Sarah Cobey

List of Publications by Year
in descending order

58 papers	4,600 citations	186265 28 h-index	155660 55 g-index
80 all docs	80 docs citations	80 times ranked	6565 citing authors

#	Article	IF	Citations
1	Model-informed COVID-19 vaccine prioritization strategies by age and serostatus. Science, 2021, 371, 916-921.	12.6	588
2	Contemporary H3N2 influenza viruses have a glycosylation site that alters binding of antibodies elicited by egg-adapted vaccine strains. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12578-12583.	7.1	437
3	Epochal Evolution Shapes the Phylodynamics of Interpandemic Influenza A (H3N2) in Humans. Science, 2006, 314, 1898-1903.	12.6	423
4	Practical considerations for measuring the effective reproductive number, Rt. PLoS Computational Biology, 2020, 16, e1008409.	3.2	343
5	Immune history and influenza virus susceptibility. Current Opinion in Virology, 2017, 22, 105-111.	5.4	199
6	Niche and Neutral Effects of Acquired Immunity Permit Coexistence of Pneumococcal Serotypes. Science, 2012, 335, 1376-1380.	12.6	163
7	Predicting the Epidemic Sizes of Influenza A/H1N1, A/H3N2, and B: A Statistical Method. PLoS Medicine, 2011, 8, e1001051.	8.4	153
8	Global Migration Dynamics Underlie Evolution and Persistence of Human Influenza A (H3N2). PLoS Pathogens, 2010, 6, e1000918.	4.7	151
9	Immune History and Influenza Vaccine Effectiveness. Vaccines, 2018, 6, 28.	4.4	148
10	Modeling infectious disease dynamics. Science, 2020, 368, 713-714.	12.6	129
11	Influenza Virus Vaccination Elicits Poorly Adapted B Cell Responses in Elderly Individuals. Cell Host and Microbe, 2019, 25, 357-366.e6.	11.0	124
12	Age-specific differences in the dynamics of protective immunity to influenza. Nature Communications, 2019, 10, 1660.	12.8	107
13	Concerns about SARS-CoV-2 evolution should not hold back efforts to expand vaccination. Nature Reviews Immunology, 2021, 21, 330-335.	22.7	98
14	Investigate the origins of COVID-19. Science, 2021, 372, 694-694.	12.6	92
15	Viral factors in influenza pandemic risk assessment. ELife, 2016, 5, .	6.0	82
16	Preexisting immunity shapes distinct antibody landscapes after influenza virus infection and vaccination in humans. Science Translational Medicine, 2020, 12, .	12.4	77
17	Improving influenza vaccine virus selectionReport of a WHO informal consultation held at WHO headquarters, Geneva, Switzerland, 14â€“16 June 2010. Influenza and Other Respiratory Viruses, 2012, 6, 142-152.	3.4	73
18	Strength and tempo of selection revealed in viral gene genealogies. BMC Evolutionary Biology, 2011, 11, 220.	3.2	69

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19	Pathogen evolution and the immunological niche. Annals of the New York Academy of Sciences, 2014, 1320, 1-15.	3.8	59
20	Recurring infection with ecologically distinct HPV types can explain high prevalence and diversity. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13573-13578.	7.1	59
21	Trade-offs in antibody repertoires to complex antigens. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140245.	4.0	54
22	Poor Immunogenicity, Not Vaccine Strain Egg Adaptation, May Explain the Low H3N2 Influenza Vaccine Effectiveness in 2012â€“2013. Clinical Infectious Diseases, 2018, 67, 327-333.	5.8	53
23	Earliest infections predict the age distribution of seasonal influenza A cases. ELife, 2020, 9, .	6.0	49
24	Limits to Causal Inference with State-Space Reconstruction for Infectious Disease. PLoS ONE, 2016, 11, e0169050.	2.5	44
25	Middle-aged individuals may be in a perpetual state of H3N2 influenza virus susceptibility. Nature Communications, 2020, 11, 4566.	12.8	43
26	Pathogen Diversity and Hidden Regimes of Apparent Competition. American Naturalist, 2013, 181, 12-24.	2.1	41
27	Spec-seq unveils transcriptional subpopulations of antibody-secreting cells following influenza vaccination. Journal of Clinical Investigation, 2018, 129, 93-105.	8.2	40
28	Fractionation of COVID-19 vaccine doses could extend limited supplies and reduce mortality. Nature Medicine, 2021, 27, 1321-1323.	30.7	35
29	The evolution within us. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140235.	4.0	34
30	Fighting microbial drug resistance: a primer on the role of evolutionary biology in public health. Evolutionary Applications, 2015, 8, 211-222.	3.1	34
31	COVID-19 Infection, Reinfection, and Vaccine Effectiveness in Arizona Frontline and Essential Workers: Protocol for a Longitudinal Cohort Study. JMIR Research Protocols, 2021, 10, e28925.	1.0	33
32	Host population structure and treatment frequency maintain balancing selection on drug resistance. Journal of the Royal Society Interface, 2017, 14, 20170295.	3.4	32
33	Comparison of Human H3N2 Antibody Responses Elicited by Egg-Based, Cell-Based, and Recombinant Proteinâ€“Based Influenza Vaccines During the 2017â€“2018 Season. Clinical Infectious Diseases, 2020, 71, 1447-1453.	5.8	27
34	Modeling comparative cost-effectiveness of SARS-CoV-2 vaccine dose fractionation in India. Nature Medicine, 2022, 28, 934-938.	30.7	27
35	Capturing escape in infectious disease dynamics. Trends in Ecology and Evolution, 2008, 23, 572-577.	8.7	26
36	PARIS and SPARTA: Finding the Achillesâ€™ Heel of SARS-CoV-2. MSphere, 2022, 7, e0017922.	2.9	25

