## Cristobal Uauy

List of Publications by Year in descending order

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		16451	14759
135	18,659	64	127
papers	citations	h-index	g-index
179	179	179	12668
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Shifting the limits in wheat research and breeding using a fully annotated reference genome. Science, 2018, 361, .	12.6	2,424
2	A NAC Gene Regulating Senescence Improves Grain Protein, Zinc, and Iron Content in Wheat. Science, 2006, 314, 1298-1301.	12.6	1,408
3	Speed breeding is a powerful tool to accelerate crop research and breeding. Nature Plants, 2018, 4, 23-29.	9.3	770
4	The transcriptional landscape of polyploid wheat. Science, 2018, 361, .	12.6	768
5	A Kinase-START Gene Confers Temperature-Dependent Resistance to Wheat Stripe Rust. Science, 2009, 323, 1357-1360.	12.6	625
6	Uncovering hidden variation in polyploid wheat. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E913-E921.	7.1	554
7	Multiple wheat genomes reveal global variation in modern breeding. Nature, 2020, 588, 277-283.	27.8	513
8	Induction of targeted, heritable mutations in barley and Brassica oleracea using RNA-guided Cas9 nuclease. Genome Biology, 2015, 16, 258.	8.8	490
9	An improved assembly and annotation of the allohexaploid wheat genome identifies complete families of agronomic genes and provides genomic evidence for chromosomal translocations. Genome Research, 2017, 27, 885-896.	5.5	464
10	expVIP: a Customizable RNA-seq Data Analysis and Visualization Platform. Plant Physiology, 2016, 170, 2172-2186.	4.8	403
11	A modified TILLING approach to detect induced mutations in tetraploid and hexaploid wheat. BMC Plant Biology, 2009, 9, 115.	3.6	323
12	Genomic innovation for crop improvement. Nature, 2017, 543, 346-354.	27.8	301
13	Wheat (Triticum aestivum) NAM proteins regulate the translocation of iron, zinc, and nitrogen compounds from vegetative tissues to grain. Journal of Experimental Botany, 2009, 60, 4263-4274.	4.8	300
14	Speed breeding in growth chambers and glasshouses for crop breeding and model plant research. Nature Protocols, 2018, 13, 2944-2963.	12.0	286
15	Discovery of Rare Mutations in Populations: TILLING by Sequencing   Â. Plant Physiology, 2011, 156, 1257-1268.	4.8	266
16	Combining SNP discovery from next-generation sequencing data with bulked segregant analysis (BSA) to fine-map genes in polyploid wheat. BMC Plant Biology, 2012, 12, 14.	3.6	265
17	The high grain protein content gene Gpc-B1 accelerates senescence and has pleiotropic effects on protein content in wheat. Journal of Experimental Botany, 2006, 57, 2785-2794.	4.8	252
18	Genome analyses of the wheat yellow (stripe) rust pathogen Puccinia striiformis f. sp. triticireveal polymorphic and haustorial expressed secreted proteins as candidate effectors. BMC Genomics, 2013, 14, 270.	2.8	235

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19	Impact of transposable elements on genome structure and evolution in bread wheat. Genome Biology, 2018, 19, 103.	8.8	226
20	Wheat receptor-kinase-like protein Stb6 controls gene-for-gene resistance to fungal pathogen Zymoseptoria tritici. Nature Genetics, 2018, 50, 368-374.	21.4	215
21	High-temperature adult-plant (HTAP) stripe rust resistance gene Yr36 from Triticum turgidum ssp. dicoccoides is closely linked to the grain protein content locus Gpc-B1. Theoretical and Applied Genetics, 2005, 112, 97-105.	3.6	208
22	Wheat Vacuolar Iron Transporter TaVIT2 Transports Fe and Mn and Is Effective for Biofortification. Plant Physiology, 2017, 174, 2434-2444.	4.8	206
23	PolyMarker: A fast polyploid primer design pipeline. Bioinformatics, 2015, 31, 2038-2039.	4.1	202
