## Richard A Goldstein

List of Publications by Year in descending order

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113 papers 6,037 citations

38 h-index 70 g-index

130 all docs

130 docs citations

130 times ranked

7351 citing authors

#	Article	IF	CITATIONS
1	Evolution of viral variants in remdesivirâ€treated and untreated SARSâ€CoVâ€2â€infected pediatrics patients. Journal of Medical Virology, 2022, 94, 161-172.	2.5	13
2	HIV-1 Evolutionary Dynamics under Nonsuppressive Antiretroviral Therapy. MBio, 2022, 13, e0026922.	1.8	5
3	SARS-CoV-2 evolution during treatment of chronic infection. Nature, 2021, 592, 277-282.	13.7	802
4	Selection for cooperativity causes epistasis predominately between native contacts and enables epistasis-based structure reconstruction. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	5
5	Preadaptation of pandemic GII.4Ânoroviruses in unsampled virus reservoirs years before emergence. Virus Evolution, 2020, 6, veaa067.	2.2	22
6	Viral CpG Deficiency Provides No Evidence That Dogs Were Intermediate Hosts for SARS-CoV-2. Molecular Biology and Evolution, 2020, 37, 2706-2710.	<b>3.</b> 5	18
7	<i>In Vivo</i> Emergence of a Novel Protease Inhibitor Resistance Signature in HIV-1 Matrix. MBio, 2020, $11$ , .	1.8	11
8	Dynamics of within-host Mycobacterium tuberculosis diversity and heteroresistance during treatment. EBioMedicine, 2020, 55, 102747.	2.7	52
9	Whole genome sequencing of Herpes Simplex Virus 1 directly from human cerebrospinal fluid reveals selective constraints in neurotropic viruses. Virus Evolution, 2020, 6, veaa012.	2.2	15
10	Reply to Jensen and Kowalik: Consideration of mixed infections is central to understanding HCMV intrahost diversity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 818-819.	3.3	4
11	Mixed cytomegalovirus genotypes in HIV-positive mothers show compartmentalization and distinct patterns of transmission to infants. ELife, 2020, 9, .	2.8	18
12	Biophysics and population size constrains speciation in an evolutionary model of developmental system drift. PLoS Computational Biology, 2019, 15, e1007177.	1.5	17
13	ChromaClade: combined visualisation of phylogenetic and sequence data. BMC Evolutionary Biology, 2019, 19, 186.	3.2	7
14	Positive selection in dNTPase SAMHD1 throughout mammalian evolution. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18647-18654.	3.3	14
15	Human cytomegalovirus haplotype reconstruction reveals high diversity due to superinfection and evidence of within-host recombination. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5693-5698.	3.3	94
16	SubRecon: ancestral reconstruction of amino acid substitutions along a branch in a phylogeny. Bioinformatics, 2018, 34, 2297-2299.	1.8	4
17	Molecular Signatures of Regression of the Canine Transmissible Venereal Tumor. Cancer Cell, 2018, 33, 620-633.e6.	7.7	37
18	Mutagenesis in Norovirus in Response to Favipiravir Treatment. New England Journal of Medicine, 2018, 379, 2173-2176.	13.9	43

