

Caixia Gao

List of Publications by Year in descending order

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115
papers

21,215
citations

20817
60
h-index

18647
119
g-index

125
all docs

125
docs citations

125
times ranked

12223
citing authors

#	ARTICLE	IF	CITATIONS
1	Transient expression of a TaGRF4-TaGIF1 complex stimulates wheat regeneration and improves genome editing. <i>Science China Life Sciences</i> , 2022, 65, 731-738.	4.9	32
2	Identification and characterization of <i>Sr22b</i> , a new allele of the wheat stem rust resistance gene <i>Sr22</i> effective against the Ug99 race group. <i>Plant Biotechnology Journal</i> , 2022, 20, 554-563.	8.3	17
3	The CRISPR-Cas toolbox and gene editing technologies. <i>Molecular Cell</i> , 2022, 82, 333-347.	9.7	151
4	Transcriptional repression of <i>TaNOX10</i> by TaWRKY19 compromises ROS generation and enhances wheat susceptibility to stripe rust. <i>Plant Cell</i> , 2022, 34, 1784-1803.	6.6	37
5	Genome-edited powdery mildew resistance in wheat without growth penalties. <i>Nature</i> , 2022, 602, 455-460.	27.8	181
6	Protoplast Isolation and Transfection in Wheat. <i>Methods in Molecular Biology</i> , 2022, 2464, 131-141.	0.9	3
7	Gene editing: from technologies to applications in research and beyond. <i>Science China Life Sciences</i> , 2022, 65, 657-659.	4.9	3
8	An engineered prime editor with enhanced editing efficiency in plants. <i>Nature Biotechnology</i> , 2022, 40, 1394-1402.	17.5	89
9	Accelerated Domestication of New Crops: Yield is Key. <i>Plant and Cell Physiology</i> , 2022, 63, 1624-1640.	3.1	16
10	Generating broad-spectrum tolerance to ALS-inhibiting herbicides in rice by base editing. <i>Science China Life Sciences</i> , 2021, 64, 1624-1633.	4.9	49
11	Fine-tuning the amylose content of rice by precise base editing of the <i>Wx</i> gene. <i>Plant Biotechnology Journal</i> , 2021, 19, 11-13.	8.3	95
12	An unbiased method for evaluating the genome-wide specificity of base editors in rice. <i>Nature Protocols</i> , 2021, 16, 431-457.	12.0	11
13	High-efficiency prime editing with optimized, paired pegRNAs in plants. <i>Nature Biotechnology</i> , 2021, 39, 923-927.	17.5	189
14	Genome engineering for crop improvement and future agriculture. <i>Cell</i> , 2021, 184, 1621-1635.	28.9	405
15	A route to de novo domestication of wild allotetraploid rice. <i>Cell</i> , 2021, 184, 1156-1170.e14.	28.9	259
16	Genome-wide specificity of prime editors in plants. <i>Nature Biotechnology</i> , 2021, 39, 1292-1299.	17.5	80
17	CRISPR Adventures in China. <i>CRISPR Journal</i> , 2021, 4, 304-306.	2.9	0
18	The MYB family transcription factor TuODORANT1 from <i>Triticum urartu</i> and the homolog TaODORANT1 from <i>Triticum aestivum</i> inhibit seed storage protein synthesis in wheat. <i>Plant Biotechnology Journal</i> , 2021, 19, 1863-1877.	8.3	15

