Robert Merlino

List of Publications by Year
in descending order

52	3,605	304743	214800
papers	citations	22 h-index	47 g-index

54	54	54	928
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Laboratory observation of the dustâ€acoustic wave mode. Physics of Plasmas, 1995, 2, 3563-3565.	1.9	1,218
2	Laboratory studies of waves and instabilities in dusty plasmas. Physics of Plasmas, 1998, 5, 1607-1614.	1.9	469
3	Charging of Dust Grains in a Plasma. Physical Review Letters, 1994, 73, 3093-3096.	7.8	302
4	Dust acoustic waves in a direct current glow discharge. Physics of Plasmas, 1997, 4, 2331-2335.	1.9	245
5	Experimental study of shock formation in a dusty plasma. Physics of Plasmas, 1999, 6, 3455-3458.	1.9	173
6	Laboratory Observations of Self-Excited Dust Acoustic Shocks. Physical Review Letters, 2009, 103, 115002.	7.8	129
7	Magnetized dusty plasmas: the next frontier for complex plasma research. Plasma Physics and Controlled Fusion, 2012, 54, 124034.	2.1	117
8	Ionâ€acoustic waves in a plasma with negative ions. Physics of Fluids B, 1991, 3, 284-287.	1.7	108
9	Electrostatic ionâ€cyclotron waves in a plasma with negative ions. Physics of Fluids B, 1989, 1, 2316-2318.	1.7	80
10	Confinement of dust particles in a double layer. Physics of Plasmas, 1995, 2, 3261-3265.	1.9	77
11	Shock formation in a negative ion plasma. Physics of Plasmas, 1998, 5, 2868-2870.	1.9	76
12	A note on dust wave excitation in a plasma with warm dust: Comparison with experiment. Physics of Plasmas, 2008, 15, .	1.9	55
13	Probe induced voids in a dusty plasma. Physics of Plasmas, 2004, 11, 1770-1774.	1.9	46
14	The interaction of stationary and moving objects with dusty plasmas. Physics of Plasmas, 1999, 6, 1421-1426.	1.9	42
15	Dust Ion-Acoustic Shocks in a Q Machine Device. Contributions To Plasma Physics, 2005, 45, 461-475.	1.1	34
16	Electrostatic Ion-Cyclotron Waves in a Plasma with Negative Ions. IEEE Transactions on Plasma Science, 1986, 14, 285-286.	1.3	30
17	The Kelvinâ€“Helmholtz instability in a plasma with negatively charged dust. Physics of Plasmas, 2001, 8, 31-35.	1.9	27
18	Instability of higher harmonic electrostatic ion cyclotron waves in a negative ion plasma. Journal of Plasma Physics, 2009, 75, 495-508.	2.1	27

#	Article	IF	Citations
19	The interaction of a conducting object with a supersonic plasma flow: ion deflection near a negatively charged obstacle. Journal of Plasma Physics, 1987, 37, 185-198.	2.1	24
20	Ion acoustic shock formation in a converging magnetic field geometry. Physics of Plasmas, 2000, 7, 2370-2373.	1.9	24
21	Ion flow and sheath structure near positively biased electrodes. Physics of Plasmas, 2016, 23, .	1.9	24
22	Electrostatic ion-cyclotron waves driven by parallel velocity shear. Physics of Plasmas, 2002, 9, 1824-1825.	1.9	23
23	Experimental quiescent drifting dusty plasmas and temporal dust acoustic wave growth. Physics of Plasmas, 2011, 18, .	1.9	20
24	Drift instability in a positive ionâ€“negative ion plasma. Journal of Plasma Physics, 2013, 79, 949-952.	2.1	20
25	Design Criteria for the Magnetized Dusty Plasma eXperiment. IEEE Transactions on Plasma Science, 2013, 41, 811-815.	1.3	19
26	Observation of the Taylor instability in a dusty plasma. Physics of Plasmas, 2012, 19, 014501.	1.9	18
27	Low-frequency electrostatic waves in a magnetized, current-free, heavy negative ion plasma. Journal of Plasma Physics, 2013, 79, 1107-1111.	2.1	17
28	Preliminary characteristics of magnetic field and plasma performance in the Magnetized Dusty Plasma Experiment (MDPX). Journal of Plasma Physics, 2014, 80, 803-808.	2.1	16
29	Sudden Jumps, Hysteresis, and Negative Resistance in an Argon Plasma Discharge. I. Discharges with No Magnetic Field. Beitrage Aus Der Plasmaphysik, 1986, 26, 1-12.	0.1	15
30	Methods for the characterization of imposed, ordered structures in MDPX. Physics of Plasmas, 2018, 25, .	1.9	15
31	Dusty plasmas: from Saturnâ€™s rings to semiconductor processing devices. Advances in Physics: X, 2021, 6, .	4.1	15
32	The Effect of a Magnetic Field on Wake Potential Structures. IEEE Transactions on Plasma Science, 1986, 14, 609-610.	1.3	11
33	Lowerâ€hybrid waves in a plasma with negative ions. Physics of Fluids B, 1993, 5, 1917-1918.	1.7	10
34	Secondary dust density waves excited by nonlinear dust acoustic waves. Physics of Plasmas, 2012, 19, 083702.	1.9	9
35	Interaction of a biased cylinder with a flowing dusty plasma. Journal of Plasma Physics, 2013, 79, 677-682.	2.1	8
36	Laser-induced fluorescence measurements of ion fluctuations in electron and ion presheaths. Physics of Plasmas, 2020, 27, .	1.9	8

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37	Sudden Jumps, Hysteresis, and Negative Resistance in an Argon Plasma Discharge. II. Discharges in Magnetic Fields. Beitrage Aus Der Plasmaphysik, 1986, 26, 13-17.	0.1	7
38	Influence of the ion/neutral atom mass ratio on the damping of electrostatic ion-cyclotron waves. Physics of Fluids, 1987, 30, 3304.	1.4	7
39	Filamentary double layers. Physics of Plasmas, 1994, 1, 1345-1348.	1.9	7
40	Coulomb explosion and fission of charged dust clusters. AIP Conference Proceedings, 2018, , .	0.4	6
41	Confinement of a potassium plasma in a spindle cusp magnetic field. Journal of Applied Physics, 1986, 60, 3056-3067.	2.5	5
42	The magnetized dusty plasma experiment (MDPX). AIP Conference Proceedings, 2018, , .	0.4	5
43	Transition from moving to stationary double layers in a singleâ€ended Q machine. Physics of Fluids B, 1990, 2, 1936-1940.	1.7	4
44	Experiments on ion and dust acoustic waves. , 1998, , .		4
45	On the possibility of refraction of dust acoustic waves. Journal of Plasma Physics, 2011, 77, 231-236.	2.1	3
46	Clausius' entropy revisited. Modern Physics Letters B, 2014, 28, 1450073.	1.9	2
47	Note on the Nature of the Transition of a System in a Non-equilibrium State to a System in an Equilibrium State. Journal of Computational and Theoretical Transport, 2014, 43, 3-5.	0.8	2
48	Further developments on observations of the Taylor instability in a dusty plasma. Physics of Plasmas, 2020, 27, 084501.	1.9	1
49	10.1063/1.3660546.1. , 2011, , .		1
50	The Effect of Ion Flow Shear on Electrostatic Ion-Cyclotron Waves. IEEE International Conference on Plasma Science, 2005, , .	0.0	0
51	Dispersion Relation of Dust Acoustic Waves in a dc Glow Discharge Plasma. , 2007, , .		0
52	Dust jets produced by a dust-discharge instability. Physics of Plasmas, 2010, 17, 083702.	1.9	0