24	<scp>RNA</scp> â€ <scp>S</scp> eq bulked segregant analysis enables the identification of highâ€resolution genetic markers for breeding in hexaploid wheat. Plant Biotechnology Journal, 2015, 13, 613-624.	8.3	202
25	BED-domain-containing immune receptors confer diverse resistance spectra to yellow rust. Nature Plants, 2018, 4, 662-668.	9.3	194
26	Field pathogenomics reveals the emergence of a diverse wheat yellow rust population. Genome Biology, 2015, 16, 23.	8.8	185
27	A splice acceptor site mutation in TaGW2-A1 increases thousand grain weight in tetraploid and hexaploid wheat through wider and longer grains. Theoretical and Applied Genetics, 2016, 129, 1099-1112.	3.6	179
28	Biofortification of wheat grain with iron and zinc: integrating novel genomic resources and knowledge from model crops. Frontiers in Plant Science, 2014, 5, 53.	3.6	171
29	Genome sequence and genetic diversity of European ash trees. Nature, 2017, 541, 212-216.	27.8	166
30	Discovery and development of exomeâ€based, coâ€dominant single nucleotide polymorphism markers in hexaploid wheat ( <i><scp>T</scp>riticum aestivum </i> <scp>L</scp> .). Plant Biotechnology Journal, 2013, 11, 279-295.	8.3	161
31	Identification and independent validation of a stable yield and thousand grain weight QTL on chromosome 6A of hexaploid wheat (Triticum aestivum L.). BMC Plant Biology, 2014, 14, 191.	3.6	161
32	Genomics as the key to unlocking the polyploid potential of wheat. New Phytologist, 2015, 208, 1008-1022.	<b>7.</b> 3	151
33	Physical map of the wheat highâ€grain protein content gene Gpcâ€B1 and development of a highâ€throughput molecular marker. New Phytologist, 2006, 169, 753-763.	<b>7.</b> 3	150
34	The NLR-Annotator Tool Enables Annotation of the Intracellular Immune Receptor Repertoire. Plant Physiology, 2020, 183, 468-482.	4.8	147
35	Gene editing and mutagenesis reveal inter-cultivar differences and additivity in the contribution of TaGW2Âhomoeologues to grain size and weight in wheat. Theoretical and Applied Genetics, 2018, 131, 2463-2475.	3.6	142
36	Wheat Stripe Rust Resistance Protein WKS1 Reduces the Ability of the Thylakoid-Associated Ascorbate Peroxidase to Detoxify Reactive Oxygen Species. Plant Cell, 2015, 27, 1755-1770.	6.6	133

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37	Diversity analysis of 80,000 wheat accessions reveals consequences and opportunities of selection footprints. Nature Communications, 2020, 11, 4572.	12.8	129
38	<i>Rht18</i> Semidwarfism in Wheat Is Due to Increased <i>GA 2-oxidaseA9</i> Expression and Reduced GA Content. Plant Physiology, 2018, 177, 168-180.	4.8	128
39	Separating homeologs by phasing in the tetraploid wheat transcriptome. Genome Biology, 2013, 14, R66.	8.8	126
40	Exploiting the ZIP4 homologue within the wheat Ph1 locus has identified two lines exhibiting homoeologous crossover in wheat-wild relative hybrids. Molecular Breeding, 2017, 37, 95.	2.1	126
41	A Metabolic Gene Cluster in the Wheat <i>W1</i> and the Barley <i>Cer-cqu</i> Loci Determines β-Diketone Biosynthesis and Glaucousness. Plant Cell, 2016, 28, 1440-1460.	6.6	123
42	A reductionist approach to dissecting grain weight and yield in wheat. Journal of Integrative Plant Biology, 2019, 61, 337-358.	8.5	122
43	Genome-Wide Association Study of Grain Architecture in Wild Wheat Aegilops tauschii. Frontiers in Plant Science, 2017, 8, 886.	3.6	114
44	Microcolinearity between a 2-cM region encompassing the grain protein content locus Gpc-6B1 on wheat chromosome 6B and a 350-kb region on rice chromosome 2. Functional and Integrative Genomics, 2004, 4, 59-66.	<b>3.</b> 5	109
45	TILLING <i>iin extremis</i> . Plant Biotechnology Journal, 2012, 10, 761-772.	8.3	109
