

# Huaiping Zhu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8482705/publications.pdf>

Version: 2024-02-01

118  
papers

3,745  
citations

147801

31  
h-index

149698

56  
g-index

126  
all docs

126  
docs citations

126  
times ranked

2410  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamics Complexity of Generalist Predatory Mite and the Leafhopper Pest in Tea Plantations. <i>Journal of Dynamics and Differential Equations</i> , 2023, 35, 2833-2871.	1.9	5
2	The threshold value of the number of hospital beds in a SEIHR epidemic model. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2023, 28, 1436.	0.9	1
3	Data-driven dynamical modelling of the transmission of African swine fever in a few places in China. <i>Transboundary and Emerging Diseases</i> , 2022, 69, .	3.0	10
4	Models to assess imported cases on the rebound of COVID-19 and design a long-term border control strategy in Heilongjiang Province, China. <i>Mathematical Biosciences and Engineering</i> , 2022, 19, 1-33.	1.9	4
5	Bifurcation and Dynamic Analyses of Non-monotonic Predator-Prey System with Constant Releasing Rate of Predators. <i>Qualitative Theory of Dynamical Systems</i> , 2022, 21, 1.	1.7	3
6	A Network Dynamics Model for the Transmission of COVID-19 in Diamond Princess and a Response to Reopen Large-Scale Public Facilities. <i>Healthcare (Switzerland)</i> , 2022, 10, 139.	2.0	1
7	School and community reopening during the COVID-19 pandemic: a mathematical modelling study. <i>Royal Society Open Science</i> , 2022, 9, 211883.	2.4	15
8	When and How to Adjust Non-Pharmacological Interventions Concurrent with Booster Vaccinations Against COVID-19 in Guangdong, China, 2022. <i>China CDC Weekly</i> , 2022, 4, 199-206.	2.3	9
9	The Impact of Quarantine and Medical Resources on the Control of COVID-19 in Wuhan based on a Household Model. <i>Bulletin of Mathematical Biology</i> , 2022, 84, 47.	1.9	3
10	Projections of the transmission of the Omicron variant for Toronto, Ontario, and Canada using surveillance data following recent changes in testing policies. <i>Infectious Disease Modelling</i> , 2022, 7, 83-93.	1.9	13
11	The nilpotent bifurcations in a model for generalist predatory mite and pest leafhopper with stage structure. <i>Journal of Differential Equations</i> , 2022, 321, 99-129.	2.2	3
12	Role of seasonality and spatial heterogeneous in the transmission dynamics of avian influenza. <i>Nonlinear Analysis: Real World Applications</i> , 2022, 67, 103567.	1.7	4
13	Efficacy of a "stay-at-home" policy on SARS-CoV-2 transmission in Toronto, Canada: a mathematical modelling study. <i>CMAJ Open</i> , 2022, 10, E367-E378.	2.4	11
14	Mathematical modelling of vaccination rollout and NPIs lifting on COVID-19 transmission with VOC: a case study in Toronto, Canada. <i>BMC Public Health</i> , 2022, 22, .	2.9	12
15	Assessment of regional vulnerability to Africa swine fever in China during 2018/8-2019/7 based on data envelopment analysis method. <i>Transboundary and Emerging Diseases</i> , 2021, 68, 2455-2464.	3.0	2
16	Global bifurcation studies of a cubic Liénard system. <i>Journal of Mathematical Analysis and Applications</i> , 2021, 496, 124810.	1.0	3
17	MODELING THE SPREAD OF WEST NILE VIRUS IN A SPATIALLY HETEROGENEOUS AND ADVECTIVE ENVIRONMENT. <i>Journal of Applied Analysis and Computation</i> , 2021, 11, 1868-1897.	0.5	3
18	Optimal Control of Mitigation Strategies for Dengue Virus Transmission. <i>Bulletin of Mathematical Biology</i> , 2021, 83, 8.	1.9	11

