

# Hubertus M Thomas

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1608844/publications.pdf>

Version: 2024-02-01

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	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
2	Penetration of a supersonic particle at the interface in a binary complex plasma. <i>Physical Review E</i> , 2021, 103, 013205.	0.8	3
3	Dim and bright void regimes in capacitively-coupled RF complex plasmas. <i>Plasma Sources Science and Technology</i> , 2021, 30, 035014.	1.3	6
4	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
5	Time-Dependent Shear Motion in a Strongly Coupled Dusty Plasma in PK-4 on the International Space Station (ISS). <i>IEEE Transactions on Plasma Science</i> , 2021, 49, 2972-2978.	0.6	3
6	Excitation of progressing dust ionization waves on PK-4 facility. <i>Physics of Plasmas</i> , 2021, 28, .	0.7	7
7	â€œZyflexâ€ Next generation plasma chamber for complex plasma research in space. <i>Review of Scientific Instruments</i> , 2021, 92, 103505.	0.6	10
8	Heartbeat instability as auto-oscillation between dim and bright void regimes. <i>Physical Review E</i> , 2021, 104, 045212.	0.8	3
9	Heat transport in a flowing complex plasma in microgravity conditions. <i>Physics of Plasmas</i> , 2021, 28, .	0.7	3
10	Measurement of gas temperatures in dust-free and dusty argon discharges. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 075203.	1.3	6
11	Charges of a single grain and the grain in a cloud: Theory and experiments. <i>Journal of Physics: Conference Series</i> , 2020, 1556, 012078.	0.3	0
12	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
13	Slowing of acoustic waves in electrorheological and string-fluid complex plasmas. <i>New Journal of Physics</i> , 2020, 22, 083079.	1.2	28
14	Three-dimensional structure of a string-fluid complex plasma. <i>Physical Review Research</i> , 2020, 2, .	1.3	16
15	Shear flow in a three-dimensional complex plasma in microgravity conditions. <i>Physical Review Research</i> , 2020, 2, .	1.3	11
16	Interfacial Phenomena in a Phase-Separated Binary Complex Plasma: Experiments and Simulations. , 2020, , .		0
17	Particle charge in PK-4 dc discharge from ground-based and microgravity experiments. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	35
18	Slow Dynamics in a Quasi-Two-Dimensional Binary Complex Plasma. <i>Physical Review Letters</i> , 2019, 123, 185002.	2.9	25

#	ARTICLE	IF	CITATIONS
19	New approach to measurement of the three-dimensional crystallization front propagation velocity in strongly coupled complex plasma. <i>Plasma Sources Science and Technology</i> , 2019, 28, 065014.	1.3	2
20	Theory of a cavity around a large floating sphere in complex (dusty) plasma. <i>Physical Review E</i> , 2019, 99, 053210.	0.8	8
21	Excitation of low-frequency dust density waves in flowing complex plasmas. <i>Physics of Plasmas</i> , 2019, 26, 053702.	0.7	17
22	Complex plasma research on the International Space Station. <i>Plasma Physics and Controlled Fusion</i> , 2019, 61, 014004.	0.9	26
23	Interaction of a supersonic particle with a three-dimensional complex plasma. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	8
24	Ekoplasma "Experiments with grid electrodes in microgravity. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	12
25	Supersonic particle in a low damped complex plasma under microgravity conditions. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	1
26	Particle velocity distribution in a three-dimensional dusty plasma under microgravity conditions. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	7
27	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
28	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
29	Crystal"liquid phase transitions in three-dimensional complex plasma under microgravity conditions. <i>Journal of Physics: Conference Series</i> , 2018, 946, 012144.	0.3	5
30	New radio-frequency setup for studying large 2D complex plasma crystals. <i>AIP Advances</i> , 2018, 8, .	0.6	7
31	Plasma afterglow circulation apparatus for decontamination of spacecraft equipment. <i>AIP Advances</i> , 2018, 8, .	0.6	10
32	Dissipative solitary wave at the interface of a binary complex plasma. <i>Europhysics Letters</i> , 2018, 122, 55001.	0.7	15
33	Dust density waves in a dc flowing complex plasma with discharge polarity reversal. <i>Physics of Plasmas</i> , 2018, 25, 083705.	0.7	28
34	Fingerprints of different interaction mechanisms on the collective modes in complex (dusty) plasmas. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	17
35	Wake-Mediated Propulsion of an Upstream Particle in Two-Dimensional Plasma Crystals. <i>Physical Review Letters</i> , 2017, 118, 075002.	2.9	10
36	Photophoretic force on microparticles in complex plasmas. <i>New Journal of Physics</i> , 2017, 19, 073015.	1.2	14

