

# Grey Sh Boltachev

## List of Publications by Year in descending order

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53  
papers

634  
citations

623734

14  
h-index

610901

24  
g-index

53  
all docs

53  
docs citations

53  
times ranked

338  
citing authors

#	ARTICLE	IF	CITATIONS
1	Classical and generalized Gibbs's™ approaches and the work of critical cluster formation in nucleation theory. <i>Journal of Chemical Physics</i> , 2006, 124, 194503.	3.0	75
2	Curvature dependence of the surface tension of liquid and vapor nuclei. <i>Physical Review E</i> , 1999, 59, 469-475.	2.1	68
3	Statistical substantiation of the van der Waals theory of inhomogeneous fluids. <i>Physical Review E</i> , 2002, 65, 041601.	2.1	45
4	Nucleation in superheated liquid argon-krypton solutions. <i>Journal of Chemical Physics</i> , 1997, 106, 5648-5657.	3.0	36
5	Kinetics of boiling in binary liquid-gas solutions: Comparison of different approaches. <i>Journal of Chemical Physics</i> , 2003, 119, 6166-6183.	3.0	34
6	Extended version of the van der Waals capillarity theory. <i>Journal of Chemical Physics</i> , 2004, 121, 8594.	3.0	27
7	On the definition of temperature and its fluctuations in small systems. <i>Journal of Chemical Physics</i> , 2010, 133, 134509.	3.0	26
8	Equation of State for Lennard-Jones Fluid. <i>High Temperature</i> , 2003, 41, 270-272.	1.0	22
9	Experimental Investigations of Nucleation in Helium-Oxygen Mixtures. <i>Journal of Physical Chemistry B</i> , 2002, 106, 167-175.	2.6	17
10	Temperature of critical clusters in nucleation theory: Generalized Gibbs' approach. <i>Journal of Chemical Physics</i> , 2013, 139, 034702.	3.0	17
11	Modeling and optimization of uniaxial magnetic pulse compaction of nanopowders. <i>Acta Mechanica</i> , 2013, 224, 3177-3195.	2.1	17
12	Uniaxial compaction of nanopowders on a magnetic-pulse press. <i>Technical Physics</i> , 2013, 58, 1459-1468.	0.7	17
13	Three-dimensional simulations of nanopowder compaction processes by granular dynamics method. <i>Physical Review E</i> , 2013, 88, 012209.	2.1	16
14	Size effect in nanopowder compaction. <i>Technical Physics Letters</i> , 2010, 36, 823-826.	0.7	15
15	Simulation of nanopowder compaction in terms of granular dynamics. <i>Technical Physics</i> , 2011, 56, 919-930.	0.7	15
16	Space charge influence on the angle of conical spikes developing on a liquid-metal anode. <i>Physical Review E</i> , 2008, 77, 056607.	2.1	14
17	First-order curvature corrections to the surface tension of multicomponent systems. <i>Journal of Colloid and Interface Science</i> , 2003, 264, 228-236.	9.4	13
18	Simulation of radial pulsed magnetic compaction of a granulated medium in a quasi-static approximation. <i>Technical Physics</i> , 2007, 52, 1306-1315.	0.7	11

