Rashid Jan

List of Publications by Year
in descending order

105 papers	2,876 citations	186265 28 h-index	223800 46 g-index
107 all docs	107 docs citations	107 times ranked	2410 citing authors

#	Article	IF	Citations
1	The effectiveness of quarantine and isolation determine the trend of the COVID-19 epidemics in the final phase of the current outbreak in China. International Journal of Infectious Diseases, 2020, 95, 288-293.	3.3	212
2	Media impact switching surface during an infectious disease outbreak. Scientific Reports, 2015, 5, 7838.	3.3	138
3	Dynamics of an infectious diseases with media/psychology induced non-smooth incidence. Mathematical Biosciences and Engineering, 2013, 10, 445-461.	1.9	118
4	Modeling the impact of mass influenza vaccination and public health interventions on COVID-19 epidemics with limited detection capability. Mathematical Biosciences, 2020, 325, 108378.	1.9	109
5	Sliding Mode Control of Outbreaks of Emerging Infectious Diseases. Bulletin of Mathematical Biology, 2012, 74, 2403-2422.	1.9	95
6	Modeling the Epidemic Trend of the 2019 Novel Coronavirus Outbreak in China. Innovation(China), 2020, 1, 100048.	9.1	92
7	A Filippov system describing media effects on the spread of infectious diseases. Nonlinear Analysis: Hybrid Systems, 2014, 11, 84-97.	3.5	83
8	Assessing the effects of metropolitan-wide quarantine on the spread of COVID-19 in public space and households. International Journal of Infectious Diseases, 2020, 96, 503-505.	3.3	82
9	Holling II predator–prey impulsive semi-dynamic model with complex Poincaré map. Nonlinear Dynamics, 2015, 81, 1575-1596.	5.2	78
10	Projected COVID-19 epidemic in the United States in the context of the effectiveness of a potential vaccine and implications for social distancing and face mask use. Vaccine, 2021, 39, 2295-2302.	3.8	72
11	Modeling of measles epidemic with optimized fractional order under Caputo differential operator. Chaos, Solitons and Fractals, 2021, 145, 110766.	5.1	62
12	Fractional order mathematical model of monkeypox transmission dynamics. Physica Scripta, 2022, 97, 084005.	2.5	61
13	Measuring the impact of air pollution on respiratory infection risk in China. Environmental Pollution, 2018, 232, 477-486.	7.5	59
14	Modeling the transmission of dengue infection through fractional derivatives. Chaos, Solitons and Fractals, 2019, 127, 189-216.	5.1	56
15	Global stability of an infection-age structured HIV-1 model linking within-host and between-host dynamics. Mathematical Biosciences, 2015, 263, 37-50.	1.9	55
16	Asymptomatic carriers in transmission dynamics of dengue with control interventions. Optimal Control Applications and Methods, 2020, 41, 430-447.	2.1	49
17	Predicting the HIV/AIDS epidemic and measuring the effect of mobility in mainland China. Journal of Theoretical Biology, 2013, 317, 271-285.	1.7	46
18	Modeling antiretroviral drug responses for HIV-1 infected patients using differential equation models. Advanced Drug Delivery Reviews, 2013, 65, 940-953.	13.7	45