#	ARTICLE	IF	CITATIONS
37	Density waves at the interface of a binary complex plasma. <i>Europhysics Letters</i> , 2017, 117, 25001.	0.7	17
38	Momentum transfer cross-section for ion scattering on dust particles. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	12
39	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
40	Experiments on phase transitions in three-dimensional dusty plasma under microgravity conditions. <i>Journal of Physics: Conference Series</i> , 2017, 927, 012037.	0.3	2
41	Dynamics of spinning particle pairs in a single-layer complex plasma crystal. <i>Physical Review E</i> , 2017, 96, 011201.	0.8	5
42	Coupling of Noncrossing Wave Modes in a Two-Dimensional Plasma Crystal. <i>Physical Review Letters</i> , 2017, 119, 255001.	2.9	20
43	Observation of metallic sphereâ€œcomplex plasma interactions in microgravity. <i>New Journal of Physics</i> , 2017, 19, 103019.	1.2	14
44	Wake turbulence observed behind an upstream â€œextraâ€•particle in a complex (dusty) plasma. <i>Europhysics Letters</i> , 2016, 114, 55002.	0.7	4
45	Plasma crystal dynamics measured with a three-dimensional plenoptic camera. <i>Review of Scientific Instruments</i> , 2016, 87, 033505.	0.6	12
46	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
47	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
48	Density distribution of a dust cloud in three-dimensional complex plasmas. <i>Physical Review E</i> , 2016, 94, 033204.	0.8	20
49	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
50	Assessing particle kinematics via template matching algorithms. <i>Optics Express</i> , 2016, 24, 7987.	1.7	3
51	Anisotropic confinement effects in a two-dimensional plasma crystal. <i>Physical Review E</i> , 2016, 93, 013204.	0.8	10
52	Dust interferometers in plasmas. <i>Physical Review E</i> , 2016, 93, 031201.	0.8	2
53	Quasi-two-dimensional complex plasma containing spherical particles and their binary agglomerates. <i>Physical Review E</i> , 2016, 93, 053202.	0.8	3
54	Forced mode coupling in 2D complex plasmas. <i>Europhysics Letters</i> , 2016, 115, 45002.	0.7	4

#	ARTICLE	IF	CITATIONS
55	On the long-waves dispersion in Yukawa systems. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	37
56	Optogalvanic control of instabilities in dusty plasma. <i>Journal of Physics: Conference Series</i> , 2016, 666, 012022.	0.3	0
57	On the estimation of sound speed in two-dimensional Yukawa fluids. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	21
58	Practical thermodynamics of Yukawa systems at strong coupling. <i>Journal of Chemical Physics</i> , 2015, 142, 194903.	1.2	46
59	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
60	Wave turbulence observed in an auto-oscillating complex (dusty) plasma. <i>Europhysics Letters</i> , 2015, 110, 35001.	0.7	24
61	Spontaneous formation and spin of particle pairs in a single-layer complex plasma crystal. <i>Europhysics Letters</i> , 2015, 112, 45003.	0.7	11
62	Synchronization of particle motion in compressed two-dimensional plasma crystals. <i>Europhysics Letters</i> , 2015, 110, 65001.	0.7	5
63	Practical expressions for the internal energy and pressure of Yukawa fluids. <i>Physical Review E</i> , 2015, 91, 023108.	0.8	41
64	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
65	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
66	Fluid approach to evaluate sound velocity in Yukawa systems and complex plasmas. <i>Physical Review E</i> , 2015, 91, 033110.	0.8	48
67	Thermodynamics of Yukawa fluids near the one-component-plasma limit. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	21
68	Nonlinear regime of the mode-coupling instability in 2D plasma crystals. <i>Europhysics Letters</i> , 2014, 106, 45001.	0.7	22
69	Ion sphere model for Yukawa systems (dusty plasmas). <i>Physics of Plasmas</i> , 2014, 21, .	0.7	37
70	Observation of particle pairing in a two-dimensional plasma crystal. <i>Physical Review E</i> , 2014, 89, 023103.	0.8	12
71	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
72	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

