

# Yurij Holovatch

## List of Publications by Year in descending order

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Version: 2024-02-01

132  
papers

2,292  
citations

236612

25  
h-index

264894

42  
g-index

138  
all docs

138  
docs citations

138  
times ranked

1256  
citing authors

#	ARTICLE	IF	CITATIONS
1	Public transport networks: empirical analysis and modeling. European Physical Journal B, 2009, 68, 261-275.	0.6	238
2	Resilience of public transport networks against attacks. European Physical Journal B, 2009, 71, 125-137.	0.6	203
3	Critical exponents of a three-dimensional weakly diluted quenched Ising model. Physics-Uspekhi, 2003, 46, 169-191.	0.8	85
4	Network harness: Metropolis public transport. Physica A: Statistical Mechanics and Its Applications, 2007, 380, 585-591.	1.2	78
5	Effective and asymptotic critical exponents of a weakly diluted quenched Ising model: Three-dimensional approach versus $\epsilon$ -expansion. Physical Review B, 2000, 61, 15114-15129.	1.1	69
6	Complex systems: physics beyond physics. European Journal of Physics, 2017, 38, 023002.	0.3	62
7	On the critical fluctuations in superconductors. Journal of Physics A, 1996, 29, 3409-3425.	1.6	47
8	Pseudo- $\epsilon$ -expansion of six-loop renormalization-group functions of an anisotropic cubic model. Physical Review B, 2000, 62, 12195-12200.	1.1	47
9	Influence of quenched dilution on the quasi-long-range ordered phase of the $\mathbb{Z}_2$ $\mathbb{Z}_2$ model. European Physical Journal B, 2003, 36, 91-98.	0.6	45
10	Critical properties of random anisotropy magnets. Journal of Magnetism and Magnetic Materials, 2005, 294, 305-329.	1.0	42
11	Copolymer networks and stars: Scaling exponents. Physical Review E, 1997, 56, 6370-6386.	0.8	41
12	Polymers in long-range-correlated disorder. Physical Review E, 2001, 64, 041102.	0.8	36
13	Effective critical behaviour of diluted Heisenberg-like magnets. Journal of Magnetism and Magnetic Materials, 2003, 256, 243-251.	1.0	35
14	TRANSPORTATION NETWORK STABILITY: A CASE STUDY OF CITY TRANSIT. International Journal of Modeling, Simulation, and Scientific Computing, 2012, 15, 1250063.	0.9	35
15	Scaling in public transport networks. Condensed Matter Physics, 2005, 8, 225-234.	0.3	32
16	On the criticality of frustrated spin systems with noncollinear order. Journal of Physics A, 2004, 37, 3569-3575.	1.6	31
17	Critical exponents of random Ising-like systems in general dimensions. Journal of Statistical Physics, 1992, 66, 867-883.	0.5	30
18	WEAK QUENCHED DISORDER AND CRITICALITY: RESUMMATION OF ASYMPTOTIC(?) SERIES. International Journal of Modern Physics B, 2002, 16, 4027-4079.	1.0	30

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19	Copolymer networks: Multifractal dimension spectra in polymer field theory. Europhysics Letters, 1997, 39, 31-36.	0.7	28
20	Field theory of bicritical and tetracritical points. I. Statics. Physical Review E, 2008, 78, 041124.	0.8	28
21	Comparison of a citation-based indicator and peer review for absolute and specific measures of research-group excellence. Scientometrics, 2013, 97, 767-777.	1.6	27
22	Predicting results of the Research Excellence Framework using departmental h-index. Scientometrics, 2015, 102, 2165-2180.	1.6	27
23	Relevance of the fixed dimension perturbative approach to frustrated magnets in two and three dimensions. Physical Review B, 2010, 82, .	1.1	25
24	Multifractality of Brownian motion near absorbing polymers. Physical Review E, 1999, 59, 6914-6923.	0.8	23
25	Quantifying the evolution of a scientific topic: reaction of the academic community to the Chernobyl disaster. Scientometrics, 2016, 106, 1151-1166.	1.6	23
26	Where two fractals meet: The scaling of a self-avoiding walk on a percolation cluster. Physical Review E, 2004, 70, 035104.	0.8	22
27	Critical Exponents of the Diluted Ising Model between Dimensions 2 and 4. Journal of Statistical Physics, 1998, 92, 785-808.	0.5	21
28	Violation of Lee-Yang circle theorem for Ising phase transitions on complex networks. Europhysics Letters, 2015, 111, 60009.	0.7	21
29	Partition function zeros for the Ising model on complete graphs and on annealed scale-free networks. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 135001.	0.7	21
30	Polymers in media with long-range-correlated quenched disorder. Journal of Molecular Liquids, 2001, 92, 77-84.	2.3	19
31	The correction-to-scaling exponent in dilute systems. JETP Letters, 1999, 69, 747-752.	0.4	18
32	Critical behavior of magnetic systems with extended impurities in general dimensions. Physical Review B, 2003, 67, .	1.1	18
33	Absolute and specific measures of research group excellence. Scientometrics, 2013, 95, 115-127.	1.6	18
34	Public transportation in Great Britain viewed as a complex network. Transportmetrica A: Transport Science, 2019, 15, 722-748.	1.3	18
35	A marginal dimension of a weakly diluted quenched m-vector model. Journal of Physical Studies, 2001, 5, 233-239.	0.2	18
36	The fate of Ernst Ising and the fate of his model. Journal of Physical Studies, 2017, 21, .	0.2	18

