i> . <i>Plant Genetics and Genomics: Crops and Models</i> , 2017, , 323-342.	0.3	4
1925	Molecular Studies of the Flavinogenic Fungus <i>Ashbya gossypii</i> and the Flavinogenic Yeast <i>Candida famata</i> . , 2017, , 281-296.		1
1926	Using Genome Engineering to Understand Huntington's Disease. <i>Research and Perspectives in Neurosciences</i> , 2017, , 87-101.	0.4	5
1927	Preventing Hostile and Malevolent Use of Nanotechnology Military Nanotechnology After 15 Years of the US National Nanotechnology Initiative. <i>Terrorism, Security and Computation</i> , 2017, , 49-72.	0.3	1
1928	Genetic Engineering Contribution to Forest Tree Breeding Efforts. <i>Forestry Sciences</i> , 2016, , 11-29.	0.4	10
1929	Therapeutic Cancer Vaccines. <i>Advances in Experimental Medicine and Biology</i> , 2016, 909, 139-167.	0.8	12
1930	Synthetic Gene Regulation in Cyanobacteria. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1080, 317-355.	0.8	11
1931	Hepatitis B Virus Infection: Overview. <i>Advances in Experimental Medicine and Biology</i> , 2020, 1179, 1-16.	0.8	41
1932	Present and Future Therapies for Chronic Hepatitis B. <i>Advances in Experimental Medicine and Biology</i> , 2020, 1179, 137-186.	0.8	32
1933	Evolution in crop improvement approaches and future prospects of molecular markers to CRISPR/Cas9 system. <i>Gene</i> , 2020, 753, 144795.	1.0	9
1935	Generation and characterization of HLA-universal platelets derived from induced pluripotent stem cells. <i>Scientific Reports</i> , 2020, 10, 8472.	1.6	35
1936	Therapeutic Potential of Ribozymes. <i>RSC Drug Discovery Series</i> , 2019, , 434-452.	0.2	4
1937	Base editors: modular tools for the introduction of point mutations in living cells. <i>Emerging Topics in Life Sciences</i> , 2019, 3, 483-491.	1.1	15
1938	Synthetic biology for improving cell fate decisions and tissue engineering outcomes. <i>Emerging Topics in Life Sciences</i> , 2019, 3, 631-643.	1.1	12
1939	Genetics and insect pest management in agriculture.. <i>CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources</i> , 0, , 1-8.	0.6	4
1940	Improving coffee species for pathogen resistance. <i>CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources</i> , 0, , .	0.6	9
1941	Cardiovascular Molecular Imaging. , 2015, , 601-636.		1
1942	Highly efficient RNAi and Cas9-based auto-cloning systems for <i>C. elegans</i> research. <i>Nucleic Acids Research</i> , 2018, 46, e105-e105.	6.5	51

#	ARTICLE	IF	CITATIONS
1943	Comparative genomics of the fish pathogens <i>Edwardsiella ictaluri</i> 93-146 and <i>Edwardsiella piscicida</i> C07-087. <i>Microbial Genomics</i> , 2020, 6, .	1.0	14
1944	Characterisation of a monooxygenase in <i>Shiraia bambusicola</i> . <i>Microbiology (United Kingdom)</i> , 2018, 164, 1180-1188.	0.7	6
1976	Combined and Distinct Roles of Agr Proteins in <i>Clostridioides difficile</i> 630 Sporulation, Motility, and Toxin Production. <i>MBio</i> , 2020, 11, .	1.8	24
1977	Minireview on the Relations between Gut Microflora and Parkinson's Disease: Further Biochemical (Oxidative Stress), Inflammatory, and Neurological Particularities. <i>Oxidative Medicine and Cellular Longevity</i> , 2020, 2020, 1-15.	1.9	18
1978	Human PNPLA3-I148M variant increases hepatic retention of polyunsaturated fatty acids. <i>JCI Insight</i> , 2019, 4, .	2.3	93
1979	TALE-mediated epigenetic suppression of <i>CDKN2A</i> increases replication in human fibroblasts. <i>Journal of Clinical Investigation</i> , 2015, 125, 1998-2006.	3.9	109
1980	A versatile modular vector system for rapid combinatorial mammalian genetics. <i>Journal of Clinical Investigation</i> , 2015, 125, 1603-1619.	3.9	62
1981	Recent advances in treatment of severe primary immunodeficiencies. <i>F1000Research</i> , 2015, 4, 1459.	0.8	8
1982	Plasticity of the <i>Leishmania</i> genome leading to gene copy number variations and drug resistance. <i>F1000Research</i> , 2016, 5, 2350.	0.8	111
1983	Current Status of Production of Transgenic Livestock by Genome Editing Technology. <i>Journal of Animal Reproduction and Biotechnology</i> , 2019, 34, 148-156.	0.3	6
1984	Receptor-Like Kinase RUP1 Interacts with Potassium Transporters to Regulate Pollen Tube Growth and Integrity in Rice. <i>PLoS Genetics</i> , 2016, 12, e1006085.	1.5	102
1985	Efficient Mutagenesis by Cas9 Protein-Mediated Oligonucleotide Insertion and Large-Scale Assessment of Single-Guide RNAs. <i>PLoS ONE</i> , 2014, 9, e98186.	1.1	794
1986	Protease-Dead Separase Is Dominant Negative in the <i>C. elegans</i> Embryo. <i>PLoS ONE</i> , 2014, 9, e108188.	1.1	5
1987	Modulation of Gene Expression by Polymer Nanocapsule Delivery of DNA Cassettes Encoding Small RNAs. <i>PLoS ONE</i> , 2015, 10, e0127986.	1.1	30
1988	Novel Reporter for Faithful Monitoring of ERK2 Dynamics in Living Cells and Model Organisms. <i>PLoS ONE</i> , 2015, 10, e0140924.	1.1	5
1989	CRISPR/Cas9 Promotes Functional Study of Testis Specific X-Linked Gene In Vivo. <i>PLoS ONE</i> , 2015, 10, e0143148.	1.1	10
1990	Microarray Noninvasive Neuronal Seizure Recordings from Intact Larval Zebrafish. <i>PLoS ONE</i> , 2016, 11, e0156498.	1.1	24
1991	Functional Characterization of the Osteoarthritis Susceptibility Mapping to <i>CHST11</i> A Bioinformatics and Molecular Study. <i>PLoS ONE</i> , 2016, 11, e0159024.	1.1	9

#	ARTICLE	IF	CITATIONS
1992	A High-Throughput Strategy for Dissecting Mammalian Genetic Interactions. PLoS ONE, 2016, 11, e0167617.	1.1	4
1993	Gene expression and immunohistochemical analyses of mKast suggest its late pupal and adult-specific functions in the honeybee brain. PLoS ONE, 2017, 12, e0176809.	1.1	5
1994	Highly efficient gene inactivation by adenoviral CRISPR/Cas9 in human primary cells. PLoS ONE, 2017, 12, e0182974.	1.1	44
1995	Versatile single-step-assembly CRISPR/Cas9 vectors for dual gRNA expression. PLoS ONE, 2017, 12, e0187236.	1.1	36
1996	The fungal pathogen Magnaporthe oryzae suppresses innate immunity by modulating a host potassium channel. PLoS Pathogens, 2018, 14, e1006878.	2.1	94
1997	Generation of genetically modified mice using CRISPR/Cas9 and haploid embryonic stem cell systems. Zoological Research, 2016, 37, 205-13.	0.6	9
1998	Application of the genome editing tool CRISPR/Cas9 in non-human primates. Zoological Research, 2016, 37, 214-9.	0.6	21
1999	Unleashing the Therapeutic Potential of CAR-T Cell Therapy Using Gene-Editing Technologies. Molecules and Cells, 2018, 41, 717-723.	1.0	30
2000	CRISPR and Target-Specific DNA Endonucleases for Efficient DNA Knock-in in Eukaryotic Genomes. Molecules and Cells, 2018, 41, 943-952.	1.0	22
2001	Embryo-mediated genome editing for accelerated genetic improvement of livestock. Frontiers of Agricultural Science and Engineering, 2020, 7, 148.	0.9	22
2002	Disruption of Phytoene Desaturase Gene using Transient Expression of Cas9: gRNA Complex. International Journal of Agriculture and Biology, 2016, , 990-996.	0.2	4
2003	hPaf1/PD2 interacts with OCT3/4 to promote self-renewal of ovarian cancer stem cells. Oncotarget, 2017, 8, 14806-14820.	0.8	28
2004	Regulatory Assessment of Off-Target Changes and Spurious DNA Insertions in Gene-Edited Organisms for Agri-Food Use. , 2021, 9, 1-15.		8
2005	The transformational impact of site-specific DNA modifiers on biomedicine and agriculture. Animal Reproduction, 2018, 15, 171-179.	0.4	1
2006	Creation of Cultures Containing Mutations Linked with Cardiovascular Diseases using Transfection and Genome Editing. Current Pharmaceutical Design, 2019, 25, 693-699.	0.9	7
2007	Unravelling the Role of Rhizospheric Plant-Microbe Synergy in Phytoremediation: A Genomic Perspective. Current Genomics, 2020, 21, 334-342.	0.7	20
2008	Artificial RNA Editing with ADAR for Gene Therapy. Current Gene Therapy, 2020, 20, 44-54.	0.9	11
2009	Exosome as a Natural Gene Delivery Vector for Cancer Treatment. Current Cancer Drug Targets, 2020, 20, 821-830.	0.8	15