#	ARTICLE	IF	CITATIONS
73	Cold atmospheric plasma "A new technology for spacecraft component decontamination. Planetary and Space Science, 2014, 90, 60-71.	0.9	29
74	Study of the Projectile Motion in a Dust Crystal Under Microgravity Conditions. IEEE Transactions on Plasma Science, 2014, 42, 2678-2679.	0.6	1
75	Network analysis of three-dimensional complex plasma clusters in a rotating electric field. Physical Review E, 2014, 89, 023104.	0.8	8
76	Bactericidal Agents Produced by Surface Micro-Discharge (SMD) Plasma by Controlling Gas Compositions. Plasma Processes and Polymers, 2014, 11, 426-436.	1.6	30
77	Glass-transition properties of Yukawa potentials: From charged point particles to hard spheres. Physical Review E, 2014, 89, 063105.	0.8	21
78	Collective Effects in Vortex Movements in Complex Plasmas. Physical Review Letters, 2014, 112, 115002.	2.9	51
79	Subsonic Motion of Projectile in a Fluid Complex Plasma under Microgravity Conditions. Ukrainian Journal of Physics, 2014, 59, 385-395.	0.1	0
80	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
81	Cold atmospheric plasma, a new strategy to induce senescence in melanoma cells. Experimental Dermatology, 2013, 22, 284-289.	1.4	174
82	Non-thermal plasma"More than five years of clinical experience. Clinical Plasma Medicine, 2013, 1, 19-23.	3.2	96
83	In vivo skin treatment using two portable plasma devices: Comparison of a direct and an indirect cold atmospheric plasma treatment. Clinical Plasma Medicine, 2013, 1, 35-39.	3.2	24
84	Investigation of the mutagenic potential of cold atmospheric plasma at bactericidal dosages. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2013, 753, 23-28.	0.9	77
85	Effects of cold atmospheric plasma on mucosal tissue culture. Journal Physics D: Applied Physics, 2013, 46, 045401.	1.3	22
86	Cold atmospheric argon plasma treatment may accelerate wound healing in chronic wounds: Results of an open retrospective randomized controlled study in vivo. Clinical Plasma Medicine, 2013, 1, 25-30.	3.2	162
87	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
88	Cold atmospheric plasma devices for medical issues. Expert Review of Medical Devices, 2013, 10, 367-377.	1.4	166
89	High-voltage nanosecond pulses in a low-pressure radio-frequency discharge. Physical Review E, 2013, 87, 063105.	0.8	3
90	The effect of a direct current field on the microparticle charge in the plasma afterglow. Physics of Plasmas, 2013, 20, 123702.	0.7	25