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19	High Viral Diversity and Mixed Infections in Cerebral Spinal Fluid From Cases of Varicella Zoster Virus Encephalitis. Journal of Infectious Diseases, 2018, 218, 1592-1601.	1.9	18
20	Finding Direction in the Search for Selection. Journal of Molecular Evolution, 2017, 84, 39-50.	0.8	15
21	Sequence entropy of folding and the absolute rate of amino acid substitutions. Nature Ecology and Evolution, 2017, 1, 1923-1930.	3.4	46
22	Mechanistic Models of Protein Evolution. , 2017, , 277-296.		3
23	Optimal chemotactic responses in stochastic environments. PLoS ONE, 2017, 12, e0179111.	1.1	2
24	The emerging GII.P16-GII.4 Sydney 2012 norovirus lineage is circulating worldwide, arose by late-2014 and contains polymerase changes that may increase virus transmission. PLoS ONE, 2017, 12, e0179572.	1.1	63
25	The tangled bank of amino acids. Protein Science, 2016, 25, 1354-1362.	3.1	40
26	Wide variation in susceptibility of transmitted/founder HIV-1 subtype C Isolates to protease inhibitors and association with in vitro replication efficiency. Scientific Reports, 2016, 6, 38153.	1.6	10
27	Simple Biophysical Model Predicts Faster Accumulation of Hybrid Incompatibilities in Small Populations Under Stabilizing Selection. Genetics, 2015, 201, 1525-1537.	1.2	14
28	A coarse-grained biophysical model of sequence evolution and the population size dependence of the speciation rate. Journal of Theoretical Biology, 2015, 378, 56-64.	0.8	15
29	Positive Selection Analysis of Overlapping Reading Frames Is Invalid. AIDS Research and Human Retroviruses, 2015, 31, 947-947.	0.5	4
30	Nonadaptive Amino Acid Convergence Rates Decrease over Time. Molecular Biology and Evolution, 2015, 32, 1373-1381.	3.5	66
31	Strong evidence for protein epistasis, weak evidence against it. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1450-E1450.	3.3	31
32	The Evolution of Collective Restraint: Policing and Obedience among Non-conjugative Plasmids. PLoS Computational Biology, 2013, 9, e1003036.	1.5	9
33	Population Size Dependence of Fitness Effect Distribution and Substitution Rate Probed by Biophysical Model of Protein Thermostability. Genome Biology and Evolution, 2013, 5, 1584-1593.	1.1	44
34	Amino acid coevolution induces an evolutionary Stokes shift. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1352-9.	3.3	183
35	Estimating the Distribution of Selection Coefficients from Phylogenetic Data Using Sitewise Mutation-Selection Models. Genetics, 2012, 190, 1101-1115.	1.2	114
36	Analytic Markovian Rates for Generalized Protein Structure Evolution. PLoS ONE, 2012, 7, e34228.	1.1	7

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37	The interface of protein structure, protein biophysics, and molecular evolution. Protein Science, 2012, 21, 769-785.	3.1	188
38	Assessing Predictors of Changes in Protein Stability upon Mutation Using Self-Consistency. PLoS ONE, 2012, 7, e46084.	1.1	91
39	Modeling Protein Evolution. Biological and Medical Physics Series, 2012, , 311-325.	0.3	0
40	Evolution of response dynamics underlying bacterial chemotaxis. BMC Evolutionary Biology, 2011, 11, 240.	3.2	9
41	The evolution and evolutionary consequences of marginal thermostability in proteins. Proteins: Structure, Function and Bioinformatics, 2011, 79, 1396-1407.	1.5	113
42	Charting the Host Adaptation of Influenza Viruses. Molecular Biology and Evolution, 2011, 28, 1755-1767.	3.5	28
43	Analysis of Host–Parasite Incongruence in Papillomavirus Evolution Using Importance Sampling. Molecular Biology and Evolution, 2010, 27, 1301-1314.	3.5	85
44	The Neuronal Replicator Hypothesis. Neural Computation, 2010, 22, 2809-2857.	1.3	48
45	A Model of the Mechanisms of Language Extinction and Revitalization Strategies to Save Endangered Languages. Human Biology, 2010, 82, 47-75.	0.4	29
46	Identifying Changes in Selective Constraints: Host Shifts in Influenza. PLoS Computational Biology, 2009, 5, e1000564.	1.5	106
47	Using Non-Homogeneous Models of Nucleotide Substitution to Identify Host Shift Events: Application to the Origin of the 1918 â€⁻Spanish' Influenza Pandemic Virus. Journal of Molecular Evolution, 2009, 69, 333-345.	0.8	36
48	The organization of two rRNA ( <i>rrn</i> ) operons of the slow-growing pathogen <i>Mycobacterium celatum</i> provides key insights into mycobacterial evolution. FEMS Microbiology Letters, 2008, 280, 102-112.	0.7	11
49	The structure of protein evolution and the evolution of protein structure. Current Opinion in Structural Biology, 2008, 18, 170-177.	2.6	85
50	Evolution of Taxis Responses in Virtual Bacteria: Non-Adaptive Dynamics. PLoS Computational Biology, 2008, 4, e1000084.	1.5	36
51	Changing Selective Pressure during Antigenic Changes in Human Influenza H3. PLoS Pathogens, 2008, 4, e1000058.	2.1	102
52	Aminoâ€acid interactions in psychrophiles, mesophiles, thermophiles, and hyperthermophiles: Insights from the quasiâ€chemical approximation. Protein Science, 2007, 16, 1887-1895.	3.1	76
53	Functionality and the evolution of marginal stability in proteins: inferences from lattice simulations. Evolutionary Bioinformatics, 2007, 2, 91-101.	0.6	15
54	Functionality and the Evolution of Marginal Stability in Proteins: Inferences from Lattice Simulations. Evolutionary Bioinformatics, 2006, 2, 117693430600200.	0.6	23

