Ester Lazaro

List of Publications by Year
in descending order

46 papers	1,389 citations	394421 19 h-index	345221 36 g-index
48 all docs	48 docs citations	48 times ranked	1069 citing authors

#	Article	IF	Citations
1	Suppression of viral infectivity through lethal defection. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 4448-4452.	7.1	170
2	Resistance of virus to extinction on bottleneck passages: Study of a decaying and fluctuating pattern of fitness loss. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10830-10835.	7.1	109
3	Quasispecies dynamics and RNA virus extinction. Virus Research, 2005, 107, 129-139.	2.2	93
4	High mutation rates, bottlenecks, and robustness of RNA viral quasispecies. Gene, 2005, 347, 273-282.	2.2	84
5	Analysis of Ribavirin Mutagenicity in Human Hepatitis C Virus Infection. Journal of Virology, 2007, 81, 7732-7741.	3.4	82
6	Molecular intermediates of fitness gain of an RNA virus: characterization of a mutant spectrum by biological and molecular cloning. Journal of General Virology, 2001, 82, 1049-1060.	2.9	77
7	Resistance to extinction of low fitness virus subjected to plaque-to-plaque transfers: diversification by mutation clustering 1 1Edited by J. Karn. Journal of Molecular Biology, 2002, 315, 647-661.	4.2	73
8	Population Bottlenecks in Quasispecies Dynamics. , 2006, 299, 141-170.		67
9	Modeling Viral Genome Fitness Evolution Associated with Serial Bottleneck Events: Evidence of Stationary States of Fitness. Journal of Virology, 2002, 76, 8675-8681.	3.4	58
10	Pathways to extinction: beyond the error threshold. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 1943-1952.	4.0	57
11	Viral evolution. Physics of Life Reviews, 2006, 3, 65-92.	2.8	48
12	A Sparsomycin-resistant Mutant ofHalobacterium salinariumLacks a Modification at Nucleotide U2603 in the Peptidyl Transferase Centre of 23 S rRNA. Journal of Molecular Biology, 1996, 261, 231-238.	4.2	42
13	Repeated Bottleneck Transfers Can Lead to Non-cytocidal Forms of a Cytopathic Virus: Implications for Viral Extinction. Journal of Molecular Biology, 2008, 376, 367-379.	4.2	41
14	Lipophilic analogs of sparsomycin as strong inhibitors of protein synthesis and tumor growth: a structure-activity relationship study. Journal of Medicinal Chemistry, 1989, 32, 2002-2015.	6.4	34
15	Fitness Distributions in Exponentially Growing Asexual Populations. Physical Review Letters, 2003, 90, 188102.	7.8	33
16	Beneficial Effects of Population Bottlenecks in an RNA Virus Evolving at Increased Error Rate. Journal of Molecular Biology, 2008, 384, 1120-1129.	4.2	33
17	Biochemical and kinetic characteristics of the interaction of the antitumor antibiotic sparsomycin with prokaryotic and eukaryotic ribosomes. Biochemistry, 1991, 30, 9642-9648.	2.5	31
18	Evolution at increased error rate leads to the coexistence of multiple adaptive pathways in an RNA virus. BMC Evolutionary Biology, 2013, 13, 11.	3.2	26