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19	Effect of partial immunity on transmission dynamics of dengue disease with optimal control. Mathematical Methods in the Applied Sciences, 2019, 42, 1967-1983.	2.3	42
20	Implication of vaccination against dengue for Zika outbreak. Scientific Reports, 2016, 6, 35623.	3.3	36
21	Fractional-calculus analysis of the transmission dynamics of the dengue infection. Chaos, 2021, 31, 053130.	2.5	36
22	Modelling weekly vector control against Dengue in the Guangdong Province of China. Journal of Theoretical Biology, 2016, 410, 65-76.	1.7	35
23	Modelling the effects of contaminated environments on HFMD infections in mainland China. BioSystems, 2016, 140, 1-7.	2.0	34
24	Fractional Dynamics of HIV with Source Term for the Supply of New CD4+ T-Cells Depending on the Viral Load via Caputo–Fabrizio Derivative. Molecules, 2021, 26, 1806.	3.8	34
25	Optimal control and cost-effectiveness analysis for dengue fever model with asymptomatic and partial immune individuals. Results in Physics, 2021, 31, 104919.	4.1	33
26	Modeling the effect of comprehensive interventions on Ebola virus transmission. Scientific Reports, 2015, 5, 15818.	3.3	32
27	Global hopf bifurcation of a delayed equation describing the lag effect of media impact on the spread of infectious disease. Journal of Mathematical Biology, 2018, 76, 1249-1267.	1.9	32
28	Analysis of Hybrid Nanofluid Stagnation Point Flow over a Stretching Surface with Melting Heat Transfer. Mathematical Problems in Engineering, 2022, 2022, 1-12.	1.1	31
29	Impact of Hospital Bed Shortages on the Containment of COVID-19 in Wuhan. International Journal of Environmental Research and Public Health, 2020, 17, 8560.	2.6	30
30	A general model of hormesis in biological systems and its application to pest management. Journal of the Royal Society Interface, 2019, 16, 20190468.	3.4	29
31	Modeling the dynamics of tumor–immune cells interactions via fractional calculus. European Physical Journal Plus, 2022, 137, 1.	2.6	28
32	A Feedback Control Model of Comprehensive Therapy for Treating Immunogenic Tumours. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2016, 26, 1650039.	1.7	27
33	Modelling disease spread in dispersal networks at two levels. Mathematical Medicine and Biology, 2011, 28, 227-244.	1.2	26
34	Stochastic Modelling of Air Pollution Impacts on Respiratory Infection Risk. Bulletin of Mathematical Biology, 2018, 80, 3127-3153.	1.9	25
35	The cost-effectiveness of oral HIV pre-exposure prophylaxis and early antiretroviral therapy in the presence of drug resistance among men who have sex with men in San Francisco. BMC Medicine, 2018, 16, 58.	5.5	25
36	Analysis of fractional-order dynamics of dengue infection with non-linear incidence functions. Transactions of the Institute of Measurement and Control, 2022, 44, 2630-2641.	1.7	25

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37	SLIDING BIFURCATION AND GLOBAL DYNAMICS OF A FILIPPOV EPIDEMIC MODEL WITH VACCINATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350144.	1.7	24
38	A new model of dengue fever in terms of fractional derivative. Mathematical Biosciences and Engineering, 2020, 17, 5267-5287.	1.9	24
39	Lessons drawn from China and South Korea for managing COVID-19 epidemic: Insights from a comparative modeling study. ISA Transactions, 2022, 124, 164-175.	5.7	24
40	Optimal media reporting intensity on mitigating spread of an emerging infectious disease. PLoS ONE, 2019, 14, e0213898.	2.5	23
41	Analysis of an Epidemic System with Two Response Delays in Media Impact Function. Bulletin of Mathematical Biology, 2019, 81, 1582-1612.	1.9	22
42	Linking key intervention timing to rapid decline of the COVID-19 effective reproductive number to quantify lessons from mainland China. International Journal of Infectious Diseases, 2020, 97, 296-298.	3.3	22
43	Dynamical analysis of the transmission of dengue fever via Caputo-Fabrizio fractional derivative. Chaos, Solitons and Fractals: X, 2022, 8, 100072.	2.1	22
44	Analysis and dynamical behavior of a novel dengue model via fractional calculus. International Journal of Biomathematics, 2022, 15, .	2.9	22
45	Model Selection and Evaluation Based on Emerging Infectious Disease Data Sets including A/H1N1 and Ebola. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-14.	1.3	21
46	Quantifying competitive advantages of mutant strains in a population involving importation and mass vaccination rollout. Infectious Disease Modelling, 2021, 6, 988-996.	1.9	21
47	Bioconvection Due to Gyrotactic Microorganisms in Couple Stress Hybrid Nanofluid Laminar Mixed Convection Incompressible Flow with Magnetic Nanoparticles and Chemical Reaction as Carrier for Targeted Drug Delivery through Porous Stretching Sheet. Molecules, 2021, 26, 3954.	3.8	21
48	A Predator–Prey Model with Prey Population Guided Anti-Predator Behavior. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750099.	1.7	20
49	Modelling the impact of antibody-dependent enhancement on disease severity of Zika virus and dengue virus sequential and co-infection. Royal Society Open Science, 2020, 7, 191749.	2.4	20
50	Effects of medical resource capacities and intensities of public mitigation measures on outcomes of COVID-19 outbreaks. BMC Public Health, 2021, 21, 605.	2.9	19
51	A combination of climatic conditions determines major within-season dengue outbreaks in Guangdong Province, China. Parasites and Vectors, 2019, 12, 45.	2.5	18
52	Conflict and accord of optimal treatment strategies for HIV infection within and between hosts. Mathematical Biosciences, 2019, 309, 107-117.	1.9	17
53	Modeling and Analysis of Breast Cancer with Adverse Reactions of Chemotherapy Treatment through Fractional Derivative. Computational and Mathematical Methods in Medicine, 2022, 2022, 1-19.	1.3	17
54	Global Stability of a Multi-group SVEIR Epidemiological Model with the Vaccination Age and Infection Age. Acta Applicandae Mathematicae, 2016, 144, 137-157.	1.0	16

