

Andrey A Afanasyev

List of Publications by Year in descending order

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Version: 2024-02-01

47
papers

389
citations

933447

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839539

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56
all docs

56
docs citations

56
times ranked

324
citing authors

#	ARTICLE	IF	CITATIONS
1	Method for Well Placement Optimization in Oil Field Development. Moscow University Mechanics Bulletin, 2021, 76, 55-60.	0.3	0
2	The economic potential of metalliferous sub-volcanic brines. Royal Society Open Science, 2021, 8, 202192.	2.4	30
3	Influence of permeability on the hydrothermal system at Vulcano Island (Italy): inferences from numerical simulations. Earth, Planets and Space, 2021, 73, .	2.5	6
4	Decompaction Weakening as a Mechanism of Fluid Focusing in Hydrothermal Systems. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022397.	3.4	0
5	Predicting Fluid Properties in the MUFITS Reservoir Simulator with User-Supplied Modules. Geofluids, 2021, 2021, 1-12.	0.7	1
6	Compositional modeling of multicomponent gas injection into saline aquifers with the MUFITS simulator. Journal of Natural Gas Science and Engineering, 2021, 94, 103988.	4.4	14
7	Influence of oil field production life on optimal CO ₂ flooding strategies: Insight from the microscopic displacement efficiency. Journal of Petroleum Science and Engineering, 2021, 205, 108803.	4.2	6
8	Investigation of the efficiency of gas and water injection into an oil reservoir. Fluid Dynamics, 2020, 55, 621-630.	0.9	5
9	Onset of DarcyâBÃ©nard convection in a horizontal layer of dual-permeability medium with isothermal boundaries. Journal of Fluid Mechanics, 2020, 899, .	3.4	2
10	Fluid Displacement in a Dual-Permeability Medium with Local Capillary Equilibrium. Transport in Porous Media, 2020, 135, 513-533.	2.6	3
11	Numerical modelling of brittleâductile transition with the MUFITS simulator. Computational Geosciences, 2020, 24, 1651-1662.	2.4	1
12	On the Numerical Modeling of Water Flows in Porous Media under Near-Critical Conditions. Fluid Dynamics, 2020, 55, 1003-1011.	0.9	0
13	Structure of a Temperature Front in a Fractured Porous Medium. Fluid Dynamics, 2020, 55, 915-924.	0.9	1
14	Effective Asymptotic Model of Two-Phase Flow through Fractured-Porous Media. Fluid Dynamics, 2019, 54, 671-680.	0.9	3
15	On Solution of the Riemann Problem Describing Injection of a Heated Salt Solution into an Aquifer. Fluid Dynamics, 2019, 54, 510-519.	0.9	1
16	Formation of magmatic brine lenses via focussed fluid-flow beneath volcanoes. Earth and Planetary Science Letters, 2018, 486, 119-128.	4.4	62
17	Effect of Quartz Deposition on the Dynamics of Magma Chamber Degassing. Moscow University Mechanics Bulletin, 2018, 73, 129-134.	0.3	0
18	Modeling of Multiphase Thermodynamic Equilibria of NaClâH ₂ O Binary Mixture in a Wide Range of Pressures and Temperatures. High Temperature, 2018, 56, 859-866.	1.0	1

