Horst R Thieme

List of Publications by Year
in descending order

73 papers	5,196 citations	185998 28 h-index	98622 67 g-index
78 all docs	78 docs citations	78 times ranked	1733 citing authors

#	Article	IF	Citations
1	Convergence results and a Poincarï¿½-Bendixson trichotomy for asymptotically autonomous differential equations. Journal of Mathematical Biology, 1992, 30, 755.	0.8	537
2	Persistence under Relaxed Point-Dissipativity (with Application to an Endemic Model). SIAM Journal on Mathematical Analysis, 1993, 24, 407-435.	0.9	459
3	Spectral Bound and Reproduction Number for Infinite-Dimensional Population Structure and Time Heterogeneity. SIAM Journal on Applied Mathematics, 2009, 70, 188-211.	0.8	395
4	Asymptotic speeds of spread and traveling waves for integral equations and delayed reactionâ€“diffusion models. Journal of Differential Equations, 2003, 195, 430-470.	1.1	294
5	How May Infection-Age-Dependent Infectivity Affect the Dynamics of HIV/AIDS?. SIAM Journal on Applied Mathematics, 1993, 53, 1447-1479.	0.8	199
6	Uniform persistence and permanence for non-autonomous semiflows in population biology. Mathematical Biosciences, 2000, 166, 173-201.	0.9	198
7	Asymptotically autonomous semiflows: chain recurrence and Lyapunov functions. Transactions of the American Mathematical Society, 1995, 347, 1669-1685.	0.5	177
8	Stability of the endemic equilibrium in epidemic models with subpopulations. Mathematical Biosciences, 1985, 75, 205-227.	0.9	152
9	On the formulation and analysis of general deterministic structured population models. Journal of Mathematical Biology, 1998, 36, 349-388.	0.8	146
10	Recurrent outbreaks of childhood diseases revisited: The impact of isolation. Mathematical Biosciences, 1995, 128, 93-130.	0.9	126
11	Progression age enhanced backward bifurcation in an epidemic model with super-infection. Journal of Mathematical Biology, 2003, 46, 385-424.	0.8	122
12	Density-dependent regulation of spatially distributed populations and their asymptotic speed of spread. Journal of Mathematical Biology, 1979, 8, 173-187.	0.8	116
13	Strongly order preserving semiflows generated by functional differential equations. Journal of Differential Equations, 1991, 93, 332-363.	1.1	116
14	Asymptotically Autonomous Differential Equations in the Plane. Rocky Mountain Journal of Mathematics, 1993, 24, 351.	0.2	114
15	Global Behavior of an Age-Structured Epidemic Model. SIAM Journal on Mathematical Analysis, 1991, 22, 1065-1080.	0.9	108
16	A non-local delayed and diffusive predatorâ€“prey model. Nonlinear Analysis: Real World Applications, 2001, 2, 145-160.	0.9	102
17	Endemic Models with Arbitrarily Distributed Periods of Infection I: Fundamental Properties of the Model. SIAM Journal on Applied Mathematics, 2000, 61, 803-833.	0.8	100
18	Epidemic and demographic interaction in the spread of potentially fatal diseases in growing populations. Mathematical Biosciences, 1992, 111, 99-130.	0.9	96

