Timothy R Green

List of Publications by Year
in descending order

93 papers	5,882 citations	126907 33 h-index	76900 74 g-index
96 all docs	96 docs citations	96 times ranked	7161 citing authors

#	Article	IF	Citations
1	Ground water and climate change. Nature Climate Change, 2013, 3, 322-329.	18.8	1,513
2	Beneath the surface of global change: Impacts of climate change on groundwater. Journal of Hydrology, 2011, 405, 532-560.	5.4	796
3	Tillage effects on soil hydraulic properties in space and time: State of the science. Soil and Tillage Research, 2008, 99, 4-48.	5.6	504
4	Operating principle of Soft Open Points for electrical distribution network operation. Applied Energy, 2016, 164, 245-257.	10.1	197
5	Water resources and water use efficiency in the North China Plain: Current status and agronomic management options. Agricultural Water Management, 2010, 97, 1102-1116.	5.6	194
6	Advances and challenges in predicting agricultural management effects on soil hydraulic properties. Geoderma, 2003, 116, 3-27.	5.1	177
7	A software engineering perspective on environmental modeling framework design: The Object Modeling System. Environmental Modelling and Software, 2013, 39, 201-213.	4.5	131
8	Comparison of grid-based algorithms for computing upslope contributing area. Water Resources Research, 2006, 42, .	4.2	104
9	The Tarrawarra project: high resolution spatial measurement, modelling and analysis of soil moisture and hydrological response. Hydrological Processes, 1999, 13, 633-652.	2.6	88
10	Evaluating Nitrogen and Water Management in a Double-Cropping System Using RZWQM. Vadose Zone Journal, 2006, 5, 493-505.	2.2	81
11	Modelling crop canopy and residue rainfall interception effects on soil hydrological components for semi-arid agriculture. Hydrological Processes, 2007, 21, 229-241.	2.6	81
12	Modeling a wheatâ€“maize double cropping system in China using two plant growth modules in RZWQM. Agricultural Systems, 2006, 89, 457-477.	6.1	80
13	Where is the USA Corn Belt, and how is it changing?. Science of the Total Environment, 2018, 618, 1613-1618.	8.0	80
14	Effects of Estimating Soil Hydraulic Properties and Root Growth Factor on Soil Water Balance and Crop Production. Agronomy Journal, 2009, 101, 572-583.	1.8	77
15	Climate change impacts on dryland cropping systems in the Central Great Plains, USA. Climatic Change, 2012, 111, 445-472.	3.6	72
16	Effect of Soil Water on Apparent Soil Electrical Conductivity and Texture Relationships in a Dryland Field. Biosystems Engineering, 2006, 94, 19-32.	4.3	71
17	Measurement, scaling, and topographic analyses of spatial crop yield and soil water content. Hydrological Processes, 2004, 18, 1447-1465.	2.6	68
18	Physically Based Simulation of Potential Effects of Carbon Dioxideâ€“Altered Climates on Groundwater Recharge. Vadose Zone Journal, 2007, 6, 597-609.	2.2	67

