# Christophe Fraser

#### List of Publications by Citations

Source: https://exaly.com/author-pdf/8329954/christophe-fraser-publications-by-citations.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

25,835 76 158 257 h-index g-index citations papers 280 11.8 32,104 7.19 L-index avg, IF ext. papers ext. citations

#	Paper	IF	Citations
257	Strategies for mitigating an influenza pandemic. <i>Nature</i> , <b>2006</b> , 442, 448-52	50.4	1530
256	Pandemic potential of a strain of influenza A (H1N1): early findings. <i>Science</i> , <b>2009</b> , 324, 1557-61	33.3	1403
255	Quantifying SARS-CoV-2 transmission suggests epidemic control with digital contact tracing. <i>Science</i> , <b>2020</b> , 368,	33.3	1366
254	Strategies for containing an emerging influenza pandemic in Southeast Asia. <i>Nature</i> , <b>2005</b> , 437, 209-14	50.4	1323
253	Transmission dynamics of the etiological agent of SARS in Hong Kong: impact of public health interventions. <i>Science</i> , <b>2003</b> , 300, 1961-6	33.3	823
252	Factors that make an infectious disease outbreak controllable. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 6146-51	11.5	767
251	Epidemiological determinants of spread of causal agent of severe acute respiratory syndrome in Hong Kong. <i>Lancet, The</i> , <b>2003</b> , 361, 1761-6	40	691
250	Rapid pneumococcal evolution in response to clinical interventions. <i>Science</i> , <b>2011</b> , 331, 430-4	33.3	680
249	A new framework and software to estimate time-varying reproduction numbers during epidemics. <i>American Journal of Epidemiology</i> , <b>2013</b> , 178, 1505-12	3.8	648
248	Evaluating the Effects of SARS-CoV-2 Spike Mutation D614G on Transmissibility and Pathogenicity. <i>Cell</i> , <b>2021</b> , 184, 64-75.e11	56.2	518
247	HIV-1 transmission, by stage of infection. <i>Journal of Infectious Diseases</i> , <b>2008</b> , 198, 687-93	7	485
246	Modeling targeted layered containment of an influenza pandemic in the United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2008</b> , 105, 4639-44	11.5	462
245	Assessing transmissibility of SARS-CoV-2 lineage B.1.1.7 in England. <i>Nature</i> , <b>2021</b> , 593, 266-269	50.4	452
244	Recombination and the nature of bacterial speciation. <i>Science</i> , <b>2007</b> , 315, 476-80	33.3	407
243	SARS-CoV-2 evolution during treatment of chronic infection. <i>Nature</i> , <b>2021</b> , 592, 277-282	50.4	390
242	Sensitivity of SARS-CoV-2 B.1.1.7 to mRNA vaccine-elicited antibodies. <i>Nature</i> , <b>2021</b> , 593, 136-141	50.4	376
241	Mathematical models of infectious disease transmission. <i>Nature Reviews Microbiology</i> , <b>2008</b> , 6, 477-87	22.2	373

### (2005-2009)

240	Household transmission of 2009 pandemic influenza A (H1N1) virus in the United States. <i>New England Journal of Medicine</i> , <b>2009</b> , 361, 2619-27	59.2	370
239	Seasonal infectious disease epidemiology. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2006</b> , 273, 2541-50	4.4	332
238	The bacterial species challenge: making sense of genetic and ecological diversity. <i>Science</i> , <b>2009</b> , 323, 741-6	33.3	322
237	Epidemiology, transmission dynamics and control of SARS: the 2002-2003 epidemic. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2004</b> , 359, 1091-105	5.8	312
236	Variation in HIV-1 set-point viral load: epidemiological analysis and an evolutionary hypothesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 17441-6	11.5	306
235	HIV treatment as prevention: systematic comparison of mathematical models of the potential impact of antiretroviral therapy on HIV incidence in South Africa. <i>PLoS Medicine</i> , <b>2012</b> , 9, e1001245	11.6	284
234	Virus genomes reveal factors that spread and sustained the Ebola epidemic. <i>Nature</i> , <b>2017</b> , 544, 309-315	50.4	238
233	Estimating individual and household reproduction numbers in an emerging epidemic. <i>PLoS ONE</i> , <b>2007</b> , 2, e758	3.7	238
232	The epidemiology of severe acute respiratory syndrome in the 2003 Hong Kong epidemic: an analysis of all 1755 patients. <i>Annals of Internal Medicine</i> , <b>2004</b> , 141, 662-73	8	235
231	Middle East respiratory syndrome coronavirus: quantification of the extent of the epidemic, surveillance biases, and transmissibility. <i>Lancet Infectious Diseases, The</i> , <b>2014</b> , 14, 50-56	25.5	231
230	Fuzzy species among recombinogenic bacteria. <i>BMC Biology</i> , <b>2005</b> , 3, 6	7.3	223
229	New strategies for the elimination of polio from India. <i>Science</i> , <b>2006</b> , 314, 1150-3	33.3	192
228	Hospital admission and emergency care attendance risk for SARS-CoV-2 delta (B.1.617.2) compared with alpha (B.1.1.7) variants of concern: a cohort study. <i>Lancet Infectious Diseases, The</i> , <b>2021</b> ,	25.5	188
227	Reducing the impact of the next influenza pandemic using household-based public health interventions. <i>PLoS Medicine</i> , <b>2006</b> , 3, e361	11.6	178
226	Assessing the severity of the novel influenza A/H1N1 pandemic. <i>BMJ, The</i> , <b>2009</b> , 339, b2840	5.9	175
225	Recurrent emergence of SARS-CoV-2 spike deletion H69/V70 and its role in the Alpha variant B.1.1.7. <i>Cell Reports</i> , <b>2021</b> , 35, 109292	10.6	172
224	After Ebola in West AfricaUnpredictable Risks, Preventable Epidemics. <i>New England Journal of Medicine</i> , <b>2016</b> , 375, 587-96	59.2	172
223	Methods for estimating the case fatality ratio for a novel, emerging infectious disease. <i>American Journal of Epidemiology</i> , <b>2005</b> , 162, 479-86	3.8	169

