Yantai Gan

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6737575/publications.pdf

Version: 2024-02-01

93 papers	5,038 citations	81743 39 h-index	98622 67 g-index
95 all docs	95 docs citations	95 times ranked	4341 citing authors

#	Article	IF	Citations
1	Ridge-Furrow Mulching Systemsâ€”An Innovative Technique for Boosting Crop Productivity in Semiarid Rain-Fed Environments. Advances in Agronomy, 2013, , 429-476.	2.4	453
2	Regulated deficit irrigation for crop production under drought stress. A review. Agronomy for Sustainable Development, 2016, 36, 1.	2.2	340
3	Improving farming practices reduces the carbon footprint of spring wheat production. Nature Communications, 2014, 5, 5012.	5.8	215
4	Diversifying crop rotations with pulses enhances system productivity. Scientific Reports, 2015, 5, 14625.	1.6	182
5	Lowering carbon footprint of durum wheat by diversifying cropping systems. Field Crops Research, 2011, 122, 199-206.	2.3	174
6	Innovations in agronomy for food legumes. A review. Agronomy for Sustainable Development, 2012, 32, 45-64.	2.2	158
7	Strategies for reducing the carbon footprint of field crops for semiarid areas. A review. Agronomy for Sustainable Development, 2011, 31, 643-656.	2.2	147
8	Spatial and temporal structuring of arbuscular mycorrhizal communities is differentially influenced by abiotic factors and host crop in a semi-arid prairie agroecosystem. FEMS Microbiology Ecology, 2014, 88, 333-344.	1.3	127
9	Higher yield and lower carbon emission by intercropping maize with rape, pea, and wheat in arid irrigation areas. Agronomy for Sustainable Development, 2014, 34, 535-543.	2.2	124
10	Water-Saving Innovations in Chinese Agriculture. Advances in Agronomy, 2014, , 149-201.	2.4	120
11	Alternative oilseed crops for biodiesel feedstock on the Canadian prairies. Canadian Journal of Plant Science, 2011, 91, 889-896.	0.3	117
12	Farming tactics to reduce the carbon footprint of crop cultivation in semiarid areas. A review. Agronomy for Sustainable Development, 2016, 36, 1.	2.2	111
13	Carbon footprint of spring wheat in response to fallow frequency and soil carbon changes over 25 years on the semiarid Canadian prairie. European Journal of Agronomy, 2012, 43, 175-184.	1.9	98
14	Legumes can reduce economic optimum nitrogen rates and increase yields in a wheatâ€“canola cropping sequence in western Canada. Field Crops Research, 2015, 179, 12-25.	2.3	90
15	Integrated farming with intercropping increases food production while reducing environmental footprint. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	83
16	Grazing exclusionâ€”An effective approach for naturally restoring degraded grasslands in Northern China. Land Degradation and Development, 2018, 29, 4439-4456.	1.8	79
17	Increasing the frequency of pulses in crop rotations reduces soil fungal diversity and increases the proportion of fungal pathotrophs in a semiarid agroecosystem. Agriculture, Ecosystems and Environment, 2017, 240, 206-214.	2.5	76
18	Boosting system productivity through the improved coordination of interspecific competition in maize/pea strip intercropping. Field Crops Research, 2016, 198, 50-60.	2.3	72

