Frederick R Adler

List of Publications by Year
in descending order

96 papers	5,892 citations	81839 39 h-index	79644 73 g-index
103 all docs	103 docs citations	103 times ranked	7535 citing authors

#	Article	IF	Citations
1	The Uncertain Role of Corticosteroids in the Treatment of COVID-19. JAMA Internal Medicine, 2021, 181, 139.	2.6	3
2	Do mechanisms matter? Comparing cancer treatment strategies across mathematical models and outcome objectives. Mathematical Biosciences and Engineering, 2021, 18, 6305-6327.	1.0	8
3	SARSâ€CoVâ€2 innate effector associations and viral load in early nasopharyngeal infection. Physiological Reports, 2021, 9, e14761.	0.7	15
4	ATM and ATR Activation Through Crosstalk Between DNA Damage Response Pathways. Bulletin of Mathematical Biology, 2021, 83, 38.	0.9	11
5	Will SARS-CoV-2 Become Just Another Seasonal Coronavirus?. Viruses, 2021, 13, 854.	1.5	11
6	Serial single-cell genomics reveals convergent subclonal evolution of resistance as patients with early-stage breast cancer progress on endocrine plus CDK4/6 therapy. Nature Cancer, 2021, 2, 658-671.	5.7	34
7	How Should Cancer Models Be Constructed?. Cancer Control, 2020, 27, 107327482096200.	0.7	17
8	Evaluation of a five-year predicted survival model for cystic fibrosis in later time periods. Scientific Reports, 2020, 10, 6602.	1.6	11
9	Circulating immune cell phenotype dynamics reflect the strength of tumorâ€“immune cell interactions in patients during immunotherapy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16072-16082.	3.3	60
10	Citizen science in ecology: a place for humans in nature. Annals of the New York Academy of Sciences, 2020, 1469, 52-64.	1.8	44
11	Is mammography screening beneficial: An individual-based stochastic model for breast cancer incidence and mortality. PLoS Computational Biology, 2020, 16, e1008036.	1.5	4
12	Monitoring the world's bird populations with community science data. Biological Conservation, 2020, 248, 108653.	1.9	46
13	Prospective multicenter randomized patient recruitment and sample collection to enable future measurements of sputum biomarkers of inflammation in an observational study of cystic fibrosis. BMC Medical Research Methodology, 2019, 19, 88.	1.4	8
14	A comprehensive evaluation of predictive performance of 33 species distribution models at species and community levels. Ecological Monographs, 2019, 89, e01370.	2.4	290
15	Modeling factors that regulate cell cooperativity in the zebrafish posterior lateral line primordium. Journal of Theoretical Biology, 2018, 444, 93-99.	0.8	3
16	<i>Arabidopsis</i> mRNA decay landscape arises from specialized RNA decay substrates, decapping-mediated feedback, and redundancy. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E1485-E1494.	3.3	102
17	Using opportunistic citizen science data to estimate avian population trends. Biological Conservation, 2018, 221, 151-159.	1.9	107
18	Transmission of rhinovirus in the Utah BIG-LoVE families: Consequences of age and household structure. PLoS ONE, 2018, 13, e0199388.	1.1	11

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19	Microbial Interactions in the Cystic Fibrosis Airway. Journal of Clinical Microbiology, 2018, 56, .	1.8	45
20	Human Rhinovirus Diversity and Evolution: How Strange the Change from Major to Minor. Journal of Virology, 2017, 91, .	1.5	20
21	Sleep Phase Delay in Cystic Fibrosis. Chest, 2017, 152, 386-393.	0.4	21
22	The relationship between species richness and ecosystem variability is shaped by the mechanism of coexistence. Ecology Letters, 2017, 20, 958-968.	3.0	32
23	A Mathematical Model of Cell Cycle Dysregulation Due to Human Papillomavirus Infection. Bulletin of Mathematical Biology, 2017, 79, 1564-1585.	0.9	7
24	Convergence in leaf size versus twig leaf area scaling: do plants optimize leaf area partitioning?. Annals of Botany, 2017, 119, 447-456.	1.4	30
25	A Mathematical Model for the Macrophage Response to Respiratory Viral Infection in Normal and Asthmatic Conditions. Bulletin of Mathematical Biology, 2017, 79, 1979-1998.	0.9	5
26	The Drivers of Acute and Long-term Care Clostridium difficile Infection Rates: A Retrospective Multilevel Cohort Study of 251 Facilities. Clinical Infectious Diseases, 2017, 65, 1282-1288.	2.9	13
27	The Dynamics of Disease Progression in Cystic Fibrosis. PLoS ONE, 2016, 11, e0156752.	1.1	19
28	Importation, Antibiotics, and<i>Clostridium difficile</i>Infection in Veteran Long-Term Care. Annals of Internal Medicine, 2016, 164, 787.	2.0	23
29	Harnessing Intra-Host Strain Competition to Limit Antibiotic Resistance: Mathematical Model Results. Bulletin of Mathematical Biology, 2016, 78, 1828-1846.	0.9	4
30	Southern right whale (<i>Eubalaena australis</i>) calf mortality at PenÃnsula ValdÃ©s, Argentina: Are harmful algal blooms to blame?. Marine Mammal Science, 2016, 32, 423-451.	0.9	42
31	Loose coupling in the bacterial flagellar motor. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4755-4760.	3.3	14
32	Cross-immunity between strains explains the dynamical pattern of paramyxoviruses. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13396-13400.	3.3	58
33	Community Surveillance of Respiratory Viruses Among Families in the Utah Better Identification of Germs-Longitudinal Viral Epidemiology (BIG-LoVE) Study. Clinical Infectious Diseases, 2015, 61, 1217-1224.	2.9	193
34	Serial infection of diverse host (<i>Mus</i>) genotypes rapidly impedes pathogen fitness and virulence. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20141568.	1.2	8
35	Mathematical modelling of chronic acetaminophen metabolism and liver injury. Mathematical Medicine and Biology, 2014, 31, 302-317.	0.8	12
36	Urban ecology: advancing science and society. Frontiers in Ecology and the Environment, 2014, 12, 574-581.	1.9	60

