Anatoly Nikolaevich Filippov

List of Publications by Year
in descending order

103	1,314	393982	414034
papers	citations	19 h-index	32 g-index

109	109	109	612
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prospects of Membrane Science Development. Membranes and Membrane Technologies, 2019, 1, 45-63.	0.6	111
2	Asymmetry of diffusion permeability of bi-layer membranes. Advances in Colloid and Interface Science, 2008, 139, 29-44.	7.0	70
3	Hydrodynamic permeability of aggregates of porous particles with an impermeable core. Advances in Colloid and Interface Science, 2011, 164, 21-37.	7.0	63
4	Structural Properties of Porous Materials and Powders Used in Different Fields of Science and Technology. Engineering Materials and Processes, 2014, , .	0.2	50
5	Hydrodynamic permeability of membranes built up by particles covered by porous shells: Cell models. Advances in Colloid and Interface Science, 2008, 139, 83-96.	7.0	47
6	A model of the interaction between a charged particle and a pore in a charged membrane surface. Advances in Colloid and Interface Science, 1999, 81, 35-72.	7.0	43
7	MHD mixed convective stagnation point flow along a vertical stretching sheet with heat source/sink. International Journal of Heat and Mass Transfer, 2018, 117, 780-786.	2.5	43
8	Mathematical modeling of the hydrodynamic permeability of a membrane built up from porous particles with a permeable shell. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 282-283, 272-278.	2.3	35
9	Sieve mechanism of microfiltration. Journal of Membrane Science, 1994, 89, 199-213.	4.1	33
10	Hydrodynamic permeability of membranes built up by spherical particles covered by porous shells: effect of stress jump condition. Acta Mechanica, 2010, 215, 193-209.	1.1	33
11	Creeping flow of micropolar fluid parallel to the axis of cylindrical cells with porous layer. European Journal of Mechanics, B/Fluids, 2019, 76, 73-80.	1.2	32
12	Electrotransport properties and morphology of MF-4SK membranes after surface modification with polyaniline. Russian Journal of Electrochemistry, 2010, 46, 485-493.	0.3	30
13	Theoretical and experimental investigation of diffusion permeability of hybrid MF-4SC membranes with silica nanoparticles. Journal of Membrane Science, 2014, 471, 110-117.	4.1	30
14	Isothermal Flows of Micropolar Liquids: Formulation of Problems and Analytical Solutions. Colloid Journal, 2018, 80, 14-36.	0.5	29
15	Permeability of complex porous media. Colloid Journal, 2009, 71, 31-45.	0.5	27
16	Cell models for flows in concentrated media composed of rigid impenetrable cylinders covered with a porous layer. Colloid Journal, 2009, 71, 141-155.	0.5	27
17	New approach to characterization of hybrid nanocomposites. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 521, 251-259.	2.3	25
18	Creeping flow of micropolar fluid through a swarm of cylindrical cells with porous layer (membrane). Journal of Molecular Liquids, 2019, 294, 111558.	2.3	25