#	Article	IF	Citations
19	Rooting systems of oilseed and pulse crops. II: Vertical distribution patterns across the soil profile. Field Crops Research, 2011, 122, 248-255.	2.3	69
20	Edaphic properties override the influence of crops on the composition of the soil bacterial community in a semiarid agroecosystem. Applied Soil Ecology, 2016, 105, 160-168.	2.1	64
21	Wheat and maize relay-planting with straw covering increases water use efficiency up to 46Â%. Agronomy for Sustainable Development, 2015, 35, 815-825.	2.2	62
22	Rotational Effects of Legumes and Nonâ€Legumes on Hybrid Canola and Malting Barley. Agronomy Journal, 2014, 106, 1921-1932.	0.9	60
23	Residual effects of preceding crops and nitrogen fertilizer on yield and crop and soil N dynamics of spring wheat and canola in varying environments on the Canadian prairies. Field Crops Research, 2016, 192, 86-102.	2.3	60
24	Rooting systems of oilseed and pulse crops I: Temporal growth patterns across the plant developmental periods. Field Crops Research, 2011, 122, 256-263.	2.3	59
25	Film fully-mulched ridge-furrow cropping affects soil biochemical properties and maize nutrient uptake in a rainfed semi-arid environment. Soil Science and Plant Nutrition, 2014, 60, 486-498.	0.8	59
26	Fine Root Distributions in Oilseed and Pulse Crops. Crop Science, 2010, 50, 222-226.	0.8	58
27	Chickpea genotypes shape the soil microbiome and affect the establishment of the subsequent durum wheat crop in the semiarid North American Great Plains. Soil Biology and Biochemistry, 2013, 63, 129-141.	4.2	58
28	Increased maize yield using slow-release attapulgite-coated fertilizers. Agronomy for Sustainable Development, 2014, 34, 657-665.	2.2	56
29	Phytochemicals to suppress Fusarium head blight in wheatâ€“chickpea rotation. Phytochemistry, 2012, 78, 72-80.	1.4	54
30	Intensifying crop rotations with pulse crops enhances system productivity and soil organic carbon in semi-arid environments. Field Crops Research, 2020, 248, 107657.	2.3	53
31	Preceding crops and nitrogen fertilization influence soil nitrogen cycling in no-till canola and wheat cropping systems. Field Crops Research, 2016, 191, 20-32.	2.3	52
32	Diversifying crop rotation improves system robustness. Agronomy for Sustainable Development, 2019, 39, 1.	2.2	52
33	Identification of the antifungal activity of Trichoderma longibrachiatum T6 and assessment of bioactive substances in controlling phytopathgens. Pesticide Biochemistry and Physiology, 2018, 147, 59-66.	1.6	51
34	Nitrogen accumulation in plant tissues and roots and N mineralization under oilseeds, pulses, and spring wheat. Plant and Soil, 2010, 332, 451-461.	1.8	50
35	Carbon footprint of canola and mustard is a function of the rate of N fertilizer. International Journal of Life Cycle Assessment, 2012, 17, 58-68.	2.2	50
36	First report ofFusarium redolensfrom Saskatchewan and its comparative pathogenicity. Canadian Journal of Plant Pathology, 2011, 33, 559-564.	0.8	48

#	Article	IF	Citations
37	Comparative analysis of oil and protein content and seed yield of five Brassicaceae oilseeds on the Canadian prairie. Industrial Crops and Products, 2019, 136, 77-86.	2.5	48
38	Pyrosequencing reveals how pulses influence rhizobacterial communities with feedback on wheat growth in the semiarid Prairie. Plant and Soil, 2013, 367, 493-505.	1.8	46
39	Brassinosteroid alleviates chilling-induced oxidative stress in pepper by enhancing antioxidation systems and maintenance of photosystem II. Acta Physiologiae Plantarum, 2015, 37, 1.	1.0	45
40	High frequency cropping of pulses modifies soil nitrogen level and the rhizosphere bacterial microbiome in 4-year rotation systems of the semiarid prairie. Applied Soil Ecology, 2018, 126, 47-56.	2.1	43
41	Appropriate Ammonium-Nitrate Ratio Improves Nutrient Accumulation and Fruit Quality in Pepper (Capsicum annuum L.). Agronomy, 2019, 9, 683.	1.3	42
42	Genotype-Specific Variation in the Structure of Root Fungal Communities Is Related to Chickpea Plant Productivity. Applied and Environmental Microbiology, 2015, 81, 2368-2377.	1.4	39
43	Seed Treatment with Trichoderma longibrachiatum T6 Promotes Wheat Seedling Growth under NaCl Stress Through Activating the Enzymatic and Nonenzymatic Antioxidant Defense Systems. International Journal of Molecular Sciences, 2019, 20, 3729.	1.8	39
44	Phytochemicals and spore germination: At the root of AMF host preference?. Applied Soil Ecology, 2012, 60, 98-104.	2.1	38
45	Innovative passive heat-storage walls improve thermal performance and energy efficiency in Chinese solar greenhouses for non-arable lands. Solar Energy, 2019, 190, 561-575.	2.9	38
46	Improving salt tolerance in potato through overexpression of AtHKT1 gene. BMC Plant Biology, 2019, 19, 357.	1.6	36
47	Diversifying cropping systems enhances productivity, stability, and nitrogen use efficiency. Agronomy Journal, 2020, 112, 1517-1536.	0.9	36
48	Improving the productivity and stability of oilseed cropping systems through crop diversification. Field Crops Research, 2019, 237, 65-73.	2.3	35
49	Enhancing the systems productivity and water use efficiency through coordinated soil water sharing and compensation in strip-intercropping. Scientific Reports, 2018, 8, 10494.	1.6	34
50	Water use profiles across the rooting zones of various pulse crops. Field Crops Research, 2012, 134, 130-137.	2.3	33
51	Evaluation of Selected Nonlinear Regression Models in Quantifying Seedling Emergence Rate of Spring Wheat. Crop Science, 1996, 36, 165-168.	0.8	31
52	Intensified Pulse Rotations Buildup Pea Rhizosphere Pathogens in Cereal and Pulse Based Cropping Systems. Frontiers in Microbiology, 2018, 9, 1909.	1.5	31
53	Glyphosate-resistant spring wheat production system effects on weed communities. Weed Science, 2005, 53, 451-464.	0.8	28
54	Economic Effects of Preceding Crops and Nitrogen Application on Canola and Subsequent Barley. Agronomy Journal, 2014, 106, 2055-2066.	0.9	28

