Steven S Xu

List of Publications by Year
in descending order

107 papers	6,668 citations	71061 41 h-index	76872 74 g-index
115 all docs	115 docs citations	115 times ranked	4322 citing authors

#	Article	IF	Citations
1	Durum wheat genome highlights past domestication signatures and future improvement targets. Nature Genetics, 2019, 51, 885-895.	9.4	576
2	A unique wheat disease resistance-like gene governs effector-triggered susceptibility to necrotrophic pathogens. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13544-13549.	3.3	450
3	Horizontal gene transfer of <i>Fhb7</i> from fungus underlies <i>Fusarium</i> head blight resistance in wheat. Science, 2020, 368, .	6.0	398
4	A highâ€density, <scp>SNP</scp>â€based consensus map of tetraploid wheat as a bridge to integrate durum and bread wheat genomics and breeding. Plant Biotechnology Journal, 2015, 13, 648-663.	4.1	386
5	Resistance gene cloning from a wild crop relative by sequence capture and association genetics. Nature Biotechnology, 2019, 37, 139-143.	9.4	280
6	The Cysteine Rich Necrotrophic Effector SnTox1 Produced by Stagonospora nodorum Triggers Susceptibility of Wheat Lines Harboring Snn1. PLoS Pathogens, 2012, 8, e1002467.	2.1	233
7	The hijacking of a receptor kinaseâ€"driven pathway by a wheat fungal pathogen leads to disease. Science Advances, 2016, 2, e1600822.	4.7	188
8	Targeted Introgression of a Wheat Stem Rust Resistance Gene by DNA Marker-Assisted Chromosome Engineering. Genetics, 2011, 187, 1011-1021.	1.2	133
9	Genetic Diversity for Wheat Improvement as a Conduit to Food Security. Advances in Agronomy, 2013, , 179-257.	2.4	124
10	An innovative SNP genotyping method adapting to multiple platforms and throughputs. Theoretical and Applied Genetics, 2017, 130, 597-607.	1.8	124
11	Genetics of tan spot resistance in wheat. Theoretical and Applied Genetics, 2013, 126, 2197-2217.	1.8	117
12	Population genomic analysis of Aegilops tauschii identifies targets for bread wheat improvement. Nature Biotechnology, 2022, 40, 422-431.	9.4	102
13	Development and characterization of wheat lines carrying stem rust resistance gene Sr43 derived from Thinopyrum ponticum. Theoretical and Applied Genetics, 2014, 127, 969-980.	1.8	95
14	Genomeâ€Wide Association Mapping of Leaf Rust Response in a Durum Wheat Worldwide Germplasm Collection. Plant Genome, 2016, 9, plantgenome2016.01.0008.	1.6	95
15	Evaluation of Fusarium Head Blight Resistance in Tetraploid Wheat (<i>Triticum turgidum</i> L.). Crop Science, 2008, 48, 213-222.	0.8	85
16	A consensus framework map of durum wheat (Triticum durum Desf.) suitable for linkage disequilibrium analysis and genome-wide association mapping. BMC Genomics, 2014, 15, 873.	1.2	85
17	Identification and Characterization of the SnTox6-<i>Snn6</i>Interaction in the<i>Parastagonospora nodorum</i>â€"Wheat Pathosystem. Molecular Plant-Microbe Interactions, 2015, 28, 615-625.	1.4	85
18	Introgression and Characterization of a Goatgrass Gene for a High Level of Resistance to Ug99 Stem Rust in Tetraploid Wheat. G3: Genes, Genomes, Genetics, 2012, 2, 665-673.	0.8	81

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19	Development, identification, and validation of markers for marker-assisted selection against the StagonosporaÂnodorum toxin sensitivity genes Tsn1 and Snn2 in wheat. Molecular Breeding, 2009, 23, 35-49.	1.0	80
20	<scp><scp>SnTox5</scp></scp>â€"<i><scp><i>Snn5</i></scp></i>: a novel <i><scp>S</scp>tagonospora nodorum</i> effectorâ€"wheat gene interaction and its relationship with the <scp><scp>SnToxA</scp></scp>â€"<i><scp>Tsn1</scp></i> and <scp><scp>SnTox3</scp></scp>â€"<i><scp><i>Snn3</i></scp></i>â€"<i><scp>B1</scp></i> interactions. Molecular Plant Pathology, 2012, 13, 1101-1109.	2.0	78
