

# Pavel V Prudnikov

## List of Publications by Citations

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84  
papers

579  
citations

15  
h-index

21  
g-index

89  
ext. papers

612  
ext. citations

1  
avg, IF

4.01  
L-index

#	Paper	IF	Citations
84	Field-theory approach to critical behavior of systems with long-range correlated defects. <i>Physical Review B</i> , <b>2000</b> , 62, 8777-8786	3.3	51
83	Short-time dynamics and critical behavior of the three-dimensional site-diluted Ising model. <i>Physical Review E</i> , <b>2010</b> , 81, 011130	2.4	36
82	Dimensionality crossover in critical behaviour of ultrathin ferromagnetic films. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2015</b> , 387, 77-82	2.8	35
81	Computer simulation of the critical behavior of 3D disordered ising model. <i>Journal of Experimental and Theoretical Physics</i> , <b>2007</b> , 105, 371-378	1	30
80	Static and dynamic critical properties of 3D systems with long-range correlated quenched defects. <i>Journal of Physics A</i> , <b>1999</b> , 32, 8587-8600		26
79	Nonequilibrium critical behavior of model statistical systems and methods for the description of its features. <i>Physics-Uspekh</i> , <b>2017</b> , 60, 762-797	2.8	25
78	Calculations of the dynamical critical exponent using the asymptotic series summation method. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , <b>2006</b> , 147, 561-575	0.7	25
77	Dimensional effects in ultrathin magnetic films. <i>JETP Letters</i> , <b>2014</b> , 100, 446-450	1.2	24
76	Short-Time Critical Dynamics of the Three-Dimensional Systems with Long-Range Correlated Disorder <b>2007</b> , 117, 973-991		24
75	Monte Carlo simulation of multilayer magnetic structures and calculation of the magnetoresistance coefficient. <i>JETP Letters</i> , <b>2015</b> , 102, 668-673	1.2	20
74	Nonequilibrium aging effects in the critical behavior of structurally disordered planar magnets. <i>JETP Letters</i> , <b>2015</b> , 101, 539-544	1.2	18
73	Renormalization-group description of nonequilibrium critical short-time relaxation processes: A three-loop approximation. <i>Journal of Experimental and Theoretical Physics</i> , <b>2008</b> , 106, 1095-1101	1	18
72	Monte Carlo calculations of the magnetoresistance in magnetic multilayer structures with giant magnetoresistance effects. <i>Journal Physics D: Applied Physics</i> , <b>2016</b> , 49, 235002	3	17
71	Aging and non-equilibrium critical phenomena in Monte Carlo simulations of 3D pure and diluted Ising models. <i>Progress of Theoretical and Experimental Physics</i> , <b>2015</b> , 2015, 53A01-0	5.4	16
70	Investigation of the effects of aging and temperature dependence of the transverse rigidity of a system in the two-dimensional XY model. <i>Physics of Metals and Metallography</i> , <b>2014</b> , 115, 1186-1193	1.2	16
69	Influence of disorder on critical ageing in 3D Ising model. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2015</b> , 379, 774-778	2.3	13
68	Non-Equilibrium Critical Relaxation of the 3D Heisenberg Magnets with Long-Range Correlated Disorder <b>2012</b> , 127, 369-382		13

67	Calculation of the fluctuation-dissipation ratio for the nonequilibrium critical behavior of disordered systems. <i>JETP Letters</i> , <b>2014</b> , 98, 619-625	1.2	11
66	Monte Carlo investigations of the influence of structural defects on aging effects and the violation of the fluctuation-dissipation theorem for a nonequilibrium critical behavior in the three-dimensional Ising model. <i>Journal of Experimental and Theoretical Physics</i> , <b>2014</b> , 118, 401-409	1	11
65	Field-theoretic description of the multicritical behavior of systems with two order parameters. <i>JETP Letters</i> , <b>1998</b> , 68, 950-956	1.2	11
64	Superaging and Subaging Phenomena in a Nonequilibrium Critical Behavior of the Structurally Disordered Two-Dimensional XY Model. <i>Journal of Experimental and Theoretical Physics</i> , <b>2018</b> , 126, 368-382	1	10
63	Nonequilibrium critical relaxation of structurally disordered systems in the short-time regime: Renormalization group description and computer simulation. <i>Journal of Experimental and Theoretical Physics</i> , <b>2010</b> , 110, 253-264	1	10
62	Aging effects in the nonequilibrium behavior of multilayer magnetic superstructures. <i>JETP Letters</i> , <b>2016</b> , 104, 776-783	1.2	10
61	Influence of anisotropy on magnetoresistance in magnetic multilayer structures. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2019</b> , 482, 201-205	2.8	9
60	Universal Berezinskii-Kosterlitz-Thouless dynamic scaling in the intermediate time range in frustrated Heisenberg antiferromagnets on a triangular lattice. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	9
59	Influence of disorder on ageing and memory effects in non-equilibrium critical dynamics of 3D Ising model relaxing from an ordered state. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , <b>2016</b> , 2016, 043303	1.9	9
58	Aging and memory effects in the nonequilibrium critical behavior of structurally disordered magnetic materials in the course of their evolution from the low-temperature initial state. <i>JETP Letters</i> , <b>2015</b> , 102, 167-175	1.2	7
57	Influence of long-range correlated defects on critical ultrasound propagation in solids. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	7
56	Critical behavior of disordered systems with replica symmetry breaking. <i>Journal of Experimental and Theoretical Physics</i> , <b>2002</b> , 95, 550-559	1	6
55	Effects of Superaging and Percolation Crossover on the Nonequilibrium Critical Behavior of the Two-Dimensional Disordered Ising Model. <i>JETP Letters</i> , <b>2018</b> , 107, 569-576	1.2	5
54	Analysis of the Effect of Different Initial States and Structural Defects on the Characteristics of the Nonequilibrium Critical Behavior of the 3D Ising Model. <i>Journal of Experimental and Theoretical Physics</i> , <b>2017</b> , 125, 1102-1115	1	4
53	Non-equilibrium critical behavior of the 3D classical Heisenberg model. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1163, 012020	0.3	4
52	The influence of disorder on the critical sound attenuation in solids. <i>Journal of Physics Condensed Matter</i> , <b>2005</b> , 17, L485-L492	1.8	4
51	Stability of critical behaviour of weakly disordered systems to introduction of potentials with replica symmetry breaking. <i>Journal of Physics A</i> , <b>2001</b> , 34, L145-L152		4
50	Non-equilibrium critical dynamics of multilayer magnetic structures. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2019</b> , 470, 143-146	2.8	4

