

# Yuri D Fomin

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

70  
papers

1,607  
citations

23  
h-index

38  
g-index

70  
ext. papers

1,781  
ext. citations

2.8  
avg, IF

5.1  
L-index

#	Paper	IF	Citations
70	Two liquid states of matter: a dynamic line on a phase diagram. <i>Physical Review E</i> , <b>2012</b> , 85, 031203	2.4	175
69	"Liquid-gas" transition in the supercritical region: fundamental changes in the particle dynamics. <i>Physical Review Letters</i> , <b>2013</b> , 111, 145901	7.4	127
68	Widom line for the liquid-gas transition in Lennard-Jones system. <i>Journal of Physical Chemistry B</i> , <b>2011</b> , 115, 14112-5	3.4	103
67	Quasibinary amorphous phase in a three-dimensional system of particles with repulsive-shoulder interactions. <i>Journal of Chemical Physics</i> , <b>2008</b> , 129, 064512	3.9	103
66	Waterlike thermodynamic anomalies in a repulsive-shoulder potential system. <i>Physical Review E</i> , <b>2009</b> , 79, 051202	2.4	89
65	Thermodynamic properties of supercritical carbon dioxide: Widom and Frenkel lines. <i>Physical Review E</i> , <b>2015</b> , 91, 022111	2.4	66
64	Breakdown of excess entropy scaling for systems with thermodynamic anomalies. <i>Physical Review E</i> , <b>2010</b> , 81, 061201	2.4	63
63	Inversion of sequence of diffusion and density anomalies in core-softened systems. <i>Journal of Chemical Physics</i> , <b>2011</b> , 135, 234502	3.9	51
62	Berezinskii-Kosterlitz-Thouless transition and two-dimensional melting. <i>Physics-Uspokhi</i> , <b>2017</b> , 60, 857-885	2.8	43
61	Silicalike sequence of anomalies in core-softened systems. <i>Physical Review E</i> , <b>2013</b> , 87, 042122	2.4	40
60	Core-softened system with attraction: trajectory dependence of anomalous behavior. <i>Journal of Chemical Physics</i> , <b>2011</b> , 135, 124512	3.9	40
59	Effect of a potential softness on the solid-liquid transition in a two-dimensional core-softened potential system. <i>Journal of Chemical Physics</i> , <b>2014</b> , 141, 18C522	3.9	39
58	True Widom line for a square-well system. <i>Physical Review E</i> , <b>2014</b> , 89, 042136	2.4	39
57	Experimental evidence of the Frenkel line in supercritical neon. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	38
56	Complex phase behavior of the system of particles with smooth potential with repulsive shoulder and attractive well. <i>Journal of Chemical Physics</i> , <b>2011</b> , 134, 044523	3.9	37
55	Dynamical crossover line in supercritical water. <i>Scientific Reports</i> , <b>2015</b> , 5, 14234	4.9	32
54	Random pinning changes the melting scenario of a two-dimensional core-softened potential system. <i>Physical Review E</i> , <b>2015</b> , 92, 032110	2.4	32

