

# Denise E Kirschner

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2899432/publications.pdf>

Version: 2024-02-01

143  
papers

10,950  
citations

44069

48  
h-index

34986

98  
g-index

153  
all docs

153  
docs citations

153  
times ranked

8965  
citing authors

#	ARTICLE	IF	CITATIONS
1	A methodology for performing global uncertainty and sensitivity analysis in systems biology. <i>Journal of Theoretical Biology</i> , 2008, 254, 178-196.	1.7	1,985
2	Dynamics of HIV infection of CD4+ T cells. <i>Mathematical Biosciences</i> , 1993, 114, 81-125.	1.9	776
3	Modeling immunotherapy of the tumor - immune interaction. <i>Journal of Mathematical Biology</i> , 1998, 37, 235-252.	1.9	699
4	Optimal control of the chemotherapy of HIV. <i>Journal of Mathematical Biology</i> , 1997, 35, 775-792.	1.9	385
5	Microenvironments in Tuberculous Granulomas Are Delineated by Distinct Populations of Macrophage Subsets and Expression of Nitric Oxide Synthase and Arginase Isoforms. <i>Journal of Immunology</i> , 2013, 191, 773-784.	0.8	292
6	Identifying control mechanisms of granuloma formation during <i>M. tuberculosis</i> infection using an agent-based model. <i>Journal of Theoretical Biology</i> , 2004, 231, 357-376.	1.7	275
7	Variability in Tuberculosis Granuloma T Cell Responses Exists, but a Balance of Pro- and Anti-inflammatory Cytokines Is Associated with Sterilization. <i>PLoS Pathogens</i> , 2015, 11, e1004603.	4.7	275
8	A Model to Predict Cell-Mediated Immune Regulatory Mechanisms During Human Infection with <i>Mycobacterium tuberculosis</i> . <i>Journal of Immunology</i> , 2001, 166, 1951-1967.	0.8	220
9	The equilibria that allow bacterial persistence in human hosts. <i>Nature</i> , 2007, 449, 843-849.	27.8	204
10	Dynamic balance of pro- and anti-inflammatory signals controls disease and limits pathology. <i>Immunological Reviews</i> , 2018, 285, 147-167.	6.0	175
11	Multiscale Computational Modeling Reveals a Critical Role for TNF- $\alpha$ Receptor 1 Dynamics in Tuberculosis Granuloma Formation. <i>Journal of Immunology</i> , 2011, 186, 3472-3483.	0.8	158
12	Macrophage Polarization Drives Granuloma Outcome during <i>Mycobacterium tuberculosis</i> Infection. <i>Infection and Immunity</i> , 2015, 83, 324-338.	2.2	149
13	The human immune response to <i>Mycobacterium tuberculosis</i> in lung and lymph node. <i>Journal of Theoretical Biology</i> , 2004, 227, 463-486.	1.7	141
14	Contribution of CD8+ T Cells to Control of <i>Mycobacterium tuberculosis</i> Infection. <i>Journal of Immunology</i> , 2006, 176, 4296-4314.	0.8	132
15	Synergy between Individual TNF-Dependent Functions Determines Granuloma Performance for Controlling <i>Mycobacterium tuberculosis</i> Infection. <i>Journal of Immunology</i> , 2009, 182, 3706-3717.	0.8	129
16	Tumor Necrosis Factor Blockade in Chronic Murine Tuberculosis Enhances Granulomatous Inflammation and Disorganizes Granulomas in the Lungs. <i>Infection and Immunity</i> , 2008, 76, 916-926.	2.2	128
17	Systems biology of persistent infection: tuberculosis as a case study. <i>Nature Reviews Microbiology</i> , 2008, 6, 520-528.	28.6	123
18	Reevaluation of T Cell Receptor Excision Circles as a Measure of Human Recent Thymic Emigrants. <i>Journal of Immunology</i> , 2002, 168, 4968-4979.	0.8	122