#	ARTICLE	IF	CITATIONS
19	Nonpharmaceutical interventions contribute to the control of COVID-19 in China based on a pairwise model. <i>Infectious Disease Modelling</i> , 2021, 6, 643-663.	1.9	9
20	Dynamic modeling and optimal control of cystic echinococcosis. <i>Infectious Diseases of Poverty</i> , 2021, 10, 38.	3.7	12
21	Global Hopf bifurcation and dynamics of a stage-structured model with delays for tick population. <i>Journal of Differential Equations</i> , 2021, 284, 1-22.	2.2	5
22	Evaluating the impact of the travel ban within mainland China on the epidemic of the COVID-19. <i>International Journal of Infectious Diseases</i> , 2021, 107, 278-283.	3.3	8
23	Modeling the outbreak and control of African swine fever virus in large-scale pig farms. <i>Journal of Theoretical Biology</i> , 2021, 526, 110798.	1.7	12
24	Modeling and dynamics of physiological and behavioral resistance of Asian citrus psyllid. <i>Mathematical Biosciences</i> , 2021, 340, 108674.	1.9	6
25	The transmission of dengue virus with <i>Aedes aegypti</i> mosquito in a heterogeneous environment. <i>International Journal of Biomathematics</i> , 2021, 14, 2150026.	2.9	3
26	Periodic Phenomena and Driving Mechanisms in Transmission of West Nile Virus with Maturation Time. <i>Journal of Dynamics and Differential Equations</i> , 2020, 32, 1003-1026.	1.9	8
27	Monotone dynamics and global behaviors of a West Nile virus model with mosquito demographics. <i>Journal of Mathematical Biology</i> , 2020, 80, 809-834.	1.9	7
28	Four-tier response system and spatial propagation of COVID-19 in China by a network model. <i>Mathematical Biosciences</i> , 2020, 330, 108484.	1.9	35
29	Modeling and Dynamics Analysis of Zika Transmission with Limited Medical Resources. <i>Bulletin of Mathematical Biology</i> , 2020, 82, 99.	1.9	23
30	Modeling and dynamics of Wolbachia-infected male releases and mating competition on mosquito control. <i>Journal of Mathematical Biology</i> , 2020, 81, 243-276.	1.9	22
31	The Ontario Climate Data Portal, a user-friendly portal of Ontario-specific climate projections. <i>Scientific Data</i> , 2020, 7, 147.	5.3	5
32	A data-driven network model for the emerging COVID-19 epidemics in Wuhan, Toronto and Italy. <i>Mathematical Biosciences</i> , 2020, 326, 108391.	1.9	88
33	Dynamics of Nonconstant Steady States of the Selâ€™kov Model with Saturation Effect. <i>Journal of Nonlinear Science</i> , 2020, 30, 1553-1577.	2.1	4
34	Using machine learning to synthesize spatiotemporal data for modelling DBH-height and DBH-height-age relationships in boreal forests. <i>Forest Ecology and Management</i> , 2020, 466, 118104.	3.2	16
35	Fangcang shelter hospitals during the COVID-19 epidemic, Wuhan, China. <i>Bulletin of the World Health Organization</i> , 2020, 98, 830-841D.	3.3	40
36	Complex dynamics of epidemic models on adaptive networks. <i>Journal of Differential Equations</i> , 2019, 266, 803-832.	2.2	42

