Leslie A Weston

List of Publications by Year
in descending order

131	6,718	87888 38	69250 77
papers	citations	h-index	g-index

134	134	134	6003
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The role of root exudates and allelochemicals in the rhizosphere. Plant and Soil, 2003, 256, 67-83.	3.7	1,019
2	Utilization of Allelopathy for Weed Management in Agroecosystems. Agronomy Journal, 1996, 88, 860-866.	1.8	395
3	Flavonoids: Their Structure, Biosynthesis and Role in the Rhizosphere, Including Allelopathy. Journal of Chemical Ecology, 2013, 39, 283-297.	1.8	332
4	Weed and Crop Allelopathy. Critical Reviews in Plant Sciences, 2003, 22, 367-389.	5.7	325
5	Biological Activity of Resveratrol, a Stilbenic Compound from Grapevines, Against Botrytis cinerea, the Causal Agent for Gray Mold. Journal of Chemical Ecology, 1997, 23, 1689-1702.	1.8	229
6	The role of silicon in plant biology: a paradigm shift in research approach. Annals of Botany, 2018, 121, 1265-1273.	2.9	189
7	Mode of Action, Localization of Production, Chemical Nature, and Activity of Sorgoleone: A Potent PSII Inhibitor in Sorghum spp. Root Exudates1. Weed Technology, 2001, 15, 813-825.	0.9	186
8	Grass roots chemistry: meta -Tyrosine, an herbicidal nonprotein amino acid. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16964-16969.	7.1	183
9	Phytotoxicity and Distribution of Sorgoleone in Grain Sorghum Germplasm. Journal of Agricultural and Food Chemistry, 1996, 44, 1343-1347.	5.2	156
10	Mechanisms for cellular transport and release of allelochemicals from plant roots into the rhizosphere. Journal of Experimental Botany, 2012, 63, 3445-3454.	4.8	155
11	Isolation and characterization of allelopathic volatiles from mugwort (Artemisia vulgaris). Journal of Chemical Ecology, 2005, 31, 247-265.	1.8	144
12	HPLC Analysis of Grapevine Phytoalexins Coupling Photodiode Array Detection and Fluorometry. Analytical Chemistry, 1997, 69, 5172-5177.	6.5	127
13	Evaluation of root exudates of seven sorghum accessions. Journal of Chemical Ecology, 2003, 29, 2073-2083.	1.8	122
14	Inhibition of a Photosystem II Electron Transfer Reaction by the Natural Product Sorgoleone. Journal of Agricultural and Food Chemistry, 1997, 45, 1415-1421.	5.2	121
15	A New Photosystem II Electron Transfer Inhibitor from Sorghum bicolor. Journal of Natural Products, 1998, 61, 927-930.	3.0	118
16	Allelopathic potential of sorghum-sudangrass hybrid (sudex). Journal of Chemical Ecology, 1989, 15, 1855-1865.	1.8	117
17	Are Laboratory Bioassays for Allelopathy Suitable for Prediction of Field Responses?. , 2000, 26, 2111-2118.		108
18	Herbicidal Activity and Site of Action of the Natural Product Sorgoleone. Pesticide Biochemistry and Physiology, 1996, 54, 73-83.	3.6	106

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19	Sorghum Allelopathyâ€"From Ecosystem to Molecule. Journal of Chemical Ecology, 2013, 39, 142-153.	1.8	96
20	Anatomy of Sorgoleoneâ€Secreting Root Hairs ofSorghumSpecies. International Journal of Plant Sciences, 2003, 164, 861-866.	1.3	86
21	Preharvest Factors Affecting Postharvest Quality of Vegetables. Hortscience: A Publication of the American Society for Hortcultural Science, 1997, 32, 812-816.	1.0	85
22	Effects of fertility on biomass, phytotoxicity, and allelochemical content of cereal rye. Journal of Chemical Ecology, 1995, 21, 81-96.	1.8	80
23	The Impact of Competition and Allelopathy on the Trade-Off between Plant Defense and Growth in Two Contrasting Tree Species. Frontiers in Plant Science, 2016, 7, 594.	3.6	78