Host immunity and synchronized epidemics of syphilis across the United States. Nature, 2005, 433, 417-250.4 164 222 Virulence and pathogenesis of HIV-1 infection: an evolutionary perspective. Science, 2014, 343, 124372733.3 221 163 Health benefits, costs, and cost-effectiveness of earlier eligibility for adult antiretroviral therapy and expanded treatment coverage: a combined analysis of 12 mathematical models. The Lancet 13.6 160 220 Global Health, 2013, 2, 23-34 HPTN 071 (PopART): rationale and design of a cluster-randomised trial of the population impact of an HIV combination prevention intervention including universal testing and treatment - a study 2.8 219 155 protocol for a cluster randomised trial. Trials, 2014, 15, 57 West African Ebola epidemic after one year--slowing but not yet under control. New England 218 59.2 153 Journal of Medicine, 2015, 372, 584-7 Effect of Universal Testing and Treatment on HIV Incidence - HPTN 071 (PopART). New England 217 59.2 149 Journal of Medicine, 2019, 381, 207-218 Changes in symptomatology, reinfection, and transmissibility associated with the SARS-CoV-2 216 22.4 146 variant B.1.1.7: an ecological study. Lancet Public Health, The, 2021, 6, e335-e345 The effectiveness of contact tracing in emerging epidemics. PLoS ONE, 2006, 1, e12 215 3.7 144 Bayesian reconstruction of disease outbreaks by combining epidemiologic and genomic data. PLoS 5 214 142 Computational Biology, 2014, 10, e1003457 Sequences, sequence clusters and bacterial species. Philosophical Transactions of the Royal Society 5.8 213 139 B: Biological Sciences, 2006, 361, 1917-27 Hyper-recombination, diversity, and antibiotic resistance in pneumococcus. Science, 2009, 324, 1454-7 212 33.3 138 A resurgent HIV-1 epidemic among men who have sex with men in the era of potent antiretroviral 211 3.5 137 therapy. Aids, 2008, 22, 1071-7 CD4 cell counts of 800 cells/mm3 or greater after 7 years of highly active antiretroviral therapy are feasible in most patients starting with 350 cells/mm3 or greater. Journal of Acquired Immune 210 3.1 133 Deficiency Syndromes (1999), 2007, 45, 183-92 Quantifying SARS-CoV-2 transmission suggests epidemic control with digital contact tracing 209 132 Public health. Public health risk from the avian H5N1 influenza epidemic. Science, 2004, 304, 968-9 208 128 33.3 An integrated national scale SARS-CoV-2 genomic surveillance network. Lancet Microbe, The, 2020, 207 22.2 127 1, e99-e100 Potential Biases in Estimating Absolute and Relative Case-Fatality Risks during Outbreaks. PLoS 206 4.8 124 Neglected Tropical Diseases, 2015, 9, e0003846 Neutral microepidemic evolution of bacterial pathogens. Proceedings of the National Academy of 205 11.5 118 Sciences of the United States of America, 2005, 102, 1968-73

### (2004-2007)

204	Assessing the reliability of eBURST using simulated populations with known ancestry. <i>BMC Microbiology</i> , <b>2007</b> , 7, 30	4.5	115
203	Genomic Infectious Disease Epidemiology in Partially Sampled and Ongoing Outbreaks. <i>Molecular Biology and Evolution</i> , <b>2017</b> , 34, 997-1007	8.3	112
202	Evidence that pneumococcal serotype replacement in Massachusetts following conjugate vaccination is now complete. <i>Epidemics</i> , <b>2010</b> , 2, 80-4	5.1	111
201	SARS-CoV-2 within-host diversity and transmission. <i>Science</i> , <b>2021</b> , 372,	33.3	110
200	Modeling the long-term antibody response of a human papillomavirus (HPV) virus-like particle (VLP) type 16 prophylactic vaccine. <i>Vaccine</i> , <b>2007</b> , 25, 4324-33	4.1	103
199	Ebola virus disease among children in West Africa. <i>New England Journal of Medicine</i> , <b>2015</b> , 372, 1274-7	59.2	100
198	Ethics of instantaneous contact tracing using mobile phone apps in the control of the COVID-19 pandemic. <i>Journal of Medical Ethics</i> , <b>2020</b> , 46, 427-431	2.5	99
197	No coexistence for free: neutral null models for multistrain pathogens. <i>Epidemics</i> , <b>2009</b> , 1, 2-13	5.1	96
196	Horizontal DNA Transfer Mechanisms of Bacteria as Weapons of Intragenomic Conflict. <i>PLoS Biology</i> , <b>2016</b> , 14, e1002394	9.7	95
195	The impact of homologous recombination on the generation of diversity in bacteria. <i>Journal of Theoretical Biology</i> , <b>2006</b> , 239, 210-9	2.3	94
194	Within-host and between-host evolutionary rates across the HIV-1 genome. <i>Retrovirology</i> , <b>2013</b> , 10, 49	3.6	86
193	Evolution of antibiotic resistance is linked to any genetic mechanism affecting bacterial duration of carriage. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 107	75-48 8	o <sup>81</sup>
192	HIV treatment as prevention: debate and commentarywill early infection compromise treatment-as-prevention strategies?. <i>PLoS Medicine</i> , <b>2012</b> , 9, e1001232	11.6	81
191	Underwhelming the immune response: effect of slow virus growth on CD8+-T-lymphocyte responses. <i>Journal of Virology</i> , <b>2004</b> , 78, 2247-54	6.6	81
190	HPTN 071 (PopART): a cluster-randomized trial of the population impact of an HIV combination prevention intervention including universal testing and treatment: mathematical model. <i>PLoS ONE</i> , <b>2014</b> , 9, e84511	3.7	80
189	The role of rapid diagnostics in managing Ebola epidemics. <i>Nature</i> , <b>2015</b> , 528, S109-16	50.4	79
188	HIV-1 transmitting couples have similar viral load set-points in Rakai, Uganda. <i>PLoS Pathogens</i> , <b>2010</b> , 6, e1000876	7.6	79
187	Epidemiological and genetic analysis of severe acute respiratory syndrome. <i>Lancet Infectious Diseases, The</i> , <b>2004</b> , 4, 672-83	25.5	79

