

Hubertus M Thomas

List of Publications by Year in descending order

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248
papers

8,355
citations

46918

47
h-index

54797

84
g-index

251
all docs

251
docs citations

251
times ranked

2405
citing authors

#	ARTICLE	IF	CITATIONS
1	Melting dynamics of a plasma crystal. <i>Nature</i> , 1996, 379, 806-809.	13.7	576
2	Condensed Plasmas under Microgravity. <i>Physical Review Letters</i> , 1999, 83, 1598-1601.	2.9	444
3	Ion drag force in complex plasmas. <i>Physical Review E</i> , 2002, 66, 046414.	0.8	293
4	Cold Atmospheric Plasma (CAP) Changes Gene Expression of Key Molecules of the Wound Healing Machinery and Improves Wound Healing In Vitro and In Vivo. <i>PLoS ONE</i> , 2013, 8, e79325.	1.1	265
5	PKE-Nefedov*: plasma crystal experiments on the International Space Station. <i>New Journal of Physics</i> , 2003, 5, 33-33.	1.2	232
6	Mach Cones in a Coulomb Lattice and a Dusty Plasma. <i>Physical Review Letters</i> , 1999, 83, 3649-3652.	2.9	215
7	Cold atmospheric plasma, a new strategy to induce senescence in melanoma cells. <i>Experimental Dermatology</i> , 2013, 22, 284-289.	1.4	174
8	Cold atmospheric plasma devices for medical issues. <i>Expert Review of Medical Devices</i> , 2013, 10, 367-377.	1.4	166
9	Gravity Compensation in Complex Plasmas by Application of a Temperature Gradient. <i>Physical Review Letters</i> , 2002, 89, 175001.	2.9	164
10	Cold atmospheric argon plasma treatment may accelerate wound healing in chronic wounds: Results of an open retrospective randomized controlled study in vivo. <i>Clinical Plasma Medicine</i> , 2013, 1, 25-30.	3.2	162
11	Three-Dimensional Strongly Coupled Plasma Crystal under Gravity Conditions. <i>Physical Review Letters</i> , 2000, 85, 4064-4067.	2.9	159
12	Complex plasma laboratory PK-3 Plus on the International Space Station. <i>New Journal of Physics</i> , 2008, 10, 033036.	1.2	155
13	The plasma condensation: Liquid and crystalline plasmas. <i>Physics of Plasmas</i> , 1999, 6, 1769-1780.	0.7	154
14	Direct Observation of Mode-Coupling Instability in Two-Dimensional Plasma Crystals. <i>Physical Review Letters</i> , 2010, 104, 195001.	2.9	143
15	Dynamics of Lane Formation in Driven Binary Complex Plasmas. <i>Physical Review Letters</i> , 2009, 102, 085003.	2.9	138
16	Central Collisions of Charged Dust Particles in a Plasma. <i>Physical Review Letters</i> , 1997, 79, 1269-1272.	2.9	117
17	Highly Resolved Self-Excited Density Waves in a Complex Plasma. <i>Physical Review Letters</i> , 2007, 99, 095002.	2.9	116
18	Mach cone shocks in a two-dimensional Yukawa solid using a complex plasma. <i>Physical Review E</i> , 2000, 61, 5557-5572.	0.8	113

