

# Rob J De Boer

## List of Publications by Year in descending order

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193  
papers

13,537  
citations

23567

58  
h-index

26613

107  
g-index

221  
all docs

221  
docs citations

221  
times ranked

14058  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamics of HIV infection of CD4+ T cells. <i>Mathematical Biosciences</i> , 1993, 114, 81-125.	1.9	776
2	Biphasic kinetics of peripheral blood T cells after triple combination therapy in HIV-1 infection: A composite of redistribution and proliferation. <i>Nature Medicine</i> , 1998, 4, 208-214.	30.7	686
3	In vivo labeling with 2H2O reveals a human neutrophil lifespan of 5.4 days. <i>Blood</i> , 2010, 116, 625-627.	1.4	667
4	Maintenance of Peripheral Naive T Cells Is Sustained by Thymus Output in Mice but Not Humans. <i>Immunity</i> , 2012, 36, 288-297.	14.3	482
5	T-cell division in human immunodeficiency virus (HIV)-1 infection is mainly due to immune activation: a longitudinal analysis in patients before and during highly active antiretroviral therapy (HAART). <i>Blood</i> , 2000, 95, 249-255.	1.4	397
6	Increased cell division but not thymic dysfunction rapidly affects the T-cell receptor excision circle content of the naive T cell population in HIV-1 infection. <i>Nature Medicine</i> , 2000, 6, 1036-1042.	30.7	384
7	Diverse and heritable lineage imprinting of early haematopoietic progenitors. <i>Nature</i> , 2013, 496, 229-232.	27.8	337
8	Heterogeneous Differentiation Patterns of Individual CD8 <sup>+</sup> T Cells. <i>Science</i> , 2013, 340, 635-639.	12.6	320
9	MHC polymorphism under host-pathogen coevolution. <i>Immunogenetics</i> , 2004, 55, 732-739.	2.4	235
10	Different Dynamics of CD4+ and CD8+ T Cell Responses During and After Acute Lymphocytic Choriomeningitis Virus Infection. <i>Journal of Immunology</i> , 2003, 171, 3928-3935.	0.8	231
11	Tissue-resident memory CD8 <sup>+</sup> T cells continuously patrol skin epithelia to quickly recognize local antigen. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 19739-19744.	7.1	230
12	Extending the quasi-steady state approximation by changing variables. <i>Bulletin of Mathematical Biology</i> , 1996, 58, 43-63.	1.9	227
13	Analysing immune cell migration. <i>Nature Reviews Immunology</i> , 2009, 9, 789-798.	22.7	216
14	Quantifying T lymphocyte turnover. <i>Journal of Theoretical Biology</i> , 2013, 327, 45-87.	1.7	207
15	Lymph node topology dictates T cell migration behavior. <i>Journal of Experimental Medicine</i> , 2007, 204, 771-780.	8.5	203
16	Polyspecificity of T cell and B cell receptor recognition. <i>Seminars in Immunology</i> , 2007, 19, 216-224.	5.6	194
17	Sparse production but preferential incorporation of recently produced naïve T cells in the human peripheral pool. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 6115-6120.	7.1	189
18	Do most lymphocytes in humans really reside in the gut?. <i>Trends in Immunology</i> , 2007, 28, 514-518.	6.8	187

