Catalin Ticos

List of Publications by Year
in descending order

63 papers	652 citations	687363 13 h-index	610901 24 g-index
63 all docs	63 docs citations	63 times ranked	611 citing authors

#	Article	IF	Citations
1	Experimental Real-Time Phase Synchronization of a Paced Chaotic Plasma Discharge. Physical Review Letters, 2000, 85, 2929-2932.	7.8	123
2	PHASE SYNCHRONIZATION OF CHAOS IN A PLASMA DISCHARGE TUBE. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2000, 10, 2551-2563.	1.7	53
3	Overview of results from the National Spherical Torus Experiment (NSTX). Nuclear Fusion, 2009, 49, 104016.	3.5	41
4	Experimental Demonstration of Plasma-Drag Acceleration of a Dust Cloud to Hypervelocities. Physical Review Letters, 2008, 100, 155002.	7.8	28
5	The charge on falling dust particles in a RF plasma with DC negative bias. Plasma Sources Science and Technology, 2004, 13, 395-402.	3.1	26
6	Plasma jet acceleration of dust particles to hypervelocities. Physics of Plasmas, 2008, 15, .	1.9	24
7	Plasmadynamic hypervelocity dust injector for the National Spherical Torus Experiment. Review of Scientific Instruments, 2006, 77, 10E304.	1.3	22
8	Plasma dragged microparticles as a method to measure plasma flows. Physics of Plasmas, 2006, 13, 103501.	1.9	22
9	Experimental Chua-plasma phase synchronization of chaos. Physical Review E, 2003, 68, 025202.	2.1	20
10	Dust trajectories and diagnostic applications beyond strongly coupled dusty plasmas. Physics of Plasmas, 2007, 14, 103701.	1.9	19
11	Simultaneous carbon and tungsten thin film deposition using two thermionic vacuum arcs. Thin Solid Films, 2011, 519, 4074-4077.	1.8	19
12	Microparticle probes for laboratory plasmas. IEEE Transactions on Plasma Science, 2006, 34, 242-248.	1.3	15
13	The behavior of W, Be and C layers in interaction with plasma produced by terawatt laser beam pulses. Vacuum, 2014, 110, 207-212.	3.5	14
14	Stepped heating procedure for experimental SAR evaluation of ferrofluids. European Physical Journal E, 2015, 38, 57.	1.6	13
15	Dust as a versatile matter for high-temperature plasma diagnostic. Review of Scientific Instruments, 2008, 79, 10F333.	1.3	11
16	Precession of cylindrical dust particles in the plasma sheath. Physics of Plasmas, 2015, 22, .	1.9	11
17	A pulsed â€˜plasma broomâ€™ for dusting off surfaces on Mars. New Journal of Physics, 2017, 19, 063006.	2.9	11
18	Overview of ELI-NP status and laser commissioning experiments with 1 PW and 10 PW class-lasers. Journal of Instrumentation, 2020, 15, C09053-C09053.	1.2	11

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19	Removal of floating dust in glow discharge using plasma jet. Applied Physics Letters, 2010, 97, .	3.3	10
20	A 1-D dusty plasma photonic crystal. Journal of Applied Physics, 2013, 114, 113305.	2.5	10
21	Thermal phenomena induced in a small tungsten sample during irradiation with a few MeV electron beam: Experiment versus simulations. Nuclear Instruments & Methods in Physics Research B, 2014, 337, 17-20.	1.4	10
22	Complementary dosimetry for a 6â€‐MeV electron beam. Results in Physics, 2019, 14, 102377.	4.1	10
23	Experimental wake-induced oscillations of dust particles in a rf plasma. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 319, 504-509.	2.1	9
24	Unresonant interaction of laser beams with microdroplets. Journal of the European Optical Society-Rapid Publications, 0, 7, .	1.9	9
25	Experimental demonstration of Martian soil simulant removal from a surface using a pulsed plasma jet. Review of Scientific Instruments, 2015, 86, 033509.	1.3	9
26	Pressure triggered collective oscillations of a dust crystal in a capacitive RF plasma. Plasma Physics and Controlled Fusion, 2004, 46, B293-B299.	2.1	8
27	Kinetic effects in a plasma crystal induced by an external electron beam. Physics of Plasmas, 2019, 26, 043702.	1.9	8
28	Imaging system for hypervelocity dust injection diagnostic on NSTX. Review of Scientific Instruments, 2006, 77, 10E517.	1.3	7
29	Cracks and nanodroplets produced on tungsten surface samples by dense plasma jets. Applied Surface Science, 2018, 434, 1122-1128.	6.1	6
30	Pushing microscopic matter in plasma with an electron beam. Plasma Physics and Controlled Fusion, 2020, 62, 025003.	2.1	6
31	Pacing a chaotic plasma with a music signal. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 284, 259-265.	2.1	5
32	High-speed imaging of dust particles in plasma. Journal of Plasma Physics, 2013, 79, 273-285.	2.1	5
33	Periodic striations on beryllium and tungsten surfaces by indirect femtosecond laser irradiation. Applied Physics Letters, 2014, 104, 101604.	3.3	5
34	Thermal phenomena induced in a small graphite sample during irradiation with a few MeV electron beam: Experiment versus theoretical simulations. Nuclear Instruments & Methods in Physics Research B, 2014, 318, 232-236.	1.4	5
35	Collimated electron beam accelerated at 12 kV from a Penning discharge. Review of Scientific Instruments, 2015, 86, 013301.	1.3	5
36	Influence of electron irradiation and rapid thermal annealing on photoluminescence from GaAsNBi alloys. Applied Physics Letters, 2020, 117, 142106.	3.3	5