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19	First Observation of Electrorheological Plasmas. <i>Physical Review Letters</i> , 2008, 100, 095003.	2.9	103
20	Kinetic development of crystallization fronts in complex plasmas. <i>Nature Physics</i> , 2006, 2, 181-185.	6.5	100
21	Non-thermal plasma—More than five years of clinical experience. <i>Clinical Plasma Medicine</i> , 2013, 1, 19-23.	3.2	96
22	Plasmakristall-4: New complex (dusty) plasma laboratory on board the International Space Station. <i>Review of Scientific Instruments</i> , 2016, 87, 093505.	0.6	95
23	Complex plasma—the plasma state of soft matter. <i>Soft Matter</i> , 2011, 7, 1287-1298.	1.2	86
24	Formation and behaviour of dust particle clouds in a radio-frequency discharge: results in the laboratory and under microgravity conditions. <i>New Journal of Physics</i> , 2003, 5, 19-19.	1.2	83
25	Decharging of Complex Plasmas: First Kinetic Observations. <i>Physical Review Letters</i> , 2003, 90, 055003.	2.9	81
26	Highly Resolved Fluid Flows: “Liquid Plasmas” at the Kinetic Level. <i>Physical Review Letters</i> , 2004, 92, 175004.	2.9	80
27	Dissipative Dark Soliton in a Complex Plasma. <i>Physical Review Letters</i> , 2009, 102, 135002.	2.9	80
28	Force field inside the void in complex plasmas under microgravity conditions. <i>Physical Review E</i> , 2005, 71, 056401.	0.8	78
29	Investigation of the mutagenic potential of cold atmospheric plasma at bactericidal dosages. <i>Mutation Research - Genetic Toxicology and Environmental Mutagenesis</i> , 2013, 753, 23-28.	0.9	77
30	Wave mode coupling due to plasma wakes in two-dimensional plasma crystals: In-depth view. <i>Physics of Plasmas</i> , 2011, 18, .	0.7	73
31	Transport of Microparticles in Weakly Ionized Gas-Discharge Plasmas under Microgravity Conditions. <i>Physical Review Letters</i> , 2003, 90, 245005.	2.9	69
32	Void Closure in Complex Plasmas under Microgravity Conditions. <i>Physical Review Letters</i> , 2007, 98, 265006.	2.9	69
33	Freezing and Melting of 3D Complex Plasma Structures under Microgravity Conditions Driven by Neutral Gas Pressure Manipulation. <i>Physical Review Letters</i> , 2011, 106, 205001.	2.9	69
34	Nonlinear waves externally excited in a complex plasma under microgravity conditions. <i>New Journal of Physics</i> , 2008, 10, 033037.	1.2	64
35	Wave propagation and damping in plasma crystals. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1996, 14, 496-500.	0.9	62
36	The “classical tunnelling effect” observations and theory. <i>New Journal of Physics</i> , 2006, 8, 7-7.	1.2	62

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37	Fluid-solid phase transitions in three-dimensional complex plasmas under microgravity conditions. <i>Physical Review E</i> , 2012, 85, 066407.	0.8	62
38	Levitation of cylindrical particles in the sheath of an rf plasma. <i>Physical Review E</i> , 2001, 63, 036406.	0.8	60
39	Solid/liquid/gaseous phase transitions in plasma crystals. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1996, 14, 501-505.	0.9	56
40	Electrostatic modes in collisional complex plasmas under microgravity conditions. <i>Physical Review E</i> , 2004, 69, 066401.	0.8	55
41	Critical Point in Complex Plasmas. <i>Physical Review Letters</i> , 2006, 96, 015001.	2.9	54
42	Complex-plasma manipulation by radiofrequency biasing. <i>Plasma Physics and Controlled Fusion</i> , 2004, 46, B495-B509.	0.9	52
43	Fluid phase separation in binary complex plasmas. <i>Europhysics Letters</i> , 2009, 85, 45001.	0.7	52
44	Collective Effects in Vortex Movements in Complex Plasmas. <i>Physical Review Letters</i> , 2014, 112, 115002.	2.9	51
45	Kinetics of Fluid Demixing in Complex Plasmas: Role of Two-Scale Interactions. <i>Physical Review Letters</i> , 2010, 105, 045001.	2.9	49
46	Direct measurement of the speed of sound in a complex plasma under microgravity conditions. <i>Europhysics Letters</i> , 2011, 96, 55001.	0.7	49
47	Fluid approach to evaluate sound velocity in Yukawa systems and complex plasmas. <i>Physical Review E</i> , 2015, 91, 033110.	0.8	48
48	Diagnostics of the Electronegative Plasma Sheath at Low Pressures Using Microparticles. <i>Physical Review Letters</i> , 2004, 93, 185001.	2.9	46
49	Practical thermodynamics of Yukawa systems at strong coupling. <i>Journal of Chemical Physics</i> , 2015, 142, 194903.	1.2	46
50	Measurement of the Interaction Force among Particles in Three-Dimensional Plasma Clusters. <i>Physical Review Letters</i> , 2006, 96, 115001.	2.9	45
51	The Bohm sheath criterion in strongly coupled complex plasmas. <i>New Journal of Physics</i> , 2009, 11, 073013.	1.2	45
52	Complex-plasma boundaries. <i>Physical Review E</i> , 2002, 66, 056411.	0.8	42
53	First Direct Measurement of Optical Phonons in 2D Plasma Crystals. <i>Physical Review Letters</i> , 2009, 103, 215001.	2.9	42
54	Cold atmospheric plasma for local infection control and subsequent pain reduction in a patient with chronic post-operative ear infection. <i>New Microbes and New Infections</i> , 2013, 1, 41-43.	0.8	42