21	Molecular and cytogenetic characterization of a durum wheatâ€"Aegilops speltoides chromosome translocation conferring resistance to stem rust. Chromosome Research, 2008, 16, 1097-1105.	1.0	77
22	SnTox1, a <i>Parastagonospora nodorum</i> necrotrophic effector, is a dualâ€function protein that facilitates infection while protecting from wheatâ€produced chitinases. New Phytologist, 2016, 211, 1052-1064.	3.5	76
23	Meiosis-Driven Genome Variation in Plants. Current Genomics, 2007, 8, 151-161.	0.7	75
24	Genomeâ€Wide Association and Prediction of Grain and Semolina Quality Traits in Durum Wheat Breeding Populations. Plant Genome, 2017, 10, plantgenome2017.05.0038.	1.6	75
25	Genome-wide identification of QTL conferring high-temperature adult-plant (HTAP) resistance to stripe rust (Puccinia striiformis f. sp. tritici) in wheat. Molecular Breeding, 2012, 29, 791-800.	1.0	73
26	Cytogenetic and molecular characterization of a durum alien disomic addition line with enhanced tolerance to Fusarium head blight. Genome, 2009, 52, 467-483.	0.9	66
27	Identification of novel tan spot resistance QTLs using an SSR-based linkage map of tetraploid wheat. Molecular Breeding, 2010, 25, 327-338.	1.0	66
28	Two putatively homoeologous wheat genes mediate recognition of SnTox3 to confer effectorâ€triggered susceptibility to <i>Stagonospora nodorum</i>. Plant Journal, 2011, 65, 27-38.	2.8	65
29	Identification and molecular mapping of two QTLs with major effects for resistance to Fusarium head blight in wheat. Theoretical and Applied Genetics, 2011, 123, 1107-1119.	1.8	65
30	Analysis of agronomic and domestication traits in a durumÂÃ—Âcultivated emmer wheat population using a high-density single nucleotide polymorphism-based linkage map. Theoretical and Applied Genetics, 2014, 127, 2333-2348.	1.8	64
31	Review of doubled haploid production in durum and common wheat through wheatÂÃ—Âmaize hybridization. Plant Breeding, 2014, 133, 313-320.	1.0	63
32	Evaluation and Characterization of Seedling Resistances to Stem Rust Ug99 Races in Wheatâ€"Alien Species Derivatives. Crop Science, 2009, 49, 2167-2175.	0.8	62
33	Genetic characterization and molecular mapping of Hessian fly resistance genes derived from Aegilops tauschii in synthetic wheat. Theoretical and Applied Genetics, 2006, 113, 611-618.	1.8	59
34	Molecular mapping of QTL for Fusarium head blight resistance introgressed into durum wheat. Theoretical and Applied Genetics, 2018, 131, 1939-1951.	1.8	57
35	Identification and molecular mapping of quantitative trait loci for Fusarium head blight resistance in emmer and durum wheat using a single nucleotide polymorphism-based linkage map. Molecular Breeding, 2014, 34, 1677-1687.	1.0	55
36	Evaluation of Genetic Diversity and Host Resistance to Stem Rust in USDA NSGC Durum Wheat Accessions. Plant Genome, 2017, 10, plantgenome2016.07.0071.	1.6	55

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37	A wheat cysteine-rich receptor-like kinase confers broad-spectrum resistance against Septoria tritici blotch. Nature Communications, 2021, 12, 433.	5.8	55
38	Meta-QTL analysis of tan spot resistance in wheat. Theoretical and Applied Genetics, 2020, 133, 2363-2375.	1.8	54
39	Haploidy in Cultivated Wheats: Induction and Utility in Basic and Applied Research. Crop Science, 2009, 49, 737-755.	0.8	53
40	The Wheat <i>Snn7</i> Gene Confers Susceptibility on Recognition of the <i>Parastagonospora nodorum</i> Necrotrophic Effector SnTox7. Plant Genome, 2015, 8, eplantgenome2015.02.0007.	1.6	52
41	New Insights into the Roles of Host Gene-Necrotrophic Effector Interactions in Governing Susceptibility of Durum Wheat to Tan Spot and Septoria nodorum Blotch. G3: Genes, Genomes, Genetics, 2016, 6, 4139-4150.	0.8	50
42	Genetic relationships between race-nonspecific and race-specific interactions in the wheatâ€“Pyrenophora tritici-repentis pathosystem. Theoretical and Applied Genetics, 2016, 129, 897-908.	1.8	49