53	Generalized van der Waals theory of liquid-liquid phase transitions. <i>Physical Review E</i> , <b>2006</b> , 74, 041201	2.4	30
52	How to quantify structural anomalies in fluids?. <i>Journal of Chemical Physics</i> , <b>2014</b> , 141, 034508	3.9	27
51	Dynamic transition in supercritical iron. <i>Scientific Reports</i> , <b>2014</b> , 4, 7194	4.9	24
50	Water-like anomalies in the core-softened systems: Dependence on the trajectory in density-temperature plane. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2011</b> , 375, 2181-2184	2.3	24
49	Universal crossover of liquid dynamics in supercritical region. <i>JETP Letters</i> , <b>2012</b> , 95, 164-169	1.2	23
48	The phase diagram and melting scenarios of two-dimensional Hertzian spheres. <i>Molecular Physics</i> , <b>2018</b> , 116, 3258-3270	1.7	23
47	Direct links between dynamical, thermodynamic, and structural properties of liquids: Modeling results. <i>Physical Review E</i> , <b>2017</b> , 95, 032116	2.4	20
46	Dynamics, thermodynamics and structure of liquids and supercritical fluids: crossover at the Frenkel line. <i>Journal of Physics Condensed Matter</i> , <b>2018</b> , 30, 134003	1.8	19
45	Crossover of collective modes and positive sound dispersion in supercritical state. <i>Journal of Physics Condensed Matter</i> , <b>2016</b> , 28, 43LT01	1.8	19
44	Melting Scenario of the Two-Dimensional Core-Softened System: First-Order or Continuous Transition?. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 510, 012016	0.3	18
43	Inversion of sequence of anomalies in core-softened systems with attraction. <i>European Physical Journal: Special Topics</i> , <b>2013</b> , 216, 165-173	2.3	18
42	Liquid-like and gas-like features of a simple fluid: An insight from theory and simulation. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2018</b> , 509, 690-702	3.3	17
41	Transport coefficients of soft sphere fluid at high densities. <i>JETP Letters</i> , <b>2012</b> , 95, 320-325	1.2	17
40	Properties of liquid iron along the melting line up to Earth-core pressures. <i>Journal of Physics Condensed Matter</i> , <b>2013</b> , 25, 285104	1.8	17
39	The behavior of cyclohexane confined in slit carbon nanopore. <i>Journal of Chemical Physics</i> , <b>2015</b> , 143, 184702	3.9	15
38	Comparative study of melting of graphite and graphene. <i>Carbon</i> , <b>2020</b> , 157, 767-778	10.4	15
37	Isoviscosity lines and the liquid-glass transition in simple liquids. <i>Physical Review E</i> , <b>2012</b> , 86, 011503	2.4	14
36	Comment on "Behavior of Supercritical Fluids across the Frenkel Line". <i>Journal of Physical Chemistry B</i> , <b>2018</b> , 122, 6124-6128	3.4	13

35	Complex phase diagrams of systems with isotropic potentials: results of computer simulations. <i>Physics-USpekhi</i> , <b>2020</b> , 63, 417-439	2.8	10
34	Anomalously high heat capacity of core-softened liquids. <i>Physics and Chemistry of Liquids</i> , <b>2019</b> , 57, 67-74.5		10
33	The Frenkel line and supercritical technologies. <i>Russian Journal of Physical Chemistry B</i> , <b>2014</b> , 8, 1087-1094		9
32	Complex Phase Behavior of Systems with Negative Curvature Potentials. <i>Defect and Diffusion Forum</i> , <b>2008</b> , 277, 155-160	0.7	9
31	The influence of random pinning on the melting scenario of two-dimensional soft-disk systems. <i>Molecular Physics</i> , <b>2019</b> , 117, 2910-2919	1.7	8
30	Viscosity anomaly in core-softened liquids. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2013</b> , 377, 1469-1473	2.3	8
29	Dynamical crossover in supercritical core-softened fluids. <i>Fluid Phase Equilibria</i> , <b>2016</b> , 417, 237-241	2.5	7
28	Anomalously high heat capacity of liquids: relation to structural properties. <i>Molecular Physics</i> , <b>2019</b> , 117, 2786-2792	1.7	7
27	Anomalous behavior of dispersion of longitudinal and transverse collective excitations in water. <i>Journal of Molecular Liquids</i> , <b>2019</b> , 287, 110992	6	6
26	The Frenkel line and isotope effect. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2016</b> , 444, 890-896		6
25	The effect of confinement on the solid-liquid transition in a core-softened potential system. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2020</b> , 550, 124521	3.3	6
24	The stripe phase of two-dimensional core-softened systems: Structure recognition. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2019</b> , 527, 121401	3.3	5
23	Molecular dynamics simulation of benzene in graphite and amorphous carbon slit pores. <i>Journal of Computational Chemistry</i> , <b>2013</b> , 34, 2615-24	3.5	5
22	Supercritical Grüneisen parameter and its universality at the Frenkel line. <i>Physical Review E</i> , <b>2017</b> , 96, 012107	2.4	5
21	Melting scenarios of two-dimensional Hertzian spheres with a single triangular lattice. <i>Soft Matter</i> , <b>2020</b> , 16, 3962-3972	3.6	4
20	Between two and three dimensions: Crystal structures in a slit pore. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 580, 135-145	9.3	4
19	Interplay between freezing and density anomaly in a confined core-softened fluid. <i>Molecular Physics</i> , <b>2020</b> , 118, e1718792	1.7	3
18	Excitation spectra of liquid iron up to superhigh temperatures. <i>Journal of Physics Condensed Matter</i> , <b>2017</b> , 29, 345401	1.8	3