#	ARTICLE	IF	CITATIONS
2010	CRISPR/Cas9 System and its Research Progress in Gene Therapy. <i>Anti-Cancer Agents in Medicinal Chemistry</i> , 2020, 19, 1912-1919.	0.9	4
2011	Efficient Generation of Multi-gene Knockout Cell Lines and Patient-derived Xenografts Using Multi-colored Lenti-CRISPR-Cas9. <i>Bio-protocol</i> , 2017, 7, e2222.	0.2	2
2012	CRISPR/Cas9 Gene Editing in the Marine Diatom <i>Phaeodactylum tricornutum</i> . <i>Bio-protocol</i> , 2017, 7, e2442.	0.2	20
2013	Keeping CRISPR/Cas on-Target. <i>Current Issues in Molecular Biology</i> , 2016, , .	1.0	21
2014	Next-generation sequencing to elucidate adaptive stress response and plantaricin genes among <i>Lactobacillus plantarum</i> strains. <i>Future Microbiology</i> , 2020, 15, 333-348.	1.0	8
2015	Innovative therapies for malignant brain tumors: the road to a tailored cure. <i>Acta Biomedica</i> , 2020, 91, 5-17.	0.2	21
2016	Gene therapies for high-grade gliomas: from the bench to the bedside. <i>Acta Biomedica</i> , 2020, 91, 32-50.	0.2	9
2017	Gene editing (CRISPR-Cas) technology and fisheries sector. <i>Canadian Journal of Biotechnology</i> , 2017, 1, 65-72.	0.3	16
2018	CRISPR/Cas9 in yeast: a multi-week laboratory exercise for undergraduate students. <i>CourseSource</i> , 0, 6, .	0.0	3
2019	CRISPR-induced double-strand breaks trigger recombination between homologous chromosome arms. <i>Life Science Alliance</i> , 2019, 2, e201800267.	1.3	48
2020	The advances and challenges of Gene Therapy for Duchenne Muscular Dystrophy. , 2017, 1, 019-036.		4
2021	Present status of cotton leaf curl virus disease (CLCUVD): a major threat to cotton production. <i>International Journal of Cotton Research and Technology</i> , 2019, 1, 1.	0.2	3
2022	Programmed Editing of Rice (<i>Oryza sativa</i> L.) OsSPL16 Gene Using CRISPR/Cas9 Improves Grain Yield by Modulating the Expression of Pyruvate Enzymes and Cell Cycle Proteins. <i>International Journal of Molecular Sciences</i> , 2021, 22, 249.	1.8	46
2023	Novel therapeutic approaches for hepatitis B virus covalently closed circular DNA. <i>World Journal of Gastroenterology</i> , 2015, 21, 7084-7088.	1.4	15
2024	Advance genome editing technologies in the treatment of human diseases: CRISPR therapy (Review). <i>International Journal of Molecular Medicine</i> , 2020, 46, 521-534.	1.8	19
2025	Beyond limits – the pitfalls of global gene drives for environmental risk assessment in the European Union. <i>BioRisk</i> , 0, 15, 1-29.	0.2	16
2026	Genomics Technologies for Enhanced Understanding of Robustness of LAB Starter Cultures. <i>Advances in Medical Technologies and Clinical Practice Book Series</i> , 2018, , 122-131.	0.3	1
2027	Expression of the C-Terminal Domain of Mammalian <i>TET3</i> DNA Dioxygenase in <i>Arabidopsis thaliana</i> ; Induces Heritable Methylation Changes at <i>rDNA</i> Loci. <i>Advances in Bioscience and Biotechnology (Print)</i> , 2016, 07, 243-250.	0.3	11

#	ARTICLE	IF	CITATIONS
2028	New horizon for radical cure of chronic hepatitis B virus infection. World Journal of Hepatology, 2016, 8, 863.	0.8	13
2029	Cellular models for human cardiomyopathy: What is the best option?. World Journal of Cardiology, 2019, 11, 221-235.	0.5	15
2030	CRISPR/CAS9 as a Powerful Tool for Crop Improvement. Journal of Plant Biotechnology, 2017, 44, 107-114.	0.1	3
2031	Structural and dynamic views of the CRISPR-Cas system at the single-molecule level. BMB Reports, 2016, 49, 201-207.	1.1	4
2032	Women who suffer from schizophrenia: Critical issues. World Journal of Psychiatry, 2018, 8, 125-136.	1.3	25
2033	Role of Modern Technologies in Tissue Engineering. Archives of Neuroscience, 2020, 7, .	0.1	5
2035	RNAi-mediated control of CRISPR functions. Theranostics, 2020, 10, 6661-6673.	4.6	10
2036	Detection and manipulation of live antigen-expressing cells using conditionally stable nanobodies. ELife, 2016, 5, .	2.8	77
2037	Programmed knockout mutation of liver fluke granulin attenuates virulence of infection-induced hepatobiliary morbidity. ELife, 2019, 8, .	2.8	61
2038	Assessment of genomic changes in a CRISPR/Cas9 <i>Phaeodactylum tricornutum</i> mutant through whole genome resequencing. PeerJ, 2018, 6, e5507.	0.9	26
2039	Genetic editing of the virulence gene of <i>Escherichia coli</i> using the CRISPR system. PeerJ, 2020, 8, e8881.	0.9	10
2040	Enhanced genome editing in human iPSCs with CRISPR-CAS9 by co-targeting <i>ATP1a1</i> . PeerJ, 2020, 8, e9060.	0.9	10
2041	Engineering of HN3 increases the tumor targeting specificity of exosomes and upgrade the anti-tumor effect of sorafenib on HuH-7 cells. PeerJ, 2020, 8, e9524.	0.9	6
2042	The Application of the CRISPR/Cas9 System in the Treatment of Hepatitis B Liver Cancer. Technology in Cancer Research and Treatment, 2021, 20, 153303382110452.	0.8	1
2044	Genetically engineered birds; pre-CRISPR and CRISPR era. Biology of Reproduction, 2021, , .	1.2	4
2045	CRISPR-Cas9 gene editing and rapid detection of gene-edited mutants using high-resolution melting in the apple scab fungus, <i>Venturia inaequalis</i> . Fungal Biology, 2022, 126, 35-46.	1.1	8
2046	A non-canonical, interferon-independent signaling activity of cGAMP triggers DNA damage response signaling. Nature Communications, 2021, 12, 6207.	5.8	30
2047	Narrative review of gene modification: applications in three-dimensional (3D) bioprinting. Annals of Translational Medicine, 2021, 9, 1502-1502.	0.7	3

#	ARTICLE	IF	CITATIONS
2048	CRISPR/Cas9 System-Mediated Gene Editing in the Fujian Oysters (<i>Crassostrea angulata</i>) by Electroporation. <i>Frontiers in Marine Science</i> , 2021, 8, .	1.2	6
2049	CRISPR activation of endogenous genes reprograms fibroblasts into cardiovascular progenitor cells for myocardial infarction therapy. <i>Molecular Therapy</i> , 2022, 30, 54-74.	3.7	22
2050	CZON-cutter – a CRISPR-Cas9 system for multiplexed organelle imaging in a simple unicellular alga. <i>Journal of Cell Science</i> , 2021, 134, .	1.2	3
2051	An overview on current molecular tools for heterologous gene expression in <i>Trichoderma</i> . <i>Fungal Biology and Biotechnology</i> , 2021, 8, 11.	2.5	13
2052	Recent Advances in CRISPR/Cas9-Based Genome Editing Tools for Cardiac Diseases. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10985.	1.8	5
2054	Expansion of CRISPR Targeting Sites Using an Integrated Gene-Editing System in <i>Apis mellifera</i> . <i>Insects</i> , 2021, 12, 954.	1.0	2
2055	New Frontiers in the Treatment of Homozygous Familial Hypercholesterolemia. <i>Heart Failure Clinics</i> , 2021, 18, 177-188.	1.0	14
2056	In vivo evaluation of GG2–GG1/A2 element activity in the insulin promoter region using the CRISPR–Cas9 system. <i>Scientific Reports</i> , 2021, 11, 20290.	1.6	0
2059	Developing CRISPR/Cas9 Technologies for Research and Medicine. <i>MOJ Cell Science & Report</i> , 2014, 1, .	0.1	0
2061	Genome Editing Using Site-Specific Nucleases in Amphibians. , 2015, , 133-149.		1
2062	Pre-clinical Modelling of Chromosomal Translocations and Inversions. , 2015, , 429-445.		0
2063	Genome Editing in Mice Using CRISPR/Cas9: Achievements and Prospects. <i>Cloning & Transgenesis</i> , 2015, 04, .	0.1	2
2064	Generation of genetically modified animals by genome editing technology. <i>Japanese Journal of Thrombosis and Hemostasis</i> , 2015, 26, 626-632.	0.1	0
2065	A Place to Call Home: Bioengineering Pluripotential Stem Cell Cultures. <i>AIMS Bioengineering</i> , 2015, 2, 15-28.	0.6	0
2070	The lighthouse at the end of the chromosome*. <i>F1000Research</i> , 2015, 4, 1427.	0.8	1
2071	Mouse Models for Platelet Production and Function. , 2016, , 239-263.		0
2072	Rodent Models of Diabetes. , 2016, , 1-25.		0
2073	Sequencing of Naturally Aborted Human Foetuses: A Resource for New Knowledge. , 2016, , 571-572.		0