49	Monte Carlo simulation of the non-equilibrium critical dynamics of low-dimensional magnetics and multilayer structures. <i>Lobachevskii Journal of Mathematics</i> , <b>2017</b> , 38, 944-947	0.9	3
48	Non-equilibrium critical vortex dynamics of disordered 2D XY-model. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 681, 012015	0.3	3
47	Manifestation of aging in giant magnetoresistance of the Co/Cu/Co nanostructure. <i>Journal of Physics Communications</i> , <b>2019</b> , 3, 015002	1.2	2
46	Anomalous ultrasound attenuation in solids during second-order phase transitions with allowance for relaxation effects. <i>Physics of Metals and Metallography</i> , <b>2007</b> , 104, 221-227	1.2	2
45	Effect of structural defects on anomalous ultrasound propagation in solids during second-order phase transitions. <i>Journal of Experimental and Theoretical Physics</i> , <b>2008</b> , 106, 897-904	1	2
44	Boundary critical behaviour at axial Lifshitz points of semi-infinite systems with a surface plane perpendicular to a modulation axis. <i>Journal of Physics A</i> , <b>2006</b> , 39, 7927-7942		2
43	Stability of the critical behavior of weakly disordered systems with respect to the introduction of an interaction potential breaking replica symmetry. <i>Physics of the Solid State</i> , <b>2001</b> , 43, 1759-1764	0.8	2
42	Specific Features of the Effect of Structural Defects on the Correlation and Interaction of Vortex Excitations in the Nonequilibrium BKT Dynamics of the Two-Dimensional XY Model. <i>Journal of Experimental and Theoretical Physics</i> , <b>2020</b> , 131, 768-792	1	2
41	Non-equilibrium vortex annealing of structural disorder in Berezinskii-Kosterlitz-Thouless dynamics of the two-dimensional XY-model. <i>Europhysics Letters</i> , <b>2019</b> , 128, 26002	1.6	2
40	Aging Effects in the Nonequilibrium Behavior of Magnetic Superstructures and Their Manifestation in Magnetoresistance. <i>Journal of Experimental and Theoretical Physics</i> , <b>2018</b> , 127, 731-741	1	2
39	Renormalization group description of the effect of structural defects on phase transitions in complex spin systems with random anisotropy effects and structural defects. <i>Theoretical and Mathematical Physics (Russian Federation)</i> , <b>2017</b> , 190, 359-365	0.7	1
38	Renormalization group description of the nonequilibrium critical dynamics of spin systems at the fixed space dimension $d = 3$ . <i>Theoretical and Mathematical Physics (Russian Federation)</i> , <b>2017</b> , 190, 402-410	0.7	1
37	Marginal Effect of Structural Defects on the Nonequilibrium Critical Behavior of the Two-Dimensional Ising Model. <i>Journal of Experimental and Theoretical Physics</i> , <b>2020</b> , 130, 258-273	1	1
36	Monte Carlo simulation of magnetic multilayered structures with giant magnetoresistance effects. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 681, 012016	0.3	1
35	Monte Carlo Study of the Effect of Initial States and Structural Defects on Nonequilibrium Critical Behavior of the Three-Dimensional Ising Model. <i>Physics of the Solid State</i> , <b>2018</b> , 60, 1098-1110	0.8	1
34	Nonequilibrium critical behavior of highly disordered magnets with long-range defect correlation. <i>Low Temperature Physics</i> , <b>2014</b> , 40, 443-449	0.7	1
33	Ageing and non-equilibrium critical phenomena in Monte Carlo simulations. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 510, 012020	0.3	1
32	Ageing properties of three-dimensional pure and site-diluted Ising ferromagnets. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 510, 012015	0.3	1