24	The Impact of Rye Cover Crops on Weed Populations in a Tomato Cropping System. Weed Science, 1995, 43, 318-323.	1.5	74
25	A Review of the Biology and Ecology of Three Invasive Perennials in New York State: Japanese Knotweed (Polygonum cuspidatum), Mugwort (Artemisia vulgaris) and Pale Swallow-wort (Vincetoxicum) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.7	72
26	Allelopathic Influence of Germinating Seeds and Seedlings of Cover Crops on Weed Species. Weed Science, 1996, 44, 579-584.	1.5	67
27	Cover Crop and Herbicide Influence on Row Crop Seedling Establishment in No-Tillage Culture. Weed Science, 1990, 38, 166-171.	1.5	66
28	Strategies for Using Transgenes to Produce Allelopathic Crops1. Weed Technology, 2001, 15, 826-834.	0.9	61
29	Challenges, achievements and opportunities in allelopathy research. Journal of Plant Interactions, 2005, 1, 69-81.	2.1	61
30	Identification and localization of bioactive naphthoquinones in the roots and rhizosphere of Patersonâ€™s curse (Echium plantagineum), a noxious invader. Journal of Experimental Botany, 2016, 67, 3777-3788.	4.8	56
31	Biology and Impacts of Pacific Islands Invasive Species. 13.Mikania micranthaKunth (Asteraceae). Pacific Science, 2016, 70, 257-285.	0.6	54
32	Secondary Plant Products Causing Photosensitization in Grazing Herbivores: Their Structure, Activity and Regulation. International Journal of Molecular Sciences, 2014, 15, 1441-1465.	4.1	49
33	Isolation, characterization and activity of phytotoxic compounds from quackgrass [Agropyron repens (L.)Beauv.]. Journal of Chemical Ecology, 1987, 13, 403-421.	1.8	47
34	Laboratory assessment of the allelopathic effects of fine leaf fescues. Journal of Chemical Ecology, 2003, 29, 1919-1937.	1.8	47
35	Assessment of the Phytotoxic Potential of m-Tyrosine in Laboratory Soil Bioassays. Journal of Chemical Ecology, 2009, 35, 1288-1294.	1.8	47
36	Manipulation of Root Hair Development and Sorgoleone Production in Sorghum Seedlings. Journal of Chemical Ecology, 2004, 30, 199-213.	1.8	46

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37	History and Current Trends in the Use of Allelopathy for Weed Management. HortTechnology, 2005, 15, 529-534.	0.9	45
38	SOR1, a gene associated with bioherbicide production in sorghum root hairs. Journal of Experimental Botany, 2004, 55, 2251-2259.	4.8	43
39	Activity and Persistence of Sorgoleone, a Long-Chain Hydroquinone Produced bySorghum bicolor. The Journal of Crop Improvement: Innovations in Practiceory and Research, 2001, 4, 363-377.	0.4	41
40	The importance of analytical techniques in allelopathy studies with the reported allelochemical catechin as an example. Biological Invasions, 2009, 11, 325-332.	2.4	38
41	Influence of Cover Crop and Herbicide Treatment on Weed Control and Yield in No-Till Sweet Corn (Zea maysL.) and Pumpkin (Cucurbita maximaDuch.). Weed Technology, 1996, 10, 341-346.	0.9	37
42	Inhibition of Growth, Nodulation, and Nitrogen Fixation of Legumes by Quackgrass 1. Crop Science, 1985, 25, 561-565.	1.8	36
43	An Evaluation of the Allelopathic Potential of Selected Perennial Groundcovers: Foliar Volatiles of Catmint (Nepeta Ã— faassenii) Inhibit Seedling Growth. Journal of Chemical Ecology, 2006, 32, 1835-1848.	1.8	36
44	Allelochemicals identified from Jerusalem artichoke (Helianthus tuberosus L.) residues and their potential inhibitory activity in the field and laboratory. Scientia Horticulturae, 2011, 129, 361-368.	3.6	34
45	Separating the Effects of Sorghum (Sorghum bicolor) and Rye (Secale cereale) Root and Shoot Residues on Weed Development. Weed Science, 1996, 44, 402-407.	1.5	33
