Narendra M Dixit

List of Publications by Year
in descending order

56 papers	1,754 citations	394286 19 h-index	315616 38 g-index
66 all docs	66 docs citations	66 times ranked	1589 citing authors

#	Article	IF	Citations
1	Modeling how antibody responses may determine the efficacy of COVID-19 vaccines. Nature Computational Science, 2022, 2, 123-131.	3.8	39
2	Transmitted HIV-1 is more virulent in heterosexual individuals than men-who-have-sex-with-men. PLoS Pathogens, 2022, 18, e1010319.	2.1	8
3	Modeling recapitulates the heterogeneous outcomes of SARS-CoV-2 infection and quantifies the differences in the innate immune and CD8 T-cell responses between patients experiencing mild and severe symptoms. PLoS Pathogens, 2022, 18, e1010630.	2.1	14
4	Physical â€˜strengthâ€™ of the multiâ€protein chain connecting immune cells: Does the weakest link limit antibody affinity maturation?. BioEssays, 2021, 43, 2000159.	1.2	5
5	The within-host fitness of HIV-1 increases with age in ART-naÃ¯ve HIV-1 subtype C infected children. Scientific Reports, 2021, 11, 2990.	1.6	3
6	A Low-Prevalence Single-Nucleotide Polymorphism in the Sensor Kinase PhoR in Mycobacterium tuberculosis Suppresses Its Autophosphatase Activity and Reduces Pathogenic Fitness: Implications in Evolutionary Selection. Frontiers in Microbiology, 2021, 12, 724482.	1.5	5
7	An efficient and scalable top-down method for predicting structures of microbial communities. Nature Computational Science, 2021, 1, 619-628.	3.8	16
8	Concerted Interactions between Multiple gp41 Trimers and the Target Cell Lipidome May Be Required for HIV-1 Entry. Journal of Chemical Information and Modeling, 2021, 61, 444-454.	2.5	9
9	Mechanistic insights into the effects of key mutations on SARS-CoV-2 RBDâ€“ACE2 binding. Physical Chemistry Chemical Physics, 2021, 23, 26451-26458.	1.3	19
10	Increased B Cell Selection Stringency In Germinal Centers Can Explain Improved COVID-19 Vaccine Efficacies With Low Dose Prime or Delayed Boost. Frontiers in Immunology, 2021, 12, 776933.	2.2	24
11	Bistability in virusâ€“host interaction networks underlies the success of hepatitis C treatments. , 2020, , 131-156.		0
12	Early exposure to broadly neutralizing antibodies may trigger a dynamical switch from progressive disease to lasting control of SHIV infection. PLoS Computational Biology, 2020, 16, e1008064.	1.5	17
13	Pre-existing resistance in the latent reservoir can compromise VRC01 therapy during chronic HIV-1 infection. PLoS Computational Biology, 2020, 16, e1008434.	1.5	11
14	Targeting TMPRSS2 and Cathepsin B/L together may be synergistic against SARS-CoV-2 infection. PLoS Computational Biology, 2020, 16, e1008461.	1.5	106
15	Strand-specific affinity of host factor hnRNP C1/C2 guides positive to negative-strand ratio in Coxsackievirus B3 infection. RNA Biology, 2019, 16, 1286-1299.	1.5	15
16	You Cannot Have Your Synergy and Efficacy Too. Trends in Pharmacological Sciences, 2019, 40, 811-817.	4.0	17
17	<i>110th Anniversary:</i> High-Order Interactions Can Eclipse Pairwise Interactions in Shaping the Structure of Microbial Communities. Industrial & Engineering Chemistry Research, 2019, 58, 23508-23518.	1.8	5
18	Towards multiscale modeling of the CD8⁺ T cell response to viral infections. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2019, 11, e1446.	6.6	16

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19	Mutational pathway maps and founder effects define the within-host spectrum of hepatitis C virus mutants resistant to drugs. PLoS Pathogens, 2019, 15, e1007701.	2.1	8
20	A dynamical motif comprising the interactions between antigens and CD8 T cells may underlie the outcomes of viral infections. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17393-17398.	3.3	33
21	Preferential Presentation of High-Affinity Immune Complexes in Germinal Centers Can Explain How Passive Immunization Improves the Humoral Response. Cell Reports, 2019, 29, 3946-3957.e5.	2.9	32
22	Salmonella escapes antigen presentation through K63 ubiquitination mediated endosomal proteolysis of MHC II via modulation of endosomal acidification in dendritic cells. Pathogens and Disease, 2018, 76, .	0.8	6
23	Interferon at the cellular, individual, and population level in hepatitis C virus infection: Its role in the interferonâ€free treatment era. Immunological Reviews, 2018, 285, 55-71.	2.8	11
24	Activation of Bacterial Histidine Kinases: Insights into the Kinetics of the <i>cis</i> Autophosphorylation Mechanism. MSphere, 2018, 3, .	1.3	12
25	Modeling how reversal of immune exhaustion elicits cure of chronic hepatitis C after the end of treatment with directâ€acting antiviral agents. Immunology and Cell Biology, 2018, 96, 969-980.	1.0	18
26	Modelling how responsiveness to interferon improves interferon-free treatment of hepatitis C virus infection. PLoS Computational Biology, 2018, 14, e1006335.	1.5	14
27	Trade-off between synergy and efficacy in combinations of HIV-1 latency-reversing agents. PLoS Computational Biology, 2018, 14, e1006004.	1.5	13
28	Inhibitors of hepatitis C virus entry may be potent ingredients of optimal drug combinations. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4524-E4526.	3.3	12
29	Influence of recombination on acquisition and reversion of immune escape and compensatory mutations in HIV-1. Epidemics, 2016, 14, 11-25.	1.5	17
30	Viral Decay Dynamics and Mathematical Modeling of Treatment Response: Evidence of Lower in vivo Fitness of HIV-1 Subtype C. Journal of Acquired Immune Deficiency Syndromes (1999), 2016, 73, 245-251.	0.9	12
31	Scaling law characterizing the dynamics of the transition of HIV-1 to error catastrophe. Physical Biology, 2015, 12, 054001.	0.8	7
32	Models of Viral Population Dynamics. Current Topics in Microbiology and Immunology, 2015, 392, 277-302.	0.7	6
33	The two-component signalling networks of <i>Mycobacterium tuberculosis</i> display extensive cross-talk <i>inÂvitro</i>. Biochemical Journal, 2015, 469, 121-134.	1.7	41
34	The SPL7013 dendrimer destabilizes the HIV-1 gp120â€“CD4 complex. Nanoscale, 2015, 7, 18628-18641.	2.8	41
35	Emergent properties of the interferon-signalling network may underlie the success of hepatitis C treatment. Nature Communications, 2014, 5, 3872.	5.8	37
36	Estimating the fraction of progeny virions that must incorporate APOBEC3G for suppression of productive HIV-1 infection. Virology, 2014, 449, 224-228.	1.1	10