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19	A method to downscale soil moisture to fine resolutions using topographic, vegetation, and soil data. Advances in Water Resources, 2015, 76, 81-96.	3.8	57
20	Modeling Water Quality in Watersheds: From Here to the Next Generation. Water Resources Research, 2020, 56, e2020WR027721.	4.2	54
21	Potential Impacts of Climate Change and Human Activity on Subsurface Water Resources. Vadose Zone Journal, 2007, 6, 531-532.	2.2	51
22	Digital Elevation Accuracy and Grid Cell Size: Effects on Estimated Terrain Attributes. Soil Science Society of America Journal, 2007, 71, 1371-1380.	2.2	51
23	Relating stream-bank erosion to in-stream transport of suspended sediment. Hydrological Processes, 1999, 13, 777-787.	2.6	50
24	Simulation of free air CO2 enriched wheat growth and interactions with water, nitrogen, and temperature. Agricultural and Forest Meteorology, 2010, 150, 1331-1346.	4.8	50
25	Residue Cover and Surfaceâ€Sealing Effects on Infiltration. Soil Science Society of America Journal, 2001, 65, 853-861.	2.2	47
26	Modeling the effects of controlled drainage, N rate and weather on nitrate loss to subsurface drainage. Agricultural Water Management, 2012, 103, 150-161.	5.6	47
27	Relating crop yield to topographic attributes using Spatial Analysis Neural Networks and regression. Geoderma, 2007, 139, 23-37.	5.1	42
28	Seasonal shift in the climate responses ofPinus sibirica,Pinus sylvestris, andLarix sibiricatrees from semi-arid, north-central Mongolia. Canadian Journal of Forest Research, 2011, 41, 1242-1255.	1.7	42
29	Laboratory Characterization of a Commercial Capacitance Sensor for Estimating Permittivity and Inferring Soil Water Content. Vadose Zone Journal, 2006, 5, 1048-1064.	2.2	41
30	Modelling upland and instream erosion, sediment and phosphorus transport in a large catchment. Hydrological Processes, 1999, 13, 745-752.	2.6	40
31	The Oxidation of Hypotaurine to Taurine: Bis-Aminoethyl-Î±-Disulfone, A Metabolic Intermediate in Mammalian Tissue. Advances in Experimental Medicine and Biology, 1987, 217, 39-48.	1.6	39
32	Parameterization Guidelines and Considerations for Hydrologic Models. Transactions of the ASABE, 2015, 58, 1681-1703.	1.1	39
33	Aggregation and sampling in deterministic chaos: implications for chaos identification in hydrological processes. Nonlinear Processes in Geophysics, 2005, 12, 557-567.	1.3	38
34	Optimizing Soil Hydraulic Parameters in RZWQM2 under Fallow Conditions. Soil Science Society of America Journal, 2010, 74, 1897-1913.	2.2	34
35	Effective Soil Properties of Heterogeneous Areas For Modeling Infiltration and Redistribution. Soil Science Society of America Journal, 2010, 74, 1469-1482.	2.2	34
36	Environmental modeling framework invasiveness: Analysis and implications. Environmental Modelling and Software, 2011, 26, 1240-1250.	4.5	33

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37	Linking Climate Change and Groundwater. , 2016, , 97-141.		33
38	Upscaled Soil-Water Retention Using van Genuchten's Function. Journal of Hydrologic Engineering - ASCE, 1996, 1, 123-130.	1.9	31
39	Simulation of Hydrology and Nutrient Transport in the Hetao Irrigation District, Inner Mongolia, China. Water (Switzerland), 2017, 9, 169.	2.7	29
40	Unsustainable groundwater use for global food production and related international trade. Global Sustainability, 2019, 2, .	3.3	29
41	Hydra Probe and Twelveâ€Wire Probe Comparisons in Fluids and Soil Cores. Soil Science Society of America Journal, 2010, 74, 5-12.	2.2	28
42	Measurement and inference of profile soilâ€water dynamics at different hillslope positions in a semiarid agricultural watershed. Water Resources Research, 2011, 47, .	4.2	28
43	The NADPH:O2 oxidoreductase of human neutrophils. Stoichiometry of univalent and divalent reduction of O2.. Journal of Biological Chemistry, 1986, 261, 6010-6015.	3.4	27
44	State-Dependent Anisotropy: Comparisons of Quasi-Analytical Solutions with Stochastic Results for Steady Gravity Drainage. Water Resources Research, 1995, 31, 2201-2211.	4.2	25
45	Scaling analysis of spaceâ€“time infiltration based on the universal multifractal model. Journal of Hydrology, 2006, 322, 220-235.	5.4	25
46	Simulated Effects of Soil Temperature and Salinity on Capacitance Sensor Measurements. Sensors, 2007, 7, 548-577.	3.8	25
47	The NADPH:O2 oxidoreductase of human neutrophils. Stoichiometry of univalent and divalent reduction of O2. Journal of Biological Chemistry, 1986, 261, 6010-5.	3.4	23
48	Scaling and Estimation of Evaporation and Transpiration of Water across Soil Textures. Vadose Zone Journal, 2005, 4, 418-427.	2.2	22
49	Impacts of precipitation and potential evapotranspiration patterns on downscaling soil moisture in regions with large topographic relief. Water Resources Research, 2017, 53, 1553-1574.	4.2	20
50	Application of an energy balance method for estimating evapotranspiration in cropping systems. Agricultural Water Management, 2018, 204, 107-117.	5.6	19
51	An analytical model for stream sediment transport: application to Murray and Murrumbidgee river reaches, Australia. Hydrological Processes, 1999, 13, 763-776.	2.6	18
52	Soil Moisture Sensing via Swept Frequency Based Microwave Sensors. Sensors, 2012, 12, 753-767.	3.8	18
53	Fractal Analyses of Steady Infiltration and Terrain on an Undulating Agricultural Field. Vadose Zone Journal, 2009, 8, 310-320.	2.2	18
54	Explaining water security indicators using hydrologic and agricultural systems models. Journal of Hydrology, 2022, 607, 127463.	5.4	18