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19	The effect of group size on time budgets and social behaviour in wild long-tailed macaques ( <i>Macaca</i> ) Tj ETQq1 1 0.784314 rgBT/Ov	1.4	180
20	Recruitment Times, Proliferation, and Apoptosis Rates during the CD8 + T-Cell Response to Lymphocytic Choriomeningitis Virus. <i>Journal of Virology</i> , 2001, 75, 10663-10669.	3.4	175
21	Thymic output: a bad TREC record. <i>Nature Immunology</i> , 2003, 4, 97-99.	14.5	154
22	Limited CD4+ T-cell renewal in early HIV-1 infection: Effect of highly active antiretroviral therapy. <i>Nature Medicine</i> , 1998, 4, 794-801.	30.7	151
23	The Branching Point in Erythro-Myeloid Differentiation. <i>Cell</i> , 2015, 163, 1655-1662.	28.9	146
24	Towards a general function describing t cell proliferation. <i>Journal of Theoretical Biology</i> , 1995, 175, 567-576.	1.7	145
25	Implications of Spatial Heterogeneity for the Paradox of Enrichment. <i>Ecology</i> , 1995, 76, 2270-2277.	3.2	135
26	Size and connectivity as emergent properties of a developing immune network. <i>Journal of Theoretical Biology</i> , 1991, 149, 381-424.	1.7	128
27	Dynamics of Immune Escape during HIV/SIV Infection. <i>PLoS Computational Biology</i> , 2008, 4, e1000103.	3.2	120
28	T Cell Repertoires and Competitive Exclusion. <i>Journal of Theoretical Biology</i> , 1994, 169, 375-390.	1.7	116
29	Turnover Rates of B Cells, T Cells, and NK Cells in Simian Immunodeficiency Virus-Infected and Uninfected Rhesus Macaques. <i>Journal of Immunology</i> , 2003, 170, 2479-2487.	0.8	115
30	Establishment of New Transmissible and Drug-Sensitive Human Immunodeficiency Virus Type 1 Wild Types due to Transmission of Nucleoside Analogue-Resistant Virus. <i>Journal of Virology</i> , 2001, 75, 595-602.	3.4	113
31	Closing the gap between T-cell life span estimates from stable isotope-labeling studies in mice and humans. <i>Blood</i> , 2013, 122, 2205-2212.	1.4	106
32	Amino Acid Similarity Accounts for T Cell Cross-Reactivity and for "Holes" in the T Cell Repertoire. <i>PLoS ONE</i> , 2008, 3, e1831.	2.5	106
33	Polar auxin transport: models and mechanisms. <i>Development (Cambridge)</i> , 2013, 140, 2253-2268.	2.5	105
34	Cytotoxic T cells are able to efficiently eliminate cancer cells by additive cytotoxicity. <i>Nature Communications</i> , 2021, 12, 5217.	12.8	99
35	Pattern formation in one- and two-dimensional shape-space models of the immune system. <i>Journal of Theoretical Biology</i> , 1992, 155, 295-333.	1.7	96
36	Overshoot of HIV-1 viraemia after early discontinuation of antiretroviral treatment. <i>Aids</i> , 1997, 11, F79-F84.	2.2	96

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37	The evolution of natural killer cell receptors. <i>Immunogenetics</i> , 2016, 68, 3-18.	2.4	91
38	Estimating Lymphocyte Division and Death Rates from CFSE Data. <i>Bulletin of Mathematical Biology</i> , 2006, 68, 1011-1031.	1.9	89
39	Localized memories in idiotypic networks. <i>Journal of Theoretical Biology</i> , 1990, 146, 483-499.	1.7	86
40	Estimating Relative Fitness in Viral Competition Experiments. <i>Journal of Virology</i> , 2000, 74, 11067-11072.	3.4	85
41	HLA Alleles Associated with Slow Progression to AIDS Truly Prefer to Present HIV-1 p24. <i>PLoS ONE</i> , 2007, 2, e920.	2.5	84
42	A Formal Derivation of the "Beddington" Functional Response. <i>Journal of Theoretical Biology</i> , 1997, 185, 389-400.	1.7	81
43	Heterozygote advantage fails to explain the high degree of polymorphism of the MHC. <i>Immunogenetics</i> , 2004, 55, 725-731.	2.4	77
44	Lymphocyte maintenance during healthy aging requires no substantial alterations in cellular turnover. <i>Aging Cell</i> , 2015, 14, 219-227.	6.7	76
45	An evolutionary perspective on the systems of adaptive immunity. <i>Biological Reviews</i> , 2018, 93, 505-528.	10.4	76
46	Current Estimates for HIV-1 Production Imply Rapid Viral Clearance in Lymphoid Tissues. <i>PLoS Computational Biology</i> , 2010, 6, e1000906.	3.2	75
47	The Dominant Source of CD4+ and CD8+ T-Cell Activation in HIV Infection Is Antigenic Stimulation. <i>Journal of Acquired Immune Deficiency Syndromes</i> (1999), 2000, 25, 203-211.	2.1	73
48	Degenerate T-cell Recognition of Peptides on MHC Molecules Creates Large Holes in the T-cell Repertoire. <i>PLoS Computational Biology</i> , 2012, 8, e1002412.	3.2	73
49	Slowing Down of Recovery as Generic Risk Marker for Acute Severity Transitions in Chronic Diseases. <i>Critical Care Medicine</i> , 2016, 44, 601-606.	0.9	73
50	Comprehensive Assessment and Mathematical Modeling of T Cell Population Dynamics and Homeostasis. <i>Journal of Immunology</i> , 2008, 180, 2240-2250.	0.8	72
51	Differential cytokine profiles in juvenile idiopathic arthritis subtypes revealed by cluster analysis. <i>Rheumatology</i> , 2009, 48, 899-905.	1.9	72
52	Diversity of Human T Cell Receptors. <i>Science</i> , 2000, 288, 1135a-1135.	12.6	71
53	Quantification of T-cell dynamics: from telomeres to DNA labeling. <i>Immunological Reviews</i> , 2007, 216, 35-47.	6.0	71
54	Intracellular transactivation of HIV can account for the decelerating decay of virus load during drug therapy. <i>Molecular Systems Biology</i> , 2010, 6, 348.	7.2	71