46	Sphagnum Species Modulate their Phenolic Profiles and Mycorrhizal Colonization of Surrounding Andromeda polifolia along Peatland Microhabitats. Journal of Chemical Ecology, 2018, 44, 1146-1157.	1.8	32
47	Evaluation of Selected Fine-leaf Fescue Cultivars for Their Turfgrass Quality and Weed Suppressive Ability in Field Settings. HortTechnology, 2009, 19, 660-668.	0.9	31
48	Utilization of RAPD Markers to Assess Genetic Diversity of Wild Populations of North American Ginseng (Panax quinquefolium). Planta Medica, 2007, 73, 71-76.	1.3	30
49	Metabolic Profiling of Pyrrolizidine Alkaloids in Foliage of Two Echium spp. Invaders in Australiaâ€"A Case of Novel Weapons?. International Journal of Molecular Sciences, 2015, 16, 26721-26737.	4.1	30
50	Variation in Alkaloid Production from Genetically Diverse Lolium Accessions Infected with EpichloÃ« Species. Journal of Agricultural and Food Chemistry, 2015, 63, 10355-10365.	5.2	29
51	Identification of phytotoxic metabolites released from Rehmannia glutinosa suggest their importance in the formation of its replant problem. Plant and Soil, 2019, 441, 439-454.	3.7	28
52	Effects of UVâ€Ƀ on Secondary Metabolites of St. Johnâ€™s Wort (Hypericum perforatum L.) Grown in Controlled Environments. Photochemistry and Photobiology, 2011, 87, 680-684.	2.5	27
53	Inhibition of Legume Seedling Growth by Residues and Extracts of Quackgrass (Agropyron repens). Weed Science, 1986, 34, 366-372.	1.5	26
54	Metabolic Profiling and Identification of Shikonins in Root Periderm of Two Invasive Echium spp. Weeds in Australia. Molecules, 2017, 22, 330.	3.8	26

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55	Tolerance of Tomato (Lycopersicon esculentum) and Bell Pepper (Capsicum annum) to Clomazone. Weed Science, 1989, 37, 285-289.	1.5	25
56	Effects of Meloxicam and Phenylbutazone on Equine Gastric Mucosal Permeability. Journal of Veterinary Internal Medicine, 2012, 26, 1494-1499.	1.6	23
57	Metabolic profiling in Echium plantagineum: presence of bioactive pyrrolizidine alkaloids and napthoquinones from accessions across southeastern Australia. Phytochemistry Reviews, 2013, 12, 831-837.	6.5	23
58	Evaluation of Commercial Wheat Cultivars for Canopy Architecture, Early Vigour, Weed Suppression, and Yield. Agronomy, 2020, 10, 983.	3.0	23
59	Clomazone for Weed Control in Transplanted Cole Crops (Brassica oleracea). Weed Science, 1995, 43, 121-127.	1.5	21
60	Differential Growth Response to Salt Stress Among Selected Ornamentals. Journal of Plant Nutrition, 2007, 30, 1109-1126.	1.9	21
61	Rhizo-lysimetry: facilities for the simultaneous study of root behaviour and resource use by agricultural crop and pasture systems. Plant Methods, 2013, 9, 3.	4.3	21
62	Pore Mn2+ dynamics of the rhizosphere of flooded and non-flooded rice during a long wet and drying phase in two rice growing soils. Chemosphere, 2015, 134, 16-24.	8.2	21
63	l-Canavanine: How does a simple non-protein amino acid inhibit cellular function in a diverse living system?. Phytochemistry Reviews, 2017, 16, 1269-1282.	6.5	21
64	Differences in invasibility of two contrasting habitats and invasiveness of two mugwort Artemisia vulgaris populations. Journal of Applied Ecology, 2005, 42, 567-576.	4.0	20
65	Production of pyrrolizidine alkaloids and shikonins in Echium plantagineum L. in response to various plant stressors. Pest Management Science, 2019, 75, 2530-2541.	3.4	20
66	Preharvest Factors Affecting Postharvest Quality of Vegetables. Hortscience: A Publication of the American Society for Hortcultural Science, 1995, 30, 750F-750.	1.0	20