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19	Genome editing in plants with MAD7 nuclease. Journal of Genetics and Genomics, 2021, 48, 444-451.	3.9	25
20	Genetic manipulations of TaARE1 boost nitrogen utilization and grain yield in wheat. Journal of Genetics and Genomics, 2021, 48, 950-953.	3.9	16
21	Highly efficient heritable genome editing in wheat using an RNA virus and bypassing tissue culture. Molecular Plant, 2021, 14, 1787-1798.	8.3	85
22	Plant genome engineering from lab to field—a Keystone Symposia report. Annals of the New York Academy of Sciences, 2021, 1506, 35-54.	3.8	4
23	The vernalization-induced long non-coding RNA VAS functions with the transcription factor TaRF2b to promote TaVRN1 expression for flowering in hexaploid wheat. Molecular Plant, 2021, 14, 1525-1538.	8.3	42
24	Genome-wide identification of seed storage protein gene regulators in wheat through coexpression analysis. Plant Journal, 2021, 108, 1704-1720.	5.7	9
25	Development and characterization of marker-free and transgene insertion site-defined transgenic wheat with improved grain storability and fatty acid content. Plant Biotechnology Journal, 2020, 18, 129-140.	8.3	15
26	Manipulating gene translation in plants by CRISPR-Cas9-mediated genome editing of upstream open reading frames. Nature Protocols, 2020, 15, 338-363.	12.0	48
27	The florigen interactor BdES43 represses flowering in the model temperate grass <i>Brachypodium distachyon</i> . Plant Journal, 2020, 102, 262-275.	5.7	5
28	Prime editing efficiently generates W542L and S621I double mutations in two ALS genes in maize. Genome Biology, 2020, 21, 257.	8.8	153
29	Applications of CRISPR-Cas in agriculture and plant biotechnology. Nature Reviews Molecular Cell Biology, 2020, 21, 661-677.	37.0	433
30	Rationally Designed APOBEC3B Cytosine Base Editors with Improved Specificity. Molecular Cell, 2020, 79, 728-740.e6.	9.7	104
31	Fine-tuning sugar content in strawberry. Genome Biology, 2020, 21, 230.	8.8	97
32	SWISS: multiplexed orthogonal genome editing in plants with a Cas9 nickase and engineered CRISPR RNA scaffolds. Genome Biology, 2020, 21, 141.	8.8	38
33	Prime genome editing in rice and wheat. Nature Biotechnology, 2020, 38, 582-585.	17.5	544
34	Roadmap for Accelerated Domestication of an Emerging Perennial Grain Crop. Trends in Plant Science, 2020, 25, 525-537.	8.8	65
35	Shortening the sgRNA-DNA interface enables SpCas9 and eSpCas9(1.1) to nick the target DNA strand. Science China Life Sciences, 2020, 63, 1619-1630.	4.9	10
36	Precise, predictable multi-nucleotide deletions in rice and wheat using APOBEC-Cas9. Nature Biotechnology, 2020, 38, 1460-1465.	17.5	49

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37	Prospects for the accelerated improvement of the resilient crop quinoa. <i>Journal of Experimental Botany</i> , 2020, 71, 5333-5347.	4.8	49
38	High-fidelity SaCas9 identified by directional screening in human cells. <i>PLoS Biology</i> , 2020, 18, e3000747.	5.6	38
39	Targeted mutagenesis in ryegrass (<i>Lolium</i> spp.) using the CRISPR/Cas9 system. <i>Plant Biotechnology Journal</i> , 2020, 18, 1854-1856.	8.3	25
40	Targeted, random mutagenesis of plant genes with dual cytosine and adenine base editors. <i>Nature Biotechnology</i> , 2020, 38, 875-882.	17.5	259
41	A CRISPR way for accelerating improvement of food crops. <i>Nature Food</i> , 2020, 1, 200-205.	14.0	125
42	Horizontal gene transfer of <i>Fhb7</i> from fungus underlies <i>Fusarium</i> head blight resistance in wheat. <i>Science</i> , 2020, 368, .	12.6	398
43	Genome-edited crops: how to move them from laboratory to market. <i>Frontiers of Agricultural Science and Engineering</i> , 2020, 7, 181.	1.4	14
44	CRISPR editing-mediated antiviral immunity: a versatile source of resistance to combat plant virus infections. <i>Science China Life Sciences</i> , 2019, 62, 1246-1249.	4.9	13
45	Precision plant breeding using genome editing technologies. <i>Transgenic Research</i> , 2019, 28, 53-55.	2.4	12
46	Preface to the special topic on genome editing research in China. <i>National Science Review</i> , 2019, 6, 389-390.	9.5	2
47	Modulating chromatin accessibility by transactivation and targeting proximal dsRNAs enhances Cas9 editing efficiency in vivo. <i>Genome Biology</i> , 2019, 20, 145.	8.8	75
48	Wheat AGAMOUS LIKE 6 transcription factors function in stamen development by regulating the expression of Ta APETALA3. <i>Development (Cambridge)</i> , 2019, 146, .	2.5	14
49	Breeding crops to feed 10 billion. <i>Nature Biotechnology</i> , 2019, 37, 744-754.	17.5	577
50	Boosting activity of high-fidelity CRISPR/Cas9 variants using a tRNAGln-processing system in human cells. <i>Journal of Biological Chemistry</i> , 2019, 294, 9308-9315.	3.4	23
51	CRISPR/Cas Genome Editing and Precision Plant Breeding in Agriculture. <i>Annual Review of Plant Biology</i> , 2019, 70, 667-697.	18.7	959
52	Cytosine, but not adenine, base editors induce genome-wide off-target mutations in rice. <i>Science</i> , 2019, 364, 292-295.	12.6	491
53	Generation of herbicide tolerance traits and a new selectable marker in wheat using base editing. <i>Nature Plants</i> , 2019, 5, 480-485.	9.3	210
54	Hi-TOM: a platform for high-throughput tracking of mutations induced by CRISPR/Cas systems. <i>Science China Life Sciences</i> , 2019, 62, 1-7.	4.9	244

