Steven C Chapra

List of Publications by Year
in descending order

97 papers	5,846 citations	109137 35 h-index	74018 75 g-index
100 all docs	100 docs citations	100 times ranked	5618 citing authors

#	Article	IF	Citations
1	Impact of Global Warming on Dissolved Oxygen and BOD Assimilative Capacity of the Worldâ€™s Rivers: Modeling Analysis. Water (Switzerland), 2021, 13, 2408.	1.2	26
2	Evaluating Hydraulic Habitat Suitability of Filamentous Algae Using an Unmanned Aerial Vehicle and Acoustic Doppler Current Profiler. Journal of Environmental Engineering, ASCE, 2020, 146, 04019126.	0.7	4
3	Nutrient Attenuation in Streams: A Simplified Model to Explain Field Observations. Journal of Environmental Engineering, ASCE, 2020, 146, .	0.7	4
4	The canopy effect in filamentous algae: Improved modeling of Cladophora growth via a mechanistic representation of self-shading. Ecological Modelling, 2020, 418, 108906.	1.2	8
5	Analysis of the residual nutrient load from a combined sewer system in a watershed of a deep Italian lake. Journal of Hydrology, 2019, 571, 202-213.	2.3	25
6	â€œBack to the Futureâ€ Time for a Renaissance of Public Health Engineering. International Journal of Environmental Research and Public Health, 2019, 16, 387.	1.2	5
7	Advances in River Water Quality Modelling and Management: Where We Come from, Where We Are, and Where Weâ€™re Going?. Green Energy and Technology, 2019, , 295-301.	0.4	1
8	Comparison of aquatic ecosystem functioning between eutrophic and hypereutrophic cold-region river-lake systems. Ecological Modelling, 2019, 393, 25-36.	1.2	6
9	Steady-state distributed modeling of dissolved oxygen in data-poor, sewage dominated river systems using drainage networks. Environmental Modelling and Software, 2019, 111, 153-169.	1.9	4
10	Wastewater Modification Processes in a Stabilization Reservoir: A New Mathematical Model. Green Energy and Technology, 2019, , 285-292.	0.4	0
11	Transport and Retention of Concentrated Oil-in-Water Emulsions in Porous Media. Environmental Science & Technology, 2018, 52, 4256-4264.	4.6	12
12	Evidence from field measurements and satellite imaging of impact of Earth rotation on Lake Iseo chemistry. Journal of Great Lakes Research, 2018, 44, 14-25.	0.8	9
13	Improving in-lake water quality modeling using variable chlorophyll a/algal biomass ratios. Environmental Modelling and Software, 2018, 101, 73-85.	1.9	50
14	Challenges of modelling water quality in a shallow prairie lake with seasonal ice cover. Ecological Modelling, 2018, 384, 43-52.	1.2	15
15	Influence of biomass and water velocity on light attenuation of Cladophora glomerata L. (Kuetzing) in rivers. Aquatic Botany, 2018, 151, 62-70.	0.8	7
16	Response to the Letter, Nitrogen is Not a â€œHouse of Cardsâ€ Environmental Science & Technology, 2017, 51, 1943-1943.	4.6	6
17	Climate Change Impacts on Harmful Algal Blooms in U.S. Freshwaters: A Screening-Level Assessment. Environmental Science & Technology, 2017, 51, 8933-8943.	4.6	220
18	Modelling Dissolved Oxygen Depression in an Urban River in China. Water (Switzerland), 2017, 9, 520.	1.2	38

