

Truell Hyde

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

121
papers

1,192
citations

18
h-index

26
g-index

148
ext. papers

1,407
ext. citations

2.4
avg, IF

4.52
L-index

#	Paper	IF	Citations
121	Crystallization dynamics of a single layer complex plasma. <i>Physical Review Letters</i> , 2010 , 105, 115004	7.4	85
120	Dispersion properties of the out-of-plane transverse wave in a two-dimensional Coulomb crystal. <i>Physical Review E</i> , 2003 , 68, 046403	2.4	46
119	Slow plastic creep of 2D dusty plasma solids. <i>Physical Review Letters</i> , 2014 , 113, 025002	7.4	42
118	CHARGING OF AGGREGATE GRAINS IN ASTROPHYSICAL ENVIRONMENTS. <i>Astrophysical Journal</i> , 2013 , 763, 77	4.7	42
117	CHARGING AND COAGULATION OF DUST IN PROTOPLANETARY PLASMA ENVIRONMENTS. <i>Astrophysical Journal</i> , 2012 , 744, 8	4.7	37
116	Effects of the charge-dipole interaction on the coagulation of fractal aggregates. <i>IEEE Transactions on Plasma Science</i> , 2004 , 32, 586-593	1.3	33
115	One-dimensional vertical dust strings in a glass box. <i>Physical Review E</i> , 2011 , 84, 016411	2.4	30
114	Determination of the levitation limits of dust particles within the sheath in complex plasma experiments. <i>Physics of Plasmas</i> , 2012 , 19, 013707	2.1	27
113	Helical structures in vertically aligned dust particle chains in a complex plasma. <i>Physical Review E</i> , 2013 , 87, 053106	2.4	25
112	Measurement of net electric charge and dipole moment of dust aggregates in a complex plasma. <i>Physical Review E</i> , 2014 , 90, 033101	2.4	23
111	Fluid modeling of void closure in microgravity noble gas complex plasmas. <i>Physical Review E</i> , 2010 , 81, 056402	2.4	23
110	Dust particle charge in plasma with ion flow and electron depletion near plasma boundaries. <i>Physics of Plasmas</i> , 2011 , 18, 083706	2.1	21
109	Dust as probe for horizontal field distribution in low pressure gas discharges. <i>Plasma Sources Science and Technology</i> , 2014 , 23, 045008	3.5	20
108	DUST COAGULATION IN THE VICINITY OF A GAP-OPENING JUPITER-MASS PLANET. <i>Astrophysical Journal</i> , 2016 , 823, 80	4.7	20
107	Electrical conductivity of the thermal dusty plasma under the conditions of a hybrid plasma environment simulation facility. <i>New Journal of Physics</i> , 2015 , 17, 053041	2.9	19
106	Phase transitions in a dusty plasma with two distinct particle sizes. <i>Advances in Space Research</i> , 2008 , 41, 1510-1513	2.4	19
105	Mode couplings and resonance instabilities in dust clusters. <i>Physical Review E</i> , 2013 , 88, 043103	2.4	18

