Donald E Weller

List of Publications by Year
in descending order

75 papers	5,331 citations	87723 38 h-index	102304 66 g-index
81 all docs	81 docs citations	81 times ranked	4900 citing authors

#	Article	IF	Citations
1	The Chesapeake Bay program modeling system: Overview and recommendations for future development. Ecological Modelling, 2021, 456, 109635.	1.2	30
2	Inexpensive spot sampling provides unexpectedly effective indicators of watershed nitrogen status. Ecosphere, 2020, 11, e03224.	1.0	7
3	Long-term Annual Aerial Surveys of Submersed Aquatic Vegetation (SAV) Support Science, Management, and Restoration. Estuaries and Coasts, 2019, , 1.	1.0	5
4	Long-term nutrient reductions lead to the unprecedented recovery of a temperate coastal region. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3658-3662.	3.3	199
5	Impacts of Coastal Land Use and Shoreline Armoring on Estuarine Ecosystems: an Introduction to a Special Issue. Estuaries and Coasts, 2018, 41, 2-18.	1.0	26
6	Land Use and Salinity Drive Changes in SAV Abundance and Community Composition. Estuaries and Coasts, 2018, 41, 85-100.	1.0	13
7	Effects of Local Watershed Land Use on Water Quality in Mid-Atlantic Coastal Bays and Subestuaries of the Chesapeake Bay. Estuaries and Coasts, 2018, 41, 38-53.	1.0	25
8	Uncertainty in United States coastal wetland greenhouse gas inventorying. Environmental Research Letters, 2018, 13, 115005.	2.2	40
9	Accuracy and Precision of Tidal Wetland Soil Carbon Mapping in the Conterminous United States. Scientific Reports, 2018, 8, 9478.	1.6	80
10	Urbanization reduces and homogenizes trait diversity in stream macroinvertebrate communities. Ecological Applications, 2017, 27, 2428-2442.	1.8	45
11	Submersed Aquatic Vegetation in Chesapeake Bay: Sentinel Species in a Changing World. BioScience, 2017, 67, 698-712.	2.2	68
12	Linking the Abundance of Estuarine Fish and Crustaceans in Nearshore Waters to Shoreline Hardening and Land Cover. Estuaries and Coasts, 2017, 40, 1464-1486.	1.0	23
13	Using multiple watershed models to assess the water quality impacts of alternate land development scenarios for a small community. Catena, 2017, 150, 87-99.	2.2	18
14	Using Bayesian hierarchical models to better understand nitrate sources and sinks in agricultural watersheds. Water Research, 2016, 105, 527-539.	5.3	16
15	Local and regional disturbances associated with the invasion of Chesapeake Bay marshes by the common reed Phragmites australis. Biological Invasions, 2016, 18, 2661-2677.	1.2	26
16	The Relationship Between Shoreline Armoring and Adjacent Submerged Aquatic Vegetation in Chesapeake Bay and Nearby Atlantic Coastal Bays. Estuaries and Coasts, 2016, 39, 158-170.	1.0	44
17	Interannual variation in submerged aquatic vegetation and its relationship to water quality in subestuaries of Chesapeake Bay. Marine Ecology - Progress Series, 2015, 537, 121-135.	0.9	23
18	Cropland Riparian Buffers throughout Chesapeake Bay Watershed: Spatial Patterns and Effects on Nitrate Loads Delivered to Streams. Journal of the American Water Resources Association, 2014, 50, 696-712.	1.0	33

