Jacob Weiner

List of Publications by Year
in descending order

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138 papers	14,224 citations	28274 55 h-index	20358 116 g-index
144 all docs	144 docs citations	144 times ranked	11381 citing authors

#	Article	IF	Citations
1	Biomass Allocation Responses to Root Interactions in Wheat Cultivars Support Predictions of Crop Evolutionary Ecology Theory. Frontiers in Plant Science, 2022, 13, 858636.	3.6	3
2	Does weed suppression by high crop density depend on crop spatial pattern and soil water availability?. Basic and Applied Ecology, 2022, 61, 20-29.	2.7	4
3	Case study: The effect of wheat density and cultivar on growth and reproduction of burr medic () Tj ETQq1 1 0.784314 rgBT /Overloc	1.4	2
4	Differences in Weed Suppression between Two Modern and Two Old Wheat Cultivars at Different Sowing Densities. Agronomy, 2021, 11, 253.	3.0	8
5	The need for alternative plant species interaction models. Journal of Plant Ecology, 2021, 14, 771-780.	2.3	7
6	The interaction between N and P addition on grassland soil acid buffering capacity is regulated by precipitation. Soil Science and Plant Nutrition, 2021, 67, 222-232.	1.9	4
7	Effect of reductive soil disinfestation on the chemical and microbial characteristics of rhizosphere soils associated with Salvia miltiorrhiza production in three cropping systems. Applied Soil Ecology, 2021, 160, 103865.	4.3	12
8	Human total fertility rate affected by ambient temperatures in both the present and previous generations. International Journal of Biometeorology, 2021, 65, 1837-1848.	3.0	7
9	Allometry and Yield Stability of Cereals. Frontiers in Plant Science, 2021, 12, 681490.	3.6	8
10	Yield components, reproductive allometry and the tradeoff between grain yield and yield stability in dryland spring wheat. Field Crops Research, 2020, 257, 107930.	5.1	22
11	Effects of Intra- and Interspecific Plant Density on Rhizosphere Bacterial Communities. Frontiers in Microbiology, 2020, 11, 1045.	3.5	25
12	Multispecies co-culture promotes ecological intensification of vegetable production. Journal of Cleaner Production, 2020, 257, 120851.	9.3	10
13	Crop spatial uniformity, yield and weed suppression. Advances in Agronomy, 2020, 161, 117-178.	5.2	8
14	Root proliferation in response to neighbouring roots in wheat (Triticum aestivum). Basic and Applied Ecology, 2019, 39, 10-14.	2.7	20
15	Looking in the Wrong Direction for Higher-Yielding Crop Genotypes. Trends in Plant Science, 2019, 24, 927-933.	8.8	41
16	Ecological intensification of rice production through rice-fish co-culture. Journal of Cleaner Production, 2019, 234, 1002-1012.	9.3	63
17	Increasing local biodiversity in urban environments: Community development in semi-natural species-rich forb vegetation. Landscape and Urban Planning, 2019, 184, 23-31.	7.5	6
18	Evolutionary agroecology: Trends in root architecture during wheat breeding. Evolutionary Applications, 2019, 12, 733-743.	3.1	50

