James Owen Jr

List of Publications by Year
in descending order

60 papers	893 citations	567144 15 h-index	526166 27 g-index
60 all docs	60 docs citations	60 times ranked	733 citing authors

#	Article	IF	Citations
1	Healthy Substrates Need Physicals Too!. HortTechnology, 2005, 15, 747-751.	0.5	108
2	Evaluation of commercial floating treatment wetland technologies for nutrient remediation of stormwater. Ecological Engineering, 2015, 75, 61-69.	1.6	95
3	Water Use and Treatment in Container-Grown Specialty Crop Production: A Review. Water, Air, and Soil Pollution, 2017, 228, 151.	1.1	44
4	Floating treatment wetland aided nutrient removal from agricultural runoff using two wetland species. Ecological Engineering, 2019, 127, 468-479.	1.6	42
5	The Next Ten Years: Strategic Vision of Water Resources for Nursery Producers. HortTechnology, 2016, 26, 121-132.	0.5	39
6	Container Height and Douglas Fir Bark Texture Affect Substrate Physical Properties. Hortscience: A Publication of the American Society for Hortcultural Science, 2008, 43, 505-508.	0.5	37
7	Assessment of Selected Bioretention Blends for Nutrient Retention Using Mesocosm Experiments. Journal of Environmental Quality, 2014, 43, 1754-1763.	1.0	36
8	Comprehensive Automation for Specialty Crops: Year 1 results and lessons learned. Intelligent Service Robotics, 2010, 3, 245-262.	1.6	31
9	Phosphorus Rate, Leaching Fraction, and Substrate Influence on Influent Quantity, Effluent Nutrient Content, and Response of a Containerized Woody Ornamental Crop. Hortscience: A Publication of the American Society for Hortcultural Science, 2008, 43, 906-912.	0.5	31
10	Hydrophysical Properties, Moisture Retention, and Drainage Profiles of Wood and Traditional Components for Greenhouse Substrates. Hortscience: A Publication of the American Society for Hortcultural Science, 2014, 49, 827-832.	0.5	27
11	Watson on the Farm: Using Cloud-Based Artificial Intelligence to Identify Early Indicators of Water Stress. Remote Sensing, 2019, 11, 2645.	1.8	25
12	Physical and Hydraulic Properties of Commercial Pine-bark Substrate Products Used in Production of Containerized Crops. Hortscience: A Publication of the American Society for Hortcultural Science, 2018, 53, 1883-1890.	0.5	22
13	Influence of Pumice and Plant Roots on Substrate Physical Properties Over Time. HortTechnology, 2011, 21, 554-557.	0.5	19
14	Use of the evaporative method for determination of soilless substrate moisture characteristic curves. Scientia Horticulturae, 2016, 211, 102-109.	1.7	16
15	Soilless Substrate Hydrology Can Be Engineered to Influence Plant Water Status for an Ornamental Containerized Crop Grown within Optimal Water Potentials. Journal of the American Society for Horticultural Science, 2018, 143, 268-281.	0.5	16
16	Water quality characterization of storm and irrigation runoff from a container nursery. Science of the Total Environment, 2019, 667, 166-178.	3.9	16
17	The Influence of Substrate Hydraulic Conductivity on Plant Water Status of an Ornamental Container Crop Grown in Suboptimal Substrate Water Potentials. Hortscience: A Publication of the American Society for Hortcultural Science, 2017, 52, 1419-1428.	0.5	14
18	RFID and Drones: The Next Generation of Plant Inventory. AgriEngineering, 2021, 3, 168-181.	1.7	13

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19	Industrial Mineral Aggregate Amendment Affects Physical and Chemical Properties of Pine Bark Substrates. Hortscience: A Publication of the American Society for Hortcultural Science, 2007, 42, 1287-1294.	0.5	13
20	Water Movement through a Pine-bark Substrate during Irrigation. Hortscience: A Publication of the American Society for Hortcultural Science, 2014, 49, 1432-1436.	0.5	13
21	Porous-permeable pavements promote growth and establishment and modify root depth distribution of Platanusâ€Ã—â€acerifolia (Aiton) Willd. in simulated urban tree pits. Urban Forestry and Urban Greening, 2018, 33, 27-36.	2.3	12
22	Dolomite and Micronutrient Fertilizer Affect Phosphorus Fate in Pine Bark Substrate used for Containerized Nursery Crop Production. Soil Science Society of America Journal, 2019, 83, 1410-1420.	1.2	12
23	Nutrient and pesticide remediation using a two-stage bioreactor-adsorptive system under two hydraulic retention times. Water Research, 2020, 170, 115311.	5.3	12
24	Modeling water fluxes through containerized soilless substrates using HYDRUS. Vadose Zone Journal, 2020, 19, e20031.	1.3	12
25	Virginia Nursery and Greenhouse Grower Survey of Best Management Practices. HortTechnology, 2017, 27, 386-392.	0.5	11
26	Greenhouse and Nursery Water Management Characterization and Research Priorities in the USA. Water (Switzerland), 2019, 11, 2338.	1.2	11
27	The Effect of Physical and Hydraulic Properties of Peatmoss and Pumice on Douglas Fir Bark Based Soilless Substrates. Hortscience: A Publication of the American Society for Hortcultural Science, 2009, 44, 874-878.	0.5	11
28	Controlled-release Fertilizer Placement Affects the Leaching Pattern of Nutrients from Nursery Containers during Irrigation. Hortscience: A Publication of the American Society for Hortcultural Science, 2014, 49, 1341-1345.	0.5	11
29	Growth response of Hydrangea macrophylla and Ilex crenata cultivars to low-phosphorus controlled-release fertilizers. Scientia Horticulturae, 2019, 246, 578-588.	1.7	10
30	Substrate Stratification: Layering Unique Substrates within a Container Increases Resource Efficiency without Impacting Growth of Shrub Rose. Agronomy, 2021, 11, 1454.	1.3	10
31	Compost Feedstock and Compost Acidification Affect Growth and Mineral Nutrition in Northern Highbush Blueberry. Hortscience: A Publication of the American Society for Hortcultural Science, 2019, 54, 1067-1076.	0.5	10
32	Developing Moisture Characteristic Curves and Their Descriptive Functions at Low Tensions for Soilless Substrates. Journal of the American Society for Horticultural Science, 2010, 135, 563-567.	0.5	10
33	Solute Transport through a Pine Bark-based Substrate under Saturated and Unsaturated Conditions. Journal of the American Society for Horticultural Science, 2014, 139, 634-641.	0.5	10
34	Phosphorus requirement for biomass accumulation is higher compared to photosynthetic biochemistry for three ornamental shrubs. Scientia Horticulturae, 2021, 275, 109719.	1.7	9
35	Evaluation of Seven Complex Pennisetum Hybrids for Container and Landscape Performance in the Pacific Northwestern United States. HortTechnology, 2013, 23, 525-528.	0.5	9
36	Screening Cotoneaster for Resistance to Fire Blight by Artificial Inoculation. Hortscience: A Publication of the American Society for Hortcultural Science, 2014, 49, 1480-1485.	0.5	7

