Daniel M Weinreich

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7862982/publications.pdf

Version: 2024-02-01

37 papers

4,876 citations

331538 21 h-index 414303 32 g-index

47 all docs

47 docs citations

times ranked

47

3698 citing authors

#	Article	IF	CITATIONS
1	Density fluctuations, homeostasis, and reproduction effects in bacteria. Communications Biology, 2022, 5, 397.	2.0	2
2	Covalent docking and molecular dynamics simulations reveal the specificity-shifting mutations Ala237Arg and Ala237Lys in TEM beta-lactamase. PLoS Computational Biology, 2022, 18, e1009944.	1.5	0
3	Herding an evolving biological population with quantum control tools. Nature Physics, 2021, 17, 17-19.	6.5	5
4	Predicting the viability of beta-lactamase: How folding and binding free energies correlate with beta-lactamase fitness. PLoS ONE, 2020, 15, e0233509.	1.1	26
5	Title is missing!. , 2020, 15, e0233509.		O
6	Title is missing!. , 2020, 15, e0233509.		0
7	Title is missing!. , 2020, 15, e0233509.		0
8	Title is missing!. , 2020, 15, e0233509.		0
9	Migration promotes mutator alleles in subdivided populations. Evolution; International Journal of Organic Evolution, 2019, 73, 600-608.	1.1	4
10	Selection on mutators is not frequency-dependent. ELife, 2019, 8, .	2.8	6
10	Selection on mutators is not frequency-dependent. ELife, 2019, 8, . The Influence of Higher-Order Epistasis on Biological Fitness Landscape Topography. Journal of Statistical Physics, 2018, 172, 208-225.	2.8	64
	The Influence of Higher-Order Epistasis on Biological Fitness Landscape Topography. Journal of		
11	The Influence of Higher-Order Epistasis on Biological Fitness Landscape Topography. Journal of Statistical Physics, 2018, 172, 208-225. Patterns of musculoskeletal growth and dimensional changes associated with selection and	0.5	64
11 12	The Influence of Higher-Order Epistasis on Biological Fitness Landscape Topography. Journal of Statistical Physics, 2018, 172, 208-225. Patterns of musculoskeletal growth and dimensional changes associated with selection and developmental plasticity in domestic and wild strain turkeys. Ecology and Evolution, 2018, 8, 3229-3239. Sign of selection on mutation rate modifiers depends on population size. Proceedings of the National	0.5	9
11 12 13	The Influence of Higher-Order Epistasis on Biological Fitness Landscape Topography. Journal of Statistical Physics, 2018, 172, 208-225. Patterns of musculoskeletal growth and dimensional changes associated with selection and developmental plasticity in domestic and wild strain turkeys. Ecology and Evolution, 2018, 8, 3229-3239. Sign of selection on mutation rate modifiers depends on population size. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3422-3427.	0.5 0.8	9 36
11 12 13	The Influence of Higher-Order Epistasis on Biological Fitness Landscape Topography. Journal of Statistical Physics, 2018, 172, 208-225. Patterns of musculoskeletal growth and dimensional changes associated with selection and developmental plasticity in domestic and wild strain turkeys. Ecology and Evolution, 2018, 8, 3229-3239. Sign of selection on mutation rate modifiers depends on population size. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3422-3427. Evolutionary constraints in fitness landscapes. Heredity, 2018, 121, 466-481.	0.5 0.8 3.3	64 9 36 26
11 12 13 14	The Influence of Higher-Order Epistasis on Biological Fitness Landscape Topography. Journal of Statistical Physics, 2018, 172, 208-225. Patterns of musculoskeletal growth and dimensional changes associated with selection and developmental plasticity in domestic and wild strain turkeys. Ecology and Evolution, 2018, 8, 3229-3239. Sign of selection on mutation rate modifiers depends on population size. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3422-3427. Evolutionary constraints in fitness landscapes. Heredity, 2018, 121, 466-481. Enzyme efficiency but not thermostability drives cefotaxime resistance evolution in TEM-1 β-lactamase. Molecular Biology and Evolution, 2017, 34, msx053. Variability in Fitness Effects Can Preclude Selection of the Fittest. Annual Review of Ecology,	0.5 0.8 3.3 1.2	64 9 36 26 48