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55	Practical expressions for the internal energy and pressure of Yukawa fluids. <i>Physical Review E</i> , 2015, 91, 023108.	0.8	41
56	Formation of Bubbles, Blobs, and Surface Cusps in Complex Plasmas. <i>Physical Review Letters</i> , 2009, 102, 255005.	2.9	39
57	Comment on "Measurement of the ion drag force on falling dust particles and its relation to the void formation in complex (dusty) plasmas" [Phys. Plasmas 10, 1278 (2003)]. <i>Physics of Plasmas</i> , 2003, 10, 4579-4581.	0.7	38
58	Ion sphere model for Yukawa systems (dusty plasmas). <i>Physics of Plasmas</i> , 2014, 21, .	0.7	37
59	On the long-waves dispersion in Yukawa systems. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	37
60	Structural properties of 3D complex plasmas: experiments versus simulations. <i>Plasma Physics and Controlled Fusion</i> , 2009, 51, 124028.	0.9	36
61	Particle charge in PK-4 dc discharge from ground-based and microgravity experiments. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	35
62	The plasma-sheath boundary near the adaptive electrode as traced by particles. <i>New Journal of Physics</i> , 2003, 5, 92-92.	1.2	33
63	Mach cones in a three-dimensional complex plasma. <i>Europhysics Letters</i> , 2009, 85, 45002.	0.7	33
64	Kinetics of the melting front in two-dimensional plasma crystals: Complementary analysis with the particle image and particle tracking velocimetries. <i>Physical Review E</i> , 2012, 86, 046401.	0.8	33
65	Ten Years of Plasma Crystals - from ICPIG (Bochum) to ICPIG (Greifswald). <i>Contributions To Plasma Physics</i> , 2004, 44, 450-457.	0.5	32
66	Charge-induced gelation of microparticles. <i>New Journal of Physics</i> , 2005, 7, 227-227.	1.2	32
67	Waves in a dusty plasma over the illuminated part of the Moon. <i>Journal of Plasma Physics</i> , 2013, 79, 1071-1074.	0.7	32
68	Bactericidal Agents Produced by Surface Micro-Discharge (SMD) Plasma by Controlling Gas Compositions. <i>Plasma Processes and Polymers</i> , 2014, 11, 426-436.	1.6	30
69	From Fluid Flows to Crystallization: New Results from Complex Plasmas. <i>Physica Scripta</i> , 2004, T107, 59.	1.2	29
70	Cold atmospheric plasma "A new technology for spacecraft component decontamination. <i>Planetary and Space Science</i> , 2014, 90, 60-71.	0.9	29
71	Comprehensive experimental study of heartbeat oscillations observed under microgravity conditions in the PK-3 Plus laboratory on board the International Space Station. <i>Physics of Plasmas</i> , 2011, 18, 053701.	0.7	28
72	Dust density waves in a dc flowing complex plasma with discharge polarity reversal. <i>Physics of Plasmas</i> , 2018, 25, 083705.	0.7	28

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73	Slowing of acoustic waves in electrorheological and string-fluid complex plasmas. <i>New Journal of Physics</i> , 2020, 22, 083079.	1.2	28
74	Agglomeration of microparticles in complex plasmas. <i>Physics of Plasmas</i> , 2010, 17, .	0.7	26
75	Experimental investigation on lane formation in complex plasmas under microgravity conditions. <i>New Journal of Physics</i> , 2012, 14, 073058.	1.2	26
76	Complex plasma research on the International Space Station. <i>Plasma Physics and Controlled Fusion</i> , 2019, 61, 014004.	0.9	26
77	Dust-acoustic dispersion relation in three-dimensional complex plasmas under microgravity. <i>New Journal of Physics</i> , 2007, 9, 327-327.	1.2	25
78	The effect of a direct current field on the microparticle charge in the plasma afterglow. <i>Physics of Plasmas</i> , 2013, 20, 123702.	0.7	25
79	Slow Dynamics in a Quasi-Two-Dimensional Binary Complex Plasma. <i>Physical Review Letters</i> , 2019, 123, 185002.	2.9	25
80	Circulation' dynamo in complex plasma. <i>New Journal of Physics</i> , 2007, 9, 39-39.	1.2	24
81	Shear flow instability at the interface among two streams of a highly dissipative complex plasma. <i>Europhysics Letters</i> , 2011, 96, 15001.	0.7	24
82	In vivo skin treatment using two portable plasma devices: Comparison of a direct and an indirect cold atmospheric plasma treatment. <i>Clinical Plasma Medicine</i> , 2013, 1, 35-39.	3.2	24
83	Synchronization of particle motion induced by mode coupling in a two-dimensional plasma crystal. <i>Physical Review E</i> , 2014, 89, 053108.	0.8	24
84	Wave turbulence observed in an auto-oscillating complex (dusty) plasma. <i>Europhysics Letters</i> , 2015, 110, 35001.	0.7	24
85	Complex Plasma Research under Microgravity Conditions: PKâ€³ Plus Laboratory on the International Space Station. <i>Contributions To Plasma Physics</i> , 2016, 56, 253-262.	0.5	23
86	Effects of cold atmospheric plasma on mucosal tissue culture. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 045401.	1.3	22
87	Nonlinear regime of the mode-coupling instability in 2D plasma crystals. <i>Europhysics Letters</i> , 2014, 106, 45001.	0.7	22
88	Auto-oscillations in complex plasmas. <i>New Journal of Physics</i> , 2010, 12, 043006.	1.2	21
89	Interaction of two-dimensional plasma crystals with upstream charged particles. <i>Europhysics Letters</i> , 2012, 99, 55001.	0.7	21
90	Glass-transition properties of Yukawa potentials: From charged point particles to hard spheres. <i>Physical Review E</i> , 2014, 89, 063105.	0.8	21