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55	Mass testing—An underexplored strategy for COVID-19 control. Innovation(China), 2021, 2, 100114.	9.1	16
56	Chaotic Phenomena and Oscillations in Dynamical Behaviour of Financial System via Fractional Calculus. Complexity, 2022, 2022, 1-14.	1.6	16
57	When to lift the lockdown in Hubei province during COVID-19 epidemic? An insight from a patch model and multiple source data. Journal of Theoretical Biology, 2020, 507, 110469.	1.7	15
58	Effects of New York's Executive Order on Face Mask Use on COVID-19 Infections and Mortality: A Modeling Study. Journal of Urban Health, 2021, 98, 197-204.	3.6	15
59	Multiple Equilibria in a Non-smooth Epidemic Model with Medical-Resource Constraints. Bulletin of Mathematical Biology, 2019, 81, 963-994.	1.9	14
60	A two-thresholds policy to interrupt transmission of West Nile Virus to birds. Journal of Theoretical Biology, 2019, 463, 22-46.	1.7	14
61	Using non-smooth models to determine thresholds for microbial pest management. Journal of Mathematical Biology, 2019, 78, 1389-1424.	1.9	13
62	Modeling methods for estimating HIV incidence: a mathematical review. Theoretical Biology and Medical Modelling, 2020, 17, 1.	2.1	13
63	Magnetohydrodynamic Thin Film Flow through a Porous Stretching Sheet with the Impact of Thermal Radiation and Viscous Dissipation. Mathematical Problems in Engineering, 2022, 2022, 1-10.	1.1	13
64	A data-driven mathematical model of multi-drug resistant Acinetobacter baumannii transmission in an intensive care unit. Scientific Reports, 2015, 5, 9478.	3.3	12
65	Declining trend in HIV new infections in Guangxi, China: insights from linking reported HIV/AIDS cases with CD4-at-diagnosis data. BMC Public Health, 2020, 20, 919.	2.9	12
66	Modeling sexual transmission of HIV/AIDS in Jiangsu province, China. Mathematical Methods in the Applied Sciences, 2013, 36, 234-248.	2.3	11
67	Dynamical behaviour of HIV Infection with the influence of variable source term through Galerkin method. Chaos, Solitons and Fractals, 2021, 152, 111429.	5.1	11
68	Early antiretroviral therapy and potent second-line drugs could decrease HIV incidence of drug resistance. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20170525.	2.6	10
69	Dynamical Behavior and Bifurcation Analysis of the SIR Model with Continuous Treatment and State-Dependent Impulsive Control. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2019, 29, 1950131.	1.7	10
70	Investigating the Relationship between Reopening the Economy and Implementing Control Measures during the COVID-19 Pandemic. Public Health, 2021, 200, 15-21.	2.9	10
71	Global Dynamics and Applications of an Epidemiological Model for Hepatitis C Virus Transmission in China. Discrete Dynamics in Nature and Society, 2015, 2015, 1-13.	0.9	9
72	Early HAART Initiation May Not Reduce Actual Reproduction Number and Prevalence of MSM Infection: Perspectives from Coupled within- and between-Host Modelling Studies of Chinese MSM Populations. PLoS ONE, 2016, 11, e0150513.	2.5	9

