Alexei V Ivlev

List of Publications by Year
in descending order

48 papers	2,183 citations	331670 21 h-index	214800 47 g-index
48 all docs	48 docs citations	48 times ranked	1158 citing authors

#	Article	IF	Citations
1	Rigorous Theory for Secondary Cosmic-Ray Ionization. Astrophysical Journal, 2021, 909, 107.	4.5	13
2	On a Possible Origin of the Gamma-ray Excess around the Galactic Center. Symmetry, 2021, 13, 1432.	2.2	1
3	Impact of Magnetorotational Instability on Grain Growth in Protoplanetary Disks. II. Increased Grain Collisional Velocities. Astrophysical Journal, 2021, 917, 82.	4.5	9
4	Ice mantles on dust grains: dramatic variation of thickness with grain size. Monthly Notices of the Royal Astronomical Society, 2021, 507, 6205-6214.	4.4	7
5	Self-modulation of Cosmic Rays in Molecular Clouds: Imprints in the Radio Observations. Astrophysical Journal, 2021, 921, 43.	4.5	3
6	Thermal Damping of Weak Magnetosonic Turbulence in the Interstellar Medium. Astrophysical Journal, 2021, 922, 10.	4.5	2
7	Impact of Magnetorotational Instability on Grain Growth in Protoplanetary Disks. I. Relevant Turbulence Properties. Astrophysical Journal, 2020, 891, 172.	4.5	11
8	Impact of Low-Energy Cosmic Rays on Star Formation. Space Science Reviews, 2020, 216, 1.	8.1	67
9	Inhibited Coagulation of Micron-size Dust Due to the Electrostatic Barrier. Astrophysical Journal, 2020, 889, 64.	4.5	13
10	Rapid elimination of small dust grains in molecular clouds. Astronomy and Astrophysics, 2020, 641, A39.	5.1	23
11	Formation of the Cosmic-Ray Halo: Galactic Spectrum of Primary Cosmic Rays. Astrophysical Journal, 2020, 903, 135.	4.5	5
12	Cosmic-Ray Tracks in Astrophysical Ices: Modeling with the Geant4-DNA Monte Carlo Toolkit. Astrophysical Journal, 2020, 904, 189.	4.5	7
13	Exclusion of Cosmic Rays from Molecular Clouds by Self-generated Electric Fields. Astrophysical Journal Letters, 2020, 902, L25.	8.3	4
14	Diffusive versus Free-streaming Cosmic-Ray Transport in Molecular Clouds. Astrophysical Journal, 2019, 879, 14.	4.5	31
15	Slow Dynamics in a Quasi-Two-Dimensional Binary Complex Plasma. Physical Review Letters, 2019, 123, 185002.	7.8	25
16	Phase diagram of two-dimensional colloids with Yukawa repulsion and dipolar attraction. Journal of Chemical Physics, 2019, 150, 104903.	3.0	10
17	Dust charge distribution in the interstellar medium. Monthly Notices of the Royal Astronomical Society, 2019, 485, 1220-1247.	4.4	16
18	Gas and Dust Temperature in Prestellar Cores Revisited: New Limits on Cosmic-Ray Ionization Rate. Astrophysical Journal, 2019, 884, 176.	4.5	25

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19	Penetration of Cosmic Rays into Dense Molecular Clouds: Role of Diffuse Envelopes^{â^—}. Astrophysical Journal, 2018, 855, 23.	4.5	52
20	Dissipative phase transitions in systems with nonreciprocal effective interactions. Soft Matter, 2018, 14, 9720-9729.	2.7	23
21	Production of atomic hydrogen by cosmic rays in dark clouds. Astronomy and Astrophysics, 2018, 619, A144.	5.1	31
22	Gamma-Ray Emission from Molecular Clouds Generated by Penetrating Cosmic Rays. Astrophysical Journal, 2018, 868, 114.	4.5	15
23	Structure and dynamics of a glass-forming binary complex plasma with non-reciprocal interaction. Europhysics Letters, 2018, 123, 35001.	2.0	11
24	Magnetic Mirroring and Focusing of Cosmic Rays. Astrophysical Journal, 2018, 863, 188.	4.5	26
25	Compact Dusty Clouds and Efficient H₂ Formation in Diffuse Interstellar Medium. Astrophysical Journal, 2018, 861, 30.	4.5	7
26	Cosmic-ray ionisation in circumstellar discs. Astronomy and Astrophysics, 2018, 614, A111.	5.1	111
27	Tunable two-dimensional assembly of colloidal particles in rotating electric fields. Scientific Reports, 2017, 7, 13727.	3.3	51
28	Emerging activity in bilayered dispersions with wake-mediated interactions. Journal of Chemical Physics, 2016, 144, 224901.	3.0	21
29	Interparticle Attraction in 2D Complex Plasmas. Physical Review Letters, 2016, 116, 125001.	7.8	32
30	Interpolation method for pair correlations in classical crystals. Journal of Physics Condensed Matter, 2016, 28, 235401.	1.8	22
31	Glass transition of charged particles in two-dimensional confinement. Physical Review E, 2015, 91, 052301.	2.1	10
32	Pair correlations in classical crystals: The shortest-graph method. Journal of Chemical Physics, 2015, 143, 034506.	3.0	26
33	Stopping power: Effect of the projectile deceleration. Physics of Plasmas, 2014, 21, .	1.9	2
34	Study of the Projectile Motion in a Dust Crystal Under Microgravity Conditions. IEEE Transactions on Plasma Science, 2014, 42, 2678-2679.	1.3	1
35	Microscopic theory for anisotropic pair correlations in driven binary mixtures. Journal of Physics Condensed Matter, 2012, 24, 464115.	1.8	15
36	Complex Plasmas and Colloidal Dispersions. Series in Sof Condensed Matter, 2012, , .	0.1	275

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37	Demixing in Binary Complex Plasma: Computer Simulation. IEEE Transactions on Plasma Science, 2011, 39, 2752-2753.	1.3	4
38	Bursting Bubbles in a Complex Plasma. IEEE Transactions on Plasma Science, 2011, 39, 2726-2727.	1.3	2
39	Complex plasmaâ€"the plasma state of soft matter. Soft Matter, 2011, 7, 1287-1298.	2.7	86
40	Weakly anisotropic and string fluid phases in magnetorheological systems. Journal of Magnetism and Magnetic Materials, 2011, 323, 1368-1371.	2.3	1
41	Electrorheological Complex Plasmas. IEEE Transactions on Plasma Science, 2010, 38, 733-740.	1.3	18
42	Agglomeration of microparticles in complex plasmas. Physics of Plasmas, 2010, 17, .	1.9	26
43	Solid phases in electro- and magnetorheological systems. Journal of Chemical Physics, 2009, 130, 204513.	3.0	14
44	Complex plasmas: An interdisciplinary research field. Reviews of Modern Physics, 2009, 81, 1353-1404.	45.6	655
45	Charge-induced gelation of microparticles. New Journal of Physics, 2005, 7, 227-227.	2.9	32
46	Highly Resolved Fluid Flows: â€œLiquid Plasmasâ€•at the Kinetic Level. Physical Review Letters, 2004, 92, 175004.	7.8	80
47	PKE-Nefedov*: plasma crystal experiments on the International Space Station. New Journal of Physics, 2003, 5, 33-33.	2.9	232
48	A review of liquid and crystalline plasmasâ€"new physical states of matter?. Plasma Physics and Controlled Fusion, 2002, 44, B263-B277.	2.1	30