186	Identifying currents in the gene pool for bacterial populations using an integrative approach. <i>PLoS Computational Biology</i> , <b>2009</b> , 5, e1000455	5	78
185	P14-06. Phase 1 safety and immunogenicity randomised controlled trial of a vaginal gp140 vaccine. <i>Retrovirology</i> , <b>2009</b> , 6, P194	3.6	78
184	Modelling bacterial speciation. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2006</b> , 361, 2039-44	5.8	78
183	Underwhelming the Immune Response: Effect of Slow Virus Growth on CD8 + -T-Lymphocyte Responses. <i>Journal of Virology</i> , <b>2004</b> , 78, 6079-6079	6.6	78
182	Sources of HIV infection among men having sex with men and implications for prevention. <i>Science Translational Medicine</i> , <b>2016</b> , 8, 320ra2	17.5	77
181	Genome sequencing defines phylogeny and spread of methicillin-resistant Staphylococcus aureus in a high transmission setting. <i>Genome Research</i> , <b>2015</b> , 25, 111-8	9.7	75
180	Clinical and public health implications of acute and early HIV detection and treatment: a scoping review. <i>Journal of the International AIDS Society</i> , <b>2017</b> , 20, 21579	5.4	72
179	Unraveling the drivers of MERS-CoV transmission. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 9081-6	11.5	72
178	Frequency-dependent selection in vaccine-associated pneumococcal population dynamics. <i>Nature Ecology and Evolution</i> , <b>2017</b> , 1, 1950-1960	12.3	69
177	Studies needed to address public health challenges of the 2009 H1N1 influenza pandemic: insights from modeling. <i>PLoS Medicine</i> , <b>2010</b> , 7, e1000275	11.6	69
176	Phylogenetic studies of transmission dynamics in generalized HIV epidemics: an essential tool where the burden is greatest?. <i>Journal of Acquired Immune Deficiency Syndromes (1999)</i> , <b>2014</b> , 67, 181-9	3 <sup>.1</sup>	68
175	PHYLOSCANNER: Inferring Transmission from Within- and Between-Host Pathogen Genetic Diversity. <i>Molecular Biology and Evolution</i> , <b>2018</b> , 35, 719-733	8.3	68
174	Seroprevalence of IgG antibodies to SARS-coronavirus in asymptomatic or subclinical population groups. <i>Epidemiology and Infection</i> , <b>2006</b> , 134, 211-21	4.3	67
173	Heterogeneities in the case fatality ratio in the West African Ebola outbreak 2013-2016. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2017</b> , 372,	5.8	66
172	Estimating HIV Incidence, Time to Diagnosis, and the Undiagnosed HIV Epidemic Using Routine Surveillance Data. <i>Epidemiology</i> , <b>2015</b> , 26, 653-60	3.1	64
171	What is the mechanism for persistent coexistence of drug-susceptible and drug-resistant strains of Streptococcus pneumoniae?. <i>Journal of the Royal Society Interface</i> , <b>2010</b> , 7, 905-19	4.1	64
170	The Early Transmission Dynamics of H1N1pdm Influenza in the United Kingdom. <i>PLOS Currents</i> , <b>2009</b> , 1, RRN1130		63
169	SARS-CoV antibody prevalence in all Hong Kong patient contacts. <i>Emerging Infectious Diseases</i> , <b>2004</b> , 10, 1653-6	10.2	61