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19	Convergence for Strongly Order-Preserving Semiflows. SIAM Journal on Mathematical Analysis, 1991, 22, 1081-1101.	0.9	89
20	Quasi Convergence and Stability for Strongly Order-Preserving Semiflows. SIAM Journal on Mathematical Analysis, 1990, 21, 673-692.	0.9	71
21	Uniform weak implies uniform strong persistence for non-autonomous semiflows. Proceedings of the American Mathematical Society, 1999, 127, 2395-2403.	0.4	60
22	Monotone semiflows in scalar non-quasi-monotone functional differential equations. Journal of Mathematical Analysis and Applications, 1990, 150, 289-306.	0.5	56
23	Endemic Models with Arbitrarily Distributed Periods of Infection II: Fast Disease Dynamics and Permanent Recovery. SIAM Journal on Applied Mathematics, 2000, 61, 983-1012.	0.8	56
24	Global stability of the endemic equilibrium in infinite dimension: Lyapunov functions and positive operators. Journal of Differential Equations, 2011, 250, 3772-3801.	1.1	56
25	Species decline and extinction: synergy of infectious disease and Allee effect?. Journal of Biological Dynamics, 2009, 3, 305-323.	0.8	50
26	On the Role of Variable Infectivity in the Dynamics of the Human Immunodeficiency Virus Epidemic. Lecture Notes in Biomathematics, 1989, , 157-176.	0.3	41
27	Positive perturbation of operator semigroups: growth bounds, essential compactness and asynchronous exponential growth. Discrete and Continuous Dynamical Systems, 1998, 4, 735-764.	0.5	37
28	Persistence of bacteria and phages in a chemostat. Journal of Mathematical Biology, 2012, 64, 951-979.	0.8	32
29	An endemic model with variable re-infection rate and applications to influenza. Mathematical Biosciences, 2002, 180, 207-235.	0.9	27
30	Differentiability of convolutions, integrated semigroups of bounded semi-variation, and the inhomogeneous Cauchy problem. Journal of Evolution Equations, 2008, 8, 283-305.	0.6	27
31	Delay differential systems for tick population dynamics. Journal of Mathematical Biology, 2015, 71, 1017-1048.	0.8	27
32	Remarks on resolvent positive operators and their perturbation. Discrete and Continuous Dynamical Systems, 1998, 4, 73-90.	0.5	23
33	On a class of Hammerstein integral equations. Manuscripta Mathematica, 1979, 29, 49-84.	0.3	22
34	Persistence and global stability for a class of discrete time structured population models. Discrete and Continuous Dynamical Systems, 2013, 33, 4627-4646.	0.5	21
35	An apparent paradox of horizontal and vertical disease transmission. Journal of Biological Dynamics, 2007, 1, 45-62.	0.8	19
36	Asymptotic proportionality (weak ergodicity) and conditional asymptotic equality of solutions to time-heterogeneous sublinear difference and differential equations. Journal of Differential Equations, 1988, 73, 237-268.	1.1	18

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37	LACK OF UNIQUENESS IN TRANSPORT EQUATIONS WITH A NONLOCAL NONLINEARITY. Mathematical Models and Methods in Applied Sciences, 2000, 10, 581-591.	1.7	18
38	Relatively Compact Orbits and Compact Attractors for a Class of Nonlinear Evolution Equations. Journal of Dynamics and Differential Equations, 2003, 15, 731-750.	1.0	18
39	A sharp threshold for disease persistence in host metapopulations. Journal of Biological Dynamics, 2007, 1, 363-378.	0.8	16
40	Persistence and Critical Domain Size for Diffusing Populations with Two Sexes and Short Reproductive Season. Journal of Dynamics and Differential Equations, 2016, 28, 689-705.	1.0	16
41	Chemostats and epidemics: Competition for nutrients/hosts. Mathematical Biosciences and Engineering, 2013, 10, 1635-1650.	1.0	15
42	Disease extinction and disease persistence in age structured epidemic models. Nonlinear Analysis: Theory, Methods & Applications, 2001, 47, 6181-6194.	0.6	14
43	Spectral Radii and Collatzâ€“Wielandt Numbers for Homogeneous Order-preserving Maps and the Monotone Companion Norm. Trends in Mathematics, 2016, , 415-467.	0.1	13
44	Markov Transition Functions and Semigroups of Measures. Semigroup Forum, 2007, 74, 337-369.	0.3	12
45	On Spread of Phage Infection of Bacteria in a Petri Dish. SIAM Journal on Applied Mathematics, 2012, 72, 670-688.	0.8	12
46	Persistence versus extinction for a class of discrete-time structured population models. Journal of Mathematical Biology, 2016, 72, 821-850.	0.8	12
47	From homogeneous eigenvalue problems to two-sex population dynamics. Journal of Mathematical Biology, 2017, 75, 783-804.	0.8	12
48	Measures under the flat norm as ordered normed vector space. Positivity, 2018, 22, 105-138.	0.3	12
49	Stability and persistence in ODE modelsfor populations with many stages. Mathematical Biosciences and Engineering, 2015, 12, 661-686.	1.0	12
50	Stability and Persistence in a Model for Bluetongue Dynamics. SIAM Journal on Applied Mathematics, 2011, 71, 1280-1306.	0.8	10
51	Eigenfunctionals of Homogeneous Order-Preserving Maps with Applications to Sexually Reproducing Populations. Journal of Dynamics and Differential Equations, 2016, 28, 1115-1144.	1.0	10
52	Kolmogorovâ€™s Differential Equations and Positive Semigroups on First Moment Sequence Spaces. Journal of Mathematical Biology, 2006, 53, 642-671.	0.8	9
53	A METAPOPULATION MODEL WITH DISCRETE SIZE STRUCTURE. Natural Resource Modelling, 2005, 18, 379-413.	0.8	8
54	Do fatal infectious diseases eradicate host species?. Journal of Mathematical Biology, 2018, 77, 2103-2164.	0.8	8