#	ARTICLE	IF	CITATIONS
37	The impact of cover crops on the predatory mite <i>Anystis baccarum</i> (Acari, Anystidae) and the leafhopper pest <i>Empoasca onukii</i> (Hemiptera, Cicadellidae) in a tea plantation. <i>Pest Management Science</i> , 2019, 75, 3371-3380.	3.4	31
38	Transmission dynamics of a two-strain pairwise model with infection age. <i>Applied Mathematical Modelling</i> , 2019, 71, 656-672.	4.2	9
39	Dynamics Analysis of an Avian Influenza A (H7N9) Epidemic Model with Vaccination and Seasonality. <i>Complexity</i> , 2019, 2019, 1-15.	1.6	4
40	Cover Crops Enhance Natural Enemies While Help Suppressing Pests in a Tea Plantation. <i>Annals of the Entomological Society of America</i> , 2019, 112, 348-355.	2.5	19
41	Modeling Spatiotemporal Distribution of Mosquitoes Abundance With Unobservable Environmental Factors. <i>Journal of Medical Entomology</i> , 2019, 56, 65-71.	1.8	1
42	Stochastic modeling of algal bloom dynamics with delayed nutrient recycling. <i>Mathematical Biosciences and Engineering</i> , 2019, 16, 1-24.	1.9	10
43	Models to assess the effects of non-identical sex ratio augmentations of Wolbachia -carrying mosquitoes on the control of dengue disease. <i>Mathematical Biosciences</i> , 2018, 299, 58-72.	1.9	13
44	Two-patch model for the spread of West Nile virus. <i>Bulletin of Mathematical Biology</i> , 2018, 80, 840-863.	1.9	11
45	Temperature-driven population abundance model for <i>Culex pipiens</i> and <i>Culex restuans</i> (Diptera: Culex). <i>Journal of Theoretical Biology</i> , 2018, 431, 17-28.	1.7	8
46	Impact of disposing stray dogs on risk assessment and control of Echinococcosis in Inner Mongolia. <i>Mathematical Biosciences</i> , 2018, 299, 85-96.	1.9	13
47	Free boundary models for mosquito range movement driven by climate warming. <i>Journal of Mathematical Biology</i> , 2018, 76, 841-875.	1.9	21
48	Downscaling RCP8.5 daily temperatures and precipitation in Ontario using localized ensemble optimal interpolation (EnOI) and bias correction. <i>Climate Dynamics</i> , 2018, 51, 411-431.	3.8	12
49	Spatial-temporal basic reproduction number and dynamics for a dengue disease diffusion model. <i>Mathematical Methods in the Applied Sciences</i> , 2018, 41, 5388-5403.	2.3	14
50	How seasonal forcing influences the complexity of a predator-prey system. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2018, 23, 785-807.	0.9	8
51	Dynamics of a Filippov epidemic model with limited hospital beds. <i>Mathematical Biosciences and Engineering</i> , 2018, 15, 739-764.	1.9	28
52	BIRDS MOVEMENT IMPACT ON THE TRANSMISSION OF WEST NILE VIRUS BETWEEN PATCHES. <i>Journal of Applied Analysis and Computation</i> , 2018, 8, 443-456.	0.5	1
53	Mixture Markov regression model with application to mosquito surveillance data analysis. <i>Biometrical Journal</i> , 2017, 59, 462-477.	1.0	3
54	Nonuniform $(h, k, \frac{1}{4}, \frac{1}{2})$ -dichotomy with applications to nonautonomous dynamical systems. <i>Journal of Mathematical Analysis and Applications</i> , 2017, 452, 505-551.	1.0	8

#	ARTICLE	IF	CITATIONS
55	The impact of weather and storm water management ponds on the transmission of West Nile virus. Royal Society Open Science, 2017, 4, 170017.	2.4	13
56	Modeling the transmission and control of Zika in Brazil. Scientific Reports, 2017, 7, 7721.	3.3	32
57	A series of population models for <i>Hyphantria cunea</i> with delay and seasonality. Mathematical Biosciences, 2017, 292, 57-66.	1.9	6
58	Spatial spreading model and dynamics of West Nile virus in birds and mosquitoes with free boundary. Journal of Mathematical Biology, 2017, 75, 1381-1409.	1.9	83
59	Effect of seasonal changing temperature on the growth of phytoplankton. Mathematical Biosciences and Engineering, 2017, 14, 1091-1117.	1.9	12
60	Asymptotic behavior of a delayed stochastic logistic model with impulsive perturbations. Mathematical Biosciences and Engineering, 2017, 14, 1477-1498.	1.9	9
61	The Driving Force for 2014 Dengue Outbreak in Guangdong, China. PLoS ONE, 2016, 11, e0166211.	2.5	35
62	Modeling the Effects of Augmentation Strategies on the Control of Dengue Fever With an Impulsive Differential Equation. Bulletin of Mathematical Biology, 2016, 78, 1968-2010.	1.9	32
63	Modelling the scorpion stings using surveillance data in El Bayadh Province, Algeria. Asian Pacific Journal of Tropical Disease, 2016, 6, 961-968.	0.5	2
64	Dynamic analysis of discrete-time, continuous-time and delayed feedback jerky equations. Nonlinear Dynamics, 2016, 86, 107-130.	5.2	8
65	Analysis of a stochastic model for algal bloom with nutrient recycling. International Journal of Biomathematics, 2016, 09, 1650083.	2.9	9
66	Finite Cyclicity of Some Graphics Through a Nilpotent Point of Saddle Type Inside Quadratic Systems. Qualitative Theory of Dynamical Systems, 2016, 15, 237-256.	1.7	1
67	Modeling the spread and control of dengue with limited public health resources. Mathematical Biosciences, 2016, 271, 136-145.	1.9	84
68	Nilpotent singularities and dynamics in an SIR type of compartmental model with hospital resources. Journal of Differential Equations, 2016, 260, 4339-4365.	2.2	38
69	Trend in frequency of extreme precipitation events over Ontario from ensembles of multiple GCMs. Climate Dynamics, 2016, 46, 2909-2921.	3.8	21
70	Environmental risks in a diffusive SIS model incorporating use efficiency of the medical resource. Discrete and Continuous Dynamical Systems - Series B, 2016, 21, 1469-1481.	0.9	2
71	Complex dynamics of a nutrient-plankton system with nonlinear phytoplankton mortality and allelopathy. Discrete and Continuous Dynamical Systems - Series B, 2016, 21, 2703-2728.	0.9	9
72	Dynamical analysis of a toxin-producing phytoplankton-zooplankton model with refuge. Mathematical Biosciences and Engineering, 2016, 13, 10-10.	1.9	9