#	ARTICLE	IF	CITATIONS
19	Neutralization of Tumor Necrosis Factor (TNF) by Antibody but not TNF Receptor Fusion Molecule Exacerbates Chronic Murine Tuberculosis. <i>Journal of Infectious Diseases</i> , 2007, 195, 1643-1650.	4.0	117
20	Dendritic Cell Trafficking and Antigen Presentation in the Human Immune Response to <i>Mycobacterium tuberculosis</i> . <i>Journal of Immunology</i> , 2004, 173, 494-506.	0.8	115
21	NF- $\kappa$ B Signaling Dynamics Play a Key Role in Infection Control in Tuberculosis. <i>Frontiers in Physiology</i> , 2012, 3, 170.	2.8	112
22	Multi-Scale Modeling Predicts a Balance of Tumor Necrosis Factor- $\alpha$ and Interleukin-10 Controls the Granuloma Environment during <i>Mycobacterium tuberculosis</i> Infection. <i>PLoS ONE</i> , 2013, 8, e68680.	2.5	109
23	A model for treatment strategy in the chemotherapy of AIDS. <i>Bulletin of Mathematical Biology</i> , 1996, 58, 367-390.	1.9	105
24	The dynamics of helicobacter pylori infection of the human stomach. <i>Journal of Theoretical Biology</i> , 1995, 176, 281-290.	1.7	104
25	Intracellular Bacillary Burden Reflects a Burst Size for <i>Mycobacterium tuberculosis</i> In Vivo. <i>PLoS Pathogens</i> , 2013, 9, e1003190.	4.7	104
26	Dynamics of Co-infection with <i>M. tuberculosis</i> and HIV-1. <i>Theoretical Population Biology</i> , 1999, 55, 94-109.	1.1	94
27	Strategies for Efficient Numerical Implementation of Hybrid Multi-scale Agent-Based Models to Describe Biological Systems. <i>Cellular and Molecular Bioengineering</i> , 2015, 8, 119-136.	2.1	87
28	Differential Risk of Tuberculosis Reactivation among Anti-TNF Therapies Is Due to Drug Binding Kinetics and Permeability. <i>Journal of Immunology</i> , 2012, 188, 3169-3178.	0.8	86
29	TNF and IL-10 are major factors in modulation of the phagocytic cell environment in lung and lymph node in tuberculosis: A next-generation two-compartmental model. <i>Journal of Theoretical Biology</i> , 2010, 265, 586-598.	1.7	83
30	Differences in Reactivation of Tuberculosis Induced from Anti-TNF Treatments Are Based on Bioavailability in Granulomatous Tissue. <i>PLoS Computational Biology</i> , 2007, 3, e194.	3.2	82
31	A hybrid multi-compartment model of granuloma formation and T cell priming in Tuberculosis. <i>Journal of Theoretical Biology</i> , 2011, 280, 50-62.	1.7	81
32	The Thymus During HIV Disease: Role in Pathogenesis and in Immune Recovery. <i>Current HIV Research</i> , 2004, 2, 177-183.	0.5	76
33	Multiple mechanisms allow <i>Mycobacterium tuberculosis</i> to continuously inhibit MHC class II-mediated antigen presentation by macrophages. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 4530-4535.	7.1	72
34	Mathematical analysis of the global dynamics of a model for HTLV-I infection and ATL progression. <i>Mathematical Biosciences</i> , 2002, 179, 207-217.	1.9	70
35	A computational tool integrating host immunity with antibiotic dynamics to study tuberculosis treatment. <i>Journal of Theoretical Biology</i> , 2015, 367, 166-179.	1.7	68
36	Toward a multiscale model of antigen presentation in immunity. <i>Immunological Reviews</i> , 2007, 216, 93-118.	6.0	65

