Hao Wang

List of Publications by Year
in descending order

91 papers	1,563 citations	331670 21 h-index	377865 34 g-index
91 all docs	91 docs citations	91 times ranked	774 citing authors

#	Article	IF	Citations
1	Traveling wave of a reactionâ€“diffusion vector-borne disease model with nonlocal effects and distributed delay. Journal of Dynamics and Differential Equations, 2023, 35, 3149-3185.	1.9	15
2	Geometric singular perturbation of a nonlocal partially degenerate model for <i>Aedes aegypti</i>. Discrete and Continuous Dynamical Systems - Series B, 2023, 28, 1279.	0.9	3
3	Spatiotemporal dynamics of a diffusive consumerâ€resource model with explicit spatial memory. Studies in Applied Mathematics, 2022, 148, 373-395.	2.4	31
4	Dynamics of Stoichiometric Autotrophâ€“Mixotrophâ€“Bacteria Interactions in the Epilimnion. Bulletin of Mathematical Biology, 2022, 84, 5.	1.9	6
5	Modeling the early transmission of COVID-19 in New York and San Francisco using a pairwise network model. Infectious Disease Modelling, 2022, 7, 212-230.	1.9	3
6	Spatiotemporal patterns of a diffusive prey-predator model with spatial memory and pregnancy period in an intimidatory environment. Journal of Mathematical Biology, 2022, 84, 12.	1.9	29
7	A Fisherâ€“KPP Model with a Nonlocal Weighted Free Boundary: Analysis of How Habitat Boundaries Expand, Balance or Shrink. Bulletin of Mathematical Biology, 2022, 84, 34.	1.9	1
8	Coupling the socio-economic and ecological dynamics of cyanobacteria: Single lake and network dynamics. Ecological Economics, 2022, 194, 107324.	5.7	4
9	Global dynamics of a diffusive competition model with habitat degradation. Journal of Mathematical Biology, 2022, 84, 18.	1.9	1
10	Mathematical comparison and empirical review of the Monod and Droop forms for resource-based population dynamics. Ecological Modelling, 2022, 466, 109887.	2.5	12
11	Linking bifurcation analysis of Hollingâ€“Tanner model with generalist predator to a changing environment. Studies in Applied Mathematics, 2022, 149, 124-163.	2.4	15
12	Discrete-time versus continuous-time toxic predation models. Journal of Difference Equations and Applications, 2022, 28, 244-258.	1.1	2
13	A Hypothesis-Free Bridging of Disease Dynamics and Non-pharmaceutical Policies. Bulletin of Mathematical Biology, 2022, 84, 57.	1.9	5
14	Bifurcations in the diffusive Bazykin model. Journal of Differential Equations, 2022, 323, 280-311.	2.2	7
15	Kinetics of phosphate uptake in the dinoflagellate Karenia mikimotoi in response to phosphate stress and temperature. Ecological Modelling, 2022, 468, 109909.	2.5	8
16	Traveling waves for a diffusive mosquito-borne epidemic model with general incidence. Zeitschrift Fur Angewandte Mathematik Und Physik, 2022, 73, .	1.4	14
17	Adaptive Dynamics of a Stoichiometric Phosphorusâ€“Algaeâ€“Zooplankton Model with Environmental Fluctuations. Journal of Nonlinear Science, 2022, 32, 1.	2.1	5
18	Stochastic switches of eutrophication and oligotrophication: Modeling extreme weather via non-Gaussian LÃ©vy noise. Chaos, 2022, 32, 043116.	2.5	10

