Vitaly V Ganusov

List of Publications by Year
in descending order

#	Article	IF	Citations
1	A New Method Based on the von Mises-Fisher Distribution Shows that a Minority of Liver-Localized CD8 T Cells Display Hard-To-Detect Attraction to Plasmodium-Infected Hepatocytes. Frontiers in Bioinformatics, 2022, 1, .	1.0	10
2	Liver Environmentâ€"Imposed Constraints Diversify Movement Strategies of Liver-Localized CD8 T Cells. Journal of Immunology, 2022, 208, 1292-1304.	0.4	10
3	Mathematical Modeling Suggests Cooperation of Plant-Infecting Viruses. Viruses, 2022, 14, 741.	1.5	2
4	Interactions with Asialo-Glycoprotein Receptors and Platelets Are Dispensable for CD8⁺ T Cell Localization in the Murine Liver. Journal of Immunology, 2022, 208, 2738-2748.	0.4	1
5	Ultra-low Dose Aerosol Infection of Mice with Mycobacterium tuberculosis More Closely Models Human Tuberculosis. Cell Host and Microbe, 2021, 29, 68-82.e5.	5.1	62
6	Experimental and Mathematical Approaches to Quantify Recirculation Kinetics of Lymphocytes. , 2021, , 151-169.		3
7	Impact of Oseltamivir Treatment on Influenza A and B Virus Dynamics in Human Volunteers. Frontiers in Microbiology, 2021, 12, 631211.	1.5	7
8	Treatment timing shifts the benefits of short and long antibiotic treatment over infection. Evolution, Medicine and Public Health, 2020, 2020, 249-263.	1.1	5
9	Experimental determination of the force of malaria infection reveals a non-linear relationship to mosquito sporozoite loads. PLoS Pathogens, 2020, 16, e1008181.	2.1	49
10	Title is missing!. , 2020, 16, e1008181.		0
11	Title is missing!. , 2020, 16, e1008181.		0
12	Title is missing!. , 2020, 16, e1008181.		0
13	Title is missing!. , 2020, 16, e1008181.		0
14	Clustering of Activated CD8 T Cells Around Malaria-Infected Hepatocytes Is Rapid and Is Driven by Antigen-Specific Cells. Frontiers in Immunology, 2019, 10, 2153.	2.2	18
15	Estimating Residence Times of Lymphocytes in Ovine Lymph Nodes. Frontiers in Immunology, 2019, 10, 1492.	2.2	8
16	Defining Kinetic Properties of HIV-Specific CD8+ T-Cell Responses in Acute Infection. Microorganisms, 2019, 7, 69.	1.6	3
17	The Rate of CD4 T Cell Entry into the Lungs during Mycobacterium tuberculosis Infection Is Determined by Partial and Opposing Effects of Multiple Chemokine Receptors. Infection and Immunity, 2019, 87, .	1.0	28
18	Editorial: Integrative Computational Systems Biology Approaches in Immunology and Medicine. Frontiers in Microbiology, 2019, 9, 3338.	1.5	1