#	ARTICLE	IF	CITATIONS
19	Climate Change Impacts on US Water Quality Using Two Models: HAWQS and US Basins. Water (Switzerland), 2017, 9, 118.	1.2	35
20	Dissolved phosphorus concentrations in Cayuga Lake system and differences from two analytical protocols. Lake and Reservoir Management, 2016, 32, 392-401.	0.4	2
21	Reducing Phosphorus to Curb Lake Eutrophication is a Success. Environmental Science & Technology, 2016, 50, 8923-8929.	4.6	761
22	Mass-balance modeling framework for simulating and managing long-term water quality for the lower Great Lakes. Journal of Great Lakes Research, 2016, 42, 1166-1173.	0.8	20
23	Decision Support Models for Assessing the Impact of Aquaculture on River Water Quality. Journal of Environmental Engineering, ASCE, 2016, 142, .	0.7	3
24	Simulation of the Contribution of Phosphorus-Containing Minerogenic Particles to Particulate Phosphorus Concentration in Cayuga Lake, New York. Water, Air, and Soil Pollution, 2016, 227, 1.	1.1	1
25	Simulation of Terrigenous Minerogenic Particle Populations in Time and Space in Cayuga Lake, New York, in Response to Runoff Events. Water, Air, and Soil Pollution, 2016, 227, 1.	1.1	2
26	Climate change impacts and greenhouse gas mitigation effects on U.S. water quality. Journal of Advances in Modeling Earth Systems, 2015, 7, 1326-1338.	1.3	19
27	Modelâ€Based Nitrogen and Phosphorus (Nutrient) Criteria for Large Temperate Rivers: 1. Model Development and Application. Journal of the American Water Resources Association, 2015, 51, 421-446.	1.0	13
28	Long-term trends of nutrients and trophic response variables for the Great Lakes. Limnology and Oceanography, 2015, 60, 696-721.	1.6	174
29	Sed2K: Modeling Lake Sediment Diagenesis in a Management Context. Journal of Environmental Engineering, ASCE, 2015, 141, .	0.7	2
30	Modelâ€Based Nitrogen and Phosphorus (Nutrient) Criteria for Large Temperate Rivers: 2. Criteria Derivation. Journal of the American Water Resources Association, 2015, 51, 447-470.	1.0	3
31	A client-side web application for interactive environmental simulation modeling. Environmental Modelling and Software, 2014, 55, 49-60.	1.9	46
32	Uncertainty and sensitivity analyses using GLUE when modeling inhibition and pharmaceutical cometabolism during nitrification. Environmental Modelling and Software, 2014, 60, 219-227.	1.9	11
33	Parsimonious Model for Assessing Nutrient Impacts on Periphyton-Dominated Streams. Journal of Environmental Engineering, ASCE, 2014, 140, .	0.7	16
34	Remote Sensing of Submerged Aquatic Vegetation in a Shallow Non-Turbid River Using an Unmanned Aerial Vehicle. Remote Sensing, 2014, 6, 12815-12836.	1.8	117
35	A Review Of The Research And Data Needs For Improving Load-Response Models In The Werf Nutrient Modeling Toolbox. Proceedings of the Water Environment Federation, 2014, 2014, 505-517.	0.0	1
36	Classic Optimization Techniques Applied to Stormwater and Nonpoint Source Pollution Management at the Watershed Scale. Journal of Water Resources Planning and Management - ASCE, 2013, 139, 486-491.	1.3	27

#	Article	IF	Citations
37	Optimal Location of Sediment-Trapping Best Management Practices for Nonpoint Source Load Management. Journal of Water Resources Planning and Management - ASCE, 2013, 139, 478-485.	1.3	7
38	Modeling the lateral variation of bottom-attached algae in rivers. Ecological Modelling, 2013, 267, 11-25.	1.2	16
39	Chloride and total phosphorus budgets for Green Bay, Lake Michigan. Journal of Great Lakes Research, 2013, 39, 420-428.	0.8	13
40	Load-Response Models for Establishing Site-Specific Nutrient Goals Based on Water Quality and Biological Response Indicators. Proceedings of the Water Environment Federation, 2013, 2013, 1614-1626.	0.0	2
41	Modeling Effects of Sediment Diagenesis on Recovery of Hypolimnetic Oxygen. Journal of Environmental Engineering, ASCE, 2013, 139, 44-53.	0.7	11
42	Long-term trends of Great Lakes major ion chemistry. Journal of Great Lakes Research, 2012, 38, 550-560.	0.8	120
43	Great Lakes total phosphorus revisited: 1. Loading analysis and update (1994â€"2008). Journal of Great Lakes Research, 2012, 38, 730-740.	0.8	177
44	Great Lakes total phosphorus revisited: 2. Mass balance modeling. Journal of Great Lakes Research, 2012, 38, 741-754.	0.8	77
45	Calibration and application of a sediment accumulation rate model â€" a case study. Inland Waters, 2012, 2, 23-36.	1.1	7
46	Modeling the impacts of calcite precipitation on the epilimnion of an ultraoligotrophic, hard-water lake. Ecological Modelling, 2011, 222, 76-90.	1.2	27
47	New hydroepidemiological models of indicator organisms and zoonotic pathogens in agricultural watersheds. Ecological Modelling, 2011, 222, 2093-2102.	1.2	5
48	Rubbish, Stink, and Death: The Historical Evolution, Present State, and Future Direction of Water-Quality Management and Modeling. Environmental Engineering Research, 2011, 16, 113-119.	1.5	11
49	Production of microbially-derived fulvic acid from photolysis of quinone-containing extracellular products of phytoplankton. Aquatic Sciences, 2009, 71, 170-178.	0.6	30
50	Great Lakes chloride trends: Long-term mass balance and loading analysis. Journal of Great Lakes Research, 2009, 35, 272-284.	0.8	92
51	A model of degradation and production of three pools of dissolved organic matter in an alpine lake. Limnology and Oceanography, 2009, 54, 2213-2227.	1.6	71
52	QUAL2Kw â€" A framework for modeling water quality in streams and rivers using a genetic algorithm for calibration. Environmental Modelling and Software, 2006, 21, 419-425.	1.9	189
53	Diel changes of inorganic chemistry in a macrophyte-dominated, softwater stream. Marine and Freshwater Research, 2005, 56, 1165.	0.7	14
54	Modeling the potential effects of climate change on water temperature downstream of a shallow reservoir, lower madison river, MT. Climatic Change, 2005, 68, 331-353.	1.7	65