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37	Simulations reveal that the HIV-1 gp120-CD4 complex dissociates via complex pathways and is a potential target of the polyamidoamine (PAMAM) dendrimer. Journal of Chemical Physics, 2013, 139, 024905.	1.2	21
38	A Formula to Estimate the Optimal Dosage of Ribavirin for the Treatment of Chronic Hepatitis C: Influence of Itpa Polymorphisms. Antiviral Therapy, 2012, 17, 1581-1592.	0.6	6
39	A Finite Population Model of Molecular Evolution: Theory and Computation. Journal of Computational Biology, 2012, 19, 1176-1202.	0.8	20
40	Viral Kinetics Suggests a Reconciliation of the Disparate Observations of the Modulation of Claudin-1 Expression on Cells Exposed to Hepatitis C Virus. PLoS ONE, 2012, 7, e36107.	1.1	13
41	Stochastic Simulations Suggest that HIV-1 Survives Close to Its Error Threshold. PLoS Computational Biology, 2012, 8, e1002684.	1.5	28
42	Mathematical Model of Viral Kinetics In Vitro Estimates the Number of E2-CD81 Complexes Necessary for Hepatitis C Virus Entry. PLoS Computational Biology, 2011, 7, e1002307.	1.5	22
43	Ribavirin-Induced Anemia in Hepatitis C Virus Patients Undergoing Combination Therapy. PLoS Computational Biology, 2011, 7, e1001072.	1.5	30
44	Taking Multiple Infections of Cells and Recombination into Account Leads to Small Within-Host Effective-Population-Size Estimates of HIV-1. PLoS ONE, 2011, 6, e14531.	1.1	21
45	Estimating the Threshold Surface Density of Gp120-CCR5 Complexes Necessary for HIV-1 Envelope-Mediated Cell-Cell Fusion. PLoS ONE, 2011, 6, e19941.	1.1	21
46	Estimating Frequencies of Minority Nevirapine-Resistant Strains in Chronically HIV-1-Infected Individuals Naiˆve to Nevirapine by Using Stochastic Simulations and a Mathematical Model. Journal of Virology, 2010, 84, 10230-10240.	1.5	21
47	Timing the Emergence of Resistance to Anti-HIV Drugs with Large Genetic Barriers. PLoS Computational Biology, 2009, 5, e1000305.	1.5	24
48	Recombination increases human immunodeficiency virus fitness, but not necessarily diversity. Journal of General Virology, 2008, 89, 1467-1477.	1.3	57
49	Emergence of Recombinant Forms of HIV: Dynamics and Scaling. PLoS Computational Biology, 2007, 3, e205.	1.5	21
50	13 Modelling the in vivo growth rate of HIV: implications for vaccination. Studies in Multidisciplinarity, 2005, , 231-246.	0.0	6
51	HIV dynamics with multiple infections of target cells. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 8198-8203.	3.3	94
52	Modelling how ribavirin improves interferon response rates in hepatitis C virus infection. Nature, 2004, 432, 922-924.	13.7	344
53	Complex patterns of viral load decay under antiretroviral therapy: influence of pharmacokinetics and intracellular delay. Journal of Theoretical Biology, 2004, 226, 95-109.	0.8	163
54	Estimates of intracellular delay and average drug efficacy from viral load data of HIV-infected individuals under antiretroviral therapy. Antiviral Therapy, 2004, 9, 237-46.	0.6	31

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55	Estimates of Intracellular Delay and Average Drug Efficacy from Viral Load Data of HIV-Infected Individuals under Antiretroviral Therapy. Antiviral Therapy, 2004, 9, 237-246.	0.6	79
56	Modeling Viral and Drug Kinetics: Hepatitis C Virus Treatment with Pegylated Interferon Alfa-2b. Seminars in Liver Disease, 2003, 23, 013-018.	1.8	47