67	Variable impact of rice (Oryza sativa) on soil metal reduction and availability of pore water Fe²⁺and Mn²⁺throughout the growth period. Chemistry and Ecology, 2016, 32, 182-200.	1.6	19
68	Silicon reduces herbivore performance via different mechanisms, depending on hostâ€“plant species. Austral Ecology, 2019, 44, 1092-1097.	1.5	19
69	Metabolomic approaches for the identification of flavonoids associated with weed suppression in selected Hardseeded annual pasture legumes. Plant and Soil, 2020, 447, 199-218.	3.7	18
70	Influence of Gel Additives on Nitrate, Ammonium, and Water Retention and Tomato Growth in a Soilless Medium. Hortscience: A Publication of the American Society for Hortcultural Science, 1993, 28, 1005-1007.	1.0	18
71	Understanding invasion history and predicting invasive niches using genetic sequencing technology in Australia: case studies from Cucurbitaceae and Boraginaceae. , 2016, 4, cow030.		17
72	The weed suppressive ability of selected Australian grain crops; caseÂstudies from the Riverina region in New South Wales. Crop Protection, 2018, 103, 9-19.	2.1	17

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73	Potential Use of Sweet Potato (Ipomoea batatas (L.) Lam.) to Suppress Three Invasive Plant Species in Agroecosystems (Ageratum conyzoides L., Bidens pilosa L., and Galinsoga parviflora Cav.). Agronomy, 2019, 9, 318.	3.0	17
74	Phytotoxicity and Potential Allelopathy in Pale (Cynanchum rossicum) and Black swallowwort (C.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.1	16
75	Siteâ€specific management is crucial to managing Mikania micrantha. Weed Research, 2019, 59, 155-169.	1.7	16
76	Influence of clomazone herbicide on postharvest quality of processing squash and pumpkin. Journal of Agricultural and Food Chemistry, 1995, 43, 2389-2393.	5.2	15
77	Toxic Potential and Metabolic Profiling of Two Australian Biotypes of the Invasive Plant Parthenium Weed (Parthenium hysterophorus L.). Toxins, 2020, 12, 447.	3.4	15
78	Metabolic profiling of benzoxazinoids in the roots and rhizosphere of commercial winter wheat genotypes. Plant and Soil, 2021, 466, 467-489.	3.7	15
79	Cole Crop (Brassica oleracea) Tolerance to Clomazone. Weed Science, 1992, 40, 7-11.	1.5	14
80	Effects of Clomazone on IPP Isomerase and Prenyl Transferase Activities in Cell Suspension Cultures and Cotyledons of Solanaceous Species. Weed Science, 1994, 42, 509-516.	1.5	14
81	Technologies for the Selection, Culture and Metabolic Profiling of Unique Rhizosphere Microorganisms for Natural Product Discovery. Molecules, 2019, 24, 1955.	3.8	14
82	Rehmannia glutinosa Replant Issues: Root Exudate-Rhizobiome Interactions Clearly Influence Replant Success. Frontiers in Microbiology, 2020, 11, 1413.	3.5	14
83	Evaluation of Herbaceous Perennials as Weed Suppressive Groundcovers for Use Along Roadsides or in Landscapes. Journal of Environmental Horticulture, 2005, 23, 198-203.	0.5	14
84	Bioactivity and quantitative analysis of isohexenylnaphthazarins in root periderm of two Echium spp.: E.Âplantagineum and E.Âgaditanum. Phytochemistry, 2017, 141, 162-170.	2.9	13
85	Seed dormancy in Cucumis sativus var. hardwickii (Royle) Alef.. Scientia Horticulturae, 1992, 50, 35-46.	3.6	12
86	The aetiology, prevalence and morbidity of outbreaks of photosensitisation in livestock: A review. PLoS ONE, 2019, 14, e0211625.	2.5	12
87	Using Subirrigation to Maintain Soil Moisture Content in Greenhouse Experiments. Weed Science, 1996, 44, 397-401.	1.5	11