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19	T follicular helper cells in human efferent lymph retain lymphoid characteristics. Journal of Clinical Investigation, 2019, 129, 3185-3200.	3.9	116
20	Tracking HIV-1 recombination to resolve its contribution to HIV-1 evolution in natural infection. Nature Communications, 2018, 9, 1928.	5.8	83
21	Cutting Edge: IL-1R1 Mediates Host Resistance to <i>Mycobacterium tuberculosis</i> by <i>Trans</i>-Protection of Infected Cells. Journal of Immunology, 2018, 201, 1645-1650.	0.4	28
22	Kinetics of HIV-Specific CTL Responses Plays a Minimal Role in Determining HIV Escape Dynamics. Frontiers in Immunology, 2018, 9, 140.	2.2	7
23	Time Intervals in Sequence Sampling, Not Data Modifications, Have a Major Impact on Estimates of HIV Escape Rates. Viruses, 2018, 10, 99.	1.5	3
24	Immunologic and Virologic Mechanisms for Partial Protection from Intravenous Challenge by an Integration-Defective SIV Vaccine. Viruses, 2017, 9, 135.	1.5	3
25	Severe Tuberculosis in Humans Correlates Best with Neutrophil Abundance and Lymphocyte Deficiency and Does Not Correlate with Antigen-Specific CD4 T-Cell Response. Frontiers in Immunology, 2017, 8, 963.	2.2	63
26	Quantifying Limits on Replication, Death, and Quiescence of Mycobacterium tuberculosis in Mice. Frontiers in Microbiology, 2016, 7, 862.	1.5	13
27	Strong Inference in Mathematical Modeling: A Method for Robust Science in the Twenty-First Century. Frontiers in Microbiology, 2016, 7, 1131.	1.5	48
28	CD4 T Cell-Derived IFN-Î³ Plays a Minimal Role in Control of Pulmonary Mycobacterium tuberculosis Infection and Must Be Actively Repressed by PD-1 to Prevent Lethal Disease. PLoS Pathogens, 2016, 12, e1005667.	2.1	280
29	Evaluating contribution of the cellular and humoral immune responses to the control of shedding of Mycobacterium avium spp. paratuberculosis in cattle. Veterinary Research, 2015, 46, 62.	1.1	27
30	Plasmodium Suppresses Expansion of T Cell Responses to Heterologous Infections. Journal of Immunology, 2015, 194, 697-708.	0.4	10
31	Simple Mathematical Models Do Not Accurately Predict Early SIV Dynamics. Viruses, 2015, 7, 1189-1217.	1.5	16
32	Broad CTL Response in Early HIV Infection Drives Multiple Concurrent CTL Escapes. PLoS Computational Biology, 2015, 11, e1004492.	1.5	21
33	Mathematical Modeling Reveals Kinetics of Lymphocyte Recirculation in the Whole Organism. PLoS Computational Biology, 2014, 10, e1003586.	1.5	73
34	Competition for Antigen between Th1 and Th2 Responses Determines the Timing of the Immune Response Switch during Mycobaterium avium Subspecies paratuberulosis Infection in Ruminants. PLoS Computational Biology, 2014, 10, e1003414.	1.5	68
35	Classification of T cell movement tracks allows for prediction of cell function. International Journal of Computational Biology and Drug Design, 2014, 7, 113.	0.3	7
36	Mathematical modeling provides kinetic details of the human immune response to vaccination. Frontiers in Cellular and Infection Microbiology, 2014, 4, 177.	1.8	39

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37	Mathematical modeling of escape of HIV from cytotoxic T lymphocyte responses. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P01010.	0.9	38
38	Cellular and population plasticity of helper CD4+ T cell responses. Frontiers in Physiology, 2013, 4, 206.	1.3	59
39	A mechanistic model for bromodeoxyuridine dilution naturally explains labelling data of self-renewing T cell populations. Journal of the Royal Society Interface, 2013, 10, 20120617.	1.5	17
40	In vivo imaging of CD8⁺T cell-mediated elimination of malaria liver stages. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9090-9095.	3.3	148
41	Vertical T cell immunodominance and epitope entropy determine HIV-1 escape. Journal of Clinical Investigation, 2013, 123, 380-93.	3.9	165
42	Early Low-Titer Neutralizing Antibodies Impede HIV-1 Replication and Select for Virus Escape. PLoS Pathogens, 2012, 8, e1002721.	2.1	159
43	Distinct Kinetics of Gag-Specific CD4+ and CD8+ T Cell Responses during Acute HIV-1 Infection. Journal of Immunology, 2012, 188, 2198-2206.	0.4	24
44	Mtb-Specific CD27low CD4 T Cells as Markers of Lung Tissue Destruction during Pulmonary Tuberculosis in Humans. PLoS ONE, 2012, 7, e43733.	1.1	64
45	Evolution of viral life-cycle in response to cytotoxic T lymphocyte-mediated immunity. Journal of Theoretical Biology, 2012, 310, 3-13.	0.8	4
46	Fitness Costs and Diversity of the Cytotoxic T Lymphocyte (CTL) Response Determine the Rate of CTL Escape during Acute and Chronic Phases of HIV Infection. Journal of Virology, 2011, 85, 10518-10528.	1.5	141
47	Killing of Targets by CD8+ T Cells in the Mouse Spleen Follows the Law of Mass Action. PLoS ONE, 2011, 6, e15959.	1.1	41
48	Persistence of viral infection despite similar killing efficacy of antiviral CD8+ T cells during acute and chronic phases of infection. Virology, 2010, 405, 193-200.	1.1	18
49	In Mice, Tuberculosis Progression Is Associated with Intensive Inflammatory Response and the Accumulation of Gr-1dim Cells in the Lungs. PLoS ONE, 2010, 5, e10469.	1.1	69
50	Stochastic Models of Lymphocyte Proliferation and Death. PLoS ONE, 2010, 5, e12775.	1.1	52
51	Explicit Kinetic Heterogeneity: Mathematical Models for Interpretation of Deuterium Labeling of Heterogeneous Cell Populations. PLoS Computational Biology, 2010, 6, e1000666.	1.5	33
52	Transmission of Single HIV-1 Genomes and Dynamics of Early Immune Escape Revealed by Ultra-Deep Sequencing. PLoS ONE, 2010, 5, e12303.	1.1	259
53	The first T cell response to transmitted/founder virus contributes to the control of acute viremia in HIV-1 infection. Journal of Experimental Medicine, 2009, 206, 1253-1272.	4.2	562
54	Lymphocyte kinetics in health and disease. Trends in Immunology, 2009, 30, 182-189.	2.9	33

