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List of Publications by Year
in descending order

Version: 2024-02-01

66 papers	1,720 citations	304743 22 h-index	289244 40 g-index
67 all docs	67 docs citations	67 times ranked	846 citing authors

#	Article	IF	Citations
1	Design and modeling of ignition targets for the National Ignition Facility. Physics of Plasmas, 1995, 2, 2480-2487.	1.9	329
2	The development and advantages of beryllium capsules for the National Ignition Facility. Physics of Plasmas, 1998, 5, 1953-1959.	1.9	136
3	Ignition target design and robustness studies for the National Ignition Facility. Physics of Plasmas, 1996, 3, 2084-2093.	1.9	91
4	Diagnosing inertial confinement fusion gamma ray physics (invited). Review of Scientific Instruments, 2010, 81, 10D333.	1.3	85
5	Knudsen Layer Reduction of Fusion Reactivity. Physical Review Letters, 2012, 109, 095001.	7.8	77
6	Exploration of the Transition from the Hydrodynamiclike to the Strongly Kinetic Regime in Shock-Driven Implosions. Physical Review Letters, 2014, 112, 185001.	7.8	77
7	Ion Thermal Decoupling and Species Separation in Shock-Driven Implosions. Physical Review Letters, 2015, 114, 025001.	7.8	67
8	Revised Knudsen-layer reduction of fusion reactivity. Physics of Plasmas, 2013, 20, .	1.9	45
9	Cylindrical implosion experiments using laser direct drive. Physics of Plasmas, 1999, 6, 2095-2104.	1.9	44
10	Nuclear diagnostics for the National Ignition Facility (invited). Review of Scientific Instruments, 2001, 72, 773-779.	1.3	39
11	Approximate models for the ion-kinetic regime in inertial-confinement-fusion capsule implosions. Physics of Plasmas, 2015, 22, 052707.	1.9	38
12	D-T gamma-to-neutron branching ratio determined from inertial confinement fusion plasmas. Physics of Plasmas, 2012, 19, .	1.9	37
13	Low Fuel Convergence Path to Direct-Drive Fusion Ignition. Physical Review Letters, 2016, 116, 255003.	7.8	36
14	Investigation of ion kinetic effects in direct-drive exploding-pusher implosions at the NIF. Physics of Plasmas, 2014, 21, 122712.	1.9	33
15	Fusion neutrons from the gasâ€“pusher interface in deuterated-shell inertial confinement fusion implosions. Physics of Plasmas, 1998, 5, 768-774.	1.9	32
16	Multifluid interpenetration mixing in directly driven inertial confinement fusion capsule implosions. Physics of Plasmas, 2004, 11, 2723-2728.	1.9	27
17	Measurement of areal density in the ablators of inertial-confinement-fusion capsules via detection of ablator (n, nâ€²Î³) gamma-ray emission. Physics of Plasmas, 2013, 20, .	1.9	27
18	Assessment of ion kinetic effects in shock-driven inertial confinement fusion implosions using fusion burn imaging. Physics of Plasmas, 2015, 22, .	1.9	27

#	Article	IF	Citations
19	Ion-kinetic simulations of D-3He gas-filled inertial confinement fusion target implosions with moderate to large Knudsen number. Physics of Plasmas, 2016, 23, .	1.9	26
20	Determination of the deuterium-tritium branching ratio based on inertial confinement fusion implosions. Physical Review C, 2012, 85, .	2.9	25
21	Degradation of radiatively driven inertial confinement fusion capsule implosions by multifluid interpenetration mixing. Physics of Plasmas, 2003, 10, 4427-4434.	1.9	24
22	Highly Resolved Measurements of a Developing Strong Collisional Plasma Shock. Physical Review Letters, 2018, 120, 095001.	7.8	23
23	The feedout process: Rayleighâ€“Taylor and Richtmyerâ€“Meshkov instabilities in uniform, radiation-driven foils. Physics of Plasmas, 1999, 6, 932-939.	1.9	22
24	Using gamma-ray emission to measure areal density of inertial confinement fusion capsules. Review of Scientific Instruments, 2010, 81, 10D332.	1.3	21
25	Gamma Reaction History ablator areal density constraints upon correlated diagnostic modeling of National Ignition Facility implosion experiments. Physics of Plasmas, 2015, 22, .	1.9	21
26	Observation of interspecies ion separation in inertial-confinement-fusion implosions. Europhysics Letters, 2016, 115, 65001.	2.0	21
27	Developments in NIF Beryllium Capsule Design. Fusion Science and Technology, 2000, 38, 16-21.	0.6	17
28	Tuning indirect-drive implosions using cone power balance. Physics of Plasmas, 2011, 18, .	1.9	17
29	Demonstration of symcaps to measure implosion symmetry in the foot of the NIF scale 0.7 hohlraums. Laser and Particle Beams, 2009, 27, 123-127.	1.0	16
30	Diffusion-dominated mixing in moderate convergence implosions. Physical Review E, 2018, 97, 061201.	2.1	16
31	Observation and modeling of interspecies ion separation in inertial confinement fusion implosions via imaging x-ray spectroscopy. Physics of Plasmas, 2017, 24, 056305.	1.9	15
32	Diagnostic signature of the compressibility of the inertial-confinement-fusion pusher. Physical Review E, 2020, 101, 023208.	2.1	15
33	Improved inertial confinement fusion gamma reaction history 12C gamma-ray signal by direct subtraction. Review of Scientific Instruments, 2019, 90, 113503.	1.3	14
34	Prediction Uncertainties beyond the Range of Experience: A Case Study in Inertial Confinement Fusion Implosion Experiments. SIAM-ASA Journal on Uncertainty Quantification, 2019, 7, 604-633.	2.0	12
35	Late-time radiography of beryllium ignition-target ablators in long-pulse gas-filled hohlraums. Physics of Plasmas, 2006, 13, 056304.	1.9	11
36	In situcalibration of the Gamma Reaction History instrument using reference samples (â€œpucksâ€) for areal density measurements. EPJ Web of Conferences, 2013, 59, 13019.	0.3	11