104	COSMIC DUST AGGREGATION WITH STOCHASTIC CHARGING. <i>Astrophysical Journal</i> , 2013 , 776, 103	4.7	18
103	The magnetic field inside a protoplanetary disc gap opened by planets of different masses. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017 , 472, 3277-3287	4.3	17
102	Mode coupling and resonance instabilities in quasi-two-dimensional dust clusters in complex plasmas. <i>Physical Review E</i> , 2014 , 90, 033109	2.4	17
101	Digital imaging and analysis of dusty plasmas. <i>Advances in Space Research</i> , 2004 , 34, 2374-2378	2.4	17
100	Charging in a dusty plasma with a size distribution: a comparison of three models. <i>Advances in Space Research</i> , 2002 , 29, 1283-1288	2.4	17
99	Computer simulations of Coulomb crystallization in a dusty plasma. <i>IEEE Transactions on Plasma Science</i> , 2001 , 29, 231-237	1.3	17
98	Self-diffusion in two-dimensional quasimagnetized rotating dusty plasmas. <i>Physical Review E</i> , 2019 , 99, 013203	2.4	17
97	Gravitoelectrodynamics in Saturn's F ring: encounters with Prometheus and Pandora. <i>Journal of Physics A</i> , 2003 , 36, 6207-6214		16
96	Structural phase transitions and out-of-plane dust lattice instabilities in vertically confined plasma crystals. <i>Physical Review E</i> , 2005 , 71, 026406	2.4	16
95	Simple method to measure the interaction potential of dielectric grains in a dusty plasma. <i>Physical Review E</i> , 2010 , 82, 036401	2.4	15
94	Dusty plasma correlation function experiment. <i>Advances in Space Research</i> , 2004 , 34, 2379-2383	2.4	15
93	Experimental and computational characterization of a modified GEC cell for dusty plasma experiments. <i>New Journal of Physics</i> , 2009 , 11, 063024	2.9	14
92	Effect of dipole-dipole charge interactions on dust coagulation. <i>New Journal of Physics</i> , 2009 , 11, 063030	2.9	14
91	Photophoresis on polydisperse basalt microparticles under microgravity. <i>Journal of Aerosol Science</i> , 2014 , 76, 126-137	4.3	13
90	Formation of Cosmic Dust Bunnies. <i>IEEE Transactions on Plasma Science</i> , 2007 , 35, 260-265	1.3	13
89	The impact of dust grains on fast fly-by spacecraft: Momentum multiplication, measurements and theory. <i>Advances in Space Research</i> , 1984 , 4, 297-301	2.4	13
88	Dipole-Dipole Interactions of Charged-Magnetic Grains. <i>IEEE Transactions on Plasma Science</i> , 2010 , 38, 792-797	1.3	12
87	Charging and Growth of Fractal Dust Grains. <i>IEEE Transactions on Plasma Science</i> , 2008 , 36, 310-314	1.3	12

86	Ion-wake field inside a glass box. <i>Physical Review E</i> , 2016 , 94, 033201	2.4	12
85	Vibrational Modes and Instabilities of a Dust-Particle Pair in a Complex Plasma. <i>IEEE Transactions on Plasma Science</i> , 2010 , 38, 826-832	1.3	11
84	Charging in a dusty plasma. <i>Advances in Space Research</i> , 1997 , 20, 1539-1542	2.4	10
83	Dynamics of a dust crystal with two different size dust species. <i>Advances in Space Research</i> , 2006 , 38, 2564-2570	2.4	10
82	Dispersion relations for thermally excited waves in plasma crystals. <i>Journal of Physics A</i> , 2003 , 36, 6109-6115		10
81	Experimental study of the nonreciprocal effective interactions between microparticles in an anisotropic plasma. <i>Scientific Reports</i> , 2020 , 10, 13653	4.9	10
80	Aerodynamic and engineering design of a 1.5 s high quality microgravity drop tower facility. <i>Acta Astronautica</i> , 2016 , 129, 335-344	2.9	10
79	Anomalous diffusion in one-dimensional disordered systems: a discrete fractional Laplacian method. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020 , 53, 135205	2	9
78	Photophoretic force on aggregate grains. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016 , 455, 2582-2591	4.3	9
77	Dusty plasma cavities: Probe-induced and natural. <i>Physical Review E</i> , 2015 , 91, 063105	2.4	9
76	Two-dimensional and three-dimensional Coulomb clusters in parabolic traps. <i>Physics of Plasmas</i> , 2014 , 21, 093702	2.1	9
75	Mode Couplings and Conversions for Horizontal Dust Particle Pairs in Complex Plasmas. <i>IEEE Transactions on Plasma Science</i> , 2013 , 41, 745-753	1.3	9
74	Probing the Sheath Electric Field With a Crystal Lattice by Using Thermophoresis in Dusty Plasma. <i>IEEE Transactions on Plasma Science</i> , 2010 , 38, 768-773	1.3	9
73	The calculation of grain charge in a dense dusty plasma with a nonuniform surface potential. <i>Advances in Space Research</i> , 2002 , 29, 1277-1282	2.4	9
72	The initial structure of chondrule dust rims I: Electrically neutral grains. <i>Icarus</i> , 2019 , 321, 99-111	3.8	9
71	Dust charging in dynamic ion wakes. <i>Physics of Plasmas</i> , 2020 , 27, 023703	2.1	8
70	Physical interpretation of the spectral approach to delocalization in infinite disordered systems. <i>Materials Research Express</i> , 2016 , 3, 125904	1.7	8
69	A charging model for a dust cloud with a size distribution and a nonuniform potential. <i>Advances in Space Research</i> , 2002 , 29, 1289-1294	2.4	8