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19	Size-asymmetric root competition in deep, nutrient-poor soil. Journal of Plant Ecology, 2019, 12, 78-88.	2.3	10
20	Fine root responses to temporal nutrient heterogeneity and competition in seedlings of two tree species with different rooting strategies. Ecology and Evolution, 2018, 8, 3367-3375.	1.9	21
21	Increasing plant diversity with border crops reduces insecticide use and increases crop yield in urban agriculture. ELife, 2018, 7, .	6.0	35
22	Latitudinal pattern of flowering synchrony in an invasive wind-pollinated plant. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20181072.	2.6	16
23	Convergence of community composition during secondary succession on Zokor rodent mounds on the Tibetan Plateau. Journal of Plant Ecology, 2018, 11, 453-464.	2.3	8
24	Spatial analysis of root hemiparasitic shrubs and their hosts: a search for spatial signatures of above- and below-ground interactions. Plant Ecology, 2017, 218, 185-196.	1.6	4
25	Applying plant ecological knowledge to increase agricultural sustainability. Journal of Ecology, 2017, 105, 865-870.	4.0	56
26	Effects of nitrogen and water addition on trace element stoichiometry in five grassland species. Journal of Plant Research, 2017, 130, 659-668.	2.4	28
27	It's About Time: A Critique of Macroecological Inferences Concerning Plant Competition. Trends in Ecology and Evolution, 2017, 32, 86-87.	8.7	31
28	The Effects of Soil Drying on the Growth of a Dominant Peatland Species, Carex lasiocarpa. Wetlands, 2017, 37, 1135-1143.	1.5	6
29	Evolutionary agroecology: individual fitness and population yield in wheat (Triticum aestivum). Ecology, 2017, 98, 2261-2266.	3.2	65
30	Modelling the effect of size-asymmetric competition on size inequality: Simple models with two plants. Ecological Modelling, 2017, 343, 101-108.	2.5	11
31	Experience of inundation or drought alters the responses of plants to subsequent water conditions. Journal of Ecology, 2017, 105, 176-187.	4.0	33
32	Reducing shade avoidance responses in a cereal crop. AoB PLANTS, 2017, 9, plx039.	2.3	27
33	Size asymmetry of resource competition and the structure of plant communities. Journal of Ecology, 2016, 104, 899-910.	4.0	122
34	Nitrogen:phosphorous supply ratio and allometry in five alpine plant species. Ecology and Evolution, 2016, 6, 8881-8892.	1.9	61
35	Yieldâ€“density relationships of above- and belowground organs in Allium cepa var. aggregatum populations. Plant Ecology, 2016, 217, 913-922.	1.6	7
36	The allometry of reproductive allocation in a Chloris virgata population in response to simulated atmospheric nitrogen deposition. Basic and Applied Ecology, 2016, 17, 388-395.	2.7	15

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37	Is colourful self-sustaining forb vegetation mere fantasy?. Urban Forestry and Urban Greening, 2016, 15, 75-79.	5.3	3
38	Does climate directly influence <scp>NPP</scp> globally?. Global Change Biology, 2016, 22, 12-24.	9.5	98
39	Effects of CO 2 elevation and irrigation regimes on leaf gas exchange, plant water relations, and water use efficiency of two tomato cultivars. Agricultural Water Management, 2016, 169, 26-33.	5.6	89
40	Copper tolerant Elsholtzia splendens facilitates Commelina communis on a copper mine spoil. Plant and Soil, 2015, 397, 201-211.	3.7	12
41	Growth trajectories and interspecific competitive dynamics in wheat/maize and barley/maize intercropping. Plant and Soil, 2015, 397, 227-238.	3.7	42
42	Using our agrobiodiversity: plant-based solutions to feed the world. Agronomy for Sustainable Development, 2015, 35, 1217-1235.	5.3	58
43	Effects of density and sowing pattern on weed suppression and grain yield in three varieties of maize under high weed pressure. Weed Research, 2014, 54, 467-474.	1.7	47
44	Individual variability and mortality required for constant final yield in simulated plant populations. Theoretical Ecology, 2014, 7, 263-271.	1.0	4
45	Salt tolerance and stress level affect plant biomassâ€“density relationships and neighbor effects. Acta Oecologica, 2014, 58, 1-4.	1.1	4
46	Shoot competition, root competition and reproductive allocation in <scp>C</scp>henopodium acuminatum. Journal of Ecology, 2014, 102, 1688-1696.	4.0	26
47	Contrasts between wholeâ€plant and local nutrient levels determine root growth and death in Ailanthus altissima (Simaroubaceae). American Journal of Botany, 2014, 101, 812-819.	1.7	13
48	Initial density affects biomassâ€“density and allometric relationships in selfâ€thinning populations of <scp>F</scp>agopyrum esculentum. Journal of Ecology, 2013, 101, 475-483.	4.0	29
49	Allometric analysis of the effects of density on reproductive allocation and Harvest Index in 6 varieties of wheat (Triticum). Field Crops Research, 2013, 144, 162-166.	5.1	44
50	Feeding the world: genetically modified crops versus agricultural biodiversity. Agronomy for Sustainable Development, 2013, 33, 651-662.	5.3	168
51	Root and shoot competition: a metaâ€analysis. Journal of Ecology, 2013, 101, 1298-1312.	4.0	119
52	Sizeâ€symmetric competition in a shadeâ€tolerant invasive plant. Journal of Systematics and Evolution, 2013, 51, 318-325.	3.1	9
53	Plant Interactions Alter the Predictions of Metabolic Scaling Theory. PLoS ONE, 2013, 8, e57612.	2.5	26
54	The effects of salt stress and arbuscular mycorrhiza on plant neighbour effects and self-thinning. Basic and Applied Ecology, 2012, 13, 673-680.	2.7	10