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55	Quantifying cell turnover using CFSE data. <i>Journal of Immunological Methods</i> , 2005, 298, 183-200.	1.4	70
56	Crawling and Gliding: A Computational Model for Shape-Driven Cell Migration. <i>PLoS Computational Biology</i> , 2015, 11, e1004280.	3.2	70
57	In Mice, Tuberculosis Progression Is Associated with Intensive Inflammatory Response and the Accumulation of Gr-1dim Cells in the Lungs. <i>PLoS ONE</i> , 2010, 5, e10469.	2.5	69
58	Subtle CXCR3-Dependent Chemotaxis of CTLs within Infected Tissue Allows Efficient Target Localization. <i>Journal of Immunology</i> , 2015, 195, 5285-5295.	0.8	66
59	Early recovery of CD4+ T lymphocytes in children on highly active antiretroviral therapy. <i>Aids</i> , 1998, 12, 2155-2159.	2.2	65
60	Understanding the Failure of CD8 + T-Cell Vaccination against Simian/Human Immunodeficiency Virus. <i>Journal of Virology</i> , 2007, 81, 2838-2848.	3.4	63
61	T Cell Dynamics in HIV-1 Infection. <i>Advances in Immunology</i> , 1999, 73, 301-327.	2.2	61
62	Circulatory and maturation kinetics of human monocyte subsets in vivo. <i>Blood</i> , 2017, 130, 1474-1477.	1.4	61
63	The naive T-cell receptor repertoire has an extremely broad distribution of clone sizes. <i>ELife</i> , 2020, 9, .	6.0	61
64	Dynamics of CD8+ T Cell Responses during Acute and Chronic Lymphocytic Choriomeningitis Virus Infection. <i>Journal of Immunology</i> , 2007, 179, 2944-2951.	0.8	60
65	Establishment of the CD4+ T-cell pool in healthy children and untreated children infected with HIV-1. <i>Blood</i> , 2004, 104, 3513-3519.	1.4	59
66	Estimating Costs and Benefits of CTL Escape Mutations in SIV/HIV Infection. <i>PLoS Computational Biology</i> , 2006, 2, e24.	3.2	59
67	Immune Activation and Collateral Damage in AIDS Pathogenesis. <i>Frontiers in Immunology</i> , 2013, 4, 298.	4.8	59
68	RTCR: a pipeline for complete and accurate recovery of T cell repertoires from high throughput sequencing data. <i>Bioinformatics</i> , 2016, 32, 3098-3106.	4.1	54
69	Small variations in multiple parameters account for wide variations in HIV-1 set-points: a novel modelling approach. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2001, 268, 235-242.	2.6	52
70	Thymic selection does not limit the individual MHC diversity. <i>European Journal of Immunology</i> , 2003, 33, 3353-3358.	2.9	52
71	Random Migration and Signal Integration Promote Rapid and Robust T Cell Recruitment. <i>PLoS Computational Biology</i> , 2014, 10, e1003752.	3.2	52
72	Spatial modelling of brief and long interactions between T cells and dendritic cells. <i>Immunology and Cell Biology</i> , 2007, 85, 306-314.	2.3	51

