DNA-Free Genetically Edited Grapevine and Apple Prot Ribonucleoproteins

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Citation Report

#	Article	IF	CITATIONS
1	Development of CRISPR/Cas9 mediated virus resistance in agriculturally important crops. Bioengineered, 2017, 8, 274-279.	3.2	49
2	Towards mastering CRISPR-induced gene knock-in in plants: Survey of key features and focus on the model Physcomitrella patens. Methods, 2017, 121-122, 103-117.	3.8	51
3	Current and future editing reagent delivery systems for plant genome editing. Science China Life Sciences, 2017, 60, 490-505.	4.9	124
4	New variants of CRISPR RNAâ€guided genome editing enzymes. Plant Biotechnology Journal, 2017, 15, 917-926.	8.3	79
5	Linking the knowledge and reasoning of dissenting actors fosters a bottom-up design of agroecological viticulture. Agronomy for Sustainable Development, 2017, 37, 1.	5.3	13
6	Genome Editing to Improve Abiotic Stress Responses in Plants. Progress in Molecular Biology and Translational Science, 2017, 149, 99-109.	1.7	32
7	Engineering Molecular Immunity Against Plant Viruses. Progress in Molecular Biology and Translational Science, 2017, 149, 167-186.	1.7	12
8	Recent advances in CRISPR/Cas mediated genome editing for crop improvement. Plant Biotechnology Reports, 2017, 11, 193-207.	1.5	37
9	Genome Editing—Principles and Applications for Functional Genomics Research and Crop Improvement. Critical Reviews in Plant Sciences, 2017, 36, 291-309.	5.7	111
10	Breeding next generation tree fruits: technical and legal challenges. Horticulture Research, 2017, 4, 17067.	6.3	51
11	Gene Editing in Polyploid Crops: Wheat, Camelina, Canola, Potato, Cotton, Peanut, Sugar Cane, and Citrus. Progress in Molecular Biology and Translational Science, 2017, 149, 65-80.	1.7	39
12	Genetic engineering strategies for biotic and abiotic stress tolerance and quality enhancement in horticultural crops: a comprehensive review. 3 Biotech, 2017, 7, 239.	2.2	159
13	Whole-genome sequencing and SNV genotyping of â€~Nebbiolo' (Vitis vinifera L.) clones. Scientific Reports, 2017, 7, 17294.	3.3	72
14	Crop genes modified using the CRISPR/Cas system. Russian Journal of Genetics: Applied Research, 2017, 7, 822-832.	0.4	13
15	New Biotechnological Tools for the Genetic Improvement of Major Woody Fruit Species. Frontiers in Plant Science, 2017, 8, 1418.	3.6	102
16	CRISPR/Cas9: A Practical Approach in Date Palm Genome Editing. Frontiers in Plant Science, 2017, 8, 1469.	3.6	34
17	Gene Editing and Crop Improvement Using CRISPR-Cas9 System. Frontiers in Plant Science, 2017, 8, 1932.	3.6	244
18	Common Bean Fe Biofortification Using Model Species' Lessons. Frontiers in Plant Science, 2017, 8, 2187.	3.6	20

ARTICLE IF CITATIONS # CRISPR/Cas9-mediated targeted mutagenesis in grape. PLoS ONE, 2017, 12, e0177966. 2.5 173 19 Transgenic crops and beyond: how can biotechnology contribute to the sustainable control of plant diseases?. European Journal of Plant Pathology, 2018, 152, 977-986. 1.7 High-Resolution Analysis of the Efficiency, Heritability, and Editing Outcomes of CRISPR/Cas9-Induced Modifications of <i>NCED4</i> in Lettuce (<i>Lactuca sativa</i>). G3: Genes, Genomes, Genetics, 2018, 8, 21 1.8 83 1513-1521. A method for the production and expedient screening of CRISPR/Cas9-mediated non-transgenic mutant 148 plants. Horticulture Research, 2018, 5, 13. CRISPR/Cas approach: A new way of looking at plant-abiotic interactions. Journal of Plant Physiology, 23 3.5 66 2018, 224-225, 156-162. Efficient genome editing of wild strawberry genes, vector development and validation. Plant Biotechnology Journal, 2018, 16, 1868-1877. 8.3 Genome editing technologies and their applications in crop improvement. Plant Biotechnology 25 1.5 41 Reports, 2018, 12, 57-68. Genome editing of bread wheat using biolistic delivery of CRISPR/Cas9 in vitro transcripts or 12.0 26 179 ribonucleoproteins. Nature Protocols, 2018, 13, 413-430. Concerns regarding †off-target' activity of genome editing endonucleases. Plant Physiology and 27 5.8 32 Biochemistry, 2018, 131, 22-30. Identification of Novel Strain-Specific and Environment-Dependent Minor QTLs Linked to Fire Blight 1.8 Resistance in Apples. Plant Molecular Biology Reporter, 2018, 36, 247-256. CRISPR/Cas9â€mediated efficient targeted mutagenesis in grape in the first generation. Plant 29 270 8.3 Biotechnology Journal, 2018, 16, 844-855. CRISPR/Cas9-mediated efficient editing in phytoene desaturase (PDS) demonstrates precise manipulation 30 203 in banana cv. Rasthali genome. Functional and Integrative Genomics, 2018, 18, 89-99. A Tonoplast Sugar Transporter Underlies a Sugar Accumulation QTL in Watermelon. Plant Physiology, $\mathbf{31}$ 4.8 118 2018, 176, 836-850. Genome Editing in Trees: From Multiple Repair Pathways to Long-Term Stability. Frontiers in Plant Science, 2018, 9, 1732. 3.6 CRISPR/Cas9-Mediated Gene Editing Tool and Fathomless Genetic and Metabolic Engineering 33 2 Applications in Plants. , 2018, , 167-179. DNA-Free Genome Editing of Brassica oleracea and B. rapa Protoplasts Using CRISPR-Cas9 34 134 Ribonucleoprotein Complexes. Frontiers in Plant Science, 2018, 9, 1594. 35 Applications and potential of genome editing in crop improvement. Genome Biology, 2018, 19, 210. 8.8 286 Pathogenicity Traits Correlate With the Susceptible Vitis vinifera Leaf Physiology Transition in the Biotroph Fungus Erysiphe necator: An Adaptation to Plant Ontogenic Resistance. Frontiers in Plant Science, 2018, 9, 1808.

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#	Article	IF	CITATIONS
37	A New Zealand Perspective on the Application and Regulation of Gene Editing. Frontiers in Plant Science, 2018, 9, 1323.	3.6	56
38	Current Progress and Future Prospects for the Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) Genome Editing Technology in Fruit Tree Breeding. Critical Reviews in Plant Sciences, 2018, 37, 233-258.	5.7	10
39	CRISPR–Cas9-mediated genome editing in apple and grapevine. Nature Protocols, 2018, 13, 2844-2863.	12.0	142
40	Editing the genome of Aphanomyces invadans using CRISPR/Cas9. Parasites and Vectors, 2018, 11, 554.	2.5	14
41	Genome Editing for Crop Improvement – Applications in Clonally Propagated Polyploids With a Focus on Potato (Solanum tuberosum L.). Frontiers in Plant Science, 2018, 9, 1607.	3.6	65
42	Crop Gene-Editing: Should We Bypass or Apply Existing GMO Policy?. Trends in Plant Science, 2018, 23, 947-950.	8.8	18
43	Genome Editing as a Tool for Fruit Ripening Manipulation. Frontiers in Plant Science, 2018, 9, 1415.	3.6	33
44	Enhanced Genome Editing with Cas9 Ribonucleoprotein in Diverse Cells and Organisms. Journal of Visualized Experiments, 2018, , .	0.3	29
45	CRISPR for Crop Improvement: An Update Review. Frontiers in Plant Science, 2018, 9, 985.	3.6	425
46	Woody Ornamentals of the Temperate Zone. Handbook of Plant Breeding, 2018, , 803-887.	0.1	9
47	Plant Tissue Culture: A Battle Horse in the Genome Editing Using CRISPR/Cas9. Methods in Molecular Biology, 2018, 1815, 131-148.	0.9	8
48	Genome Editing: Targeting Susceptibility Genes for Plant Disease Resistance. Trends in Biotechnology, 2018, 36, 898-906.	9.3	215
49	Efficient genome editing in Fusarium oxysporum based on CRISPR/Cas9 ribonucleoprotein complexes. Fungal Genetics and Biology, 2018, 117, 21-29.	2.1	91
50	Putting primary metabolism into perspective to obtain better fruits. Annals of Botany, 2018, 122, 1-21.	2.9	77
51	Genome Editing for Crop Improvement: Status and Prospects. , 2018, , 75-104.		3
52	The Enhancement of Plant Disease Resistance Using CRISPR/Cas9 Technology. Frontiers in Plant Science, 2018, 9, 1245.	3.6	190
53	Unlocking the potential of CRISPR technology for improving livelihoods in Africa. Biotechnology and Genetic Engineering Reviews, 2018, 34, 198-215.	6.2	6
54	Exploration of Plant-Microbe Interactions for Sustainable Agriculture in CRISPR Era. Microorganisms, 2019, 7, 269.	3.6	87

