Yaroslav Ispolatov

List of Publications by Year
in descending order

62 papers	1,877 citations	331670 21 h-index	289244 40 g-index
72 all docs	72 docs citations	72 times ranked	1849 citing authors

#	Article	IF	Citations
1	Persistence of plasmids targeted by CRISPR interference in bacterial populations. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2114905119.	7.1	2
2	Boom-bust population dynamics increase diversity in evolving competitive communities. Communications Biology, 2021, 4, 502.	4.4	14
3	Evolution to alternative levels of stable diversity leaves areas of niche space unexplored. PLoS Computational Biology, 2021, 17, e1008650.	3.2	6
4	Evolution of diversity in metabolic strategies. ELife, 2021, 10, .	6.0	19
5	A note on the complexity of evolutionary dynamics in a classic consumer-resource model. Theoretical Ecology, 2020, 13, 79-84.	1.0	3
6	Evolutionary adaptation of highâ€diversity communities to changing environments. Ecology and Evolution, 2020, 10, 11941-11953.	1.9	2
7	Competition-driven evolution of organismal complexity. PLoS Computational Biology, 2019, 15, e1007388.	3.2	6
8	Acculturation drives the evolution of intergroup conflict. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14089-14097.	7.1	9
9	Natural diversity of CRISPR spacers of Thermus : evidence of local spacer acquisition and global spacer exchange. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180092.	4.0	21
10	Lily Pollen Tubes Pulse According to a Simple Spatial Oscillator. Scientific Reports, 2018, 8, 12135.	3.3	8
11	Diversity and Coevolutionary Dynamics in High-Dimensional Phenotype Spaces. American Naturalist, 2017, 189, 105-120.	2.1	35
12	Optimal number of spacers in CRISPR arrays. PLoS Computational Biology, 2017, 13, e1005891.	3.2	48
13	Towards a mechanistic foundation of evolutionary theory. ELife, 2017, 6, .	6.0	87
14	The Influence of Copy-Number of Targeted Extrachromosomal Genetic Elements on the Outcome of CRISPR-Cas Defense. Frontiers in Molecular Biosciences, 2016, 3, 45.	3.5	26
15	Small-scale universality and large-scale diversity. Physics of Life Reviews, 2016, 17, 163-165.	2.8	0
16	Individual-based models for adaptive diversification in high-dimensional phenotype spaces. Journal of Theoretical Biology, 2016, 390, 97-105.	1.7	25
17	Computing in fish schools. ELife, 2016, 5, e12852.	6.0	2
18	Chaos in high-dimensional dissipative dynamical systems. Scientific Reports, 2015, 5, 12506.	3.3	29

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19	Cell shape impacts on the positioning of the mitotic spindle with respect to the substratum. Molecular Biology of the Cell, 2015, 26, 1286-1295.	2.1	20
20	CHAOS AND UNPREDICTABILITY IN EVOLUTION. Evolution; International Journal of Organic Evolution, 2014, 68, 1365-1373.	2.3	56
21	Symmetric competition as a general model for single-species adaptive dynamics. Journal of Mathematical Biology, 2013, 67, 169-184.	1.9	12
22	A Model for the Self-Organization of Vesicular Flux and Protein Distributions in the Golgi Apparatus. PLoS Computational Biology, 2013, 9, e1003125.	3.2	14
23	Division of labour and the evolution of multicellularity. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 1768-1776.	2.6	87
24	Omnivory can both enhance and dampen perturbations in food webs. Theoretical Ecology, 2011, 4, 55-67.	1.0	7
25	Continuously stable strategies as evolutionary branching points. Journal of Theoretical Biology, 2010, 266, 529-535.	1.7	9
26	A model for the evolutionary diversification of religions. Journal of Theoretical Biology, 2010, 267, 676-684.	1.7	8
27	On the Evolution of Decoys in Plant Immune Systems. Biological Theory, 2010, 5, 256-263.	1.5	2
28	Complexity and Diversity. Science, 2010, 328, 494-497.	12.6	108
29	SPECIATION DUE TO HYBRID NECROSIS IN PLANT-PATHOGEN MODELS. Evolution; International Journal of Organic Evolution, 2009, 63, 3076-3084.	2.3	18
30	Detection of the dominant direction of information flow and feedback links in densely interconnected regulatory networks. BMC Bioinformatics, 2008, 9, 424.	2.6	21
31	Spreading out of perturbations in reversible reaction networks. New Journal of Physics, 2007, 9, 273-273.	2.9	27
32	Propagation of large concentration changes in reversible protein-binding networks. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13655-13660.	7.1	76
33	Automatic extraction of gene ontology annotation and its correlation with clusters in protein networks. BMC Bioinformatics, 2007, 8, 243.	2.6	46
34	Finding mesoscopic communities in sparse networks. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P09014-P09014.	2.3	11
35	Cliques and duplicationâ€“divergence network growth. New Journal of Physics, 2005, 7, 145-145.	2.9	37
36	Binding properties and evolution of homodimers in protein-protein interaction networks. Nucleic Acids Research, 2005, 33, 3629-3635.	14.5	159

