Pierre Magal

List of Publications by Year
in descending order

118 papers	3,495 citations	186265 28 h-index	161849 54 g-index
125 all docs	125 docs citations	125 times ranked	2212 citing authors

#	Article	IF	Citations
1	Global Attractors and Steady States for Uniformly Persistent Dynamical Systems. SIAM Journal on Mathematical Analysis, 2005, 37, 251-275.	1.9	419
2	Lyapunov functional and global asymptotic stability for an infection-age model. Applicable Analysis, 2010, 89, 1109-1140.	1.3	247
3	Understanding Unreported Cases in the COVID-19 Epidemic Outbreak in Wuhan, China, and the Importance of Major Public Health Interventions. Biology, 2020, 9, 50.	2.8	192
4	A COVID-19 epidemic model with latency period. Infectious Disease Modelling, 2020, 5, 323-337.	1.9	181
5	A model of antibiotic-resistant bacterial epidemics in hospitals. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13343-13348.	7.1	135
6	Modeling antibiotic resistance in hospitals: The impact of minimizing treatment duration. Journal of Theoretical Biology, 2007, 249, 487-499.	1.7	119
7	Different Modalities of Intercellular Membrane Exchanges Mediate Cell-to-cell P-glycoprotein Transfers in MCF-7 Breast Cancer Cells. Journal of Biological Chemistry, 2012, 287, 7374-7387.	3.4	114
8	Predicting the cumulative number of cases for the COVID-19 epidemic in China from early data. Mathematical Biosciences and Engineering, 2020, 17, 3040-3051.	1.9	108
9	The Impact of Different Antibiotic Regimens on the Emergence of Antimicrobial-Resistant Bacteria. PLoS ONE, 2008, 3, e4036.	2.5	92
10	Travelling wave solutions for an infection-age structured epidemic model with external supplies. Nonlinearity, 2011, 24, 2891-2911.	1.4	91
11	Travelling Wave Solutions in Multigroup Age-Structured Epidemic Models. Archive for Rational Mechanics and Analysis, 2010, 195, 311-331.	2.4	83
12	Hopf bifurcation for non-densely defined Cauchy problems. Zeitschrift Fur Angewandte Mathematik Und Physik, 2011, 62, 191-222.	1.4	74
13	Theory and Applications of Abstract Semilinear Cauchy Problems. Applied Mathematical Sciences (Switzerland), 2018, , .	0.8	73
14	Predicting the number of reported and unreported cases for the COVID-19 epidemics in China, South Korea, Italy, France, Germany and United Kingdom. Journal of Theoretical Biology, 2021, 509, 110501.	1.7	72
15	Essential growth rate for bounded linear perturbation of non-densely defined Cauchy problems. Journal of Mathematical Analysis and Applications, 2008, 341, 501-518.	1.0	69
16	Center manifolds for semilinear equations with non-dense domain and applications to Hopf bifurcation in age structured models. Memoirs of the American Mathematical Society, 2009, 202, 0-0.	0.9	69
17	On the Basic Reproduction Number of Reaction-Diffusion Epidemic Models. SIAM Journal on Applied Mathematics, 2019, 79, 284-304.	1.8	67
18	Two-Group Infection Age Model Including an Application to Nosocomial Infection. SIAM Journal on Applied Mathematics, 2013, 73, 1058-1095.	1.8	58