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19	Effects of Shoreline Alteration and Other Stressors on Submerged Aquatic Vegetation in Subestuaries of Chesapeake Bay and the Mid-Atlantic Coastal Bays. Estuaries and Coasts, 2014, 37, 1516-1531.	1.0	40
20	Species Distribution Models of Freshwater Stream Fishes in Maryland and Their Implications for Management. Environmental Modeling and Assessment, 2013, 18, 1-12.	1.2	23
21	Using Multiple Watershed Models to Predict Water, Nitrogen, and Phosphorus Discharges to the Patuxent Estuary¹. Journal of the American Water Resources Association, 2013, 49, 15-39.	1.0	21
22	Legacy Effects in Material Flux: Structural Catchment Changes Predate Long-Term Studies. BioScience, 2012, 62, 575-584.	2.2	59
23	Applying additive modelling and gradient boosting to assess the effects of watershed and reach characteristics on riverine assemblages. Methods in Ecology and Evolution, 2012, 3, 116-128.	2.2	55
24	Effects of riparian buffers on nitrate concentrations in watershed discharges: new models and management implications. , 2011, 21, 1679-1695.		60
25	Anthropogenic disturbance and streams: land use and land-use change affect stream ecosystems via multiple pathways. Freshwater Biology, 2011, 56, 611-626.	1.2	84
26	Geoadditive regression modeling of stream biological condition. Environmental and Ecological Statistics, 2011, 18, 709-733.	1.9	26
27	How novel is too novel? Stream community thresholds at exceptionally low levels of catchment urbanization. , 2011, 21, 1659-1678.		136
28	Watershed model calibration using multi-objective optimization and multi-site averaging. Journal of Hydrology, 2010, 380, 277-288.	2.3	51
29	Formation of Diphenyl Sulfoxide and Diphenyl Sulfide via the Aluminum Chlorideâ€“Facilitated Electrophilic Aromatic Substitution of Benzene with Thionyl Chloride, and a Novel Reduction of Sulfur (IV) to Sulfur (II). Phosphorus, Sulfur and Silicon and the Related Elements, 2010, 185, 2535-2542.	0.8	6
30	Classifying the biological condition of small streams: an example using benthic macroinvertebrates. Journal of the North American Benthological Society, 2009, 28, 869-884.	3.0	31
31	Net anthropogenic phosphorus inputs: spatial and temporal variability in the Chesapeake Bay region. Biogeochemistry, 2008, 88, 285-304.	1.7	125
32	A Stream Network Model for Integrated Watershed Modeling. Environmental Modeling and Assessment, 2008, 13, 291-303.	1.2	16
33	Integrated Modular Modeling of Water and Nutrients From Point and Nonpoint Sources in the Patuxent River Watershed¹. Journal of the American Water Resources Association, 2008, 44, 700-723.	1.0	10
34	Empirical Models Based on the Universal Soil Loss Equation Fail to Predict Sediment Discharges from Chesapeake Bay Catchments. Journal of Environmental Quality, 2008, 37, 79-89.	1.0	53
35	Combining HGM and EMAP procedures to assess wetlands at the watershed scale â€" status of flats and non-tidal riverine wetlands in the Nanticoke River watershed, Delaware and Maryland (USA). Wetlands, 2007, 27, 462-478.	0.7	32
36	Comparing functional assessments of wetlands to measurements of soil characteristics and nitrogen processing. Wetlands, 2007, 27, 479-497.	0.7	36

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37	Landscape indicators of wetland condition in the Nanticoke River watershed, Maryland and Delaware, USA. Wetlands, 2007, 27, 498-514.	0.7	26
38	Effects of watershed and estuarine characteristics on the abundance of submerged aquatic vegetation in Chesapeake Bay subestuaries. Estuaries and Coasts, 2007, 30, 840-854.	1.0	41
39	Effects of stream map resolution on measures of riparian buffer distribution and nutrient retention potential. Landscape Ecology, 2007, 22, 973-992.	1.9	55
40	Comparison of Automated Watershed Delineations. Photogrammetric Engineering and Remote Sensing, 2006, 72, 159-168.	0.3	49
41	Improved methods for quantifying potential nutrient interception by riparian buffers. Landscape Ecology, 2006, 21, 1327-1345.	1.9	98
42	Temporal variability of optical properties in a shallow, eutrophic estuary: Seasonal and interannual variability. Estuarine, Coastal and Shelf Science, 2005, 64, 156-170.	0.9	63
43	SPATIAL CONSIDERATIONS FOR LINKING WATERSHED LAND COVER TO ECOLOGICAL INDICATORS IN STREAMS. , 2005, 15, 137-153.		431
44	Watershed Land Use Is Strongly Linked to PCBs in White Perch in Chesapeake Bay Subestuaries. Environmental Science & Technology, 2004, 38, 6546-6552.	4.6	53
45	Sources of nutrient inputs to the Patuxent River estuary. Estuaries and Coasts, 2003, 26, 226-243.	1.7	79
46	Effects of land-use change on nutrient discharges from the Patuxent River watershed. Estuaries and Coasts, 2003, 26, 244-266.	1.7	75
47	Title is missing!. Water, Air, and Soil Pollution, 2001, 128, 139-159.	1.1	70
48	EFFECTS OF LAND COVER AND GEOLOGY ON STREAM CHEMISTRY IN WATERSHEDS OF CHESAPEAKE BAY. Journal of the American Water Resources Association, 2000, 36, 1349-1365.	1.0	68
49	Beaver pond biogeochemical effects in the Maryland Coastal Plain. Biogeochemistry, 2000, 49, 217-239.	1.7	78
50	Title is missing!. Biogeochemistry, 2000, 49, 143-173.	1.7	49
51	Dissolved Silicate Dynamics of the Rhode River Watershed and Estuary. Estuaries and Coasts, 2000, 23, 188.	1.7	19
52	Effects of Precipitation and Air Temperature on Phosphorus Fluxes from Rhode River Watersheds. Journal of Environmental Quality, 1999, 28, 144-154.	1.0	30
53	Precipitation Effects on Sediment and Associated Nutrient Discharges from Rhode River Watersheds. Journal of Environmental Quality, 1999, 28, 1897-1907.	1.0	26
54	EFFECTS OF INTERANNUAL VARIATION OF PRECIPITATION ON STREAM DISCHARGE FROM RHODE RIVER SUBWATERSHEDS. Journal of the American Water Resources Association, 1999, 35, 73-82.	1.0	11