#	Article	IF	CITATIONS
55	Modern Trends in Plant Genome Editing: An Inclusive Review of the CRISPR/Cas9 Toolbox. International Journal of Molecular Sciences, 2019, 20, 4045.	4.1	133
56	Strategies to Increase On-Target and Reduce Off-Target Effects of the CRISPR/Cas9 System in Plants. International Journal of Molecular Sciences, 2019, 20, 3719.	4.1	61
57	DNA-free genome editing with preassembled CRISPR/Cas9 ribonucleoproteins in plants. Transgenic Research, 2019, 28, 61-64.	2.4	39
58	The emerging and uncultivated potential of CRISPR technology in plant science. Nature Plants, 2019, 5, 778-794.	9.3	294
59	A Multifaceted Overview of Apple Tree Domestication. Trends in Plant Science, 2019, 24, 770-782.	8.8	46
60	CRISPR-Cas9 system: A new-fangled dawn in gene editing. Life Sciences, 2019, 232, 116636.	4.3	160
61	Future Breeding Strategies. Compendium of Plant Genomes, 2019, , 301-315.	0.5	0
62	Genome editing for horticultural crop improvement. Horticulture Research, 2019, 6, 113.	6.3	79
63	CRISPR/Cas System: Recent Advances and Future Prospects for Genome Editing. Trends in Plant Science, 2019, 24, 1102-1125.	8.8	292
64	Genome Editing in Plants: Exploration of Technological Advancements and Challenges. Cells, 2019, 8, 1386.	4.1	115
65	Citrus Genetic Engineering for Disease Resistance: Past, Present and Future. International Journal of Molecular Sciences, 2019, 20, 5256.	4.1	54
66	DNA-free mutagenesis of GIGANTEA in Brassica oleracea var. capitata using CRISPR/Cas9 ribonucleoprotein complexes. Plant Biotechnology Reports, 2019, 13, 483-489.	1.5	23
67	Delivery of CRISPR/Cas Components into Higher Plant Cells for Genome Editing. Russian Journal of Plant Physiology, 2019, 66, 694-706.	1.1	27
68	Evolution of plant mutagenesis tools: a shifting paradigm from random to targeted genome editing. Plant Biotechnology Reports, 2019, 13, 423-445.	1.5	43
69	Efficient Targeted Mutagenesis in Apple and First Time Edition of Pear Using the CRISPR-Cas9 System. Frontiers in Plant Science, 2019, 10, 40.	3.6	163
70	Genome Editing in Agriculture: Technical and Practical Considerations. International Journal of Molecular Sciences, 2019, 20, 2888.	4.1	51
71	Isolation and culture of strawberry protoplasts and field evaluation of regenerated plants. Scientia Horticulturae, 2019, 256, 108552.	3.6	10
72	Data Mining by Pluralistic Approach on CRISPR Gene Editing in Plants. Frontiers in Plant Science, 2019, 10, 801.	3.6	12

#	Article	IF	CITATIONS
73	CRISPR technology is revolutionizing the improvement of tomato and other fruit crops. Horticulture Research, 2019, 6, 77.	6.3	164
74	Improving plant-resistance to insect-pests and pathogens: The new opportunities through targeted genome editing. Seminars in Cell and Developmental Biology, 2019, 96, 65-76.	5.0	59
75	Regeneration of plants from embryogenic callus-derived protoplasts of Garganega and Sangiovese grapevine (Vitis vinifera L.) cultivars. Plant Cell, Tissue and Organ Culture, 2019, 138, 239-246.	2.3	28
76	Harnessing Genome Editing Techniques to Engineer Disease Resistance in Plants. Frontiers in Plant Science, 2019, 10, 550.	3.6	62
77	Application of genetic modification and genome editing for developing climateâ€smart banana. Food and Energy Security, 2019, 8, e00168.	4.3	52
78	CRISPR/Cas Genome Editing and Precision Plant Breeding in Agriculture. Annual Review of Plant Biology, 2019, 70, 667-697.	18.7	959
79	An efficient DNA- and selectable-marker-free genome-editing system using zygotes in rice. Nature Plants, 2019, 5, 363-368.	9.3	135
80	Overexpression of MdEPF2 improves water use efficiency and reduces oxidative stress in tomato. Environmental and Experimental Botany, 2019, 162, 321-332.	4.2	26
81	GM Food Regulations in the EU. , 2019, , .		3
82	Prunus genetics and applications after de novo genome sequencing: achievements and prospects. Horticulture Research, 2019, 6, 58.	6.3	121
83	Agrobacterium-Mediated Transformation of Tree Fruit Crops: Methods, Progress, and Challenges. Frontiers in Plant Science, 2019, 10, 226.	3.6	48
84	Evaluation of Methods to Assess in vivo Activity of Engineered Genome-Editing Nucleases in Protoplasts. Frontiers in Plant Science, 2019, 10, 110.	3.6	21
85	An EU Perspective on Biosafety Considerations for Plants Developed by Genome Editing and Other New Genetic Modification Techniques (nGMs). Frontiers in Bioengineering and Biotechnology, 2019, 7, 31.	4.1	65
86	Systems of Delivery of CRISPR/Cas9 Ribonucleoprotein Complexes for Genome Editing. Russian Journal of Bioorganic Chemistry, 2019, 45, 431-437.	1.0	12
87	Application and optimization of the CRISPR/Cas9 system in grape. Acta Horticulturae, 2019, , 149-154.	0.2	1
88	Development of Improved Fruit, Vegetable, and Ornamental Crops Using the CRISPR/Cas9 Genome Editing Technique. Plants, 2019, 8, 601.	3.5	59
89	Biomimetic Mineralization-Based CRISPR/Cas9 Ribonucleoprotein Nanoparticles for Gene Editing. ACS Applied Materials & amp; Interfaces, 2019, 11, 47762-47770.	8.0	14

		CITATION REPORT		
#	Article		IF	Citations
91	DNA-Free Genome Editing: Past, Present and Future. Frontiers in Plant Science, 2018, 9), 1957.	3.6	135
92	Functional analysis of the <i>TM6</i> MADS-box gene in the octoploid strawberry by CRISPR/Cas9-directed mutagenesis. Journal of Experimental Botany, 2019, 70, 885-895	5.	4.8	93
93	The CRISPR/Cas9 system and its applications in crop genome editing. Critical Reviews i 2019, 39, 321-336.	n Biotechnology,	9.0	109
94	Biolistic Delivery of CRISPR/Cas9 with Ribonucleoprotein Complex in Wheat. Methods Biology, 2019, 1917, 327-335.	in Molecular	0.9	23
95	CRISPR/Cas9: A Novel Weapon in the Arsenal to Combat Plant Diseases. Frontiers in Pl 9, 2008.	ant Science, 2018,	3.6	42
96	Plant Cellular and Molecular Biotechnology: Following Mariotti's Steps. Plants, 201	.9, 8, 18.	3.5	26
97	Application and future perspective of CRISPR/Cas9 genome editing in fruit crops. Journ Plant Biology, 2020, 62, 269-286.	al of Integrative	8.5	52
98	Prospects for potato genome editing to engineer resistance against viruses and cold-in sweetening. GM Crops and Food, 2020, 11, 185-205.	duced	3.8	12
99	CRISPR-associated nucleases: the Dawn of a new age of efficient crop improvement. Tr Research, 2020, 29, 1-35.	ansgenic	2.4	31
100	Grapevine: Resistance genes, sRNAs and immunity. , 2020, , 151-179.			3
101	Reduced fire blight susceptibility in apple cultivars using a highâ€efficiency CRISPR/Cas gene editing system. Plant Biotechnology Journal, 2020, 18, 845-858.	;9â€FLP/FRTâ€based	8.3	98
102	CRISPR/Cas9 for development of disease resistance in plants: recent progress, limitatic prospects. Briefings in Functional Genomics, 2020, 19, 26-39.	ns and future	2.7	87
103	Lipofection-mediated genome editing using DNA-free delivery of the Cas9/gRNA ribonu plant cells. Plant Cell Reports, 2020, 39, 245-257.	icleoprotein into	5.6	66
104	CRISPR-TSKO: A Tool for Tissue-Specific Genome Editing in Plants. Trends in Plant Scier 123-126.	nce, 2020, 25,	8.8	19
105	Improving Horticultural Crops via CRISPR/Cas9: Current Successes and Prospects. Plan	ts, 2020, 9, 1360.	3.5	18
106	The present and potential future methods for delivering CRISPR/Cas9 components in p Genetic Engineering and Biotechnology, 2020, 18, 25.	lants. Journal of	3.3	75
107	CRISPR/Cas9-Mediated Gene Editing in Grain Crops. , 0, , .			1
108	Efficient isolation of protoplasts from rice calli with pause points and its application in gene expression and genome editing assays. Plant Methods, 2020, 16, 151.	transient	4.3	14

#	Article	IF	CITATIONS
109	Broadening the GMO risk assessment in the EU for genome editing technologies in agriculture. Environmental Sciences Europe, 2020, 32, .	5.5	43
110	CRISPR/Cas9 Genome Editing Technology: A Valuable Tool for Understanding Plant Cell Wall Biosynthesis and Function. Frontiers in Plant Science, 2020, 11, 589517.	3.6	24
111	Genome Editing as A Versatile Tool to Improve Horticultural Crop Qualities. Horticultural Plant Journal, 2020, 6, 372-384.	5.0	18
112	Engineering crops of the future: CRISPR approaches to develop climate-resilient and disease-resistant plants. Genome Biology, 2020, 21, 289.	8.8	102
113	Efficient genome editing using CRISPR–Cas9 RNP delivery into cabbage protoplasts via electro-transfection. Plant Biotechnology Reports, 2020, 14, 695-702.	1.5	33
114	Recent Advances of In Vitro Culture for the Application of New Breeding Techniques in Citrus. Plants, 2020, 9, 938.	3.5	23
115	A Revolution toward Gene-Editing Technology and Its Application to Crop Improvement. International Journal of Molecular Sciences, 2020, 21, 5665.	4.1	62
116	CRISPR/Cas9 Gene Editing: An Unexplored Frontier for Forest Pathology. Frontiers in Plant Science, 2020, 11, 1126.	3.6	31
117	CRISPR-Cas9 System for Plant Genome Editing: Current Approaches and Emerging Developments. Agronomy, 2020, 10, 1033.	3.0	47
118	CRISPR/Cas9-mediated mutagenesis of VvMLO3 results in enhanced resistance to powdery mildew in grapevine (Vitis vinifera). Horticulture Research, 2020, 7, 116.	6.3	113
119	Biotechnological Approaches: Gene Overexpression, Gene Silencing, and Genome Editing to Control Fungal and Oomycete Diseases in Grapevine. International Journal of Molecular Sciences, 2020, 21, 5701.	4.1	39
120	Improving Nutritional and Functional Quality by Genome Editing of Crops: Status and Perspectives. Frontiers in Plant Science, 2020, 11, 577313.	3.6	53
121	Revisiting CRISPR/Cas-mediated crop improvement: Special focus on nutrition. Journal of Biosciences, 2020, 45, 1.	1.1	18
122	CRISPR/Cas9-mediated VvPR4b editing decreases downy mildew resistance in grapevine (Vitis vinifera L.). Horticulture Research, 2020, 7, 149.	6.3	75
123	Exploration of Susceptible Genes with Clustered Regularly Interspaced Short Palindromic Repeats–Tissue-Specific Knockout (CRISPR-TSKO) to Enhance Host Resistance. Critical Reviews in Plant Sciences, 2020, 39, 387-417.	5.7	15
124	PEG-Delivered CRISPR-Cas9 Ribonucleoproteins System for Gene-Editing Screening of Maize Protoplasts. Genes, 2020, 11, 1029.	2.4	36
125	Establishment of a PEG-mediated protoplast transformation system based on DNA and CRISPR/Cas9 ribonucleoprotein complexes for banana. BMC Plant Biology, 2020, 20, 425.	3.6	62
126	New Plant Breeding Techniques in Citrus for the Improvement of Important Agronomic Traits. A Review. Frontiers in Plant Science, 2020, 11, 1234.	3.6	32