#	Article	IF	Citations
55	Cropping practices impact fungal endophytes and pathogens in durum wheat roots. Applied Soil Ecology, 2016, 100, 104-111.	2.1	25
56	Tag-encoded pyrosequencing analysis of the effects of fungicide application and plant genotype on rhizobacterial communities. Applied Soil Ecology, 2012, 60, 92-97.	2.1	24
57	Lentil enhances the productivity and stability of oilseed-cereal cropping systems across different environments. European Journal of Agronomy, 2019, 105, 24-31.	1.9	24
58	Slow-Release Fertilizer Improves the Growth, Quality, and Nutrient Utilization of Wintering Chinese Chives (Allium tuberosum Rottler ex Spreng.). Agronomy, 2020, 10, 381.	1.3	24
59	Glyphosate-resistant wheat persistence in western Canadian cropping systems. Weed Science, 2005, 53, 846-859.	0.8	23
60	Relating soil microbial properties to yields of no-till canola on the Canadian prairies. European Journal of Agronomy, 2015, 62, 110-119.	1.9	23
61	Gobi agriculture: an innovative farming system that increases energy and water use efficiencies. A review. Agronomy for Sustainable Development, 2018, 38, 1.	2.2	23
62	Bacterial endophytes mediate positive feedback effects of early legume termination times on the yield of subsequent durum wheat crops. Canadian Journal of Microbiology, 2012, 58, 1368-1377.	0.8	22
63	Efficacy of Trichoderma longibrachiatum in the control of Heterodera avenae. BioControl, 2014, 59, 319-331.	0.9	21
64	Diversifying crop rotations enhances agroecosystem services and resilience. Advances in Agronomy, 2022, , 299-335.	2.4	21
65	Pyrosequencing reveals the impact of foliar fungicide application to chickpea on root fungal communities of durum wheat in subsequent year. Fungal Ecology, 2015, 15, 73-81.	0.7	20
66	Genotypic variation in the response of chickpea to arbuscular mycorrhizal fungi and non-mycorrhizal fungal endophytes. Canadian Journal of Microbiology, 2018, 64, 265-275.	0.8	20
67	Soilâ€“Plant Indices Help Explain Legume Response to Crop Rotation in a Semiarid Environment. Frontiers in Plant Science, 2018, 9, 1488.	1.7	20
68	Synchrony of nitrogen supply and crop demand are driven via high maize density in maize/pea strip intercropping. Scientific Reports, 2019, 9, 10954.	1.6	19
69	Up to 32Â% yield increase with optimized spatial patterns of canola plant establishment in western Canada. Agronomy for Sustainable Development, 2014, 34, 793-801.	2.2	18
70	Incongruous variation of denitrifying bacterial communities as soil N level rises in Canadian canola fields. Applied Soil Ecology, 2015, 89, 93-101.	2.1	18
71	Phytochemicals induced in chickpea roots selectively and non-selectively stimulate and suppress fungal endophytes and pathogens. Plant and Soil, 2016, 409, 479-493.	1.8	18
72	AtHKT1 gene regulating K+ state in whole plant improves salt tolerance in transgenic tobacco plants. Scientific Reports, 2018, 8, 16585.	1.6	18