46	The Genetic Basis of Composite Spike Form in Barley and â€~Miracle-Wheat'. Genetics, 2015, 201, 155-165.	2.9	109
47	The host-pathogen interaction between wheat and yellow rust induces temporally coordinated waves of gene expression. BMC Genomics, 2016, 17, 380.	2.8	105
48	Increased pericarp cell length underlies a major quantitative trait locus for grain weight in hexaploid wheat. New Phytologist, 2017, 215, 1026-1038.	7.3	103
49	Wheat genomics comes of age. Current Opinion in Plant Biology, 2017, 36, 142-148.	7.1	103
50	Population genomic analysis of Aegilops tauschii identifies targets for bread wheat improvement. Nature Biotechnology, 2022, 40, 422-431.	17.5	102
51	Combining Traditional Mutagenesis with New High-Throughput Sequencing and Genome Editing to Reveal Hidden Variation in Polyploid Wheat. Annual Review of Genetics, 2017, 51, 435-454.	7.6	100
52	Genomics reveals new landscapes for crop improvement. Genome Biology, 2013, 14, 206.	8.8	99
53	Induced Mutations in the <i>Starch Branching Enzyme II</i> ( <i>SBEII</i> ) Genes Increase Amylose and Resistant Starch Content in Durum Wheat. Crop Science, 2012, 52, 1754-1766.	1.8	97
54	Down-regulation of four putative arabinoxylan feruloyl transferase genes from family PF02458 reduces ester-linked ferulate content in rice cell walls. Planta, 2010, 231, 677-691.	3.2	90

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55	Functional characterization of GPC-1 genes in hexaploid wheat. Planta, 2014, 239, 313-324.	3.2	85
56	Enabling reusability of plant phenomic datasets with MIAPPE 1.1. New Phytologist, 2020, 227, 260-273.	7.3	84
57	Applying the latest advances in genomics and phenomics for trait discovery in polyploid wheat. Plant Journal, 2019, 97, 56-72.	5.7	83
58	The <i><scp>I</scp>nhibitor of wax 1</i> locus ( <i><scp>I</scp>w1</i> ) prevents formation of βâ€and <scp>OH</scp> â€Î²â€diketones in wheat cuticular waxes and maps to a sub <scp>M</scp> interval on chromosome arm 2 <scp>BS</scp> . Plant Journal, 2013, 74, 989-1002.	5.7	82
59	The < i>Cer-cqu < /i> gene cluster determines three key players in a $\hat{i}^2$ -diketone synthase polyketide pathway synthesizing aliphatics in epicuticular waxes. Journal of Experimental Botany, 2016, 67, 2715-2730.	4.8	81
60	A roadmap for gene functional characterisation in crops with large genomes: Lessons from polyploid wheat. ELife, 2020, 9, .	6.0	78
61	RNA interference for wheat functional gene analysis. Transgenic Research, 2007, 16, 689-701.	2.4	76
62	Effect of the down-regulation of the high Grain Protein Content (GPC) genes on the wheat transcriptome during monocarpic senescence. BMC Genomics, 2011, 12, 492.	2.8	75
63	Wheat root systems as a breeding target for climate resilience. Theoretical and Applied Genetics, 2021, 134, 1645-1662.	3.6	74
64	Identification of Transcription Factors Regulating Senescence in Wheat through Gene Regulatory Network Modelling. Plant Physiology, 2019, 180, 1740-1755.	4.8	73
65	Wheat Grain Filling Is Limited by Grain Filling Capacity rather than the Duration of Flag Leaf Photosynthesis: A Case Study Using NAM RNAi Plants. PLoS ONE, 2015, 10, e0134947.	2.5	73
66	Colinearity between the barley grain protein content (GPC) QTL on chromosome arm 6HS and the wheat Gpc-B1 region. Molecular Breeding, 2008, 22, 25-38.	2.1	70
67	Divergent functions of orthologous NAC transcription factors in wheat and rice. Plant Molecular Biology, 2012, 78, 515-524.	3.9	70
68	Improving wheat as a source of iron and zinc for global nutrition. Nutrition Bulletin, 2019, 44, 53-59.	1.8	69
69	A haplotype-led approach to increase the precision of wheat breeding. Communications Biology, 2020, 3, 712.	4.4	68
70	Mutation Scanning in Wheat by Exon Capture and Next-Generation Sequencing. PLoS ONE, 2015, 10, e0137549.	2.5	65