#	ARTICLE	IF	CITATIONS
2074	Graph Centrality Based Prediction of Cancer Genes. Springer Proceedings in Mathematics and Statistics, 2016, , 275-311.	0.1	0
2075	Plant functional genomics: Approaches and applications. , 2016, , 157-186.		2
2077	Genome modifications in crops employing engineered nucleases. Agricultural Reviews, 2016, , .	0.1	0
2080	Revisiting Domestication to Revitalize Crop Improvement: The Florigen Revolution. Plant Breeding and Biotechnology, 2016, 4, 387-397.	0.3	3
2081	Cellular-Based Therapies for Paediatric GI Motility Disorders. , 2017, , 523-532.		0
2084	Designer Effectors for Editing and Regulating Complex Genomes. , 2017, , 137-157.		0
2086	Dravet and GEFS+ Syndromes. , 2017, , 777-795.		0
2088	Mouse Models of Thrombosis. , 2017, , 681-698.		0
2090	Genome Editing with Crispr-Cas9 Systems: Basic Research and Clinical Applications. Indonesian Biomedical Journal, 2017, 9, 1.	0.2	4
2093	CRISPR system for genome engineering: the application for autophagy study. BMB Reports, 2017, 50, 247-256.	1.1	2
2095	Is CRISPR a fear Against Sports?. , 2017, 2, 016-017.		1
2103	Genome Editing of Food-Grade Lactobacilli To Develop Therapeutic Probiotics. , 0, , 389-408.		2
2104	Multiple Stepwise Gene Knockout Using CRISPR/Cas9 in Escherichia coli. Bio-protocol, 2018, 8, e2688.	0.2	3
2105	éª¼âµ,,ãæãâ«ç%©â®ÿé““ã·N = 1 ç”ç©¶. Journal of the Society of Biomechanisms, 2018, 42, 43-46.	0.0	0
2107	A CRISPR/Cas9 Based Strategy to Manipulate the Alzheimers Amyloid Pathway. SSRN Electronic Journal, 0, , .	0.4	1
2116	Cas9ãfãfã,«ãf¼ã,¼ã,’ç”“ã,ãÿã,ããfã,¼ã,²ãfãfãfãã®ãã,æ—°ã—ã,ã,²ãfãfãç:“é,†æ³·¼^CRISPR Nickaseã,ã,¹ãfãf¼%ããé—ç		
2124	Deletion of FOXL2 by CRISPR promotes cell;½cycle G0/G1 restriction in KGN cells. International Journal of Molecular Medicine, 2019, 43, 567-574.	1.8	5
2125	Two Sides to a Wing: A Gene that Makes Butterfly Upper and Bottom Wing Patterns Different. Frontiers for Young Minds, 0, 6, .	0.8	0

#	ARTICLE	IF	CITATIONS
2126	Selected Innovative Solutions for the Regulation of GM Crops in Times of Gene Editing. , 2019, , 3-41.		2
2127	Applications of Genome Engineering/Editing Tools in Plants. , 2019, , 143-165.		1
2128	War against old world bollworm, <i>Helicoverpa armigera</i> (HUBNER): past, present and future. Progressive Agriculture, 2019, 19, 186.	0.1	0
2130	CRISPR/Cas9 gene editing in Huh7 and Hepa RG cell lines. Romanian Biotechnological Letters, 2019, 24, 216-228.	0.5	0
2135	Nomenclature: Naming Your Gene-Modified Mouse. Methods in Molecular Biology, 2020, 2066, 149-162.	0.4	0
2136	Current Status of New Plant Breeding Technologies and Crop Development. Han'guk Yukchong Hakhoe Chi, 2019, 51, 161-174.	0.2	3
2138	Engineering Photosynthetic Microbes for Sustainable Bioenergy Production. , 2020, , 183-198.		2
2139	From bacterial battles to CRISPR crops; progress towards agricultural applications of genome editing. Emerging Topics in Life Sciences, 2019, 3, 687-693.	1.1	0
2145	Construction of a <i>Mex3c</i> Gene-Deficient Mouse Model to Study C-FOS Expression in Hypothalamic Nuclei and Observe Morphological Differences in Embryonic Neural Tube Development. Medical Science Monitor, 2020, 26, e927334.	0.5	1
2146	CRISPR/Cas9 in lepidopteran insects: Progress, application and prospects. Journal of Insect Physiology, 2021, 135, 104325.	0.9	29
2147	Refining the genomic location of single nucleotide polymorphism variation affecting Atlantic salmon maturation timing at a key large-effect locus. Molecular Ecology, 2022, 31, 562-570.	2.0	14
2149	Biotechnological approaches for the enhancement of anticancer secondary metabolite production from endophytic fungi. , 2020, , 135-155.		0
2150	In vitro Assay Revealed Mismatches between Guide RNA and Target DNA can Enhance Cas9 Nuclease Activity. Current Chinese Science, 2020, 1, 69-72.	0.2	0
2151	Regenerating Urethral Striated Muscle by CRISPRi/dCas9-KRAB-Mediated Myostatin Silencing for Obesity-Associated Stress Urinary Incontinence. CRISPR Journal, 2020, 3, 562-572.	1.4	9
2152	Development of PCR based approach to detect potential mosaicism in porcine embryos. Journal of Animal Reproduction and Biotechnology, 2020, 35, 323-328.	0.3	5
2154	THE JOURNEY OF CRISPR-CAS9 FROM BACTERIAL DEFENSE MECHANISM TO A GENE EDITING TOOL IN BOTH ANIMALS AND PLANTS. Biological & Clinical Sciences Research Journal, 2020, 2020, .	0.4	11
2155	CRISPR-Cas orthologs and variants. , 2022, , 7-38.		0
2156	Transgenic Approaches for Improvement of Brassica Species. , 2020, , 187-213.		3

#	ARTICLE	IF	CITATIONS
2157	Refactoring and optimization of metabolic network. , 2020, , 77-105.		2
2158	CRISPR-Cas and the Wicked Problem of Moral Responsibility. Techno:Phil, 2020, , 45-58.	0.3	0
2159	RNA and malaria pathogenesis. , 2020, , 163-173.		0
2160	Chapter 14. Classes, Modes of Action and Selection of New Modalities in Drug Discovery. RSC Drug Discovery Series, 2020, , 277-316.	0.2	0
2162	Introduction to Genome Editing Techniques: Implications in Modern Agriculture. Concepts and Strategies in Plant Sciences, 2020, , 1-30.	0.6	1
2163	Meeting a Challenge: A View on Studying Transcriptional Control of Genes Involved in Plant Biomass Degradation in <i>Aspergillus niger</i> . Grand Challenges in Biology and Biotechnology, 2020, , 211-235.	2.4	1
2164	Cloning-Free (DNA-Free) CRISPR-Cas9-Mediated Gene Editing in Human Liver Cell Line and Its Detection. Springer Protocols, 2020, , 163-171.	0.1	0
2165	Gene Editing. , 2020, , 147-164.		0
2166	Biolytic Delivery of Programmable Nuclease (CRISPR/Cas9) in Bread Wheat. Methods in Molecular Biology, 2020, 2124, 309-329.	0.4	3
2167	Use of Physical Approaches for Systemic Drug Delivery. Healthy Ageing and Longevity, 2020, , 299-325.	0.2	0
2168	Gene and cell based therapies for the prevention and treatment of supraventricular arrhythmias. , 2020, , 761-780.		0
2169	Gene therapy and its application in dermatology. Indian Journal of Dermatology, 2020, 65, 341.	0.1	5
2170	Evaluation of the Efficiency of Genome Editing Tools by a Frameshift Fluorescence Protein Reporter. Bio-protocol, 2020, 10, e3622.	0.2	1
2171	Genome Engineering Tools in Immunotherapy. , 2020, , 73-102.		0
2172	Linking Features of Genomic Function to Fundamental Features of Learned Vocal Communication. Springer Handbook of Auditory Research, 2020, , 211-244.	0.3	1
2174	Polyethylenimine-Functionalized Carbon Dots for Delivery of CRISPR/Cas9 Complexes. ACS Applied Bio Materials, 2021, 4, 7979-7992.	2.3	14
2175	Systemic biodistribution and hepatocyte-specific gene editing with CRISPR/Cas9 using hyaluronic acid-based nanoparticles. Nanomedicine: Nanotechnology, Biology, and Medicine, 2022, 40, 102488.	1.7	5
2176	Towards Biomanufacturing of Cell-Derived Matrices. International Journal of Molecular Sciences, 2021, 22, 11929.	1.8	8

#	ARTICLE	IF	CITATIONS
2177	In vitro evaluation of CRISPR PX-LmGP63 vector effect on pathogenicity of Leishmania major as a primary step to control leishmaniasis. Microbial Pathogenesis, 2021, 161, 105281.	1.3	3
2180	Gene Knockout of Beneficial Plant-associated Bacillus spp. Using the CRISPR-Cas9 Double Plasmid System. Methods in Molecular Biology, 2021, 2232, 173-191.	0.4	2
2181	Fitopatojenlere Karşı Dayanıklı CRISPR/Cas Teknolojisi. European Journal of Science and Technology, 0, , .	0.5	1
2183	Approaches to identifying synthetic lethal interactions in cancer. Yale Journal of Biology and Medicine, 2015, 88, 145-55.	0.2	32
2184	CRISPR, Patents, and the Public Health. Yale Journal of Biology and Medicine, 2017, 90, 667-672.	0.2	13
2185	Nuclease-Mediated Gene Therapies for Inherited Metabolic Diseases of the Liver. Yale Journal of Biology and Medicine, 2017, 90, 553-566.	0.2	11
2186	Potential implication of SGK1-dependent activity change in BV-2 microglial cells. International Journal of Physiology, Pathophysiology and Pharmacology, 2018, 10, 115-123.	0.8	3
2187	Advent of CRISPR Based Immunotherapy in Hematologic Malignancies. , 2018, 2, .		0
2189	Role of plant biotechnology in enhancement of alkaloid production from cell culture system of Catharanthus roseus: A medicinal plant with potent anti-tumor properties. Industrial Crops and Products, 2022, 176, 114298.	2.5	5
2190	CRISPR/Cas System and Factors Affecting Its Precision and Efficiency. Frontiers in Cell and Developmental Biology, 2021, 9, 761709.	1.8	20
2191	CRISPR and KRAS: a match yet to be made. Journal of Biomedical Science, 2021, 28, 77.	2.6	3
2192	Aspergillus oryzae FaeA is responsible for the release of ferulic acid, a precursor of off-odor 4-vinylguaiacol in sake brewing. Journal of Bioscience and Bioengineering, 2022, 133, 140-145.	1.1	4
2194	CRISPR/Cas9 editing in conditionally immortalized HoxB8 cells for studying gene regulation in mouse dendritic cells. European Journal of Immunology, 2022, 52, 1859-1862.	1.6	7
2195	Generation of in situ CRISPR-mediated primary and metastatic cancer from monkey liver. Signal Transduction and Targeted Therapy, 2021, 6, 411.	7.1	14
2196	Find and cut-and-transfer (FiCAT) mammalian genome engineering. Nature Communications, 2021, 12, 7071.	5.8	21
2198	A comparison study of superovulation strategies for C57BL/6J and B6D2F1 mice in CRISPR-Cas9 mediated genome editing. Reproduction, Fertility and Development, 2021, 33, 772.	0.1	1
2199	Beyond Genome Editing: CRISPR Approaches. , 2022, , 187-218.		2
2200	Genome Editing of Induced Pluripotent Stem Cells Using CRISPR/Cas9 Ribonucleoprotein Complexes to Model Genetic Ocular Diseases. Methods in Molecular Biology, 2021, , 1.	0.4	1

