Mainassara A Zaman-Allah

List of Publications by Year
in descending order

54	3,601	185998 28	205818 48
papers	citations	h-index	g-index

56	56	56	4219
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Translating High-Throughput Phenotyping into Genetic Gain. Trends in Plant Science, 2018, 23, 451-466.	4.3	525
2	Integrated genomics, physiology and breeding approaches for improving drought tolerance in crops. Theoretical and Applied Genetics, 2012, 125, 625-645.	1.8	397
3	Unmanned aerial platform-based multi-spectral imaging for field phenotyping of maize. Plant Methods, 2015, 11, 35.	1.9	248
4	A conservative pattern of water use, rather than deep or profuse rooting, is critical for the terminal drought tolerance of chickpea. Journal of Experimental Botany, 2011, 62, 4239-4252.	2.4	202
5	Understanding the factors influencing fall armyworm (Spodoptera frugiperda J.E. Smith) damage in African smallholder maize fields and quantifying its impact on yield. A case study in Eastern Zimbabwe. Crop Protection, 2019, 120, 141-150.	1.0	170
6	Chickpea genotypes contrasting for seed yield under terminal drought stress in the field differ for traits related to the control of water use. Functional Plant Biology, 2011, 38, 270.	1.1	161
7	Adaptation of grain legumes to climate change: a review. Agronomy for Sustainable Development, 2012, 32, 31-44.	2.2	145
8	Nodular diagnosis for ecological engineering of the symbiotic nitrogen fixation with legumes. Procedia Environmental Sciences, 2011, 9, 40-46.	1.3	119
9	The salt-responsive transcriptome of chickpea roots and nodules via deepSuperSAGE. BMC Plant Biology, 2011, 11, 31.	1.6	103
10	A Novel Remote Sensing Approach for Prediction of Maize Yield Under Different Conditions of Nitrogen Fertilization. Frontiers in Plant Science, 2016, 7, 666.	1.7	98
11	High-Throughput Phenotyping of Canopy Cover and Senescence in Maize Field Trials Using Aerial Digital Canopy Imaging. Remote Sensing, 2018, 10, 330.	1.8	96
12	Water: the most important â€˜molecularâ€™ component of water stress tolerance research. Functional Plant Biology, 2013, 40, 1310.	1.1	94
13	Gains in Maize Genetic Improvement in Eastern and Southern Africa: I. CIMMYT Hybrid Breeding Pipeline. Crop Science, 2017, 57, 168-179.	0.8	94
14	Beat the stress: breeding for climate resilience in maize for the tropical rainfed environments. Theoretical and Applied Genetics, 2021, 134, 1729-1752.	1.8	92
15	Comparative Performance of Ground vs. Aerially Assessed RGB and Multispectral Indices for Early-Growth Evaluation of Maize Performance under Phosphorus Fertilization. Frontiers in Plant Science, 2017, 8, 2004.	1.7	80
16	Crop science experiments designed to inform crop modeling. Agricultural and Forest Meteorology, 2013, 170, 8-18.	1.9	78
17	Lower soil moisture threshold for transpiration decline under water deficit correlates with lower canopy conductance and higher transpiration efficiency in drought-tolerant cowpea. Functional Plant Biology, 2012, 39, 306.	1.1	77
18	Potential benefits of drought and heat tolerance for adapting maize to climate change in tropical environments. Climate Risk Management, 2018, 19, 106-119.	1.6	68