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55	Gene Replacement by Intron Targeting with CRISPR-Cas9. <i>Methods in Molecular Biology</i> , 2019, 1917, 285-296.	0.9	4
56	Biolistic Delivery of CRISPR/Cas9 with Ribonucleoprotein Complex in Wheat. <i>Methods in Molecular Biology</i> , 2019, 1917, 327-335.	0.9	23
57	Targeted mutagenesis in wheat microspores using CRISPR/Cas9. <i>Scientific Reports</i> , 2018, 8, 6502.	3.3	98
58	A chromatin loop represses <i>WUSCHEL</i> expression in Arabidopsis. <i>Plant Journal</i> , 2018, 94, 1083-1097.	5.7	53
59	Analysis of the functions of <i>TaGW2</i> homoeologs in wheat grain weight and protein content traits. <i>Plant Journal</i> , 2018, 94, 857-866.	5.7	211
60	The future of CRISPR technologies in agriculture. <i>Nature Reviews Molecular Cell Biology</i> , 2018, 19, 275-276.	37.0	199
61	Genome editing of bread wheat using biolistic delivery of CRISPR/Cas9 in vitro transcripts or ribonucleoproteins. <i>Nature Protocols</i> , 2018, 13, 413-430.	12.0	179
62	Robust genome editing of CRISPR-Cas9 at NAG PAMs in rice. <i>Science China Life Sciences</i> , 2018, 61, 122-125.	4.9	48
63	An Uncanonical CCCH-Tandem Zinc-Finger Protein Represses Secondary Wall Synthesis and Controls Mechanical Strength in Rice. <i>Molecular Plant</i> , 2018, 11, 163-174.	8.3	51
64	Genotyping genome-edited mutations in plants using CRISPR ribonucleoprotein complexes. <i>Plant Biotechnology Journal</i> , 2018, 16, 2053-2062.	8.3	62
65	From Genetic Stock to Genome Editing: Gene Exploitation in Wheat. <i>Trends in Biotechnology</i> , 2018, 36, 160-172.	9.3	63
66	Conferring DNA virus resistance with high specificity in plants using virus-inducible genome-editing system. <i>Genome Biology</i> , 2018, 19, 197.	8.8	59
67	Applications and potential of genome editing in crop improvement. <i>Genome Biology</i> , 2018, 19, 210.	8.8	286
68	Manipulating mRNA splicing by base editing in plants. <i>Science China Life Sciences</i> , 2018, 61, 1293-1300.	4.9	50
69	Efficient C-to-T base editing in plants using a fusion of nCas9 and human APOBEC3A. <i>Nature Biotechnology</i> , 2018, 36, 950-953.	17.5	310
70	Domestication of wild tomato is accelerated by genome editing. <i>Nature Biotechnology</i> , 2018, 36, 1160-1163.	17.5	440
71	Genome editing of upstream open reading frames enables translational control in plants. <i>Nature Biotechnology</i> , 2018, 36, 894-898.	17.5	244
72	Expanded base editing in rice and wheat using a Cas9-adenosine deaminase fusion. <i>Genome Biology</i> , 2018, 19, 59.	8.8	392