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19	Consequences of cell-to-cell P-glycoprotein transfer on acquired multidrug resistance in breast cancer: a cell population dynamics model. Biology Direct, 2011, 6, 5.	4.6	54
20	The parameter identification problem for SIR epidemic models: identifying unreported cases. Journal of Mathematical Biology, 2018, 77, 1629-1648.	1.9	53
21	A model for ovine brucellosis incorporating direct and indirect transmission. Journal of Biological Dynamics, 2010, 4, 2-11.	1.7	51
22	On a vector-host epidemic model with spatial structure. Nonlinearity, 2018, 31, 5589-5614.	1.4	48
23	SI epidemic model applied to COVID-19 data in mainland China. Royal Society Open Science, 2020, 7, 201878.	2.4	44
24	A Model of the 2014 Ebola Epidemic in West Africa with Contact Tracing. PLOS Currents, 2015, 7, .	1.4	44
25	Qualitative analysis and travelling wave solutions for the SI model with vertical transmission. Communications on Pure and Applied Analysis, 2012, 11, 97-113.	0.8	40
26	Final Size of an Epidemic for a Two-Group SIR Model. SIAM Journal on Applied Mathematics, 2016, 76, 2042-2059.	1.8	39
27	Hopf bifurcation in a size-structured population dynamic model with random growth. Journal of Differential Equations, 2009, 247, 956-1000.	2.2	37
28	Normal forms for semilinear equations with non-dense domain with applications to age structured models. Journal of Differential Equations, 2014, 257, 921-1011.	2.2	30
29	Modelling the transmission dynamics of meticillin-resistant Staphylococcus aureus in Beijing Tongren hospital. Journal of Hospital Infection, 2011, 79, 302-308.	2.9	29
30	Existence of Periodic Solutions for a State Dependent Delay Differential Equation. Journal of Differential Equations, 2000, 165, 61-95.	2.2	27
31	AN IN VITRO CELL POPULATION DYNAMICS MODEL INCORPORATING CELL SIZE, QUIESCENCE, AND CONTACT INHIBITION. Mathematical Models and Methods in Applied Sciences, 2011, 21, 871-892.	3.3	27
32	Perturbation of a Globally Stable Steady State and Uniform Persistence. Journal of Dynamics and Differential Equations, 2009, 21, 1-20.	1.9	26
33	Projectors on the generalized eigenspaces for functional differential equations using integrated semigroups. Journal of Differential Equations, 2008, 244, 1784-1809.	2.2	24
34	Integrated semigroups and parabolic equations. Part I: linear perturbation of almost sectorial operators. Journal of Evolution Equations, 2010, 10, 263-291.	1.1	24
35	Susceptible-infectious-recovered models revisited: From the individual level to the population level. Mathematical Biosciences, 2014, 250, 26-40.	1.9	24
36	Final size of a multi-group SIR epidemic model: Irreducible and non-irreducible modes of transmission. Mathematical Biosciences, 2018, 301, 59-67.	1.9	24

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37	Optimal Control of Harvesting in a Nonlinear Elliptic System Arising from Population Dynamics. Journal of Mathematical Analysis and Applications, 2001, 254, 571-586.	1.0	22
38	Sustained oscillations in an evolutionary epidemiological model of influenza A drift. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 965-992.	2.1	21
39	An Environmental Model of Honey Bee Colony Collapse Due to Pesticide Contamination. Bulletin of Mathematical Biology, 2019, 81, 4908-4931.	1.9	21
40	Mathematical Parameters of the COVID-19 Epidemic in Brazil and Evaluation of the Impact of Different Public Health Measures. Biology, 2020, 9, 220.	2.8	21
41	Asymptotic Behavior in a Salmonella Infection Model. Mathematical Modelling of Natural Phenomena, 2007, 2, 1-25.	2.4	20
42	Unreported Cases for Age Dependent COVID-19 Outbreak in Japan. Biology, 2020, 9, 132.	2.8	19
43	A model of Salmonella infection within industrial house hens. Journal of Theoretical Biology, 2006, 242, 755-763.	1.7	17
44	Turing and Turingâ€“Hopf Bifurcations for a Reaction Diffusion Equation with Nonlocal Advection. Journal of Nonlinear Science, 2018, 28, 1959-1997.	2.1	17
45	Oscillations in age-structured models of consumer-resource mutualisms. Discrete and Continuous Dynamical Systems - Series B, 2015, 21, 537-555.	0.9	16
46	Monotone abstract non-densely defined Cauchy problems applied to age structured population dynamic models. Journal of Mathematical Analysis and Applications, 2019, 479, 450-481.	1.0	15
47	Modeling Vaccine Efficacy for COVID-19 Outbreak in New York City. Biology, 2022, 11, 345.	2.8	15
48	Competition for light in forest population dynamics: From computer simulator to mathematical model. Journal of Theoretical Biology, 2017, 419, 290-304.	1.7	14
49	Identifying the number of unreported cases in SIR epidemic models. Mathematical Medicine and Biology, 2020, 37, 243-261.	1.2	14
50	Clarifying predictions for COVID-19 from testing data: The example of New York State. Infectious Disease Modelling, 2021, 6, 273-283.	1.9	14
51	Projectors on the Generalized Eigenspaces for Partial Differential Equations with Time Delay. Fields Institute Communications, 2013, , 353-390.	1.3	14
52	Predicting the Number of Reported and Unreported Cases for the COVID-19 Epidemic in South Korea, Italy, France and Germany. SSRN Electronic Journal, 0, , .	0.4	14
53	A robust phenomenological approach to investigate COVID-19 data for France. Mathematics in Applied Sciences and Engineering, 0, , 1-12.	0.8	13
54	A spatio-temporal model to describe the spread of Salmonella within a laying flock. Journal of Theoretical Biology, 2010, 267, 595-604.	1.7	12