## (2015-2019)

168	Community based distribution of oral HIV self-testing kits in Zambia: a cluster-randomised trial nested in four HPTN 071 (PopART) intervention communities. <i>Lancet HIV,the</i> , <b>2019</b> , 6, e81-e92	7.8	58	
167	HIV treatment as prevention: models, data, and questionstowards evidence-based decision-making. <i>PLoS Medicine</i> , <b>2012</b> , 9, e1001259	11.6	57	
166	The epidemiological impact of the NHS COVID-19 app. <i>Nature</i> , <b>2021</b> , 594, 408-412	50.4	57	
165	Influenza transmission in households during the 1918 pandemic. <i>American Journal of Epidemiology</i> , <b>2011</b> , 174, 505-14	3.8	56	
164	Exposure Patterns Driving Ebola Transmission in West Africa: A Retrospective Observational Study. <i>PLoS Medicine</i> , <b>2016</b> , 13, e1002170	11.6	56	
163	Heterogeneity in the frequency and characteristics of homologous recombination in pneumococcal evolution. <i>PLoS Genetics</i> , <b>2014</b> , 10, e1004300	6	55	
162	Antigen-driven CD4+ T cell and HIV-1 dynamics: residual viral replication under highly active antiretroviral therapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1999</b> , 96, 15167-72	11.5	55	
161	New insights into the evolutionary rate of HIV-1 at the within-host and epidemiological levels. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2012</b> , 279, 3367-75	4.4	54	
160	Essential epidemiological mechanisms underpinning the transmission dynamics of seasonal influenza. <i>Journal of the Royal Society Interface</i> , <b>2012</b> , 9, 304-12	4.1	54	
159	Resurgence of HIV infection among men who have sex with men in Switzerland: mathematical modelling study. <i>PLoS ONE</i> , <b>2012</b> , 7, e44819	3.7	54	
158	Recent trends and patterns in HIV-1 transmitted drug resistance in the United Kingdom. <i>HIV Medicine</i> , <b>2017</b> , 18, 204-213	2.7	53	
157	Key data for outbreak evaluation: building on the Ebola experience. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2017</b> , 372,	5.8	52	
156	HIV recombination: what is the impact on antiretroviral therapy?. <i>Journal of the Royal Society Interface</i> , <b>2005</b> , 2, 489-503	4.1	50	
155	Ebola Virus Disease among Male and Female Persons in West Africa. <i>New England Journal of Medicine</i> , <b>2016</b> , 374, 96-8	59.2	48	
154	Integrating phylodynamics and epidemiology to estimate transmission diversity in viral epidemics. <i>PLoS Computational Biology</i> , <b>2013</b> , 9, e1002876	5	48	
153	The timing of COVID-19 transmission		48	
152	Transmission characteristics of the 2009 H1N1 influenza pandemic: comparison of 8 Southern hemisphere countries. <i>PLoS Pathogens</i> , <b>2011</b> , 7, e1002225	7.6	47	
151	Dispersion of the HIV-1 Epidemic in Men Who Have Sex with Men in the Netherlands: A Combined Mathematical Model and Phylogenetic Analysis. <i>PLoS Medicine</i> , <b>2015</b> , 12, e1001898; discussion e10018	9g <sup>1.6</sup>	45	

150	27 years of the HIV epidemic amongst men having sex with men in the Netherlands: an in depth mathematical model-based analysis. <i>Epidemics</i> , <b>2010</b> , 2, 66-79	5.1	45
149	HIV treatment as prevention: optimising the impact of expanded HIV treatment programmes. <i>PLoS Medicine</i> , <b>2012</b> , 9, e1001258	11.6	45
148	Threshold parameters for a model of epidemic spread among households and workplaces. <i>Journal of the Royal Society Interface</i> , <b>2009</b> , 6, 979-87	4.1	43
147	Pneumococcal Capsule Synthesis Locus cps as Evolutionary Hotspot with Potential to Generate Novel Serotypes by Recombination. <i>Molecular Biology and Evolution</i> , <b>2017</b> , 34, 2537-2554	8.3	42
146	Reduction of the HIV-1-infected T-cell reservoir by immune activation treatment is dose-dependent and restricted by the potency of antiretroviral drugs. <i>Aids</i> , <b>2000</b> , 14, 659-69	3.5	42
145	Phylogenetic Tools for Generalized HIV-1 Epidemics: Findings from the PANGEA-HIV Methods Comparison. <i>Molecular Biology and Evolution</i> , <b>2017</b> , 34, 185-203	8.3	41
144	A simple approach to measure transmissibility and forecast incidence. <i>Epidemics</i> , <b>2018</b> , 22, 29-35	5.1	41
143	Historical zoonoses and other changes in host tropism of Staphylococcus aureus, identified by phylogenetic analysis of a population dataset. <i>PLoS ONE</i> , <b>2013</b> , 8, e62369	3.7	40
142	Reproductive numbers, epidemic spread and control in a community of households. <i>Mathematical Biosciences</i> , <b>2009</b> , 221, 11-25	3.9	40
141	PANGEA-HIV: phylogenetics for generalised epidemics in Africa. <i>Lancet Infectious Diseases, The</i> , <b>2015</b> , 15, 259-61	25.5	39
140	Is HIV short-sighted? Insights from a multistrain nested model. <i>Evolution; International Journal of Organic Evolution</i> , <b>2013</b> , 67, 2769-82	3.8	39
139	Assessment of epidemic projections using recent HIV survey data in South Africa: a validation analysis of ten mathematical models of HIV epidemiology in the antiretroviral therapy era. <i>The Lancet Global Health</i> , <b>2015</b> , 3, e598-608	13.6	38
138	S-duality in N = 4 supersymmetric gauge theories with arbitrary gauge group. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1996</b> , 383, 422-428	4.2	38
137	Easy and accurate reconstruction of whole HIV genomes from short-read sequence data with shiver. <i>Virus Evolution</i> , <b>2018</b> , 4, vey007	3.7	38
136	How the dynamics and structure of sexual contact networks shape pathogen phylogenies. <i>PLoS Computational Biology</i> , <b>2013</b> , 9, e1003105	5	35
135	Viral load levels measured at set-point have risen over the last decade of the HIV epidemic in the Netherlands. <i>PLoS ONE</i> , <b>2009</b> , 4, e7365	3.7	35
134	Epidemiological changes on the Isle of Wight after the launch of the NHS Test and Trace programme: a preliminary analysis. <i>The Lancet Digital Health</i> , <b>2020</b> , 2, e658-e666	14.4	34
133	The role of antigenic stimulation and cytotoxic T cell activity in regulating the long-term immunopathogenesis of HIV: mechanisms and clinical implications. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2001</b> , 268, 2085-95	4.4	33