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73	Efficient DNA-free genome editing of bread wheat using CRISPR/Cas9 ribonucleoprotein complexes. <i>Nature Communications</i> , 2017, 8, 14261.	12.8	751
74	Generation of thermosensitive male-sterile maize by targeted knockout of the ZmTMS5 gene. <i>Journal of Genetics and Genomics</i> , 2017, 44, 465-468.	3.9	122
75	Precise base editing in rice, wheat and maize with a Cas9-cytidine deaminase fusion. <i>Nature Biotechnology</i> , 2017, 35, 438-440.	17.5	690
76	Simultaneous modification of three homoeologs of <i>TaEDR1</i> by genome editing enhances powdery mildew resistance in wheat. <i>Plant Journal</i> , 2017, 91, 714-724.	5.7	403
77	Current and future editing reagent delivery systems for plant genome editing. <i>Science China Life Sciences</i> , 2017, 60, 490-505.	4.9	124
78	Construction of a Genome-Wide Mutant Library in Rice Using CRISPR/Cas9. <i>Molecular Plant</i> , 2017, 10, 1238-1241.	8.3	208
79	Anything impossible with CRISPR/Cas9?. <i>Science China Life Sciences</i> , 2017, 60, 445-446.	4.9	5
80	High-efficiency gene targeting in hexaploid wheat using <i>DNA</i> replicons and CRISPR/Cas9. <i>Plant Journal</i> , 2017, 89, 1251-1262.	5.7	305
81	A "new lease of life": Fncpf1 possesses DNA cleavage activity for genome editing in human cells. <i>Nucleic Acids Research</i> , 2017, 45, 11295-11304.	14.5	108
82	KTN80 confers precision to microtubule severing by specific targeting of katanin complexes in plant cells. <i>EMBO Journal</i> , 2017, 36, 3435-3447.	7.8	66
83	Targeted Mutagenesis in Hexaploid Bread Wheat Using the TALEN and CRISPR/Cas Systems. <i>Methods in Molecular Biology</i> , 2017, 1679, 169-185.	0.9	7
84	Progress and prospects in plant genome editing. <i>Nature Plants</i> , 2017, 3, 17107.	9.3	349
85	Transcriptome Association Identifies Regulators of Wheat Spike Architecture. <i>Plant Physiology</i> , 2017, 175, 746-757.	4.8	94
86	Recent advances in DNA-free editing and precise base editing in plants. <i>Emerging Topics in Life Sciences</i> , 2017, 1, 161-168.	2.6	8
87	Perfectly matched 20-nucleotide guide RNA sequences enable robust genome editing using high-fidelity SpCas9 nucleases. <i>Genome Biology</i> , 2017, 18, 191.	8.8	111
88	An Efficient Targeted Mutagenesis System Using CRISPR/Cas in Monocotyledons. <i>Current Protocols in Plant Biology</i> , 2016, 1, 329-344.	2.8	9
89	MicroRNA393 is involved in nitrogen-promoted rice tillering through regulation of auxin signal transduction in axillary buds. <i>Scientific Reports</i> , 2016, 6, 32158.	3.3	44
90	Generation of Stable Transgenic Rice (<i>Oryza sativa</i> L.) by <i>Agrobacterium</i> -Mediated Transformation. <i>Current Protocols in Plant Biology</i> , 2016, 1, 235-246.	2.8	11