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19	Effect of the magnetic field on the hydrodynamic permeability of a membrane. Colloid Journal, 2012, 74, 515-522.	0.5	21
20	Sieve mechanism of microfiltration separation. Separation and Purification Technology, 2002, 26, 51-59.	3.9	20
21	Transport Asymmetry of Novel Bi-Layer Hybrid Perfluorinated Membranes on the Base of MF-4SC Modified by Halloysite Nanotubes with Platinum. Polymers, 2018, 10, 366.	2.0	19
22	Theoretical and experimental study of asymmetry of diffusion permeability of composite membranes. Colloid Journal, 2010, 72, 243-254.	0.5	18
23	Asymmetry of currentâ€“voltage characteristics: a bilayer model of a modified ion-exchange membrane. Colloid Journal, 2016, 78, 397-406.	0.5	18
24	A Jeffrey-fluid model of blood flow in tubes with stenosis. Colloid Journal, 2017, 79, 849-856.	0.5	18
25	Hydrodynamic Permeability of the Membrane as a System of Rigid Particles Covered with Porous Layer (Cell Model). Colloid Journal, 2004, 66, 266-270.	0.5	17
26	Effect of magnetic field on the hydrodynamic permeability of a membrane built up by porous spherical particles. Colloid Journal, 2017, 79, 160-171.	0.5	17
27	Diffusion of electrolytes of different natures through the cation-exchange membrane. Colloid Journal, 2017, 79, 556-566.	0.5	16
28	On hydrodynamic permeability of a membrane built up by porous deformed spheroidal particles. Colloid Journal, 2013, 75, 611-622.	0.5	15
29	Liquid flow inside a cylindrical capillary with walls covered with a porous layer (Gel). Colloid Journal, 2013, 75, 214-225.	0.5	15
30	Hydrodynamic permeability of a membrane composed of porous spherical particles in the presence of uniform magnetic field. Colloid Journal, 2014, 76, 725-738.	0.5	15
31	A Cell Model of an Ion-Exchange Membrane. Hydrodynamic Permeability. Colloid Journal, 2018, 80, 716-727.	0.5	15
32	A Cell Model of the Ion-Exchange Membrane. Electrical Conductivity and Electroosmotic Permeability. Colloid Journal, 2018, 80, 728-738.	0.5	15
33	Food nanotechnologies. Russian Journal of General Chemistry, 2010, 80, 630-642.	0.3	14
34	Hydrodynamic permeability of biporous membrane. Colloid Journal, 2013, 75, 473-482.	0.5	14
35	Influence of Magnetic Field on Micropolar Fluid Flow in a Cylindrical Tube Enclosing an Impermeable Core Coated with Porous Layer. Colloid Journal, 2020, 82, 649-660.	0.5	13
36	Asymmetric transmembrane transfer caused by a difference in adsorption characteristics at interfaces. Colloid Journal, 2012, 74, 739-742.	0.5	12

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37	Synthesis and diffusion permeability of MF-4SK/polyaniline composite membranes with controlled thickness of the modified layer. Colloid Journal, 2013, 75, 289-296.	0.5	12
38	Perfluorinated hybrid membranes modified by metal decorated clay nanotubes. Journal of Membrane Science, 2019, 582, 172-181.	4.1	11
39	Poiseuille Flow of Micropolar-Newtonian Fluid through Concentric Pipes Filled with Porous Medium. Colloid Journal, 2020, 82, 333-341.	0.5	11
40	Permeability of medium composed of cylindrical fibers with fractal porous adlayer. Colloid Journal, 2011, 73, 167-175.	0.5	10
41	An AFM study of ultrafiltration membranes: Peculiarities of pore size distribution. Petroleum Chemistry, 2014, 54, 498-506.	0.4	10
42	Verification of the Cell (Heterogeneous) Model of an Ion-Exchange Membrane and Its Comparison with the Homogeneous Model. Colloid Journal, 2019, 81, 597-606.	0.5	10
43	The role of termination reactions of radical intermediates in reversible addition-fragmentation chain-transfer polymerization. Polymer Science - Series C, 2015, 57, 94-109.	0.8	9
44	On a hydrodynamic permeability of a system of coaxial partly porous cylinders with superhydrophobic surfaces. Applied Mathematics and Computation, 2018, 338, 363-375.	1.4	9
45	Hydrodynamic Permeability of a Membrane Built up by Non-Homogenous Porous Cylindrical Particles. Membranes and Membrane Technologies, 2019, 1, 394-405.	0.6	9
46	Sorption and desorption of water vapor by grains of native starch of some crops. Colloid Journal, 2008, 70, 366-371.	0.5	8
47	Electrodiffusion Characteristics of Halloysite-Modified Bilayer Membranes. Colloid Journal, 2020, 82, 81-92.	0.5	8
48	Flow around a Liquid Sphere Filled with a Non-Newtonian Liquid and Placed into a Porous Medium. Colloid Journal, 2020, 82, 152-160.	0.5	8
49	Modelling of transport properties of perfluorinated one- and bilayer membranes modified by polyaniline decorated clay nanotubes. Electrochimica Acta, 2021, 389, 138768.	2.6	8
50	Effect of Magnetic Field on Hydrodynamic Permeability of Biporous Membrane Relative to Micropolar Liquid Flow. Colloid Journal, 2021, 83, 662-675.	0.5	7
51	Studies of asymmetry of diffusion permeability of nanocomposite ion-exchange membranes: Model of charge density of fixed groups linear by membrane thickness. Russian Journal of Electrochemistry, 2012, 48, 181-188.	0.3	6
52	Transport Properties of Novel Hybrid Cation-Exchange Membranes on the Base of MF-4SC and Halloysite Nanotubes. Journal of Materials Science and Chemical Engineering, 2015, 03, 58-65.	0.2	6
53	Simulation of the onset of flow through a PTMSP-based polymer membrane during nanofiltration of water-methanol mixture. Petroleum Chemistry, 2015, 55, 347-362.	0.4	6
54	Cavitating vortex generation by a submerged jet. Journal of Experimental and Theoretical Physics, 2006, 102, 862-868.	0.2	5