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37	Binaries and core-ring structures in self-gravitating systems. Physical Review E, 2005, 72, 026115.	2.1	1
38	Duplication-divergence model of protein interaction network. Physical Review E, 2005, 71, 061911.	2.1	138
39	Anomalously slow phase transitions in self-gravitating systems. Physical Review E, 2004, 70, 026102.	2.1	13
40	Modeling Strombolian eruptions of Karymsky volcano, Kamchatka, Russia. Journal of Volcanology and Geothermal Research, 2003, 122, 265-280.	2.1	30
41	Collapses and explosions in self-gravitating systems. Physical Review E, 2003, 68, 036117.	2.1	18
42	Phase diagram of self-attracting systems. Physical Review E, 2002, 66, 036109.	2.1	46
43	Lattice Boltzmann method for viscoelastic fluids. Physical Review E, 2002, 65, 056704.	2.1	33
44	Correlation functions in decorated lattice models. Physica A: Statistical Mechanics and Its Applications, 2001, 291, 49-59.	2.6	2
45	Symmetry effects and equivalences in lattice models of hydrophobic interaction. Physica A: Statistical Mechanics and Its Applications, 2001, 291, 24-38.	2.6	9
46	Multi-particle interaction in a model of the hydrophobic interaction. Physica A: Statistical Mechanics and Its Applications, 2001, 291, 39-48.	2.6	6
47	On first-order phase transitions in microcanonical and canonical non-extensive systems. Physica A: Statistical Mechanics and Its Applications, 2001, 295, 475-487.	2.6	90
48	Phase transitions in systems with1/rÎ±attractive interactions. Physical Review E, 2001, 64, 056103.	2.1	25
49	Collapse in Systems with Attractive Nonintegrable Potentials. Physical Review Letters, 2001, 87, 210601.	7.8	19
50	Unified approach to prewetting and wetting phase transitions. Physica A: Statistical Mechanics and Its Applications, 2000, 279, 203-212.	2.6	8
51	Particle systems with stochastic passing. Physical Review E, 2000, 61, R2163-R2167.	2.1	4
52	Molecular weight effects on chain pull-out fracture of reinforced polymeric interfaces. Physical Review E, 1999, 60, 4460-4464.	2.1	6
53	Persistence in systems with algebraic interaction. Physical Review E, 1999, 60, R2437-R2440.	2.1	3
54	Convergent approximation for the 2-body correlation function in an interface. Physica A: Statistical Mechanics and Its Applications, 1999, 271, 23-35.	2.6	0

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55	Ballistic coalescence model. Physica A: Statistical Mechanics and Its Applications, 1998, 252, 165-172.	2.6	2
56	Wealth distributions in asset exchange models. European Physical Journal B, 1998, 2, 267-276.	1.5	244
57	Anomalous Electric Fields Inside a Dense Plasma of a Current Sheet. Contributions To Plasma Physics, 1996, 36, 667-678.	1.1	11
58	War: The dynamics of vicious civilizations. Physical Review E, 1996, 54, 1274-1289.	2.1	25
59	Annihilation of charged particles. Physical Review E, 1996, 53, 3154-3159.	2.1	20
60	A generalized theory of stark broadening of hydrogen-like spectral lines in dense plasmas. Journal of Quantitative Spectroscopy and Radiative Transfer, 1995, 54, 307-315.	2.3	15
61	A convergent theory of Stark broadening of hydrogen lines in dense plasmas. Journal of Quantitative Spectroscopy and Radiative Transfer, 1994, 51, 129-138.	2.3	43
62	SPECIFIC FEATURES OF STARK BROADENING OF HELIUM-LIKE MULTI-CHARGED ION SPECTRAL LINES. Journal De Physique Colloque, 1988, 49, C1-83-C1-86.	0.2	1