

Alexander V Rodionov

List of Publications by Year in descending order

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28
papers

1,072
citations

516710

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526287

27
g-index

28
all docs

28
docs citations

28
times ranked

833
citing authors

#	ARTICLE	IF	CITATIONS
1	Complement to the "Kolgan project". Journal of Computational Physics, 2012, 231, 4465-4468.	3.8	268
2	The Dependence of the Circumnuclear Coma Structure on the Properties of the Nucleus. Icarus, 1997, 127, 319-353.	2.5	146
3	The Dependence of the Circumnuclear Coma Structure on the Properties of the Nucleus. Icarus, 1997, 129, 72-93.	2.5	81
4	Direct Monte Carlo and multifluid modeling of the circumnuclear dust coma Spherical grain dynamics revisited. Icarus, 2005, 176, 192-219.	2.5	68
5	Comparison between Navier-Stokes and Direct Monte Carlo Simulations of the Circumnuclear Coma I. Homogeneous, Spherical Source. Icarus, 2002, 156, 249-268.	2.5	62
6	An advanced physical model of cometary activity. Planetary and Space Science, 2002, 50, 983-1024.	1.7	50
7	The Dependence of the Circumnuclear Coma Structure on the Properties of the Nucleus. Icarus, 1999, 138, 85-106.	2.5	48
8	Modelling the circumnuclear coma of comets: objectives, methods and recent results Invited talk presented at the Workshop on the Rosetta Targets: Observations, Modelling and Future Work held at Osservatorio Astronomico di Capodimonte, Naples (Italy), December 10-11, 1997.. Planetary and Space Science, 1999, 47, 797-826.	1.7	47
9	Artificial viscosity in Godunov-type schemes to cure the carbuncle phenomenon. Journal of Computational Physics, 2017, 345, 308-329.	3.8	44
10	Navier-Stokes and direct Monte Carlo simulations of the circumnuclear coma II. Homogeneous, aspherical sources. Icarus, 2003, 163, 479-503.	2.5	35
11	Methods of increasing the accuracy in Godunov's scheme. USSR Computational Mathematics and Mathematical Physics, 1987, 27, 164-169.	0.0	24
12	Monte-Carlo and multifluid modelling of the circumnuclear dust coma II. Aspherical-homogeneous, and spherical-inhomogeneous nuclei. Icarus, 2009, 201, 358-380.	2.5	24
13	Monotonic scheme of the second order of approximation for the continuous calculation of non-equilibrium flows. USSR Computational Mathematics and Mathematical Physics, 1987, 27, 175-180.	0.0	23
14	Comet Hyakutake Gas Arcs: First Observational Evidence of Standing Shock Waves in a Cometary Coma. Icarus, 1998, 136, 232-267.	2.5	19
15	Artificial viscosity to cure the shock instability in high-order Godunov-type schemes. Computers and Fluids, 2019, 190, 77-97.	2.5	18
16	The Dependence of the Circumnuclear Coma Structure on the Properties of the Nucleus IV. Structure of the Night-Side Gas Coma of a Strongly Sublimating Nucleus. Icarus, 2000, 148, 464-478.	2.5	16
17	The near-nucleus gas coma of comet 67P/Churyumov-Gerasimenko prior to the descent of the surface lander PHILAE. Astronomy and Astrophysics, 2018, 618, A71.	5.1	13
18	Navier-Stokes and direct Monte-Carlo simulations of the circumnuclear gas coma. Icarus, 2008, 194, 327-346.	2.5	11

#	ARTICLE	IF	CITATIONS
19	Artificial viscosity to cure the carbuncle phenomenon: The three-dimensional case. <i>Journal of Computational Physics</i> , 2018, 361, 50-55.	3.8	11
20	The Near-Nuclear Coma of Comet Halley in March 1986. <i>Earth, Moon and Planets</i> , 2002, 90, 435-443.	0.6	10
21	Practical relations for assessments of the gas coma parameters. <i>Icarus</i> , 2021, 354, 114091.	2.5	10
22	Simplified artificial viscosity approach for curing the shock instability. <i>Computers and Fluids</i> , 2021, 219, 104873.	2.5	9
23	Time-dependent, three-dimensional fluid model of the outer coma, with application to the comet Hale-Bopp gas spirals. <i>Advances in Space Research</i> , 2006, 38, 1923-1927.	2.6	8
24	On the use of Boussinesq approximation in turbulent supersonic jet modeling. <i>International Journal of Heat and Mass Transfer</i> , 2010, 53, 889-901.	4.8	8
25	On the similarity of dust flows in the inner coma of comets. <i>Icarus</i> , 2021, 364, 114476.	2.5	7
26	A new approach for modeling the dust dynamics in the near-nucleus coma. <i>Advances in Space Research</i> , 2006, 38, 1976-1982.	2.6	5
27	Simulated measurements of 67P/Churyumovâ€™Gerasimenko dust coma at 3 AU by the Rosetta GIADA instrument using the GIPSI tool. <i>Astronomy and Computing</i> , 2014, 5, 57-69.	1.7	5
28	The Near-Nuclear Coma of Comet Halley in March 1986. , 2002, , 435-443.		2