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37	Data on floating treatment wetland aided nutrient removal from agricultural runoff using two wetland species. Data in Brief, 2019, 22, 756-761.	0.5	6
38	Experimental approach to detect water stress in ornamental plants using sUAS-imagery. , 2018, , .		6
39	What are the relevant sources and factors affecting event mean concentrations (EMCs) of nutrients and sediment in stormwater?. Science of the Total Environment, 2022, 828, 154368.	3.9	6
40	Costs of Capturing and Recycling Irrigation Water in Container Nurseries. Hortscience: A Publication of the American Society for Hortcultural Science, 2017, 52, 258-263.	0.5	5
41	Growth Response of Three Containerized Woody Plant Taxa to Varying Low Phosphorus Fertilizer Concentrations. Hortscience: A Publication of the American Society for Hortcultural Science, 2018, 53, 628-637.	0.5	5
42	Dose-Dependent Phytotoxicity of Pesticides in Simulated Nursery Runoff on Landscape Nursery Plants. Water (Switzerland), 2019, 11, 2354.	1.2	5
43	Soilless substrate science: a North American needs assessment to steer soilless substrate research into the future. Acta Horticulturae, 2021, , 313-318.	0.1	5
44	Dolomite and Micronutrient Fertilizer Affect Phosphorus Fate When Growing Crape Myrtle in Pine Bark. Hortscience: A Publication of the American Society for Hortcultural Science, 2020, 55, 832-840.	0.5	5
45	Applications of High-Resolution Imaging for Open Field Container Nursery Counting. Remote Sensing, 2018, 10, 2018.	1.8	4
46	Research Priorities of the Environmental Horticultural Industry Founded through Consensus1. Journal of Environmental Horticulture, 2019, 37, 120-126.	0.3	4
47	Sensitivity of Hydrangea paniculata Plants to Residual Herbicides in Recycled Irrigation Varies with Plant Growth Stage. Water (Switzerland), 2020, 12, 1402.	1.2	3
48	Validation of Nursery and Greenhouse Best Management Practices through Scientific Evidence. HortTechnology, 2019, 29, 700-715.	0.5	3
49	The Use of Dewpoint Hygrometry to Measure Low Water Potentials in Soilless Substrate Components and Composites. Agronomy, 2020, 10, 1393.	1.3	2
50	Irrigation return flow and nutrient movement mitigation by irrigation method for container plant production. Irrigation Science, 2021, 39, 567-585.	1.3	2
51	Specialty crop retention reservoir performance and design considerations to secure quality water and mitigate non-point source runoff. Journal of Cleaner Production, 2021, 321, 128925.	4.6	2
52	Evaluating Soil and Foliar Fertilization ofAbies nordmannianaUnder Container and Field Production. Scandinavian Journal of Forest Research, 2013, 28, 419-427.	0.5	1
53	Technical Note: In-Situ Performance and Usability of a Distributed, Wireless Sensor Network via Mesh Connectivity at a Production Container Nursery. Applied Engineering in Agriculture, 2013, , 779-782.	0.3	1
54	Reducing pesticide transport in surface and subsurface irrigation return flow in specialty crop production. Agricultural Water Management, 2021, 256, 107124.	2.4	1

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55	Chlorophyll, Carotenoid, and Visual Color Rating of Japanese-cedar Grown in the Southeastern United States. Hortscience: A Publication of the American Society for Hortcultural Science, 2013, 48, 1452-1456.	0.5	1
56	Water Quality Characterization of Irrigation and Storm Runoff for a Nursery. Green Energy and Technology, 2019, , 788-793.	0.4	1
57	The Relationship between Drone Speed and the Number of Flights in RFID Tag Reading for Plant Inventory. Drones, 2022, 6, 2.	2.7	1
58	On-the-Fly Tree Caliper Measurement. , 2010, , .		0
59	Cold Hardiness of Grevillea in Western Oregon. HortTechnology, 2020, 30, 117-121.	0.5	0
60	Effect of Residual Pesticides in Recycled Nursery Runoff on Growth and Physiology of Six Ornamental Shrubs. Water, Air, and Soil Pollution, 2022, 233, 1.	1.1	0