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91	On the estimation of sound speed in two-dimensional Yukawa fluids. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	21
92	Thermodynamics of Yukawa fluids near the one-component-plasma limit. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	21
93	Complex Plasmas under Microgravity Conditions: Parabolic Flights. <i>Physica Scripta</i> , 2001, T89, 16.	1.2	20
94	Structural properties of 3D complex plasmas under microgravity conditions. <i>Europhysics Letters</i> , 2010, 92, 15003.	0.7	20
95	Convection in a dusty radio-frequency plasma under the influence of a thermal gradient. <i>New Journal of Physics</i> , 2011, 13, 083034.	1.2	20
96	Nonviscous motion of a slow particle in a dust crystal under microgravity conditions. <i>Physical Review E</i> , 2012, 86, 016401.	0.8	20
97	Density distribution of a dust cloud in three-dimensional complex plasmas. <i>Physical Review E</i> , 2016, 94, 033204.	0.8	20
98	Coupling of Noncrossing Wave Modes in a Two-Dimensional Plasma Crystal. <i>Physical Review Letters</i> , 2017, 119, 255001.	2.9	20
99	Complex (dusty) plasmasâ€™ kinetic studies of strong coupling phenomena. <i>Physics of Plasmas</i> , 2012, 19, .	0.7	19
100	Channeling of particles and associated anomalous transport in a two-dimensional complex plasma crystal. <i>Physical Review E</i> , 2014, 89, 021101.	0.8	19
101	Synthesis of water ice particles in a plasma chamber. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	18
102	Electrorheological Complex Plasmas. <i>IEEE Transactions on Plasma Science</i> , 2010, 38, 733-740.	0.6	18
103	Modeling of Cassini's charging at Saturn orbit insertion flyby. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	18
104	Three-Dimensional Structure of Mach Cones in Monolayer Complex Plasma Crystals. <i>Physical Review Letters</i> , 2012, 109, 175001.	2.9	18
105	The formation and transport phenomena of nanometre-sized particles in a dc plasma. <i>New Journal of Physics</i> , 2012, 14, 023024.	1.2	18
106	Agglomeration of mesoscopic particles in plasma. <i>New Journal of Physics</i> , 2009, 11, 103013.	1.2	17
107	Multiple phase transitions associated with charge cannibalism effect in complex (dusty) plasmas. <i>Europhysics Letters</i> , 2010, 91, 25001.	0.7	17
108	On the heterogeneous character of the heartbeat instability in complex (dusty) plasmas. <i>Physics of Plasmas</i> , 2012, 19, .	0.7	17

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109	Fingerprints of different interaction mechanisms on the collective modes in complex (dusty) plasmas. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	17
110	Density waves at the interface of a binary complex plasma. <i>Europhysics Letters</i> , 2017, 117, 25001.	0.7	17
111	Excitation of low-frequency dust density waves in flowing complex plasmas. <i>Physics of Plasmas</i> , 2019, 26, 053702.	0.7	17
112	Removing dust particles from a large area discharge. <i>Applied Physics Letters</i> , 2009, 94, 081502.	1.5	16
113	Transverse oscillations in a single-layer dusty plasma under microgravity. <i>Physics of Plasmas</i> , 2009, 16, .	0.7	16
114	Lane Formation in Driven Binary Complex Plasmas on the International Space Station. <i>IEEE Transactions on Plasma Science</i> , 2010, 38, 861-868.	0.6	16
115	Approximate expression for the electric potential around an absorbing particle in isotropic collisionless plasma. <i>Physics of Plasmas</i> , 2015, 22, 053704.	0.7	16
116	Three-dimensional structure of a string-fluid complex plasma. <i>Physical Review Research</i> , 2020, 2, .	1.3	16
117	Excitation of dust density waves in weak electric fields. <i>Physics of Plasmas</i> , 2012, 19, 023702.	0.7	15
118	Microparticles deep in the plasma sheath: Coulomb "explosion". <i>Physics of Plasmas</i> , 2012, 19, .	0.7	15
119	Autowaves in a dc complex plasma confined behind a de Laval nozzle. <i>Europhysics Letters</i> , 2013, 102, 45001.	0.7	15
120	Measurement of the speed of sound by observation of the Mach cones in a complex plasma under microgravity conditions. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	15
121	Dissipative solitary wave at the interface of a binary complex plasma. <i>Europhysics Letters</i> , 2018, 122, 55001.	0.7	15
122	High speed laser tomography system. <i>Review of Scientific Instruments</i> , 2008, 79, 035102.	0.6	14
123	Initial stages in phase separation of binary complex plasmas: Numerical experiments. <i>Europhysics Letters</i> , 2011, 93, 55001.	0.7	14
124	Photophoretic force on microparticles in complex plasmas. <i>New Journal of Physics</i> , 2017, 19, 073015.	1.2	14
125	Observation of metallic sphere"complex plasma interactions in microgravity. <i>New Journal of Physics</i> , 2017, 19, 103019.	1.2	14
126	Dissipative dark solitons in a dc complex plasma. <i>Europhysics Letters</i> , 2010, 89, 25001.	0.7	13