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73	Interactions between macrophages and T-lymphocytes: Tumor sneaking through intrinsic to helper T cell dynamics. <i>Journal of Theoretical Biology</i> , 1986, 120, 331-351.	1.7	50
74	A General Functional Response of Cytotoxic T Lymphocyte-Mediated Killing of Target Cells. <i>Biophysical Journal</i> , 2014, 106, 1780-1791.	0.5	50
75	De novo T-cell generation in patients at different ages and stages of HIV-1 disease. <i>Blood</i> , 2004, 104, 470-477.	1.4	49
76	Estimating In Vivo Death Rates of Targets due to CD8 T-Cell-Mediated Killing. <i>Journal of Virology</i> , 2008, 82, 11749-11757.	3.4	49
77	Reliable reconstruction of HIV-1 whole genome haplotypes reveals clonal interference and genetic hitchhiking among immune escape variants. <i>Retrovirology</i> , 2014, 11, 56.	2.0	49
78	IL-2 Regulates Expansion of CD4+ T Cell Populations by Affecting Cell Death: Insights from Modeling CFSE Data. <i>Journal of Immunology</i> , 2007, 179, 950-957.	0.8	48
79	Extending the quasi-steady state approximation by changing variables. <i>Bulletin of Mathematical Biology</i> , 1996, 58, 43-63.	1.9	47
80	Procedures for reliable estimation of viral fitness from time-series data. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2002, 269, 1887-1893.	2.6	47
81	Estimating division and death rates from CFSE data. <i>Journal of Computational and Applied Mathematics</i> , 2005, 184, 140-164.	2.0	47
82	Decline in excision circles requires homeostatic renewal or homeostatic death of naive T cells. <i>Journal of Theoretical Biology</i> , 2003, 224, 351-358.	1.7	46
83	A spatial model of germinal center reactions: cellular adhesion based sorting of B cells results in efficient affinity maturation. <i>Journal of Theoretical Biology</i> , 2003, 222, 9-22.	1.7	45
84	Reassessing the Human Immunodeficiency Virus Type 1 Life Cycle through Age-Structured Modeling: Life Span of Infected Cells, Viral Generation Time, and Basic Reproductive Number, $R_0$ . <i>Journal of Virology</i> , 2009, 83, 7659-7667.	3.4	44
85	Implications of CTL-Mediated Killing of HIV-Infected Cells during the Non-Productive Stage of Infection. <i>PLoS ONE</i> , 2011, 6, e16468.	2.5	43
86	B cells within germinal centers migrate preferentially from dark to light zone. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 8755-8760.	7.1	43
87	Activation threshold tuning in an affinity model for the T cell repertoire. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2004, 271, 609-616.	2.6	42
88	Target cell availability and the successful suppression of HIV by hydroxyurea and didanosine. <i>Aids</i> , 1998, 12, 1567-1570.	2.2	41
89	Predicting the duration of antiviral treatment needed to suppress plasma HIV-1 RNA. <i>Journal of Clinical Investigation</i> , 2000, 105, 777-782.	8.2	41
90	Killing of Targets by CD8+ T Cells in the Mouse Spleen Follows the Law of Mass Action. <i>PLoS ONE</i> , 2011, 6, e15959.	2.5	41