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55	Interaction of a charged spherical particle with a pore of a charged hydrophobic membrane in an electrolyte solution. Petroleum Chemistry, 2011, 51, 536-541.	0.4	5
56	Flow of viscous liquid in porous model medium with fractal structure. Colloid Journal, 2011, 73, 158-166.	0.5	5
57	Mathematical modeling of microfiltration of polydisperse suspension on heterogeneous membranes. Petroleum Chemistry, 2012, 52, 520-526.	0.4	5
58	Synthesis and prediction of transport properties of hybrid bilayer ion-exchange membranes. Surface Innovations, 2017, 5, 130-137.	1.4	5
59	A Cell Model of a Membrane with Allowance for Variable Viscosity of Liquid in Porous Shells of Spherical Grains. Colloid Journal, 2018, 80, 199-206.	0.5	5
60	Diffusive dissolution of a drop in a capillary. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 239, 129-133.	2.3	4
61	Experimental and theoretical studies of asymmetry of transport properties of modified ultrafiltration membranes. Colloid Journal, 2010, 72, 846-856.	0.5	4
62	Separation of aqueous electrolyte solutions with asymmetric membranes containing one charged layer. Colloid Journal, 2012, 74, 12-21.	0.5	4
63	Characterization of perfluorinated cation-exchange membranes MF-4SC surface modified with halloysite nanotubes. AIP Conference Proceedings, 2015, , .	0.3	4
64	Asymmetry of current-voltage characteristics of ion-exchange membranes: Model of charge density of fixed groups linear by membrane thickness. Russian Journal of Electrochemistry, 2017, 53, 257-269.	0.3	4
65	Determination of the surface potential for hollow-fiber membranes by the streaming-potential method. Colloid Journal, 2017, 79, 677-684.	0.5	4
66	Approbation of the Cell Model of a Cation-Exchange Membrane on 1 : 1 Electrolytes. Membranes and Membrane Technologies, 2019, 1, 278-285.	0.6	4
67	Theoretical description of the hygroscopicity of hydrophilic biopolymers and their mixtures. Colloid Journal, 2007, 69, 232-236.	0.5	3
68	Cell model of biporous medium (membrane). Colloid Journal, 2011, 73, 303-308.	0.5	3
69	Transmembrane gas transfer through a two-layer membrane. Colloid Journal, 2015, 77, 520-524.	0.5	3
70	Mathematical simulation of atomic hydrogen diffusion transfer through a bimetallic membrane. Colloid Journal, 2016, 78, 115-120.	0.5	3
71	Hydrogen diffusion transfer through an asymmetric three-layer vanadium membrane. Colloid Journal, 2017, 79, 549-555.	0.5	3
72	Influence of the Electric Potential Difference on the Diffusion Permeability of an Ion-Exchange Membrane. Petroleum Chemistry, 2018, 58, 774-779.	0.4	3