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37	Complex networks. Journal of Physical Studies, 2006, 10, 247-289.	0.2	17
38	Interevent time distributions of human multi-level activity in a virtual world. Physica A: Statistical Mechanics and Its Applications, 2015, 419, 681-690.	1.2	16
39	Universality classes of the three-dimensionalmn-vector model. Journal of Physics A, 2004, 37, 10727-10734.	1.6	15
40	Critical dynamics and effective exponents of magnets with extended impurities. Physical Review B, 2005, 72, .	1.1	15
41	Local and cluster critical dynamics of the 3d random-site Ising model. Physica A: Statistical Mechanics and Its Applications, 2006, 370, 163-178.	1.2	15
42	Predicting results of the research excellence framework using departmental h-index: revisited. Scientometrics, 2015, 104, 1013-1017.	1.6	15
43	Critical exponents of Ising-like systems in general dimensions. Theoretical and Mathematical Physics(Russian Federation), 1993, 96, 1099-1109.	0.3	14
44	Proportionate vs disproportionate distribution of wealth of two individuals in a tempered Paretian ensemble. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 4340-4346.	1.2	14
45	Criticality of the random-site Ising model: Metropolis, Swendsen-Wang and Wolff Monte Carlo algorithms. Condensed Matter Physics, 2005, 8, 149-162.	0.3	14
46	The 2D XY model on a finite lattice with structural disorder: quasi-long-range ordering under realistic conditions. European Physical Journal B, 2007, 56, 93-105.	0.6	13
47	Critical behavior of the two-dimensional Ising model with long-range correlated disorder. Physical Review B, 2016, 93, .	1.1	13
48	Attack Vulnerability of Public Transport Networks. , 2009, , 721-731.		13
49	Compilation of twoâ€point and fourâ€point graphs in field theory in noninteger dimensions. Journal of Mathematical Physics, 1994, 35, 3866-3880.	0.5	12
50	Quasi-long-range ordering in a finite-size 2D classical Heisenberg model. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 3741-3748.	0.7	12
51	The quenched-disordered Ising model in two and four dimensions. AIP Conference Proceedings, 2009, , .	0.3	12
52	Five-loop critical exponents of the weakly diluted Ising model: 3D approach versus $\hat{\mu}$ -expansion. Journal of Physical Studies, 1998, 2, 213-220.	0.2	12
53	On the universality class of the 3d Ising model with long-range-correlated disorder. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 4497-4512.	1.2	11
54	Fixed points in frustrated magnets revisited. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P03014.	0.9	11