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127	Model experiment for studying lane formation in binary complex plasmas. <i>Europhysics Letters</i> , 2012, 99, 45001.	0.7	13
128	Correlation and spectrum of dust acoustic waves in a radio-frequency plasma using PK-4 on the International Space Station. <i>Physics of Plasmas</i> , 2020, 27, .	0.7	13
129	Coalescence of complex plasma clouds. <i>New Journal of Physics</i> , 2006, 8, 25-25.	1.2	12
130	The "dipole instability"™ in complex plasmas and its role in plasma crystal melting. <i>New Journal of Physics</i> , 2006, 8, 54-54.	1.2	12
131	Effect of rotating electric field on 3D complex (dusty) plasma. <i>Physics of Plasmas</i> , 2011, 18, 063706.	0.7	12
132	Observation of particle pairing in a two-dimensional plasma crystal. <i>Physical Review E</i> , 2014, 89, 023103.	0.8	12
133	Plasma crystal dynamics measured with a three-dimensional plenoptic camera. <i>Review of Scientific Instruments</i> , 2016, 87, 033505.	0.6	12
134	Momentum transfer cross-section for ion scattering on dust particles. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	12
135	Capacitively coupled rf discharge with a large amount of microparticles: Spatiotemporal emission pattern and microparticle arrangement. <i>Physical Review E</i> , 2017, 96, 033203.	0.8	12
136	Ekoplasma " Experiments with grid electrodes in microgravity. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	12
137	Latest Results on Complex Plasmas with the PK-3 Plus Laboratory on Board the International Space Station. <i>Microgravity Science and Technology</i> , 2018, 30, 581-589.	0.7	12
138	Spontaneous formation and spin of particle pairs in a single-layer complex plasma crystal. <i>Europhysics Letters</i> , 2015, 112, 45003.	0.7	11
139	Transverse ionization instability of the elongated dust cloud in the gas discharge uniform positive column under microgravity conditions. <i>Journal of Physics: Conference Series</i> , 2016, 774, 012174.	0.3	11
140	Elementary Processes in Complex Plasmas. <i>Lecture Notes in Physics</i> , 2008, , 67-140.	0.3	11
141	Shear flow in a three-dimensional complex plasma in microgravity conditions. <i>Physical Review Research</i> , 2020, 2, .	1.3	11
142	Complex Plasmas under Microgravity Conditions: First Results from PKE-Nefedov. <i>AIP Conference Proceedings</i> , 2002, , .	0.3	10
143	Energy relaxation and vibrations in small 3D plasma clusters. <i>New Journal of Physics</i> , 2008, 10, 043028.	1.2	10
144	Effect of high-voltage nanosecond pulses on complex plasmas. <i>Physics of Plasmas</i> , 2009, 16, 113705.	0.7	10