71	Strategy for exploiting exotic germplasm using genetic, morphological, and environmental diversity: the Aegilops tauschii Coss. example. Theoretical and Applied Genetics, 2013, 126, 1793-1808.	3.6	62
72	Identification of a major QTL controlling the content of B-type starch granules in Aegilops. Journal of Experimental Botany, 2011, 62, 2217-2228.	4.8	59

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73	Genome-Wide Sequence and Expression Analysis of the NAC Transcription Factor Family in Polyploid Wheat. G3: Genes, Genomes, Genetics, 2017, 7, 3019-3029.	1.8	59
74	Strategies to improve wheat for human health. Nature Food, 2020, 1, 475-480.	14.0	54
75	The wheatPhs-A1pre-harvest sprouting resistance locus delays the rate of seed dormancy loss and maps 0.3 cM distal to thePM19genes in UK germplasm. Journal of Experimental Botany, 2016, 67, 4169-4178.	4.8	53
76	Agricultural Selection of Wheat Has Been Shaped by Plant-Microbe Interactions. Frontiers in Microbiology, 2020, 11, 132.	3.5	53
77	Haplotype Analysis of the Pre-harvest Sprouting Resistance Locus Phs-A1 Reveals a Causal Role of TaMKK3-A in Global Germplasm. Frontiers in Plant Science, 2017, 8, 1555.	3.6	50
78	Genome-Wide Association Mapping of Grain Micronutrients Concentration in Aegilops tauschii. Frontiers in Plant Science, 2019, 10, 54.	3.6	45
79	Genome-Wide Transcription During Early Wheat Meiosis Is Independent of Synapsis, Ploidy Level, and the Ph1 Locus. Frontiers in Plant Science, 2018, 9, 1791.	3.6	44
80	A change in temperature modulates defence to yellow (stripe) rust in wheat line UC1041 independently of resistance gene Yr36. BMC Plant Biology, 2014, 14, 10.	3.6	41
81	Hotspots in the genomic architecture of field drought responses in wheat as breeding targets. Functional and Integrative Genomics, 2019, 19, 295-309.	3.5	40
82	Reduced height alleles (Rht) and Hagberg falling number of wheat. Journal of Cereal Science, 2012, 55, 305-311.	3.7	39
83	Heat in Wheat: Exploit Reverse Genetic Techniques to Discover New Alleles Within the Triticum durum sHsp26 Family. Frontiers in Plant Science, 2018, 9, 1337.	3.6	38
84	Final grain weight is not limited by the activity of key starch-synthesising enzymes during grain filling in wheat. Journal of Experimental Botany, 2018, 69, 5461-5475.	4.8	38
85	Systematic Investigation of FLOWERING LOCUS T-Like Poaceae Gene Families Identifies the Short-Day Expressed Flowering Pathway Gene, TaFT3 in Wheat (Triticum aestivum L.). Frontiers in Plant Science, 2016, 7, 857.	3.6	37
86	A carbohydrate-binding protein, B-GRANULE CONTENT 1, influences starch granule size distribution in a dose-dependent manner in polyploid wheat. Journal of Experimental Botany, 2020, 71, 105-115.	4.8	36
87	Ectopic expression of <i>Triticum polonicum VRT-A2</i> underlies elongated glumes and grains in hexaploid wheat in a dosage-dependent manner. Plant Cell, 2021, 33, 2296-2319.	6.6	36
88	Copy number variation of <i>TdDof</i> controls solid-stemmed architecture in wheat. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28708-28718.	7.1	33
89	<i>ENHANCED GRAVITROPISM 2</i> i>encodes a STERILE ALPHA MOTIFâ€"containing protein that controls root growth angle in barley and wheat. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	32
90	Dissecting the genetic basis of wheat blast resistance in the Brazilian wheat cultivar BR 18-Terena. BMC Plant Biology, 2020, 20, 398.	3.6	30

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91	The membrane-localized protein kinase MAP4K4/TOT3 regulates thermomorphogenesis. Nature Communications, 2021, 12, 2842.	12.8	30
92	Pathogen-induced biosynthetic pathways encode defense-related molecules in bread wheat. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2123299119.	7.1	30