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55	Critical phenomena on scale-free networks: Logarithmic corrections and scaling functions. Physical Review E, 2010, 82, 011145.	0.8	11
56	Monte Carlo study of anisotropic scaling generated by disorder. Physical Review E, 2015, 92, 042118.	0.8	11
57	Large-scale structures in the $\Lambda$ CDM Universe: network analysis and machine learning. Monthly Notices of the Royal Astronomical Society, 2020, 495, 1311-1320.	1.6	11
58	Exact solution of a classical short-range spin model with a phase transition in one dimension: The Potts model with invisible states. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 3589-3593.	0.9	11
59	Classical phase transitions in a one-dimensional short-range spin model. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 505001.	0.7	10
60	Modeling Metropolis Public Transport. , 2009, , 709-719.		10
61	Title is missing!. Journal of Statistical Physics, 2002, 107, 1303-1304.	0.5	9
62	Field theory of bicritical and tetracritical points. II. Relaxational dynamics. Physical Review E, 2008, 78, 041125.	0.8	9
63	Universal features of polymer shapes in crowded environments. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 2861-2864.	0.9	9
64	Fractal transit networks: Self-avoiding walks and Lévy flights. European Physical Journal: Special Topics, 2013, 216, 49-55.	1.2	9
65	Order, Disorder and Criticality. , 2004, , .		9
66	Polymer stars in three dimensions. Three-loop results. Theoretical and Mathematical Physics(Russian) Tj ETQq0 0 0 ggBT /Overlock 10 Tf 0.8		9
67	Copolymer networks: the spectrum of scaling dimensions. Physica A: Statistical Mechanics and Its Applications, 1998, 249, 327-331.	1.2	8
68	Colloids with polymer stars: the interaction. Journal of Molecular Liquids, 2001, 93, 151-154.	2.3	8
69	Two-dimensional copolymers and multifractality: Comparing perturbative expansions, Monte Carlo simulations, and exact results. Physical Review E, 2002, 65, 042801.	0.8	8
70	Editorial process in scientific journals: analysis and modeling. Scientometrics, 2012, 91, 101-112.	1.6	8
71	PHASE TRANSITION IN CONTINUOUS SYMMETRY MODEL IN GENERAL DIMENSIONS $\epsilon$ FIXED DIMENSION RENORMALIZATION GROUP APPROACH. International Journal of Modern Physics A, 1993, 08, 5329-5351.	0.5	7
72	Scaling of star polymers: high order results. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 328, 335-340.	0.9	7

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73	Entropy-induced separation of star polymers in porous media. <i>Physical Review E</i> , 2006, 74, 031801.	0.8	7
74	Interplay of topological and structural defects in the two-dimensional XY model. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2008, 372, 5716-5721.	0.9	7
75	Generalized Ising Model on a Scale-Free Network: An Interplay of Power Laws. <i>Entropy</i> , 2021, 23, 1175.	1.1	7
76	Ising model with variable spin/agent strengths. <i>Journal of Physics Complexity</i> , 2020, 1, 035008.	0.9	7
77	Star copolymers in porous environments: Scaling and its manifestations. <i>Physical Review E</i> , 2011, 83, 011803.	0.8	6
78	Universal shape characteristics for the mesoscopic star-shaped polymer via dissipative particle dynamics simulations. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 215101.	0.7	6
79	Spreading processes in post-epidemic environments. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2021, 573, 125980.	1.2	6
80	Complex Networks of Words in Fables. <i>Understanding Complex Systems</i> , 2017, , 159-175.	0.3	6
81	Critical dynamics of diluted relaxational models coupled to a conserved density. <i>Physical Review E</i> , 2005, 72, 036107.	0.8	5
82	Marginal dimensions of the Potts model with invisible states. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 255001.	0.7	5
83	Self-averaging in the random two-dimensional Ising ferromagnet. <i>Physical Review E</i> , 2017, 95, 032118.	0.8	5
84	Big fish and small ponds: why the departmental h-index should not be used to rank universities. <i>Scientometrics</i> , 2022, 127, 3279-3292.	1.6	5
85	Change in polymer scaling laws due to disorder. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 9465-9468.	0.7	4
86	Model C critical dynamics of random anisotropy magnets. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2007, 40, 8247-8264.	0.7	4
87	Coupled order-parameter system on a scale-free network. <i>Physical Review E</i> , 2009, 80, 011108.	0.8	4
88	Field theory of bicritical and tetracritical points. III. Relaxational dynamics including conservation of magnetization (model C). <i>Physical Review E</i> , 2009, 79, 031109.	0.8	4
89	Is your EPL attractive? Classification of publications through download statistics. <i>Europhysics Letters</i> , 2014, 108, 50011.	0.7	4
90	Data Mining in Scientometrics: Usage Analysis for Academic Publications. , 2018, , .		4