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55	Population dynamics under selection and mutation: Long-time behavior for differential equations in measure spaces. Journal of Differential Equations, 2016, 261, 1472-1505.	1.1	7
56	Persistence and extinction of diffusing populations with two sexes and short reproductive season. Discrete and Continuous Dynamical Systems - Series B, 2014, 19, 3209-3218.	0.5	7
57	On the boundedness and the asymptotic behaviour of the non-negative solutions of Volterra-Hammerstein integral equations. Manuscripta Mathematica, 1980, 31, 379-412.	0.3	6
58	An epidemic model with post-contact prophylaxis of distributed length I. Thresholds for disease persistence and extinction. Journal of Biological Dynamics, 2008, 2, 221-239.	0.8	6
59	Persistent Discrete-Time Dynamics on Measures. Springer Proceedings in Mathematics and Statistics, 2020, , 59-100.	0.1	6
60	Pathogen Competition and Coexistence and the Evolution of Virulence. , 2007, , 123-153.		5
61	Uniform Persistence in a Model for Bluetongue Dynamics. SIAM Journal on Mathematical Analysis, 2014, 46, 1160-1184.	0.9	5
62	The Transition Through Stages with Arbitrary Length Distributions, and Applications in Epidemics. The IMA Volumes in Mathematics and Its Applications, 2002, , 45-84.	0.5	4
63	Persistence of Vertically Transmitted Parasite Strains which Protect against More Virulent Horizontally Transmitted Strains. Series in Contemporary Applied Mathematics, 2009, , 187-215.	0.8	4
64	Spread of viral infection of immobilized bacteria. Networks and Heterogeneous Media, 2013, 8, 327-342.	0.5	4
65	Competition in the Chemostat with Time-Dependent Differential Removal Rates. Vietnam Journal of Mathematics, 2017, 45, 153-178.	0.4	3
66	How ticks keep ticking in the adversity of host immune reactions. Journal of Mathematical Biology, 2019, 78, 1331-1364.	0.8	3
67	Discrete-time dynamics of structured populations via Feller kernels. Discrete and Continuous Dynamical Systems - Series B, 2022, 27, 1091.	0.5	3
68	Discrete-time population dynamics of spatially distributed semelparous two-sex populations. Journal of Mathematical Biology, 2021, 83, 18.	0.8	3
69	Eigenvectors of homogeneous order-bounded order-preserving maps. Discrete and Continuous Dynamical Systems - Series B, 2017, 22, 1073-1097.	0.5	3
70	Perturbation of Transition Functions and a Feynman-Kac Formula for the Incorporation of Mortality. Positivity, 2007, 11, 299-318.	0.3	2
71	Numerical simulations of spread of rabies in a spatially distributed fox population. Mathematics and Computers in Simulation, 2019, 159, 161-182.	2.4	2
72	Spread of phage infection of bacteria in a petri dish. Discrete and Continuous Dynamical Systems - Series B, 2015, 21, 471-496.	0.5	2

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73	Numerical simulations of the spread of rabies in two-dimensional space. Applied Numerical Mathematics, 2019, 135, 87-98.	1.2	1