Shingo Iwami

List of Publications by Year
in descending order

86 papers	2,928 citations	186265 28 h-index	206112 48 g-index
101 all docs	101 docs citations	101 times ranked	3330 citing authors

#	Article	IF	Citations
1	Escaping stochastic extinction of mutant virus: Temporal pattern of emergence of drug resistance within a host. Journal of Theoretical Biology, 2022, 537, 111029.	1.7	4
2	Evaluating the cost-effectiveness of a pre-exposure prophylaxis program for HIV prevention for men who have sex with men in Japan. Scientific Reports, 2022, 12, 3088.	3.3	2
3	Factors Associated with COVID-19 Vaccine Booster Hesitancy: A Retrospective Cohort Study, Fukushima Vaccination Community Survey. Vaccines, 2022, 10, 515.	4.4	40
4	Optimal Feedback Control of Cancer Chemotherapy Using Hamiltonâ€"Jacobiâ€"Bellman Equation. Complexity, 2022, 2022, 1-11.	1.6	0
5	Antithetic effect of interferon-Î± on cell-free and cell-to-cell HIV-1 infection. PLoS Computational Biology, 2022, 18, e1010053.	3.2	1
6	Maternal embryonic leucine zipper kinase (MELK) optimally regulates the HIV-1 uncoating process. Journal of Theoretical Biology, 2022, , 111152.	1.7	0
7	Different efficacies of neutralizing antibodies and antiviral drugs on SARS-CoV-2 Omicron subvariants, BA.1 and BA.2. Antiviral Research, 2022, 205, 105372.	4.1	22
8	Modeling HIV multiple infection. Journal of Theoretical Biology, 2021, 509, 110502.	1.7	7
9	Quantifying antiviral effects against simian/human immunodeficiency virus induced by host immune response. Journal of Theoretical Biology, 2021, 509, 110493.	1.7	2
10	Required concentration index quantifies effective drug combinations against hepatitis C virus infection. Theoretical Biology and Medical Modelling, 2021, 18, 4.	2.1	1
11	Identification of novel avian and mammalian deltaviruses provides new insights into deltavirus evolution. Virus Evolution, 2021, 7, veab003.	4.9	27
12	A quantitative model used to compare within-host SARS-CoV-2, MERS-CoV, and SARS-CoV dynamics provides insights into the pathogenesis and treatment of SARS-CoV-2. PLoS Biology, 2021, 19, e3001128.	5.6	99
13	Efficacy and safety of nelfinavir in asymptomatic and mild COVID-19 patients: a structured summary of a study protocol for a multicenter, randomized controlled trial. Trials, 2021, 22, 309.	1.6	7
14	Potential anti-COVID-19 agents, cepharanthine and nelfinavir, and their usage for combination treatment. IScience, 2021, 24, 102367.	4.1	126
15	Mefloquine, a Potent Anti-severe Acute Respiratory Syndrome-Related Coronavirus 2 (SARS-CoV-2) Drug as an Entry Inhibitor in vitro. Frontiers in Microbiology, 2021, 12, 651403.	3.5	25
16	Time variation in the probability of failing to detect a case of polymerase chain reaction testing for SARS-CoV-2 as estimated from a viral dynamics model. Journal of the Royal Society Interface, 2021, 18, 20200947.	3.4	7
17	HIV Testing by Public Health Centers and Municipalities and New HIV Cases During the COVID-19 Pandemic in Japan. Journal of Acquired Immune Deficiency Syndromes (1999), 2021, 87, e182-e187.	2.1	31
18	Estimation of the incubation period of COVID-19 using viral load data. Epidemics, 2021, 35, 100454.	3.0	45