#	Article	IF	CITATIONS
127	Advanced molecular tools for breeding in Mediterranean fruit trees: genome editing approach of Ficus carica L Acta Horticulturae, 2020, , 1-10.	0.2	4
128	Table Grapes during Postharvest Storage: A Review of the Mechanisms Implicated in the Beneficial Effects of Treatments Applied for Quality Retention. International Journal of Molecular Sciences, 2020, 21, 9320.	4.1	17
129	Plant Polyphenols-Biofortified Foods as a Novel Tool for the Prevention of Human Gut Diseases. Antioxidants, 2020, 9, 1225.	5.1	22
130	Overview of purple blotch disease and understanding its management through chemical, biological and genetic approaches. Journal of Integrative Agriculture, 2020, 19, 3013-3024.	3.5	9
131	Applications of CRISPR/Cas to Improve Crop Disease Resistance: Beyond Inactivation of Susceptibility Factors. IScience, 2020, 23, 101478.	4.1	55
132	Loss of function of CRT1a (calreticulin) reduces plant susceptibility to <i>Verticillium longisporum</i> in both <i>Arabidopsis thaliana</i> and oilseed rape (<i>Brassica napus</i>). Plant Biotechnology Journal, 2020, 18, 2328-2344.	8.3	39
133	Genome editing technology and application in soybean improvement. Oil Crop Science, 2020, 5, 31-40.	2.0	32
134	CRISPR/Cas9-Mediated <i>SIMYC2</i> Mutagenesis Adverse to Tomato Plant Growth and MeJA-Induced Fruit Resistance to <i>Botrytis cinerea</i> . Journal of Agricultural and Food Chemistry, 2020, 68, 5529-5538.	5.2	46
135	Localization shift of a sugar transporter contributes to phloem unloading in sweet watermelons. New Phytologist, 2020, 227, 1858-1871.	7.3	32
136	Precision genome editing in plants: state-of-the-art in CRISPR/Cas9-based genome engineering. BMC Plant Biology, 2020, 20, 234.	3.6	152
137	Perspectives of CRISPR/Cas-mediated cis-engineering in horticulture: unlocking the neglected potential for crop improvement. Horticulture Research, 2020, 7, 36.	6.3	52
138	Genome engineering in medicinally important plants using CRISPR/Cas9 tool. , 2020, , 155-161.		3
139	Prospects for the Study and Improvement of Abiotic Stress Tolerance in Date Palms in the Post-genomics Era. Frontiers in Plant Science, 2020, 11, 293.	3.6	34
140	Fruit crops improvement using CRISPR/Cas9 system. , 2020, , 131-145.		5
141	Embryogenic callus induction and <i>Agrobacterium</i> -mediated genetic transformation of â€~Shine Muscat' grape. Plant Biotechnology, 2020, 37, 185-194.	1.0	7
142	CRISPR/Cas9-based genome editing of banana for disease resistance. Current Opinion in Plant Biology, 2020, 56, 118-126.	7.1	63
143	CRISPR/Cas9â€Based Genome Editing Using Rice Zygotes. Current Protocols in Plant Biology, 2020, 5, e20111.	2.8	11
144	A review of CRISPR associated genome engineering: application, advances and future prospects of genome targeting tool for crop improvement. Biotechnology Letters, 2020, 42, 1611-1632.	2.2	25

#	Article	IF	CITATIONS
145	How Crisp is CRISPR? CRISPR-Cas-mediated crop improvement with special focus on nutritional traits. , 2020, , 159-197.		5
146	Targeted genome editing using CRISPR-Cas9: Applications in fruit quality and stress resilience. , 2020, , 199-207.		0
148	Recent developments in social network disruption approaches to manage bacterial plant diseases. Biological Control, 2020, 150, 104376.	3.0	2
149	How to start your monocot CRISPR/Cas project: plasmid design, efficiency detection, and offspring analysis. Rice, 2020, 13, 9.	4.0	15
150	Principles, Applications, and Biosafety of Plant Genome Editing Using CRISPR-Cas9. Frontiers in Plant Science, 2020, 11, 56.	3.6	133
151	CRISPR-Cas9 system for fungi genome engineering toward industrial applications. , 2020, , 69-81.		5
152	Virus-Induced Flowering by Apple Latent Spherical Virus Vector: Effective Use to Accelerate Breeding of Grapevine. Viruses, 2020, 12, 70.	3.3	15
153	Genome editing with the CRISPRâ€Cas system: an art, ethics and global regulatory perspective. Plant Biotechnology Journal, 2020, 18, 1651-1669.	8.3	97
154	The Rise of the CRISPR/Cpf1 System for Efficient Genome Editing in Plants. Frontiers in Plant Science, 2020, 11, 264.	3.6	73
155	CRISPR/Cas9-mediated targeted mutagenesis of TAS4 and MYBA7 loci in grapevine rootstock 101-14. Transgenic Research, 2020, 29, 355-367.	2.4	38
156	Status of fire blight resistance breeding in Malus. Journal of Plant Pathology, 2021, 103, 3-12.	1.2	33
157	Somatic embryogenesis is an effective strategy for dissecting chimerism phenomena in Vitis vinifera cv Nebbiolo. Plant Cell Reports, 2021, 40, 205-211.	5.6	8
158	Engineering disease resistant plants through CRISPR-Cas9 technology. GM Crops and Food, 2021, 12, 125-144.	3.8	60
159	CRISPR/Cas: A powerful tool for gene function study and crop improvement. Journal of Advanced Research, 2021, 29, 207-221.	9.5	136
160	Strategies in the delivery of Cas9 ribonucleoprotein for CRISPR/Cas9 genome editing. Theranostics, 2021, 11, 614-648.	10.0	200
161	Tomato protoplasts as cell target for ribonucleoprotein (RNP)-mediated multiplexed genome editing. Plant Cell, Tissue and Organ Culture, 2021, 144, 463-467.	2.3	23
162	Simultaneous targeting of duplicated genes in Petunia protoplasts for flower color modification via CRISPR-Cas9 ribonucleoproteins. Plant Cell Reports, 2021, 40, 1037-1045.	5.6	72
163	Improving Biotic and Abiotic Stress Tolerance in Plants: A CRISPR-Cas Approach. Concepts and Strategies in Plant Sciences, 2021, , 217-237.	0.5	2

ARTICLE IF CITATIONS # Gene and Genome Editing with CRISPR/Cas Systems for Fruit and Vegetable Improvement. Concepts and 0.5 0 164 Strategies in Plant Sciences, 2021, , 227-245. CRISPR/Cas in food security and plant disease management., 2021, , 171-191. CRISPR-Cas9 system for functional genomics of filamentous fungi: applications and challenges., 2021,, 166 2 541-576. Plant Viruses: From Targets to Tools for CRISPR. Viruses, 2021, 13, 141. Application of CRISPR/Cas for Diagnosis and Management of Viral Diseases of Banana. Frontiers in 168 3.5 29 Microbiology, 2020, 11, 609784. Genomics, Phenomics, and Next Breeding Tools for Genetic Improvement of Safflower (Carthamus) Tj ETQq1 1 0.784314 rgBI /Overla 171 CRISPR–Cas systems as antimicrobial agents for agri-food pathogens. , 2021, , 361-386. 1 CRISPR-Cas epigenome editing: improving crop resistance to pathogens., 2021,, 65-106. 173 Genome Editing in Apple. Compendium of Plant Genomes, 2021, , 213-225. 0.5 2 On the Value of Wild Solanum Species for Improved Crop Disease Resistance: Resistances to Nematodes 174 and Viruses. Compendium of Plant Genomes, 2021, , 95-118. Delivery Methods, Resources and Design Tools in CRISPR/Cas., 2021, , 63-116. 175 5 Disease Resistance in Crops Through CRISPR/Cas., 2021, , 151-175. Induced Mutagenesis in Date Palm (Phoenix dactylifera L.) Breeding. Compendium of Plant Genomes, 178 0.5 1 2021, , 121-154. Approach for in vivo delivery of CRISPR/Cas system: a recent update and future prospect. Cellular and Molecular Life Sciences, 2021, 78, 2683-2708. 179 5.4 29 180 CRISPR Applications in Crops., 2021, , 367-381. 2 Mutagenomics for Functional Analysis of Plant Genome using CRISPR Library Screen. Concepts and Strategies in Plant Sciences, 2021, , 339-367. RNA interference and CRISPR/Cas9 applications for virus resistance., 2021, 163-182. 182 0 Efficient Genome Editing in Rice Protoplasts Using CRISPR/CAS9 Construct. Methods in Molecular Biology, 2021, 2238, 173-191.