#	Article	IF	Citations
55	Rapid Calculation of Oxygen in Streams: Approximate Delta Method. Journal of Environmental Engineering, ASCE, 2005, 131, 336-342.	0.7	27
56	Numerical Efficiency in Monte Carlo Simulationsâ€"Case Study of a River Thermodynamic Model. Journal of Environmental Engineering, ASCE, 2004, 130, 456-464.	0.7	2
57	MODELING TOC AND UV-254 ABSORBANCE FOR RESERVOIR PLANNING AND OPERATION. Journal of the American Water Resources Association, 2004, 40, 795-809.	1.0	10
58	Screening Analysis of Human Pharmaceutical Compounds in U.S. Surface Waters. Environmental Science & Technology, 2004, 38, 838-849.	4.6	227
59	Engineering Water Quality Models and TMDLs. Journal of Water Resources Planning and Management - ASCE, 2003, 129, 247-256.	1.3	87
60	Risk-based modelling of surface water quality: a case study of the Charles River, Massachusetts. Journal of Hydrology, 2003, 274, 225-247.	2.3	38
61	Decision Support System for Adaptive Water Supply Management. Journal of Water Resources Planning and Management - ASCE, 2003, 129, 165-177.	1.3	69
62	Modeling Zebra Mussel Impacts on Water Quality of Seneca River, New York. Journal of Environmental Engineering, ASCE, 2002, 128, 1158-1168.	0.7	21
63	Transient Storage and Gas Transfer in Lowland Stream. Journal of Environmental Engineering, ASCE, 2000, 126, 708-712.	0.7	26
64	On the relationship of transient storage and aggregated dead zone models of longitudinal solute transport in streams. Water Resources Research, 2000, 36, 213-224.	1.7	70
65	Modeling Impact of Storage Zones on Stream Dissolved Oxygen. Journal of Environmental Engineering, ASCE, 1999, 125, 415-419.	0.7	30
66	Trihalomethane Precursor Model for Lake Youngs, Washington. Journal of Water Resources Planning and Management - ASCE, 1997, 123, 259-265.	1.3	15
67	Empirical Models for Disinfection By-Products in Lakes and Reservoirs. Journal of Environmental Engineering, ASCE, 1997, 123, 714-715.	0.7	13
68	Temperature Model for Highly Transient Shallow Streams. Journal of Hydraulic Engineering, 1997, 123, 30-40.	0.7	51
69	Reactive Solute Transport in Streams: 1. Development of an Equilibrium-Based Model. Water Resources Research, 1996, 32, 409-418.	1.7	65
70	Reactive Solute Transport in Streams: 2. Simulation of a p H Modification Experiment. Water Resources Research, 1996, 32, 419-430.	1.7	43
71	Determination of Reaeration Coefficients: Whole-Lake Approach. Journal of Environmental Engineering, ASCE, 1996, 122, 269-275.	0.7	26
72	Modeling of NOM-Facilitated PAH Transport through Low-focSediment. Journal of Environmental Engineering, ASCE, 1995, 121, 438-446.	0.7	19