17	Experimental study of water thermodynamics up to 1.2 GPa and 473 K. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 154501	3.9	3
16	Anomalous behavior of dispersion curves in water-like systems and water. <i>Fluid Phase Equilibria</i> , <b>2019</b> , 498, 45-50	2.5	2
15	The behaviour of water and sodium chloride solution confined into asbestos nanotube. <i>Molecular Physics</i> , <b>2016</b> , 114, 2279-2288	1.7	2
14	Glass transition in a two-dimensional core-softened system. <i>Radioelektronika, Nanosistemy, Informacionnye Tehnologii</i> , <b>2020</b> , 12, 161-166	1.3	2
13	A comparison of dynamic properties of a core-softened system of particles across glass transition, melting and random tiling formation. <i>Physics and Chemistry of Liquids</i> , <b>2020</b> , 58, 290-301	1.5	2
12	Melting line and thermodynamic properties of a supeionic compound SrCl <sub>2</sub> by molecular dynamics simulation. <i>Physics and Chemistry of Liquids</i> , 1-9	1.5	2
11	Water-Like Anomalies of Core-Softened Fluids: Dependence on the Trajectories in (P $\Pi$ ) Space. <i>Advances in Chemical Physics</i> , 81-100		2
10	The influence of long-range interaction on the structure of a two-dimensional multi scale potential system. <i>Journal of Physics Condensed Matter</i> , <b>2019</b> , 31, 315103	1.8	1
9	Dispersion of acoustic excitations in tetrahedral liquids. <i>Journal of Physics Condensed Matter</i> , <b>2020</b> , 32, 395101	1.8	1
8	Structure and dynamics of molten SrCl <sub>2</sub> . <i>Physics and Chemistry of Liquids</i> , <b>2020</b> , 58, 693-700	1.5	1
7	Crystal structure of a system with three-body interactions in strong confinement. <i>Results in Physics</i> , <b>2022</b> , 34, 105239	3.7	1
6	The Berezinskii-Kosterlitz-Thouless Transition and Melting Scenarios of Two-Dimensional Systems. <i>Physics of Particles and Nuclei</i> , <b>2020</b> , 51, 786-790	0.7	1
5	Structural transition in two-dimensional Hertzian spheres in the presence of random pinning. <i>Physical Review E</i> , <b>2021</b> , 103, 062612	2.4	1
4	The phase diagram of a two-dimensional core-softened system with purely repulsive monotonic potential. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2021</b> , 565, 125519	3.3	1
3	The temperature dependence of the frequency of longitudinal excitations in liquid along isobars: Simple liquid and water. <i>Journal of Molecular Liquids</i> , <b>2021</b> , 337, 116450	6	0
2	The role of attraction in the phase diagrams and melting scenarios of generalized 2D Lennard-Jones systems.. <i>Journal of Chemical Physics</i> , <b>2022</b> , 156, 114703	3.9	0
1	The structure of a core-softened system in a narrow slit pore. <i>Physics and Chemistry of Liquids</i> , 1-18	1.5	0