

Alexey G Khrapak

List of Publications by Year in descending order

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71
papers

1,757
citations

279487

23
h-index

315357

38
g-index

73
all docs

73
docs citations

73
times ranked

643
citing authors

#	ARTICLE	IF	CITATIONS
1	Minima of shear viscosity and thermal conductivity coefficients of classical fluids. <i>Physics of Fluids</i> , 2022, 34, .	1.6	13
2	Freezing Temperature and Density Scaling of Transport Coefficients. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 2674-2678.	2.1	9
3	Freezing density scaling of fluid transport properties: Application to liquefied noble gases. <i>Journal of Chemical Physics</i> , 2022, 157, .	1.2	9
4	Prandtl Number in Classical Hard-Sphere and One-Component Plasma Fluids. <i>Molecules</i> , 2021, 26, 821.	1.7	4
5	Transport properties of Lennard-Jones fluids: Freezing density scaling along isotherms. <i>Physical Review E</i> , 2021, 103, 042122.	0.8	15
6	Correlations between the Shear Viscosity and Thermal Conductivity Coefficients of Dense Simple Liquids. <i>JETP Letters</i> , 2021, 114, 540-544.	0.4	11
7	Excess entropy and Stokes-Einstein relation in simple fluids. <i>Physical Review E</i> , 2021, 104, 044110.	0.8	25
8	Gordon Method for the Generation of Nanowires and High-Temperature Processes in Superfluid Helium. <i>High Temperature</i> , 2021, 59, 143-149.	0.1	1
9	Approximation of the Mobility of Atomic Ions of Noble Gases in Their Parent Gas. <i>High Temperature</i> , 2020, 58, 545-549.	0.1	4
10	Electron Self-Trapping in Vortex Rings in Superfluid Helium. , 2019, , .		0
11	Modified Frost formula for the mobilities of positive ions in their parent gases. <i>AIP Advances</i> , 2019, 9, 095008.	0.6	10
12	Onset of transverse (shear) waves in strongly-coupled Yukawa fluids. <i>Journal of Chemical Physics</i> , 2019, 150, 104503.	1.2	34
13	Simple Dispersion Relations for Coulomb and Yukawa Fluids. <i>IEEE Transactions on Plasma Science</i> , 2018, 46, 737-742.	0.6	18
14	Influence of a charge-gradient force on dust acoustic waves. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	16
15	Collective modes of two-dimensional classical Coulomb fluids. <i>Journal of Chemical Physics</i> , 2018, 149, 134114.	1.2	22
16	Self-trapping of electrons in vortex rings in liquid helium. <i>JETP Letters</i> , 2017, 105, 797-800.	0.4	3
17	Internal Energy of the Classical Two- and Three-Dimensional One-Component Plasma. <i>Contributions To Plasma Physics</i> , 2016, 56, 270-280.	0.5	28
18	Collective modes in two-dimensional one-component-plasma with logarithmic interaction. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	14

#	ARTICLE	IF	CITATIONS
19	Complex Plasma Research under Microgravity Conditions: PK Plus Laboratory on the International Space Station. Contributions To Plasma Physics, 2016, 56, 253-262.	0.5	23
20	On the internal energy of the classical two-dimensional one-component-plasma. AIP Advances, 2015, 5, .	0.6	5
21	On the lower bound of the internal energy of the one-component-plasma. Physics of Plasmas, 2015, 22, 044504.	0.7	5
22	Simple thermodynamics of strongly coupled one-component-plasma in two and three dimensions. Physics of Plasmas, 2014, 21, .	0.7	21
23	Ion sphere model for Yukawa systems (dusty plasmas). Physics of Plasmas, 2014, 21, .	0.7	37
24	Energy spectrum of vacancies and nanobubbles in condense matter: Crystal melting. , 2014, , .		0
25	Simple estimation of thermodynamic properties of Yukawa systems. Physical Review E, 2014, 89, 023102.	0.8	44
26	Energy of vacancy formation in the continuum matter model. Low Temperature Physics, 2013, 39, 465-467.	0.2	2
27	The effect of chlorine atoms on the charging kinetics of carbon nanoparticles forming in shock-heated plasma. High Temperature, 2012, 50, 687-693.	0.1	3
28	Dielectric catastrophe and insulator-conductor transition. Europhysics Letters, 2012, 97, 15004.	0.7	1
29	Complex Plasmas With Rodlike Particles. IEEE Transactions on Plasma Science, 2011, 39, 2732-2733.	0.6	9
30	Drift velocity of ions and electrons in non-polar dielectric liquids at high electric field strengths. , 2011, , .		4
31	Investigation of the kinetics of carbon nanoparticle charging in shock-heated plasma. High Temperature, 2011, 49, 349-355.	0.1	4
32	Negative ions in liquid helium. Low Temperature Physics, 2011, 37, 387-391.	0.2	8
33	Charge carriers and electrical conductivity in fluid molecular dielectrics under wide pressure range. , 2011, , .		0
34	Negative and positive ions in liquid helium. , 2011, , .		1
35	Grain Charging and Shielding in Collisional Plasmas. , 2011, , .		1
36	10.1007/s11447-008-1014-3. , 2010, 106, 166.		0