88	Potential Allelopathic Effects of Jerusalem Artichoke (Helianthus tuberosus) Leaf Tissues. Weed Technology, 2010, 24, 378-385.	0.9	11
89	Chemometric analysis of Amaranthus retroflexus in relation to livestock toxicity in southern Australia. Phytochemistry, 2019, 161, 1-10.	2.9	11
90	A New Photosystem II Electron Transfer Inhibitor fromSorghum Bicolor. Journal of Natural Products, 1998, 61, 1456-1456.	3.0	10

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91	Ecology and genetics affect relative invasion success of two Echium species in southern Australia. Scientific Reports, 2017, 7, 42792.	3.3	10
92	Allelopathic Crop Development: Molecular and Traditional Plant Breeding Approaches. , 0, , 231-258.		10
93	Recent developments in primer design for DNA polymorphism and mRNA profiling in higher plants. Plant Methods, 2006, 2, 4.	4.3	9
94	Specialised root adaptations display cell-specific developmental and physiological diversity. Plant and Soil, 2009, 322, 39-47.	3.7	9
95	Nutrient Accumulation and Tipburn in NFT-grown Lettuce at Several Potassium and pH Levels. Hortscience: A Publication of the American Society for Hortcultural Science, 1992, 27, 790-792.	1.0	9
96	Competitiveness of Early Vigour Wheat (Triticum aestivum L.) Genotypes Is Established at Early Growth Stages. Agronomy, 2022, 12, 377.	3.0	9
97	Determination of sucrose in equine serum using liquid chromatographyâ€“mass spectrometry (LC/MS). Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2011, 879, 3668-3671.	2.3	8
98	EFFECTS OF SOIL SALINITY IN THE GROWTH OFAMBROSIA ARTEMISIIFOLIABIOTYPES COLLECTED FROM ROADSIDE AND AGRICULTURAL FIELD. Journal of Plant Nutrition, 2013, 36, 2191-2204.	1.9	8
99	Performance and weed-suppressive potential of selected pasture legumes against annual weeds in south-eastern Australia. Crop and Pasture Science, 2019, 70, 147.	1.5	8
100	Characterization of Phytoestrogens in Medicago sativa L. and Grazing Beef Cattle. Metabolites, 2021, 11, 550.	2.9	8
101	Population genetics of invasive Citrullus lanatus, Citrullus colocynthis and Cucumis myriocarpus (Cucurbitaceae) in Australia: inferences based on chloroplast and nuclear gene sequencing. Biological Invasions, 2015, 17, 2475-2490.	2.4	7
102	Possibilities for rationally exploiting co-evolution in addressing resistance to insecticides, and beyond. Pesticide Biochemistry and Physiology, 2018, 151, 18-24.	3.6	7
103	Metabolic Profiling Provides Unique Insights to Accumulation and Biosynthesis of Key Secondary Metabolites in Annual Pasture Legumes of Mediterranean Origin. Metabolites, 2020, 10, 267.	2.9	7
104	The biology, phenology and management of Australian weed-camel melon (Citrullus lanatus (Thunb.)) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.1	6
105	The biology and management of prickly paddy melon (Cucumis myriocarpus L.), an important summer annual weed in Australia. Crop Protection, 2017, 92, 29-40.	2.1	6
106	Acute-onset high-morbidity primary photosensitisation in sheep associated with consumption of the Casbah and Mauro cultivars of the pasture legume Biserrula. BMC Veterinary Research, 2018, 14, 11.	1.9	6
107	Root Exudation: The Role of Secondary Metabolites, Their Localisation in Roots and Transport into the Rhizosphere. Soil Biology, 2014, , 221-247.	0.8	6
108	Selection for early shoot vigour in wheat increases root hair length but reduces epidermal cell size of roots and leaves. Journal of Experimental Botany, 2022, 73, 2499-2510.	4.8	6