#	Article	IF	Citations
19	Phenotypic effect of mutations in evolving populations of RNA molecules. BMC Evolutionary Biology, 2010, 10, 46.	3.2	22
20	Identification of mutations conferring 5-azacytidine resistance in bacteriophage QÎ². Virology, 2011, 417, 343-352.	2.4	19
21	Variable Mutation Rates as an Adaptive Strategy in Replicator Populations. PLoS ONE, 2010, 5, e11186.	2.5	18
22	Adaptation to Fluctuating Temperatures in an RNA Virus Is Driven by the Most Stringent Selective Pressure. PLoS ONE, 2014, 9, e100940.	2.5	18
23	A trade-off between neutrality and adaptability limits the optimization of viral quasispecies. Journal of Theoretical Biology, 2009, 261, 148-155.	1.7	17
24	Reconstructing evolutionary relationships from functional data: a consistent classification of organisms based on translation inhibition response. Molecular Phylogenetics and Evolution, 2005, 34, 371-381.	2.7	15
25	Interaction of the antibiotic sparsomycin with the ribosome. Antimicrobial Agents and Chemotherapy, 1991, 35, 10-13.	3.2	13
26	Evolutionary adaptation of an RNA bacteriophage to the simultaneous increase in the within-host and extracellular temperatures. Scientific Reports, 2018, 8, 8080.	3.3	13
27	Impact of increased mutagenesis on adaptation to high temperature in bacteriophage QÎ². Virology, 2016, 497, 163-170.	2.4	12
28	Differences in adaptive dynamics determine the success of virus variants that propagate together. Virus Evolution, 2018, 4, vex043.	4.9	11
29	Chemical, biochemical and genetic endeavours characterizing the interaction of sparsomycin with the ribosome. Biochimie, 1991, 73, 1137-1143.	2.6	10
30	The role of the hydroxymethyl function on the biological activity of the antitumor antibiotic sparsomycin. European Journal of Medicinal Chemistry, 1989, 24, 503-510.	5.5	9
31	Evolutionary Dynamics in the RNA Bacteriophage QÎ² Depends on the Pattern of Change in Selective Pressures. Pathogens, 2019, 8, 80.	2.8	8
32	Structure-activity relationships of sparsomycin: modification at the hydroxyl group. Biochimie, 1987, 69, 849-856.	2.6	6
33	Geomarkers<i>versus</i>Biomarkers: Paleoenvironmental and Astrobiological Significance. Ambio, 2007, 36, 425-426.	5.5	6
34	Changes in Protein Domains outside the Catalytic Site of the Bacteriophage QÂ Replicase Reduce the Mutagenic Effect of 5-Azacytidine. Journal of Virology, 2014, 88, 10480-10487.	3.4	6
35	Getting to Know Viral Evolutionary Strategies: Towards the Next Generation of Quasispecies Models. Current Topics in Microbiology and Immunology, 2015, 392, 201-217.	1.1	5
36	Intra-Population Competition during Adaptation to Increased Temperature in an RNA Bacteriophage. International Journal of Molecular Sciences, 2021, 22, 6815.	4.1	5

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37	Biomedical implications of viral mutation and evolution. Future Virology, 2012, 7, 391-402.	1.8	4
38	Effect of metallic cations on the efficiency of DNA amplification. Implications for nucleic acid replication during early stages of life. International Journal of Astrobiology, 2005, 4, 115.	1.6	3
39	Synthesis of sparsomycin derivatives, addressing its binding to the large ribosomal subunit. Recueil Des Travaux Chimiques Des Pays-Bas, 1992, 111, 163-169.	0.0	3
40	Characterization of Sparsomycin Resistance in Streptomyces sparsogenes. Antimicrobial Agents and Chemotherapy, 2002, 46, 2914-2919.	3.2	2
41	Supercritical branching processes and the role of fluctuations under exponential population growth. Journal of Theoretical Biology, 2003, 225, 497-505.	1.7	1
42	Genetic Variability in RNA Viruses: Consequences in Epidemiology and in the Development of New Stratgies for the Extinction of Infectivity. Biological and Medical Physics Series, 2007, , 341-362.	0.4	1
43	RNA virus evolution at variable error rate. Future Virology, 2014, 9, 665-677.	1.8	1
44	Intra-population Interactions and the Evolution of RNA Phages. , 2020, , 239-260.		1
45	Propagation of an RNA Bacteriophage at Low Host Density Leads to a More Efficient Virus Entry. Frontiers in Virology, 2022, 2, .	1.4	1
46	Populations of RNA Molecules as Computational Model for Evolution. , 2010, , 67-79.		0