#	Article	IF	CITATIONS
184	Genome Editing of Rice by CRISPR-Cas: End-to-End Pipeline for Crop Improvement. Methods in Molecular Biology, 2021, 2238, 115-134.	0.9	3
185	Future Prospects of â€~Omics' and of Other Technologies for Genetic Improvement of Apple. Compendium of Plant Genomes, 2021, , 395-412.	0.5	3
186	Virus-Free Improved Food in the Era of Bacterial Immunity. Concepts and Strategies in Plant Sciences, 2021, , 63-96.	0.5	0
187	Fungal genome editing using CRISPR-Cas nucleases: a new tool for the management of plant diseases. , 2021, , 333-360.		1
188	CRISPR applications in plant bacteriology: today and future perspectives. , 2021, , 551-577.		0
190	Challenges and Future Perspective of CRISPR/Cas Technology for Crop Improvement. , 2021, , 289-306.		1
191	Comprehensive Genome-Wide Exploration of C2H2 Zinc Finger Family in Grapevine (Vitis vinifera L.): Insights into the Roles in the Pollen Development Regulation. Genes, 2021, 12, 302.	2.4	20
192	Molecular Tools for Adapting Viticulture to Climate Change. Frontiers in Plant Science, 2021, 12, 633846.	3.6	15
193	Optimization of protoplast regeneration in the model plant Arabidopsis thaliana. Plant Methods, 2021, 17, 21.	4.3	30
194	A <i>piggyBac</i> â€mediated transgenesis system for the temporary expression of CRISPR/Cas9 in rice. Plant Biotechnology Journal, 2021, 19, 1386-1395.	8.3	20
195	Novel CRISPR–Cas Systems: An Updated Review of the Current Achievements, Applications, and Future Research Perspectives. International Journal of Molecular Sciences, 2021, 22, 3327.	4.1	105
196	Genome editing reagent delivery in plants. Transgenic Research, 2021, 30, 321-335.	2.4	35
198	CRISPR ribonucleoprotein-mediated genetic engineering in plants. Plant Communications, 2021, 2, 100168.	7.7	77
199	Genome Editing: Revolutionizing the Crop Improvement. Plant Molecular Biology Reporter, 2021, 39, 752-772.	1.8	13
200	Genome editing of hybrid poplar (Populus alba × P. glandulosa) protoplasts using Cas9/gRNA ribonucleoprotein. Journal of Plant Biotechnology, 2021, 48, 34-43.	0.4	1
201	Regulatory status of genome-editing plants: perspectives for Russian Federation. Ecological Genetics, 2021, 19, 89-101.	0.5	3
202	A More Accessible, Time-Saving, and Efficient Method for In Vitro Plant Regeneration from Potato Protoplasts. Plants, 2021, 10, 781.	3.5	10
203	Nanoparticles for protein delivery in planta. Current Opinion in Plant Biology, 2021, 60, 102052.	7.1	30

ARTICLE IF CITATIONS Genomic Approaches to Identify Molecular Bases of Crop Resistance to Diseases and to Develop Future 204 4.1 11 Breeding Strategies. International Journal of Molecular Sciences, 2021, 22, 5423. Smart Breeding for Climate Resilient Agriculture., 0, , . Current status and prospects of plant genome editing in Australia. In Vitro Cellular and 206 2.1 8 Developmental Biology - Plant, 2021, 57, 574-583. ROLE OF CRISPR TO IMPROVE ABIOTIC STRESS TOLERANCE IN CROP PLANTS. Biological & Clinical Sciences Research Journal, 2021, 2021, . Identification of Susceptibility Genes in Castanea sativa and Their Transcription Dynamics following 208 3.5 12 Pathogen Infection. Plants, 2021, 10, 913. 209 Role of Post-Harvest Physiology in Evolution of Transgenic Crops., 0, , . Efficient Targeted Mutagenesis Mediated by CRISPR-Cas12a Ribonucleoprotein Complexes in Maize. 210 5.2 17 Frontiers in Genome Editing, 2021, 3, 670529. CRISPR-Based Genome Editing Tools: Insights into Technological Breakthroughs and Future 211 2.4 Challenges. Genes, 2021, 12, 797. Advances in application of genome editing in tomato and recent development of genome editing 212 3.6 35 technology. Theoretical and Applied Genetics, 2021, 134, 2727-2747. Advancements in plant regeneration and genetic transformation of grapevine (Vitis spp.). Journal of 3.5 Integrative Agriculture, 2021, 20, 1407-1434. Genome editing for resistance against plant pests and pathogens. Transgenic Research, 2021, 30, 214 2.4 20 427-459. Role of information in consumers' preferences for eco-sustainable genetic improvements in plant 2.5 breeding. PLoS ONE, 2021, 16, e0255130. Integrating Omics and Gene Editing Tools for Rapid Improvement of Traditional Food Plants for 216 4.1 33 Diversified and Sustainable Food Security. International Journal of Molecular Sciences, 2021, 22, 8093. Induced Genetic Variations in Fruit Trees Using New Breeding Tools: Food Security and Climate 217 3.5 Resilience. Plants, 2021, 10, 1347. 218 Application of genome editing tools in plants. Tap Chi Cong Nghe Sinh Hoc, 2021, 19, 15-40. 0.0 0 Biotechnological Methods for Buckwheat Breeding. Plants, 2021, 10, 1547. Opportunities and challenges applying gene editing to specialty crops. In Vitro Cellular and 220 2.16 Developmental Biology - Plant, 2021, 57, 709-719. Gene Editing in Prunus Spp.: The Challenge of Adapting Regular Gene Transfer Procedures for Precision Breeding., 0,,.

#	Article	IF	CITATIONS
222	Effect of Three Types of Ion Beam Irradiation on Gerbera (Gerbera hybrida) In Vitro Shoots with Mutagenesis Efficiency. Plants, 2021, 10, 1480.	3.5	4
223	Efficient Protoplast Regeneration Protocol and CRISPR/Cas9-Mediated Editing of Glucosinolate Transporter (GTR) Genes in Rapeseed (Brassica napus L.). Frontiers in Plant Science, 2021, 12, 680859.	3.6	26
224	Gene editing in tree and clonal crops: progress and challenges. In Vitro Cellular and Developmental Biology - Plant, 2021, 57, 683-699.	2.1	15
225	Transgenic and genome-edited fruits: background, constraints, benefits, and commercial opportunities. Horticulture Research, 2021, 8, 166.	6.3	46
226	Targeted mutagenesis in Nicotiana tabacum ADF gene using shockwaveâ€mediated ribonucleoprotein delivery increases osmotic stress tolerance. Physiologia Plantarum, 2021, 173, 993-1007.	5.2	6
227	Molecular Abiotic Stress Tolerans Strategies: From Genetic Engineering to Genome Editing Era. , 0, , .		4
229	Consumers' acceptance of fungus resistant grapes: Future scenarios in sustainable winemaking. Journal of Cleaner Production, 2021, 307, 127318.	9.3	12
230	CRISPR-Cas9 Gene Editing for Fruit and Vegetable Crops: Strategies and Prospects. Horticulturae, 2021, 7, 193.	2.8	21
231	Random mutagenesis in vegetatively propagated crops: opportunities, challenges and genome editing prospects. Molecular Biology Reports, 2022, 49, 5729-5749.	2.3	7
232	First Report of CRISPR/Cas9 Gene Editing in Castanea sativa Mill. Frontiers in Plant Science, 2021, 12, 728516.	3.6	24
233	Versatile Applications of the CRISPR/Cas Toolkit in Plant Pathology and Disease Management. Phytopathology, 2021, 111, 1080-1090.	2.2	28
234	Impacts of the regulatory environment for gene editing on delivering beneficial products. In Vitro Cellular and Developmental Biology - Plant, 2021, 57, 609-626.	2.1	25
235	Genome editing with CRISPR/Cas9 in Pinus radiata (D. Don). BMC Plant Biology, 2021, 21, 363.	3.6	29
236	Plant and Fungal Genome Editing to Enhance Plant Disease Resistance Using the CRISPR/Cas9 System. Frontiers in Plant Science, 2021, 12, 700925.	3.6	23
237	Efficient genome editing using endogenous U6 snRNA promoter-driven CRISPR/Cas9 sgRNA in Sclerotinia sclerotiorum. Fungal Genetics and Biology, 2021, 154, 103598.	2.1	7
238	Compendium of Plant-Specific CRISPR Vectors and Their Technical Advantages. Life, 2021, 11, 1021.	2.4	26
239	Potential applications of the CRISPR/Cas technology for genetic improvement of yam (<i>Dioscorea</i>) Tj ETQq	0 0 0 g rgBT 4.3	/Qverlock 10

240	Applications of CRISPR/Cas9 System in Vegetatively Propagated Fruit and Berry Crops. Agronomy, 2021, 11, 1849.	3.0	5	
-----	--	-----	---	--

#	Article	IF	CITATIONS
241	Breeding customâ€designed crops for improved drought adaptation. Genetics & Genomics Next, 2021, 2, e202100017.	1.5	48
242	Advances in genomics and genome editing for breeding next generation of fruit and nut crops. Genomics, 2021, 113, 3718-3734.	2.9	19
243	CRISPR/Cas9-mediated genome editing is revolutionizing the improvement of horticultural crops: Recent advances and future prospects. Scientia Horticulturae, 2021, 289, 110476.	3.6	10
244	CRISPR-mediated genome editing for developing climate-resilient monocot and dicot crops. , 2022, , 393-411.		1
245	Protoplast isolation and fusion. , 2021, , 157-169.		0
246	CRISPR/Cas-Based Techniques in Plants. , 2021, , 37-61.		3
247	CRISPR-Cas Based Precision Breeding in Date Palm: Future Applications. Compendium of Plant Genomes, 2021, , 169-199.	0.5	2
248	Patents, ethics, biosafety and regulation using CRISPR technology. Progress in Molecular Biology and Translational Science, 2021, 181, 345-365.	1.7	4
249	CRISPR/Cas system for the development of disease resistance in horticulture crops. , 2021, , 107-128.		1
251	CRISPR/Cas-mediated genome editing for improved stress tolerance in plants. , 2021, , 259-291.		6
252	First Report of CRISPR/Cas9 Mediated DNA-Free Editing of 4CL and RVE7 Genes in Chickpea Protoplasts. International Journal of Molecular Sciences, 2021, 22, 396.	4.1	92
253	Modern Techniques for Plant Breeding in Ornamentals. , 2021, , 1-34.		0
254	CRISPR/Cas9-Based Gene Editing in Soybean. Methods in Molecular Biology, 2020, 2107, 349-364.	0.9	11
255	Emerging Genome Engineering Tools in Crop Research and Breeding. Methods in Molecular Biology, 2020, 2072, 165-181.	0.9	18
256	Grape Biotechnology: Past, Present, and Future. Compendium of Plant Genomes, 2019, , 349-367.	0.5	1
257	Genetic and Genomic Approaches for Adaptation of Grapevine to Climate Change. , 2020, , 157-270.		26
258	CRISPR Applications in Plant Genetic Engineering and Biotechnology. , 2019, , 429-459.		3
259	Genome Modification Approaches to Improve Performance, Quality, and Stress Tolerance of Important Mediterranean Fruit Species (Olea europaea L., Vitis vinifera L., and Quercus suber L.). , 2019, , 273-312.		2