#	ARTICLE	IF	CITATIONS
2201	VDR regulates simulated microgravity-induced atrophy in C2C12 myotubes. <i>Scientific Reports</i> , 2022, 12, 1377.	1.6	4
2202	Use of CRISPR/Cas9 gene editing to improve chimeric antigen-receptor T cell therapy: A systematic review and meta-analysis of preclinical studies. <i>Cytotherapy</i> , 2022, 24, 405-412.	0.3	6
2203	Bioengineering strategies for restoring vision. <i>Nature Biomedical Engineering</i> , 2023, 7, 387-404.	11.6	30
2204	Weak bonding strategies for achieving regio- and site-selective transformations. <i>CheM</i> , 2022, 8, 414-438.	5.8	39
2205	Targeted therapies in genetic dilated and hypertrophic cardiomyopathies: from molecular mechanisms to therapeutic targets. A position paper from the Heart Failure Association (HFA) and the Working Group on Myocardial Function of the European Society of Cardiology (ESC). <i>European Journal of Heart Failure</i> , 2022, 24, 406-420.	2.9	22
2206	DNA-Protein Cross-Linking Sequencing for Genome-Wide Mapping of Thymidine Glycol. <i>Journal of the American Chemical Society</i> , 2022, 144, 454-462.	6.6	14
2207	An Introduction to Genome Editing Techniques. , 2022, , 1-28.		1
2208	Development of versatile and efficient genetic tools for the marine-derived fungus <i>Aspergillus terreus</i> RA2905. <i>Current Genetics</i> , 2022, 68, 153-164.	0.8	10
2209	A CRISPR toolbox for generating intersectional genetic mouse models for functional, molecular, and anatomical circuit mapping. <i>BMC Biology</i> , 2022, 20, 28.	1.7	8
2210	Non-viral delivery of the CRISPR/Cas system: DNA versus RNA versus RNP. <i>Biomaterials Science</i> , 2022, 10, 1166-1192.	2.6	40
2211	New Frontiers: Precise Editing of Allergen Genes Using CRISPR. <i>Frontiers in Allergy</i> , 2021, 2, 821107.	1.2	7
2212	Highly efficient activation of endogenous gene in grape using CRISPR/dCas9-based transcriptional activators. <i>Horticulture Research</i> , 2022, 9, .	2.9	16
2213	MOF effectively deliver CRISPR and enhance gene-editing efficiency via MOF's hydrolytic activity of phosphate ester bonds. <i>Chemical Engineering Journal</i> , 2022, 439, 134992.	6.6	7
2214	Anti-CRISPR proteins as a therapeutic agent against drug-resistant bacteria. <i>Microbiological Research</i> , 2022, 257, 126963.	2.5	9
2215	C53 Interacting with UFM1-Protein Ligase 1 Regulates Microtubule Nucleation in Response to ER Stress. <i>Cells</i> , 2022, 11, 555.	1.8	7
2216	How to train your cell - Towards controlling phenotypes by harnessing the epigenome of Chinese hamster ovary production cell lines. <i>Biotechnology Advances</i> , 2022, 56, 107924.	6.0	9
2217	Strategies for High-Efficiency Mutation Using the CRISPR/Cas System. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 803252.	1.8	10
2218	dCas9-based gene editing for cleavage-free genomic knock-in of long sequences. <i>Nature Cell Biology</i> , 2022, 24, 268-278.	4.6	24

#	ARTICLE	IF	CITATIONS
2219	Liquidâ€“liquid phase separation drives cellular function and dysfunction in cancer. <i>Nature Reviews Cancer</i> , 2022, 22, 239-252.	12.8	115
2220	Advances in our understanding of nematode ion channels as potential anthelmintic targets. <i>International Journal for Parasitology: Drugs and Drug Resistance</i> , 2022, 18, 52-86.	1.4	11
2221	On the mechanism of tissue-specific mRNA delivery by selective organ targeting nanoparticles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	285
2222	Investigating the genetic and epigenetic basis of big biological questions with the parthenogenetic marbled crayfish: A review and perspectives. <i>Journal of Biosciences</i> , 2018, 43, 189-223.	0.5	8
2223	Inconclusive studies on possible CRISPR-Cas off-targets should moderate expectations about enzymes that have evolved to be non-specific. <i>Journal of Biosciences</i> , 2018, 43, 225-228.	0.5	2
2224	The genetic information (I). , 2022, , 501-534.		0
2225	A Method to Reduce off-Targets in CRISPR/Cas9 System in Plants. <i>Methods in Molecular Biology</i> , 2022, 2408, 317-324.	0.4	2
2228	V5 and GFP Tagging of Viral Gene pp38 of Marekâ€™s Disease Vaccine Strain CVI988 Using CRISPR/Cas9 Editing. <i>Viruses</i> , 2022, 14, 436.	1.5	0
2229	The Potential of Nanomedicine to Unlock the Limitless Applications of mRNA. <i>Pharmaceutics</i> , 2022, 14, 460.	2.0	11
2230	Post-translational modification: a strategic response to high temperature in plants. <i>ABIOTECH</i> , 2022, 3, 49-64.	1.8	15
2231	ANKRD24 organizes TRIOBP to reinforce stereocilia insertion points. <i>Journal of Cell Biology</i> , 2022, 221, .	2.3	7
2232	Rapid and efficient generation of antigenâ€™specific isogenic T cells from cryopreserved blood samples. <i>Immunology and Cell Biology</i> , 2022, 100, 285-295.	1.0	0
2233	CRISPR based therapeutics: a new paradigm in cancer precision medicine. <i>Molecular Cancer</i> , 2022, 21, 85.	7.9	15
2234	CRISPR signal conductor 2.0 for redirecting cellular information flow. <i>Cell Discovery</i> , 2022, 8, 26.	3.1	2
2235	Homozygous might be hemizygous: CRISPR/Cas9 editing in iPSCs results in detrimental on-target defects that escape standard quality controls. <i>Stem Cell Reports</i> , 2022, 17, 993-1008.	2.3	32
2236	Oxygen-sensitive methylation of ULK1 is required for hypoxia-induced autophagy. <i>Nature Communications</i> , 2022, 13, 1172.	5.8	32
2237	CRISPR/Cas9 and next generation sequencing in the personalized treatment of Cancer. <i>Molecular Cancer</i> , 2022, 21, 83.	7.9	26
2238	Therapeutic nucleus-access BNCT drug combined CD47-targeting gene editing in glioblastoma. <i>Journal of Nanobiotechnology</i> , 2022, 20, 102.	4.2	26

#	ARTICLE	IF	CITATIONS
2239	Targeted introduction of heritable point mutations into the plant mitochondrial genome. <i>Nature Plants</i> , 2022, 8, 245-256.	4.7	25
2240	A kinetic model predicts SpCas9 activity, improves off-target classification, and reveals the physical basis of targeting fidelity. <i>Nature Communications</i> , 2022, 13, 1367.	5.8	15
2241	Evolutionary Biology and Gene Editing of Cat Allergen, Fel d 1. <i>CRISPR Journal</i> , 2022, 5, 213-223.	1.4	13
2242	Studying Kidney Diseases Using Organoid Models. <i>Frontiers in Cell and Developmental Biology</i> , 2022, 10, 845401.	1.8	9
2243	Genome Engineering Technology for Durable Disease Resistance: Recent Progress and Future Outlooks for Sustainable Agriculture. <i>Frontiers in Plant Science</i> , 2022, 13, 860281.	1.7	12
2244	Insight into the Evolving Role of PCSK9. <i>Metabolites</i> , 2022, 12, 256.	1.3	21
2245	Taming transposable elements in vertebrates: from epigenetic silencing to domestication. <i>Trends in Genetics</i> , 2022, 38, 529-553.	2.9	59
2246	Synergistic power of genomic selection, assisted reproductive technologies, and gene editing to drive genetic improvement of cattle. <i>CABI Agriculture and Bioscience</i> , 2022, 3, .	1.1	17
2247	Genome Editing Technology and Its Application to Metabolic Engineering in Rice. <i>Rice</i> , 2022, 15, 21.	1.7	7
2248	CRISPR-mediated multiplexed live cell imaging of nonrepetitive genomic loci with one guide RNA per locus. <i>Nature Communications</i> , 2022, 13, 1871.	5.8	30
2249	Development and Application of CRISPR-Cas Based Tools. <i>Frontiers in Cell and Developmental Biology</i> , 2022, 10, 834646.	1.8	13
2250	Fast and efficient CRISPR-mediated genome editing in <i>Aureobasidium</i> using Cas9 ribonucleoproteins. <i>Journal of Biotechnology</i> , 2022, 350, 11-16.	1.9	2
2251	Hyperactivating p53 in Human Papillomavirus-Driven Cancers: A Potential Therapeutic Intervention. <i>Molecular Diagnosis and Therapy</i> , 2022, 26, 301-308.	1.6	9
2252	Emerging Biosensing Technologies for the Diagnostics of Viral Infectious Diseases. <i>Advanced Materials</i> , 2022, 34, e2201085.	11.1	29
2253	CRISPR/Cas-based Human T cell Engineering: Basic Research and Clinical Application. <i>Immunology Letters</i> , 2022, 245, 18-28.	1.1	5
2254	Modular configurations of living biomaterials incorporating nano-based artificial mediators and synthetic biology to improve bioelectrocatalytic performance: A review. <i>Science of the Total Environment</i> , 2022, 824, 153857.	3.9	6
2255	Efficient genome editing in <i>Claviceps purpurea</i> using a CRISPR/Cas9 ribonucleoprotein method. <i>Synthetic and Systems Biotechnology</i> , 2022, 7, 664-670.	1.8	6
2256	Strategic management of contaminated water bodies: Omics, genome-editing and other recent advances in phytoremediation. <i>Environmental Technology and Innovation</i> , 2022, 27, 102463.	3.0	11