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55	Emergent Robustness in Competition Between Autocatalytic Chemical Networks. Origins of Life and Evolution of Biospheres, 2006, 36, 381-389.	0.8	9
56	Observations of Amino Acid Gain and Loss during Protein Evolution Are Explained by Statistical Bias. Molecular Biology and Evolution, 2006, 23, 1444-1449.	3.5	42
57	Assessing the Accuracy of Ancestral Protein Reconstruction Methods. PLoS Computational Biology, 2006, 2, e69.	1.5	187
58	SELECTIVE ADVANTAGE OF RECOMBINATION IN EVOLVING PROTEIN POPULATIONS: A LATTICE MODEL STUDY. International Journal of Modern Physics C, 2006, 17, 75-90.	0.8	1
59	Divergence, recombination and retention of functionality during protein evolution. Human Genomics, 2005, 2, 158.	1.4	5
60	Score functions for structure prediction., 2005,,.		0
61	Modeling protein evolution. , 2005, , .		0
62	Performance of an iterated T-HMM for homology detection. Bioinformatics, 2004, 20, 2175-2180.	1.8	26
63	Predicting Functional Sites in Proteins: Site-specific Evolutionary Models and Their Application to Neurotransmitter Transporters. Journal of Molecular Biology, 2004, 339, 227-242.	2.0	22
64	Evolutionary Perspectives on Protein Thermodynamics. Lecture Notes in Computer Science, 2004, , 718-727.	1.0	2
65	Probing conformational changes in neurotransmitter transporters: a structural context. European Journal of Pharmacology, 2003, 479, 3-12.	1.7	38
66	Detecting distant homologs using phylogenetic tree-based HMMs. Proteins: Structure, Function and Bioinformatics, 2003, 52, 446-453.	1.5	18
67	Dimerization in Aminergic G-Protein-Coupled Receptors: Application of a Hidden-Site Class Model of Evolutionâ€. Biochemistry, 2003, 42, 14522-14531.	1.2	42
68	Depicting a protein's two faces: GPCR classification by phylogenetic tree-based HMMs. FEBS Letters, 2003, 554, 95-99.	1.3	32
69	Why are proteins so robust to site mutations?. Journal of Molecular Biology, 2002, 315, 479-484.	2.0	146
70	rtREV: An Amino Acid Substitution Matrix for Inference of Retrovirus and Reverse Transcriptase Phylogeny. Journal of Molecular Evolution, 2002, 55, 65-73.	0.8	214
71	Why are proteins marginally stable?. Proteins: Structure, Function and Bioinformatics, 2002, 46, 105-109.	1.5	327
72	Performance evaluation of a new algorithm for the detection of remote homologs with sequence comparison. Proteins: Structure, Function and Bioinformatics, 2002, 48, 367-376.	1.5	5

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73	Optimization of a new score function for the generation of accurate alignments. Proteins: Structure, Function and Bioinformatics, 2002, 48, 605-610.	1.5	25
74	Distribution of indel lengths. Proteins: Structure, Function and Bioinformatics, 2001, 45, 102-104.	1.5	73
75	Evolution of functionality in lattice proteins. Journal of Molecular Graphics and Modelling, 2001, 19, 150-156.	1.3	49
76	USING EVOLUTIONARY METHODS TO STUDY G-PROTEIN COUPLED RECEPTORS., 2001,,.		1
77	The distribution of structures in evolving protein populations. Biopolymers, 2000, 53, 1-8.	1.2	65
78	How to generate improved potentials for protein tertiary structure prediction: A lattice model study. Proteins: Structure, Function and Bioinformatics, 2000, 41, 157-163.	1.5	18
79	Optimization of a new score function for the detection of remote homologs. Proteins: Structure, Function and Bioinformatics, 2000, 41, 498-503.	1.5	33
80	Surveying determinants of protein structure designability across different energy models and amino-acid alphabets: A consensus. Journal of Chemical Physics, 2000, 112, 2533-2547.	1.2	35
81	The distribution of structures in evolving protein populations. , 2000, 53, 1.		1
82	The distribution of structures in evolving protein populations. , 2000, 53, 1.		1
83	ANALYZING SITE HETEROGENEITY DURING PROTEIN EVOLUTION. , 2000, , 191-202.		9
84	Universal correlation between energy gap and foldability for the random energy model and lattice proteins. Journal of Chemical Physics, 1999, 111, 6599-6609.	1,2	19
85	Effect of alphabet size and foldability requirements on protein structure designability. Proteins: Structure, Function and Bioinformatics, 1999, 34, 113-124.	1.5	56
86	Estimating the total number of protein folds. Proteins: Structure, Function and Bioinformatics, 1999, 35, 408-414.	1.5	131
87	Effect of alphabet size and foldability requirements on protein structure designability. Proteins: Structure, Function and Bioinformatics, 1999, 34, 113-124.	1.5	5
88	Protein Evolution and Structural Genomics. , 1999, , .		0
89	MODELING EVOLUTION AT THE PROTEIN LEVEL USING AN ADJUSTABLE AMINO ACID FITNESS MODEL. , 1999, , 18-29.		19
90	Optimizing energy potentials for success in protein tertiary structure prediction. Folding & Design, 1998, 3, 223-228.	4.5	35