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19	Reservoir simulation with the MUFITS code: extension for horizontal wells and fractured reservoirs. Energy Procedia, 2017, 125, 596-603.	1.8	7
20	Investigation of time-dependent two-dimensional displacement in a porous medium in the self-similar formulation of the problem. Fluid Dynamics, 2017, 52, 516-525.	0.9	1
21	Numerical simulation of formation of a concentrated brine lens subject to magma chamber degassing. Fluid Dynamics, 2017, 52, 416-423.	0.9	3
22	Magma degassing during eruption through water-saturated porous rocks. Doklady Physics, 2016, 61, 235-238.	0.7	2
23	On the influence of a geothermal system on ground deformation during a volcanic eruption. Journal of Applied Mechanics and Technical Physics, 2016, 57, 1151-1158.	0.5	1
24	Validation of the MUFITS Reservoir Simulator Against Standard CO2 Storage Benchmarks and History-matched Models of the Ketzin Pilot Site. Energy Procedia, 2016, 97, 395-402.	1.8	23
25	Coupling of Geochemical and Multiphase Flow Processes for Validation of the MUFITS Reservoir Simulator Against TOUGH. Energy Procedia, 2016, 97, 502-508.	1.8	6
26	Investigation of hydrodynamic instability of CO2 injection into an aquifer. Fluid Dynamics, 2016, 51, 513-523.	0.9	3
27	Linear stability analysis for hydrothermal alteration of kimberlitic rocks. Geophysical Journal International, 2016, 205, 1874-1885.	2.4	1
28	On the Riemann problem for supercritical CO2 injection into an aquifer. International Journal of Greenhouse Gas Control, 2015, 42, 629-643.	4.6	4
29	Investigation of hydrothermal activity at Campi Flegrei caldera using 3D numerical simulations: Extension to high temperature processes. Journal of Volcanology and Geothermal Research, 2015, 299, 68-77.	2.1	28
30	Hydrodynamic Modelling of Petroleum Reservoirs using Simulator MUFITS. Energy Procedia, 2015, 76, 427-435.	1.8	23
31	Hydrothermal alteration of kimberlite by convective flows of external water. Contributions To Mineralogy and Petrology, 2014, 168, 1038.	3.1	36
32	Investigation of the evolutionarity of discontinuities in binary mixture flows through a porous medium. Fluid Dynamics, 2014, 49, 77-87.	0.9	3
33	Mathematical modeling of multiphase seepage under near-critical conditions. Moscow University Mechanics Bulletin, 2013, 68, 76-79.	0.3	4
34	Application of the Reservoir Simulator MUFITS for 3D Modelling of CO2 Storage in Geological Formations. Energy Procedia, 2013, 40, 365-374.	1.8	22
35	Multiphase compositional modelling of CO2 injection under subcritical conditions: The impact of dissolution and phase transitions between liquid and gaseous CO2 on reservoir temperature. International Journal of Greenhouse Gas Control, 2013, 19, 731-742.	4.6	28
36	A representation of the equations of multicomponent multiphase seepage. Prikladnaya Matematika I Mekhanika, 2012, 76, 192-198.	0.4	5

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37	Simulation of the properties of a binary carbon dioxide-water mixture under sub- and supercritical conditions. <i>High Temperature</i> , 2012, 50, 340-347.	1.0	10
38	Mathematical model of nonisothermal multiphase binary mixture flow through a porous medium. <i>Fluid Dynamics</i> , 2011, 46, 80-89.	0.9	9
39	Binary-mixture flows in a porous medium at high pressure and temperature. <i>Doklady Physics</i> , 2011, 56, 224-226.	0.7	1
40	On the formulation of problems of nonisothermal water and vapor flow through a high-permeability formation. <i>Fluid Dynamics</i> , 2010, 45, 230-240.	0.9	2
41	Steady-state water and vapor flows in a porous medium. <i>Fluid Dynamics</i> , 2009, 44, 545-554.	0.9	1
42	Interaction of evaporation fronts with a formation interface in a porous medium. <i>Fluid Dynamics</i> , 2008, 43, 418-427.	0.9	3
43	Unsteady one-dimensional water and steam flows through a porous medium with allowance for phase transitions. <i>Fluid Dynamics</i> , 2007, 42, 627-636.	0.9	12
44	Hydrodynamic stability of evaporation fronts in porous media. <i>Fluid Dynamics</i> , 2007, 42, 773-783.	0.9	4
45	Phase discontinuities in water flows through a porous medium. <i>Fluid Dynamics</i> , 2006, 41, 574-584.	0.9	6
46	Numerical optimisation of CO ₂ flooding using a hierarchy of reservoir models. <i>Advances in Geosciences</i> , 0, 56, 19-31.	12.0	3
47	Modelling ground displacement and gravity changes with the MUFITS simulator. <i>Advances in Geosciences</i> , 0, 54, 89-98.	12.0	2