#	ARTICLE	IF	CITATIONS
2257	Editing out HIV: application of gene editing technology to achieve functional cure. <i>Retrovirology</i> , 2021, 18, 39.	0.9	7
2258	Clustered regularly interspaced short palindromic repeats, a glimpse of impacts in molecular biology, trends and highlights. <i>Hormone Molecular Biology and Clinical Investigation</i> , 2022, 43, 105-112.	0.3	0
2259	Engineered CRISPR-Cas systems for the detection and control of antibiotic-resistant infections. <i>Journal of Nanobiotechnology</i> , 2021, 19, 401.	4.2	37
2260	Epigenetic Epidemiology of Obesity and Type 2 Diabetes. , 2022, , 445-474.		1
2261	Making and Using Genetically Modified Organisms. , 2022, , 259-289.		1
2262	Modeling common and rare genetic risk factors of neuropsychiatric disorders in human induced pluripotent stem cells. <i>Schizophrenia Research</i> , 2022, , .	1.1	6
2263	Inducible and reversible RNA N6-methyladenosine editing. <i>Nature Communications</i> , 2022, 13, 1958.	5.8	21
2264	Overview of advances in CRISPR/deadCas9 technology and its applications in human diseases. <i>Gene</i> , 2022, 830, 146518.	1.0	10
2266	Genome-wide functional perturbation of human microsatellite repeats using engineered zinc finger transcription factors. <i>Cell Genomics</i> , 2022, 2, 100119.	3.0	3
2267	Label-Free Resonance Rayleigh Scattering Amplification for Lipopolysaccharide Detection and Logical Circuit by CRISPR/Cas12a-Driven Guanine Nanowire Assisted Non-Cross-Linking Hybridization Chain Reaction. <i>Analytical Chemistry</i> , 2022, 94, 6371-6379.	3.2	16
2268	Epigenetic Alterations and Inflammation as Emerging Use for the Advancement of Treatment in Non-Small Cell Lung Cancer. <i>Frontiers in Immunology</i> , 2022, 13, 878740.	2.2	19
2269	Novel Plant Breeding Techniques Shake Hands with Cereals to Increase Production. <i>Plants</i> , 2022, 11, 1052.	1.6	14
2270	Expanding PAM recognition and enhancing base editing activity of Cas9 variants with non-PAM domain mutations derived from xCas9. <i>FEBS Journal</i> , 2022, 289, 5899-5913.	2.2	4
2301	CRISPR/Cas9-Mediated Genome Editing System in Insect Genomics and Pest Management. <i>Methods in Molecular Biology</i> , 2022, 2360, 347-366.	0.4	1
2304	Pitfalls of Restriction Enzyme Mapping Following Generation of CRISPR Constructs.. <i>Avicenna Journal of Medical Biotechnology</i> , 2021, 13, 226-229.	0.2	0
2305	Engineering Modular Polyketide Biosynthesis in <i>Streptomyces</i> Using CRISPR/Cas: A Practical Guide. <i>Methods in Molecular Biology</i> , 2022, 2489, 173-200.	0.4	0
2307	Natural and Experimental Rewiring of Gene Regulatory Regions. <i>Annual Review of Genomics and Human Genetics</i> , 2022, 23, .	2.5	1
2308	CRISPR/Cas9-Based Genome Editing and Its Application in <i>Aspergillus</i> Species. <i>Journal of Fungi (Basel)</i> , Tj ETQq1 1 0.784314 rgBT /Overl 1.5 18		

#	ARTICLE	IF	CITATIONS
2309	A Leak-Free Inducible CRISPRi/a System for Gene Functional Studies in Plasmodium falciparum. Microbiology Spectrum, 2022, , e0278221.	1.2	3
2310	Establishment of CRFK cells for vaccine production by inactivating endogenous retrovirus with TALEN technology. Scientific Reports, 2022, 12, 6641.	1.6	1
2311	Unlocking the functional potential of polyploid yeasts. Nature Communications, 2022, 13, 2580.	5.8	10
2312	Recent developments in miRNA based recombinant protein expression in CHO. Biotechnology Letters, 2022, 44, 671-681.	1.1	2
2313	CRISPR-Cas9 mediated generation of a conditional poly(A) binding protein nuclear 1 (Pabpn1) mouse model reveals an essential role for hematopoietic stem cells. Scientific Reports, 2022, 12, 7181.	1.6	2
2316	One-Step Genotyping Method in loxP-Based Conditional Knockout Mice Generated by CRISPR-Cas9 Technology. Molecular Biotechnology, 2022, , 1.	1.3	0
2318	New Editing Tools for Gene Therapy in Inherited Retinal Dystrophies. CRISPR Journal, 2022, 5, 377-388.	1.4	9
2319	Multiscale Fluorescence Imaging. , 2022, , 38-48.		0
2320	A dual conditional CRISPR-Cas9 system to activate gene editing and reduce off-target effects in human stem cells. Molecular Therapy - Nucleic Acids, 2022, 28, 656-669.	2.3	9
2321	Synthetic biology and the regulatory roadmap for the commercialization of designer microbes. , 2022, , 449-475.		0
2322	Knockout Genes. , 2022, , 3788-3795.		0
2324	Analysis of the landscape of human enhancer sequences in biological databases. Computational and Structural Biotechnology Journal, 2022, 20, 2728-2744.	1.9	0
2327	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
2328	Biotechnological potentials of halophilic microorganisms and their impact on mankind. Beni-Suef University Journal of Basic and Applied Sciences, 2022, 11, .	0.8	17
2329	Next Generation Natural Killer Cells for Cancer Immunotherapy. Frontiers in Immunology, 2022, 13, .	2.2	14
2330	A Mutated Nme1Cas9 Is a Functional Alternative RNase to Both LwaCas13a and RfxCas13d in the Yeast S. cerevisiae. Frontiers in Bioengineering and Biotechnology, 2022, 10, .	2.0	4
2331	In Vitro Production of Bioactive Compounds from Plant Cell Culture. , 2022, , 29-67.		2
2332	Computationally designed hyperactive Cas9 enzymes. Nature Communications, 2022, 13, .	5.8	8

#	ARTICLE	IF	CITATIONS
2333	Amplifying Intermolecular Events by Streptavidin-Induced Proximity. <i>Journal of the American Chemical Society</i> , 2022, 144, 11377-11385.	6.6	0
2334	The promising novel therapies for familial hypercholesterolemia. <i>Journal of Clinical Laboratory Analysis</i> , 2022, 36, .	0.9	12
2335	Improvements in pig agriculture through gene editing. <i>CABI Agriculture and Bioscience</i> , 2022, 3, .	1.1	8
2336	CRISPR-Cas9-Based Technology and Its Relevance to Gene Editing in Parkinson's Disease. <i>Pharmaceutics</i> , 2022, 14, 1252.	2.0	18
2337	Application of CRISPR-Mediated Gene Editing for Crop Improvement. <i>Molecular Biotechnology</i> , 2022, 64, 1198-1217.	1.3	8
2338	Novel Treatments for Pediatric Relapsed or Refractory Acute B-Cell Lineage Lymphoblastic Leukemia: Precision Medicine Era. <i>Frontiers in Pediatrics</i> , 0, 10, .	0.9	7
2339	Disease modeling by efficient genome editing using a near PAM-less base editor in vivo. <i>Nature Communications</i> , 2022, 13, .	5.8	20
2340	CRISPR: A Promising Tool for Cancer Therapy. <i>Current Molecular Medicine</i> , 2022, 22, .	0.6	0
2341	Remote solid cancers rewire hepatic nitrogen metabolism via host nicotinamide-N-methyltransferase. <i>Nature Communications</i> , 2022, 13, .	5.8	16
2342	Cell-derived extracellular vesicles for CRISPR/Cas9 delivery: engineering strategies for cargo packaging and loading. <i>Biomaterials Science</i> , 2022, 10, 4095-4106.	2.6	32
2344	Cisgenic Crops: Major Strategies to Create Cisgenic Plants Based on Genome Editing. <i>Concepts and Strategies in Plant Sciences</i> , 2022, , 213-235.	0.6	2
2347	Metabolomics and Genetic Engineering for Secondary Metabolites Discovery. , 0, , .		0
2348	Zebrafish Models of Cardiac Disease: From Fortuitous Mutants to Precision Medicine. <i>Circulation Research</i> , 2022, 130, 1803-1826.	2.0	28
2349	Use of CRISPR in Infection Control. <i>Current Protein and Peptide Science</i> , 2022, 23, 299-309.	0.7	2
2350	Programmable CRISPR-Cas9 microneedle patch for long-term capture and real-time monitoring of universal cell-free DNA. <i>Nature Communications</i> , 2022, 13, .	5.8	47
2351	New and Emerging Therapies for Dyslipidemia. <i>Endocrinology and Metabolism Clinics of North America</i> , 2022, , .	1.2	3
2352	Gene Editing to Tackle Facioscapulohumeral Muscular Dystrophy. <i>Frontiers in Genome Editing</i> , 0, 4, .	2.7	0
2353	Flagella disruption in <i>Bacillus subtilis</i> increases amylase production yield. <i>Microbial Cell Factories</i> , 2022, 21, .	1.9	4