ARTICLE IF CITATIONS CRISPR/Cas9-Edited Rice: A New Frontier for Sustainable Agriculture., 2020, , 427-458. 21 260 Transgenic Technology for Disease Resistance in Crop Plants., 2021, , 499-560. Efficient genome editing of rubber tree (hevea brasiliensis) protoplasts using CRISPR/Cas9 262 5.247 ribonucleoproteins. Industrial Crops and Products, 2020, 146, 112146. CRISPR-Cas9 system: A genome-editing tool with endless possibilities. Journal of Biotechnology, 2020, 319, 36-53. CRISPR-Cas technology in modifying food crops.. CAB Reviews: Perspectives in Agriculture, Veterinary 264 1.0 24 Science, Nutrition and Natural Resources, 0, , 1-16. Improving coffee species for pathogen resistance. CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources, 0, , . 1.0 CRISPR/Cas9; A robust technology for producing genetically engineered plants. Cellular and 267 0.9 11 Molecular Biology, 2018, 64, 31-38. Yeni Nesil Genom Düzenleme Teknikleri: ZFN, TALEN, CRISPR'lar ve Bitkilerde Kullanımı. Tarla Bitkileri 0.6 Merkez Araştırma Enstitüsü Dergisi, 0, , 111-111. Understanding the Plant-microbe Interactions in CRISPR/Cas9 Era: Indeed a Sprinting Start in 269 1.6 14 Marathon. Current Genomics, 2020, 21, 429-443. Genetic editing for improvement of fruit and small fruit crops. Horticulture and Viticulture, 2019, , 270 10-15. New Strategies to Overcome Present CRISPR/Cas9 Limitations in Apple and Pear: Efficient 271 4.1 53 Dechimerization and Base Editing. International Journal of Molecular Sciences, 2021, 22, 319. Plant Hormones and Plant Defense Response Against Pathogens. Plant in Challenging Environments, 0.4 2021, , 1-28. Raising Climate-Resilient Crops: Journey From the Conventional Breeding to New Breeding Approaches. 273 1.6 7 Current Genomics, 2021, 22, 450-467. Multiplex Genome-Editing Technologies for Revolutionizing Plant Biology and Crop Improvement. 274 3.6 36 Frontiers in Plant Science, 2021, 12, 721203. Gene Editing Technologies for Sugarcane Improvement: Opportunities and Limitations. Sugar Tech, 275 1.8 9 2022, 24, 369-385. Strengthening the competitiveness of agricultural biotechnology through practical application of gene editing technology. Journal of Plant Biotechnology, 2018, 45, 155-170. Applications of Genome Engineering/Editing Tools in Plants., 2019, 143-165. 277 1 Targeted Genome Engineering and Its Application in Trait Improvement of Crop Plants. Agricultural 278 Sciences, 2019, 10, 1312-1342.

#	Article	IF	CITATIONS
279	CRISPR/Cas9 Genome Editing in Bread Wheat (Triticum aestivum L.) Genetic Improvement. , 2019, , 453-469.		3
280	Improvement of Crop's Stress Tolerance by Gene Editing CRISPR/CAS9 System. , 2020, , 557-587.		5
281	An Outlook on Global Regulatory Landscape for Genome-Edited Crops. International Journal of Molecular Sciences, 2021, 22, 11753.	4.1	43
282	Recent Advances in Management of Bacterial Diseases of Crops. , 2021, , 197-210.		0
283	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, .	0.6	11
284	Introduction to Genome Editing Techniques: Implications in Modern Agriculture. Concepts and Strategies in Plant Sciences, 2020, , 1-30.	0.5	1
286	Recent Transgenic Approaches for Stress Tolerance in Crop Plants. , 2020, , 533-556.		3
287	Byproduct Valorization of Vegetable Oil Industry Through Biotechnological Approach. , 2020, , 167-206.		7
289	Stress responses and epigenomic instability mark the loss of somatic embryogenesis competence in grapevine. Plant Physiology, 2022, 188, 490-508.	4.8	12
290	Heritable DNA-free genome editing of canola (Brassica napus L.) using PEG-mediated transfection of isolated protoplasts. In Vitro Cellular and Developmental Biology - Plant, 2022, 58, 447-456.	2.1	13
292	Fitopatojenlere Karşı Dayanıklılıkta CRISPR/Cas Teknolojisi. European Journal of Science and Technology 0, , .	0.5	1
293	Application of CRISPR–Cas9 in plant–plant growth-promoting rhizobacteria interactions for next Green Revolution. 3 Biotech, 2021, 11, 492.	2.2	3
294	Horticultural crops tackling stresses: genetic and epigenetic alterations. Genetic Resources and Crop Evolution, 2022, 69, 11.	1.6	3
295	Pre-selection of efficient Cas9 and Cpf1 guides for genome editing in apple. Acta Horticulturae, 2021, , 15-24.	0.2	1
296	A Critical Review: Recent Advancements in the Use of CRISPR/Cas9 Technology to Enhance Crops and Alleviate Global Food Crises. Current Issues in Molecular Biology, 2021, 43, 1950-1976.	2.4	48
297	Tracing CRISPR/Cas12a Mediated Genome Editing Events in Apple Using High-Throughput Genotyping by PCR Capillary Gel Electrophoresis. International Journal of Molecular Sciences, 2021, 22, 12611.	4.1	9
299	Efficiency, Specificity and Temperature Sensitivity of Cas9 and Cas12a RNPs for DNA-free Genome Editing in Plants. Frontiers in Genome Editing, 2021, 3, 760820.	5.2	12
300	Pear genetics: Recent advances, new prospects, and a roadmap for the future. Horticulture Research, 2022, 9, .	6.3	12

#	Article	IF	CITATIONS
301	CRISPR-Cas genome editing system: A versatile tool for developing disease resistant crops. Plant Stress, 2022, 3, 100056.	5.5	11
302	Applications of CRISPR/Cas System in Plants. , 2022, , 285-309.		1
303	Increased mutation efficiency of CRISPR/Cas9 genome editing in banana by optimized construct. PeerJ, 2022, 10, e12664.	2.0	13
304	Applications of CRISPR/Cas9 technology for modification of the plant genome. Genetica, 2022, 150, 1-12.	1.1	8
305	Biotic and abiotic stress tolerance through CRISPR-Cas mediated genome editing. Journal of Plant Biochemistry and Biotechnology, 2022, 31, 227-238.	1.7	11
306	Tools for engineering resistance against pathogens in plants. Journal of Plant Biochemistry and Biotechnology, 2022, 31, 459-488.	1.7	3
307	Hemp Genome Editing—Challenges and Opportunities. Frontiers in Genome Editing, 2022, 4, 823486.	5.2	10
308	Tailoring Disease Resilience Crops through CRISPR/Cas. , 2022, , 187-209.		2
309	A Method to Reduce off-Targets in CRISPR/Cas9 System in Plants. Methods in Molecular Biology, 2022, 2408, 317-324.	0.9	2
310	Designer plants for climate-resilient phytoremediation. , 2022, , 227-274.		0
312	Genomic Designing for Biotic Stress Resistant Grapevine. , 2022, , 87-255.		11
313	Genome Editing and Designer Crops for the Future. Methods in Molecular Biology, 2022, 2408, 37-69.	0.9	3
314	Buckwheat in Tissue Culture Research: Current Status and Future Perspectives. International Journal of Molecular Sciences, 2022, 23, 2298.	4.1	9
315	Genome editing interventions to combat rice blast disease. Plant Biotechnology Reports, 0, , 1.	1.5	1
316	Grapevine Gene Systems for Resistance to Gray Mold Botrytis cinerea and Powdery Mildew Erysiphe necator. Agronomy, 2022, 12, 499.	3.0	10
317	Control of Bacterial Diseases of Banana Using CRISPR/Cas-Based Gene Editing. International Journal of Molecular Sciences, 2022, 23, 3619.	4.1	20
318	Development of new wineâ€, dried―and tablegrape scions and rootstocks for Australian viticulture: past, present and future. Australian Journal of Grape and Wine Research, 2022, 28, 177-195.	2.1	5
319	New Advances of CRISPR/Cas9 Technique and its Application in Disease Treatment and Medicinal Plants Research. Current Pharmaceutical Biotechnology, 2022, 23, 1678-1690.	1.6	1

#	Article	IF	CITATIONS
321	Modified Gene Editing Systems: Diverse Bioengineering Tools and Crop Improvement. Frontiers in Plant Science, 2022, 13, 847169.	3.6	8
322	Genome Engineering Technology for Durable Disease Resistance: Recent Progress and Future Outlooks for Sustainable Agriculture. Frontiers in Plant Science, 2022, 13, 860281.	3.6	12
323	A cool climate perspective on grapevine breeding: climate change and sustainability are driving forces for changing varieties in a traditional market. Theoretical and Applied Genetics, 2022, 135, 3947-3960.	3.6	19
324	CRISPR/Cas9 and Nanotechnology Pertinence in Agricultural Crop Refinement. Frontiers in Plant Science, 2022, 13, 843575.	3.6	13
325	Latest biotechnology tools and targets for improving abiotic stress tolerance in protein legumes. Environmental and Experimental Botany, 2022, 197, 104824.	4.2	13
326	CRISPR/Cas9 Targeted Editing of Genes Associated With Fungal Susceptibility in Vitis vinifera L. cv. Thompson Seedless Using Geminivirus-Derived Replicons. Frontiers in Plant Science, 2021, 12, 791030.	3.6	10
327	Transformation systems, gene silencing and gene editing technologies in oomycetes. Fungal Biology Reviews, 2021, , .	4.7	6
328	Advances and outlook of horticultural bioengineering. Horticulture and Viticulture, 2021, , 17-29.	0.3	0
329	Non-GM Genome Editing Approaches in Crops. Frontiers in Genome Editing, 2021, 3, 817279.	5.2	21
330	Genome Editing Technology for Genetic Amelioration of Fruits and Vegetables for Alleviating Post-Harvest Loss. Bioengineering, 2022, 9, 176.	3.5	28
331	Novel Plant Breeding Techniques Shake Hands with Cereals to Increase Production. Plants, 2022, 11, 1052.	3.5	14
332	Breeding and genetics of disease resistance in temperate fruit trees: challenges and new opportunities. Theoretical and Applied Genetics, 2022, 135, 3961-3985.	3.6	28
343	Recent advancements in CRISPR/Cas technology for accelerated crop improvement. Planta, 2022, 255, 109.	3.2	9
344	CRISPR/Cas genome editing in grapevine: recent advances, challenges and future prospects. Fruit Research, 2022, 2, 1-9.	2.0	10
345	CRISPR/Cas-Mediated Genome Editing Technologies in Plants for Stress Resilience. , 2022, , 285-303.		5
347	Progress and challenges in applying CRISPR/Cas techniques to the genome editing of trees. Forestry Research, 2022, 2, 0-0.	1.1	2
349	GLRaV-2 protein p24 suppresses host defenses by interaction with a RAV transcription factor from grapevine. Plant Physiology, 2022, 189, 1848-1865.	4.8	5
350	CRISPR/Cas9 technology and its application in horticultural crops. Horticultural Plant Journal, 2022, 8, 395-407.	5.0	12