132	A transmission-virulence evolutionary trade-off explains attenuation of HIV-1 in Uganda. <i>ELife</i> , <b>2016</b> , 5,	8.9	33	
131	Estimating the Severity and Subclinical Burden of Middle East Respiratory Syndrome Coronavirus Infection in the Kingdom of Saudi Arabia. <i>American Journal of Epidemiology</i> , <b>2016</b> , 183, 657-63	3.8	32	
130	OutbreakTools: a new platform for disease outbreak analysis using the R software. <i>Epidemics</i> , <b>2014</b> , 7, 28-34	5.1	32	
129	The potential effects of changing HIV treatment policy on tuberculosis outcomes in South Africa: results from three tuberculosis-HIV transmission models. <i>Aids</i> , <b>2014</b> , 28 Suppl 1, S25-34	3.5	32	
128	Time to evaluate COVID-19 contact-tracing apps. <i>Nature Medicine</i> , <b>2021</b> , 27, 361-362	50.5	32	
127	Semi-classical quantization in N = 4 supersymmetric Yang-Mills theory and duality. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1997</b> , 402, 106-112	4.2	31	
126	On the evolutionary ecology of multidrug resistance in bacteria. <i>PLoS Pathogens</i> , <b>2019</b> , 15, e1007763	7.6	30	
125	Transmission selects for HIV-1 strains of intermediate virulence: a modelling approach. <i>PLoS Computational Biology</i> , <b>2011</b> , 7, e1002185	5	30	
124	Inferring pandemic growth rates from sequence data. Journal of the Royal Society Interface, 2012, 9, 17	′9 <b>78</b> 08	30	
123	The relationship between real-time and discrete-generation models of epidemic spread. <i>Mathematical Biosciences</i> , <b>2008</b> , 216, 63-70	3.9	29	
122	Within-host genomics of SARS-CoV-2		29	
121	CD4+ cell dynamics in untreated HIV-1 infection: overall rates, and effects of age, viral load, sex and calendar time. <i>Aids</i> , <b>2015</b> , 29, 2435-46	3.5	28	
120	Evolutionary epidemiology: preparing for an age of genomic plenty. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2013</b> , 368, 20120193	5.8	28	
119	OpenABM-Covid19-An agent-based model for non-pharmaceutical interventions against COVID-19 including contact tracing. <i>PLoS Computational Biology</i> , <b>2021</b> , 17, e1009146	5	28	
118	Phylodynamic inference and model assessment with approximate bayesian computation: influenza as a case study. <i>PLoS Computational Biology</i> , <b>2012</b> , 8, e1002835	5	27	
117	Viral dynamics and anti-viral pharmacodynamics: rethinking in vitro measures of drug potency. <i>Trends in Pharmacological Sciences</i> , <b>2001</b> , 22, 97-100	13.2	27	
116	Modeling the effect of exposure notification and non-pharmaceutical interventions on COVID-19 transmission in Washington state. <i>Npj Digital Medicine</i> , <b>2021</b> , 4, 49	15.7	27	
115	Inferring HIV-1 transmission networks and sources of epidemic spread in Africa with deep-sequence phylogenetic analysis. <i>Nature Communications</i> , <b>2019</b> , 10, 1411	17.4	26	

114	Quantifying HIV transmission flow between high-prevalence hotspots and surrounding communities: a population-based study in Rakai, Uganda. <i>Lancet HIV,the</i> , <b>2020</b> , 7, e173-e183	7.8	26
113	Modeling the combined effect of digital exposure notification and non-pharmaceutical interventions on the COVID-19 epidemic in Washington state		26
112	The evolution of antibiotic resistance in a structured host population. <i>Journal of the Royal Society Interface</i> , <b>2018</b> , 15,	4.1	25
111	Quantifying Transmission Heterogeneity Using Both Pathogen Phylogenies and Incidence Time Series. <i>Molecular Biology and Evolution</i> , <b>2017</b> , 34, 2982-2995	8.3	24
110	Modelling sexual transmission of HIV: testing the assumptions, validating the predictions. <i>Current Opinion in HIV and AIDS</i> , <b>2010</b> , 5, 269-76	4.2	24
109	The Osp(8  4) singleton action from the supermembrane. <i>Nuclear Physics B</i> , <b>1999</b> , 542, 157-194	2.8	24
108	Quantification of intrinsic residual viral replication in treated HIV-infected patients. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 15167-72	11.5	22
107	OpenABM-Covid19 - an agent-based model for non-pharmaceutical interventions against COVID-19 including contact tracing		22
106	Early analysis of a potential link between viral load and the N501Y mutation in the SARS-COV-2 spike protein		22
105	Ethical considerations in global HIV phylogenetic research. <i>Lancet HIV,the</i> , <b>2018</b> , 5, e656-e666	7.8	22
104	Systematic selection between age and household structure for models aimed at emerging epidemic predictions. <i>Nature Communications</i> , <b>2020</b> , 11, 906	17.4	21
103	From clinical sample to complete genome: Comparing methods for the extraction of HIV-1 RNA for high-throughput deep sequencing. <i>Virus Research</i> , <b>2017</b> , 239, 10-16	6.4	21
102	A strong case for viral genetic factors in HIV virulence. <i>Viruses</i> , <b>2011</b> , 3, 204-16	6.2	21
101	Viral genetic variation accounts for a third of variability in HIV-1 set-point viral load in Europe. <i>PLoS Biology</i> , <b>2017</b> , 15, e2001855	9.7	21
100	Differences in health-related quality of life between HIV-positive and HIV-negative people in Zambia and South Africa: a cross-sectional baseline survey of the HPTN 071 (PopART) trial. <i>The Lancet Global Health</i> , <b>2017</b> , 5, e1133-e1141	13.6	20
99	Comparison of cluster-based and source-attribution methods for estimating transmission risk using large HIV sequence databases. <i>Epidemics</i> , <b>2018</b> , 23, 1-10	5.1	20
98	Increasing sexual risk behaviour among Dutch men who have sex with men: mathematical models versus prospective cohort data. <i>Aids</i> , <b>2012</b> , 26, 1840-3	3.5	20
97	Adherence to antiretroviral therapy and its impact on clinical outcome in HIV-infected patients. Journal of the Royal Society Interface, <b>2005</b> , 2, 349-63	4.1	20

