H Bailung

List of Publications by Year
in descending order

73	2,400	361413	206112
papers	citations	20 h-index	48 g-index

75	75	75	1191
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Observation of Peregrine Solitons in a Multicomponent Plasma with Negative Ions. Physical Review Letters, 2011, 107, 255005.	7.8	610
2	Observation of Ion-Acoustic Shocks in a Dusty Plasma. Physical Review Letters, 1999, 83, 1602-1605.	7.8	558
3	Oblique collision of modified Kortewegâ€“de Vries ion-acoustic solitons. Physics of Plasmas, 1999, 6, 3466-3470.	1.9	79
4	Synthesis and Characterization of Oxygen Vacancy Induced Narrow Bandgap Tungsten Oxide (WO3â^'x) Nanoparticles by Plasma Discharge in Liquid and Its Photocatalytic Activity. Plasma Chemistry and Plasma Processing, 2020, 40, 1019-1036.	2.4	79
5	Observation of modulational instability in a multi-component plasma with negative ions. Journal of Plasma Physics, 1993, 50, 231-242.	2.1	73
6	Head-on collision of dust-acoustic solitons in a strongly coupled dusty plasma. Physical Review E, 2014, 89, 013110.	2.1	63
7	Observation of hole Peregrine soliton in a multicomponent plasma with critical density of negative ions. Journal of Geophysical Research: Space Physics, 2013, 118, 919-924.	2.4	62
8	Observation of second order ion acoustic Peregrine breather in multicomponent plasma with negative ions. Physics of Plasmas, 2016, 23, .	1.9	49
9	Observation of sheath modification in laboratory dusty plasma. Physics of Plasmas, 2007, 14, .	1.9	45
10	Optimization of plasma parameters for high rate deposition of titanium nitride films as protective coating on bell-metal by reactive sputtering in cylindrical magnetron device. Applied Surface Science, 2008, 254, 5760-5765.	6.1	45
11	A dusty double plasma device. Review of Scientific Instruments, 1999, 70, 2345-2348.	1.3	36
12	Observation of rarefactive ion acoustic solitary waves in dusty plasma containing negative ions. Physics of Plasmas, 2009, 16, .	1.9	33
13	Characteristics of ion-acoustic solitary wave in a laboratory dusty plasma under the influence of ion-beam. Physics of Plasmas, 2012, 19, .	1.9	33
14	Investigation of sheath properties in Ar/SF6dc discharge plasma. Journal Physics D: Applied Physics, 2003, 36, 645-652.	2.8	29
15	Observation of dust acoustic shock wave in a strongly coupled dusty plasma. Physics of Plasmas, 2016, 23, .	1.9	28
16	TiO2/polyaniline nanocomposite films prepared by magnetron sputtering combined with plasma polymerization process. Applied Surface Science, 2011, 258, 1199-1205.	6.1	27
17	Observation of beamâ€enhanced sheath instability in a double plasma device. Physics of Plasmas, 1996, 3, 3245-3250.	1.9	26
18	Observation of ion acoustic multi-Peregrine solitons in multicomponent plasma with negative ions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 4011-4018.	2.1	26

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19	Characteristics of sheath instability in a double plasma device. Physics of Plasmas, 1997, 4, 61-68.	1.9	22
20	Deposition of nanostructured crystalline and corrosion resistant alumina film on bell metal at low temperature by rf magnetron sputtering. Applied Surface Science, 2009, 255, 7403-7407.	6.1	22
21	Study on discharge plasma in a cylindrical inertial electrostatic confinement fusion device. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 2391-2396.	2.1	19
22	Ion-beam driven dust ion-acoustic solitary waves in dusty plasmas. Physics of Plasmas, 2010, 17, 044502.	1.9	18
23	Observation of instability in presence of EÃ—B flow in a direct current cylindrical magnetron discharge plasma. Physics of Plasmas, 2004, 11, 4719-4726.	1.9	17
24	Study on the influence of nitrogen on titanium nitride in a dc post magnetron sputtering plasma system. Journal Physics D: Applied Physics, 2008, 41, 195205.	2.8	17
25	Plasma process for development of a bulk heterojunction optoelectronic device: A highly sensitive UV detector. Applied Surface Science, 2012, 258, 7897-7906.	6.1	17
26	Observation of dust acoustic multi-solitons in a strongly coupled dusty plasma. Physics of Plasmas, 2016, 23, 093704.	1.9	17
27	Observation of self-excited dust acoustic wave in dusty plasma with nanometer size dust grains. Physics of Plasmas, 2017, 24, .	1.9	16
28	Observation of sheath phenomena in multicomponent plasma with negative ions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 244, 127-132.	2.1	15
29	Oblique collision of dust acoustic solitons in a strongly coupled dusty plasma. Physics of Plasmas, 2015, 22, .	1.9	15
30	Effects of a slow ion beam on ion-acoustic waves. Physics of Plasmas, 2004, 11, 3795-3800.	1.9	14
31	Influence of low energy ion beam on sheath characteristics in plasma. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 305, 419-426.	2.1	13
32	Influence of electron beam injection on plasma parameters and sheath in a dc discharge plasma. Journal of Applied Physics, 2003, 94, 6328-6333.	2.5	13
33	Ion beam interaction with a potential dip formed in front of an electron-absorbing boundary. Plasma Sources Science and Technology, 2006, 15, 59-63.	3.1	13
34	Effect of oxygen on the characteristics of radio frequency planar magnetron sputtering plasma used for aluminum oxide deposition. Journal of Applied Physics, 2007, 101, 083304.	2.5	13
35	Effect of ion beam on the propagation of rarefactive solitons in multicomponent plasma with negative ions. Physics of Plasmas, 2010, 17, .	1.9	13
36	Dust charge measurement in a strongly coupled dusty plasma produced by an rf discharge. Plasma Sources Science and Technology, 2012, 21, 045002.	3.1	13