#	Article	IF	CITATIONS
19	Adaptive Landscape by Environment Interactions Dictate Evolutionary Dynamics in Models of Drug Resistance. PLoS Computational Biology, 2016, 12, e1004710.	1.5	71
20	Quantitative Description of a Protein Fitness Landscape Based on Molecular Features. Molecular Biology and Evolution, 2015, 32, 1774-1787.	3.5	57
21	Should evolutionary geneticists worry about higher-order epistasis?. Current Opinion in Genetics and Development, 2013, 23, 700-707.	1.5	236
22	FISHER'S GEOMETRIC MODEL OF ADAPTATION MEETS THE FUNCTIONAL SYNTHESIS: DATA ON PAIRWISE EPISTASIS FOR FITNESS YIELDS INSIGHTS INTO THE SHAPE AND SIZE OF PHENOTYPE SPACE. Evolution; International Journal of Organic Evolution, 2013, 67, 2957-2972.	1.1	32
23	GENOME STRUCTURE AND THE BENEFIT OF SEX. Evolution; International Journal of Organic Evolution, 2011, 65, 523-536.	1.1	38
24	High-throughput identification of genetic interactions in HIV-1. Nature Genetics, 2011, 43, 398-400.	9.4	7
25	Stepwise acquisition of pyrimethamine resistance in the malaria parasite. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12025-12030.	3.3	241
26	Temporal Constraints on the Incorporation of Regulatory Mutants in Evolutionary Pathways. Molecular Biology and Evolution, 2009, 26, 2455-2462.	3.5	12
27	Empirical fitness landscapes reveal accessible evolutionary paths. Nature, 2007, 445, 383-386.	13.7	510
28	Darwinian Evolution Can Follow Only Very Few Mutational Paths to Fitter Proteins. Science, 2006, 312, 111-114.	6.0	1,266
29	Missense meanderings in sequence space: a biophysical view of protein evolution. Nature Reviews Genetics, 2005, 6, 678-687.	7.7	586
30	PERSPECTIVE: SIGN EPISTASIS AND GENETIC COSTRAINT ON EVOLUTIONARY TRAJECTORIES. Evolution; International Journal of Organic Evolution, 2005, 59, 1165-1174.	1.1	384
31	RAPID EVOLUTIONARY ESCAPE BY LARGE POPULATIONS FROM LOCAL FITNESS PEAKS IS LIKELY IN NATURE. Evolution; International Journal of Organic Evolution, 2005, 59, 1175-1182.	1.1	201
32	The Rank Ordering of Genotypic Fitness Values Predicts Genetic Constraint on Natural Selection on Landscapes Lacking Sign Epistasis. Genetics, 2005, 171, 1397-1405.	1.2	34
33	RAPID EVOLUTIONARY ESCAPE BY LARGE POPULATIONS FROM LOCAL FITNESS PEAKS IS LIKELY IN NATURE. Evolution; International Journal of Organic Evolution, 2005, 59, 1175.	1.1	58
34	PERSPECTIVE:SIGN EPISTASIS AND GENETIC CONSTRAINT ON EVOLUTIONARY TRAJECTORIES. Evolution; International Journal of Organic Evolution, 2005, 59, 1165.	1.1	227
35	Perspective: Sign epistasis and genetic constraint on evolutionary trajectories. Evolution; International Journal of Organic Evolution, 2005, 59, 1165-74.	1.1	401
36	Rapid evolutionary escape by large populations from local fitness peaks is likely in nature. Evolution; International Journal of Organic Evolution, 2005, 59, 1175-82.	1.1	91

#	Article	IF	CITATIONS
37	Contrasting Patterns of Nonneutral Evolution in Proteins Encoded in Nuclear and Mitochondrial Genomes. Genetics, 2000, 156, 385-399.	1.2	111