43	New QTL alleles for quality-related traits in spring wheat revealed by RIL population derived from supernumeraryÂÃ—Ânon-supernumerary spikelet genotypes. Theoretical and Applied Genetics, 2015, 128, 893-912.	1.8	47
44	The Global Durum Wheat Panel (GDP): An International Platform to Identify and Exchange Beneficial Alleles. Frontiers in Plant Science, 2020, 11, 569905.	1.7	44
45	Tan spot susceptibility governed by the Tsn1 locus and race-nonspecific resistance quantitative trait loci in a population derived from the wheat lines Salamouni and Katepwa. Molecular Breeding, 2012, 30, 1669-1678.	1.0	42
46	Chromosomal Locations of Genes for Stem Rust Resistance in Monogenic Lines Derived from Tetraploid Wheat Accession ST464. Crop Science, 2007, 47, 1441-1450.	0.8	40
47	Genetic Mapping Analysis of Breadâ€Making Quality Traits in Spring Wheat. Crop Science, 2012, 52, 2182-2197.	0.8	40
48	Discovery of a Novel Stem Rust Resistance Allele in Durum Wheat that Exhibits Differential Reactions to Ug99 Isolates. G3: Genes, Genomes, Genetics, 2017, 7, 3481-3490.	0.8	40
49	Molecular and comparative mapping of genes governing spike compactness from wild emmer wheat. Molecular Genetics and Genomics, 2014, 289, 641-651.	1.0	38
50	Saturation and comparative mapping of the genomic region harboring Hessian fly resistance gene H26 in wheat. Theoretical and Applied Genetics, 2009, 118, 1589-1599.	1.8	37
51	Evaluation and characterization of high-molecular weight 1D glutenin subunits from Aegilops tauschii in synthetic hexaploid wheats. Journal of Cereal Science, 2010, 52, 333-336.	1.8	37
52	Molecular Cytogenetic Characterization and Stem Rust Resistance of Five Wheatâˆ'Thinopyrum ponticum Partial Amphiploids. Journal of Genetics and Genomics, 2014, 41, 591-599.	1.7	37
53	Pivoting from Arabidopsis to wheat to understand how agricultural plants integrate responses to biotic stress. Journal of Experimental Botany, 2015, 66, 513-531.	2.4	35
54	Physical mapping resources for large plant genomes: radiation hybrids for wheat D-genome progenitor Aegilops tauschii. BMC Genomics, 2012, 13, 597.	1.2	33

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55	Identification and mapping of Sr46 from Aegilops tauschii accession Clae 25 conferring resistance to race TTKSK (Ug99) of wheat stem rust pathogen. Theoretical and Applied Genetics, 2015, 128, 431-443.	1.8	33
56	Mapping and characterization of two stem rust resistance genes derived from cultivated emmer wheat accession PI 193883. Theoretical and Applied Genetics, 2019, 132, 3177-3189.	1.8	33
57	A protein kinaseâ€“major sperm protein gene hijacked by a necrotrophic fungal pathogen triggers disease susceptibility in wheat. Plant Journal, 2021, 106, 720-732.	2.8	31
58	A Genome-Wide Association Study of Highly Heritable Agronomic Traits in Durum Wheat. Frontiers in Plant Science, 2019, 10, 919.	1.7	30
59	Molecular cytogenetic and genomic analyses reveal new insights into the origin of the wheat B genome. Theoretical and Applied Genetics, 2018, 131, 365-375.	1.8	28
60	Genetic analysis of threshability and other spike traits in the evolution of cultivated emmer to fully domesticated durum wheat. Molecular Genetics and Genomics, 2019, 294, 757-771.	1.0	28
61	The <i>Parastagonospora nodorum</i> necrotrophic effector SnTox5 targets the wheat gene <i>Snn5</i> and facilitates entry into the leaf mesophyll. New Phytologist, 2022, 233, 409-426.	3.5	28
62	Meiotic Homoeologous Recombinationâ€Based Alien Gene Introgression in the Genomics Era of Wheat. Crop Science, 2017, 57, 1189-1198.	0.8	27
63	Characterizing the <i>Pyrenophora teres</i> f. <i>maculata</i>â€“Barley Interaction Using Pathogen Genetics. G3: Genes, Genomes, Genetics, 2017, 7, 2615-2626.	0.8	26