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19	Impacts of a changing environment on a stoichiometric producer-grazer system: a stochastic modelling approach. Ecological Modelling, 2022, 469, 109971.	2.5	1
20	Evaluating Strategies For Tuberculosis to Achieve the Goals of WHO in China: A Seasonal Age-Structured Model Study. Bulletin of Mathematical Biology, 2022, 84, 61.	1.9	5
21	Infectivity versus fatality of SARS-CoV-2 mutations and influenza. International Journal of Infectious Diseases, 2022, 121, 195-202.	3.3	27
22	Algaeâ€“Bacteria Interactions with Nutrients and Light: A Reactionâ€“Diffusionâ€“Advection Model. Journal of Nonlinear Science, 2022, 32, .	2.1	2
23	Contrasting stoichiometric dynamics in terrestrial and aquatic grazerâ€“producer systems. Journal of Biological Dynamics, 2021, 15, S3-S34.	1.7	4
24	Spatial modeling and dynamics of organic matter biodegradation in the absence or presence of bacterivorous grazing. Mathematical Biosciences, 2021, 331, 108501.	1.9	3
25	Modeling Rabies Transmission in Spatially Heterogeneous Environments via $$heta $$-diffusion. Bulletin of Mathematical Biology, 2021, 83, 16.	1.9	4
26	Nonpharmaceutical interventions contribute to the control of COVID-19 in China based on a pairwise model. Infectious Disease Modelling, 2021, 6, 643-663.	1.9	9
27	Phytoplankton Competition for Nutrients and Light in a Stratified Lake: A Mathematical Model Connecting Epilimnion and Hypolimnion. Journal of Nonlinear Science, 2021, 31, 1.	2.1	10
28	Spatial movement with distributed memory. Journal of Mathematical Biology, 2021, 82, 33.	1.9	34
29	Bistable traveling waves in impulsive reaction-advection-diffusion models. Journal of Differential Equations, 2021, 285, 17-39.	2.2	4
30	Accurate long-range forecasting of COVID-19 mortality in the USA. Scientific Reports, 2021, 11, 13822.	3.3	18
31	Memory-based movement with spatiotemporal distributed delays in diffusion and reaction. Applied Mathematics and Computation, 2021, 404, 126254.	2.2	11
32	A longitudinal dataset of incidence and intervention policy impacts regarding the COVID-19 pandemic in Canadian provinces. Data in Brief, 2021, 38, 107381.	1.0	2
33	Dataset of COVID-19 outbreak and potential predictive features in the USA. Data in Brief, 2021, 38, 107360.	1.0	5
34	A mathematical model for Vibrio-phage interactions. Mathematical Biosciences and Engineering, 2021, 18, 2688-2712.	1.9	1
35	Dynamics of a discrete-time stoichiometric optimal foraging model. Discrete and Continuous Dynamical Systems - Series B, 2021, 26, 107-120.	0.9	2
36	Stoichiometric Ecotoxicology for a Multisubstance World. BioScience, 2021, 71, 132-147.	4.9	12