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37	Predicting future coexistence in a N orth A merican ant community. Ecology and Evolution, 2014, 4, 1804-1819.	0.8	16
38	Long-term models of oxidative stress and mitochondrial damage in insulin resistance progression. Journal of Theoretical Biology, 2014, 340, 238-250.	0.8	5
39	Deconvolution of isotope signals from bundles of multiple hairs. Oecologia, 2014, 175, 781-789.	0.9	29
40	Can antibodies against flies alter malaria transmission in birds by changing vector behavior?. Journal of Theoretical Biology, 2014, 358, 93-101.	0.8	2
41	Identification of Pauses during Formation of HIV-1 Virus Like Particles. Biophysical Journal, 2013, 105, 2262-2272.	0.2	27
42	Models of contrasting strategies of rhinovirus immune manipulation. Journal of Theoretical Biology, 2013, 327, 1-10.	0.8	3
43	Kinetics of Coinfection with Influenza A Virus and Streptococcus pneumoniae. PLoS Pathogens, 2013, 9, e1003238.	2.1	184
44	Quantitative Models of the Dose-Response and Time Course of Inhalational Anthrax in Humans. PLoS Pathogens, 2013, 9, e1003555.	2.1	38
45	Sexâ€specific effects of an avian malaria parasite on an insect vector: support for the resource limitation hypothesis. Ecology, 2012, 93, 2448-2455.	1.5	14
46	Mathematical modelling the age dependence of Epstein-Barr virus associated infectious mononucleosis. Mathematical Medicine and Biology, 2012, 29, 245-261.	0.8	12
47	Reply:. Hepatology, 2012, 56, 2428-2429.	3.6	0
48	A Time Since Recovery Model with Varying Rates of Loss of Immunity. Bulletin of Mathematical Biology, 2012, 74, 2810-2819.	0.9	11
49	Mathematical modeling of liver injury and dysfunction after acetaminophen overdose: Early discrimination between survival and death. Hepatology, 2012, 56, 727-734.	3.6	57
50	Fast food in ant communities: how competing species find resources. Oecologia, 2011, 167, 229-240.	0.9	15
51	Mathematical model of a three-stage innate immune response to a pneumococcal lung infection. Journal of Theoretical Biology, 2011, 276, 106-116.	0.8	104
52	The effects of intraspecific density dependence on species richness and species abundance distributions. Theoretical Ecology, 2011, 4, 153-162.	0.4	2
53	Alternating Host Cell Tropism Shapes the Persistence, Evolution and Coexistence of Epsteinâ€"Barr Virus Infections inÂHuman. Bulletin of Mathematical Biology, 2011, 73, 1754-1773.	0.9	8
54	Effect of 1918 PB1-F2 Expression on Influenza A Virus Infection Kinetics. PLoS Computational Biology, 2011, 7, e1001081.	1.5	67

