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	Modeling Vaccine Efficacy for COVID-19 Outbreak in New York City. Biology, 2022, 11, 345.	2.8	15
2	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
3	Return-to-home model for short-range human travel. Mathematical Biosciences and Engineering, 2022, 19, 7737-7755.	1.9	1
4	Large speed traveling waves for the Rosenzweigâ€“MacArthur predatorâ€“prey model with spatial diffusion. Physica D: Nonlinear Phenomena, 2021, 415, 132730.	2.8	10
5	Bogdanovâ€“Takens bifurcation in a predatorâ€“prey model with age structure. Zeitschrift Fur Angewandte Mathematik Und Physik, 2021, 72, 1.	1.4	3
6	Positively invariant subset for non-densely defined Cauchy problems. Journal of Mathematical Analysis and Applications, 2021, 494, 124600.	1.0	1
7	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
8	Clarifying predictions for COVID-19 from testing data: The example of New York State. Infectious Disease Modelling, 2021, 6, 273-283.	1.9	14
9	Sharp discontinuous traveling waves in a hyperbolic Kellerâ€“Segel equation. Mathematical Models and Methods in Applied Sciences, 2021, 31, 861-905.	3.3	3
10	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
11	A Model of Vaccination for Dengue in the Philippines 2016â€“2018. Frontiers in Applied Mathematics and Statistics, 2021, 7, .	1.3	6
12	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
13	Variation of constants formula andÂexponential dichotomy for nonautonomous non-densely defined Cauchy problems. Canadian Journal of Mathematics, 2021, 73, 1347-1389.	0.6	4
14	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
15	Identifying the number of unreported cases in SIR epidemic models. Mathematical Medicine and Biology, 2020, 37, 243-261.	1.2	14
16	A Holling Predator-Prey Model with Handling and Searching Predators. SIAM Journal on Applied Mathematics, 2020, 80, 1778-1795.	1.8	4
17	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
18	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

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19	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
20	Unreported Cases for Age Dependent COVID-19 Outbreak in Japan. Biology, 2020, 9, 132.	2.8	19
21	A COVID-19 epidemic model with latency period. Infectious Disease Modelling, 2020, 5, 323-337.	1.9	181
22	A cellâ€“cell repulsion model on a hyperbolic Kellerâ€“Segel equation. Journal of Mathematical Biology, 2020, 80, 2257-2300.	1.9	9
23	SI epidemic model applied to COVID-19 data in mainland China. Royal Society Open Science, 2020, 7, 201878.	2.4	44
24	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
25	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
26	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
27	Preface: Population dynamics in epidemiology and ecology. Discrete and Continuous Dynamical Systems - Series B, 2020, 25, â…°-â…±.	0.9	0
28	An Environmental Model of Honey Bee Colony Collapse Due to Pesticide Contamination. Bulletin of Mathematical Biology, 2019, 81, 4908-4931.	1.9	21
29	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
30	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
31	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
32	On the Basic Reproduction Number of Reaction-Diffusion Epidemic Models. SIAM Journal on Applied Mathematics, 2019, 79, 284-304.	1.8	67
33	Direct and indirect P-glycoprotein transfers in MCF7 breast cancer cells. Journal of Theoretical Biology, 2019, 461, 239-253.	1.7	2
34	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
35	The parameter identification problem for SIR epidemic models: identifying unreported cases. Journal of Mathematical Biology, 2018, 77, 1629-1648.	1.9	53
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	Controllability with Positivity Constraints of the Lotka--McKendrick System. SIAM Journal on Control and Optimization, 2018, 56, 723-750.	2.1	7
38	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
39	Age-Structured Models. Applied Mathematical Sciences (Switzerland), 2018, , 357-449.	0.8	1
40	On a vector-host epidemic model with spatial structure. Nonlinearity, 2018, 31, 5589-5614.	1.4	48
41	Theory and Applications of Abstract Semilinear Cauchy Problems. Applied Mathematical Sciences (Switzerland), 2018, , .	0.8	73
42	Functional Differential Equations. Applied Mathematical Sciences (Switzerland), 2018, , 309-356.	0.8	0