31	Monte Carlo simulation of critical properties of ultrathin anisotropic Heisenberg films. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 510, 012024	0.3	1
30	Non-equilibrium critical dynamics of pure and diluted 2DXY-model. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 510, 012014	0.3	1
29	Nonequilibrium critical dynamics of structurally disordered systems with long-range correlated defects. <i>JETP Letters</i> , <b>2011</b> , 93, 103-108	1.2	1
28	Stability of the critical behavior of weakly disordered systems against replica symmetry breaking. <i>JETP Letters</i> , <b>2001</b> , 73, 135-140	1.2	1
27	Multicritical behavior of disordered systems with two order parameters. <i>Physics of the Solid State</i> , <b>2000</b> , 42, 165-169	0.8	1
26	Monte-Carlo investigation of competition between uniaxial anisotropy, exchange and dipolar interactions in critical behavior of ultrathin magnetic films. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 681, 012017	0.3	1
25	Non-equilibrium critical behavior of thin Ising films. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2017</b> , 440, 33-36	2.8	
24	Dynamical Scaling in Time dependence of Correlation Length in Non-equilibrium Critical Relaxation of Pure and Site-diluted 2D XY-model. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1163, 012042	0.3	
23	Nonequilibrium critical dynamics of low-dimensional frustrated magnets and multilayer structures. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1163, 012068	0.3	
22	Effect of the Initial States, the Anisotropy, and Structural Defects on a Nonequilibrium Critical Behavior of the Three-Dimensional Heisenberg Model. <i>Physics of the Solid State</i> , <b>2020</b> , 62, 821-836	0.8	
21	Influence of initial states and structure defects on non-equilibrium critical behavior of 3D and 2D Ising models. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1163, 012005	0.3	
20	Disorder Aggregation by Vortices in Non-Equilibrium Critical Annealing of Two-Dimensional XY-model. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1163, 012039	0.3	
19	Peculiarities of non-equilibrium critical behavior of site-diluted 2D Ising model. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1163, 012016	0.3	
18	Dimensional Crossover in Critical Behavior of Thin XY-films: Equilibrium and Non-equilibrium Properties. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1163, 012041	0.3	
17	Non-equilibrium critical behaviour of ultrathin magnetic and metamagnetic Ising films. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 510, 012018	0.3	
16	Magnetic properties of multilayers based on anisotropic Heisenberg films with dipolar long-range interaction. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 903, 012018	0.3	
15	Non-Equilibrium Critical Relaxation of Heisenberg Ferromagnets with Long-Range Correlated Defects. <i>Solid State Phenomena</i> , <b>2012</b> , 190, 39-42	0.4	
14	Non-Equilibrium Critical Dynamics of Ferromagnets with Long Range Correlated Defects. <i>Solid State Phenomena</i> , <b>2012</b> , 190, 31-34	0.4	

- 13 Field-Theory Description of Nonequilibrium Critical Dynamics for Spin Systems. *Solid State Phenomena*, **2012**, 190, 23-26 0.4
- 12 Ageing Phenomena in Two-Dimensional XY-Model. *Solid State Phenomena*, **2012**, 190, 3-6 0.4
- 11 The effect of structural disorder on anomalous critical attenuation of ultrasound by solids. *Russian Physics Journal*, **2007**, 50, 458-465 0.7
- 10 Peculiarities of Non-Equilibrium Critical Behavior for 3D Diluted Ising Model with Evolution from Low-Temperature Initial State. *Materials Science Forum*, **2016**, 845, 85-88 0.4
- 9 Monte Carlo Simulation of Thin Magnetic Films Critical Behavior. *Materials Science Forum*, **2016**, 845, 89-92 0.4
- 8 Non-equilibrium vortex annealing of structural disorder in the critical relaxation of diluted two-dimensional XY-model. *Journal of Physics: Conference Series*, **2019**, 1389, 012024 0.3
- 7 The dimensional crossover in critical behavior of layered XY-model. *Journal of Physics: Conference Series*, **2019**, 1389, 012025 0.3
- 6 Influence of diffuse interfaces on the magnetoresistance in trilayer magnetic structures. *Journal of Physics: Conference Series*, **2019**, 1389, 012155 0.3
- 5 Non-equilibrium critical dynamics of low-dimensional magnetics and multilayer structures. *EPJ Web of Conferences*, **2018**, 185, 11009 0.3
- 4 Monte Carlo simulation of aging phenomena in multilayer magnetic structures. *EPJ Web of Conferences*, **2018**, 185, 03008 0.3
- 3 Non-equilibrium critical behavior of Heisenberg thin films. *EPJ Web of Conferences*, **2018**, 185, 11005 0.3
- 2 Calculation of CPP-and CIP-magnitoresistance in multilayer magnetic structures. *EPJ Web of Conferences*, **2018**, 185, 01009 0.3
- 1 Non-equilibrium critical behavior of multilayer magnetic nanostructures with a non-magnetic metal substrate. *Journal of Physics: Conference Series*, **2021**, 1740, 012010 0.3