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91	Critical Fluctuations in Normal-to-Superconducting Transition. , 1999, , 83-116.		4
92	A three-dimensional random Ising model: Resummation of five-loop series. Journal of Physical Studies, 2001, 5, 261-267.	0.2	4
93	Statistical physics of complex systems in the world and in Lviv. Journal of Physical Studies, 2018, 22, .	0.2	4
94	Renormalization group study of the m-vector model between two and four dimensions. Ferroelectrics, 1997, 192, 55-59.	0.3	3
95	PHASE TRANSITION IN THE RANDOM ANISOTROPY MODEL. , 2001, , 457-467.		3
96	Entropic equation of state and scaling functions near the critical point in uncorrelated scale-free networks. Physical Review E, 2011, 83, 061114.	0.8	3
97	Universal shape characteristics for the mesoscopic polymer chain via dissipative particle dynamics. Journal of Physics Condensed Matter, 2016, 28, 505101.	0.7	3
98	Bipartite Graph Analysis as an Alternative to Reveal Clusterization in Complex Systems. , 2018, , .		3
99	Embedding technique and network analysis of scientific innovations emergence in an arXiv-based concept network. , 2020, , .		3
100	Possibility of a continuous phase transition in random-anisotropy magnets with a generic random-axis distribution. Physical Review B, 2020, 101, .	1.1	3
101	Variety of scaling laws for DNA thermal denaturation. Physica A: Statistical Mechanics and Its Applications, 2021, 573, 125917.	1.2	3
102	NETWORK OF SCIENTIFIC CONCEPTS: EMPIRICAL ANALYSIS AND MODELING. International Journal of Modeling, Simulation, and Scientific Computing, 2021, 24, .	0.9	3
103	Order, Disorder and Criticality. , 2018, , .		3
104	Order, Disorder and Criticality. , 2012, , .		3
105	Spreading processes in "post-epidemic" environments. II. Safety patterns on scale-free networks. Physica A: Statistical Mechanics and Its Applications, 2022, 591, 126799.	1.2	3
106	Diffusion-controlled reactions in presence of polymers. Journal of Molecular Liquids, 2001, 93, 155-158.	2.3	2
107	On the critical properties of the three-dimensional random Ising model. Journal of Molecular Liquids, 2003, 105, 221-225.	2.3	2
108	Renormalization group approaches to polymers in disordered media. , 2005, , 103-147.		2

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109	Model C critical dynamics of disordered magnets. Journal of Physics A, 2006, 39, 7943-7961.	1.6	2
110	Enhancement of the critical slowing down influenced by extended defects. Journal of Molecular Liquids, 2006, 127, 60-61.	2.3	2
111	Static and dynamic critical behaviour of 3d random-site Ising model: Different Monte Carlo algorithms. Journal of Molecular Liquids, 2006, 127, 69-70.	2.3	2
112	Perturbation expansion for the diluted two-dimensional XY model. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 366, 150-154.	0.9	2
113	Network harness: bundles of routes in public transport networks. , 2009, , .		2
114	Universal free-energy distribution in the critical point of a random Ising ferromagnet. Physical Review E, 2014, 90, 052126.	0.8	2
115	A mechanism for evolution of the physical concepts network. Condensed Matter Physics, 2021, 24, 24001.	0.3	2
116	Critical behaviour in non-integer dimension. , 1996, , 269-281.		1
117	Scaling of complex polymers: New universality classes and beyond. Philosophical Magazine, 2008, 88, 4085-4091.	0.7	1
118	Biconical critical dynamics. Europhysics Letters, 2010, 91, 46002.	0.7	1
119	Field theory of bicritical and tetracritical points. IV. Critical dynamics including reversible terms. Physical Review E, 2012, 85, 021143.	0.8	1
120	Analyses of a Virtual World. Understanding Complex Systems, 2017, , 115-130.	0.3	1
121	Order, Disorder and Criticality. , 2020, , .		1
122	Order, Disorder and Criticality. , 2015, , .		1
123	STAR POLYMERS IN CORRELATED DISORDER. , 2008, , .		0
124	Publisher's Note: Field theory of bicritical and tetracritical points. III. Relaxational dynamics including conservation of magnetization (model C) [Phys. Rev. E 79, 031109 (2009)]. Physical Review E, 2009, 79, .	0.8	0
125	Spin vortices and vacancies: Interactions and pinning on a square lattice. Physical Review B, 2010, 81, .	1.1	0
126	From Brownian motion to self-avoiding walks and Lévy flights. European Physical Journal: Special Topics, 2013, 216, 1-2.	1.2	0



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127	Phase diagram of Model C in the parametric space of order parameter and space dimensions. Physical Review B, 2016, 93, .	1.1	0
128	Shape analysis of random polymer networks. Journal of Physics Condensed Matter, 2020, 32, 335102.	0.7	0
129	DNA thermal denaturation by polymer field theory approach: effects of the environment. Condensed Matter Physics, 2021, 24, 33603.	0.3	0
130	Fluctuations and criticality (dedicated to Reinhard Folk on his 60th birthday). Condensed Matter Physics, 2005, 8, 3-10.	0.3	0
131	Complex-Network Approach for Visualizing and Quantifying the Evolution of a Scientific Topic. Advances in Human and Social Aspects of Technology Book Series, 2018, , 106-120.	0.3	0
132	Вплив параметрів на динаміку процесу розпаду в системі з випадковими зв'язками. Вісник Національної академії наук України, 2021, , 1-4.		