43	Integrated Semigroups and Cauchy Problems with Non-dense Domain. Applied Mathematical Sciences (Switzerland), 2018, , 101-164.	0.8	0
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	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
46	Modeling epidemic outbreaks in geographical regions: Seasonal influenza in Puerto Rico. Discrete and Continuous Dynamical Systems - Series S, 2018, .	1.1	1
47	Parabolic Equations. Applied Mathematical Sciences (Switzerland), 2018, , 451-521.	0.8	0
48	Semilinear Cauchy Problems with Non-dense Domain. Applied Mathematical Sciences (Switzerland), 2018, , 217-248.	0.8	9
49	Center Manifolds, Hopf Bifurcation, and Normal Forms. Applied Mathematical Sciences (Switzerland), 2018, , 249-308.	0.8	0
50	Spectral Theory for Linear Operators. Applied Mathematical Sciences (Switzerland), 2018, , 165-216.	0.8	0
51	Semigroups and Hille-Yosida Theorem. Applied Mathematical Sciences (Switzerland), 2018, , 57-99.	0.8	0
52	Competition for light in forest population dynamics: From computer simulator to mathematical model. Journal of Theoretical Biology, 2017, 419, 290-304.	1.7	14
53	Singular perturbation for an abstract non-densely defined Cauchy problem. Journal of Evolution Equations, 2017, 17, 1089-1128.	1.1	7
54	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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55	Bogdanovâ€“Takens bifurcation in a predatorâ€“prey model. Zeitschrift Fur Angewandte Mathematik Und Physik, 2016, 67, 1.	1.4	7
56	Final Size of an Epidemic for a Two-Group SIR Model. SIAM Journal on Applied Mathematics, 2016, 76, 2042-2059.	1.8	39
57	Normal Forms for an Age Structured Model. Journal of Dynamics and Differential Equations, 2016, 28, 733-761.	1.9	11
58	Persistence of Exponential Trichotomy for Linear Operators: A Lyapunovâ€“Perron Approach. Journal of Dynamics and Differential Equations, 2016, 28, 93-126.	1.9	10
59	Hopf bifurcation in an age-structured population model with two delays. Communications on Pure and Applied Analysis, 2015, 14, 657-676.	0.8	8
60	A Finite-time Condition for Exponential Trichotomy in Infinite Dynamical Systems. Canadian Journal of Mathematics, 2015, 67, 1065-1090.	0.6	7
61	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
62	A Model of the 2014 Ebola Epidemic in West Africa with Contact Tracing. PLOS Currents, 2015, 7, .	1.4	44
63	Oscillations in age-structured models of consumer-resource mutualisms. Discrete and Continuous Dynamical Systems - Series B, 2015, 21, 537-555.	0.9	16
64	Susceptible-infectious-recovered models revisited: From the individual level to the population level. Mathematical Biosciences, 2014, 250, 26-40.	1.9	24
65	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
66	Asymptotic Behavior of a Nonlocal Diffusive Logistic Equation. SIAM Journal on Mathematical Analysis, 2014, 46, 1731-1753.	1.9	7
67	Two-Group Infection Age Model Including an Application to Nosocomial Infection. SIAM Journal on Applied Mathematics, 2013, 73, 1058-1095.	1.8	58
68	Projectors on the Generalized Eigenspaces for Partial Differential Equations with Time Delay. Fields Institute Communications, 2013, , 353-390.	1.3	14
69	Hopf bifurcation for a size-structured model with resting phase. Discrete and Continuous Dynamical Systems, 2013, 33, 4891-4921.	0.9	7
70	Multiple travelling waves for an SI-epidemic model. Networks and Heterogeneous Media, 2013, 8, 171-190.	1.1	4
71	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
72	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

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73	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
74	Qualitative analysis of a model for co-culture of bacteria and amoebae. Mathematical Biosciences and Engineering, 2012, 9, 259-279.	1.9	0
75	Modelling the transmission dynamics of meticillin-resistant Staphylococcus aureus in Beijing Tongren hospital. Journal of Hospital Infection, 2011, 79, 302-308.	2.9	29
76	Hopf Bifurcation for a Maturity Structured Population Dynamic Model. Journal of Nonlinear Science, 2011, 21, 521-562.	2.1	7
77	Hopf bifurcation for non-densely defined Cauchy problems. Zeitschrift Fur Angewandte Mathematik Und Physik, 2011, 62, 191-222.	1.4	74
78	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
79	Travelling wave solutions for an infection-age structured epidemic model with external supplies. Nonlinearity, 2011, 24, 2891-2911.	1.4	91