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91	Determining Lineage Pathways from Cellular Barcoding Experiments. <i>Cell Reports</i> , 2014, 6, 617-624.	6.4	40
92	Current best estimates for the average lifespans of mouse and human leukocytes: reviewing two decades of deuterium labeling experiments. <i>Immunological Reviews</i> , 2018, 285, 233-248.	6.0	40
93	Bioinformatic analysis of functional differences between the immunoproteasome and the constitutive proteasome. <i>Immunogenetics</i> , 2003, 55, 437-449.	2.4	39
94	Discriminating self from nonself with short peptides from large proteomes. <i>Immunogenetics</i> , 2004, 56, 311-320.	2.4	39
95	Towards estimating the true duration of dendritic cell interactions with T cells. <i>Journal of Immunological Methods</i> , 2009, 347, 54-69.	1.4	39
96	Reconstitution of naive T cells during antiretroviral treatment of HIV-infected adults is dependent on age. <i>Aids</i> , 2002, 16, 2263-2266.	2.2	37
97	A Mathematical Model of Protein Degradation by the Proteasome. <i>Biophysical Journal</i> , 2005, 88, 2422-2432.	0.5	37
98	Chemotactic Migration of T Cells towards Dendritic Cells Promotes the Detection of Rare Antigens. <i>PLoS Computational Biology</i> , 2012, 8, e1002763.	3.2	37
99	Estimating average cellular turnover from 5-bromo-2'-deoxyuridine (BrdU) measurements. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2003, 270, 849-858.	2.6	36
100	The Rate of Immune Escape Vanishes When Multiple Immune Responses Control an HIV Infection. <i>Journal of Immunology</i> , 2013, 191, 3277-3286.	0.8	36
101	Immunological discrimination between self and non-self by precursor depletion and memory accumulation. <i>Journal of Theoretical Biology</i> , 1987, 124, 343-369.	1.7	34
102	From the two-dimensional Th1 and Th2 phenotypes to high-dimensional models for gene regulation. <i>International Immunology</i> , 2008, 20, 1269-1277.	4.0	33
103	Explicit Kinetic Heterogeneity: Mathematical Models for Interpretation of Deuterium Labeling of Heterogeneous Cell Populations. <i>PLoS Computational Biology</i> , 2010, 6, e1000666.	3.2	33
104	Identifying viral parameters from in vitro cell cultures. <i>Frontiers in Microbiology</i> , 2012, 3, 319.	3.5	33
105	Response: The in vivo half-life of human neutrophils. <i>Blood</i> , 2011, 117, 6053-6054.	1.4	32
106	How Germinal Centers Evolve Broadly Neutralizing Antibodies: the Breadth of the Follicular Helper T Cell Response. <i>Journal of Virology</i> , 2017, 91, .	3.4	32
107	Short Lifespans of Memory T-cells in Bone Marrow, Blood, and Lymph Nodes Suggest That T-cell Memory Is Maintained by Continuous Self-Renewal of Recirculating Cells. <i>Frontiers in Immunology</i> , 2018, 9, 2054.	4.8	32
108	Cytokines and Chemokines Involved in Acute Retinal Necrosis. , 2017, 58, 2139.		31

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109	Testing structural identifiability by a simple scaling method. <i>PLoS Computational Biology</i> , 2020, 16, e1008248.	3.2	31
110	Which of Our Modeling Predictions Are Robust?. <i>PLoS Computational Biology</i> , 2012, 8, e1002593.	3.2	30
111	Replicative history marks transcriptional and functional disparity in the CD8+ T cell memory pool. <i>Nature Immunology</i> , 2022, 23, 791-801.	14.5	30
112	Resource Competition Determines Selection of B Cell Repertoires. <i>Journal of Theoretical Biology</i> , 2001, 212, 333-343.	1.7	28
113	Lineage-specific T-cell reconstitution following in vivo CD4+ and CD8+ lymphocyte depletion in nonhuman primates. <i>Blood</i> , 2010, 116, 748-758.	1.4	28
114	Quantification of naive and memory T-cell turnover during HIV-1 infection. <i>Aids</i> , 2015, 29, 2071-2080.	2.2	28
115	The Reticular Cell Network: A Robust Backbone for Immune Responses. <i>PLoS Biology</i> , 2016, 14, e2000827.	5.6	28
116	Local actin dynamics couple speed and persistence in a cellular Potts model of cell migration. <i>Biophysical Journal</i> , 2021, 120, 2609-2622.	0.5	28
117	Normal Telomere Lengths in Naive and Memory CD4+ T Cells in HIV Type 1 Infection: A Mathematical Interpretation. <i>AIDS Research and Human Retroviruses</i> , 1999, 15, 1053-1062.	1.1	27
118	Long-term adaptation of the influenza A virus by escaping cytotoxic T-cell recognition. <i>Scientific Reports</i> , 2016, 6, 33334.	3.3	27
119	The Contribution of the Thymus to the Recovery of Peripheral Naive T-Cell Numbers During Antiretroviral Treatment for HIV Infection. <i>Journal of Acquired Immune Deficiency Syndromes (1999)</i> , 2008, 49, 1-8.	2.1	26
120	Immuno-epidemiological Modeling of HIV-1 Predicts High Heritability of the Set-Point Virus Load, while Selection for CTL Escape Dominates Virulence Evolution. <i>PLoS Computational Biology</i> , 2014, 10, e1003899.	3.2	26
121	CXCL4 Links Inflammation and Fibrosis by Reprogramming Monocyte-Derived Dendritic Cells in vitro. <i>Frontiers in Immunology</i> , 2020, 11, 2149.	4.8	26
122	The Effects of Age, Thymectomy, and HIV Infection on $\hat{I}^1$ and $\hat{I}^2$ TCR Excision Circles in Naive T Cells. <i>Journal of Immunology</i> , 2006, 177, 4391-4401.	0.8	25
123	Hematopoiesis in numbers. <i>Trends in Immunology</i> , 2021, 42, 1100-1112.	6.8	25
124	Release of Virus from Lymphoid Tissue Affects Human Immunodeficiency Virus Type 1 and Hepatitis C Virus Kinetics in the Blood. <i>Journal of Virology</i> , 2001, 75, 2597-2603.	3.4	24
125	Modelling deuterium labelling of lymphocytes with temporal and/or kinetic heterogeneity. <i>Journal of the Royal Society Interface</i> , 2012, 9, 2191-2200.	3.4	22
126	The Dominant Source of CD4+ and CD8+ T-Cell Activation in HIV Infection Is Antigenic Stimulation. <i>Journal of Acquired Immune Deficiency Syndromes (1999)</i> , 2000, , 203-211.	2.1	20