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37	First measurements of remaining shell areal density on the OMEGA laser using the Diagnostic for Areal Density (DAD). Review of Scientific Instruments, 2018, 89, 083510.	1.3	11
38	Carbon ablator areal density at fusion burn: Observations and trends at the National Ignition Facility. Physics of Plasmas, 2020, 27, .	1.9	11
39	Study of the ion kinetic effects in ICF run-away burn using a quasi-1D hybrid model. Physics of Plasmas, 2017, 24, .	1.9	10
40	A direct-drive exploding-pusher implosion as the first step in development of a monoenergetic charged-particle backlighting platform at the National Ignition Facility. High Energy Density Physics, 2016, 18, 38-44.	1.5	9
41	Commissioning the new pulse dilation Gas Cherenkov Detector at the National Ignition Facility. High Energy Density Physics, 2020, 37, 100862.	1.5	9
42	Gold wall ablation and hohlraum filling measurements of vacuum and gas-filled hohlraums. , 2006, 6261, 49.		8
43	Diagnosing radiation drive asymmetry and absorbed energy in ignitionHohlraumsusing gas-filled capsules. Review of Scientific Instruments, 2006, 77, 10E705.	1.3	8
44	Calibrating mix models for NIF tuning. Journal of Physics: Conference Series, 2010, 244, 022011.	0.4	8
45	First spectral measurement of deuterium-tritium fusion <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î³</mml:mi></mml:math> rays in inertial fusion experiments. Physical Review C, 2021, 104, .	2.9	8
46	Feedout coupling of Richtmyerâ€“Meshkov and Rayleighâ€“Taylor instabilities in stratified, radiation-driven foils. Physics of Plasmas, 1999, 6, 940-946.	1.9	7
47	Measurements of ion velocity separation and ionization in multi-species plasma shocks. Physics of Plasmas, 2018, 25, .	1.9	7
48	Progress on observations of interspecies ion separation in inertial-confinement-fusion implosions via imaging x-ray spectroscopy. Physics of Plasmas, 2019, 26, 062702.	1.9	7
49	Time resolved ablator areal density during peak fusion burn on inertial confinement fusion implosions. Physics of Plasmas, 2021, 28, 032701.	1.9	7
50	Simulation of instability growth rates on the front and back of laser accelerated planar targets. Physics of Plasmas, 1998, 5, 2988-2996.	1.9	5
51	Diagnosing ablator burn through in ignition capsules using D2+He3 gas filled surrogates. Review of Scientific Instruments, 2006, 77, 10E711.	1.3	5
52	Tuning NIF drive symmetry with symmetry capsules. Journal of Physics: Conference Series, 2008, 112, 022075.	0.4	5
53	Use of d-H3e proton spectroscopy as a diagnostic of shell Ïr in capsule implosion experiments with âˆ¼0.2 NIF scale high temperature Hohlraums at Omega. Review of Scientific Instruments, 2008, 79, 10E526.	1.3	4
54	First observation of increased DT yield over prediction due to addition of hydrogen. Physics of Plasmas, 2021, 28, 012707.	1.9	4

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55	Cherenkov detector analysis for implosions with multiple nuclear reactions. Review of Scientific Instruments, 2018, 89, 10I103.	1.3	3
56	Exact solutions to a time-dependent vacuum transport problem. Journal of Quantitative Spectroscopy and Radiative Transfer, 1985, 34, 435-445.	2.3	2
57	Direct-drive DT implosions with Knudsen number variations. Journal of Physics: Conference Series, 2016, 717, 012030.	0.4	2
58	Predictions of the Microstructural Contribution to Instability Seeding in Beryllium ICF Capsules. AIP Conference Proceedings, 2004, , .	0.4	1
59	Sensitivity of capsule implosion symmetry due to laser beam imbalance in a scale 0.2 hot hohlraum at Omega. Journal of Physics: Conference Series, 2010, 244, 032043.	0.4	1
60	A reduced model for the ICF Gamma-Ray reaction history diagnostic. Journal of Physics: Conference Series, 2010, 244, 032058.	0.4	1
61	Kinetic studies of ICF implosions. Journal of Physics: Conference Series, 2016, 717, 012027.	0.4	1
62	Tamper asymmetry and its effect on transmission for x-ray driven opacity simulations. Physics of Plasmas, 2017, 24, .	1.9	1
63	Radiation hydrodynamics with backscatter and beam spray in gas filled hohlraum experiments at the National Ignition Facility. European Physical Journal Special Topics, 2006, 133, 129-133.	0.2	0
64	INERTIAL CONFINEMENT FUSION RESEARCH AT LOS ALAMOS NATIONAL LABORATORY. , 2009, , .		0
65	On a statistical scattering model to explain capsule implosion asymmetry in vacuum hohlraums with radiation temperatures of order 100eV. Journal of Physics: Conference Series, 2010, 244, 022076.	0.4	0
66	Uncertainty analysis for ablator areal density measurements using gamma-ray emission of imploded capsules at the OMEGA laser. , 2011, , .		0