#	ARTICLE	IF	CITATIONS
73	Delay differential systems for tick population dynamics. <i>Journal of Mathematical Biology</i> , 2015, 71, 1017-1048.	1.9	27
74	A SIS reaction–diffusion–advection model in a low-risk and high-risk domain. <i>Journal of Differential Equations</i> , 2015, 259, 5486-5509.	2.2	131
75	Bifurcation of an SIS model with nonlinear contact rate. <i>Journal of Mathematical Analysis and Applications</i> , 2015, 432, 1119-1138.	1.0	24
76	The dynamics of temperature and light on the growth of phytoplankton. <i>Journal of Theoretical Biology</i> , 2015, 385, 8-19.	1.7	48
77	Multi-host transmission dynamics of schistosomiasis and its optimal control. <i>Mathematical Biosciences and Engineering</i> , 2015, 12, 983-1006.	1.9	19
78	Clustering of the abundance of West Nile virus vector mosquitoes in Peel Region, Ontario, Canada. <i>Environmental and Ecological Statistics</i> , 2014, 21, 651-666.	3.5	5
79	The Dynamics of Growing Islets and Transmission of Schistosomiasis Japonica in the Yangtze River. <i>Bulletin of Mathematical Biology</i> , 2014, 76, 1194-1217.	1.9	10
80	Bifurcations and complex dynamics of an SIR model with the impact of the number of hospital beds. <i>Journal of Differential Equations</i> , 2014, 257, 1662-1688.	2.2	100
81	Transmission dynamics of West Nile virus in mosquitoes and corvids and non-corvids. <i>Journal of Mathematical Biology</i> , 2014, 68, 1553-1582.	1.9	53
82	Epidemic models for complex networks with demographics. <i>Mathematical Biosciences and Engineering</i> , 2014, 11, 1295-1317.	1.9	47
83	A new model with delay for mosquito population dynamics. <i>Mathematical Biosciences and Engineering</i> , 2014, 11, 1395-1410.	1.9	12
84	The Bifurcation Study of 1:2 Resonance in a Delayed System of Two Coupled Neurons. <i>Journal of Dynamics and Differential Equations</i> , 2013, 25, 193-216.	1.9	11
85	Canard cycles for predator–prey systems with Holling types of functional response. <i>Journal of Differential Equations</i> , 2013, 254, 879-910.	2.2	81
86	Forecast of Dengue Incidence Using Temperature and Rainfall. <i>PLoS Neglected Tropical Diseases</i> , 2012, 6, e1908.	3.0	215
87	MODELING THE SCHISTOSOMIASIS ON THE ISLETS IN NANJING. <i>International Journal of Biomathematics</i> , 2012, 05, 1250037.	2.9	9
88	THE IMPACT OF RESOURCE AND TEMPERATURE ON MALARIA TRANSMISSION. <i>Journal of Biological Systems</i> , 2012, 20, 285-302.	1.4	5
89	Discrete time hedging with liquidity risk. <i>Finance Research Letters</i> , 2012, 9, 135-143.	6.7	8
90	The Impact of Weather Conditions on <i>Culex pipiens</i> and <i>Culex restuans</i> (Diptera: Culicidae) Abundance: A Case Study in Peel Region. <i>Journal of Medical Entomology</i> , 2011, 48, 468-475.	1.8	67