#	ARTICLE	IF	CITATIONS
91	Autowaves in a dc complex plasma confined behind a de Laval nozzle. Europhysics Letters, 2013, 102, 45001.	0.7	15
92	Waves in a dusty plasma over the illuminated part of the Moon. Journal of Plasma Physics, 2013, 79, 1071-1074.	0.7	32
93	Cold atmospheric plasma for local infection control and subsequent pain reduction in a patient with chronic post-operative ear infection. New Microbes and New Infections, 2013, 1, 41-43.	0.8	42
94	Cold Atmospheric Plasma (CAP) Changes Gene Expression of Key Molecules of the Wound Healing Machinery and Improves Wound Healing In Vitro and In Vivo. PLoS ONE, 2013, 8, e79325.	1.1	265
95	Excitation of dust density waves in weak electric fields. Physics of Plasmas, 2012, 19, 023702.	0.7	15
96	Synthesis of diamond fine particles on levitated seed particles in a rf CH <sub>4</sub> /H <sub>2</sub> plasma chamber equipped with a hot filament. Journal of Applied Physics, 2012, 112, 073303.	1.1	6
97	Growth of nanometer sized particles in a dc discharge. , 2012, , .		0
98	String formation in 3D particle clusters in complex plasmas. , 2012, , .		0
99	Interaction of 2D plasma crystals with upstream charged particle: Mach cones and channeling effect. , 2012, , .		0
100	Model experiment for studying lane formation in binary complex plasmas. Europhysics Letters, 2012, 99, 45001.	0.7	13
101	Cassini capturing of freshlyâ€produced waterâ€group ions in the Enceladus torus. Geophysical Research Letters, 2012, 39, .	1.5	7
102	String structures in driven 3D complex-plasma clusters. Europhysics Letters, 2012, 100, 35001.	0.7	10
103	Experimental investigation on lane formation in complex plasmas under microgravity conditions. New Journal of Physics, 2012, 14, 073058.	1.2	26
104	Microparticles deep in the plasma sheath: Coulomb â€œexplosionâ€ Physics of Plasmas, 2012, 19, .	0.7	15
105	On the heterogeneous character of the heartbeat instability in complex (dusty) plasmas. Physics of Plasmas, 2012, 19, .	0.7	17
106	Kinetics of the melting front in two-dimensional plasma crystals: Complementary analysis with the particle image and particle tracking velocimetries. Physical Review E, 2012, 86, 046401.	0.8	33
107	Three-Dimensional Structure of Mach Cones in Monolayer Complex Plasma Crystals. Physical Review Letters, 2012, 109, 175001.	2.9	18
108	Apparent surface tension in complex (dusty) plasmas. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
109	Interaction of two-dimensional plasma crystals with upstream charged particles. Europhysics Letters, 2012, 99, 55001.	0.7	21
110	The formation and transport phenomena of nanometre-sized particles in a dc plasma. New Journal of Physics, 2012, 14, 023024.	1.2	18
111	Reasons Why We Need Cold Atmospheric Plasmas in Bacteria-Related Diseases in Medicine. Plasma Medicine, 2012, 2, 85-96.	0.2	6
112	Nonviscous motion of a slow particle in a dust crystal under microgravity conditions. Physical Review E, 2012, 86, 016401.	0.8	20
113	Direct experimental observation of binary agglomerates in complex plasmas. Applied Physics Letters, 2012, 100, 264101.	1.5	10
114	Complex (dusty) plasmasâ€”kinetic studies of strong coupling phenomena. Physics of Plasmas, 2012, 19, .	0.7	19
115	Fluid-solid phase transitions in three-dimensional complex plasmas under microgravity conditions. Physical Review E, 2012, 85, 066407.	0.8	62
116	Modeling of Cassini's charging at Saturn orbit insertion flyby. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	18
117	PREFACE: Dustyâ€”Complex Plasmas: Basic and Interdisciplinary Research. , 2011, , .		1
118	Mode coupling due to ion wakes in 2D complex plasma crystals. , 2011, , .		0
119	Exploring the limits of cooperative phenomena using complex plasmas. AIP Conference Proceedings, 2011, , .	0.3	0
120	Universal properties of the melting curves for a wide class of interparticle interactions. , 2011, , .		2
121	Demixing in Binary Complex Plasma: Computer Simulation. IEEE Transactions on Plasma Science, 2011, 39, 2752-2753.	0.6	4
122	Particles Inside the Void of a Complex Plasma. IEEE Transactions on Plasma Science, 2011, 39, 2758-2759.	0.6	3
123	Bursting Bubbles in a Complex Plasma. IEEE Transactions on Plasma Science, 2011, 39, 2726-2727.	0.6	2
124	Effect of rotating electric field on 3D complex (dusty) plasma. Physics of Plasmas, 2011, 18, 063706.	0.7	12
125	Comprehensive experimental study of heartbeat oscillations observed under microgravity conditions in the PK-3 Plus laboratory on board the International Space Station. Physics of Plasmas, 2011, 18, 053701.	0.7	28
126	Complex plasmaâ€”the plasma state of soft matter. Soft Matter, 2011, 7, 1287-1298.	1.2	86