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91	Gene replacements and insertions in rice by intron targeting using CRISPR-Cas9. <i>Nature Plants</i> , 2016, 2, 16139.	9.3	303
92	Efficient and transgene-free genome editing in wheat through transient expression of CRISPR/Cas9 DNA or RNA. <i>Nature Communications</i> , 2016, 7, 12617.	12.8	710
93	The CRISPR/Cas9 Genome Editing Revolution. <i>Journal of Genetics and Genomics</i> , 2016, 43, 227-228.	3.9	10
94	Establishing a CRISPR-Cas-like immune system conferring DNA virus resistance in plants. <i>Nature Plants</i> , 2015, 1, 15144.	9.3	337
95	Developing CRISPR Technology in Major Crop Plants. , 2015, , 145-159.		5
96	Creation of fragrant rice by targeted knockout of the <i>OsBADH2</i> gene using TALEN technology. <i>Plant Biotechnology Journal</i> , 2015, 13, 791-800.	8.3	276
97	The OsSPL16-GW7 regulatory module determines grain shape and simultaneously improves rice yield and grain quality. <i>Nature Genetics</i> , 2015, 47, 949-954.	21.4	555
98	Biolistic Genetic Transformation of a Wide Range of Chinese Elite Wheat (<i>Triticum aestivum</i> L.) Varieties. <i>Journal of Genetics and Genomics</i> , 2015, 42, 39-42.	3.9	23
99	Genome editing in crops: from bench to field. <i>National Science Review</i> , 2015, 2, 13-15.	9.5	31
100	Precision Genome Engineering and Agriculture: Opportunities and Regulatory Challenges. <i>PLoS Biology</i> , 2014, 12, e1001877.	5.6	367
101	O-GlcNAc-mediated interaction between VER2 and TaGRP2 elicits TaVRN1 mRNA accumulation during vernalization in winter wheat. <i>Nature Communications</i> , 2014, 5, 4572.	12.8	108
102	An efficient TALEN mutagenesis system in rice. <i>Methods</i> , 2014, 69, 2-8.	3.8	23
103	Targeted Mutagenesis in <i>Zea mays</i> Using TALENs and the CRISPR/Cas System. <i>Journal of Genetics and Genomics</i> , 2014, 41, 63-68.	3.9	567
104	Targeted genome modification technologies and their applications in crop improvements. <i>Plant Cell Reports</i> , 2014, 33, 575-583.	5.6	158
105	Genome editing in rice and wheat using the CRISPR/Cas system. <i>Nature Protocols</i> , 2014, 9, 2395-2410.	12.0	627
106	Simultaneous editing of three homoeoalleles in hexaploid bread wheat confers heritable resistance to powdery mildew. <i>Nature Biotechnology</i> , 2014, 32, 947-951.	17.5	1,635
107	Comparison Between Agrobacterium-Mediated and Direct Gene Transfer Using the Gene Gun. <i>Methods in Molecular Biology</i> , 2013, 940, 3-16.	0.9	24
108	Targeted genome modification of crop plants using a CRISPR-Cas system. <i>Nature Biotechnology</i> , 2013, 31, 686-688.	17.5	1,657

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109	TALENs: Customizable Molecular DNA Scissors for Genome Engineering of Plants. <i>Journal of Genetics and Genomics</i> , 2013, 40, 271-279.	3.9	95
110	Rapid and Efficient Gene Modification in Rice and Brachypodium Using TALENs. <i>Molecular Plant</i> , 2013, 6, 1365-1368.	8.3	245
111	Comparison of three selectable marker genes for transformation of tall fescue (<i>Festuca arundinacea</i>) Tj ETQq1 1 0.784314 rgBT /Overd 658-666.	2.1	5
112	Brachypodium as a Model for the Grasses: Today and the Future Â. <i>Plant Physiology</i> , 2011, 157, 3-13.	4.8	243
113	Agrobacterium-mediated transformation of meadow fescue (<i>Festuca pratensis</i> Huds.). <i>Plant Cell Reports</i> , 2009, 28, 1431-1437.	5.6	10
114	Comparative analysis of transgenic tall fescue (<i>Festuca arundinacea</i> Schreb.) plants obtained by Agrobacterium-mediated transformation and particle bombardment. <i>Plant Cell Reports</i> , 2008, 27, 1601-1609.	5.6	41
115	Generation of large numbers of transgenic Kentucky bluegrass (<i>Poa pratensis</i> L.) plants following biolistic gene transfer. <i>Plant Cell Reports</i> , 2006, 25, 19-25.	5.6	25