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37	Oscillations of Dust Particles Due to Ion Wake Fields: An Experimental Demonstration. Physica Scripta, 2004, T107, 117.	2.5	4
38	Observation of the Evolution of Supersonic Plasma Jet Launched by a Coaxial Gun. IEEE Transactions on Plasma Science, 2011, 39, 2388-2389.	1.3	4
39	Hypervelocity Dust Storm Launched With a Coaxial Plasma Gun. IEEE Transactions on Plasma Science, 2008, 36, 2770-2774.	1.3	3
40	Applications and Progress of Dust Injection to Fusion Energy. AIP Conference Proceedings, 2008, , .	0.4	3
41	Levitated dust particles subjected to plasma jet. Journal of Plasma Physics, 2010, 76, 501-511.	2.1	3
42	Rotation of a strongly coupled dust cluster in plasma by the torque of an electron beam. Physical Review E, 2021, 103, 023210.	2.1	3
43	Phase Synchronization in a Plasma Discharge Driven by a Chaotic Signal. AIP Conference Proceedings, 2003, , .	0.4	2
44	Generation of dust projectiles passing over an obstacle in the plasma sheath. Physics of Plasmas, 2012, 19, 083701.	1.9	2
45	RADIOLOGICAL SAFETY ASSESSMENT FOR THE EXPERIMENTAL AREA OF A HYPER-INTENSE LASER WITH PEAKâ€"POWER OF 1PWâ€"CETAL. Radiation Protection Dosimetry, 2017, 175, 104-109.	0.8	2
46	Irradiation of nuclear materials with laser-plasma filaments produced in air and deuterium by terrawatt (TW) laser pulses. Journal Physics D: Applied Physics, 2018, 51, 025302.	2.8	2
47	Optimizing direct laser-driven electron acceleration and energy gain at ELI-NP. European Physical Journal D, 2020, 74, 1.	1.3	2
48	Modeling the electron acceleration in relativistic channels for space irradiation applications. Plasma Physics and Controlled Fusion, 2020, 62, 124001.	2.1	2
49	Irradiation of W and K-Doped W Laminates without or with Cu, V, Ti Interlayers under a Pulsed 6 MeV Electron Beam. Materials, 2022, 15, 956.	2.9	2
50	Power dropout control by optical phase modulation in a chaotic semiconductor laser. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 2486.	2.1	1
51	Experimental control of power dropouts by current modulation in a semiconductor laser with optical feedback. Physica Scripta, 2011, 83, 055402.	2.5	1
52	Dust Accelerators And Their Applications In High-Temperature Plasmas. , 2011, , .		1
53	Laser method for corneal structure investigation. , 1998, 3405, 665.		0
54	Hypervelocity Dust Storm Launched with a Coaxial Plasma Gun. , 2007, , .		0

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55	M:N phase synchronization of LFF in an chaotic ECSL system. , 2007, , .		0
56	Hypervelocity dust storm launched with a coaxial plasma gun. , 2007, , .		0
57	A New Parameter Regime for Dust in Plasma: the Case of Dense and Supersonic Plasma Flows. AIP Conference Proceedings, 2008, , .	0.4	0
58	Observation of Hypervelocity Dust in Dense Supersonic Plasma Flows: Physics and Applications. , 2008, , .		0
59	Dust crystal interaction with plasma flows. , 2009, , .		0
60	Dust particles interaction with plasma jet. , 2009, , .		0
61	Experiments with an rf dusty plasma and an external plasma jet. , 2010, , .		0
62	Optical Spectrum Analysis of Chaotic Synchronization in a Bidirectional Coupled Semiconductor Laser System. , 2013, , 425-429.		0
63	Target Characteristics Used in Laser-Plasma Acceleration of Protons Based on the TNSA Mechanism. Frontiers in Physics, 2022, 10, .	2.1	0