#	Article	IF	Citations
19	Gains in Maize Genetic Improvement in Eastern and Southern Africa: II. CIMMYT Openâ€Pollinated Variety Breeding Pipeline. Crop Science, 2017, 57, 180-191.	0.8	63
20	Restriction of transpiration rate under high vapour pressure deficit and nonâ€limiting water conditions is important for terminal drought tolerance in cowpea. Plant Biology, 2013, 15, 304-316.	1.8	60
21	Root Anatomical Traits and Their Possible Contribution to Drought Tolerance in Grain Legumes. Plant Production Science, 2013, 16, 1-8.	0.9	60
22	Higher flower and seed number leads to higher yield under water stress conditions imposed during reproduction in chickpea. Functional Plant Biology, 2015, 42, 162.	1.1	54
23	Evaluating Maize Genotype Performance under Low Nitrogen Conditions Using RGB UAV Phenotyping Techniques. Sensors, 2019, 19, 1815.	2.1	54
24	Elevated CO2 concentration around alfalfa nodules increases N2 fixation. Journal of Experimental Botany, 2010, 61, 121-130.	2.4	44
25	A phytase gene is overexpressed in root nodules cortex of Phaseolus vulgarisâ€“rhizobia symbiosis under phosphorus deficiency. Planta, 2013, 238, 317-324.	1.6	38
26	Physiological and Molecular Aspects of Tolerance to Environmental Constraints in Grain and Forage Legumes. International Journal of Molecular Sciences, 2015, 16, 18976-19008.	1.8	37
27	High-throughput method for ear phenotyping and kernel weight estimation in maize using ear digital imaging. Plant Methods, 2018, 14, 49.	1.9	37
28	Effect of salinity on root-nodule conductance to the oxygen diffusion in the Cicer arietinumâ€“Mesorhizobium ciceri symbiosis. Journal of Plant Physiology, 2007, 164, 1028-1036.	1.6	34
29	Root growth in Jatropha and its implications for drought adaptation. Biomass and Bioenergy, 2012, 39, 247-252.	2.9	34
30	Drought priming improved water status, photosynthesis and water productivity of cowpea during post-anthesis drought stress. Agricultural Water Management, 2021, 245, 106565.	2.4	32
31	Nitrogen rate impacts on tropical maize nitrogen use efficiency and soil nitrogen depletion in eastern and southern Africa. Nutrient Cycling in Agroecosystems, 2020, 116, 397-408.	1.1	26
32	Identification of donors for low-nitrogen stress with maize lethal necrosis (MLN) tolerance for maize breeding in sub-Saharan Africa. Euphytica, 2019, 215, 80.	0.6	24
33	Phenotypic and molecular characterization of chickpea rhizobia isolated from different areas of Tunisia. Canadian Journal of Microbiology, 2007, 53, 427-434.	0.8	23
34	RHIZOBIAL INOCULATION AND P FERTILIZATION RESPONSE IN COMMON BEAN (PHASEOLUS VULGARIS) UNDER GLASSHOUSE AND FIELD CONDITIONS. Experimental Agriculture, 2007, 43, 67-77.	0.4	20
35	When the going gets tough: Performance of stress tolerant maize during the 2015/16 (El NiÃ±o) and 2016/17 (La NiÃ±a) season in southern Africa. Agriculture, Ecosystems and Environment, 2018, 268, 79-89.	2.5	20
36	Genetic Diversity among Selected Elite CIMMYT Maize Hybrids in East and Southern Africa. Crop Science, 2017, 57, 2395-2404.	0.8	10

#	Article	IF	Citations
37	Transpiration difference under high evaporative demand in chickpea (Cicer arietinum L.) may be explained by differences in the water transport pathway in the root cylinder. Plant Biology, 2020, 22, 769-780.	1.8	10
38	The Legumeâ€“Rhizobia Symbiosis. Handbook of Plant Breeding, 2015, , 267-290.	0.1	9
39	Low-N stress tolerant maize hybrids have higher fertilizer N recovery efficiency and reduced N-dilution in the grain compared to susceptible hybrids under low N conditions. Plant Production Science, 2020, 23, 417-426.	0.9	9
40	Evaluation of agro-morphological diversity of groundnut (Arachis hypogaea L.) in Niger. African Journal of Agricultural Research Vol Pp, 2015, 10, 334-344.	0.2	8
41	DiversitÃ© agro-morphologique des accessions de fonio [<i>Digitaria exilis</i> (Kippist.) Stapf.] au Niger. International Journal of Biological and Chemical Sciences, 2015, 8, 1710.	0.1	8
42	Plant Biomass Productivity Under Abiotic Stresses in SAT Agriculture. , 0, , .		7
43	Increasing Genetic Gains in Maize in Stress-Prone Environments of the Tropics. , 2020, , 97-132.		6
44	Leaf versus whole-canopy remote sensing methodologies for crop monitoring under conservation agriculture: a case of study with maize in Zimbabwe. Scientific Reports, 2020, 10, 16008.	1.6	5
45	Genetic diversity and population structure in a collection of roselle (Hibiscus sabdariffaL.) from Niger. Plant Genetic Resources: Characterisation and Utilisation, 2014, 12, 207-214.	0.4	4
46	Maize Kernel Abortion Recognition and Classification Using Binary Classification Machine Learning Algorithms and Deep Convolutional Neural Networks. AI, 2020, 1, 361-375.	2.1	4
47	New Technologies for Phenotyping. , 2015, , 1-14.		3
48	Phenotyping: New Crop Breeding Frontier. , 2018, , 1-11.		3
49	Chickpea. SpringerBriefs in Environmental Science, 2017, , 35-45.	0.3	2
50	Evaluating the Performance of Different Commercial and Pre-Commercial Maize Varieties under Low Nitrogen Conditions Using Affordable Phenotyping Tools. Proceedings (mdpi), 2018, 2, .	0.2	2
51	Genotypic variability for tolerance to salinity and phosphorus deficiency among N2-dependent recombinant inbred lines of Common Bean (Phaseolus vulgaris). African Journal of Microbiology Research, 2012, 6, .	0.4	2
52	Situation de rÃ©fÃ©rence de la phytodiversitÃ© et la productivitÃ© herbacÃ©e dâ€™un dispositif de suivi du feu de brousse au Niger. International Journal of Biological and Chemical Sciences, 2014, 8, 1165.	0.1	1
53	Clipping Effects on the Growth Variation, Water Use Efficiency and Photosynthetic Activity in Buffel Grass (Cenchrus ciliaris L.) Poaceae. Asian Journal of Plant Sciences, 2007, 7, 95-99.	0.2	1
54	Phenotyping: New Crop Breeding Frontier. , 2019, , 493-503.		0