		CITATION RI	EPORT	
#	Article		IF	Citations
351	Genome Editing for Sustainable Agriculture in Africa. Frontiers in Genome Editing, 202	2, 4, .	5.2	24
352	RNA Interference for Improving Disease Resistance in Plants and Its Relevance in This C Regularly Interspaced Short Palindromic Repeats-Dominated Era in Terms of dsRNA-Bas Frontiers in Plant Science, 2022, 13, .		3.6	8
353	Environment Sustainability and Role of Biotechnology. , 2022, , 21-64.			2
354	VvEPFL9-1 Knock-Out via CRISPR/Cas9 Reduces Stomatal Density in Grapevine. Frontie 2022, 13, .	rs in Plant Science,	3.6	21
355	CRISPR/Cas Genome Editing in Engineering Plant Secondary Metabolites of Therapeuti 187-208.	c Benefits. , 2022, ,		2
356	Challenges Facing CRISPR/Cas9-Based Genome Editing in Plants. Frontiers in Plant Scie	nce, 2022, 13, .	3.6	34
357	First Report on Genome Editing via Ribonucleoprotein (RNP) in Castanea sativa Mill In Journal of Molecular Sciences, 2022, 23, 5762.	ternational	4.1	13
358	A Robust Expression and Purification Method for Production of SpCas9-GFP-MBP Fusio Vitro Applications. Methods and Protocols, 2022, 5, 44.	n Protein for In	2.0	1
359	Chickpea Biofortification for Cytokinin Dehydrogenase via Genome Editing to Enhance Stress Tolerance and Food Security. Frontiers in Genetics, 0, 13, .	Abiotic-Biotic	2.3	16
360	Application of CRISPR-Mediated Gene Editing for Crop Improvement. Molecular Biotecl 64, 1198-1217.	nnology, 2022,	2.4	8
361	Powdery Mildew Resistance Genes in Vines: An Opportunity to Achieve a More Sustain Pathogens, 2022, 11, 703.	able Viticulture.	2.8	9
362	CRISPR/Cas9 System: A Potential Tool for Genetic Improvement in Floricultural Crops. Biotechnology, 2022, 64, 1303-1318.	Molecular	2.4	11
363	Origin of the genome editing systems: application for crop improvement. , 2022, 77, 3	353-3383.		1
364	Principles and Practices of Genome Editing in Crop Plants. , 2022, , 1-21.			0
365	Modern Techniques for Plant Breeding in Ornamentals. , 2022, , 523-555.			3
366	Biotic Stresses in Cucurbits: Status, Challenges, Breeding and Genetic Tools to Enhanc 2022, , 345-379.	e Resistance. ,		1
367	Plant-based engineering for production of high-valued natural products. Natural Produc 2022, 39, 1492-1509.	ct Reports,	10.3	9
368	The role of plant tissue culture in pharmaceuticals and secondary metabolites producti 357-372.	on. , 2022, ,		0

#	Article	IF	CITATIONS
369	Recent Developments and Strategies for the Application of Agrobacterium-Mediated Transformation of Apple Malus × domestica Borkh. Frontiers in Plant Science, 0, 13, .	3.6	7
370	A DNA-Free Editing Platform for Genetic Screens in Soybean via CRISPR/Cas9 Ribonucleoprotein Delivery. Frontiers in Plant Science, 0, 13, .	3.6	7
371	A detailed landscape of CRISPR-Cas-mediated plant disease and pest management. Plant Science, 2022, 323, 111376.	3.6	43
372	Protoplast technology enables the identification of efficient multiplex genome editing tools in Phalaenopsis. Plant Science, 2022, 322, 111368.	3.6	3
373	Making small molecules in plants: A chassis for synthetic biologyâ€based production of plant natural products. Journal of Integrative Plant Biology, 2023, 65, 417-443.	8.5	14
374	Three strategies of transgenic manipulation for crop improvement. Frontiers in Plant Science, 0, 13, .	3.6	5
376	Engineering traits through CRISPR/cas genome editing in woody species to improve forest diversity and yield. Critical Reviews in Biotechnology, 2023, 43, 884-903.	9.0	6
377	CRISPR/Cas tool designs for multiplex genome editing and its applications in developing biotic and abiotic stress-resistant crop plants. Molecular Biology Reports, 2022, 49, 11443-11467.	2.3	4
378	CRISPR/Cas9 Technology and Its Utility for Crop Improvement. International Journal of Molecular Sciences, 2022, 23, 10442.	4.1	12
379	CRISPR Genome Editing Brings Global Food Security into the First Lane: Enhancing Nutrition and Stress Resilience in Crops. , 2022, , 285-344.		2
380	Development of Abiotic Stress Resistant Grapevine Varieties. , 2022, , 61-159.		2
381	Off-Target Effects of Crop Genome Editing and Its Minimization. , 2022, , 185-208.		0
382	Genome Editing Is Revolutionizing Crop Improvement. , 2022, , 3-41.		0
383	Genome Editing for the Improvement of Oilseed Crops. , 2022, , 367-392.		1
384	Management of Pests Using Genetic Tools in Africa. , 2022, , 303-326.		1
385	CRISPR-Cas9/Cpf1-Based Multigene Editing in Crops. , 2022, , 67-94.		0
386	Genome Editing Tools for Food Security. , 2022, , 45-65.		1
387	Genomic Approaches to Improve Abiotic Stress Tolerance in Apple (Malus ×  domestica). , 2022, , 1-1	7.	1

# 388	ARTICLE Editing Plant Genome with CRISPR/Cas: A Sustainable Strategy for Disease Management. , 2022, , 369-396.	IF	Citations
389	Priming defense by transiently suppressing plant susceptibility genes in ornamental crops: A novel strategy for post-harvest diseases management. Frontiers in Plant Science, 0, 13, .	3.6	0
390	DNA Free CRISPR/DCAS9 Based Transcriptional Activation System for UGT76G1 Gene in Stevia rebaudiana Bertoni Protoplasts. Plants, 2022, 11, 2393.	3.5	3
391	CRISPR/Cas9 mediated genome editing tools and their possible role in disease resistance mechanism. Molecular Biology Reports, 2022, 49, 11587-11600.	2.3	1
392	CRISPR-Based Genome Editing and Its Applications in Woody Plants. International Journal of Molecular Sciences, 2022, 23, 10175.	4.1	14
393	Editing of StSR4 by Cas9-RNPs confers resistance to Phytophthora infestans in potato. Frontiers in Plant Science, 0, 13, .	3.6	5
394	Phytoremediation and sequestration of soil metals using the CRISPR/Cas9 technology to modify plants: a review. Environmental Chemistry Letters, 2023, 21, 429-445.	16.2	11
395	Gene Pyramiding in Transgenic Plant Development: Approaches and Challenges. Journal of Plant Growth Regulation, 2023, 42, 6038-6056.	5.1	6
396	Targeted Genome-Editing Techniques in Plant Defense Regulation. , 2022, , 1-32.		0
397	Application of Molecular Ecology Approaches in Sustainable Agriculture for a Better Understanding of Plant–Microbiome Interactions. Microorganisms for Sustainability, 2022, , 71-91.	0.7	1
398	DNA-free genome editing in grapevine using CRISPR/Cas9 ribonucleoprotein complexes followed by protoplast regeneration. Horticulture Research, 2023, 10, .	6.3	22
399	Plant biomacromolecule delivery methods in the 21st century. Frontiers in Genome Editing, 0, 4, .	5.2	7
400	Transgene-free genome editing and RNAi ectopic application in fruit trees: Potential and limitations. Frontiers in Plant Science, 0, 13, .	3.6	2
401	Unlocking grapevine in vitro regeneration: Issues and perspectives for genetic improvement and functional genomic studies. Plant Physiology and Biochemistry, 2022, 193, 99-109.	5.8	6
402	The economics and policy of genome editing in crop improvement. Plant Genome, 2023, 16, .	2.8	7
403	Genome Editing by Ribonucleoprotein Based Delivery of the Cas9 System in Plants. , 2022, , 187-195.		1
404	Genome Editing in Plants for Resistance Against Bacterial Pathogens. , 2022, , 217-235.		1
405	Genome Engineering as a Tool for Enhancing Crop Traits: Lessons from CRISPR/Cas9. , 2022, , 3-25.		0