#	ARTICLE	IF	CITATIONS
37	Computational Modeling Predicts IL-10 Control of Lesion Sterilization by Balancing Early Host Immunity-Mediated Antimicrobial Responses with Caseation during <i>Mycobacterium tuberculosis</i> Infection. <i>Journal of Immunology</i> , 2015, 194, 664-677.	0.8	63
38	Predicting the second wave of COVID-19 in Washtenaw County, MI. <i>Journal of Theoretical Biology</i> , 2020, 507, 110461.	1.7	63
39	A model for treatment strategy in the chemotherapy of aids. <i>Bulletin of Mathematical Biology</i> , 1996, 58, 367-390.	1.9	61
40	A review of computational and mathematical modeling contributions to our understanding of <i>Mycobacterium tuberculosis</i> within-host infection and treatment. <i>Current Opinion in Systems Biology</i> , 2017, 3, 170-185.	2.6	61
41	A comparison of random vs. chemotaxis-driven contacts of T cells with dendritic cells during repertoire scanning. <i>Journal of Theoretical Biology</i> , 2008, 250, 732-751.	1.7	60
42	Comparing epidemic tuberculosis in demographically distinct heterogeneous populations. <i>Mathematical Biosciences</i> , 2002, 180, 161-185.	1.9	59
43	Understanding drug resistance for monotherapy treatment of HIV infection. <i>Bulletin of Mathematical Biology</i> , 1997, 59, 763-785.	1.9	57
44	Peptide length-based prediction of peptide-MHC class II binding. <i>Bioinformatics</i> , 2006, 22, 2761-2767.	4.1	57
45	Identification of Key Processes that Control Tumor Necrosis Factor Availability in a Tuberculosis Granuloma. <i>PLoS Computational Biology</i> , 2010, 6, e1000778.	3.2	57
46	Comparing efficacies of moxifloxacin, levofloxacin and gatifloxacin in tuberculosis granulomas using a multi-scale systems pharmacology approach. <i>PLoS Computational Biology</i> , 2017, 13, e1005650.	3.2	57
47	Characterizing the Dynamics of CD4+ T Cell Priming within a Lymph Node. <i>Journal of Immunology</i> , 2010, 184, 2873-2885.	0.8	54
48	Model of HIV-1 Disease Progression Based on Virus-Induced Lymph Node Homing and Homing-Induced Apoptosis of CD4+ Lymphocytes. <i>Journal of Acquired Immune Deficiency Syndromes (1999)</i> , 2000, 24, 352-362.	2.1	53
49	Tunable resolution as a systems biology approach for multi-scale, multi-compartment computational models. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2014, 6, 289-309.	6.6	53
50	A multifaceted approach to modeling the immune response in tuberculosis. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2011, 3, 479-489.	6.6	50
51	On the global dynamics of a model for tumor immunotherapy. <i>Mathematical Biosciences and Engineering</i> , 2009, 6, 573-583.	1.9	50
52	Identifying mechanisms driving formation of granuloma-associated fibrosis during <i>Mycobacterium tuberculosis</i> infection. <i>Journal of Theoretical Biology</i> , 2017, 429, 1-17.	1.7	49
53	Mathematical and computational approaches can complement experimental studies of host-pathogen interactions. <i>Cellular Microbiology</i> , 2009, 11, 531-539.	2.1	48
54	Multiscale Model of <i>Mycobacterium tuberculosis</i> Infection Maps Metabolite and Gene Perturbations to Granuloma Sterilization Predictions. <i>Infection and Immunity</i> , 2016, 84, 1650-1669.	2.2	48