#	Article	IF	Citations
73	Agronomic Responses of Brassica carinata to Herbicide, Seeding Rate, and Nitrogen on the Northern Great Plains. Crop Science, 2018, 58, 2633-2643.	0.8	18
74	Lentil enhances agroecosystem productivity with increased residual soil water and nitrogen. Renewable Agriculture and Food Systems, 2017, 32, 319-330.	0.8	15
75	Nitrogen Source Affects the Composition of Metabolites in Pepper (Capsicum annuum L.) and Regulates the Synthesis of Capsaicinoids through the GOGATâ€“GS Pathway. Foods, 2020, 9, 150.	1.9	15
76	Facility Cultivation Systems â€œè®¾æ–½å†œä¸šâ€• A Chinese Model for the Planet. Advances in Agronomy, 2017, 145, 1-42.	2.1	14
77	Influence of introduced arbuscular mycorrhizal fungi and phosphorus sources on plant traits, soil properties, and rhizosphere microbial communities in organic legume-flax rotation. Plant and Soil, 2019, 443, 87-106.	1.8	13
78	Optimization of the Fermentation Media and Parameters for the Bio-control Potential of Trichoderma longibrachiatum T6 Against Nematodes. Frontiers in Microbiology, 2020, 11, 574601.	1.5	13
79	Yield Stability and Seed Shattering Characteristics of Brassica juncea Canola in the Northern Great Plains. Crop Science, 2016, 56, 1296-1305.	0.8	12
80	SOIL QUALITY INDICATORS AND CROP YIELD UNDER LONG-TERM TILLAGE SYSTEMS. Experimental Agriculture, 2017, 53, 497-511.	0.4	11
81	â€˜Decouplingâ€™ land productivity and greenhouse gas footprints: A review. Land Degradation and Development, 2018, 29, 4348-4361.	1.8	11
82	Expression of Nâ€cycling genes of root microbiomes provides insights for sustaining oilseed crop production. Environmental Microbiology, 2020, 22, 4545-4556.	1.8	11
83	Root rot alters the root-associated microbiome of field pea in commercial crop production systems. Plant and Soil, 2021, 460, 593-607.	1.8	10
84	Field-scale spatial distribution characteristics of soil nutrients in a newly reclaimed sandy cropland in the Hexi Corridor of Northwest China. Environmental Earth Sciences, 2013, 70, 2987-2996.	1.3	9
85	Durum Wheat Productivity in Response to Soil Water and Soil Residual Nitrogen Associated with Previous Crop Management. Agronomy Journal, 2016, 108, 1468-1478.	0.9	9
86	Agronomic Advancement in Tillage, Crop Rotation, Soil Health, and Genetic Gain in Durum Wheat Cultivation: A 17-Year Canadian Story. Agronomy, 2018, 8, 193.	1.3	8
87	Promoting pepper (Capsicum annuum) photosynthesis via chloroplast ultrastructure and enzyme activities by optimising the ammonium to nitrate ratio. Functional Plant Biology, 2020, 47, 303.	1.1	8
88	Nodulation and nitrogen accumulation in pulses vary with species, cultivars, growth stages, and environments. Canadian Journal of Plant Science, 2018, 98, 527-542.	0.3	7
89	Economics of pulse crop frequency and sequence in a wheatâ€based rotation. Agronomy Journal, 2020, 112, 2058-2080.	0.9	6
90	Performance of Rhizobial Inoculant Formulations in the Field. Crop Management, 2004, 3, 1-6.	0.3	5

#	Article	IF	Citations
91	Preceding Crops and Nitrogen Effects on Crop Energy Use Efficiency in Canola and Barley. Agronomy Journal, 2016, 108, 1079-1088.	0.9	4
92	No-Till Farming Systems in the Canadian Prairies. , 2020, , 601-616.		2
93	Soil 16S DNA sequence data and corresponding soil property and wheat yield data from a 72-plot field experiment involving pulses and wheat crops grown in rotations in the semiarid prairie. Data in Brief, 2019, 23, 103790.	0.5	1