

# Dmitrii O Kharchenko

## List of Publications by Citations

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57  
papers

539  
citations

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60  
ext. papers

597  
ext. citations

1.8  
avg, IF

4  
L-index

#	Paper	IF	Citations
57	Stochastic generalization for a hyperbolic model of spinodal decomposition. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2010</b> , 389, 3443-3455	3.3	29
56	Noise-induced pattern formation in system of point defects subjected to irradiation. <i>European Physical Journal B</i> , <b>2012</b> , 85, 1	1.2	24
55	Phase-field modeling of epitaxial growth in stochastic systems with interacting adsorbate. <i>Physica Scripta</i> , <b>2011</b> , 83, 045802	2.6	24
54	A study of pyramidal islands formation in epitaxy within the generalized phase-field model. <i>European Physical Journal B</i> , <b>2013</b> , 86, 1	1.2	21
53	Nanosize pattern formation in overdamped stochastic reaction-diffusion systems with interacting adsorbate. <i>Physical Review E</i> , <b>2012</b> , 86, 041143	2.4	21
52	Self-organized criticality within fractional Lorenz scheme. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2003</b> , 323, 263-293	3.3	20
51	Ab-initio calculations for the structural properties of Zr-Nb alloys. <i>Condensed Matter Physics</i> , <b>2013</b> , 16, 13801	1.3	20
50	Stochastic effects at ripple formation processes in anisotropic systems with multiplicative noise. <i>Physical Review E</i> , <b>2010</b> , 82, 061108	2.4	19
49	Properties of nano-islands formation in nonequilibrium reaction-diffusion systems with memory effects. <i>Physica Scripta</i> , <b>2012</b> , 86, 055401	2.6	19
48	Modeling self-organization of nano-size vacancy clusters in stochastic systems subjected to irradiation. <i>Radiation Effects and Defects in Solids</i> , <b>2014</b> , 169, 418-436	0.9	18
47	Noise induced patterning in reaction-diffusion systems with non-Fickian diffusion. <i>Physica D: Nonlinear Phenomena</i> , <b>2009</b> , 238, 2251-2260	3.3	18
46	Abnormal grain growth in nonequilibrium systems: effects of point defect patterning. <i>Physical Review E</i> , <b>2014</b> , 89, 042133	2.4	17
45	Statistical properties of nanosized clusters on a surface in overdamped stochastic reaction-Cattaneo systems. <i>Surface Science</i> , <b>2014</b> , 630, 158-167	1.8	17
44	Noise induced patterning in periodic systems with conserved dynamics. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2010</b> , 389, 3356-3367	3.3	17
43	Phase transitions induced by noise cross-correlations. <i>Physical Review E</i> , <b>2005</b> , 71, 041101	2.4	16
42	Morphology change of the silicon surface induced by Ar <sup>+</sup> ion beam sputtering. <i>Condensed Matter Physics</i> , <b>2011</b> , 14, 23602	1.3	16
41	Scaling properties of pyramidal islands formation process at epitaxial growth. <i>European Physical Journal B</i> , <b>2015</b> , 88, 1	1.2	15

40	Simulation of a Spatial Organization of Point Defects in Irradiated Systems. <i>Ukrainian Journal of Physics</i> , <b>2013</b> , 58, 993-1008	0.4	15
39	Pattern selection processes and noise induced pattern-forming transitions in periodic systems with transient dynamics. <i>Open Physics</i> , <b>2011</b> , 9,	1.3	14
38	Properties of spatial arrangement of V-type defects in irradiated materials: 3D-modelling. <i>Condensed Matter Physics</i> , <b>2013</b> , 16, 33001	1.3	14
37	Phase separation in binary systems with internal multiplicative noise. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2008</b> , 387, 5342-5354	3.3	13
36	Phase separation in binary systems with competing internal and external multiplicative noises. <i>European Physical Journal B</i> , <b>2010</b> , 76, 37-48	1.2	12
35	Statistical properties of abnormal nano-sized adsorbate islands growth in a model of adsorptive multilayer system. <i>Surface Science</i> , <b>2015</b> , 637-638, 90-100	1.8	11
34	Phase transitions induced by thermal fluctuations. <i>European Physical Journal B</i> , <b>2008</b> , 61, 95-103	1.2	11
33	Nano-sized Adsorbate Structure Formation in Anisotropic Multilayer System. <i>Nanoscale Research Letters</i> , <b>2017</b> , 12, 337	5	10
32	Fluctuation induced reconstruction of phase transition. <i>European Physical Journal B</i> , <b>2003</b> , 32, 375-382	1.2	9
31	Evolution of a stochastic system within the framework of Tsallis statistics. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2005</b> , 354, 262-280	3.3	9
30	Chaos in a generalized Lorenz system. <i>Chaos, Solitons and Fractals</i> , <b>2009</b> , 41, 2595-2605	9.3	7
29	Evolution of the system with multiplicative noise. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2001</b> , 293, 178-188	3.3	7
28	Universality and self-similar behaviour of non-equilibrium systems with non-Fickian diffusion. <i>Condensed Matter Physics</i> , <b>2014</b> , 17, 33004	1.3	7
27	Modeling microstructure evolution of binary systems subjected to irradiation and mechanical loading. <i>Radiation Effects and Defects in Solids</i> , <b>2015</b> , 170, 584-600	0.9	6
26	Coloured noise influence on system evolution. <i>European Physical Journal B</i> , <b>2002</b> , 29, 97-103	1.2	6
25	Thermal effects in nano-sized adsorbate islands growth processes at vapor deposition. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2016</b> , 444, 689-699	3.3	5
24	Multiscale Modelling of Self-Organization of Non-Equilibrium Point Defects in Irradiated $\alpha$ -Zirconium. <i>Progress in Physics of Metals</i> , <b>2017</b> , 18, 295-400	1.6	5
23	A study of phase separation processes in presence of dislocations in binary systems subjected to irradiation. <i>Condensed Matter Physics</i> , <b>2015</b> , 18, 23003	1.3	5