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55	How Important are Crop Spatial Pattern and Density for Weed Suppression by Spring Wheat?. Weed Science, 2012, 60, 501-509.	1.5	59
56	Variation in the degree of specialization can maintain local diversity in model communities. Theoretical Ecology, 2012, 5, 161-166.	1.0	9
57	Reproductive allometry in Pedicularis species changes with elevation. Journal of Ecology, 2012, 100, 452-458.	4.0	32
58	Arbuscular mycorrhizal fungi alter plant allometry and biomassâ€“density relationships. Annals of Botany, 2011, 107, 407-413.	2.9	28
59	Evolutionary Agroecology: the potential for cooperative, high density, weedâ€suppressing cereals. Evolutionary Applications, 2010, 3, 473-479.	3.1	149
60	Effects of positive interactions, size symmetry of competition and abiotic stress on self-thinning in simulated plant populations. Annals of Botany, 2010, 106, 647-652.	2.9	44
61	Constant Final Yield. Annual Review of Ecology, Evolution, and Systematics, 2010, 41, 173-192.	8.3	121
62	Is reproductive allocation in Senecio vulgaris plastic?. Botany, 2009, 87, 475-481.	1.0	34
63	Variation in Local Density Results in a Positive Correlation between Plant Neighbor Sizes. American Naturalist, 2009, 173, 705-708.	2.1	13
64	The allometry of reproduction within plant populations. Journal of Ecology, 2009, 97, 1220-1233.	4.0	245
65	Positive interactions can increase size inequality in plant populations. Journal of Ecology, 2009, 97, 1401-1407.	4.0	68
66	Balance between facilitation and resource competition determines biomassâ€“density relationships in plant populations. Ecology Letters, 2008, 11, 1189-1197.	6.4	133
67	Crop Density, Sowing Pattern, and Nitrogen Fertilization Effects on Weed Suppression and Yield In Spring Wheat. Weed Science, 2008, 56, 97-102.	1.5	98
68	Modeling the growth of individuals in crowded plant populations. Journal of Plant Ecology, 2008, 1, 111-116.	2.3	34
69	Competitive dynamics in two- and three-component intercrops. Journal of Applied Ecology, 2007, 44, 545-551.	4.0	66
70	The influence of Triticum aestivum density, sowing pattern and nitrogen fertilization on leaf area index and its spatial variation. Basic and Applied Ecology, 2007, 8, 252-257.	2.7	48
71	Quantifying size-asymmetric growth among individual beech trees. Canadian Journal of Forest Research, 2006, 36, 418-425.	1.7	26
72	Width of clover strips and wheat rows influence grain yield in winter wheat/white clover intercropping. Field Crops Research, 2006, 95, 280-290.	5.1	53

