Alexander F Pshenichnikov

List of Publications by Year
in descending order

61	1,226	430874	377865
papers	citations	18 h-index	34 g-index

61	61	61	522
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Magneto-granulometric analysis of concentrated ferrocolloids. Journal of Magnetism and Magnetic Materials, 1996, 161, 94-102.	2.3	156
2	Magnetic properties of polydisperse ferrofluids: A critical comparison between experiment, theory, and computer simulation. Physical Review E, 2007, 75, 061405.	2.1	130
3	Magnetic properties of ferrocolloids. Journal of Magnetism and Magnetic Materials, 1990, 85, 40-46.	2.3	82
4	On the Structure of Microaggregates in Magnetite Colloids. Journal of Colloid and Interface Science, 1996, 182, 63-70.	9.4	80
5	Equilibrium magnetization of concentrated ferrocolloids. Journal of Magnetism and Magnetic Materials, 1995, 145, 319-326.	2.3	78
6	Equilibrium magnetization and microstructure of the system of superparamagnetic interacting particles: numerical simulation. Journal of Magnetism and Magnetic Materials, 2000, 213, 357-369.	2.3	64
7	Magnetic properties of ferrocolloids: The effect of interparticle interactions. Journal of Magnetism and Magnetic Materials, 1987, 65, 269-272.	2.3	56
8	Magnetophoresis, sedimentation, and diffusion of particles in concentrated magnetic fluids. Journal of Chemical Physics, 2011, 134, 184508.	3.0	45
9	Cluster structure and the first-order phase transition in dipolar systems. European Physical Journal E, 2001, 6, 399-407.	1.6	39
10	Low-temperature susceptibility of concentrated magnetic fluids. Journal of Chemical Physics, 2004, 121, 5455-5467.	3.0	38
11	Magnetic susceptibility of concentrated ferrocolloids. Colloid Journal, 2005, 67, 189-200.	1.3	36
12	Temperature-dependent dynamic correlations in suspensions of magnetic nanoparticles in a broad range of concentrations: a combined experimental and theoretical study. Physical Chemistry Chemical Physics, 2016, 18, 18342-18352.	2.8	35
13	Dynamic susceptibility of a concentrated ferrofluid: The role of interparticle interactions. Physical Review E, 2019, 100, 032605.	2.1	29
14	Magnetophoresis of particles and aggregates in concentrated magnetic fluids. Physical Review E, 2012, 86, 051401.	2.1	28
15	Chain-like aggregates in magnetic fluids. Journal of Magnetism and Magnetic Materials, 2005, 292, 332-344.	2.3	25
16	Dispersion of magnetic susceptibility and the microstructure of magnetic fluid. Colloid Journal, 2006, 68, 294-303.	1.3	22
17	Magnetophoresis and diffusion of colloidal particles in a thin layer of magnetic fluids. Journal of Magnetism and Magnetic Materials, 2010, 322, 2575-2580.	2.3	22
18	Sedimentation equilibria in polydisperse ferrofluids: critical comparisons between experiment, theory, and computer simulation. Soft Matter, 2016, 12, 4103-4112.	2.7	19

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19	Phase separation in dipolar systems: Numerical simulation. JETP Letters, 2000, 72, 182-185.	1.4	18
20	A mutual-inductance bridge for analysis of magnetic fluids. Instruments and Experimental Techniques, 2007, 50, 509-514.	0.5	17
21	A magnetic fluid for operation in strong gradient fields. Colloid Journal, 2015, 77, 196-201.	1.3	17
22	Deformation of the free surface of a liquid by thermocapillary motion. Fluid Dynamics, 1983, 18, 463-465.	0.9	14
23	Floating of solid non-magnetic bodies in magnetic fluids: Comprehensive analysis in the framework of inductive approach. Physics of Fluids, 2020, 32, .	4.0	14
24	Vortex flows induced by drop-like aggregate drift in magnetic fluids. Physics of Fluids, 2014, 26, .	4.0	12
25	Weakening of magnetic response experimentally observed for ferrofluids with strongly interacting magnetic nanoparticles. Journal of Molecular Liquids, 2019, 277, 762-768.	4.9	10
26	Influence of coagulant and free stabilizer on formation of aggregates in magnetic fluids. Colloid Journal, 2010, 72, 236-242.	1.3	9
27	Effect of demagnetizing fields on particle spatial distribution in magnetic fluids. Magnetohydrodynamics, 2012, 48, 503-514.	0.3	9
28	Concentration-dependent zero-field magnetic dynamic response of polydisperse ferrofluids. Journal of Magnetism and Magnetic Materials, 2018, 459, 252-255.	2.3	8
29	Dynamics of Magnetic Fluids in Crossed DC and AC Magnetic Fields. Nanomaterials, 2019, 9, 1711.	4.1	8
30	Nonlinear response of a dilute ferrofluid to an alternating magnetic field. Journal of Molecular Liquids, 2022, 346, 117449.	4.9	8
31	Determination of the weight of a non-magnetic body immersed in magnetic fluid exposed to uniform magnetic field. Magnetohydrodynamics, 2019, 55, 73-78.	0.3	8
32	Birefringence in Concentrated Ferrocolloids. Colloid Journal, 2001, 63, 275-282.	1.3	7
33	Self-organization of magnetic moments in dipolar chains with restricted degrees of freedom. Physical Review E, 2015, 92, 042303.	2.1	7
34	On natural solutal convection in magnetic fluids. Physics of Fluids, 2015, 27, 092001.	4.0	7
35	Motion of a deformable droplet of magnetic fluid in a rotating magnetic field. Fluid Dynamics, 2000, 35, 17-23.	0.9	6
36	Effect of centrifugation on dynamic susceptibility of magnetic fluids. Journal of Magnetism and Magnetic Materials, 2017, 432, 30-36.	2.3	6