#	Article	IF	Citations
73	Sewage contamination in the upper Mississippi River as measured by the fecal sterol, coprostanol. Water Research, 1995, 29, 1427-1436.	5.3	117
74	Managing Agricultural Phosphorus for Protection of Surface Waters: Issues and Options. Journal of Environmental Quality, 1994, 23, 437-451.	1.0	1,132
75	Reply [to â€œComment on â€˜An efficient numerical solution of the transient storage equations for solute transport in small streamsâ€™ by R. L. Runkel and S. C. Chapraâ€]. Water Resources Research, 1994, 30, 2863-2865.	1.7	11
76	An efficient numerical solution of the transient storage equations for solute transport in small streams. Water Resources Research, 1993, 29, 211-215.	1.7	90
77	Closure to â€œ Delta Method for Estimating Primary Production, Respiration, and Reaeration in Streams â€•by Steven C. Chapra and Dominic M. Di Toro (September/October, Vol. 117, No. 5). Journal of Environmental Engineering, ASCE, 1992, 118, 1007-1008.	0.7	0
78	Fate of environmental pollutants. Water Environment Research, 1992, 64, 581-593.	1.3	0
79	Long-term phenomenological model of phosphorus and oxygen for stratified lakes. Water Research, 1991, 25, 707-715.	5.3	130
80	Delta Method For Estimating Primary Production, Respiration, And Reaeration In Streams. Journal of Environmental Engineering, ASCE, 1991, 117, 640-655.	0.7	157
81	Toxicantâ€Loading Concept for Organic Contaminants in Lakes. Journal of Environmental Engineering, ASCE, 1991, 117, 656-677.	0.7	15
82	Personal computers and environmental engineering Part I â€“Trends and perspectives. Environmental Science & Technology, 1987, 21, 832-837.	4.6	5
83	Confirmation of water quality models. Ecological Modelling, 1983, 20, 113-133.	1.2	53
84	Comment on â€œThe effect of changes in the nutrient income on the condition of Lake Washingtonâ€• (Edmondson and Lehman). Limnology and Oceanography, 1983, 28, 792-795.	1.6	2
85	The Need for Simple Approaches for the Estimation of Lake Model Prediction Uncertainty. , 1983, , 293-303.		2
86	A budget model accounting for the positional availability of phosphorus in lakes. Water Research, 1982, 16, 205-209.	5.3	7
87	Bioavailability of Phosphorus Inputs to Lakes. Journal of Environmental Quality, 1982, 11, 555-563.	1.0	186
88	Quantification of the Lake Trophic Typologies of Naumann (Surface Quality) and Thienemann (Oxygen) with Special Reference to the Great Lakes. Journal of Great Lakes Research, 1981, 7, 182-193.	0.8	61
89	Simulation of Recent and Projected Total Phosphorus Trends in Lake Ontario. Journal of Great Lakes Research, 1980, 6, 101-112.	0.8	18
90	Applying phosphorus loading models to embayments1. Limnology and Oceanography, 1979, 24, 163-168.	1.6	14

#	Article	IF	Citations
91	A note on error analysis for a phosphorus retention model. Water Resources Research, 1979, 15, 1643-1646.	1.7	23
92	Expressing the Phosphorus Loading Concept in Probabilistic Terms. Journal of the Fisheries Research Board of Canada, 1979, 36, 225-229.	1.0	65
93	Great Lakes Eutrophication: The Effect of Point Source Control of Total Phosphorus. Science, 1977, 196, 1448-1450.	6.0	52
94	Comparison of an Ecological Model of Lake Ontario and Phosphorus Loading Models. Journal of the Fisheries Research Board of Canada, 1977, 34, 286-290.	1.0	26
95	Total Phosphorus Model for the Great Lakes. American Society of Civil Engineers, Journal of the Environmental Engineering Division, 1977, 103, 147-161.	0.3	72
96	A chlorophyll <i>a</i> model and its relationship to phosphorus loading plots for lakes. Water Resources Research, 1976, 12, 1260-1264.	1.7	62
97	Comment on â€˜An empirical method of estimating the retention of phosphorus in lakesâ€™ by W. B. Kirchner and P. J. Dillon. Water Resources Research, 1975, 11, 1033-1034.	1.7	79