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55	Fractal-Based Scaling and Scale-Invariant Dispersion of Peak Concentrations of Crop Protection Chemicals in Rivers. Environmental Science & Technology, 2004, 38, 2995-3003.	10.0	15
56	Development and testing of a terrain-based hydrologic model for spatial Hortonian Infiltration and Runoff/On. Environmental Modelling and Software, 2008, 23, 794-812.	4.5	15
57	Development of the Land-use and Agricultural Management Practice web-Service (LAMPS) for generating crop rotations in space and time. Soil and Tillage Research, 2016, 155, 233-249.	5.6	14
58	Age-ranked hydrological budgets and a travel time description of catchment hydrology. Hydrology and Earth System Sciences, 2016, 20, 4929-4947.	4.9	14
59	Spatial Interrelationships between Wheat Phenology, Thermal Time, and Terrain Attributes. Agronomy Journal, 2012, 104, 1110-1121.	1.8	13
60	Comparison of Electrical and Thermal Conductivities for Soils From Five States. Soil Science, 2010, 175, 573-578.	0.9	12
61	Crop water use efficiency at multiple scales. Agricultural Water Management, 2010, 97, 1099-1101.	5.6	12
62	Frequency Domain Probe Design for High Frequency Sensing of Soil Moisture. Agriculture (Switzerland), 2016, 6, 60.	3.1	12
63	Effects of subsurface soil characteristics on wetlandâ€“groundwater interaction in the coastal plain of the Chesapeake Bay watershed. Hydrological Processes, 2019, 33, 305-315.	2.6	11
64	The Drought Calculator: Decision Support Tool for Predicting Forage Growth During Drought. Rangeland Ecology and Management, 2013, 66, 570-578.	2.3	9
65	Downscaling soil moisture over regions that include multiple coarse-resolution grid cells. Remote Sensing of Environment, 2017, 199, 187-200.	11.0	9
66	Bridging technology transfer boundaries: Integrated cloud services deliver results of nonlinear process models as surrogate model ensembles. Environmental Modelling and Software, 2021, 146, 105231.	4.5	9
67	Human spermicidal activity of inorganic and organic oxidants. Fertility and Sterility, 2001, 76, 157-162.	1.0	8
68	Temporally stable patterns in grain yield and soil water on a dryland catena. Agricultural Systems, 2007, 94, 119-127.	6.1	8
69	The AgroEcoSystem (AgES) Responseâ€Function Model Simulates Layered Soilâ€Water Dynamics in Semiarid Colorado: Sensitivity and Calibration. Vadose Zone Journal, 2015, 14, 1-16.	2.2	8
70	Winter Wheat Phenology Simulations Improve when Adding Responses to Water Stress. Agronomy Journal, 2019, 111, 2350-2360.	1.8	8
71	Integration of a Three-Dimensional Process-Based Hydrological Model into the Object Modeling System. Water (Switzerland), 2016, 8, 12.	2.7	7
72	Hydrological modeling of the RibeirÃ£o das Posses â€“ An assessment based on the Agricultural Ecosystem Services (AgES) watershed model. Revista Ambiente & Ãgua, 2017, 12, 351.	0.3	7