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145	String structures in driven 3D complex-plasma clusters. <i>Europhysics Letters</i> , 2012, 100, 35001.	0.7	10
146	Direct experimental observation of binary agglomerates in complex plasmas. <i>Applied Physics Letters</i> , 2012, 100, 264101.	1.5	10
147	Anisotropic confinement effects in a two-dimensional plasma crystal. <i>Physical Review E</i> , 2016, 93, 013204.	0.8	10
148	Wake-Mediated Propulsion of an Upstream Particle in Two-Dimensional Plasma Crystals. <i>Physical Review Letters</i> , 2017, 118, 075002.	2.9	10
149	Plasma afterglow circulation apparatus for decontamination of spacecraft equipment. <i>AIP Advances</i> , 2018, 8, .	0.6	10
150	“Zyflex” Next generation plasma chamber for complex plasma research in space. <i>Review of Scientific Instruments</i> , 2021, 92, 103505.	0.6	10
151	Non-equilibrium phase transitions in complex plasma. <i>Plasma Physics and Controlled Fusion</i> , 2010, 52, 124042.	0.9	9
152	Spontaneous pairing and cooperative movements of micro-particles in a two dimensional plasma crystal. <i>Physics of Plasmas</i> , 2015, 22, 053703.	0.7	9
153	Dynamics of cluster particles in a dense plasma. <i>New Journal of Physics</i> , 2006, 8, 203-203.	1.2	8
154	Dust density waves in a complex plasma layer. <i>Physics of Plasmas</i> , 2007, 14, .	0.7	8
155	Complex plasmas “ new discoveries in strong coupling physics. <i>Applied Physics B: Lasers and Optics</i> , 2007, 89, 527-534.	1.1	8
156	Dusty plasma diagnostics methods for charge, electron temperature, and ion density. <i>Physics of Plasmas</i> , 2010, 17, .	0.7	8
157	Nonlinear structures of strongly coupled complex plasmas in the proximity of a presheath/sheath edge. <i>New Journal of Physics</i> , 2010, 12, 073038.	1.2	8
158	Network analysis of three-dimensional complex plasma clusters in a rotating electric field. <i>Physical Review E</i> , 2014, 89, 023104.	0.8	8
159	Interaction of a supersonic particle with a three-dimensional complex plasma. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	8
160	Theory of a cavity around a large floating sphere in complex (dusty) plasma. <i>Physical Review E</i> , 2019, 99, 053210.	0.8	8
161	Influence of temporal variations in plasma conditions on the electric potential near self-organized dust chains. <i>Physics of Plasmas</i> , 2022, 29, .	0.7	8
162	Dressed particle simulation of dusty plasmas. <i>Physics of Plasmas</i> , 2005, 12, 022309.	0.7	7

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163	Controlled particle transport in a plasma chamber with striped electrode. <i>Physics of Plasmas</i> , 2009, 16, 123702.	0.7	7
164	Cassini capturing of freshly-produced water-group ions in the Enceladus torus. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	7
165	Particle velocity distribution in a three-dimensional dusty plasma under microgravity conditions. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	7
166	Influence of dust particles on the neon spectral line intensities at the uniform positive column of dc discharge at the space apparatus "Plasma Kristall-4". <i>Journal of Physics: Conference Series</i> , 2018, 946, 012143.	0.3	7
167	New radio-frequency setup for studying large 2D complex plasma crystals. <i>AIP Advances</i> , 2018, 8, .	0.6	7
168	Long-term evolution of the three-dimensional structure of string-fluid complex plasmas in the PK-4 experiment. <i>Physical Review E</i> , 2021, 103, 063212.	0.8	7
169	Excitation of progressing dust ionization waves on PK-4 facility. <i>Physics of Plasmas</i> , 2021, 28, .	0.7	7
170	Plasma crystals and liquid plasmas. , 1998, , .		6
171	PKE-Nefedov "Complex plasma research on the international space station. <i>Microgravity Science and Technology</i> , 2005, 16, 317-321.	0.7	6
172	Experiments with microrods in a radio-frequency plasma sheath. <i>Physics of Plasmas</i> , 2006, 13, 063502.	0.7	6
173	Parameters of a collisional radio-frequency sheath and dust characteristics resulting from the microparticle levitation. <i>Physics of Plasmas</i> , 2009, 16, 103505.	0.7	6
174	Study of the 3D plasma cluster environment by emission spectroscopy. <i>New Journal of Physics</i> , 2009, 11, 113023.	1.2	6
175	Traveling electric field probed by a fine particle above voltage-modulated strips in a striped electrode device. <i>Physics of Plasmas</i> , 2010, 17, .	0.7	6
176	Generation of a Double Layer at the Interface of Strongly Coupled Complex Plasmas. <i>IEEE Transactions on Plasma Science</i> , 2010, 38, 869-873.	0.6	6
177	Synthesis of diamond fine particles on levitated seed particles in a rf CH ₄ /H ₂ plasma chamber equipped with a hot filament. <i>Journal of Applied Physics</i> , 2012, 112, 073303.	1.1	6
178	Reasons Why We Need Cold Atmospheric Plasmas in Bacteria-Related Diseases in Medicine. <i>Plasma Medicine</i> , 2012, 2, 85-96.	0.2	6
179	Measurement of gas temperatures in dust-free and dusty argon discharges. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 075203.	1.3	6
180	Dim and bright void regimes in capacitively-coupled RF complex plasmas. <i>Plasma Sources Science and Technology</i> , 2021, 30, 035014.	1.3	6

