Sabin Lessard

List of Publications by Year
in descending order

Version: 2024-02-01

60 papers	974 citations	516561 16 h-index	501076 28 g-index
61 all docs	61 docs citations	61 times ranked	419 citing authors

#	Article	IF	Citations
1	Noise-Induced Quasi-Heteroclinic Cycle in a Rockâ€“Paperâ€“Scissors Game with Random Payoffs. Dynamic Games and Applications, 2022, 12, 1280-1292.	1.1	2
2	Stochastic evolutionary stability in matrix games with random payoffs. Physical Review E, 2022, 105, 034303.	0.8	2
3	Evolution of cooperation with respect to fixation probabilities in multi-player games with random payoffs. Theoretical Population Biology, 2022, 145, 1-21.	0.5	2
4	Stochastic replicator dynamics and evolutionary stability. Physical Review E, 2022, 105, 044403.	0.8	6
5	The effect of the opting-out strategy on conditions for selection to favor the evolution of cooperation in a finite population. Journal of Theoretical Biology, 2021, 510, 110543.	0.8	3
6	The effect of variability in payoffs on average abundance in two-player linear games under symmetric mutation. Journal of Theoretical Biology, 2021, 513, 110569.	0.8	4
7	Inclusive fitness and Hamiltonâ€™s rule in a stochastic environment. Theoretical Population Biology, 2021, 142, 91-99.	0.5	2
8	First-order effect of frequency-dependent selection on fixation probability in an age-structured population with application to a public goods game. Theoretical Population Biology, 2020, 133, 80-96.	0.5	7
9	Randomized matrix games in a finite population: Effect of stochastic fluctuations in the payoffs on the evolution of cooperation. Theoretical Population Biology, 2020, 134, 77-91.	0.5	9
10	Diffusion approximation for an age-class-structured population under viability and fertility selection with application to fixation probability of an advantageous mutant. Journal of Mathematical Biology, 2019, 79, 2069-2110.	0.8	3
11	The left-hand side of the Fundamental Theorem of Natural Selection: A reply. Journal of Theoretical Biology, 2019, 472, 77-83.	0.8	5
12	Weak selection can filter environmental noise in the evolution of animal behavior. Physical Review E, 2019, 100, 052411.	0.8	1
13	Frequency-dependent growth in class-structured populations: continuous dynamics in the limit of weak selection. Journal of Mathematical Biology, 2018, 77, 229-259.	0.8	11
14	Environmental Noise Could Promote Stochastic Local Stability of Behavioral Diversity Evolution. Physical Review Letters, 2018, 120, 218101.	2.9	18
15	Evolutionary stability concepts in a stochastic environment. Physical Review E, 2017, 96, 032414.	0.8	17
16	Fixation probability in a two-locus intersexual selection model. Theoretical Population Biology, 2016, 109, 75-87.	0.5	2
17	Definitions of fitness in age-structured populations: Comparison in the haploid case. Journal of Theoretical Biology, 2016, 391, 65-73.	0.8	10
18	Strong Migration Limit for Games in Structured Populations: Applications to Dominance Hierarchy and Set Structure. Games, 2015, 6, 318-346.	0.4	7

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19	Evolution of cooperation in a multidimensional phenotype space. Theoretical Population Biology, 2015, 102, 60-75.	0.5	9
20	On the interpretation and relevance of the Fundamental Theorem of Natural Selection. Theoretical Population Biology, 2015, 104, 59-67.	0.5	33
21	Conditions for Cooperation to be More Abundant than Defection in a Hierarchically Structured Population. Dynamic Games and Applications, 2015, 5, 239-262.	1.1	5
22	Fixation Probability in a Two-Locus Model by the Ancestral Recombinationâ€“Selection Graph. Genetics, 2012, 190, 691-707.	1.2	10
23	Effect of epistasis and linkage on fixation probability in three-locus models: An ancestral recombinationâ€“selection graph approach. Theoretical Population Biology, 2012, 82, 131-145.	0.5	5
24	On the Robustness of the Extension of the One-Third Law of Evolution to the Multi-Player Game. Dynamic Games and Applications, 2011, 1, 408-418.	1.1	28
25	Effective Game Matrix and Inclusive Payoff in Group-Structured Populations. Dynamic Games and Applications, 2011, 1, 301-318.	1.1	16
26	Recurrence Equations for the Probability Distribution of Sample Configurations in Exact Population Genetics Models. Journal of Applied Probability, 2010, 47, 732-751.	0.4	5
27	Recurrence Equations for the Probability Distribution of Sample Configurations in Exact Population Genetics Models. Journal of Applied Probability, 2010, 47, 732-751.	0.4	5
28	Fixation probability with multiple alleles and projected average allelic effect on selection. Theoretical Population Biology, 2009, 75, 266-277.	0.5	9
29	Diffusion approximations for one-locus multi-allele kin selection, mutation and random drift in group-structured populations: a unifying approach to selection models in population genetics. Journal of Mathematical Biology, 2009, 59, 659-696.	0.8	18
30	Evolutionary game dynamics in a finite asymmetric two-deme population and emergence of cooperation. Journal of Theoretical Biology, 2008, 255, 137-151.	0.8	12
31	A Composite-Conditional-Likelihood Approach for Gene Mapping Based on Linkage Disequilibrium in Windows of Marker Loci. Statistical Applications in Genetics and Molecular Biology, 2008, 7, Article27.	0.2	6
32	An Exact Sampling Formula for the Wrightâ€“Fisher Model and a Solution to a Conjecture About the Finite-Island Model. Genetics, 2007, 177, 1249-1254.	1.2	16
33	Cooperation is less likely to evolve in a finite population with a highly skewed distribution of family size. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 1861-1865.	1.2	7
34	Fixation probability for a beneficial allele and a mutant strategy in a linear game under weak selection in a finite island model. Theoretical Population Biology, 2007, 72, 409-425.	0.5	20
35	The probability of fixation of a single mutant in an exchangeable selection model. Journal of Mathematical Biology, 2007, 54, 721-744.	0.8	95
36	ESS theory now. Theoretical Population Biology, 2006, 69, 231-233.	0.5	1