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73	Electrostatic and Molecular Interaction between a Charged Spherical Particle and a Charged Membrane Pore: The Case of Given Surface Charge Densities. Membranes and Membrane Technologies, 2021, 3, 15-23.	0.6	3
74	A Cell Model of an Ion-Exchange Membrane. Electrodiffusion Coefficient and Diffusion Permeability. Colloid Journal, 2021, 83, 387-398.	0.5	3
75	Time Dependent Magnetohydrodynamic Flow of CuO/Al2O3/TiO2 Water Based Nanofluid along a Vertical Permeable Stretching Surface. Colloid Journal, 2021, 83, 500-512.	0.5	3
76	Oscillatory Viscoelastic Model of Blood Flow in Stenotic Artery. Colloid Journal, 2020, 82, 617-625.	0.5	3
77	Modeling Asymmetry of a Currentâ€“Voltage Curve of a Novel MF-4SC/PTMSP Bilayer Membrane. Membranes, 2022, 12, 22.	1.4	3
78	Control of Electrolyte Filtration through a Charged Porous Layer (Membrane) Using a Combination of Pressure Drop and an External Electric Field. Colloids and Interfaces, 2022, 6, 34.	0.9	3
79	Theory of the Filtration of Nonelectrolyte Solutions through a Biporous Membrane with Allowance for the Kinetics of Pore Blocking. Colloid Journal, 2004, 66, 261-265.	0.5	2
80	Statistical processing of ultrafiltration membrane pore size distribution determined by atomic force microscopy. Petroleum Chemistry, 2015, 55, 909-917.	0.4	2
81	Effect of the nonlinearity of sorption on the permeability of two-layer membranes. Russian Journal of Physical Chemistry A, 2015, 89, 477-480.	0.1	2
82	Filtration of suspension of heavy particles through a porous medium. Petroleum Chemistry, 2016, 56, 360-366.	0.4	2
83	Negative rejection of nonionic dye in aqueous alcohol solutions during nanofiltration by hydrophobic membranes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 532, 203-207.	2.3	2
84	Asymmetry of Hydrogen Transfer through a Composite Membrane. Colloid Journal, 2018, 80, 326-330.	0.5	2
85	Mathematical Simulation of Gas Transfer through a Bilayer Membrane with Account for Adsorption Kinetics. Colloid Journal, 2018, 80, 207-213.	0.5	2
86	Dynamic Impact on a Pipeline Considering Dry Friction on its Surface. Mechanics of Solids, 2019, 54, 1144-1150.	0.3	2
87	Cell Model of a Fibrous Medium (Membrane). Comparison between Two Different Approaches to Varying Liquid Viscosity. Membranes and Membrane Technologies, 2020, 2, 230-243.	0.6	2
88	Modeling Of Flow in a Fracture Inside Porous Medium. , 2014, , .		2
89	Foreword. Advances in Colloid and Interface Science, 2008, 139, 1-2.	7.0	1
90	Cell model for hydromagnetic axial flow over a cylinder. Part I. transverse magnetic field. Colloid Journal, 2013, 75, 642-648.	0.5	1

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91	Theoretical study of interdiffusion of aqueous solutions of 1 : 1 electrolytes having the same anion through a cation-exchange membrane. Colloid Journal, 2014, 76, 600-608.	0.5	1
92	Theoretical evaluation of the microfiltration membrane lifetime. Petroleum Chemistry, 2014, 54, 705-709.	0.4	1
93	Theoretical and experimental investigation of interdiffusion in MF-4SC sulfonated cation-exchange membranes. Petroleum Chemistry, 2015, 55, 406-410.	0.4	1
94	Electrophoretic Mobility of a Polyelectrolyte Capsule. Colloid Journal, 2018, 80, 189-198.	0.5	1
95	Influence of flow and charge transfer inside membranes on measurements of membrane zeta potential. Journal of Molecular Liquids, 2021, 323, 114865.	2.3	1
96	Euromembrane 2000 highlights membrane-based water treatment technologies. Membrane Technology, 2001, 2001, 4-8.	0.5	0
97	On a mathematical description of the isotherm of water vapor sorption on grains of various cereals. Russian Journal of Physical Chemistry A, 2007, 81, 383-386.	0.1	0
98	Diffusive permeability of hybrid cation-exchange membranes MF-4SC/halloysite nanotubes. , 2015, , .		0
99	Mathematical simulation of atomic hydrogen diffusion transfer through a multilayer metal membrane at finite pressures. Colloid Journal, 2017, 79, 138-143.	0.5	0
100	Influence of Adsorption Kinetics on Gas Transfer through a Composite Membrane. Colloid Journal, 2021, 83, 513-517.	0.5	0
101	Oil and Gas Bearing Rock. Engineering Materials and Processes, 2014, , 161-181.	0.2	0
102	Influence of Surface Forces on Membrane Separations. Membranes, 2022, 12, 400.	1.4	0
103	Electrophoretic motion of a porous polyelectrolyte microcapsule. Theoretical and Computational Fluid Dynamics, 0, , .	0.9	0