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73	Describing the spatial pattern of crop plants with special reference to cropâ€“weed competition studies. Field Crops Research, 2006, 96, 207-215.	5.1	12
74	Influence of sowing density and spatial pattern of spring wheat (Triticum aestivum) on the suppression of different weed species. Weed Biology and Management, 2006, 6, 165-173.	1.4	67
75	Above- and below-ground competition between intercropped winter wheat Triticum aestivum and white clover Trifolium repens. Journal of Applied Ecology, 2006, 43, 237-245.	4.0	68
76	Competitive effect is a linear function of neighbour biomass in experimental populations of Kochia scoparia. Journal of Ecology, 2006, 94, 305-309.	4.0	68
77	Size-asymmetric competition and size-asymmetric growth in a spatially explicit zone-of-influence model of plant competition. Ecological Research, 2006, 21, 707-712.	1.5	93
78	Mechanical control of clover improves nitrogen supply and growth of wheat in winter wheat/white clover intercropping. European Journal of Agronomy, 2006, 24, 149-155.	4.1	38
79	Increased density and spatial uniformity increase weed suppression by spring wheat. Weed Research, 2005, 45, 316-321.	1.7	94
80	Pattern-Oriented Modeling of Agent-Based Complex Systems: Lessons from Ecology. Science, 2005, 310, 987-991.	12.6	1,685
81	Effects of density and spatial pattern of winter wheat on suppression of different weed species. Weed Science, 2005, 53, 690-694.	1.5	48
82	Are invasive plant species better competitors than native plant species? - evidence from pair-wise experiments. Oikos, 2004, 105, 229-238.	2.7	489
83	Effects of distance to crop rows and to conspecific neighbours on the size of Brassica napus and Veronica persica weeds. Basic and Applied Ecology, 2004, 5, 35-41.	2.7	5
84	Allocation, plasticity and allometry in plants. Perspectives in Plant Ecology, Evolution and Systematics, 2004, 6, 207-215.	2.7	669
85	Larger Triticum aestivum plants do not preempt nutrient-rich patches in a glasshouse experiment. Plant Ecology, 2003, 169, 85-92.	1.6	26
86	Ecology â€“ the science of agriculture in the 21st century. Journal of Agricultural Science, 2003, 141, 371-377.	1.3	52
87	Size symmetry of competition alters biomassâ€“density relationships. Proceedings of the Royal Society B: Biological Sciences, 2002, 269, 2191-2195.	2.6	65
88	Modelling individual growth and competition in plant populations: growth curves of Chenopodium album at two densities. Journal of Ecology, 2002, 90, 666-671.	4.0	51
89	The Effects of Density, Spatial Pattern, and Competitive Symmetry on Size Variation in Simulated Plant Populations. American Naturalist, 2001, 158, 438-450.	2.1	223
90	Plant allelochemical interference or soil chemical ecology?. Perspectives in Plant Ecology, Evolution and Systematics, 2001, 4, 3-12.	2.7	140

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91	Suppression of weeds by spring wheat Triticum aestivum increases with crop density and spatial uniformity. Journal of Applied Ecology, 2001, 38, 784-790.	4.0	227
92	The nature of tree growth and the "age-related decline in forest productivity". Oikos, 2001, 94, 374-376.	2.7	141
93	A Neighborhood View of Interactions among Individual Plants. , 2000, , 11-27.		96
94	DESCRIBING INEQUALITY IN PLANT SIZE OR FECUNDITY. Ecology, 2000, 81, 1139-1142.	3.2	228
95	The effect of nutrient availability on biomass allocation patterns in 27 species of herbaceous plants. Perspectives in Plant Ecology, Evolution and Systematics, 2000, 3, 115-127.	2.7	323
96	On Self-Criticism in Ecology. Oikos, 1999, 85, 373.	2.7	6
97	Effects of Rosmarinus officinalis neighbors on resprouting of Erica multiflora individuals. Plant Ecology, 1998, 136, 167-173.	1.6	7
98	Mechanisms determining the degree of size asymmetry in competition among plants. Oecologia, 1998, 113, 447-455.	2.0	840
99	Modeling the growth of individuals in plant populations: local density variation in a strand population of Xanthium strumarium (Asteraceae). American Journal of Botany, 1998, 85, 1638-1645.	1.7	14
100	How Important are Environmental Maternal Effects in Plants? A Study with Centaurea Maculosa. Journal of Ecology, 1997, 85, 133.	4.0	143
101	Symmetry of Below-Ground Competition between Kochia scoparia Individuals. Oikos, 1997, 79, 85.	2.7	104
102	A coupled map lattice model of the growth of plant monocultures. Ecological Modelling, 1996, 84, 81-90.	2.5	34
103	Problems in Predicting the Ecological Effects of Elevated CO2. , 1996, , 431-441.		9
104	On the Practice of Ecology. Journal of Ecology, 1995, 83, 153.	4.0	130
105	Size dependency of sexual reproduction and of clonal growth in two perennial plants. Canadian Journal of Botany, 1995, 73, 1831-1837.	1.1	109
106	Following the growth of individuals in crowded plant populations. Trends in Ecology and Evolution, 1995, 10, 389-390.	8.7	28
107	Effect of local competition on resprouting ofArbutus unedoafter clipping. Journal of Vegetation Science, 1994, 5, 145-152.	2.2	25
108	Competition and Allometry in Kochia scoparia. Annals of Botany, 1994, 73, 263-271.	2.9	70