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109	An integrative morphological and molecular approach to identification of three Australian cucurbitaceous invasive weeds: Citrullus colocynthis, C. lanatus and Cucumis myriocarpus. Australian Systematic Botany, 2016, 29, 247.	0.9	5
110	Genetic evidence for plural introduction pathways of the invasive weed Patersonâ€™s curse (Echium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.5	5
111	Comparative effects of grazing, herbicide or forage conservation on barley grass content in Trifolium subterraneum L. clover-based pasture. Crop and Pasture Science, 2019, 70, 800.	1.5	5
112	Alternative Weed Management Strategies for Landscape and Turf Settings. , 2004, , 403-422.		4
113	Chemical Basis for Weed Suppressive Activity of Sorghum. ACS Symposium Series, 2005, , 59-70.	0.5	4
114	Metabolomics and Metabolic Profiling: Investigation of Dynamic Plant-Environment Interactions at the Functional Level. , 2018, , 323-345.		3
115	Evaluation of selected commercial oilseed rape cultivars for early vigour, weed suppression and yield in southern New South Wales. Weed Research, 2020, 60, 450-463.	1.7	3
116	The Impact of Ensiling at Different Moisture Contents on Germinability and Viability of Selected Weed Speciesâ€™ Seeds. Agronomy, 2021, 11, 1639.	3.0	3
117	Evaluation of Sulfentrazone for Weed Control and Phytotoxicity in Field-Grown Landscape Plants. Journal of Environmental Horticulture, 2001, 19, 189-194.	0.5	3
118	A Historical Perspective on Plant Invasion in Australia. , 2022, , 129-149.		3
119	Contrasting Volatilomes of Livestock Dung Drive Preference of the Dung Beetle Bubas bison (Coleoptera: Scarabaeidae). Molecules, 2022, 27, 4152.	3.8	3
120	Segregating endophyte infected seed from uninfected seed in annual ryegrass (Lolium rigidum) infected with EpichloÃ« occultans. Seed Science and Technology, 2015, 43, 40-51.	1.4	2
121	The Impact of Herbicide Application and Defoliation on Barley Grass (Hordeum murinum subsp.) Tj ETQq1 1 0.784314 rgBT /Overlock	3.0	2
122	Winter Forage Crop Harvest Time Impacts Regeneration of the Annual Weeds Barley Grass, Annual Ryegrass and Wild Radish. Agronomy, 2021, 11, 1700.	3.0	2
123	Genotypic identification of Panicum spp. in New South Wales, Australia using DNA barcoding. Scientific Reports, 2021, 11, 16055.	3.3	2
124	Evaluations and Correlated Responses for Resistance to Chloramben Herbicide in Cucumber. Hortscience: A Publication of the American Society for Hortcultural Science, 1991, 26, 905-908.	1.0	2
125	Evaluation of Barley Cultivars for Competitive Traits in Southern New South Wales. Plants, 2022, 11, 362.	3.5	2
126	Weed Suppression and Performance of Grain Legumes Following an Irrigated Rice Crop in Southern Australia. Agronomy, 2016, 6, 47.	3.0	1

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127	Causative factors influencing epizoochorous dispersal of weed seeds by sheep and associated carcass contamination in southern Australia. Weed Research, 2020, 60, 221-231.	1.7	1
128	Impact of Rotational Sequence Selection on Weed Seedbank Composition in Australian Broadacre Crops. Agronomy, 2022, 12, 375.	3.0	1
129	Utilization of Stress Tolerant, Weed Suppressive Groundcovers for Low Maintenance Landscape Settings. , 2008, , 347-361.		0
130	Recent Developments in Primer Design for DNA Markers in Higher Plants. Hortscience: A Publication of the American Society for Hortcultural Science, 2006, 41, 1006C-1006.	1.0	0
131	What levels of soil Mn²⁺ can pulse and legume crops tolerate when grown in rotation with paddy rice?. Journal of Plant Nutrition, 2023, 46, 1329-1343.	1.9	0