#	ARTICLE	IF	CITATIONS
127	Wave mode coupling due to plasma wakes in two-dimensional plasma crystals: In-depth view. Physics of Plasmas, 2011, 18, .	0.7	73
128	Direct measurement of the speed of sound in a complex plasma under microgravity conditions. Europhysics Letters, 2011, 96, 55001.	0.7	49
129	Interpenetration of two clouds of microparticles in complex plasma under microgravity conditions. AIP Conference Proceedings, 2011, , .	0.3	1
130	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
131	Freezing and Melting of 3D Complex Plasma Structures under Microgravity Conditions Driven by Neutral Gas Pressure Manipulation. Physical Review Letters, 2011, 106, 205001.	2.9	69
132	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
133	Shear flow instability at the interface among two streams of a highly dissipative complex plasma. Europhysics Letters, 2011, 96, 15001.	0.7	24
134	Initial stages in phase separation of binary complex plasmas: Numerical experiments. Europhysics Letters, 2011, 93, 55001.	0.7	14
135	Convection in a dusty radio-frequency plasma under the influence of a thermal gradient. New Journal of Physics, 2011, 13, 083034.	1.2	20
136	Dissipative Dark Soliton in a Complex Plasma. IEEE Transactions on Plasma Science, 2011, 39, 2720-2721.	0.6	0
137	Experimental determination of particle charge in highly collisional plasma. AIP Conference Proceedings, 2011, , .	0.3	3
138	Experimental analysis of surface wave in complex plasmas under microgravity condition. , 2011, , .		0
139	Initial stages in phase separation of binary complex plasmas: Numerical experiments. , 2011, , .		0
140	Formation of Jet Propulsion Near Dust Particle in Plasma. , 2011, , .		0
141	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
142	The charging of dust particles in the range of very high discharge frequencies. AIP Conference Proceedings, 2011, , .	0.3	0
143	Structural properties of dense hard sphere systems near random close packing. AIP Conference Proceedings, 2011, , .	0.3	1
144	Frequency dependence of microparticle charge in a radio frequency discharge with Margenau electron velocity distribution. Physics of Plasmas, 2011, 18, 014501.	0.7	3

#	ARTICLE	IF	CITATIONS
145	Oblique interactions of dust density waves. , 2010, , .		1
146	Dust removal in radio-frequency plasmas by a traveling potential modulation. , 2010, , .		0
147	Auto-oscillations in complex plasmas. New Journal of Physics, 2010, 12, 043006.	1.2	21
148	Collective effects in complex plasma. Plasma Sources Science and Technology, 2010, 19, 065026.	1.3	3
149	Numerical experiments on 2D strongly coupled complex plasmas. Journal of Physics: Conference Series, 2010, 257, 012020.	0.3	0
150	Dissipative dark solitons in a dc complex plasma. Europhysics Letters, 2010, 89, 25001.	0.7	13
151	A memoir of the scientific work of Beatrice Maria Annaratone. Plasma Physics and Controlled Fusion, 2010, 52, 124001.	0.9	0
152	Dusty plasma diagnostics methods for charge, electron temperature, and ion density. Physics of Plasmas, 2010, 17, .	0.7	8
153	Traveling electric field probed by a fine particle above voltage-modulated strips in a striped electrode device. Physics of Plasmas, 2010, 17, .	0.7	6
154	Multiple phase transitions associated with charge cannibalism effect in complex (dusty) plasmas. Europhysics Letters, 2010, 91, 25001.	0.7	17
155	Nonlinear structures of strongly coupled complex plasmas in the proximity of a presheath/sheath edge. New Journal of Physics, 2010, 12, 073038.	1.2	8
156	Lane Formation in Driven Binary Complex Plasmas on the International Space Station. IEEE Transactions on Plasma Science, 2010, 38, 861-868.	0.6	16
157	Non-equilibrium phase transitions in complex plasma. Plasma Physics and Controlled Fusion, 2010, 52, 124042.	0.9	9
158	Synthesis of water ice particles in a plasma chamber. Journal of Geophysical Research, 2010, 115, .	3.3	18
159	Structural properties of 3D complex plasmas under microgravity conditions. Europhysics Letters, 2010, 92, 15003.	0.7	20
160	Electrorheological Complex Plasmas. IEEE Transactions on Plasma Science, 2010, 38, 733-740.	0.6	18
161	Generation of a Double Layer at the Interface of Strongly Coupled Complex Plasmas. IEEE Transactions on Plasma Science, 2010, 38, 869-873.	0.6	6
162	Agglomeration of microparticles in complex plasmas. Physics of Plasmas, 2010, 17, .	0.7	26