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73	Introduction to Hydrology. , 2014, , 1-126.		7
74	Fully distributed versus semi-distributed process simulation of a highly managed watershed with mixed land use and irrigation return flow. Environmental Modelling and Software, 2021, 140, 105000.	4.5	6
75	Spatial Patterns and Cross-Correlations of Temporal Changes in Soil Carbonates and Surface Elevation in a Winter Wheat-Fallow Cropping System. Soil Science Society of America Journal, 2015, 79, 417-427.	2.2	5
76	Optimum Returns from Greenhouse Vegetables under Water Quality and Risk Constraints in the United Arab Emirates. Sustainability, 2017, 9, 719.	3.2	5
77	Physiological trait networks enhance understanding of crop growth and water use in contrasting environments. Plant, Cell and Environment, 2022, 45, 2554-2572.	5.7	5
78	Simulated Impacts of Climate Change on Groundwater Recharge in the Subtropics of Queensland, Australia. , 1997, , 187-204.		4
79	Fringe Capacitance Correction for a Coaxial Soil Cell. Sensors, 2011, 11, 757-770.	3.8	4
80	Hydropedology: The Last Decade and the Next Decade. Soil Science Society of America Journal, 2015, 79, 357-361.	2.2	3
81	Improved Theory of Time Domain Reflectometry with Variable Coaxial Cable Length for Electrical Conductivity Measurements. Soil Science Society of America Journal, 2017, 81, 723-733.	2.2	3
82	Irrigation variability and climate change affect derived distributions of simulated water recharge and nitrate leaching. Water International, 2018, 43, 829-845.	1.0	3
83	Hydrologic Downscaling of Soil Moisture Using Global Data Sets without Site-Specific Calibration. Journal of Hydrologic Engineering - ASCE, 2018, 23, .	1.9	3
84	Stochastic analysis and probabilistic downscaling of soil moisture in small catchments. Journal of Hydrology, 2020, 585, 124711.	5.4	3
85	Hydrobiogeochemistry of Two Catchments in Brazil Under Forest Recovery in an Environmental Services Payment Program. Environmental Monitoring and Assessment, 2021, 193, 3.	2.7	3
86	Sensitivity of Spatial Analysis Neural Network Training and Interpolation to Structural Parameters. Mathematical Geosciences, 2004, 36, 721-742.	0.9	2
87	Multisection Transmission Line Scatter Function Theory for Measurements of Soil Dielectric Properties. Soil Science Society of America Journal, 2014, 78, 1139-1145.	2.2	2
88	Deploying the WinTR-20 Computational Engine as a Web Service. Applied Engineering in Agriculture, 2016, 32, 601-608.	0.7	2
89	Proposed Standards for Peer-Reviewed Publication of Computer Code. Agronomy Journal, 2016, 108, 1782-1786.	1.8	2
90	Enhanced hydrologic simulation may not improve downscaled soil moisture patterns without improved soil characterization. Soil Science Society of America Journal, 2020, 84, 672-689.	2.2	1

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91	Chlorophyll-a Concentration Assessment Using Remotely Sensed Data over Multiple Years along the Coasts of the United Arab Emirates. Emirates Journal of Food and Agriculture, 0, , 345.	1.0	1
92	Measuring and Mapping Patterns of Soil Erosion and Deposition Related to Soil Carbonate Concentrations Under Agricultural Management. Journal of Visualized Experiments, 2017, , .	0.3	0
93	A tribute in memory of Dr. James (Jim) C. Ascough II. Environmental Modelling and Software, 2017, 97, 211-212.	4.5	0