22	Modeling phase decomposition and patterning in binary alloy systems subjected to neutron irradiation. <i>Radiation Effects and Defects in Solids</i> , <b>2016</b> , 171, 819-839	0.9	5
21	A study of void size growth in nonequilibrium stochastic systems of point defects. <i>European Physical Journal B</i> , <b>2016</b> , 89, 1	1.2	5
20	Path integral solution of the system with coloured multiplicative noise. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2002</b> , 308, 113-124	3.3	4
19	Kinetics of phase transitions with singular multiplicative noise. <i>Physics of the Solid State</i> , <b>2000</b> , 42, 532-538	3.8	4
18	Self-Organization of an Ensemble of Vacancies under the Spinodal Decomposition of Binary Systems at Continuous Irradiation. <i>Ukrainian Journal of Physics</i> , <b>2016</b> , 61, 265-278	0.4	4
17	Phase field modelling voids nucleation and growth in binary systems. <i>Condensed Matter Physics</i> , <b>2018</b> , 21, 13002	1.3	4
16	Patterning and pattern selection in a surface layer: Feedback between point defects population and surface layer temperature variations. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2016</b> , 463, 152-162	3.3	4
15	Islands growth control in adsorptive multilayer plasma-condensate systems. <i>Journal of Crystal Growth</i> , <b>2019</b> , 514, 1-7	1.6	3
14	SCALING LAWS IN STOCHASTIC SYSTEMS WITH ANOMALOUS DIFFUSION. <i>Fluctuation and Noise Letters</i> , <b>2002</b> , 02, L273-L278	1.2	3
13	Point defects patterning in irradiated Zirconium: numerical study in the framework of the rate theory. <i>Radiation Effects and Defects in Solids</i> , <b>2018</b> , 173, 527-554	0.9	2
12	Phase field modeling precipitation of $\beta$ phase and mechanical properties change in Zr-Nb alloys under neutron irradiation. <i>Radiation Effects and Defects in Solids</i> , <b>2020</b> , 175, 602-626	0.9	2
11	An influence of vacancies and elastic deformation coupling onto phase decomposition of binary systems. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2017</b> , 486, 497-507	3.3	1
10	Microstructure evolution of cascade annealing in irradiated pure Zr: a molecular dynamics study. <i>Radiation Effects and Defects in Solids</i> , <b>2019</b> , 174, 752-764	0.9	0
9	A Study of Atomic Displacements Produced in Cascades in Irradiated $\alpha$ -Zr by Using Molecular Dynamics Simulations. <i>Metallofizika I Noveishie Tekhnologii</i> , <b>2016</b> , 38, 1303-1320	0.5	0
8	An Atomic Scale Study of Structural and Electronic Properties for $\alpha$ -Zirconium with Single Vacancies and Vacancy Clusters. <i>Metallofizika I Noveishie Tekhnologii</i> , <b>2016</b> , 38, 1195-1212	0.5	0
7	Stability of $\beta$ Nb phase in Zr-Nb alloys under neutron irradiation: Phase field modeling. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 035104	2.5	0
6	First-principle calculations of vacancy clustering in zirconium-based alloys. <i>Journal of Nuclear Materials</i> , <b>2021</b> , 554, 153079	3.3	0
5	Nano-Sized Pattern Formation in Nonequilibrium Adsorptive Systems with Interacting Adsorbate. <i>Springer Proceedings in Physics</i> , <b>2016</b> , 69-84	0.2	

- 4 Nano-sized Adsorbate Island Formation in Adsorptive Anisotropic Multilayer Systems. *Springer Proceedings in Physics*, **2019**, 135-152 0.2
- 3 Self-Organized Criticality within the Framework of the Variational Principle **2005**, 695-715
- 2 Thermal Effects at Nano-sized Pattern Formation in Surface Layers. *Springer Proceedings in Physics*, **2017**, 365-382 0.2
- 1 Electromigration-induced formation of percolating adsorbate islands during condensation from the gaseous phase: a computational study. *Beilstein Journal of Nanotechnology*, **2021**, 12, 694-703 3