#	ARTICLE	IF	CITATIONS
163	Kinetics of Fluid Demixing in Complex Plasmas: Role of Two-Scale Interactions. Physical Review Letters, 2010, 105, 045001.	2.9	49
164	Direct Observation of Mode-Coupling Instability in Two-Dimensional Plasma Crystals. Physical Review Letters, 2010, 104, 195001.	2.9	143
165	Effect of high-voltage nanosecond pulses on complex plasmas. Physics of Plasmas, 2009, 16, 113705.	0.7	10
166	Controlled particle transport in a plasma chamber with striped electrode. Physics of Plasmas, 2009, 16, 123702.	0.7	7
167	Parameters of a collisional radio-frequency sheath and dust characteristics resulting from the microparticle levitation. Physics of Plasmas, 2009, 16, 103505.	0.7	6
168	Removing dust particles from a large area discharge. Applied Physics Letters, 2009, 94, 081502.	1.5	16
169	Transverse oscillations in a single-layer dusty plasma under microgravity. Physics of Plasmas, 2009, 16, .	0.7	16
170	Study of the 3D plasma cluster environment by emission spectroscopy. New Journal of Physics, 2009, 11, 113023.	1.2	6
171	Agglomeration of mesoscopic particles in plasma. New Journal of Physics, 2009, 11, 103013.	1.2	17
172	Dissipative Dark Soliton in a Complex Plasma. Physical Review Letters, 2009, 102, 135002.	2.9	80
173	Mach cones in a three-dimensional complex plasma. Europhysics Letters, 2009, 85, 45002.	0.7	33
174	Structural properties of 3D complex plasmas: experiments versus simulations. Plasma Physics and Controlled Fusion, 2009, 51, 124028.	0.9	36
175	First Direct Measurement of Optical Phonons in 2D Plasma Crystals. Physical Review Letters, 2009, 103, 215001.	2.9	42
176	Formation of Bubbles, Blobs, and Surface Cusps in Complex Plasmas. Physical Review Letters, 2009, 102, 255005.	2.9	39
177	Anisotropic plasma crystals: Phase diagram. , 2009, , .		0
178	The Bohm sheath criterion in strongly coupled complex plasmas. New Journal of Physics, 2009, 11, 073013.	1.2	45
179	Fluid phase separation in binary complex plasmas. Europhysics Letters, 2009, 85, 45001.	0.7	52
180	Dynamics of Lane Formation in Driven Binary Complex Plasmas. Physical Review Letters, 2009, 102, 085003.	2.9	138

