## Anatoly Nikolaevich Filippov

List of Publications by Year in descending order

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103 papers 1,314 citations

393982 19 h-index 32 g-index

109 all docs 109 docs citations

109 times ranked 612 citing authors

#	Article	IF	CITATIONS
1	Modeling Asymmetry of a Current–Voltage Curve of a Novel MF-4SC/PTMSP Bilayer Membrane. Membranes, 2022, 12, 22.	1.4	3
2	Influence of Surface Forces on Membrane Separations. Membranes, 2022, 12, 400.	1.4	0
3	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
4	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
5	Influence of flow and charge transfer inside membranes on measurements of membrane zeta potential. Journal of Molecular Liquids, 2021, 323, 114865.	2.3	1
6	A Cell Model of an Ion-Exchange Membrane. Electrodiffusion Coefficient and Diffusion Permeability. Colloid Journal, 2021, 83, 387-398.	0.5	3
7	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
8	Influence of Adsorption Kinetics on Gas Transfer through a Composite Membrane. Colloid Journal, 2021, 83, 513-517.	0.5	0
9	Modelling of transport properties of perfluorinated one- and bilayer membranes modified by polyaniline decorated clay nanotubes. Electrochimica Acta, 2021, 389, 138768.	2.6	8
10	Effect of Magnetic Field on Hydrodynamic Permeability of Biporous Membrane Relative to Micropolar Liquid Flow. Colloid Journal, 2021, 83, 662-675.	0.5	7
11	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
12	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
13	Poiseuille Flow of Micropolar-Newtonian Fluid through Concentric Pipes Filled with Porous Medium. Colloid Journal, 2020, 82, 333-341.	0.5	11
14	Electrodiffusion Characteristics of Halloysite-Modified Bilayer Membranes. Colloid Journal, 2020, 82, 81-92.	0.5	8
15	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
16	Oscillatory Viscoelastic Model of Blood Flow in Stenotic Artery. Colloid Journal, 2020, 82, 617-625.	0.5	3
17	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
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	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
20	Prospects of Membrane Science Development. Membranes and Membrane Technologies, 2019, 1, 45-63.	0.6	111
21	Perfluorinated hybrid membranes modified by metal decorated clay nanotubes. Journal of Membrane Science, 2019, 582, 172-181.	4.1	11
22	Dynamic Impact on a Pipeline Considering Dry Friction on its Surface. Mechanics of Solids, 2019, 54, 1144-1150.	0.3	2
23	Hydrodynamic Permeability of a Membrane Built up by Non-Homogenous Porous Cylindrical Particles. Membranes and Membrane Technologies, 2019, 1, 394-405.	0.6	9
24	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
25	Isothermal Flows of Micropolar Liquids: Formulation of Problems and Analytical Solutions. Colloid Journal, 2018, 80, 14-36.	0.5	29
26	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
27	A Cell Model of an Ion-Exchange Membrane. Hydrodynamic Permeability. Colloid Journal, 2018, 80, 716-727.	0.5	15
28	A Cell Model of the Ion-Exchange Membrane. Electrical Conductivity and Electroosmotic Permeability. Colloid Journal, 2018, 80, 728-738.	0.5	15
29	Asymmetry of Hydrogen Transfer through a Composite Membrane. Colloid Journal, 2018, 80, 326-330.	0.5	2
30	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
31	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
32	Electrophoretic Mobility of a Polyelectrolyte Capsule. Colloid Journal, 2018, 80, 189-198.	0.5	1
33	Mathematical Simulation of Gas Transfer through a Bilayer Membrane with Account for Adsorption Kinetics. Colloid Journal, 2018, 80, 207-213.	0.5	2
34	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
35	Influence of the Electric Potential Difference on the Diffusion Permeability of an Ion-Exchange Membrane. Petroleum Chemistry, 2018, 58, 774-779.	0.4	3
36	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

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37	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
38	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
39	Mathematical simulation of atomic hydrogen diffusion transfer through a multilayer metal membrane at finite pressures. Colloid Journal, 2017, 79, 138-143.	0.5	O
40	Hydrogen diffusion transfer through an asymmetric three-layer vanadium membrane. Colloid Journal, 2017, 79, 549-555.	0.5	3
41	Determination of the surface potential for hollow-fiber membranes by the streaming-potential method. Colloid Journal, 2017, 79, 677-684.	0.5	4
42	Diffusion of electrolytes of different natures through the cation-exchange membrane. Colloid Journal, 2017, 79, 556-566.	0.5	16
43	New approach to characterization of hybrid nanocomposites. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 521, 251-259.	2.3	25
44	A Jeffrey-fluid model of blood flow in tubes with stenosis. Colloid Journal, 2017, 79, 849-856.	0.5	18
45	Synthesis and prediction of transport properties of hybrid bilayer ion-exchange membranes. Surface Innovations, 2017, 5, 130-137.	1.4	5
46	Filtration of suspension of heavy particles through a porous medium. Petroleum Chemistry, 2016, 56, 360-366.	0.4	2
47	Mathematical simulation of atomic hydrogen diffusion transfer through a bimetallic membrane. Colloid Journal, 2016, 78, 115-120.	0.5	3
48	Asymmetry of current–voltage characteristics: a bilayer model of a modified ion-exchange membrane. Colloid Journal, 2016, 78, 397-406.	0.5	18
49	Characterization of perfluorinated cation-exchange membranes MF-4SC surface modified with halloysite nanotubes. AIP Conference Proceedings, 2015, , .	0.3	4
50	Diffusive permeability of hybrid cation-exchange membranes MF-4SC/halloysite nanotubes. , 2015, , .		0
51	Statistical processing of ultrafiltration membrane pore size distribution determined by atomic force microscopy. Petroleum Chemistry, 2015, 55, 909-917.	0.4	2
52	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
53	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
54	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