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55	Effects of Precipitation and Air Temperature on Nitrogen Discharges from Rhode River Watersheds. Water, Air, and Soil Pollution, 1999, 115, 547-575.	1.1	18
56	Transport of nitrogen and phosphorus from rhode river watersheds during storm events. Water Resources Research, 1999, 35, 2513-2521.	1.7	96
57	Denitrification in surface soils of a riparian forest: Effects of water, nitrate and sucrose additions. Soil Biology and Biochemistry, 1998, 30, 833-843.	4.2	35
58	HEURISTIC MODELS FOR MATERIAL DISCHARGE FROM LANDSCAPES WITH RIPARIAN BUFFERS. , 1998, 8, 1156-1169.		86
59	Relating nutrient discharges from watersheds to land use and streamflow variability. Water Resources Research, 1997, 33, 2579-2590.	1.7	289
60	Effects of Agriculture on Discharges of Nutrients from Coastal Plain Watersheds of Chesapeake Bay. Journal of Environmental Quality, 1997, 26, 836-848.	1.0	201
61	NONPOINT SOURCE DISCHARGES OF NUTRIENTS FROM PIEDMONT WATERSHEDS OF CHESAPEAKE BAY. Journal of the American Water Resources Association, 1997, 33, 631-645.	1.0	81
62	Human Contributions to Terrestrial Nitrogen Flux. BioScience, 1996, 46, 655-664.	2.2	201
63	Temporal variation in precipitation chemistry on the shore of the Chesapeake Bay. Water, Air, and Soil Pollution, 1995, 83, 263-284.	1.1	45
64	Nutrient Interception by a Riparian Forest Receiving Inputs from Adjacent Cropland. Journal of Environmental Quality, 1993, 22, 467-473.	1.0	258
65	Nutrient Flux in a Landscape: Effects of Coastal Land Use and Terrestrial Community Mosaic on Nutrient Transport to Coastal Waters. Estuaries and Coasts, 1992, 15, 431.	1.7	169
66	Cross Media Inputs to Eastern US Watersheds and Their Significance to Estuarine Water Quality. Water Science and Technology, 1992, 26, 2675-2683.	1.2	5
67	The Self-Thinning Rule: Dead or Unsupported?--A Reply to Lonsdale. Ecology, 1991, 72, 747-750.	1.5	44
68	Nutrients and chlorophyll at the interface of a watershed and an estuary. Limnology and Oceanography, 1991, 36, 251-267.	1.6	82
69	Will the Real Self-Thinning Rule Please Stand Up?--A Reply to Osawa and Sugita. Ecology, 1990, 71, 1204-1207.	1.5	82
70	The Interspecific Size-Density Relationship Among Crowded Plant Stands and Its Implications for the -3/2 Power Rule of Self-Thinning. American Naturalist, 1989, 133, 20-41.	1.0	71
71	Self-Thinning Exponent Correlated with Allometric Measures of Plant Geometry. Ecology, 1987, 68, 813-821.	1.5	143
72	A Reevaluation of the â€3/2 Power Rule of Plant Selfâ€Thinning. Ecological Monographs, 1987, 57, 23-43.	2.4	424

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73	Rates of Heat Exchange in Largemouth Bass: Experiment and Model. Physiological Zoology, 1984, 57, 413-427.	1.5	10
74	Chaotic Models as Representations of Ecological Systems. American Naturalist, 1982, 120, 259-263.	1.0	19
75	Requirement of low oxidation-reduction potential for photosynthesis in a blue-green alga (Phormidium sp.). Archives of Microbiology, 1975, 104, 7-13.	1.0	51