#	ARTICLE	IF	CITATIONS
55	Predicting differential responses to structured treatment interruptions during HAART. <i>Bulletin of Mathematical Biology</i> , 2004, 66, 1093-1118.	1.9	47
56	Understanding the Immune Response in Tuberculosis Using Different Mathematical Models and Biological Scales. <i>Multiscale Modeling and Simulation</i> , 2005, 3, 312-345.	1.6	47
57	Systems biology approaches for understanding cellular mechanisms of immunity in lymph nodes during infection. <i>Journal of Theoretical Biology</i> , 2011, 287, 160-170.	1.7	47
58	On treatment of tuberculosis in heterogeneous populations. <i>Journal of Theoretical Biology</i> , 2003, 223, 391-404.	1.7	44
59	Immunotherapy of HIV-1 Infection. <i>Journal of Biological Systems</i> , 1998, 06, 71-83.	1.4	43
60	Dynamics of Naive and Memory CD4+ T Lymphocytes in HIV-1 Disease Progression. <i>Journal of Acquired Immune Deficiency Syndromes</i> (1999), 2002, 30, 41-58.	2.1	43
61	Fluoroquinolone Efficacy against Tuberculosis Is Driven by Penetration into Lesions and Activity against Resident Bacterial Populations. <i>Antimicrobial Agents and Chemotherapy</i> , 2019, 63, .	3.2	42
62	In silico evaluation and exploration of antibiotic tuberculosis treatment regimens. <i>BMC Systems Biology</i> , 2015, 9, 79.	3.0	41
63	IL-10 Impairs Local Immune Response in Lung Granulomas and Lymph Nodes during Early <i>Mycobacterium tuberculosis</i> Infection. <i>Journal of Immunology</i> , 2020, 204, 644-659.	0.8	41
64	Model of HIV-1 Disease Progression Based on Virus-Induced Lymph Node Homing and Homing-Induced Apoptosis of CD4+ Lymphocytes. <i>Journal of Acquired Immune Deficiency Syndromes</i> (1999), 2000, 24, 352-362.	2.1	39
65	Harnessing the Heterogeneity of T Cell Differentiation Fate to Fine-Tune Generation of Effector and Memory T Cells. <i>Frontiers in Immunology</i> , 2014, 5, 57.	4.8	39
66	A Multi-Compartment Hybrid Computational Model Predicts Key Roles for Dendritic Cells in Tuberculosis Infection. <i>Computation</i> , 2016, 4, 39.	2.0	39
67	Deletion of TGF- $\beta$ 1 Increases Bacterial Clearance by Cytotoxic T Cells in a Tuberculosis Granuloma Model. <i>Frontiers in Immunology</i> , 2017, 8, 1843.	4.8	39
68	Chemokine and Cytokine Mediated Loss of Regulatory T Cells in Lymph Nodes during Pathogenic Simian Immunodeficiency Virus Infection. <i>Journal of Immunology</i> , 2008, 180, 5530-5536.	0.8	38
69	Computational and Empirical Studies Predict <i>Mycobacterium tuberculosis</i> -Specific T Cells as a Biomarker for Infection Outcome. <i>PLoS Computational Biology</i> , 2016, 12, e1004804.	3.2	38
70	Role of the Thymus in Pediatric HIV-1 Infection. <i>Journal of Acquired Immune Deficiency Syndromes</i> , 1998, 18, 95-109.	0.3	36
71	A model for integrative study of human gastric acid secretion. <i>Journal of Applied Physiology</i> , 2003, 94, 1602-1618.	2.5	36
72	The dual role of dendritic cells in the immune response to human immunodeficiency virus type 1 infection. <i>Journal of General Virology</i> , 2008, 89, 2228-2239.	2.9	36