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55	A spatial model of honey bee colony collapse due to pesticide contamination of foraging bees. Journal of Mathematical Biology, 2020, 80, 2363-2393.	1.9	12
56	What can we learn from COVID-19 data by using epidemic models with unidentified infectious cases?. Mathematical Biosciences and Engineering, 2021, 19, 537-594.	1.9	12
57	Analysis of a Model for Transfer Phenomena in Biological Populations. SIAM Journal on Applied Mathematics, 2009, 70, 40-62.	1.8	11
58	Normal Forms for an Age Structured Model. Journal of Dynamics and Differential Equations, 2016, 28, 733-761.	1.9	11
59	Effect of genetic resistance of the hen toSalmonellacarrier-state on incidence of bacterial contamination: synergy with vaccination. Veterinary Research, 2008, 39, 20.	3.0	11
60	Preface. Journal of Biological Dynamics, 2010, 4, 1-1.	1.7	10
61	Persistence of Exponential Trichotomy for Linear Operators: A Lyapunovâ€“Perron Approach. Journal of Dynamics and Differential Equations, 2016, 28, 93-126.	1.9	10
62	Large speed traveling waves for the Rosenzweigâ€“MacArthur predatorâ€“prey model with spatial diffusion. Physica D: Nonlinear Phenomena, 2021, 415, 132730.	2.8	10
63	Hopf bifurcation for a spatially and age structured population dynamics model. Discrete and Continuous Dynamical Systems - Series B, 2015, 20, 1735-1757.	0.9	9
64	A cellâ€“cell repulsion model on a hyperbolic Kellerâ€“Segel equation. Journal of Mathematical Biology, 2020, 80, 2257-2300.	1.9	9
65	Semilinear Cauchy Problems with Non-dense Domain. Applied Mathematical Sciences (Switzerland), 2018, , 217-248.	0.8	9
66	Hopf bifurcation in an age-structured population model with two delays. Communications on Pure and Applied Analysis, 2015, 14, 657-676.	0.8	8
67	Predicting the Cumulative Number of Cases for the COVID-19 Epidemic in China from Early Data. SSRN Electronic Journal, 0, , .	0.4	8
68	Hopf Bifurcation for a Maturity Structured Population Dynamic Model. Journal of Nonlinear Science, 2011, 21, 521-562.	2.1	7
69	Asymptotic Behavior of a Nonlocal Diffusive Logistic Equation. SIAM Journal on Mathematical Analysis, 2014, 46, 1731-1753.	1.9	7
70	A Finite-time Condition for Exponential Trichotomy in Infinite Dynamical Systems. Canadian Journal of Mathematics, 2015, 67, 1065-1090.	0.6	7
71	Bogdanovâ€“Takens bifurcation in a predatorâ€“prey model. Zeitschrift Fur Angewandte Mathematik Und Physik, 2016, 67, 1.	1.4	7
72	Singular perturbation for an abstract non-densely defined Cauchy problem. Journal of Evolution Equations, 2017, 17, 1089-1128.	1.1	7

