Sergei Cherkasov

List of Publications by Year
in descending order

36 papers	**146** citations	1163117 **8** h-index	1372567 **10** g-index
36 all docs	**36** docs citations	**36** times ranked	**29** citing authors

#	Article	IF	Citations
1	Limitations of the Boussinesq Model on the Example of Laminary Natural Convection of Gas between Vertical Isothermal Walls. High Temperature, 2018, 56, 878-883.	1.0	5
2	Approximate analytical solution of a 2D problem for a heat conducting emitting plate. High Temperature, 2017, 55, 75-78.	1.0	1
3	Specific features of wall free convection in a temperature-stratified medium. High Temperature, 2017, 55, 393-399.	1.0	0
4	Anisotropic effect of natural convection on the temperature field in an enclosure in the presence of stable temperature stratification. Fluid Dynamics, 2015, 50, 681-690.	0.9	1
5	The effect of longitudinal heat flow on the temperature distribution in a moving rib for a discontinuous distribution of the heat transfer coefficient. High Temperature, 2015, 53, 765-767.	1.0	0
6	A modified model for simplified description of evolution of a single bubble upon increase in the pressure of the surrounding fluid. High Temperature, 2014, 52, 93-97.	1.0	2
7	An Investigation into Air-Sand-Water Three-Phase Flow through the Sandblasting Nozzle. Journal of Computational Multiphase Flows, 2013, 5, 207-222.	0.8	1
8	Thermal processes in compression of a vapor bubble in liquid hydrocarbon based on the homobaric model. High Temperature, 2012, 50, 631-638.	1.0	5
9	Mathematical simulation of evolution of solitary spherical gas bubble based on homobaric model. High Temperature, 2011, 49, 422-429.	1.0	9
10	Asymptotic solutions in the problem of a heat-conducting radiating rib. High Temperature, 2011, 49, 924-926.	1.0	4
11	Some special features of description of thermal and dynamic processes in gases in the approximation of homobaricity. High Temperature, 2010, 48, 422-426.	1.0	4
12	Numerical Modeling of Thermal and Hydrodynamic Processes During the Bubble Compression Due to the Ambient Pressure Rise in a Liquid. , 2010, , .		0
13	Certain hydrodynamic characteristics of the evolution of a solitary spherical bubble in the finite compression regime. Fluid Dynamics, 2009, 44, 250-257.	0.9	1
14	Simplified approach to the calculation of variation of composition of liquid mixture under conditions of its isothermal evaporation. High Temperature, 2009, 47, 299-301.	1.0	0
15	On the fulfillment of the energy conservation law in mathematical models of evolution of single spherical bubble. International Journal of Heat and Mass Transfer, 2008, 51, 3623-3629.	4.8	14
16	Numerical simulation of compression of the single spherical vapor bubble on a basis of the uniform model. International Journal of Heat and Mass Transfer, 2008, 51, 3615-3622.	4.8	9
17	Mathematical simulation of evolution of solitary spherical vapor bubble under compression by external pressure. High Temperature, 2008, 46, 84-90.	1.0	4
18	Mathematical simulation of the compression process of a vapor bubble at a pressure increase in the surrounding liquid. Journal of Engineering Thermophysics, 2008, 17, 300-310.	1.4	4

#	ARTICLE	IF	CITATIONS
19	Theoretical investigation of modes of compression of a spherical vapor bubble using a simplified model. High Temperature, 2007, 45, 837-843.	1.0	2
20	Theoretical investigation of the heating of liquid in straight channels owing to viscous dissipation. High Temperature, 2006, 44, 432-435.	1.0	1
21	Title is missing!. High Temperature, 2002, 40, 447-455.	1.0	6
22	The Effect of the Variability of Density on the Propagation of Heat in a Gas. High Temperature, 2002, 40, 571-576.	1.0	3
23	Title is missing!. High Temperature, 2001, 39, 905-911.	1.0	8
24	Mathematical simulation of mixed convection in a vertical cylindrical vessel. Fluid Dynamics, 1998, 33, 818-825.	0.9	0
25	Theory of the Local Self-Similar Regime of the Laminar Free-Convection Boundary Layer in the Neighborhood of a Vertical Wall. Fluid Dynamics, 1997, 32, 772-779.	0.9	2
26	Mathematical modeling of natural convection in a vertical cylindrical tank with alternating-sign heat flux distribution on the wall. Fluid Dynamics, 1996, 31, 218-223.	0.9	8
27	Development of hydrodynamic instability in film condensation on a cylindrical tube in weightlessness. Fluid Dynamics, 1995, 30, 894-898.	0.9	1
28	Natural convection and temperature stratification in a cryogenic fuel tank in microgravity. Fluid Dynamics, 1994, 29, 710-716.	0.9	11
29	Aspects of the free-convection boundary layer in a temperature-stratified medium. Fluid Dynamics, 1993, 28, 19-24.	0.9	4
30	Self-similar thermal stratification regime in vessels with natural convection. Fluid Dynamics, 1990, 24, 670-674.	0.9	0
31	Quasisteady free convection regime in a vertical cylindrical vessel. Fluid Dynamics, 1986, 21, 125-131.	0.9	5
32	Natural convection in a vertical cylindrical vessel with heat supplied to its side and free surfaces. Fluid Dynamics, 1984, 19, 902-906.	0.9	12
33	Unsteady thermal convection in a cylindrical vessel heated from the side. Fluid Dynamics, 1984, 18, 620-629.	0.9	12
34	Natural convection of a viscoplastic fluid in vertical circular channels. Fluid Dynamics, 1984, 18, 800-803.	0.9	0
35	Natural convection produced by unsteady heating of a viscoplastic liquid in a plane vertical layer. Fluid Dynamics, 1983, 17, 610-612.	0.9	0
36	Combined convection of a viscoplastic liquid in a plane vertical layer. Fluid Dynamics, 1980, 14, 901-903.	0.9	7