#	ARTICLE	IF	CITATIONS
73	Computational Modeling Predicts Simultaneous Targeting of Fibroblasts and Epithelial Cells Is Necessary for Treatment of Pulmonary Fibrosis. <i>Frontiers in Pharmacology</i> , 2016, 7, 183.	3.5	35
74	Global sensitivity analysis of biological multiscale models. <i>Current Opinion in Biomedical Engineering</i> , 2019, 11, 109-116.	3.4	35
75	Theoretical and experimental approaches for studying factors defining the <i>Helicobacter pylori</i> –host relationship. <i>Trends in Microbiology</i> , 2000, 8, 321-329.	7.7	34
76	The timing of TNF and IFN- $\gamma$ signaling affects macrophage activation strategies during <i>Mycobacterium tuberculosis</i> infection. <i>Journal of Theoretical Biology</i> , 2008, 252, 24-38.	1.7	34
77	Tuberculosis: global approaches to a global disease. <i>Current Opinion in Biotechnology</i> , 2010, 21, 524-531.	6.6	34
78	Low Levels of T Cell Exhaustion in Tuberculous Lung Granulomas. <i>Infection and Immunity</i> , 2018, 86, .	2.2	34
79	Modeling socio-demography to capture tuberculosis transmission dynamics in a low burden setting. <i>Journal of Theoretical Biology</i> , 2011, 289, 197-205.	1.7	32
80	Influence of backward bifurcation on interpretation of $R_0$ in a model of epidemic tuberculosis with reinfection. <i>Mathematical Biosciences and Engineering</i> , 2004, 1, 81-93.	1.9	32
81	Dose finding for new vaccines: The role for immunostimulation/immunodynamic modelling. <i>Journal of Theoretical Biology</i> , 2019, 465, 51-55.	1.7	30
82	Resistance, Remission, and Qualitative Differences in HIV Chemotherapy. <i>Emerging Infectious Diseases</i> , 1997, 3, 273-283.	4.3	29
83	<i>Mycobacterium tuberculosis</i> as viewed through a computer. <i>Trends in Microbiology</i> , 2005, 13, 206-211.	7.7	27
84	To Sobol or not to Sobol? The effects of sampling schemes in systems biology applications. <i>Mathematical Biosciences</i> , 2021, 337, 108593.	1.9	27
85	The Effects of HIV-1 Infection on Latent Tuberculosis. <i>Mathematical Modelling of Natural Phenomena</i> , 2008, 3, 229-266.	2.4	26
86	Applying Optimization Algorithms to Tuberculosis Antibiotic Treatment Regimens. <i>Cellular and Molecular Bioengineering</i> , 2017, 10, 523-535.	2.1	26
87	Both Pharmacokinetic Variability and Granuloma Heterogeneity Impact the Ability of the First-Line Antibiotics to Sterilize Tuberculosis Granulomas. <i>Frontiers in Pharmacology</i> , 2020, 11, 333.	3.5	26
88	Increased expression of interferon-inducible genes in macaque lung tissues during simian immunodeficiency virus infection. <i>Microbes and Infection</i> , 2006, 8, 1839-1850.	1.9	25
89	Dynamics of Naive and Memory CD4+ T Lymphocytes in HIV-1 Disease Progression. <i>Journal of Acquired Immune Deficiency Syndromes (1999)</i> , 2002, 30, 41-58.	2.1	24
90	A multi-scale approach to designing therapeutics for tuberculosis. <i>Integrative Biology (United Kingdom)</i> , 2013, 5, 1-13.	1.3	24

#	ARTICLE	IF	CITATIONS
91	A Mathematical Model of Gene Therapy for the Treatment of Cancer. Lecture Notes on Mathematical Modelling in the Life Sciences, 2013, , 367-385.	0.4	23
92	Mathematical and computational approaches can complement experimental studies of host-pathogen interactions. Cellular Microbiology, 2009, 11, 531-9.	2.1	23
93	Effect of Multiple Genetic Polymorphisms on Antigen Presentation and Susceptibility to Mycobacterium tuberculosis Infection. Infection and Immunity, 2008, 76, 3221-3232.	2.2	22
94	Neutrophil Dynamics Affect Mycobacterium tuberculosis Granuloma Outcomes and Dissemination. Frontiers in Immunology, 2021, 12, 712457.	4.8	22
95	A computational model tracks whole-lung Mycobacterium tuberculosis infection and predicts factors that inhibit dissemination. PLoS Computational Biology, 2020, 16, e1007280.	3.2	21
96	Systems biology predicts that fibrosis in tuberculous granulomas may arise through macrophage-to-myofibroblast transformation. PLoS Computational Biology, 2020, 16, e1008520.	3.2	21
97	A model for the study of Helicobacter pylori interaction with human gastric acid secretion. Journal of Theoretical Biology, 2004, 228, 55-80.	1.7	20
98	The Roles of Immune Memory and Aging in Protective Immunity and Endogenous Reactivation of Tuberculosis. PLoS ONE, 2013, 8, e60425.	2.5	20
99	Emergence and selection of isoniazid and rifampin resistance in tuberculosis granulomas. PLoS ONE, 2018, 13, e0196322.	2.5	20
100	A Metapopulation Model Of Granuloma Formation In The Lung During Infection With Mycobacterium Tuberculosis. Mathematical Biosciences and Engineering, 2005, 2, 535-560.	1.9	20
101	Mathematical and computational approaches can complement experimental studies of host-pathogen interactions. Cellular Microbiology, 2008, 11, 531-9.	2.1	20
102	Reconstitution of thymic function in HIV-1 patients treated with highly active antiretroviral therapy. Clinical Immunology, 2003, 106, 95-105.	3.2	19
103	A model for Vibrio cholerae colonization of the human intestine. Journal of Theoretical Biology, 2011, 289, 247-258.	1.7	19
104	Evaluating vaccination strategies for tuberculosis in endemic and non-endemic settings. Journal of Theoretical Biology, 2019, 469, 1-11.	1.7	19
105	CaliPro: A Calibration Protocol That Utilizes Parameter Density Estimation to Explore Parameter Space and Calibrate Complex Biological Models. Cellular and Molecular Bioengineering, 2021, 14, 31-47.	2.1	19
106	Identifying Mechanisms of Homeostatic Signaling in Fibroblast Differentiation. Bulletin of Mathematical Biology, 2015, 77, 1556-1582.	1.9	18
107	A virtual host model of Mycobacterium tuberculosis infection identifies early immune events as predictive of infection outcomes. Journal of Theoretical Biology, 2022, 539, 111042.	1.7	17
108	Inoculation Dose of Mycobacterium tuberculosis Does Not Influence Priming of T Cell Responses in Lymph Nodes. Journal of Immunology, 2013, 190, 4707-4716.	0.8	16