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73	Controllability with Positivity Constraints of the Lotka--McKendrick System. SIAM Journal on Control and Optimization, 2018, 56, 723-750.	2.1	7
74	Hopf bifurcation for a size-structured model with resting phase. Discrete and Continuous Dynamical Systems, 2013, 33, 4891-4921.	0.9	7
75	A system of state-dependent delay differential equation modelling forest growth II: Boundedness of solutions. Nonlinear Analysis: Real World Applications, 2018, 42, 334-352.	1.7	6
76	A Model of Vaccination for Dengue in the Philippines 2016â€“2018. Frontiers in Applied Mathematics and Statistics, 2021, 7, .	1.3	6
77	Mutation and recombination in a model of phenotype evolution. Journal of Evolution Equations, 2002, 2, 21-39.	1.1	5
78	A center manifold for second order semilinear differential equations on the real line and applications to the existence of wave trains for the Gurtinâ€“McCamy equation. Transactions of the American Mathematical Society, 2019, 372, 3487-3537.	0.9	5
79	Existence and uniqueness of solutions for a hyperbolic Kellerï¿½CSegel equation. Discrete and Continuous Dynamical Systems - Series B, 2021, 26, 1931-1966.	0.9	5
80	Spatial spread of epidemic diseases in geographical settings: Seasonal influenza epidemics in Puerto Rico. Discrete and Continuous Dynamical Systems - Series B, 2020, 25, 2185-2202.	0.9	5
81	Projectors on the Generalized Eigenspaces for Neutral Functional Differential Equations in L^p Spaces. Canadian Journal of Mathematics, 2010, 62, 74-93.	0.6	4
82	A Holling Predator-Prey Model with Handling and Searching Predators. SIAM Journal on Applied Mathematics, 2020, 80, 1778-1795.	1.8	4
83	NONLINEAR BOUNDARY CONDITIONS DERIVED BY SINGULAR PERTUBATION IN AGE STRUCTURED POPULATION DYNAMICS MODEL. Journal of Applied Analysis and Computation, 2011, 1, 373-395.	0.5	4
84	Multiple travelling waves for an SI-epidemic model. Networks and Heterogeneous Media, 2013, 8, 171-190.	1.1	4
85	Variation of constants formula andÂexponential dichotomy for nonautonomous non-densely defined Cauchy problems. Canadian Journal of Mathematics, 2021, 73, 1347-1389.	0.6	4
86	Bogdanovâ€“Takens bifurcation in a predatorâ€“prey model with age structure. Zeitschrift Fur Angewandte Mathematik Und Physik, 2021, 72, 1.	1.4	3
87	Sharp discontinuous traveling waves in a hyperbolic Kellerâ€“Segel equation. Mathematical Models and Methods in Applied Sciences, 2021, 31, 861-905.	3.3	3
88	Understanding Unreported Cases in the 2019-Ncov Epidemic Outbreak in Wuhan, China, and the Importance of Major Public Health Interventions (ä¸½å›½æ¦‚æ‰‰æ–°å† ç–«æƒ…ä¸æœªæŠ¥å‘Šæ¡ˆä¾‹åˆ†æžä¸Žé‡è¦å…¬å…	0.4	3
89	A Uniqueness Result for Nontrivial Steady States of a Density-dependent Population Dynamics Model. Journal of Mathematical Analysis and Applications, 1999, 233, 148-168.	1.0	2
90	A Model for Transfer of P-Glycoproteins in MCF-7 Breast Cancer Cell Line with Multiple Transfer Rules. Bulletin of Mathematical Biology, 2017, 79, 2049-2067.	1.9	2