#	Article	IF	CITATIONS
406	Features of somatic embryogenesis in the culture <i>in vitro</i> in hybrid grape form E-342. BIO Web of Conferences, 2022, 53, 02004.	0.2	0
407	Marker-Assisted Selection (MAS): Untapped Potential for Enhancing Food and Nutrition Securities in Sub-Saharan Africa. , 2023, , 283-306.		Ο
408	Strategies for genotype-flexible plant transformation. Current Opinion in Biotechnology, 2023, 79, 102848.	6.6	21
409	Transgenic Improvement for Biotic Resistance of Crops. International Journal of Molecular Sciences, 2022, 23, 14370.	4.1	2
410	Regeneration of non-chimeric plants from DNA-free edited grapevine protoplasts. Frontiers in Plant Science, 0, 13, .	3.6	14
411	CRISPR/Cas Genome Editing Technologies for Plant Improvement against Biotic and Abiotic Stresses: Advances, Limitations, and Future Perspectives. Cells, 2022, 11, 3928.	4.1	16
412	Transcriptional Effects of Rootstock on Scion after Drought: A Case Study of Using MdGH3 RNAi as the Rootstock. Horticulturae, 2022, 8, 1212.	2.8	0
413	Is CRISPR/Cas9 a way forward to fast-track genetic improvement in commercial palms? Prospects and limits. Frontiers in Plant Science, 0, 13, .	3.6	8
414	Past, present, and future of genetic strategies to control tolerance to the main fungal and oomycete pathogens of grapevine. Journal of Experimental Botany, 2023, 74, 1309-1330.	4.8	4
415	Fruit Crop Improvement with Genome Editing, In Vitro and Transgenic Approaches. Horticulturae, 2023, 9, 58.	2.8	3
416	Applications and challenges of harnessing genome editing in oilseed crops. Journal of Plant Biochemistry and Biotechnology, 2023, 32, 751-772.	1.7	2
417	Biotechnologies and Strategies for Grapevine Improvement. Horticulturae, 2023, 9, 62.	2.8	10
418	Machine learning in the estimation of CRISPR-Cas9 cleavage sites for plant system. Frontiers in Genetics, 0, 13, .	2.3	1
419	Recent Trends in Genome Editing Technologies for Agricultural Crop Improvement. , 2023, , 357-379.		2
420	Nutritional Enhancement in Horticultural Crops by CRISPR/Cas9: Status and Future Prospects. , 2023, , 399-430.		0
421	Genome editing approaches using reproductive cells/tissues in flowering plants. Frontiers in Genome Editing, 0, 4, .	5.2	1
422	The Role of Italy in the Use of Advanced Plant Genomic Techniques on Fruit Trees: State of the Art and Future Perspectives. International Journal of Molecular Sciences, 2023, 24, 977.	4.1	5
423	Making headway toward enduring changes: perspectives on breeding tree crops through genome editing. Tree Genetics and Genomes, 2023, 19, .	1.6	0

# 424	ARTICLE Gene Editing for Plant Resistance to Abiotic Factors: A Systematic Review. Plants, 2023, 12, 305.	IF 3.5	CITATIONS 9
425	Optimization of highly efficient exogenous-DNA-free Cas9-ribonucleoprotein mediated gene editing in disease susceptibility loci in wheat (Triticum aestivum L.). Frontiers in Plant Science, 0, 13, .	3.6	5
426	Accelerating wood domestication in forest trees through genome editing: Advances and prospects. Current Opinion in Plant Biology, 2023, 71, 102329.	7.1	8
427	Characterization of the core region of grape VvHOS1 promoter activity and its upstream regulatory proteins. Environmental and Experimental Botany, 2023, 207, 105199.	4.2	Ο
428	Tending genome editing via CRISPR/Cas9-induced mutagenesis: Opportunity and challenges for yield, quality and nutritional improvement of fruit crops. Scientia Horticulturae, 2023, 311, 111790.	3.6	3
429	CRISPR-Cas Genome Editing for Horticultural Crops Improvement: Advantages and Prospects. Horticulturae, 2023, 9, 38.	2.8	7
430	TargetedÂmutagenesis with sequenceâ€specific nucleases for accelerated improvement of polyploid crops: Progress, challenges, and prospects. Plant Genome, 2023, 16, .	2.8	5
431	Applications of CRISPR/Cas genome editing in economically important fruit crops: recent advances and future directions. Molecular Horticulture, 2023, 3, .	5.8	5
432	Recent progress in CRISPR/Cas9-based genome editing for enhancing plant disease resistance. Gene, 2023, 866, 147334.	2.2	10
433	Release of chimeras and efficient selection of editing mutants by CRISPR/Cas9-mediated gene editing in apple. Scientia Horticulturae, 2023, 316, 112011.	3.6	3
434	CRISPR/Cas9 editing of the polygalacturonase <i>FaPG1</i> gene improves strawberry fruit firmness. Horticulture Research, 2023, 10, .	6.3	13
436	Multi-faceted CRISPR-Cas9 strategy to reduce plant based food loss and waste for sustainable bio-economy – A review. Journal of Environmental Management, 2023, 332, 117382.	7.8	5
438	Genome-Editing Approaches for Biofortification of Cereal Crops. , 2023, , 93-126.		0
439	Genome editing for improving nutritional quality, post-harvest shelf life and stress tolerance of fruits, vegetables, and ornamentals. Frontiers in Genome Editing, 0, 5, .	5.2	3
440	Strategic transgene-free approaches of CRISPR-based genome editing in plants. Molecular Genetics and Genomics, 2023, 298, 507-520.	2.1	3
441	Seedlessness Trait and Genome Editing—A Review. International Journal of Molecular Sciences, 2023, 24, 5660.	4.1	3
442	Perceptions of plant breeding methods–from â€~phenotypic selection' to â€~genetic modification' and breeding technologies'. New Zealand Journal of Agricultural Research, 0, , 1-49.	â€~new 1.6	3
443	Genome-wide characterization and expression analysis of the MLO gene family sheds light on powdery mildew resistance in Lagenaria siceraria. Heliyon, 2023, 9, e14624.	3.2	4

#	Article	IF	CITATIONS
444	Genome editing of apple – establishing a workflow for the generation of homohistont mutant lines. Acta Horticulturae, 2023, , 21-28.	0.2	0
445	New breeding technology approaches to improve apple and pear cultivars. Acta Horticulturae, 2023, , 199-204.	0.2	2
446	Automated, High-Throughput Protoplast Transfection for Gene Editing and Transgene Expression Studies. Methods in Molecular Biology, 2023, , 129-149.	0.9	0
447	Induced Mutagenesis for Developing Climate Resilience in Plants. , 2023, , 177-203.		0
448	An overview of genome engineering in plants, including its scope, technologies, progress and grand challenges. Functional and Integrative Genomics, 2023, 23, .	3.5	14
449	Application of a novel strong promoter from Chinese fir (Cunninghamia lanceolate) in the CRISPR/Cas mediated genome editing of its protoplasts and transgenesis of rice and poplar. Frontiers in Plant Science, 0, 14, .	3.6	2
450	Genome-edited crops. , 2023, , 73-99.		0
451	Engineering crop resistance to biotic stresses. , 2023, , 171-220.		0
452	Recommendations for the Assessment of Potential Environmental Effects of Genome-Editing Applications in Plants in the EU. Plants, 2023, 12, 1764.	3.5	4
453	Ribonucleoprotein (RNP)-Mediated Targeted Mutagenesis in Barley (Hordeum vulgare L.). Methods in Molecular Biology, 2023, , 187-197.	0.9	0
454	Shoot Regeneration <i>via</i> Callus derived from Shoot Apex of Apple Cultivar â€~Fuji'. Horticulture Journal, 2023, , .	0.8	0
455	Improvement of Crops Using the CRISPR/Cas System: New Target Genes. Molecular Biology, 2023, 57, 375-397.	1.3	1
456	Genome engineering of disease susceptibility genes for enhancing resistance in plants. Functional and Integrative Genomics, 2023, 23, .	3.5	1
457	Breakthrough in CRISPR/Cas system: Current and future directions and challenges. Biotechnology Journal, 2023, 18, .	3.5	3
458	CRISPR-Cas9-based precise engineering of SIHyPRP1 protein towards multi-stress tolerance in tomato. Frontiers in Plant Science, 0, 14, .	3.6	7
459	Integrated Molecular and Bioinformatics Approaches for Disease-Related Genes in Plants. Plants, 2023, 12, 2454.	3.5	4
460	Application of new breeding techniques in fruit trees. Plant Physiology, 0, , .	4.8	3
461	Generation of the transgene-free canker-resistant Citrus sinensis using Cas12a/crRNA ribonucleoprotein in the T0 generation. Nature Communications, 2023, 14, .	12.8	11

#	Article	IF	CITATIONS
463	Methods of crop improvement and applications towards fortifying food security. Frontiers in Genome Editing, 0, 5, .	5.2	0
464	Exploring Plant-Microbe Interaction Through the Lens of Genome Editing. , 2023, , 243-272.		0
465	Current insights and advances into plant male sterility: new precision breeding technology based on genome editing applications. Frontiers in Plant Science, 0, 14, .	3.6	3
466	Recent Developments in CRISPR/Cas9 Genome-Editing Technology Related to Plant Disease Resistance and Abiotic Stress Tolerance. Biology, 2023, 12, 1037.	2.8	4
467	Molecular Mechanisms Underlying Potential Pathogen Resistance in Cannabis sativa. Plants, 2023, 12, 2764.	3.5	2
468	Insights into the molecular mechanisms underlying responses of apple trees to abiotic stresses. Horticulture Research, 2023, 10, .	6.3	1
469	DNA-free genome editing in tomato protoplasts using CRISPR/Cas9 ribonucleoprotein delivery. Horticulture Environment and Biotechnology, 0, , .	2.1	0
470	Revisiting Alternaria-host interactions: New insights on its pathogenesis, defense mechanisms and control strategies. Scientia Horticulturae, 2023, 322, 112424.	3.6	3
471	Improvements in Protoplast Isolation Protocol and Regeneration of Different Cabbage (Brassica) Tj ETQq0 0 0 rg	3T ₃ .5verlo	ck ₁ 10 Tf 50 4
472	The secret password: Cell death-inducing proteins in filamentous phytopathogens - As versatile tools to develop disease-resistant crops. Microbial Pathogenesis, 2023, 183, 106276.	2.9	0
473	Development of a Mesophyll Protoplast-Based System for Gene Editing of Papaya. In Vitro Cellular and Developmental Biology - Plant, 2023, 59, 517-535.	2.1	0
474	CRISPR/Cas in Improvement of Food Crops for Feeding the World into the Future. , 2023, , 529-566.		0
475	Genome-wide characterization of the soybean DOMAIN OF UNKNOWN FUNCTION 679 membrane protein gene family highlights their potential involvement in growth and stress response. Frontiers in Plant Science, 0, 14, .	3.6	1
476	Recent Advancements in CRISPR/Cas-based Genome Editing in Plants. , 2023, , 1-22.		0
477	Introduction to breeding disease-resistant horticultural plants. , 2024, , 1-20.		0
478	Efficient isolation and transformation of protoplasts in coconut endosperm and leaves for gene function studies. , 2023, 2, 0-0.		0
479	Establishment of targeted mutagenesis in soybean protoplasts using CRISPR/Cas9 RNP delivery via electroâ^ transfection. Frontiers in Plant Science, 0, 14, .	3.6	2
480	Genetic amelioration of fruit and vegetable crops to increase biotic and abiotic stress resistance through CRISPR Genome Editing. Frontiers in Plant Science, 0, 14, .	3.6	1