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37	On the determination of the particle interaction potential in a dusty plasma from a pair correlation function. JETP Letters, 2009, 90, 332-335.	0.4	6
38	Metallization of aluminum hydride AlH_3 at high multiple-shock pressures. Physical Review B, 2009, 79, .	0.1	1
39	Peculiar Properties of Rodlike Particles Levitating in the Sheath of an RF Plasma. IEEE Transactions on Plasma Science, 2009, 37, 1110-1115.	0.6	10
40	Negative ions in non-polar liquids. International Journal of Mass Spectrometry, 2008, 277, 236-239.	0.7	13
41	Energy spectrum of one-particle excitations in liquid dielectrics under high pressures and temperatures. Journal of Experimental and Theoretical Physics, 2008, 106, 910-917.	0.2	3
42	Peculiar properties of rodlike particles levitating in the sheath of an rf plasma. AIP Conference Proceedings, 2008, , .	0.3	0
43	A Model for Grain Charging in Weakly Ionized Plasmas. AIP Conference Proceedings, 2008, , .	0.3	1
44	Model of grain charging in collisional plasmas accounting for collisionless layer. Physics of Plasmas, 2007, 14, 042102.	0.7	63
45	Attraction of Positively Charged Particles in Highly Collisional Plasmas. Physical Review Letters, 2007, 99, 055003.	2.9	46
46	Void Closure in Complex Plasmas under Microgravity Conditions. Physical Review Letters, 2007, 98, 265006.	2.9	69
47	Structure of negative impurity ions in liquid helium. JETP Letters, 2007, 86, 252-255.	0.4	7
48	Charging properties of a dust grain in collisional plasmas. Physics of Plasmas, 2006, 13, 052114.	0.7	75
49	Electron and ion fluxes to a dust grain in atmospheric pressure plasma. Journal of Physics A, 2006, 39, 4561-4564.	1.6	2
50	Electron-forbidden energy gap of hydrogen in a wide pressure interval. Journal of Experimental and Theoretical Physics, 2005, 100, 14-21.	0.2	1
51	The mobility of positive and negative ions in liquid xenon. Radiation Physics and Chemistry, 2005, 74, 152-159.	1.4	8
52	Vapor-air discharges between electrolytic cathode and metal anode at atmospheric pressure. High Temperature, 2005, 43, 1-7.	0.1	10
53	Dust Waves Excited in a DC Glow Discharge Plasma. AIP Conference Proceedings, 2005, , .	0.3	0
54	Shock wave formation in a dc glow discharge dusty plasma. Physical Review E, 2005, 71, 036413.	0.8	39

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55	Large-amplitude dust waves excited by the gas-dynamic impact in a dc glow discharge plasma. <i>Physical Review E</i> , 2004, 69, 016402.	0.8	46
56	Excitation of Dust-Acoustic Waves in a DC Glow-Discharge Dusty Plasma by Means of Pulsed Gasdynamic Stimulation. <i>High Temperature</i> , 2004, 42, 659-666.	0.1	3
57	Dusty plasma of a dc glow discharge: methods of investigation and characteristic features of behavior. <i>High Temperature</i> , 2004, 42, 827-841.	0.1	14
58	Anomalous Mobility of Negative Charges in Liquid Hydrogen: A Model of Ionic Bubble. <i>High Temperature</i> , 2003, 41, 425-427.	0.1	37
59	Rodlike particles in gas discharge plasmas: Theoretical model. <i>Physical Review E</i> , 2003, 68, 026403.	0.8	40
60	Levitation of cylindrical particles in the sheath of an rf plasma. <i>Physical Review E</i> , 2001, 63, 036406.	0.8	60
61	Conjecture of the lifetime of delocalized electrons in liquid helium. <i>Journal of Chemical Physics</i> , 2001, 115, 10048-10049.	1.2	37
62	Liquid plasma crystal: Coulomb crystallization of cylindrical macroscopic grains in a gas-discharge plasma. <i>JETP Letters</i> , 2000, 71, 102-105.	0.4	37
63	Mechanism of dust-acoustic instability in a direct current glow discharge plasma. <i>Physics of Plasmas</i> , 2000, 7, 1374-1380.	0.7	138
64	Negative ions in liquid xenon. <i>Journal of Experimental and Theoretical Physics</i> , 1999, 88, 320-324.	0.2	7
65	Anomalous heating of a system of dust particles in a gas-discharge plasma. <i>JETP Letters</i> , 1997, 66, 419-425.	0.4	64
66	Crystallization of a dusty plasma in the positive column of a glow discharge. <i>JETP Letters</i> , 1996, 64, 92-98.	0.4	75
67	Structure of O_2^+ in dense helium gas. <i>Physical Review E</i> , 1995, 51, 4804-4806.	0.8	53
68	Comment on ϵ^{\sim} Relation between the electron scattering length and the van der Waals approximation to the equation of state ϵ^{\sim} . <i>Physical Review A</i> , 1995, 51, 5043-5044.	1.0	10
69	Thermodynamical Characteristics of Liquid Metal Droplets. <i>Physica Status Solidi (B): Basic Research</i> , 1988, 145, 455-466.	0.7	7
70	Self-trapped states of positrons and positronium in dense gases in liquids. <i>Reports on Progress in Physics</i> , 1982, 45, 697-751.	8.1	122
71	On the annihilation rate of positronium in dense rare gases. <i>Applied Physics Berlin</i> , 1978, 16, 179-183.	1.4	38