68	Dust as probes: Determining confinement and interaction forces. <i>Physical Review E</i> , 2020 , 102, 043210	2.4	7
67	Analysis of magnetic field plasma interactions using microparticles as probes. <i>Physical Review E</i> , 2015 , 92, 023107	2.4	7
66	Spontaneous formation and spin of particle pairs in a single-layer complex plasma crystal. <i>Europhysics Letters</i> , 2015 , 112, 45003	1.6	7
65	Interaction force in a vertical dust chain inside a glass box. <i>Physical Review E</i> , 2014 , 90, 013107	2.4	7
64	Measurement of the Vertical Nonuniformity of the Plasma Sheath in a Complex Plasma. <i>IEEE Transactions on Plasma Science</i> , 2009 , 37, 1620-1625	1.3	7
63	Charged grains in Saturn's F-Ring: interaction with Saturn's magnetic field. <i>Advances in Space Research</i> , 2004 , 33, 2292-2297	2.4	7
62	Mass loading of planetary atmospheres by rocky satellites: Transport and enhanced lifetimes of satellite ejecta in planetary magnetospheres. <i>Advances in Space Research</i> , 1984 , 4, 27-30	2.4	7
61	The influence of monomer shape on aggregate morphologies. <i>Astronomy and Astrophysics</i> , 2012 , 539, A99	5.1	7
60	Temperature measurement of a dust particle in a RF plasma GEC reference cell. <i>Journal of Plasma Physics</i> , 2016 , 82,	2.7	7
59	A New Inductively Driven Plasma Generator (IPG6) Setup and Initial Experiments. <i>IEEE Transactions on Plasma Science</i> , 2013 , 41, 804-810	1.3	6
58	Effect of multi-sized dust distribution on local plasma sheath potentials. <i>Advances in Space Research</i> , 2006 , 38, 2575-2580	2.4	6
57	Numerical simulation and analysis of thermally excited waves in plasma crystals. <i>Advances in Space Research</i> , 2004 , 34, 2390-2395	2.4	6
56	Mode couplings and resonance instabilities in finite dust chains. <i>Physical Review E</i> , 2015 , 91, 053101	2.4	5
55	Transport properties of disordered two-dimensional complex plasma crystal. <i>Contributions To Plasma Physics</i> , 2018 , 58, 209-216	1.4	5
54	Nonlinear mode coupling and internal resonance observed in a dusty plasma. <i>New Journal of Physics</i> , 2019 , 21, 103051	2.9	5
53	Delocalization in infinite disordered two-dimensional lattices of different geometry. <i>Physical Review B</i> , 2017 , 96,	3.3	5
52	Kuiper binary formation. <i>Advances in Space Research</i> , 2007 , 40, 280-283	2.4	5
51	Numerical study of anomalous diffusion of light in semicrystalline polymer structures. <i>Physical Review Research</i> , 2020 , 2,	3.9	5