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37	Sedimentation equilibrium of magnetic nanoparticles with strong dipole-dipole interactions. Physical Review E, 2017, 95, 032609.	2.1	6
38	Floating of dia-, para-, and superparamagnetic bodies in magnetic fluids: Analysis of wall effects in the framework of inductive approach. Physics of Fluids, 2021, 33, .	4.0	6
39	Computation of demagnetizing fields and particle distribution in magnetic fluid with inhomogeneous density. Journal of Magnetism and Magnetic Materials, 2012, 324, 1342-1347.	2.3	5
40	Deformation and breakup of a liquid film under the action of thermocapillary convection. Journal of Applied Mechanics and Technical Physics, 1987, 28, 399-403.	0.5	4
41	The magneto-optical properties of an ensemble of ellipsoidal dielectric particles in a magnetic fluid. Journal of Experimental and Theoretical Physics, 2002, 95, 275-281.	0.9	4
42	Measurements of the transverse susceptibility and magnetization of magnetic fluids. Instruments and Experimental Techniques, 2008, 51, 466-470.	0.5	4
43	Sedimentation of particles in concentrated magnetic fluids: numerical simulation. Magnetohydrodynamics, 2015, 51, 551-560.	0.3	4
44	Forces acting on a permanent magnet placed in a rectangular cavity with a magnetic fluid. Computational Continuum Mechanics, 2014, 7, 5-14.	0.5	4
45	Free convection of a liquid binary mixture in an inclined rectangular cavity. Fluid Dynamics, 1980, 14, 619-622.	0.9	3
46	A method of simultaneous measurement of the soret and diffusion coefficients of liquid solutions. Journal of Engineering Physics, 1983, 44, 529-533.	0.0	3
47	Effect of free convection on thermodiffusion in a liquid mixture filling an inclined rectangular cavity. Journal of Applied Mechanics and Technical Physics, 1987, 27, 695-697.	0.5	3
48	Gravitational Convection of a Liquid Mixture in a Horizontal Cylindrical Gap at Moderate Grashof Numbers. Cosmic Research, 2004, 42, 109-116.	0.6	2
49	Influence of interparticle interactions on diffusion processes in magnetic fluids. Physics Procedia, 2010, 9, 101-104.	1.2	2
50	Equilibrium susceptibility of concentrated ferrocolloids: Monte Carlo simulation. Magnetohydrodynamics, 2013, 49, 101-110.	0.3	2
51	Nonlinear response of a concentrated ferrofluid to a low-frequency magnetic field. Magnetohydrodynamics, 2018, 54, 73-78.	0.3	2
52	Magnetic properties of solidified ferrocolloids. Physics of the Solid State, 1998, 40, 970-974.	0.6	1
53	Dynamics of magnetophoresis in dilute magnetic fluids. Physics Procedia, 2010, 9, 96-100.	1.2	1
54	Stationary Thermomagnetic Convection of Ferrofluid in an Enclosed Loop. Journal of Physics: Conference Series, 2021, 1945, 012022.	0.4	1

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55	Convective oscillations in interconnected containers. Fluid Dynamics, 1976, 9, 506-510.	0.9	0
56	Effect of thermal diffusion on free convection of a binary mixture in a cavity with a square cross-section. Journal of Applied Mechanics and Technical Physics, 1982, 22, 655-659.	0.5	0
57	Thermodiffusion separation of a liquid mixture under developed convection conditions. Journal of Applied Mechanics and Technical Physics, 1988, 29, 212-216.	0.5	0
58	Magnetovibrational flows in a magnetic fluid. Fluid Dynamics, 1998, 33, 102-109.	0.9	0
59	Magneto-optical properties of binar ferrocolloids. Journal of Physics: Conference Series, 2018, 994, 012010.	0.4	0
60	Amplitude Dependence of Dynamic Susceptibility of a Magnetic Fluid at Acoustic Frequencies. IOP Conference Series: Materials Science and Engineering, 2019, 581, 012024.	0.6	0
61	Response to ``Comment on ``Tangential stresses on the magnetic fluid boundary and rotational effect''. Magnetohydrodynamics, 2007, 43, 143-145.	0.3	0