64	Identification of a major dominant gene for race-nonspecific tan spot resistance in wild emmer wheat. Theoretical and Applied Genetics, 2020, 133, 829-841.	1.8	26
65	Homoeology of Thinopyrum junceum and Elymus rectisetus chromosomes to wheat and disease resistance conferred by the Thinopyrum and Elymus chromosomes in wheat. Chromosome Research, 2012, 20, 699-715.	1.0	25
66	Characterization of HMW Glutenin Subunits in <i>Thinopyrum intermedium</i>, <i>Th. bessarabicum</i>, <i>Lophopyrum elongatum</i>, <i>Aegilops markgrafii</i>, and Their Addition Lines in Wheat. Crop Science, 2011, 51, 667-677.	0.8	24
67	Delimitation of wheat ph1b deletion and development of ph1b-specific DNA markers. Theoretical and Applied Genetics, 2019, 132, 195-204.	1.8	24
68	Evaluation of Seedling Resistance to Tan Spot and Stagonospora nodorum Blotch in Tetraploid Wheat. Crop Science, 2008, 48, 1107-1116.	0.8	22
69	A triple threat: the <i>Parastagonospora nodorum</i> SnTox267 effector exploits three distinct host genetic factors to cause disease in wheat. New Phytologist, 2022, 233, 427-442.	3.5	22
70	Meiotic homoeologous recombination-based mapping of wheat chromosome 2B and its homoeologues in Aegilops speltoides and Thinopyrum elongatum. Theoretical and Applied Genetics, 2018, 131, 2381-2395.	1.8	21
71	Physical localization and genetic mapping of the fertility restoration gene<i>Rfo</i>in canola (<i>Brassica napus</i>L.). Genome, 2009, 52, 401-407.	0.9	20
72	Genetic Diversity and Resistance to Fusarium Head Blight in Synthetic Hexaploid Wheat Derived From Aegilops tauschii and Diverse Triticum turgidum Subspecies. Frontiers in Plant Science, 2018, 9, 1829.	1.7	20

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73	Identification, mapping, and marker development of stem rust resistance genes in durum wheat â€˜Lebsockâ€™. Molecular Breeding, 2018, 38, 1.	1.0	19
74	Epigenetic regulation of gene expression improves Fusarium head blight resistance in durum wheat. Scientific Reports, 2020, 10, 17610.	1.6	18
75	Attempted Compensation for Linkage Drag Affecting Agronomic Characteristics of Durum Wheat 1AS/1DL Translocation Lines. Crop Science, 2013, 53, 422-429.	0.8	17
76	Molecular and Cytogenetic Characterization of Six Wheat-Aegilops markgrafii Disomic Addition Lines and Their Resistance to Rusts and Powdery Mildew. Frontiers in Plant Science, 2018, 9, 1616.	1.7	17
77	Resistance to Race TTKSK of <i>Puccinia graminis</i> f. sp. <i>tritici</i> in Emmer Wheat. Crop Science, 2012, 52, 2234-2242.	0.8	16
78	A New Map Location of Gene <i>Stb3</i> for Resistance to Septoria Tritici Blotch in Wheat. Crop Science, 2015, 55, 35-43.	0.8	15
79	Function and evolution of allelic variations of <i>Sr13</i> conferring resistance to stem rust in tetraploid wheat (<i>Triticum turgidum</i> L.). Plant Journal, 2021, 106, 1674-1691.	2.8	15
80	Development and Validation of Molecular Markers Closely Linked to <i>H32</i> for Resistance to Hessian Fly in Wheat. Crop Science, 2010, 50, 1325-1332.	0.8	14
81	Molecular and Cytogenetic Characterization of Wheat Introgression Lines Carrying the Stem Rust Resistance Gene Sr39. Crop Science, 2010, 50, 1393-1400.	0.8	14
82	Wheatâ€“Aegilops Introgressions. , 2015, , 221-243.		14
83	Chromosome Engineering Techniques for Targeted Introgression of Rust Resistance from Wild Wheat Relatives. Methods in Molecular Biology, 2017, 1659, 163-172.	0.4	14
84	Genome-wide association mapping of tan spot resistance in a worldwide collection of durum wheat. Theoretical and Applied Genetics, 2020, 133, 2227-2237.	1.8	14
85	High molecular weight glutenin gene diversity in Aegilops tauschii demonstrates unique origin of superior wheat quality. Communications Biology, 2021, 4, 1242.	2.0	14