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37	Consequences of host heterogeneity, epitope immunodominance, and immune breadth for strain competition. Journal of Theoretical Biology, 2011, 270, 80-87.	1.7	24
38	Explaining the geographical origins of seasonal influenza A (H3N2). Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20161312.	2.6	21
39	Does influenza drive absolute humidity?. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2270-E2271.	7.1	20
40	Geographic and demographic heterogeneity of SARS-CoV-2 diagnostic testing in Illinois, USA, March to December 2020. BMC Public Health, 2021, 21, 1105.	2.9	19
41	Of variants and vaccines. Cell, 2021, 184, 6222-6223.	28.9	18
42	Lineage-specific protection and immune imprinting shape the age distributions of influenza B cases. Nature Communications, 2021, 12, 4313.	12.8	17
43	Incorporating temporal distribution of population-level viral load enables real-time estimation of COVID-19 transmission. Nature Communications, 2022, 13, 1155.	12.8	16
44	Selection and Neutral Mutations Drive Pervasive Mutability Losses in Long-Lived Anti-HIV B-Cell Lineages. Molecular Biology and Evolution, 2018, 35, 1135-1146.	8.9	15
45	CpG-creating mutations are costly in many human viruses. Evolutionary Ecology, 2020, 34, 339-359.	1.2	14
46	K-Pax2: Bayesian identification of cluster-defining amino acid positions in large sequence datasets. Microbial Genomics, 2015, 1, e000025.	2.0	12
47	The Hospital Microbiome Project: Meeting report for the 2nd Hospital Microbiome Project, Chicago, USA, January 15th, 2013. Standards in Genomic Sciences, 2013, 8, 571-579.	1.5	11
48	Estimating Vaccine-Driven Selection in Seasonal Influenza. Viruses, 2018, 10, 509.	3.3	8
49	An Egg-Derived SulfatedN-Acetyllactosamine Glycan Is an Antigenic Decoy of Influenza Virus Vaccines. MBio, 2021, 12, e0083821.	4.1	8
50	Ecological factors driving the long-term evolution of influenza's host range. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 2803-2810.	2.6	7
51	Use of an individual-based model of pneumococcal carriage for planning a randomized trial of a whole-cell vaccine. PLoS Computational Biology, 2018, 14, e1006333.	3.2	6
52	The Potential Beneficial Effects of Vaccination on Antigenically Evolving Pathogens. American Naturalist, 2022, 199, 223-237.	2.1	6
53	Improvements in Severe Acute Respiratory Syndrome Coronavirus 2 Testing Cascade in the United States: Data From Serial Cross-sectional Assessments. Clinical Infectious Diseases, 2021, , .	5.8	5
54	Repeated Vaccination May Protect Children From Influenza Infection. JAMA Network Open, 2018, 1, e183730.	5.9	1

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55	Sick if you do, sick if you donâ€™t. Nature Ecology and Evolution, 2017, 1, 1602-1603.	7.8	0
56	Response to Skowronski and De Serres. Clinical Infectious Diseases, 2018, 67, 1476-1476.	5.8	0
57	Characterization of the immunologic repertoire: A quick start guide. Immunological Reviews, 2018, 284, 5-8.	6.0	0
58	SARS-CoV-2 Infection Among Pregnant People at Labor and Delivery and Changes in Infection Rates in the General Population: Lessons Learned From Illinois. Public Health Reports, 2022, , 003335492210918.	2.5	0