#	ARTICLE	IF	CITATIONS
2354	JACKIE: Fast Enumeration of Genome-Wide Single- and Multicopy CRISPR Target Sites and Their Off-Target Numbers. <i>CRISPR Journal</i> , 0, , .	1.4	1
2355	Programmable Transcriptional Modulation with a Structured RNA-Mediated CRISPR-dCas9 Complex. <i>Journal of the American Chemical Society</i> , 2022, 144, 12690-12697.	6.6	4
2356	CRISPR-Cas12a nucleases function with structurally engineered crRNAs: SynThetic trAcrRNA. <i>Scientific Reports</i> , 2022, 12, .	1.6	5
2357	Evolution of Gene Therapy, Historical Perspective. <i>Hematology/Oncology Clinics of North America</i> , 2022, 36, 627-645.	0.9	5
2358	Engineering <i>Citrobacter freundii</i> using CRISPR/Cas9 system. <i>Journal of Microbiological Methods</i> , 2022, 200, 106533.	0.7	3
2359	Deletion of NTH1 and HSP12 increases the freeze-thaw resistance of baker's yeast in bread dough. <i>Microbial Cell Factories</i> , 2022, 21, .	1.9	4
2361	Saponin and fluorine-modified polycation as a versatile gene delivery system. <i>Nanotechnology</i> , 2022, 33, 445101.	1.3	2
2362	CRISPR-Cas systems: role in cellular processes beyond adaptive immunity. <i>Folia Microbiologica</i> , 2022, 67, 837-850.	1.1	1
2363	CRISPR-Cas mediated genome engineering of cyanobacteria. <i>Methods in Enzymology</i> , 2022, , .	0.4	2
2364	Patient-derived cells – an irreplaceable tool for research of reduced penetrance in movement disorders. <i>Medizinische Genetik</i> , 2022, 34, 125-130.	0.1	0
2365	Development of multiple transgenic CRISPR/Cas9 methods for genome editing in the fall armyworm, <i>Spodoptera frugiperda</i> . <i>Journal of Pest Science</i> , 2023, 96, 1637-1650.	1.9	5
2366	Implementation of a tunable t-CRISPRi system for gene regulation in <i>Giardia duodenalis</i> . <i>Plasmid</i> , 2022, 122, 102641.	0.4	1
2367	Potassium sulphate induces resistance of rice against the root-knot nematode <i>Meloidogyne graminicola</i> . <i>Journal of Integrative Agriculture</i> , 2022, 21, 3263-3277.	1.7	3
2368	Translating advances in microbial bioproduction to sustainable biotechnology. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	2.0	7
2369	Development of Artificial System to Induce Chromatin Loosening in <i>Saccharomyces cerevisiae</i> . <i>Biomolecules</i> , 2022, 12, 1138.	1.8	1
2370	A Novel CRISPR-MultiTargeter Multi-agent Reinforcement learning (CMT-MARL) algorithm to identify editable target regions using a Hybrid scoring from multiple similar sequences. <i>Applied Intelligence</i> , 2023, 53, 9562-9579.	3.3	0
2372	Translational potential of base-editing tools for gene therapy of monogenic diseases. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	2.0	5
2373	Two Years into the COVID-19 Pandemic: Lessons Learned. <i>ACS Infectious Diseases</i> , 2022, 8, 1758-1814.	1.8	47

#	ARTICLE	IF	CITATIONS
2374	Efficient genome editing in wild strains of mice using the i-GONAD method. <i>Scientific Reports</i> , 2022, 12, .	1.6	5
2375	<scp>CRISPR</scp>/Casâ€based tools for the targeted control of plant viruses. <i>Molecular Plant Pathology</i> , 2022, 23, 1701-1718.	2.0	20
2376	Chemistries of bifunctional PROTAC degraders. <i>Chemical Society Reviews</i> , 2022, 51, 7066-7114.	18.7	73
2378	CRISPR Genome Editing Brings Global Food Security into the First Lane: Enhancing Nutrition and Stress Resilience in Crops. , 2022, , 285-344.		2
2379	Off-Target Effects of Crop Genome Editing and Its Minimization. , 2022, , 185-208.		0
2380	Genome Editing for the Improvement of Oilseed Crops. , 2022, , 367-392.		1
2381	Next-Generation Mice Genetics for Circadian Studies. <i>Neuromethods</i> , 2022, , 359-376.	0.2	0
2382	CRISPR/Cas9 On- and Off-Target Activity Using Correlative Force and Fluorescence Single-Molecule Microscopy. <i>Methods in Molecular Biology</i> , 2022, , 349-378.	0.4	0
2383	CRISPR/Cas9-mediated LRP10 Knockout in HuTu-80 and HEK 293T Cell Lines. <i>Bio-protocol</i> , 2022, 12, .	0.2	1
2384	Genome Editing Tools for Food Security. , 2022, , 45-65.		1
2385	BEtarget: A versatile web-based tool to design guide RNAs for base editing in plants. <i>Computational and Structural Biotechnology Journal</i> , 2022, 20, 4009-4014.	1.9	5
2386	Medical Application of Molecular Robots. , 2022, , 247-281.		0
2387	Genome Editing for Stress Tolerance in Cereals: Methods, Opportunities, and Applications. , 2022, , 345-367.		0
2388	Medical use of cell-penetrating peptides: how far have they come?. , 2022, , 235-254.		0
2389	Applications and prospects of genome editing in plant fatty acid and triacylglycerol biosynthesis. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	6
2390	The Bibliometric Landscape of Gene Editing Innovation and Regulation in the Worldwide. <i>Cells</i> , 2022, 11, 2682.	1.8	18
2391	CRISPR-Cas9 Gene Editing of the Sal1 Gene Family in Wheat. <i>Plants</i> , 2022, 11, 2259.	1.6	9
2392	BmSuc1 Affects Silk Properties by Acting on Sericin1 in <i>Bombyx mori</i> . <i>International Journal of Molecular Sciences</i> , 2022, 23, 9891.	1.8	2

#	ARTICLE	IF	CITATIONS
2393	Temperature dependent in vitro binding and release of target DNA by Cas9 enzyme. <i>Scientific Reports</i> , 2022, 12, .	1.6	8
2394	Genetic modification of the ant <i>Lasius niger</i> using CRISPR-Cas9 technology. <i>Insect Molecular Biology</i> , 2023, 32, 11-25.	1.0	2
2395	Melanin Synthesis Pathway Interruption: CRISPR/Cas9-mediated Knockout of <i>dopa decarboxylase</i> (<i>DDC</i>) in <i>Harmonia axyridis</i> (Coleoptera: Coccinellidae). <i>Journal of Insect Science</i> , 2022, 22, .	0.6	5
2396	Target-enriched nanopore sequencing and de novo assembly reveals co-occurrences of complex on-target genomic rearrangements induced by CRISPR-Cas9 in human cells. <i>Genome Research</i> , 0, , .	2.4	9
2397	Efficient Homology-Directed Repair with Circular Single-Stranded DNA Donors. <i>CRISPR Journal</i> , 2022, 5, 685-701.	1.4	16
2398	Evasion of Cas9 toxicity to develop an efficient genome editing system and its application to increase ethanol yield in <i>Fusarium venenatum</i> TB01. <i>Applied Microbiology and Biotechnology</i> , 2022, 106, 6583-6593.	1.7	5
2399	CRISPR-Cas9: Taming protozoan parasites with bacterial scissor. <i>Journal of Parasitic Diseases</i> , 2022, 46, 1204-1212.	0.4	2
2400	Research progress of CRISPR-based biosensors and bioassays for molecular diagnosis. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	2.0	8
2401	Abiotic stress enhancement tools for improving crop tolerance. <i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i> , 2022, 50, 12855.	0.5	0
2402	The key role of indole-3-acetic acid biosynthesis by <i>Bacillus thuringiensis</i> RZ2MS9 in promoting maize growth revealed by the <i>ipdC</i> gene knockout mediated by the CRISPR-Cas9 system. <i>Microbiological Research</i> , 2023, 266, 127218.	2.5	11
2403	Non-Viral Delivery of CRISPR/Cas Cargo to the Retina Using Nanoparticles: Current Possibilities, Challenges, and Limitations. <i>Pharmaceutics</i> , 2022, 14, 1842.	2.0	15
2404	Challenges and hopes in CRISPR CAS technology in future. , 0, , 5-12.		0
2405	Ingeniería genética contra estrés abiótico en cultivos neotropicales: osmolitos, factores de transcripción y CRISPR/Cas9. <i>Revista Colombiana De Biotecnología</i> , 2022, 23, 47-66.	0.5	0
2406	Turning Tables for CRISPR/Cas9 Editing System: From Scratch to Advanced Delivery Platforms. , 2022, , 1-27.		1
2407	Current Challenges and Genomic Advances Toward the Development of Coffee Genotypes Resistant to Biotic Stress. , 2022, , 159-189.		0
2408	Negative Cross-Talk between TLR2/4-Independent AMPK \pm 1 and TLR2/4-Dependent JNK Regulates <i>S. pneumoniae</i> -induced Mucosal Innate Immune Response. <i>Journal of Immunology</i> , 2022, 209, 1532-1544.	0.4	2
2409	Cryo-EM structure of the type III-E CRISPR-Cas effector gRAMP in complex with TPR-CHAT. <i>Cell Research</i> , 2022, 32, 1128-1131.	5.7	10
2410	Current updates of CRISPR/Cas9-mediated genome editing and targeting within tumor cells: an innovative strategy of cancer management. <i>Cancer Communications</i> , 2022, 42, 1257-1287.	3.7	12