96	Quantifying the transmissibility of human influenza and its seasonal variation in temperate regions. <i>PLOS Currents</i> , <b>2009</b> , 1, RRN1125		20
95	COVID-19 symptoms at hospital admission vary with age and sex: results from the ISARIC prospective multinational observational study. <i>Infection</i> , <b>2021</b> , 49, 889-905	5.8	20
94	HIV-1 drug resistance mutations emerging on darunavir therapy in PI-naive and -experienced patients in the UK. <i>Journal of Antimicrobial Chemotherapy</i> , <b>2016</b> , 71, 3487-3494	5.1	20
93	Using nearly full-genome HIV sequence data improves phylogeny reconstruction in a simulated epidemic. <i>Scientific Reports</i> , <b>2016</b> , 6, 39489	4.9	20
92	High Transmissibility During Early HIV Infection Among Men Who Have Sex With Men-San Francisco, California. <i>Journal of Infectious Diseases</i> , <b>2015</b> , 211, 1757-60	7	19
91	High heritability is compatible with the broad distribution of set point viral load in HIV carriers. <i>PLoS Pathogens</i> , <b>2015</b> , 11, e1004634	7.6	18
90	Molecular Epidemiology of HIV-1 Subtype B Reveals Heterogeneous Transmission Risk: Implications for Intervention and Control. <i>Journal of Infectious Diseases</i> , <b>2018</b> , 217, 1522-1529	7	18
89	Host population structure and treatment frequency maintain balancing selection on drug resistance. <i>Journal of the Royal Society Interface</i> , <b>2017</b> , 14,	4.1	18
88	Genomic analysis of emerging pathogens: methods, application and future trends. <i>Genome Biology</i> , <b>2014</b> , 15, 541	18.3	18
87	Distinguishing Between Reservoir Exposure and Human-to-Human Transmission for Emerging Pathogens Using Case Onset Data. <i>PLOS Currents</i> , <b>2014</b> , 6,		18
86	An evolutionary model to predict the frequency of antibiotic resistance under seasonal antibiotic use, and an application to. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2017</b> , 284,	4.4	17
85	Epidemic growth rate and household reproduction number in communities of households, schools and workplaces. <i>Journal of Mathematical Biology</i> , <b>2011</b> , 63, 691-734	2	17
84	On the weak coupling spectrum of N = 2 supersymmetric SU(n) gauge theory. <i>Nuclear Physics B</i> , <b>1997</b> , 490, 217-235	2.8	17
83	How effectively can HIV phylogenies be used to measure heritability?. <i>Evolution, Medicine and Public Health</i> , <b>2013</b> , 2013, 209-24	3	16
82	Evolution of HIV-1 within untreated individuals and at the population scale in Uganda. <i>PLoS Pathogens</i> , <b>2018</b> , 14, e1007167	7.6	15
81	Estimating the public health impact of the effect of herpes simplex virus suppressive therapy on plasma HIV-1 viral load. <i>Aids</i> , <b>2009</b> , 23, 1005-13	3.5	15
80	A Comprehensive Genomics Solution for HIV Surveillance and Clinical Monitoring in Low-Income Settings. <i>Journal of Clinical Microbiology</i> , <b>2020</b> , 58,	9.7	15
79	Effect of the Latent Reservoir on the Evolution of HIV at the Within- and Between-Host Levels. <i>PLoS Computational Biology</i> , <b>2017</b> , 13, e1005228	5	14

78	Convergent evolution and topologically disruptive polymorphisms among multidrug-resistant tuberculosis in Peru. <i>PLoS ONE</i> , <b>2017</b> , 12, e0189838	3.7	14
77	The Timing of COVID-19 Transmission. SSRN Electronic Journal,	1	14
76	Impact and Cost-Effectiveness of Point-Of-Care CD4 Testing on the HIV Epidemic in South Africa. <i>PLoS ONE</i> , <b>2016</b> , 11, e0158303	3.7	14
75	PANGEA-HIV 2: Phylogenetics And Networks for Generalised Epidemics in Africa. <i>Current Opinion in HIV and AIDS</i> , <b>2019</b> , 14, 173-180	4.2	14
74	HIV-1 full-genome phylogenetics of generalized epidemics in sub-Saharan Africa: impact of missing nucleotide characters in next-generation sequences. <i>AIDS Research and Human Retroviruses</i> , <b>2017</b> , 33, 1083-1098	1.6	13
73	Evolution of HIV virulence in response to widespread scale up of antiretroviral therapy: a modeling study. <i>Virus Evolution</i> , <b>2016</b> , 2, vew028	3.7	13
72	Phylogenetic Methods Inconsistently Predict the Direction of HIV Transmission Among Heterosexual Pairs in the HPTN 052 Cohort. <i>Journal of Infectious Diseases</i> , <b>2019</b> , 220, 1406-1413	7	13
71	Viral replication under combination antiretroviral therapy: a comparison of four different regimens. Journal of Acquired Immune Deficiency Syndromes (1999), <b>2002</b> , 30, 167-76	3.1	12
70	Has the rate of CD4 cell count decline before initiation of antiretroviral therapy changed over the course of the Dutch HIV epidemic among MSM?. <i>PLoS ONE</i> , <b>2013</b> , 8, e64437	3.7	12
69	The impact of viral mutations on recognition by SARS-CoV-2 specific Tcells. <i>IScience</i> , <b>2021</b> , 24, 103353	6.1	12
68	The effect on treatment comparisons of different measurement frequencies in human immunodeficiency virus observational databases. <i>American Journal of Epidemiology</i> , <b>2006</b> , 163, 676-83	3.8	11
67	Comparative potency of three antiretroviral therapy regimes in primary HIV infection. <i>Aids</i> , <b>2006</b> , 20, 247-52	3.5	11
66	Large Variations in HIV-1 Viral Load Explained by Shifting-Mosaic Metapopulation Dynamics. <i>PLoS Biology</i> , <b>2016</b> , 14, e1002567	9.7	11
65	Improved characterisation of MRSA transmission using within-host bacterial sequence diversity. <i>ELife</i> , <b>2019</b> , 8,	8.9	11
64	Efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine against SARS-CoV-2 lineages circulating in Brazil. <i>Nature Communications</i> , <b>2021</b> , 12, 5861	17.4	11
63	Transformation Asymmetry and the Evolution of the Bacterial Accessory Genome. <i>Molecular Biology and Evolution</i> , <b>2018</b> , 35, 575-581	8.3	10
62	A systematic review of reported reassortant viral lineages of influenza A. <i>BMC Infectious Diseases</i> , <b>2016</b> , 16, 3	4	10
61	Instantons, three dimensional gauge theories, and monopole moduli spaces. <i>Physical Review D</i> , <b>1998</b> , 58,	4.9	10