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37	Observation of ion-acoustic shock waves undergoing Landau damping. Physics of Plasmas, 2004, 11, 3925-3931.	1.9	12
38	Characteristics of large amplitude compressive ion acoustic solitary wave in ion beam multicomponent plasma. Physics of Plasmas, 2010, 17, 032301.	1.9	12
39	Sheath and potential characteristics in rf magnetron sputtering plasma. Journal of Applied Physics, 2006, 100, 083303.	2.5	11
40	Transition of ion-acoustic perturbations in multicomponent plasma with negative ions. Physics of Plasmas, 2008, 15, 082111.	1.9	11
41	Vortex formation in a strongly coupled dusty plasma flow past an obstacle. Physics of Plasmas, 2020, 27, .	1.9	11
42	Cold atmospheric pressure plasma for attenuation of SARS-CoV-2 spike protein binding to ACE2 protein and the RNA deactivation. RSC Advances, 2022, 12, 9466-9472.	3.6	11
43	Investigation of theEÃ—Brotation of electrons and related plasma characteristics in a radio frequency magnetron sputtering discharge. Journal Physics D: Applied Physics, 2007, 40, 6865-6872.	2.8	10
44	Observation of ion-acoustic shock wave transition due to enhanced Landau damping. Physics of Plasmas, 2008, 15, 052311.	1.9	10
45	Characteristics of dust voids in a strongly coupled laboratory dusty plasma. Physics of Plasmas, 2018, 25, .	1.9	10
46	Studies on virtual electrode and ion sheath characteristics in a cylindrical inertial electrostatic confinement fusion device. Physics of Plasmas, 2019, 26, 073514.	1.9	10
47	Observations of low-frequency mode in a multicomponent plasma with negative ions. Physics of Plasmas, 1999, 6, 1636-1640.	1.9	9
48	Development and optical characterization of an atmospheric pressure non-thermal plasma jet for superhydrophobic surface fabrication. Plasma Research Express, 2020, 2, 045002.	0.9	9
49	Effect of E Ã— B electron drift and plasma discharge in dc magnetron sputtering plasma. Chinese Physics B, 2011, 20, 014701.	1.4	8
50	Spatiotemporal evolution of a self-excited dust density wave in a nanodusty plasma under strong Havnes effect. Physics of Plasmas, 2021, 28, .	1.9	8
51	Characteristics of presheath in multicomponent plasma with negative ions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 333, 102-109.	2.1	7
52	Chaotic attractors in ion-beam plasma system. Chaos, Solitons and Fractals, 1994, 4, 677-680.	5.1	6
53	Self-similarity of electrostatic fluctuations in a linear magnetised plasma system. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 350, 380-385.	2.1	6
54	Charging of micrometre-sized dust grains in a low temperature and low density plasma produced using a magnetic filter. Plasma Sources Science and Technology, 2010, 19, 055005.	3.1	6

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55	A nanodusty plasma experiment to create extended dust clouds using reactive argon acetylene plasmas. Physics of Plasmas, 2021, 28, 063703.	1.9	6
56	Oblique collision of plane ion acoustic solitons in a multicomponent plasma with negative ions. Journal of Plasma Physics, 1999, 61, 151-159.	2.1	5
57	Ion and electron sheath characteristics in a low density and low temperature plasma. Physics of Plasmas, 2017, 24, 113512.	1.9	5
58	Propagation of solitary ion wavepacket in multi-component plasma with negative ions. Chaos, Solitons and Fractals, 1996, 7, 21-24.	5.1	4
59	Sheath characteristics in multi-component plasma with negative ions. Pramana - Journal of Physics, 2004, 62, 1091-1098.	1.8	4
60	The influence of RF power and gas pressure on the surface characteristics of aluminium oxide deposited by RF magnetron sputtering plasma. Journal of Physics: Conference Series, 2010, 208, 012102.	0.4	4
61	Suppression of a spontaneous dust density wave by modulation of ion streaming. Plasma Science and Technology, 2020, 22, 045002.	1.5	4
62	Novel single-step synthesis and shape transformation of Au/CuO micro/nanocomposites using plasma-liquid interaction. Nanotechnology, 2021, 32, 245601.	2.6	4
63	Analysis of electron energy distribution function in a magnetically filtered complex plasma. Chinese Physics B, 2013, 22, 045201.	1.4	3
64	Editorial: Peregrine Soliton and Breathers in Wave Physics: Achievements and Perspectives. Frontiers in Physics, 2021, 9, .	2.1	3
65	Characteristics of ion acoustic modified Korteweg de Vries (KdV) solitons in multicomponent plasma with negative ions. Journal of Physics: Conference Series, 2010, 208, 012036.	0.4	1
66	Shock Wave Propagation in a Dusty Plasma Crystal. AIP Conference Proceedings, 2011, , .	0.4	1
67	Study of the sheath potential structure using emissive probe in a dc magnetron plasma. Journal of Physics: Conference Series, 2010, 208, 012128.	0.4	0
68	Experiments on Coulomb Crystal in Rf Discharge Plasma. , 2011, , .		0
69	Sheath characteristics in a magnetically filtered low density low temperature multicomponent plasma with negative ions. Physics of Plasmas, 2019, 26, 123511.	1.9	0
70	10.1063/1.4950832.1. , 2016, , .		0
71	10.1063/1.4962566.1. , 2016, , .		0
72	10.1063/1.5001721.1. , 2017, , .		0

#	Article	IF	Citations
73	10.1063/5.0022356.1. , 2020, , .		0