#	ARTICLE	IF	CITATIONS
2411	Efficient gene replacement by CRISPR/Cas9-mediated homologous recombination in the model diatom <i>Thalassiosira pseudonana</i> . <i>New Phytologist</i> , 2023, 238, 438-452.	3.5	8
2413	Comprehensive analysis and accurate quantification of unintended large gene modifications induced by CRISPR-Cas9 gene editing. <i>Science Advances</i> , 2022, 8, .	4.7	25
2414	Enhancement of Gene Editing and Base Editing with Therapeutic Ribonucleoproteins through In Vivo Delivery Based on Absorptive Silica Nanoconstruct. <i>Advanced Healthcare Materials</i> , 2023, 12, .	3.9	6
2415	Site-Directed DNA Sequence Modification Using CRISPR/Cas 9. , 2022, , 149-173.		0
2416	Targeted deletion of ecto-5'-nucleotidase results in retention of inosine monophosphate content in postmortem muscle of medaka (<i>Oryzias latipes</i>). <i>Scientific Reports</i> , 2022, 12, .	1.6	1
2418	Design and synthesis of DNA hydrogel based on EXPAR and CRISPR/Cas14a for ultrasensitive detection of creatine kinase MB. <i>Biosensors and Bioelectronics</i> , 2022, 218, 114792.	5.3	19
2419	Nucleoredoxin 1 positively regulates heat stress tolerance by enhancing the transcription of antioxidants and heat-shock proteins in tomato. <i>Biochemical and Biophysical Research Communications</i> , 2022, 635, 12-18.	1.0	7
2421	Gene targeting as a therapeutic avenue in diseases mediated by the complement alternative pathway. <i>Immunological Reviews</i> , 2023, 313, 402-419.	2.8	10
2422	CRISPR-based genetic control strategies for insect pests. <i>Journal of Integrative Agriculture</i> , 2023, 22, 651-668.	1.7	7
2423	Current Strategies of Muscular Dystrophy Therapeutics: An Overview. <i>Methods in Molecular Biology</i> , 2023, , 3-30.	0.4	2
2424	Current understanding of gliomagenesis: from model to mechanism. <i>International Journal of Medical Sciences</i> , 2022, 19, 2071-2079.	1.1	1
2425	Efficiency of CRISPR-Cas9 genetic engineering in <i>Escherichia coli</i> BL21 is impaired by lack of Lon protease. <i>Journal of Microbiological Methods</i> , 2023, 204, 106648.	0.7	2
2426	Current advances of <i>Pichia pastoris</i> as cell factories for production of recombinant proteins. <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	12
2427	A Genetic Compensation Phenomenon and Global Gene Expression Changes in Sex-miR-2766-3p Knockout Strain of <i>Spodoptera exigua</i> H4bner (<i>Lepidoptera: Noctuidae</i>). <i>Insects</i> , 2022, 13, 1075.	1.0	1
2429	Multiplexed engineering and precision gene editing in cellular immunotherapy. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	4
2430	Repurposing the Endogenous CRISPR-Cas9 System for High-Efficiency Genome Editing in <i>Lactobacillus paracasei</i> . <i>ACS Synthetic Biology</i> , 2022, 11, 4031-4042.	1.9	2
2431	PAM-independent ultra-specific activation of CRISPR-Cas12a via sticky-end dsDNA. <i>Nucleic Acids Research</i> , 2022, 50, 12674-12688.	6.5	11
2433	Challenges in Gene Therapy for Somatic Reverted Mosaicism in X-Linked Combined Immunodeficiency by CRISPR/Cas9 and Prime Editing. <i>Genes</i> , 2022, 13, 2348.	1.0	3

#	ARTICLE	IF	CITATIONS
2434	Induction of Male Sterility by Targeted Mutation of a Restorer-of-Fertility Gene with CRISPR/Cas9-Mediated Genome Editing in Brassica napus L. <i>Plants</i> , 2022, 11, 3501.	1.6	1
2435	PCSK9 Biomarker and Key Modulator for Cardiovascular Disorders: Heralding a New Therapeutic Era and their Future Perspectives. <i>Current Molecular Pharmacology</i> , 2022, 16, .	0.7	0
2436	Advances and perspectives on perylenequinone biosynthesis. <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	5
2437	Prospective Advances in Genome Editing Investigation. <i>Advances in Experimental Medicine and Biology</i> , 2023, , 301-313.	0.8	0
2438	CRISPR-Cas9 mediated genome editing of Huntingtonâ€™s disease neurospheres. <i>Molecular Biology Reports</i> , 2023, 50, 2127-2136.	1.0	0
2439	Progress and Challenges in Elucidating the Functional Role of Effectors in the Soybean-Phytophthora sojae Interaction. <i>Journal of Fungi (Basel, Switzerland)</i> , 2023, 9, 12.	1.5	1
2440	Fecal Microbiota Transplantation and Other Gut Microbiota Manipulation Strategies. <i>Microorganisms</i> , 2022, 10, 2424.	1.6	13
2441	Background: Genome Editing with Programmable Nucleases. , 2023, , 17-50.		0
2442	CRISPR Off-Target Analysis Platforms. <i>Methods in Molecular Biology</i> , 2023, , 279-285.	0.4	1
2443	THOR is a targetable epigenetic biomarker with clinical implications in breast cancer. <i>Clinical Epigenetics</i> , 2022, 14, .	1.8	6
2444	A Review on Advanced CRISPR-Based Genome-Editing Tools: Base Editing and Prime Editing. <i>Molecular Biotechnology</i> , 2023, 65, 849-860.	1.3	12
2445	New Therapeutics for Extracellular Vesicles: Delivering CRISPR for Cancer Treatment. <i>International Journal of Molecular Sciences</i> , 2022, 23, 15758.	1.8	7
2446	Overcoming the Bloodâ€™Brain Barrier for Gene Therapy via Systemic Administration of GSHâ€™Responsive Silica Nanocapsules. <i>Advanced Materials</i> , 2023, 35, .	11.1	18
2447	Comprehensive computational analysis of epigenetic descriptors affecting CRISPR-Cas9 off-target activity. <i>BMC Genomics</i> , 2022, 23, .	1.2	4
2448	Prime Editing in Mammals: The Next Generation of Precision Genome Editing. <i>CRISPR Journal</i> , 2022, 5, 746-768.	1.4	0
2449	Advances in off-target detection for CRISPR-based genome editing. <i>Human Gene Therapy</i> , 0, , .	1.4	0
2451	Singleâ€™molecule localization microscopy goes quantitative. <i>Microscopy Research and Technique</i> , 2023, 86, 494-504.	1.2	0
2452	Liveâ€™Cell Glycocalyx Engineering. <i>ChemBioChem</i> , 2023, 24, .	1.3	1

#	ARTICLE	IF	CITATIONS
2454	Machine learning in the estimation of CRISPR-Cas9 cleavage sites for plant system. <i>Frontiers in Genetics</i> , 0, 13, .	1.1	1
2455	Consumer Evaluation of Novel Plant-Breeding Technologies: A Decision-Focused Research Agenda. <i>Concepts and Strategies in Plant Sciences</i> , 2023, , 101-134.	0.6	0
2456	CRISPR-Cas9 recognition of enzymatically synthesized base-modified nucleic acids. <i>Nucleic Acids Research</i> , 2023, 51, 1501-1511.	6.5	5
2457	Progresses, Challenges, and Prospects of CRISPR/Cas9 Gene-Editing in Glioma Studies. <i>Cancers</i> , 2023, 15, 396.	1.7	5
2459	Introduction and Perspectives of DNA Base Editors. <i>Methods in Molecular Biology</i> , 2023, , 3-11.	0.4	1
2460	Dynamics of CLIMP-63 S-acylation control ER morphology. <i>Nature Communications</i> , 2023, 14, .	5.8	9
2461	MDM2 antagonists promote CRISPR/Cas9-mediated precise genome editing in sheep primary cells. <i>Molecular Therapy - Nucleic Acids</i> , 2023, 31, 309-323.	2.3	1
2462	Functional Analysis of Variants in BRCA1 Using CRISPR Base Editors. <i>Methods in Molecular Biology</i> , 2023, , 73-85.	0.4	0
2464	Metabolic Engineering of De Novo Pathway for the Production of 2â€²-Fucosyllactose in <i>Escherichia coli</i> . <i>Molecular Biotechnology</i> , 2023, 65, 1485-1497.	1.3	1
2465	Triple functional mild photothermal improves gene editing of PD-L1 for enhanced antitumor immunity. <i>Journal of Controlled Release</i> , 2023, 354, 57-68.	4.8	9
2466	Sensitive and selective DNA detecting electrochemical sensor via double cleaving CRISPR Cas12a and dual polymerization on hyperbranched rolling circle amplification. <i>Biosensors and Bioelectronics</i> , 2023, 224, 115078.	5.3	17
2467	A Landscape of CRISPR/Cas Technique for Emerging Viral Disease Diagnostics and Therapeutics: Progress and Prospects. <i>Pathogens</i> , 2023, 12, 56.	1.2	6
2468	Advances in CRISPR-Cas9 for the Baculovirus Vector System: A Systematic Review. <i>Viruses</i> , 2023, 15, 54.	1.5	1
2469	Host Plant Resistance: An Eco-Friendly Approach for Crop Disease Management. , 2021, , 395-449.		0
2470	Functional genomics approaches for combating the abiotic stresses in wheat. , 2023, , 209-232.		0
2471	CRISPR-Cas genome editing for the development of abiotic stress-tolerant wheat. , 2023, , 195-207.		1
2472	Implications of CRISPR-Cas9 Genome Editing Methods in Atherosclerotic Cardiovascular Diseases. <i>Current Problems in Cardiology</i> , 2023, 48, 101603.	1.1	1
2473	CRISPR and CAS Editing Tools Employment in the Control of AMR Pathogens. , 2023, , 1-19.		0