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109	Modeling of Discontinuous Relationships in Biology with Censored Regression. American Naturalist, 1994, 143, 494-507.	2.1	36
110	Growth Variation in a Naturally Established Population of Pinus Sylvestris. Ecology, 1994, 75, 660-670.	3.2	128
111	Plastic Relationships between Reproductive and Vegetative Mass in Solidago altissima. Evolution; International Journal of Organic Evolution, 1993, 47, 61.	2.3	54
112	PLASTIC RELATIONSHIPS BETWEEN REPRODUCTIVE AND VEGETATIVE MASS IN SOLIDAGO ALTISSIMA. Evolution; International Journal of Organic Evolution, 1993, 47, 61-74.	2.3	84
113	Competition, Herbivory and Plant Size Variability: Hypochaeris radicata Grazed by Snails (Helix) Tj ETQq1 1 0.784314 rgBT /Overlock 10	3.6	24
114	Competition and Allometry in Three Species of Annual Plants. Ecology, 1992, 73, 648-656.	3.2	201
115	On the Analysis of Size-Dependent Reproductive Output in Plants. Functional Ecology, 1992, 6, 308.	3.6	126
116	Size-dependent reproductive output in agricultural weeds. Canadian Journal of Botany, 1991, 69, 442-446.	1.1	114
117	Effects of competitive asymmetry on a local density model of plant interference. Journal of Theoretical Biology, 1991, 149, 165-179.	1.7	48
118	Size structure of populations within populations: leaf number and size in crowded and uncrowded Impatiens pallida individuals. Oecologia, 1991, 85, 327-331.	2.0	15
119	Plant Size Variation and Vertebrate Herbivory: Winter Wheat Grazed by Rabbits. Journal of Applied Ecology, 1991, 28, 154.	4.0	15
120	Competition and Growth Form in a Woodland Annual. Journal of Ecology, 1990, 78, 459.	4.0	110
121	Growth and Variability in Crowded and Uncrowded Populations of Dwarf Marigolds (Tagetes patula). Annals of Botany, 1990, 65, 513-524.	2.9	24
122	Asymmetric competition in plant populations. Trends in Ecology and Evolution, 1990, 5, 360-364.	8.7	1,026
123	Local Density Variation may Mimic Effects of Asymmetric Competition on Plant Size Variability. Ecology, 1989, 70, 1188-1191.	3.2	70
124	Growth, Death and Size Distribution Change in an Impatiens Pallida Population. Journal of Ecology, 1989, 77, 524.	4.0	59
125	Including competitive asymmetry in measures of local interference in plant populations. Oecologia, 1989, 80, 349-355.	2.0	127
126	Size Variability and Self-Thinning in Wild-Rice (Zizania aquatica). American Journal of Botany, 1988, 75, 445.	1.7	17

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127	SIZE VARIABILITY AND SELFâ€THINNING IN WILDâ€RICE (ZIZANIA AQUATICA). American Journal of Botany, 1988, 75, 445-448.	1.7	31
128	Bootstrapping the Gini Coefficient of Inequality. Ecology, 1987, 68, 1548-1551.	3.2	216
129	How Competition for Light and Nutrients Affects Size Variability in Ipomoea Tricolor Populations. Ecology, 1986, 67, 1425-1427.	3.2	205
130	Size Variability and Competition in Plant Monocultures. Oikos, 1986, 47, 211.	2.7	615
131	Size Hierarchies in Experimental Populations of Annual Plants. Ecology, 1985, 66, 743-752.	3.2	392
132	Growth and mortality of individual plants as a function of ?available area?. Oecologia, 1984, 62, 57-60.	2.0	155
133	The meaning and measurement of size hierarchies in plant populations. Oecologia, 1984, 61, 334-336.	2.0	463
134	Neighbourhood Interference Amongst Pinus Rigida Individuals. Journal of Ecology, 1984, 72, 183.	4.0	217
135	A Neighborhood Model of Annual-Plant Interference. Ecology, 1982, 63, 1237-1241.	3.2	192
136	Dispersal and neighborhood effects in an annual plant competition model. Ecological Modelling, 1981, 13, 131-147.	2.5	65
137	The Effects of Plant Density, Species Proportion and Potassium-Phosphorus Fertilization on Interference Between Trifolium Incarnatum and Lolium Multiflorum with Limited Nitrogen Supply. Journal of Ecology, 1980, 68, 969.	4.0	22
138	Species traits and shoot-root biomass allocation in 20 dry-grassland species. Journal of Plant Ecology, 0, , rtw143.	2.3	10