50	Ionization waves in the PK-4 direct current neon discharge. <i>Plasma Sources Science and Technology</i> ,	3.5	5
49	Investigating the impact of flexible furniture in the elementary classroom. <i>Learning Environments Research</i> , 2021 , 24, 153-167	2.1	5
48	Nonlinear response of vertical paired structure in complex plasma. <i>Plasma Physics and Controlled Fusion</i> , 2019 , 61, 055004	2	4
47	Multipole Expansions of Aggregate Charge: How Far to Go?. <i>IEEE Transactions on Plasma Science</i> , 2016 , 44, 519-524	1.3	4
46	Glow and Dust in Plasma Boundaries. <i>IEEE Transactions on Plasma Science</i> , 2013 , 41, 799-803	1.3	4
45	Vertical-probe-induced asymmetric dust oscillation in complex plasma. <i>Physical Review E</i> , 2013 , 87, 053109	2.4	4
44	Employing dust particle chains as a wakefield diagnostic. <i>IEEE Transactions on Plasma Science</i> , 2008 , 36, 554-558	1.3	4
43	Relationship Between the DC Bias and the Debye Length in a Complex Plasma. <i>IEEE Transactions on Plasma Science</i> , 2007 , 35, 323-327	1.3	4
42	Discrete stochastic charging of aggregate grains. <i>Physical Review E</i> , 2018 , 97, 053207	2.4	4
41	Operational behaviour of the inductively-heated plasma generator IPG6-B for scientific applications. <i>Vacuum</i> , 2020 , 176, 109338	3.7	3
40	Vertical Interaction Between Dust Particles Confined in a Glass Box in a Complex Plasma. <i>IEEE Transactions on Plasma Science</i> , 2013 , 41, 794-798	1.3	3
39	Modeling Agglomeration of Dust Particles in Plasma 2011 ,		3
38	The effect of dust charge variation, due to ion flow and electron depletion, on dust levitation 2011 ,		3
37	The dust bands of the planet Mars. <i>Advances in Space Research</i> , 1997 , 20, 1535-1538	2.4	3
36	Structural Phases of Bounded Three-Dimensional Screened Coulomb Clusters (Finite Yukawa System). <i>IEEE Transactions on Plasma Science</i> , 2007 , 35, 346-351	1.3	3
35	Finite coulomb crystal formation. <i>Advances in Space Research</i> , 2004 , 34, 2396-2401	2.4	3
34	Modeling chondrule melting using a resizing box_tree code. <i>Advances in Space Research</i> , 2002 , 29, 1311-1314	2.4	3
33	Dust grain orbital behavior around ceres. <i>Advances in Space Research</i> , 2003 , 31, 2591-2597	2.4	3

