Andrey N Salamatin

List of Publications by Year
in descending order

45 papers	1,485 citations	471509 17 h-index	315739 38 g-index
45 all docs	45 docs citations	45 times ranked	1216 citing authors

#	Article	IF	Citations
1	Formation of Porous Gas Hydrates from Ice Powders:Â Diffraction Experiments and Multistage Model. Journal of Physical Chemistry B, 2003, 107, 10299-10311.	2.6	253
2	Physical, chemical and biological processes in Lake Vostok and other Antarctic subglacial lakes. Nature, 2001, 414, 603-609.	27.8	240
3	Formation of Methane Hydrate from Polydisperse Ice Powders. Journal of Physical Chemistry B, 2006, 110, 13283-13295.	2.6	117
4	Ice core age dating and paleothermometer calibration based on isotope and temperature profiles from deep boreholes at Vostok Station (East Antarctica). Journal of Geophysical Research, 1998, 103, 8963-8977.	3.3	96
5	Kinetics of CO₂-Hydrate Formation from Ice Powders: Data Summary and Modeling Extended to Low Temperatures. Journal of Physical Chemistry C, 2013, 117, 8443-8457.	3.1	93
6	Fluid Composition and Kinetics of the in Situ Replacement in CH₄â€“CO₂ Hydrate System. Journal of Physical Chemistry C, 2016, 120, 27159-27172.	3.1	87
7	Experimental studies on the formation of porous gas hydrates. American Mineralogist, 2004, 89, 1228-1239.	1.9	69
8	Kinetics of CO₂ Hydrate Formation from Water Frost at Low Temperatures: Experimental Results and Theoretical Model. Journal of Physical Chemistry C, 2011, 115, 4022-4032.	3.1	63
9	Bubbly-ice densification in ice sheets: II. Applications. Journal of Glaciology, 1997, 43, 397-407.	2.2	59
10	Diffusion Model for Gas Replacement in an Isostructural CH₄â€“CO₂ Hydrate System. Journal of Physical Chemistry C, 2017, 121, 17603-17616.	3.1	57
11	Post-nucleation conversion of an air bubble to clathrate airâ€“hydrate crystal in ice. Journal of Crystal Growth, 1998, 193, 197-218.	1.5	56
12	Guest Migration Revealed in CO₂ Clathrate Hydrates. Energy & Fuels, 2015, 29, 5681-5691.	5.1	42
13	Characteristics of a crater glacier at Ushkovsky volcano, Kamchatka, Russia, as revealed by the physical properties of ice cores and borehole thermometry. Journal of Glaciology, 2001, 47, 423-432.	2.2	29
14	Depthâ€“age and temperature prediction at Dome Fuji station, East Antarctica. Annals of Glaciology, 2002, 35, 384-390.	1.4	28
15	Modelling dynamics of glaciers in volcanic craters. Journal of Glaciology, 2000, 46, 177-187.	2.2	24
16	Kinetics of airâ€“hydrate nucleation in polar ice sheets. Journal of Crystal Growth, 2001, 223, 285-305.	1.5	20
17	Vostok (Antarctica) ice-core time-scale from datings of different origins. Annals of Glaciology, 2004, 39, 283-292.	1.4	20
18	Bubbly-ice densification in ice sheets: I. Theory. Journal of Glaciology, 1997, 43, 387-396.	2.2	18

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19	Simulated features of the air-hydrate formation process in the Antarctic ice sheet at Vostok. Annals of Glaciology, 1999, 29, 191-201.	1.4	12
20	Creep flow and pressure relaxation in bubbly medium. International Journal of Solids and Structures, 1997, 34, 61-78.	2.7	11
21	Effect of the working surface shape of a thermal drill on hot-point ice boring performance. Journal of Soviet Mathematics, 1988, 43, 2496-2505.	0.0	9
22	Air-hydrate crystal growth in polar ice. Journal of Crystal Growth, 2003, 257, 412-426.	1.5	9
23	Vostok (Antarctica) climate record time-scale deduced from the analysis of a borehole-temperature profile. Annals of Glaciology, 1994, 20, 207-214.	1.4	9
24	Generalization of the method of integral relations and its application to some heat flow problems. Journal of Soviet Mathematics, 1988, 41, 1013-1025.	0.0	8
25	A simplified multi-scale model for predicting climatic variations of the ice-sheet surface elevation in central Antarctica. Annals of Glaciology, 1996, 23, 28-35.	1.4	7
26	Spatial distribution of air molecules within individual clathrate hydrates in polar ice sheets. Annals of Glaciology, 2000, 31, 252-256.	1.4	7
27	Simple relations for the close-off depth and age in dry-snow densification. Annals of Glaciology, 2008, 49, 71-76.	1.4	7
28	A simplified multi-scale model for predicting climatic variations of the ice-sheet surface elevation in central Antarctica. Annals of Glaciology, 1996, 23, 28-35.	1.4	6
29	Bubbly-ice densification in ice sheets: II. Applications. Journal of Glaciology, 1997, 43, 397-407.	2.2	6
30	Motion of the edge of an ice sheet. Journal of Soviet Mathematics, 1989, 44, 672-675.	0.0	5
31	Mathematical description and calculation of contact melting. Journal of Engineering Physics, 1984, 47, 1071-1077.	0.0	4
32	Similarity analysis of the general mathematical model of an icecap glacier. Journal of Soviet Mathematics, 1989, 44, 664-672.	0.0	4
33	Temperatureâ€Driven Bubble Migration as Proxy for Internal Bubble Pressures and Bubble Trapping Function in Ice Cores. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10264-10282.	3.3	3
34	Bubbly-ice densification in ice sheets: I. Theory. Journal of Glaciology, 1997, 43, 387-396.	2.2	2
35	Mathematical Model of the Separation of Polydisperse Systems. Theoretical Foundations of Chemical Engineering, 2002, 36, 481-484.	0.7	2
36	Simulation of the thermal conditions of radioelectronic devices using averaging methods. Journal of Engineering Physics, 1990, 59, 1352-1358.	0.0	1

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37	Numerical simulation of unsteady hydrodynamic processes in a well equipped with an electric centrifugal pump. Journal of Soviet Mathematics, 1992, 61, 2360-2367.	0.0	1
38	Steady-state size distribution of air bubbles in polar ice. Led I Sneg, 2015, 128, 20.	0.2	1
39	Mathematical statement and investigation of the problem of heat transfer between fluid flow in a channel and the environment. Journal of Soviet Mathematics, 1988, 42, 1723-1730.	0.0	0
40	Analysis of the simplest mathematical models of dome-shaped glaciers. Journal of Soviet Mathematics, 1988, 43, 2506-2512.	0.0	0
41	Solution of two-phase Stefan's problem for cylindrical domain. Journal of Soviet Mathematics, 1988, 41, 1429-1436.	0.0	0
42	A microparameter regularization procedure and accuracy estimation of the macrocontinuous equations of the mechanics of multiphase media. Journal of Soviet Mathematics, 1989, 46, 2216-2221.	0.0	0
43	Dynamics of a nonstationary dome glacier in the two-dimensional approximation. Journal of Soviet Mathematics, 1989, 44, 33-39.	0.0	0
44	Mathematical model and a difference scheme for the computation of the heterogeneous process of hydrogen separation from helium. Journal of Soviet Mathematics, 1990, 50, 1841-1844.	0.0	0
45	Effective Heat Transfer Coefficients and Temperature Modelling in Electronic Systems. , 1994, , 899-909.		0