#	ARTICLE	IF	CITATIONS
91	Dynamics of a delay Schistosomiasis model in snail infections. <i>Mathematical Biosciences and Engineering</i> , 2011, 8, 1099-1115.	1.9	1
92	Existence and roughness of exponential dichotomies of linear dynamic equations on time scales. <i>Computers and Mathematics With Applications</i> , 2010, 59, 2658-2675.	2.7	47
93	Periodic solution of single population models on time scales. <i>Mathematical and Computer Modelling</i> , 2010, 52, 515-521.	2.0	16
94	Necessary and sufficient criteria for the existence of exponential dichotomy on time scales. <i>Computers and Mathematics With Applications</i> , 2010, 60, 2387-2398.	2.7	10
95	The backward bifurcation in compartmental models for West Nile virus. <i>Mathematical Biosciences</i> , 2010, 227, 20-28.	1.9	39
96	The impact of maturation delay of mosquitoes on the transmission of West Nile virus. <i>Mathematical Biosciences</i> , 2010, 228, 119-126.	1.9	47
97	Threshold Conditions for West Nile Virus Outbreaks. <i>Bulletin of Mathematical Biology</i> , 2009, 71, 627-647.	1.9	45
98	Modeling and Simulation Studies of West Nile Virus in Southern Ontario Canada. <i>Series in Contemporary Applied Mathematics</i> , 2009, , 331-343.	0.8	1
99	The Impact of Media on the Control of Infectious Diseases. <i>Journal of Dynamics and Differential Equations</i> , 2008, 20, 31-53.	1.9	305
100	Bifurcation analysis of a plant-herbivore model with toxin-determined functional response. <i>Journal of Differential Equations</i> , 2008, 245, 442-467.	2.2	46
101	LIMIT CYCLE BIFURCATIONS IN NEAR-HAMILTONIAN SYSTEMS BY PERTURBING A NILPOTENT CENTER. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2008, 18, 3013-3027.	1.7	27
102	An SIS Infection Model Incorporating Media Coverage. <i>Rocky Mountain Journal of Mathematics</i> , 2008, 38, .	0.4	179
103	Media/Psychological Impact on Multiple Outbreaks of Emerging Infectious Diseases. <i>Computational and Mathematical Methods in Medicine</i> , 2007, 8, 153-164.	1.3	226
104	The impact of prophylaxis of healthcare workers on influenza pandemic burden. <i>Journal of the Royal Society Interface</i> , 2007, 4, 727-734.	3.4	14
105	The loop quantities and bifurcations of homoclinic loops. <i>Journal of Differential Equations</i> , 2007, 234, 339-359.	2.2	25
106	Multiple Focus and Hopf Bifurcations in a Predator-Prey System with Nonmonotonic Functional Response. <i>SIAM Journal on Applied Mathematics</i> , 2006, 66, 802-819.	1.8	70
107	TRAVELING WAVES FOR AN INTEGRABLE HIGHER ORDER KDV TYPE WAVE EQUATIONS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2006, 16, 2235-2260.	1.7	42
108	Modeling spatial spread of west nile virus and impact of directional dispersal of birds. <i>Mathematical Biosciences and Engineering</i> , 2006, 3, 145-160.	1.9	48

#	ARTICLE	IF	CITATIONS
109	FROM THE PP-GRAPHICS TO THE FINITENESS PART OF HILBERT'S 16TH PROBLEM FOR QUADRATIC SYSTEMS. , 2005, , .		0
110	A mathematical model for assessing control strategies against West Nile virus. Bulletin of Mathematical Biology, 2005, 67, 1107-1133.	1.9	236
111	Fast and Slow Dynamics of Malaria and the S-gene Frequency. Journal of Dynamics and Differential Equations, 2004, 16, 869-896.	1.9	19
112	PP-graphics with a nilpotent elliptic singularity in quadratic systems and Hilbert's 16th problem. Journal of Differential Equations, 2004, 196, 169-208.	2.2	10
113	Critical Role of Nosocomial Transmission in the Toronto SARS Outbreak. Mathematical Biosciences and Engineering, 2004, 1, 1-13.	1.9	76
114	Bifurcation Analysis of a Predator-Prey System with Nonmonotonic Functional Response. SIAM Journal on Applied Mathematics, 2003, 63, 636-682.	1.8	190
115	Finite Cyclicity of Graphics with a Nilpotent Singularity of Saddle or Elliptic Type. Journal of Differential Equations, 2002, 178, 325-436.	2.2	31
116	The Dirichlet Problem for a Singular Singularly Perturbed Quasilinear Second Order Differential System. Journal of Mathematical Analysis and Applications, 1997, 210, 308-336.	1.0	2
117	A Singular Singularly Perturbed Boundary Value Problem of the Second Order Quasilinear Systems. Journal of Mathematical Analysis and Applications, 1994, 182, 320-347.	1.0	6
118	Efficacy of 'Stay-at-Home' Policy and Transmission of COVID-19 in Toronto, Canada: A Mathematical Modeling Study. SSRN Electronic Journal, 0, , .	0.4	2