32	Micron and submicron debris/lunar ejecta concentrations between L values of 1.7 and 3.0 in the earth's magnetosphere. <i>Advances in Space Research</i> , 1990 , 10, 409-412	2.4	3
31	Mode-coupling instability in a single-layer complex plasma crystal: Strong damping regime. <i>Physics of Plasmas</i> , 2018 , 25, 093702	2.1	3
30	Mapping the Plasma Potential in a Glass Box. <i>IEEE Transactions on Plasma Science</i> , 2019 , 47, 3079-3086	1.3	2
29	Spectral approach to transport in a two-dimensional honeycomb lattice with substitutional disorder. <i>Physical Review B</i> , 2019 , 99,	3.3	2
28	Comparison of Plasma Magnetic Field Interactions in a Static and Dynamic Plasma Facility. <i>Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan</i> , 2016 , 14, Pe_21-Pe_26	0.3	2
27	Dust Particle Pair Correlation Functions and the Nonlinear Effect of Interaction Potentials. <i>IEEE Transactions on Plasma Science</i> , 2019 , 47, 3057-3062	1.3	2
26	Dynamics of spinning particle pairs in a single-layer complex plasma crystal. <i>Physical Review E</i> , 2017 , 96, 011201	2.4	2
25	SARIM PLUS sample return of comet 67P/CG and of interstellar matter. <i>Experimental Astronomy</i> , 2012 , 33, 723-751	1.3	2
24	Guest Editorial Special Issue on Dusty Plasmas. <i>IEEE Transactions on Plasma Science</i> , 2013 , 41, 733-734	1.3	2
23	Agglomeration of Dust Particles in the Lab 2011 ,		2
22	Structural Phase Transitions and Vertical Mode Spectra in 2-D Finite Plasma Crystals. <i>IEEE Transactions on Plasma Science</i> , 2008 , 36, 2753-2758	1.3	2
21	Charging of fractal dust agglomerates in a plasma environment 2007 ,		2
20	Plasma condensation and the one component plasma model. <i>Advances in Space Research</i> , 2002 , 29, 1295-1300	2.1	2
19	Discharge parameters of PlasmaKristall-4BU: A modifiable dusty plasma experiment. <i>Review of Scientific Instruments</i> , 2020 , 91, 083506	1.7	2
18	Mapping of force fields in a capacitively driven radiofrequency plasma discharge. <i>Journal of Plasma Physics</i> , 2016 , 82,	2.7	2
17	The initial structure of chondrule dust rims II: Charged grains. <i>Icarus</i> , 2021 , 354, 114053	3.8	2
16	Particle Growth in an Experimental Dusty Plasma System. <i>Chinese Physics Letters</i> , 2018 , 35, 125201	1.8	2
15	Design of a 1.5 Seconds High Quality Microgravity Drop Tower Facility. <i>Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan</i> , 2016 , 14, Ph_7-Ph_14	0.3	1

14	Simple experiment on the sputtering rate of solids in gas discharges. <i>Physics of Plasmas</i> , 2017 , 24, 060701.	1.1	1
13	The effect of electrode heating on the discharge parameters in complex plasma experiments. <i>Plasma Sources Science and Technology</i> , 2011 , 20, 015026	3.5	1
12	A model of coagulation in dust clouds during grain charging. <i>Advances in Space Research</i> , 2004 , 34, 2384-2389	2.3	1
11	A modified particle-particle approach to the charging of grain lattices within a dusty plasma. <i>Advances in Space Research</i> , 1993 , 13, 179-182	2.4	1
10	Detailed Model of the Growth of Fluffy Dust Aggregates in a Protoplanetary Disk: Effects of Nebular Conditions. <i>Astrophysical Journal</i> , 2020 , 897, 182	4.7	1
9	Effect of ionization waves on dust chain formation in a DC discharge. <i>Journal of Plasma Physics</i> , 2021 , 87,	2.7	1
8	A machine learning based Bayesian optimization solution to non-linear responses in dusty plasmas. <i>Machine Learning: Science and Technology</i> , 2021 , 2, 035017	5.1	0
7	Fractional Laplacian spectral approach to turbulence in a dusty plasma monolayer. <i>Physics of Plasmas</i> , 2021 , 28, 073705	2.1	0
6	Influence of temporal variations in plasma conditions on the electric potential near self-organized dust chains. <i>Physics of Plasmas</i> , 2022 , 29, 023701	2.1	0
5	Effects of monomer shape on the formation of aggregates from a power law monomer distribution. <i>New Journal of Physics</i> , 2013 , 15, 073026	2.9	
4	Numerical study of structural phase transitions in a vertically confined plasma crystal. <i>Advances in Space Research</i> , 2006 , 38, 2571-2574	2.4	
3	Numerical Simulation of Gravitoelectrodynamics in Dusty Plasmas 2002 , 199-202		
2	Dust grain orbital behavior around Neptune. <i>Advances in Space Research</i> , 2002 , 29, 1271-1275	2.4	
1	Mutual gravitational perturbations between planetesimals within protoplanetary disks. <i>Advances in Space Research</i> , 2002 , 29, 1301-1306	2.4	