93	Ubiquitin-related genes are differentially expressed in isogenic lines contrasting for pericarp cell size and grain weight in hexaploid wheat. BMC Plant Biology, 2018, 18, 22.	3.6	29
94	Aegilops umbellulata introgression carrying leaf rust and stripe rust resistance genes Lr76 and Yr70 located to 9.47-Mb region on 5DS telomeric end through a combination of chromosome sorting and sequencing. Theoretical and Applied Genetics, 2020, 133, 903-915.	3.6	26
95	A Co-Expression Network in Hexaploid Wheat Reveals Mostly Balanced Expression and Lack of Significant Gene Loss of Homeologous Meiotic Genes Upon Polyploidization. Frontiers in Plant Science, 2019, 10, 1325.	3.6	24
96	Transfer of a starch phenotype from wild wheat to bread wheat by deletion of a locus controlling B-type starch granule content. Journal of Experimental Botany, 2017, 68, 5497-5509.	4.8	22
97	The Wheat GENIE3 Network Provides Biologically-Relevant Information in Polyploid Wheat. G3: Genes, Genomes, Genetics, 2020, 10, 3675-3686.	1.8	21
98	FANCM promotes class I interfering crossovers and suppresses class II non-interfering crossovers in wheat meiosis. Nature Communications, 2022, $13$ , .	12.8	21
99	Application of TILLING for Orphan Crop Improvement. , 2013, , 83-113.		20
100	Conserved residues in the wheat (Triticum aestivum) NAM-A1 NAC domain are required for protein binding and when mutated lead to delayed peduncle and flag leaf senescence. BMC Plant Biology, 2019, 19, 407.	3.6	19
101	MicroRNA-resistant alleles of <i>HOMEOBOX DOMAIN-2</i> modify inflorescence branching and increase grain protein content of wheat. Science Advances, 2022, 8, eabn5907.	10.3	19
102	Barley lys3 mutants are unique amongst shrunken-endosperm mutants in having abnormally large embryos. Journal of Cereal Science, 2018, 82, 16-24.	3.7	18
103	Identification of a Dominant Chlorosis Phenotype Through a Forward Screen of the Triticum turgidum cv. Kronos TILLING Population. Frontiers in Plant Science, 2019, 10, 963.	3.6	18
104	Crossover-active regions of the wheat genome are distinguished by DMC1, the chromosome axis, H3K27me3, and signatures of adaptation. Genome Research, 2021, 31, 1614-1628.	5.5	18
105	Genetic Screening for Mutants with Altered Seminal Root Numbers in Hexaploid Wheat Using a High-Throughput Root Phenotyping Platform. G3: Genes, Genomes, Genetics, 2019, 9, 2799-2809.	1.8	17
106	Exome sequencing of bulked segregants identified a novel TaMKK3-A allele linked to the wheat ERA8 ABA-hypersensitive germination phenotype. Theoretical and Applied Genetics, 2020, 133, 719-736.	3.6	17
107	High expression of the MADS-box gene <i>VRT2</i> increases the number of rudimentary basal spikelets in wheat. Plant Physiology, 2022, 189, 1536-1552.	4.8	17
108	Development of mlo-based resistance in tetraploid wheat against wheat powdery mildew. Theoretical and Applied Genetics, 2019, 132, 3009-3022.	3.6	16

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109	New insights into homoeologous copy number variations in the hexaploid wheat genome. Plant Genome, 2021, 14, e20069.	2.8	16
110	A saturated SNP linkage map for the orange wheat blossom midge resistance gene Sm1. Theoretical and Applied Genetics, 2016, 129, 1507-1517.	3.6	15
111	The eyespot resistance genes Pch1 and Pch2 of wheat are not homoeoloci. Theoretical and Applied Genetics, 2017, 130, 91-107.	3.6	15
112	Global transcriptome analysis uncovers the gene co-expression regulation network and key genes involved in grain development of wheat (Triticum aestivum L.). Functional and Integrative Genomics, 2019, 19, 853-866.	3.5	14