86	Characterization of <i>Thinopyrum</i> Species for Wheat Stem Rust Resistance and Ploidy Level. Crop Science, 2014, 54, 2663-2672.	0.8	12
87	Variation in Chromosome Constitution of the Xiaoyan Series Partial Amphiploids and Its Relationship to Stripe Rust and Stem Rust Resistance. Journal of Genetics and Genomics, 2015, 42, 657-660.	1.7	12
88	Pyrenophora tritici-repentisRace 4 Isolates Cause Disease on Tetraploid Wheat. Phytopathology, 2020, 110, 1781-1790.	1.1	12
89	Development and characterization of wheatâ€“sea wheatgrass (Thinopyrum junceiforme) amphiploids for biotic stress resistance and abiotic stress tolerance. Theoretical and Applied Genetics, 2019, 132, 163-175.	1.8	11
90	Comparative analysis of genetic background in eight near-isogenic wheat lines with different H genes conferring resistance to Hessian fly. Genome, 2011, 54, 81-89.	0.9	10

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91	Physical mapping of DNA markers linked to stem rust resistance gene Sr47 in durum wheat. Theoretical and Applied Genetics, 2017, 130, 1135-1154.	1.8	10
92	Genetic analysis and molecular mapping of crown rust resistance in common wheat. Theoretical and Applied Genetics, 2014, 127, 609-619.	1.8	9
93	QTL mapping of resistance to tan spot induced by race 2 of Pyrenophora tritici-repentis in tetraploid wheat. Theoretical and Applied Genetics, 2020, 133, 433-442.	1.8	9
94	Chromosome Painting by GISH and Multicolor FISH. Methods in Molecular Biology, 2016, 1429, 7-21.	0.4	8
95	Cloning and characterization of the homoeologous genes for the Rec8-like meiotic cohesin in polyploid wheat. BMC Plant Biology, 2018, 18, 224.	1.6	8
96	Characterization of synthetic wheat line Largo for resistance to stem rust. G3: Genes, Genomes, Genetics, 2021, 11, .	0.8	7
97	Novel stripe rust allâ€stage resistance loci identified in a worldwide collection of durum wheat using genomeâ€wide association mapping. Plant Genome, 2021, 14, e20136.	1.6	7
98	Dissection and physical mapping of wheat chromosome 7B by inducing meiotic recombination with its homoeologues in Aegilops speltoides and Thinopyrum elongatum. Theoretical and Applied Genetics, 2020, 133, 3455-3467.	1.8	6
99	Evaluation and Haplotype Analysis of Elite Synthetic Hexaploid Wheat Lines for Resistance to Hessian Fly. Crop Science, 2012, 52, 752-763.	0.8	5
100	Interactions of Genotype and Glutenin Subunit Composition on Breadmaking Quality of Durum 1ASâ€¢1ALâ€‐1DL Translocation Lines. Cereal Chemistry, 2014, 91, 211-217.	1.1	5
101	Development of a diagnostic co-dominant marker for stem rust resistance gene Sr47 introgressed from Aegilops speltoides into durum wheat. Theoretical and Applied Genetics, 2015, 128, 2367-2374.	1.8	5
102	Genetic Mapping of Majorâ€Effect Seed Dormancy Quantitative Trait Loci on Chromosome 2B using Recombinant Substitution Lines in Tetraploid Wheat. Crop Science, 2016, 56, 59-72.	0.8	5
103	â€˜Elginâ€ND' Spring Wheat: A Newly Adapted Cultivar to the Northâ€Central Plains of the United States with High Agronomic and Quality Performance. Journal of Plant Registrations, 2016, 10, 130-134.	0.4	4
104	Partitioning and physical mapping of wheat chromosome 3B and its homoeologue 3E in Thinopyrum elongatum by inducing homoeologous recombination. Theoretical and Applied Genetics, 2020, 133, 1277-1289.	1.8	4
105	Unique fertility restoration suppressor genes for male-sterile CMS ANN2 and CMS ANN3 cytoplasms in sunflower (Helianthus annuus L.). Molecular Breeding, 2019, 39, 1.	1.0	3
106	Marker-assisted characterization of durum wheat Langdonâ€"Golden Ball disomic substitution lines. Theoretical and Applied Genetics, 2010, 120, 1575-1585.	1.8	2
107	Haplotype variants of Sr46 in Aegilops tauschii, the diploid D genome progenitor of wheat. Theoretical and Applied Genetics, 2022, 135, 2627-2639.	1.8	2