Satoshi Taguchi

List of Publications by Year
in descending order

26	208	7	14
papers	citations	h-index	g-index
		1306789	1058022

27	27	27	88
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rarefied gas flow around a sharp edge induced by a temperature field. Journal of Fluid Mechanics, 2012, 694, 191-224.	1.4	38
2	Vapor flows condensing at incidence onto a plane condensed phase in the presence of a noncondensable gas. I. Subsonic condensation. Physics of Fluids, 2003, 15, 689-705.	1.6	32
3	Vapor flows with evaporation and condensation in the continuum limit: effect of a trace of noncondensable gas. European Journal of Mechanics, B/Fluids, 2003, 22, 51-71.	1.2	24
4	Vapor flows condensing at incidence onto a plane condensed phase in the presence of a noncondensable gas. II. Supersonic condensation. Physics of Fluids, 2004, 16, 79-92.	1.6	17
5	Motion of an array of plates in a rarefied gas caused by radiometric force. Physical Review E, 2015, 91, 063007.	0.8	16
6	Asymptotic theory of a uniform flow of a rarefied gas past a sphere at low Mach numbers. Journal of Fluid Mechanics, 2015, 774, 363-394.	1.4	10
7	Diffusion model for Knudsen-type compressor composed of periodic arrays of circular cylinders. Physics of Fluids, 2010, 22, 102001.	1.6	7
8	A rarefied gas flow around a rotating sphere: diverging profiles of gradients of macroscopic quantities. Journal of Fluid Mechanics, 2019, 862, 5-33.	1.4	7
9	Vapor flows in the continuum limit in the presence of a small amount of noncondensable gas. Physics of Fluids, 2004, 16, 4105-4120.	1.6	6
10	Vapor Flows Along a Plane Condensed Phase with Weak Condensation in the Presence of a Noncondensable Gas. Journal of Statistical Physics, 2006, 124, 321-369.	0.5	6
11	Gradient Divergence of Fluid-Dynamic Quantities in Rarefied Gases on Smooth Boundaries. Journal of Statistical Physics, 2017, 168, 1319-1352.	0.5	6
12	Switching between laserâ€induced thermophoresis and thermal convection of liquid suspension in a microgap with variable dimension. Electrophoresis, 2021, 42, 2401-2409.	1.3	6
13	On the motion of slightly rarefied gas induced by a discontinuous surface temperature. Journal of Fluid Mechanics, 2020, 897, .	1.4	5
14	Rarefied gas flow over an in-line array of circular cylinders. Physics of Fluids, 2008, 20, .	1.6	4
15	Transient behaviour of a rarefied gas around a sphere caused by impulsive rotation. Journal of Fluid Mechanics, 2021, 909, .	1.4	4
16	Asymptotic far-field behavior of macroscopic quantities in a problem of slow uniform rarefied gas flow past a sphere. Physical Review Fluids, 2017, 2, .	1.0	4
17	A Two-Surface Problem of the Electron Flow in a Semiconductor on the Basis of Kinetic Theory. Journal of Statistical Physics, 2007, 130, 313-342.	0.5	3
18	Singular behavior of the macroscopic quantities in the free molecular gas. Physics of Fluids, 2016, 28, .	1.6	3

#	Article	IF	Citations
19	A Study of Promotion of Sublimation Phenomenon of Freeze Drying by Using Thermal Edge Flow(Fluids) Tj ETQq1 1 0.784314 rgBT /Ove Engineers Series B B-hen, 2009, 75, 1642-1648.	0.2	2
20	A simple model for flows around moving vanes in Crookes radiometer. , 2012, , .		2
21	Inversion of the transverse force on a spinning sphere moving in a rarefied gas. Journal of Fluid Mechanics, 2022, 933, .	1.4	2
22	Vacuum formation behind the expansion wave in a piston motion problem. Physical Review E, 2012, 86, 016305.	0.8	1
23	On the drag exerted on the sphere by a slow uniform flow of a rarefied gas. , 2014, , .		1
24	One-way flow over uniformly heated U-shaped bodies driven by thermal edge effects. Scientific Reports, 2022, 12, 1929.	1.6	1
25	J0550205 Drag exerted on a spherical particle immersed in a rarefied gas flow. The Proceedings of Mechanical Engineering Congress Japan, 2014, 2014, _J0550205--_J0550205-.	0.0	0
26	A Generalized Slip-Flow Theory for a Slightly Rarefied Gas Flow Induced by Discontinuous Wall Temperature. Springer INdAM Series, 2021, , 327-344.	0.4	0