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73	A robust study to conceptualize the interactions of CD4+T-cells and human immunodeficiency virus via fractional-calculus. Physica Scripta, 0, , .	2.5	9
74	Analysis of a multiscale HIV-1 model coupling within-host viral dynamics and between-host transmission dynamics. Mathematical Biosciences and Engineering, 2020, 17, 6720-6736.	1.9	9
75	Dynamical Behaviour and Chaotic Phenomena of HIV Infection through Fractional Calculus. Discrete Dynamics in Nature and Society, 2022, 2022, 1-19.	0.9	9
76	A conceptual model for optimizing vaccine coverage to reduce vector-borne infections in the presence of antibody-dependent enhancement. Theoretical Biology and Medical Modelling, 2018, 15, 13.	2.1	8
77	Air quality index induced nonsmooth system for respiratory infection. Journal of Theoretical Biology, 2019, 460, 160-169.	1.7	8
78	Estimation of the reproduction number and identification of periodicity for HFMD infections in northwest China. Journal of Theoretical Biology, 2020, 484, 110027.	1.7	8
79	A General Framework for Dimensionality Reduction of K-Means Clustering. Journal of Classification, 2020, 37, 616-631.	2.2	8
80	Analysis of PD‐type iterative learning control for discrete‐time singular system. Mathematical Methods in the Applied Sciences, 0, , .	2.3	8
81	Complex dynamics of an epidemic model with saturated media coverage and recovery. Nonlinear Dynamics, 2022, 107, 2995-3023.	5.2	8
82	A Parametric Analysis of the Effect of Hybrid Nanoparticles on the Flow Field and Homogeneous-Heterogeneous Reaction between Squeezing Plates. Advances in Mathematical Physics, 2022, 2022, 1-22.	0.8	8
83	A piecewise model of virus-immune system with two thresholds. Mathematical Biosciences, 2016, 278, 63-76.	1.9	7
84	Personalized life expectancy and treatment benefit index of antiretroviral therapy. Theoretical Biology and Medical Modelling, 2017, 14, 1.	2.1	7
85	Coupling the Macroscale to the Microscale in a Spatiotemporal Context to Examine Effects of Spatial Diffusion on Disease Transmission. Bulletin of Mathematical Biology, 2020, 82, 58.	1.9	7
86	Frequent implementation of interventions may increase HIV infections among MSM in China. Scientific Reports, 2018, 8, 451.	3.3	6
87	Global Dynamics of a Virus-Immune System with Virus-Guided Therapy and Saturation Growth of Virus. Mathematical Problems in Engineering, 2018, 2018, 1-18.	1.1	6
88	Multiscale System for Environmentally-Driven Infectious Disease with Threshold Control Strategy. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2018, 28, 1850064.	1.7	6
89	Modeling and analyzing the effects of fixed‐time intervention on transmission dynamics of echinococcosis in Qinghai province. Mathematical Methods in the Applied Sciences, 2021, 44, 4276-4296.	2.3	4
90	Modelling the Periodic Outbreak of Measles in Mainland China. Mathematical Problems in Engineering, 2020, 2020, 1-13.	1.1	3

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91	Measles dynamics on network models with optimal control strategies. Advances in Difference Equations, 2021, 2021, 138.	3.5	3
92	Numerical Solution of Schrödinger Equation by Crank–Nicolson Method. Mathematical Problems in Engineering, 2022, 2022, 1-11.	1.1	3
93	A SEMI-STOCHASTIC MODEL FOR HIV POPULATION DYNAMICS. International Journal of Biomathematics, 2009, 02, 391-404.	2.9	2
94	The effect of delayed host self-regulation on host–pathogen population cycles in forest insects. Journal of Theoretical Biology, 2009, 258, 240-249.	1.7	2
95	MODELING STRATEGIES FOR CONTROLLING H1N1 OUTBREAKS IN CHINA. International Journal of Biomathematics, 2012, 05, 1250017.	2.9	2
96	THE DYNAMICS OF A DISCRETE SEIT MODEL WITH AGE AND INFECTION AGE STRUCTURES. International Journal of Biomathematics, 2012, 05, 1260004.	2.9	2
97	Identifying Risk Factors Of A(H7N9) Outbreak by Wavelet Analysis and Generalized Estimating Equation. International Journal of Environmental Research and Public Health, 2019, 16, 1311.	2.6	2
98	Dynamics of a non-smooth epidemic model with three thresholds. Theory in Biosciences, 2020, 139, 47-65.	1.4	2
99	Unsteady Electrohydrodynamic Stagnation Point Flow of Hybrid Nanofluid Past a Convective Heated Stretch/Shrink Sheet. Advances in Mathematical Physics, 2021, 2021, 1-9.	0.8	2
100	Analytic Simulation for Magnetohydrodynamic Unsteady Buongiorno Model Hybrid Nanofluid Flow over Stretching. Advances in Mathematical Physics, 2022, 2022, 1-16.	0.8	2
101	Monotonicity Results for Nabla Riemann–Liouville Fractional Differences. Mathematics, 2022, 10, 2433.	2.2	2
102	Modeling Saturated Diagnosis and Vaccination in Reducing HIV/AIDS Infection. Abstract and Applied Analysis, 2014, 2014, 1-12.	0.7	1
103	Determining travel fluxes in epidemic areas. PLoS Computational Biology, 2021, 17, e1009473.	3.2	1
104	Global existence, general decay and blow-up for a nonlinear wave equation with logarithmic source term and fractional boundary dissipation. Discrete and Continuous Dynamical Systems - Series S, 2023, 16, 1323-1345.	1.1	1
105	Differences in how interventions coupled with effective reproduction numbers account for marked variations in COVID-19 epidemic outcomes. Mathematical Biosciences and Engineering, 2020, 17, 5085-5098.	1.9	0