O S Jones

List of Publications by Year in descending order

58 papers	4,763 citations	109321 35 h-index	128289 60 g-index
61 all docs	61 docs citations	61 times ranked	1509 citing authors

#	Article	IF	Citations
1	Three-dimensional HYDRA simulations of National Ignition Facility targets. Physics of Plasmas, 2001, 8, 2275-2280.	1.9	579
2	Point design targets, specifications, and requirements for the 2010 ignition campaign on the National Ignition Facility. Physics of Plasmas, 2011, 18, .	1.9	534
3	Progress towards ignition on the National Ignition Facility. Physics of Plasmas, 2013, 20, .	1.9	259
4	Burning plasma achieved in inertial fusion. Nature, 2022, 601, 542-548.	27.8	233
5	Onset of Hydrodynamic Mix in High-Velocity, Highly Compressed Inertial Confinement Fusion Implosions. Physical Review Letters, 2013, 111, 085004.	7.8	215
6	Three-dimensional simulations of low foot and high foot implosion experiments on the National Ignition Facility. Physics of Plasmas, 2016, 23, .	1.9	162
7	2D X-Ray Radiography of Imploding Capsules at the National Ignition Facility. Physical Review Letters, 2014, 112, 195001.	7.8	154
8	Inertially confined fusion plasmas dominated by alpha-particle self-heating. Nature Physics, 2016, 12, 800-806.	16.7	144
9	Metrics for long wavelength asymmetries in inertial confinement fusion implosions on the National Ignition Facility. Physics of Plasmas, 2014, 21, .	1.9	140
10	Detailed implosion modeling of deuterium-tritium layered experiments on the National Ignition Facility. Physics of Plasmas, 2013, 20, 056318.	1.9	128
11	Radiation hydrodynamics modeling of the highest compression inertial confinement fusion ignition experiment from the National Ignition Campaign. Physics of Plasmas, 2015, 22, .	1.9	120
12	Neutron spectrometryâ€"An essential tool for diagnosing implosions at the National Ignition Facility (invited). Review of Scientific Instruments, 2012, 83, 10D308.	1.3	117
13	First High-Convergence Cryogenic Implosion in a Near-Vacuum Hohlraum. Physical Review Letters, 2015, 114, 175001.	7.8	117
14	High-density carbon ablator experiments on the National Ignition Facility. Physics of Plasmas, 2014, 21, .	1.9	116
15	Shock timing experiments on the National Ignition Facility: Initial results and comparison with simulation. Physics of Plasmas, 2012, 19, .	1.9	115
16	A high-resolution integrated model of the National Ignition Campaign cryogenic layered experiments. Physics of Plasmas, 2012, 19, .	1.9	108
17	Symmetry tuning for ignition capsules via the symcap technique. Physics of Plasmas, 2011, 18, .	1.9	101
18	Cryogenic thermonuclear fuel implosions on the National Ignition Facility. Physics of Plasmas, 2012, 19, .	1.9	95

#	Article	IF	Citations
19	Design of inertial fusion implosions reaching the burning plasma regime. Nature Physics, 2022, 18, 251-258.	16.7	87
20	of Plasmas, 2015, 22, 056318.	1.9	80
21	Three-dimensional modeling and hydrodynamic scaling of National Ignition Facility implosions. Physics of Plasmas, 2019, 26, .	1.9	70
22	Progress towards a more predictive model for hohlraum radiation drive and symmetry. Physics of Plasmas, 2017, 24, 056312.	1.9	64
23	Indirect drive ignition at the National Ignition Facility. Plasma Physics and Controlled Fusion, 2017, 59, 014021.	2.1	64
24	Cryogenic tritium-hydrogen-deuterium and deuterium-tritium layer implosions with high density carbon ablators in near-vacuum hohlraums. Physics of Plasmas, 2015, 22, 062703.	1.9	62
25	Integrated modeling of cryogenic layered highfoot experiments at the NIF. Physics of Plasmas, 2016, 23, .	1.9	59
26	The relationship between gas fill density and hohlraum drive performance at the National Ignition Facility. Physics of Plasmas, 2017, 24, .	1.9	55
27	Toward a burning plasma state using diamond ablator inertially confined fusion (ICF) implosions on the National Ignition Facility (NIF). Plasma Physics and Controlled Fusion, 2019, 61, 014023.	2.1	53
28	A survey of pulse shape options for a revised plastic ablator ignition design. Physics of Plasmas, 2014, 21, .	1.9	50
29	Hotspot conditions achieved in inertial confinement fusion experiments on the National Ignition Facility. Physics of Plasmas, 2020, 27, .	1.9	50
30	Performance of High-Convergence, Layered DT Implosions with Extended-Duration Pulses at the National Ignition Facility. Physical Review Letters, 2013, 111, 215001.	7.8	47
31	Simulation of self-generated magnetic fields in an inertial fusion hohlraum environment. Physics of Plasmas, 2017, 24, .	1.9	44
32	Images of the laser entrance hole from the static x-ray imager at NIF. Review of Scientific Instruments, 2010, 81, 10E538.	1.3	42
33	Stabilization of high-compression, indirect-drive inertial confinement fusion implosions using a 4-shock adiabat-shaped drive. Physics of Plasmas, 2015, 22, .	1.9	40
34	Performance of indirectly driven capsule implosions on the National Ignition Facility using adiabat-shaping. Physics of Plasmas, 2016, 23, 056303.	1.9	38
35	Electron temperature measurements inside the ablating plasma of gas-filled hohlraums at the National Ignition Facility. Physics of Plasmas, 2016, 23, .	1.9	34
36	Adiabat-shaping in indirect drive inertial confinement fusion. Physics of Plasmas, 2015, 22, 052702.	1.9	31