113	LYS3 encodes a prolamin-box-binding transcription factor that controls embryo growth in barley and wheat. Journal of Cereal Science, 2020, 93, 102965.	3.7	14
114	Discovery and characterisation of a new leaf rust resistance gene introgressed in wheat from wild wheat Aegilops peregrina. Scientific Reports, 2020, 10, 7573.	3.3	13
115	Genetic Characterization of a Wheat Association Mapping Panel Relevant to Brazilian Breeding Using a High-Density Single Nucleotide Polymorphism Array. G3: Genes, Genomes, Genetics, 2020, 10, 2229-2239.	1.8	12
116	Genome-wide association mapping identifies yellow rust resistance loci in Ethiopian durum wheat germplasm. PLoS ONE, 2021, 16, e0243675.	2.5	12
117	Wheat in vivo RNA structure landscape reveals a prevalent role of RNA structure in modulating translational subgenome expression asymmetry. Genome Biology, 2021, 22, 326.	8.8	12
118	<i>Yr36</i> Confers Partial Resistance at Temperatures Below 18°C to U.K. Isolates of <i>Puccinia striiformis</i> . Phytopathology, 2014, 104, 871-878.	2.2	11
119	Fine mapping of Aegilops peregrina co-segregating leaf and stripe rust resistance genes to distal-most end of 5DS. Theoretical and Applied Genetics, 2019, 132, 1473-1485.	3.6	8
120	Characterization of wheat lacking B-type starch granules. Journal of Cereal Science, 2022, 104, 103398.	3.7	8
121	Comparative Genomics and Functional Studies of Wheat BED-NLR Loci. Genes, 2020, 11, 1406.	2.4	7
122	Identification of Fusarium head blight resistance loci in two Brazilian wheat mapping populations. PLoS ONE, 2021, 16, e0248184.	2.5	7
123	Plant Genomics: Unlocking the Genome of Wheat's Progenitor. Current Biology, 2017, 27, R1122-R1124.	3.9	6
124	Insights into the resistance of a synthetically-derived wheat to Septoria tritici blotch disease: less is more. BMC Plant Biology, 2020, 20, 407.	3.6	6
125	A heat-shock inducible system for flexible gene expression in cereals. Plant Methods, 2020, 16, 137.	4.3	5
126	Pathogenomic analyses of <i>Puccinia striiformis</i> f. sp. <i>tritici</i> supports a close genetic relationship between South and EastÂAfrica. Plant Pathology, 2022, 71, 279-288.	2.4	5

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127	Trend, population structure, and trait mapping from 15 years of national varietal trials of UK winter wheat. G3: Genes, Genomes, Genetics, 2022, 12, .	1.8	5
128	Yield reduction historically associated with the Aegilops ventricosa 7DV introgression is genetically and physically distinct from the eyespot resistance gene Pch1. Theoretical and Applied Genetics, 2020, 133, 707-717.	3.6	4
129	Allelic diversity study of functional genes in East Africa bread wheat highlights opportunities for genetic improvement. Molecular Breeding, 2020, 40, 1.	2.1	4
130	The Triticum ispahanicum elongated glume locus P2 maps to chromosome 6A and is associated with the ectopic expression of SVP-A1. Theoretical and Applied Genetics, 2022, , .	3.6	4
131	Distribution of <i>Puccinia striiformis</i> f. sp. <i>tritici</i> Races and Virulence in Wheat Growing Regions of Kenya from 1970 to 2014. Plant Disease, 2022, 106, 701-710.	1.4	3
132	Identification and mapping of resistance to stem rust in the European winter wheat cultivars Spark and Rialto. Molecular Breeding, 2016, 36, 1.	2.1	2
133	Evaluation of the susceptibility of modern, wild, ancestral, and mutational wheat lines to Septoria tritici blotch disease. Plant Pathology, 2021, 70, 1123-1137.	2.4	2
134	A robust KASP marker for selection of four pairs of linked leaf rust and stripe rust resistance genes introgressed on chromosome arm 5DS from different wheat genomes. Molecular Biology Reports, 2021, 48, 5209-5216.	2.3	2
135	Next Generation Sequencing Enabled Genetics in Hexaploid Wheat. , 2015, , 201-209.		0