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55	Estimating In Vivo Death Rates of Targets due to CD8 T-Cell-Mediated Killing. Journal of Virology, 2008, 82, 11749-11757.	1.5	49
56	IL-2 Regulates Expansion of CD4+ T Cell Populations by Affecting Cell Death: Insights from Modeling CFSE Data. Journal of Immunology, 2007, 179, 950-957.	0.4	48
57	Dynamics of CD8+ T Cell Responses during Acute and Chronic Lymphocytic Choriomeningitis Virus Infection. Journal of Immunology, 2007, 179, 2944-2951.	0.4	60
58	Discriminating between Different Pathways of Memory CD8+ T Cell Differentiation. Journal of Immunology, 2007, 179, 5006-5013.	0.4	23
59	Do most lymphocytes in humans really reside in the gut?. Trends in Immunology, 2007, 28, 514-518.	2.9	187
60	IMPERFECT VACCINES AND THE EVOLUTION OF PATHOGENS CAUSING ACUTE INFECTIONS IN VERTEBRATES. Evolution; International Journal of Organic Evolution, 2006, 60, 957-969.	1.1	28
61	Estimating Lymphocyte Division and Death Rates from CFSE Data. Bulletin of Mathematical Biology, 2006, 68, 1011-1031.	0.9	89
62	Estimating Costs and Benefits of CTL Escape Mutations in SIV/HIV Infection. PLoS Computational Biology, 2006, 2, e24.	1.5	59
63	How Does Cross-Reactive Stimulation Affect the Longevity of CD8+ T Cell Memory?. PLoS Computational Biology, 2006, 2, e55.	1.5	7
64	Imperfect vaccines and the evolution of pathogens causing acute infections in vertebrates. Evolution; International Journal of Organic Evolution, 2006, 60, 957-69.	1.1	13
65	The role of models in understanding CD8+ T-cell memory. Nature Reviews Immunology, 2005, 5, 101-111.	10.6	195
66	Quantifying cell turnover using CFSE data. Journal of Immunological Methods, 2005, 298, 183-200.	0.6	70
67	Pathology during acute infections: contributions of intracellular pathogens and the CTL response. Biology Letters, 2005, 1, 239-242.	1.0	7
68	The rescaling method for quantifying the turnover of cell populations. Journal of Theoretical Biology, 2003, 225, 275-283.	0.8	45
69	Trade-offs and the evolution of virulence of microparasites: do details matter?. Theoretical Population Biology, 2003, 64, 211-220.	0.5	55
70	The role of the cytotoxic Tâ€“lymphocyte response and virus cytopathogenicity in the virus decline during antiviral therapy. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, 1513-1518.	1.2	5
71	Estimating the Instability Parameters of Plasmid-Bearing Cells. I. Chemostat Culture. Journal of Theoretical Biology, 2002, 219, 193-205.	0.8	28
72	WITHIN-HOST POPULATION DYNAMICS AND THE EVOLUTION OF MICROPARASITES IN A HETEROGENEOUS HOST POPULATION. Evolution; International Journal of Organic Evolution, 2002, 56, 213-223.	1.1	124