#	ARTICLE	IF	CITATIONS
2474	Recent Advances in Genome-Editing Technology with CRISPR/Cas9 Variants and Stimuli-Responsive Targeting Approaches within Tumor Cells: A Future Perspective of Cancer Management. <i>International Journal of Molecular Sciences</i> , 2023, 24, 7052.	1.8	6
2475	Light-Start CRISPR-Cas12a Reaction with Caged crRNA Enables Rapid and Sensitive Nucleic Acid Detection. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	3
2476	Genome editing, a superior therapy for inherited retinal diseases. <i>Vision Research</i> , 2023, 206, 108192.	0.7	10
2477	Efficient correction of ABCA4 variants by CRISPR-Cas9 in hiPSCs derived from Stargardt disease patients. <i>Molecular Therapy - Nucleic Acids</i> , 2023, 32, 64-79.	2.3	4
2478	Genetic susceptibility to diabetic kidney disease is linked to promoter variants of XOR. <i>Nature Metabolism</i> , 2023, 5, 607-625.	5.1	5
2479	Applications of Genome Editing Techniques for the Improvement of Medicinal Plants. , 2022, , 545-569.		0
2480	The paradigm of intracellular parasite survival and drug resistance in leishmanial parasite through genome plasticity and epigenetics: Perception and future perspective. <i>Frontiers in Cellular and Infection Microbiology</i> , 0, 13, .	1.8	0
2481	Prime Editing for Human Gene Therapy: Where Are We Now?. <i>Cells</i> , 2023, 12, 536.	1.8	11
2482	Gene Drive: Past, Present and Future Roads to Vertebrate Biocontrol. , 2023, 2, 52-70.		2
2483	High-Efficiency CRISPR/Cas9-Mediated Correction of a Homozygous Mutation in Achromatopsia-Patient-Derived iPSCs. <i>International Journal of Molecular Sciences</i> , 2023, 24, 3655.	1.8	2
2485	Therapeutic strategies for autism: targeting three levels of the central dogma of molecular biology. <i>Translational Psychiatry</i> , 2023, 13, .	2.4	6
2486	A Split CRISPR/Cas13b System for Conditional RNA Regulation and Editing. <i>Journal of the American Chemical Society</i> , 2023, 145, 5561-5569.	6.6	5
2487	Dynamics of Target DNA Binding and Cleavage by <i>Staphylococcus aureus</i> Cas9 as Revealed by High-Speed Atomic Force Microscopy. <i>ACS Nano</i> , 2023, 17, 4629-4641.	7.3	2
2488	Localization and characterization of carbonic anhydrases in <i>Thalassiosira pseudonana</i> . <i>Photosynthesis Research</i> , 2023, 156, 217-229.	1.6	9
2489	A simple, rapid, and efficient method for generating multigene knockout culture cells by the CRISPR/Cas9 system. <i>Genes To Cells</i> , 0, , .	0.5	1
2490	Show me the benefits! Determinants of behavioral intentions towards CRISPR in the United States. <i>Food Quality and Preference</i> , 2023, 107, 104842.	2.3	4
2491	Genome Editing Technology: A New Frontier for the Treatment and Prevention of Cardiovascular Diseases. <i>Current Problems in Cardiology</i> , 2023, 48, 101692.	1.1	8
2492	Genetic improvement in <i>Musa</i> through modern biotechnological methods. <i>Revista Bionatura</i> , 2023, 8, 1-13.	0.1	0

#	ARTICLE	IF	CITATIONS
2493	Role of gut symbionts of insect pests: A novel target for insect-pest control. <i>Frontiers in Microbiology</i> , 0, 14, .	1.5	9
2494	Excision of Integrated Human Herpesvirus 6A Genomes Using CRISPR/Cas9 Technology. <i>Microbiology Spectrum</i> , 2023, 11, .	1.2	0
2495	Biomaterial-assisted targeted and controlled delivery of CRISPR/Cas9 for precise gene editing. <i>Biomaterials Science</i> , 2023, 11, 3762-3783.	2.6	16
2497	Bioinformatics approaches to analyzing CRISPR screen data: from dropout screens to single-cell CRISPR screens. <i>Quantitative Biology</i> , 2022, 10, 307-320.	0.3	3
2498	Many parasitoids lack adult fat accumulation, despite fatty acid synthesis: A discussion of concepts and considerations for future research. <i>Current Research in Insect Science</i> , 2023, 3, 100055.	0.8	1
2499	Development of a CRISPR-cas9 system "CZON-cutter" for multiplexed organelle imaging in a simple unicellular alga. <i>Plant Morphology</i> , 2022, 34, 37-45.	0.1	0
2500	Application of nanotechnology in reversing therapeutic resistance and controlling metastasis of colorectal cancer. <i>World Journal of Gastroenterology</i> , 0, 29, 1911-1941.	1.4	0
2501	Light-Start CRISPR-Cas12a Reaction with Caged crRNA Enables Rapid and Sensitive Nucleic Acid Detection. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	15
2503	Binding to the conserved and stably folded guide RNA pseudoknot induces Cas12a conformational changes during ribonucleoprotein assembly. <i>Journal of Biological Chemistry</i> , 2023, 299, 104700.	1.6	1
2504	Targeted Modulation of Chicken Genes In Vitro Using CRISPRa and CRISPRi Toolkit. <i>Genes</i> , 2023, 14, 906.	1.0	1
2505	Large-scale FO CRISPR screens in vivo using MIC-Drop. <i>Nature Protocols</i> , 2023, 18, 1841-1865.	5.5	1
2506	The need for assessment of risks arising from interactions between NGT organisms from an EU perspective. <i>Environmental Sciences Europe</i> , 2023, 35, .	11.0	3
2508	RNA-Cleaving DNase-Based Amplification Strategies for Biosensing and Therapy. <i>Advanced Healthcare Materials</i> , 2023, 12, .	3.9	10
2509	Cellular-Based Therapies for Paediatric GI Motility Disorders. , 2022, , 617-629.		0
2512	New Therapeutic Chemical Modalities: Compositions, Modes-of-action, and Drug Discovery. , 2023, , 911-961.		0
2520	Diseases of Cassava. <i>Handbook of Plant Disease Management</i> , 2023, , 1-37.	0.5	0
2522	Produktion von transgenen Nutztieren: "berblick "ber transgene Technologien. , 2023, , 109-138.		0
2528	<i>Agrobacterium tumefaciens</i> -Mediated Plant Transformation: A Review. <i>Molecular Biotechnology</i> , 0, , .	1.3	5

#	ARTICLE	IF	CITATIONS
2532	Research development of porphyrin-based metal-organic frameworks: targeting modalities and cancer therapeutic applications. <i>Journal of Materials Chemistry B</i> , 2023, 11, 6172-6200.	2.9	5
2535	Diagnostic applications and therapeutic option of Cascade CRISPR/Cas in the modulation of miRNA in diverse cancers: promises and obstacles. <i>Journal of Cancer Research and Clinical Oncology</i> , 2023, 149, 9557-9575.	1.2	2
2548	CRISPR Libraries and Whole-Genome Screening to Identify Essential Factors for Viral Infections. <i>Advances in Experimental Medicine and Biology</i> , 2023, , 157-172.	0.8	0
2550	CRISPR/Cas9 as a Simple Technique for the Generation of Murine Knockout Models for Neuropsychiatric Diseases. <i>Methods in Molecular Biology</i> , 2023, , 45-55.	0.4	0
2551	CRISPR and CAS Editing Tools Employment in the Control of AMR Pathogens. , 2023, , 999-1017.		0
2572	Modern therapies of nonsmall cell lung cancer. <i>Journal of Applied Genetics</i> , 2023, 64, 695-711.	1.0	3
2573	Medicine and Disease. <i>Computational Biology</i> , 2023, , 355-364.	0.1	0
2574	The Nature of Living Things. <i>Computational Biology</i> , 2023, , 173-216.	0.1	0
2580	CRISPR/Cas Mediated Genome Editing for Improving Stress Resilience in Plants. <i>Environmental Science and Engineering</i> , 2023, , 143-167.	0.1	0
2599	Exosomes for CRISPR-Cas9 Delivery: The Cutting Edge in Genome Editing. <i>Molecular Biotechnology</i> , 0, , .	1.3	1
2602	Genome Editing in Diatoms: Current Progress and Challenges. , 2023, , 54-60.		0
2606	Enhancing Maize (<i>Zea mays</i> L.) Crop through Advanced Techniques: A Comprehensive Approach. , 0, , .		0
2612	CRISPR/Cas-Mediated Genome Editing for Sugarcane Improvement. <i>Sugar Tech</i> , 0, , .	0.9	0
2618	Benefits of Using the CRISPR/Cas9 System for the Correction of Genetic Mutations. <i>Molecular Genetics, Microbiology and Virology</i> , 2023, 38, 137-142.	0.0	0
2620	Gene Editing in Hematopoietic Stem Cells. <i>Advances in Experimental Medicine and Biology</i> , 2023, , 177-199.	0.8	0
2621	CRISPR-Cas-led advancements in translational biotechnology. , 2024, , 71-91.		0
2623	Genetic modification of mice using CRISPR-Cas9: Best practices and practical concepts explained. , 2024, , 425-452.		0
2625	Diseases of Cassava. <i>Handbook of Plant Disease Management</i> , 2023, , 1-36.	0.5	0

#	ARTICLE	IF	CITATIONS
2626	RNA therapeutics for the treatment of blood disorders. Progress in Molecular Biology and Translational Science, 2024, , 273-286.	0.9	0
2631	Pathogenesis, molecular mechanism and treatment approaches of psoriasis: An update. AIP Conference Proceedings, 2024, , .	0.3	0
2641	CRISPR-Cas and Its Applications in Food Production. , 2024, , 349-391.		0
2643	Crispr Gene Editing for Secondary Metabolite Production: A Review. , 2024, , 437-475.		0
2644	Targeted Gene Editing of Nuclear-Encoded Plastid Proteins in Phaeodactylum tricornutum via CRISPR/Cas9. Methods in Molecular Biology, 2024, , 269-287.	0.4	0
2646	Multiplex genome editing in plants through CRISPR-Cas. , 2024, , 127-142.		0
2647	Bioinformatics tools and databases in genome editing for plants. , 2024, , 51-66.		0