#	ARTICLE	IF	CITATIONS
109	Strategic Priming with Multiple Antigens can Yield Memory Cell Phenotypes Optimized for Infection with <i>Mycobacterium tuberculosis</i> : A Computational Study. <i>Frontiers in Microbiology</i> , 2016, 6, 1477.	3.5	16
110	Spatial Organization and Recruitment of Non-Specific T Cells May Limit T Cell-Macrophage Interactions Within <i>Mycobacterium tuberculosis</i> Granulomas. <i>Frontiers in Immunology</i> , 2020, 11, 613638.	4.8	16
111	New Insights into Mathematical Modeling of the Immune System. <i>Immunologic Research</i> , 2006, 36, 157-166.	2.9	15
112	Multi-scale models of lung fibrosis. <i>Matrix Biology</i> , 2020, 91-92, 35-50.	3.6	15
113	A multi-scale pipeline linking drug transcriptomics with pharmacokinetics predicts in vivo interactions of tuberculosis drugs. <i>Scientific Reports</i> , 2021, 11, 5643.	3.3	15
114	A population model capturing dynamics of tuberculosis granulomas predicts host infection outcomes. <i>Mathematical Biosciences and Engineering</i> , 2015, 12, 625-642.	1.9	15
115	PREDICTING EFFICACY OF PROTON PUMP INHIBITORS IN REGULATING GASTRIC ACID SECRETION. <i>Journal of Biological Systems</i> , 2004, 12, 1-34.	1.4	14
116	T cell transcription factor expression evolves over time in granulomas from <i>Mycobacterium tuberculosis</i> -infected cynomolgus macaques. <i>Cell Reports</i> , 2022, 39, 110826.	6.4	14
117	Lack of good correlation of serum CC-chemokine levels with human immunodeficiency virus-1 disease stage and response to treatment. <i>Translational Research</i> , 2004, 143, 310-319.	2.3	13
118	The Effects of Different HIV Type 1 Strains on Human Thymic Function. <i>AIDS Research and Human Retroviruses</i> , 2002, 18, 1239-1251.	1.1	12
119	Requirement for multiple activation signals by anti-inflammatory feedback in macrophages. <i>Journal of Theoretical Biology</i> , 2006, 241, 276-294.	1.7	12
120	Effectiveness of contact investigations for tuberculosis control in Arkansas. <i>Journal of Theoretical Biology</i> , 2015, 380, 238-246.	1.7	12
121	In silico models of <i>M. tuberculosis</i> infection provide a route to new therapies. <i>Drug Discovery Today: Disease Models</i> , 2015, 15, 37-41.	1.2	12
122	Integrating Non-human Primate, Human, and Mathematical Studies to Determine the Influence of BCG Timing on H56 Vaccine Outcomes. <i>Frontiers in Microbiology</i> , 2018, 9, 1734.	3.5	12
123	A Framework for Network-Based Epidemiological Modeling of Tuberculosis Dynamics Using Synthetic Datasets. <i>Bulletin of Mathematical Biology</i> , 2020, 82, 78.	1.9	12
124	Simian Immunodeficiency Virus Infection Alters Chemokine Networks in Lung Tissues of Cynomolgus Macaques. <i>American Journal of Pathology</i> , 2010, 177, 1274-1285.	3.8	11
125	The Role of Dimensionality in Understanding Granuloma Formation. <i>Computation</i> , 2018, 6, 58.	2.0	11
126	Identifying DNA splice sites using hypernetworks with artificial molecular evolution. <i>BioSystems</i> , 2007, 87, 117-124.	2.0	10