## (2021-2020)

60	Horizontal gene transfer rate is not the primary determinant of observed antibiotic resistance frequencies in. <i>Science Advances</i> , <b>2020</b> , 6, eaaz6137	14.3	10
59	Case-based surveillance of antimicrobial resistance with full susceptibility profiles. JAC-Antimicrobial Resistance, <b>2019</b> , 1, dlz070	2.9	10
58	Optimizing the precision of case fatality ratio estimates under the surveillance pyramid approach. <i>American Journal of Epidemiology</i> , <b>2014</b> , 180, 1036-46	3.8	9
57	High prevalence of integrase mutation L74I in West African HIV-1 subtypes prior to integrase inhibitor treatment. <i>Journal of Antimicrobial Chemotherapy</i> , <b>2020</b> , 75, 1575-1579	5.1	8
56	Interpretation of correlations in setpoint viral load in transmitting couples. Aids, 2010, 24, 2596-7	3.5	8
55	Phylogenetic and Demographic Characterization of Directed HIV-1 Transmission Using Deep Sequences from High-Risk and General Population Cohorts/Groups in Uganda. <i>Viruses</i> , <b>2020</b> , 12,	6.2	7
54	Link between the numbers of particles and variants founding new HIV-1 infections depends on the timing of transmission. <i>Virus Evolution</i> , <b>2019</b> , 5, vey038	3.7	6
53	HIV treatment-as-prevention research: taking the right road at the crossroads. <i>PLoS Medicine</i> , <b>2015</b> , 12, e1001800	11.6	6
52	Antigen-driven T-cell turnover. Journal of Theoretical Biology, 2002, 219, 177-92	2.3	6
51	Evaluation of Phylogenetic Methods for Inferring the Direction of Human Immunodeficiency Virus (HIV) Transmission: HIV Prevention Trials Network (HPTN) 052. <i>Clinical Infectious Diseases</i> , <b>2021</b> , 72, 30-	3 <sup>1</sup> 7 <sup>1.6</sup>	6
50	Age patterns of HIV incidence in eastern and southern Africa: a modelling analysis of observational population-based cohort studies. <i>Lancet HIV,the</i> , <b>2021</b> , 8, e429-e439	7.8	6
49	Virological outcomes of boosted protease inhibitor-based first-line ART in subjects harbouring thymidine analogue-associated mutations as the sole form of transmitted drug resistance. <i>Journal of Antimicrobial Chemotherapy</i> , <b>2019</b> , 74, 746-753	5.1	5
48	Virological failure and development of new resistance mutations according to CD4 count at combination antiretroviral therapy initiation. <i>HIV Medicine</i> , <b>2016</b> , 17, 368-72	2.7	5
47	A highly virulent variant of HIV-1 circulating in the Netherlands <i>Science</i> , <b>2022</b> , 375, 540-545	33.3	5
46	Frequency-dependent selection can forecast evolution in Streptococcus pneumoniae. <i>PLoS Biology</i> , <b>2020</b> , 18, e3000878	9.7	5
45	Predicting evolution using frequency-dependent selection in bacterial populations		5
44	Performance of a high-throughput next-generation sequencing method for analysis of HIV drug resistance and viral load. <i>Journal of Antimicrobial Chemotherapy</i> , <b>2020</b> , 75, 3510-3516	5.1	5
43	Cost and cost-effectiveness of a universal HIV testing and treatment intervention in Zambia and South Africa: evidence and projections from the HPTN 071 (PopART) trial. <i>The Lancet Global Health</i> , <b>2021</b> , 9, e668-e680	13.6	5