#	ARTICLE	IF	CITATIONS
181	Charge calculations of dust particles in a plasma from their trajectories during central collisions. , 1998, , .		5
182	Double layer formation at the interface of complex plasmas. Physics of Plasmas, 2008, 15, 082104.	0.7	5
183	Synchronization of particle motion in compressed two-dimensional plasma crystals. Europhysics Letters, 2015, 110, 65001.	0.7	5
184	Dynamics of spinning particle pairs in a single-layer complex plasma crystal. Physical Review E, 2017, 96, 011201.	0.8	5
185	Crystalâ€œliquid phase transitions in three-dimensional complex plasma under microgravity conditions. Journal of Physics: Conference Series, 2018, 946, 012144.	0.3	5
186	Demixing in Binary Complex Plasma: Computer Simulation. IEEE Transactions on Plasma Science, 2011, 39, 2752-2753.	0.6	4
187	Increase of Kinetic Energy of Dusty Cluster Particles Due to Parametric Instability Caused by Nanosecond Electric Pulses. Contributions To Plasma Physics, 2011, 51, 529-532.	0.5	4
188	Wake turbulence observed behind an upstream â€œextraâ€•particle in a complex (dusty) plasma. Europhysics Letters, 2016, 114, 55002.	0.7	4
189	Forced mode coupling in 2D complex plasmas. Europhysics Letters, 2016, 115, 45002.	0.7	4
190	Complex plasma research on ISS: PK-3 Plus, PK-4 and impact/plasmalab. Acta Astronautica, 2008, 63, 53-60.	1.7	3
191	Collective effects in complex plasma. Plasma Sources Science and Technology, 2010, 19, 065026.	1.3	3
192	Particles Inside the Void of a Complex Plasma. IEEE Transactions on Plasma Science, 2011, 39, 2758-2759.	0.6	3
193	Experimental determination of particle charge in highly collisional plasma. AIP Conference Proceedings, 2011, , .	0.3	3
194	Frequency dependence of microparticle charge in a radio frequency discharge with Margenau electron velocity distribution. Physics of Plasmas, 2011, 18, 014501.	0.7	3
195	High-voltage nanosecond pulses in a low-pressure radio-frequency discharge. Physical Review E, 2013, 87, 063105.	0.8	3
196	Assessing particle kinematics via template matching algorithms. Optics Express, 2016, 24, 7987.	1.7	3
197	Quasi-two-dimensional complex plasma containing spherical particles and their binary agglomerates. Physical Review E, 2016, 93, 053202.	0.8	3
198	Penetration of a supersonic particle at the interface in a binary complex plasma. Physical Review E, 2021, 103, 013205.	0.8	3

#	ARTICLE	IF	CITATIONS
199	Time-Dependent Shear Motion in a Strongly Coupled Dusty Plasma in PK-4 on the International Space Station (ISS). IEEE Transactions on Plasma Science, 2021, 49, 2972-2978.	0.6	3
200	Heartbeat instability as auto-oscillation between dim and bright void regimes. Physical Review E, 2021, 104, 045212.	0.8	3
201	Heat transport in a flowing complex plasma in microgravity conditions. Physics of Plasmas, 2021, 28, .	0.7	3
202	The approach to diamond growth on levitating seed particles. Applied Surface Science, 2007, 254, 177-180.	3.1	2
203	Universal properties of the melting curves for a wide class of interparticle interactions. , 2011, , .		2
204	Bursting Bubbles in a Complex Plasma. IEEE Transactions on Plasma Science, 2011, 39, 2726-2727.	0.6	2
205	Levitation and collection of diamond fine particles in the rf plasma chamber equipped with a hot filament. Physics of Plasmas, 2011, 18, .	0.7	2
206	Dust Density Waves in Weak Electric Fields: Effect of the Dust Number Density. IEEE Transactions on Plasma Science, 2013, 41, 2446-2450.	0.6	2
207	Publisher's Note: High-voltage nanosecond pulses in a low-pressure radio-frequency discharge [Phys. Rev. E87, 063105 (2013)]. Physical Review E, 2013, 87, .	0.8	2
208	Dust interferometers in plasmas. Physical Review E, 2016, 93, 031201.	0.8	2
209	Experiments on phase transitions in three-dimensional dusty plasma under microgravity conditions. Journal of Physics: Conference Series, 2017, 927, 012037.	0.3	2
210	New approach to measurement of the three-dimensional crystallization front propagation velocity in strongly coupled complex plasma. Plasma Sources Science and Technology, 2019, 28, 065014.	1.3	2
211	Complex Plasma " Why It Is an Unusual State of Matter?. Lecture Notes in Physics, 2008, , 1-45.	0.3	1
212	Diagnosis in Complex Plasmas for Microgravity Experiments (PK-3 plus). AIP Conference Proceedings, 2008, , .	0.3	1
213	Oblique interactions of dust density waves. , 2010, , .		1
214	PREFACE: Dusty"Complex Plasmas: Basic and Interdisciplinary Research. , 2011, , .		1
215	Interpenetration of two clouds of microparticles in complex plasma under microgravity conditions. AIP Conference Proceedings, 2011, , .	0.3	1
216	Freezing and melting of 3D complex plasma structures driven by neutral gas pressure manipulation in PK-3 Plus experiment. AIP Conference Proceedings, 2011, , .	0.3	1