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91	Numerical simulations of a population dynamic model describing parasite destruction in a wild type pine forest. Ecological Complexity, 2018, 34, 147-160.	2.9	2
92	A system of state-dependent delay differential equation modeling forest growth I: semiflow properties. Journal of Evolution Equations, 2018, 18, 1853-1888.	1.1	2
93	Persistence of a normally hyperbolic manifold for a system of non densely defined Cauchy problems. Journal of Differential Equations, 2019, 267, 2950-3008.	2.2	2
94	Direct and indirect P-glycoprotein transfers in MCF7 breast cancer cells. Journal of Theoretical Biology, 2019, 461, 239-253.	1.7	2
95	An integrated semigroup approach for age structured equations with diffusion and non-homogeneous boundary conditions. Nonlinear Differential Equations and Applications, 2021, 28, 1.	0.8	2
96	Global stability for differential equations with homogeneous nonlinearity and application to population dynamics. Discrete and Continuous Dynamical Systems - Series B, 2002, 2, 541-560.	0.9	2
97	Functional differential equation with infinite delay in a space of exponentially bounded and uniformly continuous functions. Discrete and Continuous Dynamical Systems - Series B, 2020, 25, 2271-2292.	0.9	2
98	Real-Time Prediction of the End of an Epidemic Wave: COVID-19 in China as a Case-Study. Fields Institute Communications, 2022, , 173-195.	1.3	2
99	Influence of Routine Slaughtering on the Evolution of BSE: Example of British and French Slaughterings. Risk Analysis, 2007, 27, 1151-1167.	2.7	1
100	Age-Structured Models. Applied Mathematical Sciences (Switzerland), 2018, , 357-449.	0.8	1
101	Positively invariant subset for non-densely defined Cauchy problems. Journal of Mathematical Analysis and Applications, 2021, 494, 124600.	1.0	1
102	Asymptotic Behavior of a Nonlocal Advection System with Two Populations. Journal of Dynamics and Differential Equations, 0, , 1.	1.9	1
103	What Can We Learn from COVID-19 Data by Using Epidemic Models with Unidentified Infectious Cases?. SSRN Electronic Journal, 0, , .	0.4	1
104	Modeling epidemic outbreaks in geographical regions: Seasonal influenza in Puerto Rico. Discrete and Continuous Dynamical Systems - Series S, 2018, .	1.1	1
105	Return-to-home model for short-range human travel. Mathematical Biosciences and Engineering, 2022, 19, 7737-7755.	1.9	1
106	Corrigendum to â€œModelling the transmission dynamics of meticillin-resistant Staphylococcus aureus in Beijing Tongren hospitalâ€•[Journal of Hospital Infection 2011;79:302â€“308]. Journal of Hospital Infection, 2012, 81, 141.	2.9	0
107	Functional Differential Equations. Applied Mathematical Sciences (Switzerland), 2018, , 309-356.	0.8	0
108	Integrated Semigroups and Cauchy Problems with Non-dense Domain. Applied Mathematical Sciences (Switzerland), 2018, , 101-164.	0.8	0

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109	Clarifying Predictions for COVID-19 from Testing Data: The Example of New York State. SSRN Electronic Journal, 0, , .	0.4	0
110	SI Epidemic Model Applied to COVID-19 Data in Mainland China. SSRN Electronic Journal, 0, , .	0.4	0
111	Qualitative analysis of a model for co-culture of bacteria and amoebae. Mathematical Biosciences and Engineering, 2012, 9, 259-279.	1.9	0
112	Parabolic Equations. Applied Mathematical Sciences (Switzerland), 2018, , 451-521.	0.8	0
113	Center Manifolds, Hopf Bifurcation, and Normal Forms. Applied Mathematical Sciences (Switzerland), 2018, , 249-308.	0.8	0
114	Spectral Theory for Linear Operators. Applied Mathematical Sciences (Switzerland), 2018, , 165-216.	0.8	0
115	Semigroups and Hille-Yosida Theorem. Applied Mathematical Sciences (Switzerland), 2018, , 57-99.	0.8	0
116	Preface: Population dynamics in epidemiology and ecology. Discrete and Continuous Dynamical Systems - Series B, 2020, 25, â...°-â...±.	0.9	0
117	Global Analysis of SARS-CoV-2 Mitigation Impact Reveals an Arabian Peninsula Cluster with High Infection Rates and Shared Indicators. SSRN Electronic Journal, 0, , .	0.4	0
118	Unreported Cases for Age Dependent COVID-19 Outbreak in Japan. SSRN Electronic Journal, 0, , .	0.4	0