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127	Virus Encoded MHC-Like Decoys Diversify the Inhibitory KIR Repertoire. <i>PLoS Computational Biology</i> , 2013, 9, e1003264.	3.2	20
128	Quantifying the effect of Vpu on the promotion of HIV-1 replication in the humanized mouse model. <i>Retrovirology</i> , 2016, 13, 23.	2.0	20
129	What do mathematical models tell us about killing rates during HIV-1 infection?. <i>Immunology Letters</i> , 2015, 168, 1-6.	2.5	19
130	Crossreactivity of the T-cell receptor. <i>Trends in Immunology</i> , 1998, 19, 428-429.	7.5	18
131	Notwithstanding Circumstantial Alibis, Cytotoxic T Cells Can Be Major Killers of HIV-1-Infected Cells. <i>Journal of Virology</i> , 2016, 90, 7066-7083.	3.4	18
132	A mechanistic model for bromodeoxyuridine dilution naturally explains labelling data of self-renewing T cell populations. <i>Journal of the Royal Society Interface</i> , 2013, 10, 20120617.	3.4	17
133	Reconciling Estimates of Cell Proliferation from Stable Isotope Labeling Experiments. <i>PLoS Computational Biology</i> , 2015, 11, e1004355.	3.2	17
134	Idiotypic networks incorporating T-B cell co-operation. The conditions for percolation. <i>Journal of Theoretical Biology</i> , 1989, 139, 17-38.	1.7	16
135	Selection by AZT and Rapid Replacement in the Absence of Drugs of HIV Type 1 Resistant to Multiple Nucleoside Analogs. <i>AIDS Research and Human Retroviruses</i> , 2001, 17, 807-818.	1.1	16
136	A Coevolutionary Arms Race between Hosts and Viruses Drives Polymorphism and Polygenicity of NK Cell Receptors. <i>Molecular Biology and Evolution</i> , 2015, 32, 2149-2160.	8.9	16
137	The Specificity and Polymorphism of the MHC Class I Prevents the Global Adaptation of HIV-1 to the Monomorphic Proteasome and TAP. <i>PLoS ONE</i> , 2008, 3, e3525.	2.5	15
138	Toxin production spontaneously becomes regulated by local cell density in evolving bacterial populations. <i>PLoS Computational Biology</i> , 2019, 15, e1007333.	3.2	15
139	A Sigmoid Functional Response Emerges When Cytotoxic T Lymphocytes Start Killing Fresh Target Cells. <i>Biophysical Journal</i> , 2017, 112, 1221-1235.	0.5	14
140	Tissue Dimensionality Influences the Functional Response of Cytotoxic T Lymphocyte-Mediated Killing of Targets. <i>Frontiers in Immunology</i> , 2016, 7, 668.	4.8	14
141	Dynamics of Recent Thymic Emigrants in Young Adult Mice. <i>Frontiers in Immunology</i> , 2017, 8, 933.	4.8	14
142	Characterization of the ferret TRB locus guided by V, D, J, and C gene expression analysis. <i>Immunogenetics</i> , 2020, 72, 101-108.	2.4	14
143	Clonal Exhaustion as a Result of Immune Deviation. <i>Bulletin of Mathematical Biology</i> , 2003, 65, 359-374.	1.9	13
144	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. <i>Theoretical Biology and Medical Modelling</i> , 2014, 11, 22.	2.1	13