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19	Shock-wave compaction of the granular medium initiated by magnetically pulsed accelerated striker. Acta Mechanica, 2009, 204, 37-50.	2.1	11
20	Curvature corrections to surface tension. Physical Review E, 2004, 70, 011603.	2.1	10
21	Effect of retardation in the dispersion forces between spherical particles. Journal of Colloid and Interface Science, 2011, 355, 417-422.	9.4	10
22	Tangential interaction of elastic spherical particles in contact. International Journal of Solids and Structures, 2012, 49, 2107-2114.	2.7	10
23	Control of the Operation Mode of a Relativistic <i>Ka</i> -Band Backward-Wave Oscillator. IEEE Transactions on Plasma Science, 2015, 43, 2613-2620.	1.3	10
24	Compaction and elastic unloading of nanopowders under the granular dynamic method. Powder Metallurgy and Metal Ceramics, 2012, 51, 260-266.	0.8	8
25	The second and third virial coefficients of simple fluids. High Temperature, 2006, 44, 83-90.	1.0	7
26	Influence of the space charge on the configuration of conical spikes on a liquid-metal surface. Europhysics Letters, 2006, 76, 36-41.	2.0	7
27	Dynamic compaction model for a granular medium. Journal of Applied Mechanics and Technical Physics, 2008, 49, 336-339.	0.5	7
28	Densification of the granular medium by the low amplitude shock waves. Acta Mechanica, 2009, 207, 223-234.	2.1	7
29	Dynamics of cylindrical conducting shells in a pulsed longitudinal magnetic field. Technical Physics, 2010, 55, 753-761.	0.7	7
30	Shift and torsion contact problems for arbitrary axisymmetric normal stress distributions. International Journal of Solids and Structures, 2013, 50, 2894-2900.	2.7	7
31	Effect of long-range interactions on the surface tension. Russian Journal of Physical Chemistry A, 2006, 80, 445-448.	0.6	6
32	Simulation of the macromechanical behavior of oxide nanopowders during compaction processes. Granular Matter, 2015, 17, 345-358.	2.2	6
33	Analytical model of a corona discharge from a conical electrode under saturation. Technical Physics, 2012, 57, 1493-1502.	0.7	5
34	Expansion of a conducting shell by the magnetic field of an external inductor. Technical Physics Letters, 2009, 35, 334-336.	0.7	4
35	The van der Waals Theory of Capillarity and Computer Simulation. Colloid Journal, 2002, 64, 661-670.	1.3	3
36	Is Gibbs' Thermodynamic Theory of Heterogeneous Systems Really Perfect?. , 2005, , 418-446.		3

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37	Properties of argon liquid-vapor interface. Colloid Journal, 2006, 68, 26-31.	1.3	3
38	Bimetallic cylinder in a pulsed magnetic field. Technical Physics Letters, 2009, 35, 916-919.	0.7	3
39	A model of electron emission from a wedge in the space-charge-limited current regime. Technical Physics Letters, 2007, 33, 909-911.	0.7	2
40	Model of corona discharge from a thin point in a space-charge-limited current regime. Technical Physics Letters, 2012, 38, 365-367.	0.7	2
41	Compaction and elastic unloading of nanopowders in terms of granular dynamics. Technical Physics, 2015, 60, 252-259.	0.7	2
42	Simulating the Conductor With a Nonuniform Resistance Under High-Pulsed Magnetic Fields. IEEE Transactions on Plasma Science, 2021, 49, 2463-2469.	1.3	2
43	Durability of Inductor Material with Inhomogenous Resistance under High Pulsed Magnetic Field Generation. , 2020, , .		2
44	Mechanical approach to the description of liquid-vapor interfaces at low temperatures. Chemical Physics Letters, 2004, 394, 329-333.	2.6	1
45	Inclusion of Corrections of the Highest Order of Smallness in the Van der Waals Capillarity Theory. High Temperature, 2005, 43, 538-545.	1.0	1
46	The thermodynamic properties of nitrogen, argon, oxygen, and their mixtures in the region of the liquid-gas phase transition. Russian Journal of Physical Chemistry A, 2006, 80, 501-504.	0.6	1
47	Analysis of the dynamic radial compaction of granular media. Journal of Applied Mechanics and Technical Physics, 2008, 49, 1040-1046.	0.5	1
48	Electron emission in a flat cathode-curved anode system in the space-charge-limited current regime. Technical Physics Letters, 2008, 34, 934-936.	0.7	1
49	Nucleation at retrograde condensation. AIP Conference Proceedings, 2000, , .	0.4	0
50	Singularity in the current density distribution at the boundary of emitting region on a flat cathode surface. Technical Physics Letters, 2008, 34, 1041-1043.	0.7	0
51	Model of a wedge-electrode corona discharge under saturation: Exact solutions. Technical Physics, 2014, 59, 366-372.	0.7	0
52	Magnetic Field Measurement Features With a Miniature B-Dot Probe. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 970-978.	2.2	0
53	Kinetics of Boiling-up of a Gassed Liquid. Heat Transfer Research, 2007, 38, 211-221.	1.6	0