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19	Detection of significant antiviral drug effects on COVID-19 with reasonable sample sizes in randomized controlled trials: A modeling study. PLoS Medicine, 2021, 18, e1003660.	8.4	32
20	Revisiting the guidelines for ending isolation for COVID-19 patients. ELife, 2021, 10, .	6.0	17
21	Incomplete antiviral treatment may induce longer durations of viral shedding during SARS-CoV-2 infection. Life Science Alliance, 2021, 4, e202101049.	2.8	14
22	A widely distributed HIV-1 provirus elimination assay to evaluate latency-reversing agents inÂvitro. Cell Reports Methods, 2021, 1, 100122.	2.9	9
23	Detection of significant antiviral drug effects on COVID-19 using viral load and PCR-positive rate in randomized controlled trials. Translational and Regulatory Sciences, 2021, 3, 85-88.	0.2	0
24	The machinery for endocytosis of epidermal growth factor receptor coordinates the transport of incoming hepatitis B virus to the endosomal network. Journal of Biological Chemistry, 2020, 295, 800-807.	3.4	30
25	Should a viral genome stay in the host cell or leave? A quantitative dynamics study of how hepatitis C virus deals with this dilemma. PLoS Biology, 2020, 18, e3000562.	5.6	9
26	Modeling Borna Disease Virus <i>In Vitro</i> Spread Reveals the Mode of Antiviral Effect Conferred by an Endogenous Bornavirus-Like Element. Journal of Virology, 2020, 94, .	3.4	3
27	Quantifying the antiviral effect of APOBEC3 on HIV-1 infection in humanized mouse model. Journal of Theoretical Biology, 2020, 498, 110295.	1.7	0
28	Direct Evidence of Abortive Lytic Infection-Mediated Establishment of Epstein-Barr Virus Latency During B-Cell Infection. Frontiers in Microbiology, 2020, 11, 575255.	3.5	27
29	The machinery for endocytosis of epidermal growth factor receptor coordinates the transport of incoming hepatitis B virus to the endosomal network. Journal of Biological Chemistry, 2020, 295, 800-807.	3.4	37
30	Modeling the efficiency of filovirus entry into cells in vitro: Effects of SNP mutations in the receptor molecule. PLoS Computational Biology, 2020, 16, e1007612.	3.2	0
31	Quantitative Immunology by Data Analysis Using Mathematical Models. , 2019, , 984-992.		3
32	Revealing uninfected and infected target cell dynamics from peripheral blood data in highly and less pathogenic simian/human immunodeficiency virus infected Rhesus macaque. Journal of Theoretical Biology, 2019, 479, 29-36.	1.7	1
33	Epidermal growth factor receptor is a host-entry cofactor triggering hepatitis B virus internalization. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8487-8492.	7.1	170
34	Mathematical Analysis of a Transformed ODE from a PDE Multiscale Model of Hepatitis C Virus Infection. Bulletin of Mathematical Biology, 2019, 81, 1427-1441.	1.9	25
35	A PDE multiscale model of hepatitis C virus infection can be transformed to a system of ODEs. Journal of Theoretical Biology, 2018, 448, 80-85.	1.7	21
36	Sporadic on/off switching of HTLV-1 Tax expression is crucial to maintain the whole population of virus-induced leukemic cells. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E1269-E1278.	7.1	135

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37	Human-Specific Adaptations in Vpu Conferring Anti-tetherin Activity Are Critical for Efficient Early HIV-1 Replication InÂVivo. Cell Host and Microbe, 2018, 23, 110-120.e7.	11.0	43
38	Dynamics of HIV-1 coinfection in different susceptible target cell populations during cell-free infection. Journal of Theoretical Biology, 2018, 455, 39-46.	1.7	5
39	Malaria incidences in South Africa linked to a climate mode in southwestern Indian Ocean. Environmental Development, 2018, 27, 47-57.	4.1	11
40	Quantifying antiviral activity optimizes drug combinations against hepatitis C virus infection. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1922-1927.	7.1	50
41	A heartâ€“brainâ€“kidney network controls adaptation to cardiac stress through tissue macrophage activation. Nature Medicine, 2017, 23, 611-622.	30.7	119
42	Reply to Padmanabhan and Dixit: Hepatitis C virus entry inhibitors for optimally boosting direct-acting antiviral-based treatments. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4527-E4529.	7.1	9
43	Duration of SHIV production by infected cells is not exponentially distributed: Implications for estimates of infection parameters and antiviral efficacy. Scientific Reports, 2017, 7, 42765.	3.3	30
44	Number of infection events per cell during HIV-1 cell-free infection. Scientific Reports, 2017, 7, 6559.	3.3	13
45	A highly pathogenic simian/human immunodeficiency virus effectively produces infectious virions compared with a less pathogenic virus in cell culture. Theoretical Biology and Medical Modelling, 2017, 14, 9.	2.1	17
46	HIV-1 competition experiments in humanized mice show that APOBEC3H imposes selective pressure and promotes virus adaptation. PLoS Pathogens, 2017, 13, e1006348.	4.7	41
47	(In)validating experimentally derived knowledge about influenza A defective interfering particles. Journal of the Royal Society Interface, 2016, 13, 20160412.	3.4	14
48	Impact of asymptomatic infections on the early spread of malaria. Japan Journal of Industrial and Applied Mathematics, 2016, 33, 671-681.	0.9	0
49	Modelling Ebola virus dynamics: Implications for therapy. Antiviral Research, 2016, 135, 62-73.	4.1	26
50	Quantifying the effect of Vpu on the promotion of HIV-1 replication in the humanized mouse model. Retrovirology, 2016, 13, 23.	2.0	20
51	Dynamics of HIV infection in lymphoid tissue network. Journal of Mathematical Biology, 2016, 72, 909-938.	1.9	24
52	Pandemic HIV-1 Vpu overcomes intrinsic herd immunity mediated by tetherin. Scientific Reports, 2015, 5, 12256.	3.3	14
53	Effect of eclipse phase on quantifying viral dynamics of acute HIV-1 infection in humanized mouse model. Nonlinear Theory and Its Applications IEICE, 2015, 6, 47-53.	0.6	2
54	A method to determine the duration of the eclipse phase for in vitro infection with a highly pathogenic SHIV strain. Scientific Reports, 2015, 5, 10371.	3.3	51