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145	HIV-1 CCR5 gene therapy will fail unless it is combined with a suicide gene. <i>Scientific Reports</i> , 2016, 5, 18088.	3.3	13
146	Self Assertion Modeled as a Network Repertoire of Multi-Determinant Antibodies. <i>Journal of Theoretical Biology</i> , 1996, 183, 55-66.	1.7	12
147	Process Noise: An Explanation for the Fluctuations in the Immune Response during Acute Viral Infection. <i>Biophysical Journal</i> , 2007, 92, 3358-3367.	0.5	12
148	Cell division curtails helper phenotype plasticity and expedites helper T cell differentiation. <i>Immunology and Cell Biology</i> , 2012, 90, 860-868.	2.3	12
149	Antigen-Stimulated CD4 T Cell Expansion Can Be Limited by Their Grazing of Peptide-MHC Complexes. <i>Journal of Immunology</i> , 2013, 190, 5454-5458.	0.8	12
150	Time Scales of CD4+ T Cell Depletion in HIV Infection. <i>PLoS Medicine</i> , 2007, 4, e193.	8.4	11
151	The distribution of CTL epitopes in HIV-1 appears to be random, and similar to that of other proteomes. <i>BMC Evolutionary Biology</i> , 2009, 9, 184.	3.2	11
152	Impaired immune evasion in HIV through intracellular delays and multiple infection of cells. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 3003-3010.	2.6	11
153	Quantifying the Protection of Activating and Inhibiting NK Cell Receptors during Infection with a CMV-Like Virus. <i>Frontiers in Immunology</i> , 2014, 5, 20.	4.8	11
154	Can Selective MHC Downregulation Explain the Specificity and Genetic Diversity of NK Cell Receptors?. <i>Frontiers in Immunology</i> , 2015, 6, 311.	4.8	11
155	Is T Cell Negative Selection a Learning Algorithm?. <i>Cells</i> , 2020, 9, 690.	4.1	11
156	Memorizing innate instructions requires a sufficiently specific adaptive immune system. <i>International Immunology</i> , 2002, 14, 525-532.	4.0	10
157	Estimating the role of thymic output in HIV infection. <i>Current Opinion in HIV and AIDS</i> , 2006, 1, 16-21.	3.8	10
158	Stochastic Inheritance of Division and Death Times Determines the Size and Phenotype of CD8+ T Cell Families. <i>Frontiers in Immunology</i> , 2019, 10, 436.	4.8	10
159	Reconciling Longitudinal Naive T-Cell and TREC Dynamics during HIV-1 Infection. <i>PLoS ONE</i> , 2016, 11, e0152513.	2.5	10
160	Quantification of T-cell dynamics during latent cytomegalovirus infection in humans. <i>PLoS Pathogens</i> , 2021, 17, e1010152.	4.7	10
161	A new bell-shaped function for idiotypic interactions based on cross-linking. <i>Bulletin of Mathematical Biology</i> , 1996, 58, 285-312.	1.9	9
162	The Integration Hypothesis: An Evolutionary Pathway to Benign SIV Infection. <i>PLoS Pathogens</i> , 2006, 2, e15.	4.7	9