42	The evolution of subtype B HIV-1 tat in the Netherlands during 1985-2012. <i>Virus Research</i> , <b>2018</b> , 250, 51-64	6.4	4
41	Bimodal distribution and set point HBV DNA viral loads in chronic infection: retrospective analysis of cohorts from the UK and South Africa. <i>Wellcome Open Research</i> , <b>2020</b> , 5, 113	4.8	4
40	Bimodal distribution and set point HBV DNA viral loads in chronic infection: retrospective analysis of cohorts from the UK and South Africa. <i>Wellcome Open Research</i> , <b>2020</b> , 5, 113	4.8	4
39	Easy and Accurate Reconstruction of Whole HIV Genomes from Short-Read Sequence Data		4
38	Mapping of HIV-1C Transmission Networks Reveals Extensive Spread of Viral Lineages Across Villages in Botswana Treatment-as-Prevention Trial. <i>Journal of Infectious Diseases</i> , <b>2020</b> , 222, 1670-168	10 <sup>7</sup>	3
37	Pervasive and non-random recombination in near full-length HIV genomes from Uganda. <i>Virus Evolution</i> , <b>2020</b> , 6, veaa004	3.7	3
36	Risk factors and outcomes for the Q151M and T69 insertion HIV-1 resistance mutations in historic UK data. <i>AIDS Research and Therapy</i> , <b>2018</b> , 15, 11	3	3
35	Let it be sexualselection, aggregation and distortion used to construct a case against sexual transmission. <i>International Journal of STD and AIDS</i> , <b>2003</b> , 14, 782-4; author reply 784-6	1.4	3
34	Monitoring key epidemiological parameters of SARS-CoV-2 transmission. <i>Nature Medicine</i> , <b>2021</b> , 27, 18	5 <b>4</b> 01.85	553
33	COVID-19 incidence and R decreased on the Isle of Wight after the launch of the Test, Trace, Isolate pr	ogram	m <b>ę</b>
32	Epidemiology, transmission dynamics, and control of SARS: the 2002\(\mathbb{\textit{2003}}\) epidemic <b>2005</b> , 61-80		3
31	A comprehensive genomics solution for HIV surveillance and clinical monitoring in a global health setti	ng	3
30	Efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine against SARS-CoV-2 lineages circulating in Brazil; an exploratory analysis of a randomised controlled trial		3
29	Associations between baseline characteristics, CD4 cell count response and virological failure on first-line efavirenz + tenofovir + emtricitabine for HIV. <i>Journal of Virus Eradication</i> , <b>2019</b> , 5, 204-211	2.8	3
28	Synergistic Activity of Mobile Genetic Element Defences in. <i>Genes</i> , <b>2019</b> , 10,	4.2	2
27	- HINVA C		
	HIV-1 Sequence Data Coverage in Central East Africa from 1959 to 2013. <i>AIDS Research and Human Retroviruses</i> , <b>2016</b> , 32, 904-8	1.6	2
26		1.6	2

24	Bimodal distribution and set point HBV DNA viral loads in chronic infection: retrospective analysis of cohorts from the UK and South Africa		2
23	Genomic assessment of quarantine measures to prevent SARS-CoV-2 importation and transmission <i>Nature Communications</i> , <b>2022</b> , 13, 1012	17.4	2
22	Recombination Analysis of Near Full-Length HIV-1 Sequences and the Identification of a Potential New Circulating Recombinant Form from Rakai, Uganda. <i>AIDS Research and Human Retroviruses</i> , <b>2020</b> , 36, 467-474	1.6	1
21	Continuation of emtricitabine/lamivudine within combination antiretroviral therapy following detection of the M184V/I HIV-1 resistance mutation. <i>HIV Medicine</i> , <b>2020</b> , 21, 309-321	2.7	1
20	ResponseInfluenza. <i>Science</i> , <b>2009</b> , 325, 1072-1073	33.3	1
19	Lineage replacement and evolution captured by the United Kingdom Covid Infection Survey		1
18	Improving Post-Release Care Engagement for People Living with HIV Involved in the Criminal Justice System: A Systematic Review. <i>AIDS and Behavior</i> , <b>2021</b> , 1	4.3	1
17	Host population structure and treatment frequency maintain balancing selection on drug resistance		1
16	Coalescent models for populations with time-varying population sizes and arbitrary offspring distribut	ions	1
15	Many but small HIV-1 non-B transmission chains in the Netherlands. <i>Aids</i> , <b>2022</b> , 36, 83-94	3.5	1
14	Deep-sequence phylogenetics to quantify patterns of HIV transmission in the context of a universal testing and treatment trial - BCPP/ Ya Tsie trial <i>ELife</i> , <b>2022</b> , 11,	8.9	1
13	PopART-IBM, a highly efficient stochastic individual-based simulation model of generalised HIV epidemics developed in the context of the HPTN 071 (PopART) trial. <i>PLoS Computational Biology</i> , <b>2021</b> , 17, e1009301	5	O
12	Workup of Human Blood Samples for Deep Sequencing of HIV-1 Genomes. <i>Methods in Molecular Biology</i> , <b>2018</b> , 1746, 55-61	1.4	
11	Transmission Dynamics and Control of the Viral Aetiological Agent of SARS 2008, 111-130		
10	Exploring Genetic Relatedness, Patterns of Evolutionary Descent, and the Population Genetics of Bacterial Pathogens Using Multilocus Sequence Typing495-508		
9	Influenza pandemic vaccines: spread them thin?. <i>PLoS Medicine</i> , <b>2007</b> , 4, e228	11.6	
8	Multilocus Models of Bacterial Population Genetics93-104		
7	Phylogenetic estimation of the viral fitness landscape of HIV-1 set-point viral load <i>Virus Evolution</i> , <b>2022</b> , 8, veac022	3.7	

- 6 Frequency-dependent selection can forecast evolution in Streptococcus pneumoniae 2020, 18, e3000878
- 5 Frequency-dependent selection can forecast evolution in Streptococcus pneumoniae **2020**, 18, e3000878
- Frequency-dependent selection can forecast evolution in Streptococcus pneumoniae **2020**, 18, e3000878
- 3 Frequency-dependent selection can forecast evolution in Streptococcus pneumoniae **2020**, 18, e3000878
- 2 Frequency-dependent selection can forecast evolution in Streptococcus pneumoniae **2020**, 18, e3000878
- Frequency-dependent selection can forecast evolution in Streptococcus pneumoniae **2020**, 18, e3000878