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37	Corridors for migration between large subdivided populations, and the structured coalescent. Theoretical Population Biology, 2006, 70, 412-420.	0.5	6
38	Kin Selection Is Implicated in Partial Sib-Mating Populations With Constant Viability Differences Before Mating. Genetics, 2005, 171, 407-413.	1.2	1
39	Ewensâ€™ sampling formula and related formulae: combinatorial proofs, extensions to variable population size and applications to ages of alleles. Theoretical Population Biology, 2005, 68, 167-177.	0.5	34
40	Long-term stability from fixation probabilities in finite populations: New perspectives for ESS theory. Theoretical Population Biology, 2005, 68, 19-27.	0.5	61
41	The two-locus ancestral graph in a subdivided population: convergence as the number of demes grows in the island model. Journal of Mathematical Biology, 2004, 48, 275-292.	0.8	21
42	Kin selection and coefficients of relatedness in family-structured populations with inbreeding. Theoretical Population Biology, 2004, 66, 287-306.	0.5	6
43	Change in frequency of a rare mutant allele: A general formula and applications to partial inbreeding models. Journal of Mathematical Biology, 2003, 46, 71-94.	0.8	2
44	Theory of the Effects of Population Structure and Sampling on Patterns of Linkage Disequilibrium Applied to Genomic Data From Humans. Genetics, 2003, 164, 1043-1053.	1.2	48
45	Gene Mapping via the Ancestral Recombination Graph. Theoretical Population Biology, 2002, 62, 215-229.	0.5	35
46	The Theory of Optimal Sex Ratio. Comments on Theoretical Biology, 2002, 7, 315-354.	0.6	2
47	Equilibrium structure and stability in a frequency-dependent, two-population diploid model. Journal of Mathematical Biology, 2001, 43, 1-21.	0.8	1
48	Optimal Sex Ratios in Structured Populations. Journal of Theoretical Biology, 2000, 207, 159-175.	0.8	33
49	Stability analysis of the partial selfing selection model. Journal of Mathematical Biology, 2000, 40, 541-574.	0.8	8
50	Stochastic Effects in LMC Models. Theoretical Population Biology, 1999, 55, 127-136.	0.5	11
51	Fisher's Fundamental Theorem of Natural Selection Revisited. Theoretical Population Biology, 1997, 52, 119-136.	0.5	81
52	On the non-existence of an optimal migration rate. Journal of Mathematical Biology, 1997, 35, 657-682.	0.8	2
53	Relatedness and inclusive fitness with inbreeding. Theoretical Population Biology, 1992, 42, 284-307.	0.5	10
54	Evolutionary stability: One concept, several meanings. Theoretical Population Biology, 1990, 37, 159-170.	0.5	67

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55	Ã‰volution Du Rapport NumÃ©rique Des Sexes Et ModÃ¨les Dynamiques Connexes. , 1990, , 269-325.		6
56	10. Resource Allocation In Mendelian Populations: Further In Ess Theory. , 1989, , 207-246.		13
57	On the optimal sex-ratio: A stability analysis based on a characterization for one-locus multiallele viability models. Journal of Mathematical Biology, 1984, 20, 15-38.	0.8	22
58	Evolutionary dynamics in frequency-dependent two-phenotype models. Theoretical Population Biology, 1984, 25, 210-234.	0.5	70
59	A criterion for stability-instability at fixation states involving an eigenvalue one with applications in population genetics. Theoretical Population Biology, 1982, 22, 108-126.	0.5	16
60	Effect of Variability in Payoffs on Conditions for the Evolution of Cooperation in a Small Population. Dynamic Games and Applications, 0, , 1.	1.1	4