#	ARTICLE	IF	CITATIONS
181	Complex plasma research on ISS: PK-3 Plus, PK-4 and impact/plasmalab. Acta Astronautica, 2008, 63, 53-60.	1.7	3
182	Nonlinear waves externally excited in a complex plasma under microgravity conditions. New Journal of Physics, 2008, 10, 033037.	1.2	64
183	Complex plasma laboratory PK-3 Plus on the International Space Station. New Journal of Physics, 2008, 10, 033036.	1.2	155
184	First Observation of Electrorheological Plasmas. Physical Review Letters, 2008, 100, 095003.	2.9	103
185	Complex Plasma " Why It Is an Unusual State of Matter?. Lecture Notes in Physics, 2008, , 1-45.	0.3	1
186	High speed laser tomography system. Review of Scientific Instruments, 2008, 79, 035102.	0.6	14
187	Energy relaxation and vibrations in small 3D plasma clusters. New Journal of Physics, 2008, 10, 043028.	1.2	10
188	Mono-layer Plasma Crystals and Clusters. Lecture Notes in Physics, 2008, , 289-331.	0.3	0
189	New Directions of Research in Complex Plasmas on the International Space Station. AIP Conference Proceedings, 2008, , .	0.3	0
190	Diagnosis in Complex Plasmas for Microgravity Experiments (PK-3 plus). AIP Conference Proceedings, 2008, , .	0.3	1
191	Double layer formation at the interface of complex plasmas. Physics of Plasmas, 2008, 15, 082104.	0.7	5
192	Basic mechanisms of circulation in complex plasmas. , 2008, , .		0
193	Fluid Complex Plasmas"Studies at the Particle Level. AIP Conference Proceedings, 2008, , .	0.3	0
194	Elementary Processes in Complex Plasmas. Lecture Notes in Physics, 2008, , 67-140.	0.3	11
195	Comments on Other Dust Structures: Concluding Remarks. Lecture Notes in Physics, 2008, , 333-363.	0.3	1
196	Why Complex Plasmas Have Many Applications in Future Technology?. Lecture Notes in Physics, 2008, , 47-66.	0.3	0
197	Collective Effects in Complex Plasmas. Lecture Notes in Physics, 2008, , 141-195.	0.3	0
198	Experiments on Plasma Crystals and Long-range Correlations. Lecture Notes in Physics, 2008, , 247-287.	0.3	0

#	ARTICLE	IF	CITATIONS
199	Micro-particle Collective and Non-collective Pair Interactions. Lecture Notes in Physics, 2008, , 197-245.	0.3	0
200	Circulation' dynamo in complex plasma. New Journal of Physics, 2007, 9, 39-39.	1.2	24
201	Dust-acoustic dispersion relation in three-dimensional complex plasmas under microgravity. New Journal of Physics, 2007, 9, 327-327.	1.2	25
202	Dust density waves in a complex plasma layer. Physics of Plasmas, 2007, 14, .	0.7	8
203	Void Closure in Complex Plasmas under Microgravity Conditions. Physical Review Letters, 2007, 98, 265006.	2.9	69
204	Highly Resolved Self-Excited Density Waves in a Complex Plasma. Physical Review Letters, 2007, 99, 095002.	2.9	116
205	Complex plasmas â€“ new discoveries in strong coupling physics. Applied Physics B: Lasers and Optics, 2007, 89, 527-534.	1.1	8
206	The approach to diamond growth on levitating seed particles. Applied Surface Science, 2007, 254, 177-180.	3.1	2
207	Critical Point in Complex Plasmas. Physical Review Letters, 2006, 96, 015001.	2.9	54
208	Measurement of the Interaction Force among Particles in Three-Dimensional Plasma Clusters. Physical Review Letters, 2006, 96, 115001.	2.9	45
209	Experiments with microrods in a radio-frequency plasma sheath. Physics of Plasmas, 2006, 13, 063502.	0.7	6
210	Kinetic development of crystallization fronts in complex plasmas. Nature Physics, 2006, 2, 181-185.	6.5	100
211	Coalescence of complex plasma clouds. New Journal of Physics, 2006, 8, 25-25.	1.2	12
212	The â€“classical tunnelling effectâ€™â€”observations and theory. New Journal of Physics, 2006, 8, 7-7.	1.2	62
213	The â€“dipole instabilityâ€™ in complex plasmas and its role in plasma crystal melting. New Journal of Physics, 2006, 8, 54-54.	1.2	12
214	Polarization of transverse modes in plasma crystals. Physics of Plasmas, 2006, 13, 094505.	0.7	0
215	Dynamics of cluster particles in a dense plasma. New Journal of Physics, 2006, 8, 203-203.	1.2	8
216	Charge-induced gelation of microparticles. New Journal of Physics, 2005, 7, 227-227.	1.2	32

