Vasily Kosyanchuk

List of Publications by Year in descending order

26 papers	181 citations	1040056 9 h-index	1125743 13 g-index
26 all docs	26 docs citations	26 times ranked	51 citing authors

#	Article	IF	Citations
1	Application of event-driven molecular dynamics approach to rarefied gas dynamics problems. Computers and Fluids, 2018, 170, 121-127.	2.5	20
2	Numerical investigation of gas separation in the system of filaments with different temperatures. International Journal of Heat and Mass Transfer, 2019, 138, 144-151.	4.8	19
3	Multiscale modeling of a gas separation device based on effect of thermal transpiration in the membrane. Separation and Purification Technology, 2017, 180, 58-68.	7.9	17
4	Study of gas separation by the means of high-frequency membrane oscillations. Acta Astronautica, 2015, 116, 282-285.	3.2	13
5	Numerical simulation of novel gas separation effect in microchannel with a series of oscillating barriers. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	13
6	A detailed multiscale study of rotationalâ€“translational relaxation process of diatomic molecules. Physics of Fluids, 2021, 33, .	4.0	11
7	Free-molecular gas flow through the oscillating membrane. Microfluidics and Nanofluidics, 2015, 18, 1039-1043.	2.2	10
8	Simulation of gas separation effect in microchannel with moving walls. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	10
9	Rotational relaxation model for nitrogen and its application in free jet expansion problem. Physics of Fluids, 2020, 32, .	4.0	10
10	A new principle of separation of gas mixtures in non-stationary transitional flows. Acta Astronautica, 2019, 163, 120-125.	3.2	8
11	Separation of a binary gas mixture outflowing into vacuum through a micronozzle. Physics of Fluids, 2021, 33, .	4.0	8
12	Potential energy surface of interaction of two diatomic molecules for air flows simulation at intermediate temperatures. Chemical Physics, 2020, 536, 110850.	1.9	7
13	Aeroseparation of gas mixture during supersonic outflow in vacuumed reservoir with skimmer. Vacuum, 2022, 199, 110959.	3.5	7
14	Navigation system for a wide range of tasks based on IMU aided with heterogeneous additional information. , 2015, , .		6
15	Efficient localization using different mean offset models in Gaussian processes. , 2014, , .		4
16	Free-molecular gas flow through an oscillating membrane. Fluid Dynamics, 2014, 49, 524-529.	0.9	4
17	Free-molecular gas flow in microchannels with surface acoustic waves: Effect of mixture separation. Vacuum, 2022, 203, 111223.	3.5	4
18	An atomic-level study of the N2â€“N2 collision process at temperatures up to 2000 K. Physics of Fluids, 2020, 32, 056109.	4.0	3

#	Article	IF	Citations
19	Non-stationary rarefied gas flow in a plane channel with a series of oscillating barriers. European Journal of Mechanics, B/Fluids, 2021, , .	2.5	3
20	Gas separation effect induced by filaments with different temperatures. AIP Conference Proceedings, 2019, , .	0.4	2
21	Simulation of free-molecular and transition multicomponent gas flow through the system of filaments with different temperatures. IOP Conference Series: Materials Science and Engineering, 2018, 387, 012083.	0.6	1
22	Effect of internal degrees of freedom in rarefied gas problems: Plane Couette flow. International Journal of Heat and Mass Transfer, 2022, 190, 122759.	4.8	1
23	Free-molecular gas flow through the high-frequency oscillating membrane. Journal of Physics: Conference Series, 2016, 681, 012034.	0.4	0
24	Numerical study of rarefied gas flows in microchannels with oscillating elements. IOP Conference Series: Materials Science and Engineering, 2018, 387, 012042.	0.6	0
25	Free-Molecular Gas Flow in a Channel with Curving Boundary. Fluid Dynamics, 2018, 53, 417-427.	0.9	0
26	Rarefied gas flows in structures with high-frequency oscillating elements. AIP Conference Proceedings, 2019, , .	0.4	0