		CITATION RE	PORT	
#	Article		IF	CITATIONS
481	Development and prospect of gene edited fruits and vegetables. Food Quality and Safet	-y, 0, , .	1.8	0
482	Development of biotechnological tools for hazelnut breeding. Acta Horticulturae, 2023,	, 41-48.	0.2	0
483	Usefulness of current sgRNA design guidelines and in vitro cleavage assays for plant CR genome editing: a case targeting the polyphenol oxidase gene family in eggplant (Solan	ISPR/Cas um melongena) Tj ETQqC	0204rgBT	'Overlock 10
484	CRISPR/Cas Mediated Genome Editing for Improving Stress Resilience in Plants. Environ and Engineering, 2023, , 143-167.	mental Science	0.2	0
485	Unlocking CRISPR/Cas-Mediated Editing Potential for Designing Climate-Smart Crop Pla 873-893.	nts. , 2023, ,		0
486	Apple CRISPR-Cas9—A Recipe for Successful Targeting of AGAMOUS-like Genes in Dor 2023, 12, 3693.	nestic Apple. Plants,	3.5	0
487	CRISPR/Cas9-Mediated genetically edited ornamental and aromatic plants: A promising phytoremediation of heavy metals. Journal of Cleaner Production, 2023, 428, 139512.	technology in	9.3	3
488	CRISPR Variants for Gene Editing in Plants: Biosafety Risks and Future Directions. Intern Journal of Molecular Sciences, 2023, 24, 16241.	ational	4.1	1
489	Genome editing for healthy crops: traits, tools and impacts. Frontiers in Plant Science, C	9, 14, .	3.6	2
490	Evidence and opportunities for developing non-transgenic genome edited crops using s nuclease 1 approach. Critical Reviews in Biotechnology, 0, , 1-11.	ite-directed	9.0	0
491	DNA-free CRISPR/Cas9 genome editing system for oil palm protoplasts using multiple ribonucleoproteins (RNPs) complexes. Industrial Crops and Products, 2024, 208, 11779	5.	5.2	0
492	Enhancing powdery mildew resistance in soybean by targeted mutation of MLO genes u CRISPR/Cas9 system. BMC Plant Biology, 2023, 23, .	ising the	3.6	1
493	Cloning and expression analysis of Mildew Locus O <i>(MLO)</i> genes related to power resistance in <i>Vitis pseudoreticulata</i> , and functional characterisation of <i>VpML Zealand Journal of Crop and Horticultural Science, 0, , 1-17.</i>		1.3	0
494	Transgenic Approaches for Stress Tolerance in Crops. , 2023, , 793-818.			0
495	Microparticle-mediated CRISPR DNA delivery for genome editing in poplar. Frontiers in F 14, .	'lant Science, O,	3.6	1
496	Malus Species: Germplasm Conservation and Utilization. , 2023, , 1-36.			0
497	CRISPR/Cas as a Genome-Editing Technique in Fruit Tree Breeding. International Journal Sciences, 2023, 24, 16656.	of Molecular	4.1	0
498	Isolation, Purification, and Application of Protoplasts and Transient Expression Systems International Journal of Molecular Sciences, 2023, 24, 16892.	in Plants.	4.1	0

# 499	ARTICLE CRISPR/Cas9-based genome editing: A revolutionary approach for crop improvement and global food security. Physiological and Molecular Plant Pathology, 2024, 129, 102191.	IF 2.5	CITATIONS
501	Reduced susceptibility to downy mildew in grapevine plants edited for <i>VvDMR6-1</i> . Journal of Experimental Botany, 0, , .	4.8	0
502	3Bs of CRISPR-Cas mediated genome editing in plants: exploring the basics, bioinformatics and biosafety landscape. Physiology and Molecular Biology of Plants, 2023, 29, 1825-1850.	3.1	1
503	Using New Bioinformatics Strategies at the Design Stage of Genome-edited Plants (Review). Applied Biochemistry and Microbiology, 2023, 59, 743-753.	0.9	Ο
504	Targeted Gene Editing in Pome Fruit Genetics and Breeding: State-of-the-Art, Application Potential and Perspectives. , 2024, , 309-345.		0
508	An Efficient Protoplast-based Genome Editing protocol for <i>Vitis</i> species. Horticulture Research, 0, , .	6.3	0
509	Revolutionizing Agriculture: Harnessing CRISPR/Cas9 for Crop Enhancement. Indian Journal of Microbiology, 0, , .	2.7	0
510	Genome Editing in Horticultural Plants: Present Applications and Future Perspective. , 2024, , 223-246.		0
511	Engineering Phytonutrient Content in Tomato by Genome Editing Technologies. , 2024, , 385-393.		0
512	Methods and Techniques to Select Efficient Guides for CRISPR-Mediated Genome Editing in Plants. , 2024, , 89-117.		0
514	CRISPR/Cas基å›ç»"编辑在木本æ ç ‰©æ€§çжæ"¹è‰⁻ä,的应用. Chinese Science Bulletin, 2023, , .	0.7	0
515	Genome editing based on <i>in vitro</i> -assembled ribonucleoproteins in plants. Cytologia, 2023, 88, 283-288.	0.6	0
516	Genome Editing for Biotic Stress Resistance in Medicinal Plants. , 2023, , 174-187.		0
517	NLR- and mlo-Based Resistance Mechanisms against Powdery Mildew in Cannabis sativa. Plants, 2024, 13, 105.	3.5	1
518	Regulatory aspects of plants resulting from new genomic techniques in the European Union. , 2024, , 251-279.		0
519	Crop Improvement: Comparison of Transgenesis and Gene Editing. Horticulturae, 2024, 10, 57.	2.8	0
520	CRISPR technology towards genome editing of the perennial and semi-perennial crops citrus, coffee and sugarcane. Frontiers in Plant Science, 0, 14, .	3.6	0
521	Genome Editing and Plant-Pathogen Interaction. , 2023, , 311-340.		0

#	Article	IF	CITATIONS
522	Editing Metabolism, Sex, and Microbiome: How Can We Help Poplar Resist Pathogens?. International Journal of Molecular Sciences, 2024, 25, 1308.	4.1	0
523	Table grape breeding programs and new cultivars. Acta Horticulturae, 2024, , 9-18.	0.2	0
525	Phenotyping, genetics, and "-omics―approaches to unravel and introgress enhanced resistance against apple scab (<i>Venturia inaequalis</i>) in apple cultivars (<i>Malus</i> × <i>domestica</i>). Horticulture Research, 2024, 11, .	6.3	1
526	Microclonal propagation of elite industrial grape cultivars (<i>Vitis vinifera</i> L.). Proceedings on Applied Botany, Genetics and Breeding, 2024, 184, 222-231.	0.6	0
527	Establishment of a PEG-Assisted Protoplast Transfection System in Musa acuminata cv. Berangan (AAA) Using a CRISPR/Cas9 Ribonucleoprotein Complex. Biology Bulletin, 2023, 50, S298-S309.	0.5	0
528	DNA- and Selectable-Marker-Free Genome-Editing System Using Zygotes from Recalcitrant Maize Inbred B73. Plant and Cell Physiology, 0, , .	3.1	0
529	Advances in Quercus ilex L. breeding: the CRISPR/Cas9 technology via ribonucleoproteins. Frontiers in Plant Science, 0, 15, .	3.6	0
530	CRISPR/Cas techniques used in plant disease management. , 2024, , 331-351.		0
531	CRISPR/Cas system: A revolutionary tool for crop improvement. Biotechnology Journal, 2024, 19, .	3.5	0
532	Genome editing based trait improvement in crops: current perspective, challenges and opportunities. Nucleus (India), 0, , .	2.2	0
533	New biotechnological tools for grapevine improvement. Advances in Botanical Research, 2024, , .	1.1	0
534	New improvements in grapevine genome editing: high efficiency biallelic homozygous knock-out from regenerated plantlets by using an optimized zCas9i. Plant Methods, 2024, 20, .	4.3	0
535	Perspectives and Overview of CRISPR/Cas Technology in Plant Pathogenesis. , 2024, , 571-588.		0
536	CRISPR-based precision breeding of fruits, vegetables, and ornamental plants. , 2024, , 191-216.		0
537	Nanomaterials for intelligent CRISPR-Cas tools: improving environment sustainability. Environmental Science and Pollution Research, 0, , .	5.3	0
538	Genome-Editing Advances for Disease Resistance in Plants. , 2024, , 293-316.		0
539	Detailed Insight into Various Classes of the CRISPR/Cas System to Develop Future Crops. , 2024, , 227-279.		0
540	Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)-Associated Proteins (Cas) [CRISPR–Cas]: An Emerging Technique in Plant Disease Detection and Management. , 2024, , 589-645.		0

#	Article	IF	CITATIONS
541	Deciphering the Role of CRISPR/Cas9 in the Amelioration of Abiotic and Biotic Stress Conditions. , 2024, , 193-226.		0
542	CRISPR/Cas Genome Editing in Fruit Crops: Recent Advances, Challenges, and Future Prospects. , 2024, , 261-278.		0
543	Plant Genome Editing for Enhanced Biotic Stress Tolerance Using the CRISPR/Cas Technology. , 2024, , 183-219.		0
544	Multiplex genome editing in plants through CRISPR-Cas. , 2024, , 127-142.		0
545	Base editing and prime editing in horticulture crops: Potential applications, challenges, and prospects. , 2024, , 105-126.		0
546	CRISPR-Cas9 technology for enhancement of fruit quality. , 2024, , 309-318.		0
547	CRISPR genome editing of woody trees: Current status and future prospects. , 2024, , 401-418.		0
548	Editing of banana, apple, and grapevine genomes using the CRISPR-Cas9 system. , 2024, , 349-364.		0
549	CRISPRized fruit, vegetable, and ornamental crops: A note from editors. , 2024, , 3-20.		0
550	Improving Qualities of Horticultural Crops Using Various CRISPR Delivery Methods. , 2024, , 239-260.		0