#	ARTICLE	IF	CITATIONS
163	Tissue distribution of lymphocytes and plasma cells and the role of the gut: response to Pabst et al.. Trends in Immunology, 2008, 29, 209-210.	6.8	9
164	Cell-density independent increased lymphocyte production and loss rates post-autologous HSCT. ELife, 2021, 10, .	6.0	9
165	Early divergence of Th1 and Th2 transcriptomes involves a small core response and sets of transiently expressed genes. European Journal of Immunology, 2013, 43, 1074-1084.	2.9	8
166	Role of avidity and breadth of the CD4 T cell response in progression to AIDS. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 1697-1704.	2.6	7
167	Identification of helper T cell master regulator candidates using the polar score method. Journal of Immunological Methods, 2010, 361, 98-109.	1.4	7
168	Analytical results on the Beauchemin model of lymphocyte migration. BMC Bioinformatics, 2013, 14, S10.	2.6	7
169	A new model to simulate and analyze proliferating cell populations in BrdU labeling experiments. BMC Systems Biology, 2013, 7, S4.	3.0	7
170	Induction of appropriate Th cell phenotypes: Cellular decision-making in heterogeneous environments. Parasite Immunology, 2013, 35, n/a-n/a.	1.5	7
171	Time to Viral Suppression in Perinatally HIV-Infected Infants Depends on the Viral Load and CD4 T-Cell Percentage at the Start of Treatment. Journal of Acquired Immune Deficiency Syndromes (1999), 2020, 83, 522-529.	2.1	7
172	Quantifying how MHC polymorphism prevents pathogens from adapting to the antigen presentation pathway. Epidemics, 2010, 2, 99-108.	3.0	6
173	How lymphocytes add up. Nature Immunology, 2017, 18, 12-13.	14.5	6
174	TCR $\beta$ rearrangements without a D segment are common, abundant, and public. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	6
175	T-cell division in human immunodeficiency virus (HIV)-1 infection is mainly due to immune activation: a longitudinal analysis in patients before and during highly active antiretroviral therapy (HAART). Blood, 2000, 95, 249-255.	1.4	6
176	Complementarity of Binding Motifs is a General Property of HLA-A and HLA-B Molecules and Does Not Seem to Effect HLA Haplotype Composition. Frontiers in Immunology, 2013, 4, 374.	4.8	5
177	Specificity of inhibitory KIRs enables NK cells to detect changes in an altered peptide environment. Immunogenetics, 2018, 70, 87-97.	2.4	5
178	Quantifying the Dynamics of HIV Decline in Perinatally Infected Neonates on Antiretroviral Therapy. Journal of Acquired Immune Deficiency Syndromes (1999), 2020, 85, 209-218.	2.1	5
179	Poor repertoire selection in symmetric idiotypic network models. Immunology Letters, 1989, 22, 101-112.	2.5	4
180	A new bell-shaped function for idiotypic interactions based on cross-linking. Bulletin of Mathematical Biology, 1996, 58, 285-312.	1.9	4

#	ARTICLE	IF	CITATIONS
181	Local Attachment Explains Small World-like Properties of Fibroblastic Reticular Cell Networks in Lymph Nodes. <i>Journal of Immunology</i> , 2019, 202, 3318-3325.	0.8	4
182	Quantification of CD4 Recovery in Early-Treated Infants Living With HIV. <i>Journal of Acquired Immune Deficiency Syndromes (1999)</i> , 2022, 89, 546-557.	2.1	4
183	Turnover of Murine Cytomegalovirus-Expanded CD8+ T Cells Is Similar to That of Memory Phenotype T Cells and Independent of the Magnitude of the Response. <i>Journal of Immunology</i> , 2022, 208, 799-806.	0.8	4
184	A Generalized Mathematical Model To Estimate T- and B-Cell Receptor Diversities Using AmpliCot. <i>Biophysical Journal</i> , 2012, 103, 999-1010.	0.5	1
185	Optimal T cell cross-reactivity and the role of regulatory T cells. <i>Journal of Theoretical Biology</i> , 2015, 375, 4-12.	1.7	1
186	Lymph node topology dictates T cell migration behavior. <i>Journal of Cell Biology</i> , 2007, 177, i2-i2.	5.2	1
187	Combining cellular barcoding and mathematical modeling to infer the structure of the hematopoietic pathway. <i>Experimental Hematology</i> , 2014, 42, S56.	0.4	0
188	Common myeloid progenitors are made up of distinct subpopulations that either yield erythrocytes or myeloid cells. <i>Experimental Hematology</i> , 2015, 43, S88.	0.4	0
189	The limitations, dangers, and benefits of simple methods for testing identifiability. <i>PLoS Computational Biology</i> , 2021, 17, e1009425.	3.2	0
190	Testing structural identifiability by a simple scaling method. , 2020, 16, e1008248.		0
191	Testing structural identifiability by a simple scaling method. , 2020, 16, e1008248.		0
192	Testing structural identifiability by a simple scaling method. , 2020, 16, e1008248.		0
193	Testing structural identifiability by a simple scaling method. , 2020, 16, e1008248.		0