#	ARTICLE	IF	CITATIONS
217	Structural properties of dense hard sphere systems near random close packing. AIP Conference Proceedings, 2011, , .	0.3	1
218	Study of the Projectile Motion in a Dust Crystal Under Microgravity Conditions. IEEE Transactions on Plasma Science, 2014, 42, 2678-2679.	0.6	1
219	Supersonic particle in a low damped complex plasma under microgravity conditions. AIP Conference Proceedings, 2018, , .	0.3	1
220	Comments on Other Dust Structures: Concluding Remarks. Lecture Notes in Physics, 2008, , 333-363.	0.3	1
221	Polarization of transverse modes in plasma crystals. Physics of Plasmas, 2006, 13, 094505.	0.7	0
222	Mono-layer Plasma Crystals and Clusters. Lecture Notes in Physics, 2008, , 289-331.	0.3	0
223	New Directions of Research in Complex Plasmas on the International Space Station. AIP Conference Proceedings, 2008, , .	0.3	0
224	Basic mechanisms of circulation in complex plasmas. , 2008, , .		0
225	Fluid Complex Plasmasâ€”Studies at the Particle Level. AIP Conference Proceedings, 2008, , .	0.3	0
226	Anisotropic plasma crystals: Phase diagram. , 2009, , .		0
227	Dust removal in radio-frequency plasmas by a traveling potential modulation. , 2010, , .		0
228	Numerical experiments on 2D strongly coupled complex plasmas. Journal of Physics: Conference Series, 2010, 257, 012020.	0.3	0
229	A memoir of the scientific work of Beatrice Maria Annaratone. Plasma Physics and Controlled Fusion, 2010, 52, 124001.	0.9	0
230	Mode coupling due to ion wakes in 2D complex plasma crystals. , 2011, , .		0
231	Exploring the limits of cooperative phenomena using complex plasmas. AIP Conference Proceedings, 2011, , .	0.3	0
232	Dissipative Dark Soliton in a Complex Plasma. IEEE Transactions on Plasma Science, 2011, 39, 2720-2721.	0.6	0
233	Experimental analysis of surface wave in complex plasmas under microgravity condition. , 2011, , .		0
234	Initial stages in phase separation of binary complex plasmas: Numerical experiments. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
235	Formation of Jet Propulsion Near Dust Particle in Plasma. , 2011, , .		0
236	The charging of dust particles in the range of very high discharge frequencies. AIP Conference Proceedings, 2011, , .	0.3	0
237	Growth of nanometer sized particles in a dc discharge. , 2012, , .		0
238	String formation in 3D particle clusters in complex plasmas. , 2012, , .		0
239	Interaction of 2D plasma crystals with upstream charged particle: Mach cones and channeling effect. , 2012, , .		0
240	Apparent surface tension in complex (dusty) plasmas. , 2012, , .		0
241	Optogalvanic control of instabilities in dusty plasma. Journal of Physics: Conference Series, 2016, 666, 012022.	0.3	0
242	Charges of a single grain and the grain in a cloud: Theory and experiments. Journal of Physics: Conference Series, 2020, 1556, 012078.	0.3	0
243	Why Complex Plasmas Have Many Applications in Future Technology?. Lecture Notes in Physics, 2008, , 47-66.	0.3	0
244	Collective Effects in Complex Plasmas. Lecture Notes in Physics, 2008, , 141-195.	0.3	0
245	Experiments on Plasma Crystals and Long-range Correlations. Lecture Notes in Physics, 2008, , 247-287.	0.3	0
246	Micro-particle Collective and Non-collective Pair Interactions. Lecture Notes in Physics, 2008, , 197-245.	0.3	0
247	Subsonic Motion of Projectile in a Fluid Complex Plasma under Microgravity Conditions. Ukrainian Journal of Physics, 2014, 59, 385-395.	0.1	0
248	Interfacial Phenomena in a Phase-Separated Binary Complex Plasma: Experiments and Simulations. , 2020, , .		0