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55	Quantifying the Antiviral Effect of IFN on HIV-1 Replication in Cell Culture. Scientific Reports, 2015, 5, 11761.	3.3	10
56	Exploring the conserved quantity of viral infection model with periodical cell removal. Japan Journal of Industrial and Applied Mathematics, 2015, 32, 749-757.	0.9	0
57	A conservation law for virus infection kinetics in vitro. Journal of Theoretical Biology, 2015, 376, 39-47.	1.7	10
58	Cell-to-cell infection by HIV contributes over half of virus infection. ELife, 2015, 4, .	6.0	137
59	Mathematical modeling of multi-drugs therapy: a challenge for determining the optimal combinations of antiviral drugs. Theoretical Biology and Medical Modelling, 2014, 11, 41.	2.1	27
60	APOBEC3D and APOBEC3F Potently Promote HIV-1 Diversification and Evolution in Humanized Mouse Model. PLoS Pathogens, 2014, 10, e1004453.	4.7	79
61	Improving the estimation of the death rate of infected cells from time course data during the acute phase of virus infections: application to acute HIV-1 infection in a humanized mouse model. Theoretical Biology and Medical Modelling, 2014, 11, 22.	2.1	13
62	Quantification of Deaminase Activity-Dependent and -Independent Restriction of HIV-1 Replication Mediated by APOBEC3F and APOBEC3G through Experimental-Mathematical Investigation. Journal of Virology, 2014, 88, 5881-5887.	3.4	32
63	Quantifying viral dynamics of highly and less pathogenic simian/human immunodeficiency viruses from in vitro experimental data. IEICE Proceeding Series, 2014, 1, 37-40.	0.0	0
64	Quantification of the Dynamics of Enterovirus 71 Infection by Experimental-Mathematical Investigation. Journal of Virology, 2013, 87, 701-705.	3.4	15
65	HIV-1 Vpr Accelerates Viral Replication during Acute Infection by Exploitation of Proliferating CD4+ T Cells In Vivo. PLoS Pathogens, 2013, 9, e1003812.	4.7	49
66	Quantification of viral infection dynamics in animal experiments. Frontiers in Microbiology, 2013, 4, 264.	3.5	11
67	A Race between Tumor Immunoescape and Genome Maintenance Selects for Optimum Levels of (epi)genetic Instability. PLoS Computational Biology, 2012, 8, e1002370.	3.2	9
68	Vpu Augments the Initial Burst Phase of HIV-1 Propagation and Downregulates BST2 and CD4 in Humanized Mice. Journal of Virology, 2012, 86, 5000-5013.	3.4	65
69	Identifying viral parameters from in vitro cell cultures. Frontiers in Microbiology, 2012, 3, 319.	3.5	33
70	Lymph nodes harbor viral reservoirs that cause rebound of plasma viremia in SIV-infected macaques upon cessation of combined antiretroviral therapy. Virology, 2012, 423, 107-118.	2.4	107
71	Quantification system for the viral dynamics of a highly pathogenic simian/human immunodeficiency virus based on an in vitroexperiment and a mathematical model. Retrovirology, 2012, 9, 18.	2.0	38
72	Global stability of a generalized epidemic model. Journal of Mathematical Analysis and Applications, 2010, 362, 286-300.	1.0	5

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73	A geographical spread of vaccine-resistance in avian influenza epidemics. Journal of Theoretical Biology, 2009, 259, 219-228.	1.7	29
74	Dynamical Adaptation of Parental Care. Bulletin of Mathematical Biology, 2009, 71, 931-951.	1.9	10
75	A mathematical design of vector vaccine against autoimmune disease. Journal of Theoretical Biology, 2009, 256, 382-392.	1.7	16
76	Avian flu pandemic: Can we prevent it?. Journal of Theoretical Biology, 2009, 257, 181-190.	1.7	48
77	Optimal control strategy for prevention of avian influenza pandemic. Journal of Theoretical Biology, 2009, 260, 220-229.	1.7	93
78	Immune impairment in HIV infection: Existence of risky and immunodeficiency thresholds. Journal of Theoretical Biology, 2009, 260, 490-501.	1.7	30
79	Immune impairment thresholds in HIV infection. Immunology Letters, 2009, 123, 149-154.	2.5	24
80	Paradox of Vaccination: Is Vaccination Really Effective against Avian Flu Epidemics?. PLoS ONE, 2009, 4, e4915.	2.5	22
81	SVIR epidemic models with vaccination strategies. Journal of Theoretical Biology, 2008, 253, 1-11.	1.7	205
82	Prevention of avian influenza epidemic: What policy should we choose?. Journal of Theoretical Biology, 2008, 252, 732-741.	1.7	29
83	Viral diversity limits immune diversity in asymptomatic phase of HIV infection. Theoretical Population Biology, 2008, 73, 332-341.	1.1	10
84	Avianâ€"human influenza epidemic model. Mathematical Biosciences, 2007, 207, 1-25.	1.9	149
85	Dynamical properties of autoimmune disease models: Tolerance, flare-up, dormancy. Journal of Theoretical Biology, 2007, 246, 646-659.	1.7	46
86	Frequency dependence and viral diversity imply chaos in an HIV model. Physica D: Nonlinear Phenomena, 2006, 223, 222-228.	2.8	9