#	ARTICLE	IF	CITATIONS
127	Phase variation and host immunity against high molecular weight (HMW) adhesins shape population dynamics of nontypeable <i>Haemophilus influenzae</i> within human hosts. <i>Journal of Theoretical Biology</i> , 2014, 355, 208-218.	1.7	9
128	Structural identifiability analysis of age-structured PDE epidemic models. <i>Journal of Mathematical Biology</i> , 2022, 84, 9.	1.9	9
129	CTL ACTION DURING HIV-1 IS DETERMINED VIA INTERACTIONS WITH MULTIPLE CELL TYPES. , 2005, , 219-254.		8
130	Data-Driven Model Validation Across Dimensions. <i>Bulletin of Mathematical Biology</i> , 2019, 81, 1853-1866.	1.9	7
131	A Systems Biology Approach for Understanding Granuloma Formation and Function in Tuberculosis. , 2013, , 127-155.		7
132	Remarks on Modeling Host-Viral Dynamics and Treatment. <i>The IMA Volumes in Mathematics and Its Applications</i> , 2002, , 287-308.	0.5	7
133	JTB Editorial Malpractice: A Case Report. <i>Journal of Theoretical Biology</i> , 2020, 488, 110171.	1.7	6
134	The importance of an inter-compartmental delay in a model for human gastric acid secretion. <i>Bulletin of Mathematical Biology</i> , 2003, 65, 963-990.	1.9	4
135	Modeling pathogen and host: in vitro, in vivo and in silico models of latent <i>Mycobacterium tuberculosis</i> infection. <i>Drug Discovery Today: Disease Models</i> , 2005, 2, 149-154.	1.2	4
136	A Diffusion Model for AIDS in a Closed, Heterosexual Population: Examining Rates of Infection. <i>SIAM Journal on Applied Mathematics</i> , 1996, 56, 143-166.	1.8	3
137	Computational Modeling of Granuloma Formation in Tuberculosis Yields Insights into both Infection and Treatment. <i>Biophysical Journal</i> , 2014, 106, 644a.	0.5	3
138	Editorial overview Current opinion in systems biology. <i>Current Opinion in Systems Biology</i> , 2018, 12, iv-vi.	2.6	2
139	Mathematical Models of Colonization and Persistence in Bacterial Infections. , 0, , 79-100.		2
140	Understanding drug resistance for monotherapy treatment of HIV infection. <i>Bulletin of Mathematical Biology</i> , 1997, 59, 763-785.	1.9	1
141	Solution of the Asymmetric Mixing Problem. <i>SIAM Journal on Applied Mathematics</i> , 1998, 58, 725-736.	1.8	1
142	Predicting the pattern of economics research: The case of the real business cycle theory. <i>Journal of Macroeconomics</i> , 1996, 18, 359-372.	1.3	0
143	Fifty years of JTB: Past, present and future. <i>Journal of Theoretical Biology</i> , 2011, 268, iii-iv.	1.7	0