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37	Developing an Experimental Basis for Understanding Transport in NIF Hohlraum Plasmas. Physical Review Letters, 2018, 121, 095002.	7.8	28
38	Role of hydrodynamics simulations in laser-plasma interaction predictive capability. Physics of Plasmas, 2007, 14, 056304.	1.9	24
39	Measurement of the Absolute Hohlraum-Wall Albedo under Ignition Foot Drive Conditions. Physical Review Letters, 2004, 93, 065002.	7.8	23
40	Soft x-ray images of the laser entrance hole of ignition hohlraums. Review of Scientific Instruments, 2012, 83, 10E525.	1.3	22
41	Towards a more universal understanding of radiation drive in gas-filled hohlraums. Journal of Physics: Conference Series, 2016, 717, 012026.	0.4	20
42	Heat transport modeling of the dot spectroscopy platform on NIF. Plasma Physics and Controlled Fusion, 2018, 60, 044009.	2.1	20
43	Laser propagation in a subcritical foam: Ion and electron heating. Physics of Plasmas, 2018, 25, .	1.9	17
44	A high-speed two-frame, 1-2 ns gated X-ray CMOS imager used as a hohlraum diagnostic on the National Ignition Facility (invited). Review of Scientific Instruments, 2016, 87, 11E203.	1.3	16
45	Simultaneous visualization of wall motion, beam propagation, and implosion symmetry on the National Ignition Facility (invited). Review of Scientific Instruments, 2018, 89, 10K111.	1.3	15
46	Evidence of restricted heat transport in National Ignition Facility Hohlraums. Physics of Plasmas, 2020, 27, 102704.	1.9	15
47	Exploring implosion designs for increased compression on the National Ignition Facility using high density carbon ablators. Physics of Plasmas, 2022, 29, .	1.9	15
48	Laser propagation in a subcritical foam: Subgrid model. Physics of Plasmas, 2020, 27, 112710.	1.9	13
49	Understanding ICF hohlraums using NIF gated laser-entrance-hole images. Physics of Plasmas, 2020, 27, 022702.	1.9	13
50	Observation of hohlraum-wall motion with spectrally selective x-ray imaging at the National Ignition Facility. Review of Scientific Instruments, 2016, 87, 11E321.	1.3	11
51	Experimental and calculational investigation of laser-heated additive manufactured foams. Physics of Plasmas, 2021, 28, .	1.9	9
52	Laser transport and backscatter in low-density SiO2 and Ta2O5 foams. Physics of Plasmas, 2021, 28, .	1.9	6
53	The effects of multispecies Hohlraum walls on stimulated Brillouin scattering, Hohlraum dynamics, and beam propagation. Physics of Plasmas, 2021, 28, .	1.9	6
54	Simulation studies of the interaction of laser radiation with additively manufactured foams. Plasma Physics and Controlled Fusion, 2021, 63, 055009.	2.1	5

#	Article	IF	Citations
55	Reaching 30% energy coupling efficiency for a high-density-carbon capsule in a gold rugby hohlraum on NIF. Nuclear Fusion, 2021, 61, 086028.	3.5	4
56	Hydroscaling indirect-drive implosions on the National Ignition Facility. Physics of Plasmas, 2022, 29, .	1.9	4
57	A novel method to measure ion density in ICF experiments using x-ray spectroscopy of cylindrical tracers. Physics of Plasmas, 2020, 27, 112714.	1.9	2
58	Foam-lined hohlraum, inertial confinement fusion experiments on the National Ignition Facility. Physical Review E, 2020, 102, 051201.	2.1	2