#	ARTICLE	IF	CITATIONS
217	PKE-Nefedov " Complex plasma research on the international space station. <i>Microgravity Science and Technology</i> , 2005, 16, 317-321.	0.7	6
218	Dressed particle simulation of dusty plasmas. <i>Physics of Plasmas</i> , 2005, 12, 022309.	0.7	7
219	Force field inside the void in complex plasmas under microgravity conditions. <i>Physical Review E</i> , 2005, 71, 056401.	0.8	78
220	Complex-plasma manipulation by radiofrequency biasing. <i>Plasma Physics and Controlled Fusion</i> , 2004, 46, B495-B509.	0.9	52
221	Highly Resolved Fluid Flows: "Liquid Plasmas" at the Kinetic Level. <i>Physical Review Letters</i> , 2004, 92, 175004.	2.9	80
222	Ten Years of Plasma Crystals - from ICPIG (Bochum) to ICPIG (Greifswald). <i>Contributions To Plasma Physics</i> , 2004, 44, 450-457.	0.5	32
223	Electrostatic modes in collisional complex plasmas under microgravity conditions. <i>Physical Review E</i> , 2004, 69, 066401.	0.8	55
224	Diagnostics of the Electronegative Plasma Sheath at Low Pressures Using Microparticles. <i>Physical Review Letters</i> , 2004, 93, 185001.	2.9	46
225	From Fluid Flows to Crystallization: New Results from Complex Plasmas. <i>Physica Scripta</i> , 2004, T107, 59.	1.2	29
226	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
227	Transport of Microparticles in Weakly Ionized Gas-Discharge Plasmas under Microgravity Conditions. <i>Physical Review Letters</i> , 2003, 90, 245005.	2.9	69
228	Decharging of Complex Plasmas: First Kinetic Observations. <i>Physical Review Letters</i> , 2003, 90, 055003.	2.9	81
229	PKE-Nefedov*: plasma crystal experiments on the International Space Station. <i>New Journal of Physics</i> , 2003, 5, 33-33.	1.2	232
230	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
231	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
232	Gravity Compensation in Complex Plasmas by Application of a Temperature Gradient. <i>Physical Review Letters</i> , 2002, 89, 175001.	2.9	164
233	Complex-plasma boundaries. <i>Physical Review E</i> , 2002, 66, 056411.	0.8	42
234	Complex Plasmas under Microgravity Conditions: First Results from PKE-Nefedov. <i>AIP Conference Proceedings</i> , 2002, , .	0.3	10

#	ARTICLE	IF	CITATIONS
235	Ion drag force in complex plasmas. <i>Physical Review E</i> , 2002, 66, 046414.	0.8	293
236	Levitation of cylindrical particles in the sheath of an rf plasma. <i>Physical Review E</i> , 2001, 63, 036406.	0.8	60
237	Complex Plasmas under Microgravity Conditions: Parabolic Flights. <i>Physica Scripta</i> , 2001, T89, 16.	1.2	20
238	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
239	Three-Dimensional Strongly Coupled Plasma Crystal under Gravity Conditions. <i>Physical Review Letters</i> , 2000, 85, 4064-4067.	2.9	159
240	Condensed Plasmas under Microgravity. <i>Physical Review Letters</i> , 1999, 83, 1598-1601.	2.9	444
241	The plasma condensation: Liquid and crystalline plasmas. <i>Physics of Plasmas</i> , 1999, 6, 1769-1780.	0.7	154
242	Mach Cones in a Coulomb Lattice and a Dusty Plasma. <i>Physical Review Letters</i> , 1999, 83, 3649-3652.	2.9	215
243	Plasma crystals and liquid plasmas. , 1998, , .		6
244	Charge calculations of dust particles in a plasma from their trajectories during central collisions. , 1998, , .		5
245	Central Collisions of Charged Dust Particles in a Plasma. <i>Physical Review Letters</i> , 1997, 79, 1269-1272.	2.9	117
246	Melting dynamics of a plasma crystal. <i>Nature</i> , 1996, 379, 806-809.	13.7	576
247	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
248	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