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37	Extinction and Quasi-Stationarity for Discrete-Time, Endemic SIS and SIR Models. SIAM Journal on Applied Mathematics, 2021, 81, 2195-2217.	1.8	6
38	Incorporating carbon dioxide into a stoichiometric producerâ€“grazer model. Journal of Mathematical Biology, 2021, 83, 49.	1.9	4
39	Spatial movement with diffusion and memory-based self-diffusion and cross-diffusion. Journal of Differential Equations, 2021, 305, 242-269.	2.2	27
40	Evaluating the impacts of non-pharmaceutical interventions on the transmission dynamics of COVID-19 in Canada based on mobile network. PLoS ONE, 2021, 16, e0261424.	2.5	5
41	Diffusive Spatial Movement with Memory. Journal of Dynamics and Differential Equations, 2020, 32, 979-1002.	1.9	49
42	Threshold behavior in a stochastic algal growth model with stoichiometric constraints and seasonal variation. Journal of Differential Equations, 2020, 268, 5113-5139.	2.2	71
43	Stoichiometric Modeling of Abovegroundâ€“Belowground Interaction of Herbaceous Plant and Two Herbivores. Bulletin of Mathematical Biology, 2020, 82, 107.	1.9	3
44	Noise-Induced Transitions in a Nonsmooth Producerâ€“Grazer Model with Stoichiometric Constraints. Bulletin of Mathematical Biology, 2020, 82, 55.	1.9	39
45	Analysis of Propagation for Impulsive Reaction-Diffusion Models. SIAM Journal on Applied Mathematics, 2020, 80, 521-542.	1.8	20
46	Transient Dynamics of a Stoichiometric Cyanobacteria Model via Multiple-Scale Analysis. SIAM Journal on Applied Mathematics, 2020, 80, 1223-1246.	1.8	17
47	Analysis of a spatial memory model with nonlocal maturation delay and hostile boundary condition. Discrete and Continuous Dynamical Systems, 2020, 40, 5845-5868.	0.9	24
48	Spatiotemporal dynamics in the single population model with memory-based diffusion and nonlocal effect. Journal of Differential Equations, 2019, 267, 6316-6351.	2.2	77
49	R0 and sensitivity analysis of a predator-prey model with seasonality and maturation delay. Mathematical Biosciences, 2019, 315, 108225.	1.9	10
50	Diffusive spatial movement with memory and maturation delays. Nonlinearity, 2019, 32, 3188-3208.	1.4	46
51	Compensatory Foraging in Stoichiometric Producerâ€“Grazer Models. Bulletin of Mathematical Biology, 2019, 81, 4932-4950.	1.9	15
52	Second-generation stoichiometric mathematical model to predict methane emissions from oil sands tailings. Science of the Total Environment, 2019, 694, 133645.	8.0	17
53	Regulation of phosphate uptake kinetics in the bloom-forming dinoflagellates prorocentrum donghaiense with emphasis on two-stage dynamic process. Journal of Theoretical Biology, 2019, 463, 12-21.	1.7	15
54	Geometric stability switch criteria in delay differential equations with two delays and delay dependent parameters. Journal of Differential Equations, 2019, 266, 7073-7100.	2.2	54

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55	Global asymptotic stability of a Lotkaâ€“Volterra competition model with stochasticity in inter-specific competition. Applied Mathematics Letters, 2019, 89, 58-63.	2.7	8
56	Dynamics of coral reef models in the presence of parrotfish. Natural Resource Modelling, 2019, 32, e12202.	2.0	3
57	Stoichiometric food chain model on discrete time scale. Mathematical Biosciences and Engineering, 2019, 16, 101-118.	1.9	7
58	Dynamics of a periodic stoichiometric model with application in predicting and controlling algal bloom in Bohai Sea off China. Mathematical Biosciences and Engineering, 2019, 16, 119-138.	1.9	7
59	Stochastic sensitivity analysis of noise-induced transitions in a predator-prey model with environmental toxins. Mathematical Biosciences and Engineering, 2019, 16, 2141-2153.	1.9	16
60	Refuge-mediated predatorâ€“prey dynamics and biomass pyramids. Mathematical Biosciences, 2018, 298, 29-45.	1.9	7
61	Complete Global and Bifurcation Analysis of a Stoichiometric Predatorâ€“Prey Model. Journal of Dynamics and Differential Equations, 2018, 30, 447-472.	1.9	13
62	A stoichiometric organic matter decomposition model in a chemostat culture. Journal of Mathematical Biology, 2018, 76, 609-644.	1.9	12
63	Weak dynamical threshold for the â€œstrict homeostasisâ€•assumption in ecological stoichiometry. Ecological Modelling, 2018, 384, 233-240.	2.5	12
64	A switching model for the impact of toxins on the spread of infectious diseases. Journal of Mathematical Biology, 2018, 77, 1093-1115.	1.9	11
65	On Impulsive Reaction-Diffusion Models in Higher Dimensions. SIAM Journal on Applied Mathematics, 2017, 77, 224-246.	1.8	20
66	A Hybrid Continuous/Discrete-Time Model for Invasion Dynamics of Zebra Mussels in Rivers. SIAM Journal on Applied Mathematics, 2017, 77, 854-880.	1.8	14
67	Somatic Growth Dilution of a toxicant in a predatorâ€“prey model under stoichiometric constraints. Journal of Theoretical Biology, 2016, 407, 198-211.	1.7	13
68	Stability and Bifurcation in a Stoichiometric Producer-Grazer Model with Knife Edge. SIAM Journal on Applied Dynamical Systems, 2016, 15, 2051-2077.	1.6	10
69	Temperature- and Turbidity-Dependent Competitive Interactions Between Invasive Freshwater Mussels. Bulletin of Mathematical Biology, 2016, 78, 353-380.	1.9	4
70	The Inverse Method for a Childhood Infectious Disease Model with Its Application to Pre-vaccination and Post-vaccination Measles Data. Bulletin of Mathematical Biology, 2015, 77, 2231-2263.	1.9	11
71	Modeling the bacterial contribution to planktonic community respiration in the regulation of solar energy and nutrient availability. Ecological Complexity, 2015, 23, 25-33.	2.9	8
72	The impact of environmental toxins on predatorâ€“prey dynamics. Journal of Theoretical Biology, 2015, 378, 12-30.	1.7	42