80	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
81	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
82	Integrated semigroups and parabolic equations. Part I: linear perburbation of almost sectorial operators. Journal of Evolution Equations, 2010, 10, 263-291.	1.1	24
83	Travelling Wave Solutions in Multigroup Age-Structured Epidemic Models. Archive for Rational Mechanics and Analysis, 2010, 195, 311-331.	2.4	83
84	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
85	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
86	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
87	A model for ovine brucellosis incorporating direct and indirect transmission. Journal of Biological Dynamics, 2010, 4, 2-11.	1.7	51
88	Preface. Journal of Biological Dynamics, 2010, 4, 1-1.	1.7	10
89	Lyapunov functional and global asymptotic stability for an infection-age model. Applicable Analysis, 2010, 89, 1109-1140.	1.3	247
90	Hopf bifurcation in a size-structured population dynamic model with random growth. Journal of Differential Equations, 2009, 247, 956-1000.	2.2	37

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91	Perturbation of a Globally Stable Steady State and Uniform Persistence. Journal of Dynamics and Differential Equations, 2009, 21, 1-20.	1.9	26
92	Analysis of a Model for Transfer Phenomena in Biological Populations. SIAM Journal on Applied Mathematics, 2009, 70, 40-62.	1.8	11
93	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
94	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
95	Projectors on the generalized eigenspaces for functional differential equations using integrated semigroups. Journal of Differential Equations, 2008, 244, 1784-1809.	2.2	24
96	The Impact of Different Antibiotic Regimens on the Emergence of Antimicrobial-Resistant Bacteria. PLoS ONE, 2008, 3, e4036.	2.5	92
97	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
98	Asymptotic Behavior in a Salmonella Infection Model. Mathematical Modelling of Natural Phenomena, 2007, 2, 1-25.	2.4	20
99	Modeling antibiotic resistance in hospitals: The impact of minimizing treatment duration. Journal of Theoretical Biology, 2007, 249, 487-499.	1.7	119
100	Influence of Routine Slaughtering on the Evolution of BSE: Example of British and French Slaughterings. Risk Analysis, 2007, 27, 1151-1167.	2.7	1
101	A model of Salmonella infection within industrial house hens. Journal of Theoretical Biology, 2006, 242, 755-763.	1.7	17
102	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
103	Global Attractors and Steady States for Uniformly Persistent Dynamical Systems. SIAM Journal on Mathematical Analysis, 2005, 37, 251-275.	1.9	419
104	Mutation and recombination in a model of phenotype evolution. Journal of Evolution Equations, 2002, 2, 21-39.	1.1	5
105	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
106	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
107	Existence of Periodic Solutions for a State Dependent Delay Differential Equation. Journal of Differential Equations, 2000, 165, 61-95.	2.2	27
108	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

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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	Asymptotic Behavior of a Nonlocal Advection System with Two Populations. Journal of Dynamics and Differential Equations, 0, , 1.	1.9	1
111	A robust phenomenological approach to investigate COVID-19 data for France. Mathematics in Applied Sciences and Engineering, 0, , 1-12.	0.8	13
112	SI Epidemic Model Applied to COVID-19 Data in Mainland China. SSRN Electronic Journal, 0, , .	0.4	0
113	What Can We Learn from COVID-19 Data by Using Epidemic Models with Unidentified Infectious Cases?. SSRN Electronic Journal, 0, , .	0.4	1
114	Predicting the Cumulative Number of Cases for the COVID-19 Epidemic in China from Early Data. SSRN Electronic Journal, 0, , .	0.4	8
115	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
116	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
117	Understanding Unreported Cases in the 2019-Ncov Epidemic Outbreak in Wuhan, China, and the Importance of Major Public Health Interventions (ä¸å›½æ¦‚æ±‰è–¯å†ç–«æƒ…ä¸æœªæŠ¥å‘Šæœ‰ç—…ä¾‹çš„é‡è¦å…¬å…	0.4	3
118	Unreported Cases for Age Dependent COVID-19 Outbreak in Japan. SSRN Electronic Journal, 0, , .	0.4	0