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55	An accurate two-phase approximate solution to an acute viral infection model. Journal of Mathematical Biology, 2010, 60, 711-726.	0.8	75
56	A Continuous-State Coalescent and the Impact of Weak Selection on the Structure of Gene Genealogies. Molecular Biology and Evolution, 2010, 27, 1162-1172.	3.5	51
57	Gene Genealogies Strongly Distorted by Weakly Interfering Mutations in Constant Environments. Genetics, 2010, 184, 529-545.	1.2	62
58	The role of age structure in the persistence of a chronic pathogen in a fluctuating population. Journal of Biological Dynamics, 2009, 3, 224-234.	0.8	3
59	Lung Transplantation for Cystic Fibrosis. Proceedings of the American Thoracic Society, 2009, 6, 619-633.	3.5	65
60	To fight or not to fight: context-dependent interspecific aggression in competing ants. Animal Behaviour, 2009, 77, 297-305.	0.8	80
61	Testing the â€˜rare pitâ€™ hypothesis for xylem cavitation resistance in three species of <i>Acer</i>. New Phytologist, 2009, 182, 664-674.	3.5	153
62	How Host Population Dynamics Translate into Time-Lagged Prevalence: An Investigation of Sin Nombre Virus in Deer Mice. Bulletin of Mathematical Biology, 2008, 70, 236-252.	0.9	46
63	The Role of Heterogeneity in the Persistence and Prevalence of Sin Nombre Virus in Deer Mice. American Naturalist, 2008, 172, 855-867.	1.0	18
64	Lung Transplantation and Survival in Children with Cystic Fibrosis. New England Journal of Medicine, 2008, 359, e6.	13.9	4
65	Lung Transplantation and Survival in Children with Cystic Fibrosis. New England Journal of Medicine, 2007, 357, 2143-2152.	13.9	186
66	STOCHASTICITY, COMPLEX SPATIAL STRUCTURE, AND THE FEASIBILITY OF THE SHIFTING BALANCE THEORY. Evolution; International Journal of Organic Evolution, 2006, 60, 448-459.	1.1	0
67	Commentary on Calcagno et al. (2006): Coexistence in a metacommunity: the competitionâ€“colonization trade-off is not dead. Ecology Letters, 2006, 9, 907-909.	3.0	3
68	When do localized natural enemies increase species richness?. Ecology Letters, 2005, 8, 438-447.	3.0	89
69	Use of Lung Transplantation Survival Models to Refine Patient Selection in Cystic Fibrosis. American Journal of Respiratory and Critical Care Medicine, 2005, 171, 1053-1059.	2.5	127
70	Interaction between the X chromosome and an autosome regulates size sexual dimorphism in Portuguese Water Dogs. Genome Research, 2005, 15, 1820-1824.	2.4	69
71	Water transport in plants obeys Murray's law. Nature, 2003, 421, 939-942.	13.7	365
72	HOW VIRULENT SHOULD A PARASITE BE TO ITS VECTOR?. Ecology, 2003, 84, 2568-2574.	1.5	43

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73	Optimization, Conflict, and Nonoverlapping Foraging Ranges in Ants. American Naturalist, 2003, 162, 529-543.	1.0	68
74	Genetic basis for systems of skeletal quantitative traits: Principal component analysis of the canid skeleton. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 9930-9935.	3.3	151
75	Value of Ophthalmologic Examination in Diagnosing Temporal Arteritis. JAMA - Journal of the American Medical Association, 2002, 287, 1528.	3.8	10
76	Time's crooked arrow: optimal foraging and rate-biased time perception. Animal Behaviour, 2002, 64, 589-597.	0.8	14
77	Predictive 5-Year Survivorship Model of Cystic Fibrosis. American Journal of Epidemiology, 2001, 153, 345-352.	1.6	647
78	How to make a Biological Switch. Journal of Theoretical Biology, 2000, 203, 117-133.	0.8	274
79	GENETIC AND PHYLOGENETIC CONSEQUENCES OF ISLAND BIOGEOGRAPHY. Evolution; International Journal of Organic Evolution, 2000, 54, 387-396.	1.1	102
80	IS SPACE NECESSARY? INTERFERENCE COMPETITION AND LIMITS TO BIODIVERSITY. Ecology, 2000, 81, 3226-3232.	1.5	96
81	Is Space Necessary? Interference Competition and Limits to Biodiversity. Ecology, 2000, 81, 3226.	1.5	63
82	The Balance of Terror: An Alternative Mechanism for Competitive Tradeâ€Offs and Its Implications for Invading Species. American Naturalist, 1999, 154, 497-509.	1.0	26
83	Evolution of Virulence: a Unified Framework for Coinfection and Superinfection. Journal of Theoretical Biology, 1998, 195, 293-313.	0.8	174
84	Induced resistance to herbivores and the information content of early season attack. Oecologia, 1996, 107, 379-385.	0.9	43
85	Stumped by Trees? A Generalized Null Model for Patterns of Organismal Diversity. American Naturalist, 1995, 145, 329-342.	1.0	64
86	Mechanisms of pollen deposition by insect pollinators. Evolutionary Ecology, 1995, 9, 304-317.	0.5	40
87	Defended Fortresses or Moving Targets? Another Model of Inducible Defenses Inspired by Military Metaphors. American Naturalist, 1994, 144, 813-832.	1.0	169
88	A General Test for Interaction Modification. Ecology, 1994, 75, 1552-1559.	1.5	39
89	Construction of Multidimensional Clustered Patterns. Ecology, 1994, 75, 1289-1298.	1.5	23
90	Migration Alone Can Produce Persistence of Host-Parasitoid Models. American Naturalist, 1993, 141, 642-650.	1.0	72

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91	Information Collection and Spread by Networks of Patrolling Ants. American Naturalist, 1992, 140, 373-400.	1.0	102
92	The effects of averaging on the basic reproduction ratio. Mathematical Biosciences, 1992, 111, 89-98.	0.9	39
93	The dynamics of simultaneous infections with altered susceptibilities. Theoretical Population Biology, 1991, 40, 369-410.	0.5	29
94	Inducible defenses, phenotypic variability and biotic environments. Trends in Ecology and Evolution, 1990, 5, 407-410.	4.2	118
95	Diffuse coevolution in plant-herbivore communities. Theoretical Population Biology, 1990, 37, 171-191.	0.5	34
96	Water transport in plants obeys Murray's law. , 0, .		1