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73	Dynamics of a Producerâ€“Grazer Model Incorporating the Effects of Excess Food Nutrient Content on Grazerâ€™s Growth. Bulletin of Mathematical Biology, 2014, 76, 2175-2197.	1.9	35
74	Dynamics of a Cholera Transmission Model with Immunological Threshold and Natural Phage Control in Reservoir. Bulletin of Mathematical Biology, 2014, 76, 2025-2051.	1.9	16
75	Mathematical analysis of coral reef models. Journal of Mathematical Analysis and Applications, 2014, 416, 352-373.	1.0	14
76	Global Hopf branches and multiple limit cycles in a delayed Lotka-Volterra predator-prey model. Discrete and Continuous Dynamical Systems - Series B, 2014, 19, 747-760.	0.9	6
77	A model for the impact of contaminants on fish population dynamics. Journal of Theoretical Biology, 2013, 334, 71-79.	1.7	33
78	MODELING FISH BIOMASS STRUCTURE AT NEAR PRISTINE CORAL REEFS AND DEGRADATION BY FISHING. Journal of Biological Systems, 2012, 20, 21-36.	1.4	12
79	Extracting the time-dependent transmission rate from infection data via solution of an inverse ODE problem. Journal of Biological Dynamics, 2012, 6, 509-523.	1.7	43
80	On the â€œstrict homeostasisâ€•assumption in ecological stoichiometry. Ecological Modelling, 2012, 243, 81-88.	2.5	56
81	Global analysis of a stoichiometric producerâ€“grazer model with Holling type functional responses. Journal of Mathematical Biology, 2011, 63, 901-932.	1.9	31
82	Modeling inverted biomass pyramids and refuges in ecosystems. Ecological Modelling, 2009, 220, 1376-1382.	2.5	44
83	Dynamics of Indirectly Transmitted Infectious Diseases withÂImmunological Threshold. Bulletin of Mathematical Biology, 2009, 71, 845-862.	1.9	92
84	The roles of predator maturation delay and functional response in determining the periodicity of predatorâ€“prey cycles. Mathematical Biosciences, 2009, 221, 1-10.	1.9	25
85	Daphnia species invasion, competitive exclusion, and chaotic coexistence. Discrete and Continuous Dynamical Systems - Series B, 2009, 12, 481-493.	0.9	13
86	Dynamics of a mechanistically derived stoichiometric producer-grazer model. Journal of Biological Dynamics, 2008, 2, 286-296.	1.7	46
87	Dynamics of Stoichiometric Bacteria-Algae Interactions in the Epilimnion. SIAM Journal on Applied Mathematics, 2007, 68, 503-522.	1.8	46
88	Alternative models for cyclic lemming dynamics. Mathematical Biosciences and Engineering, 2007, 4, 85-99.	1.9	2
89	Dispersal-driven coexistence in a multiple-patch competition model for zebra and quagga mussels. Journal of Difference Equations and Applications, 0, , 1-15.	1.1	1
90	Complex Dynamics in a General Diffusive Predatorâ€“Prey Model with Predator Maturation Delay. Journal of Dynamics and Differential Equations, 0, , .	1.9	4

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91	Competitive Exclusion and Coexistence in a Stoichiometric Chemostat Model. Journal of Dynamics and Differential Equations, 0, , .	1.9	2