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55	Transmembrane gas transfer through a two-layer membrane. Colloid Journal, 2015, 77, 520-524.	0.5	3
56	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
57	Theoretical and experimental investigation of interdiffusion in MF-4SC sulfonated cation-exchange membranes. Petroleum Chemistry, 2015, 55, 406-410.	0.4	1
58	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
59	Theoretical evaluation of the microfiltration membrane lifetime. Petroleum Chemistry, 2014, 54, 705-709.	0.4	1
60	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
61	An AFM study of ultrafiltration membranes: Peculiarities of pore size distribution. Petroleum Chemistry, 2014, 54, 498-506.	0.4	10
62	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
63	Structural Properties of Porous Materials and Powders Used in Different Fields of Science and Technology. Engineering Materials and Processes, 2014, , .	0.2	50
64	Oil and Gas Bearing Rock. Engineering Materials and Processes, 2014, , 161-181.	0.2	0
65	Modeling Of Flow in a Fracture Inside Porous Medium. , 2014, , .		2
66	Hydrodynamic permeability of biporous membrane. Colloid Journal, 2013, 75, 473-482.	0.5	14
67	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
68	On hydrodynamic permeability of a membrane built up by porous deformed spheroidal particles. Colloid Journal, 2013, 75, 611-622.	0.5	15
69	Cell model for hydromagnetic axial flow over a cylinder. Part I. transverse magnetic field. Colloid Journal, 2013, 75, 642-648.	0.5	1
70	Liquid flow inside a cylindrical capillary with walls covered with a porous layer (Gel). Colloid Journal, 2013, 75, 214-225.	0.5	15
71	Effect of the magnetic field on the hydrodynamic permeability of a membrane. Colloid Journal, 2012, 74, 515-522.	0.5	21
72	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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73	Mathematical modeling of microfiltration of polydisperse suspension on heterogeneous membranes. Petroleum Chemistry, 2012, 52, 520-526.	0.4	5
74	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
75	Separation of aqueous electrolyte solutions with asymmetric membranes containing one charged layer. Colloid Journal, 2012, 74, 12-21.	0.5	4
76	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
77	Flow of viscous liquid in porous model medium with fractal structure. Colloid Journal, 2011, 73, 158-166.	0.5	5
78	Permeability of medium composed of cylindrical fibers with fractal porous adlayer. Colloid Journal, 2011, 73, 167-175.	0.5	10
79	Cell model of biporous medium (membrane). Colloid Journal, 2011, 73, 303-308.	0.5	3
80	Hydrodynamic permeability of aggregates of porous particles with an impermeable core. Advances in Colloid and Interface Science, 2011, 164, 21-37.	7.0	63
81	Electrotransport properties and morphology of MF-4SK membranes after surface modification with polyaniline. Russian Journal of Electrochemistry, 2010, 46, 485-493.	0.3	30
82	Theoretical and experimental study of asymmetry of diffusion permeability of composite membranes. Colloid Journal, 2010, 72, 243-254.	0.5	18
83	Experimental and theoretical studies of asymmetry of transport properties of modified ultrafiltration membranes. Colloid Journal, 2010, 72, 846-856.	0.5	4
84	Food nanotechnologies. Russian Journal of General Chemistry, 2010, 80, 630-642.	0.3	14
85	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
86	Permeability of complex porous media. Colloid Journal, 2009, 71, 31-45.	0.5	27
87	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
88	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
89	Foreword. Advances in Colloid and Interface Science, 2008, 139, 1-2.	7.0	1
90	Asymmetry of diffusion permeability of bi-layer membranes. Advances in Colloid and Interface Science, 2008, 139, 29-44.	7.0	70

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91	Sorption and desorption of water vapor by grains of native starch of some crops. Colloid Journal, 2008, 70, 366-371.	0.5	8
92	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
93	Theoretical description of the hygroscopicity of hydrophilic biopolymers and their mixtures. Colloid Journal, 2007, 69, 232-236.	0.5	3
94	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
95	Cavitating vortex generation by a submerged jet. Journal of Experimental and Theoretical Physics, 2006, 102, 862-868.	0.2	5
96	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
97	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
98	Diffusive dissolution of a drop in a capillary. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 239, 129-133.	2.3	4
99	Sieve mechanism of microfiltration separation. Separation and Purification Technology, 2002, 26, 51-59.	3.9	20
100	Euromembrane 2000 highlights membrane-based water treatment technologies. Membrane Technology, 2001, 2001, 4-8.	0.5	0
101	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
102	Sieve mechanism of microfiltration. Journal of Membrane Science, 1994, 89, 199-213.	4.1	33
103	Electrophoretic motion of a porous polyelectrolyte microcapsule. Theoretical and Computational Fluid Dynamics, 0, , .	0.9	O