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91	Models of natural mutations including site heterogeneity. , 1998, 32, 289-295.		69
92	On the thermodynamic hypothesis of protein folding. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 5545-5549.	3.3	92
93	Models of natural mutations including site heterogeneity. Proteins: Structure, Function and Bioinformatics, 1998, 32, 289-295.	1.5	1
94	Compaction and folding in model proteins. Journal of Chemical Physics, 1997, 107, 4408-4415.	1.2	5
95	Predicting protein secondary structure with probabilistic schemata of evolutionarily derived information. Protein Science, 1997, 6, 1963-1975.	3.1	22
96	Mutation matrices and physical-chemical properties: Correlations and implications., 1997, 27, 336-344.		44
97	Evolution of model proteins on a foldability landscape. , 1997, 29, 461-466.		86
98	The foldability landscape of model proteins. , 1997, 42, 427-438.		65
99	Mutation matrices and physicalâ€chemical properties: Correlations and implications. Proteins: Structure, Function and Bioinformatics, 1997, 27, 336-344.	1.5	1
100	Why are some proteins structures so common?. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 3341-3345.	3.3	126
101	Probabilistic reconstruction of ancestral protein sequences. Journal of Molecular Evolution, 1996, 42, 313-320.	0.8	188
102	Constructing amino acid residue substitution classes maximally indicative of local protein structure. , 1996, 25, 28-37.		19
103	Predicting solvent accessibility: Higher accuracy using Bayesian statistics and optimized residue substitution classes. Proteins: Structure, Function and Bioinformatics, 1996, 25, 38-47.	1.5	38
104	Searching for foldable protein structures using optimized energy functions. Biopolymers, 1995, 36, 43-51.	1.2	72
105	Optimal local propensities for model proteins. Proteins: Structure, Function and Bioinformatics, 1995, 22, 413-418.	1.5	66
106	Context-dependent optimal substitution matrices. Protein Engineering, Design and Selection, 1995, 8, 641-645.	1.0	85
107	Generalized protein tertiary structure recognition using associative memory hamiltonians. Journal of Molecular Biology, 1991, 222, 1013-1034.	2.0	71
108	Excited states, electron-transfer reactions, and intermediates in bacterial photosynthetic reaction centers. The Journal of Physical Chemistry, 1989, 93, 8280-8294.	2.9	129

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#	Article	IF	CITATIONS
109	The effect of very high magnetic fields on the delayed fluorescence from oriented bacterial reaction centers. Biochimica Et Biophysica Acta - Bioenergetics, 1989, 977, 70-77.	0.5	23
110	The effect of very high magnetic fields on the reaction dynamics in bacterial reaction centers: Implications for the reaction mechanism. Biochimica Et Biophysica Acta - Bioenergetics, 1989, 977, 78-86.	0.5	32
111	Energetics of initial charge separation in bacterial photosynthesis: The triplet decay rate in very high magnetic fields. Biochimica Et Biophysica Acta - Bioenergetics, 1988, 934, 253-263.	0.5	74
112	The Nature of Excited States and Intermediates in Bacterial Photosynthesis., 1988,, 165-176.		4
113	Effects of Nuclear Spin Polarization on Reaction Dynamics in Photosynthetic Bacterial Reaction Centers. Biophysical Journal, 1987, 51, 937-946.	0.2	54