

# J L Kline

## List of Publications by Year in descending order

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218  
papers

9,527  
citations

30070

54  
h-index

45317

90  
g-index

230  
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230  
docs citations

230  
times ranked

2743  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fuel gain exceeding unity in an inertially confined fusion implosion. <i>Nature</i> , 2014, 506, 343-348.	27.8	742
2	Point design targets, specifications, and requirements for the 2010 ignition campaign on the National Ignition Facility. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	534
3	Symmetric Inertial Confinement Fusion Implosions at Ultra-High Laser Energies. <i>Science</i> , 2010, 327, 1228-1231.	12.6	321
4	Progress towards ignition on the National Ignition Facility. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	259
5	Onset of Hydrodynamic Mix in High-Velocity, Highly Compressed Inertial Confinement Fusion Implosions. <i>Physical Review Letters</i> , 2013, 111, 085004.	7.8	215
6	High-Adiabatic High-Foot Inertial Confinement Fusion Implosion Experiments on the National Ignition Facility. <i>Physical Review Letters</i> , 2014, 112, 055001.	7.8	199
7	Design of a High-Foot High-Adiabatic ICF Capsule for the National Ignition Facility. <i>Physical Review Letters</i> , 2014, 112, 055002.	7.8	173
8	Symmetry tuning via controlled crossed-beam energy transfer on the National Ignition Facility. <i>Physics of Plasmas</i> , 2010, 17, .	1.9	171
9	2D X-Ray Radiography of Imploding Capsules at the National Ignition Facility. <i>Physical Review Letters</i> , 2014, 112, 195001.	7.8	154
10	The high-foot implosion campaign on the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	149
11	Inertially confined fusion plasmas dominated by alpha-particle self-heating. <i>Nature Physics</i> , 2016, 12, 800-806.	16.7	144
12	Hot-Spot Mix in Ignition-Scale Inertial Confinement Fusion Targets. <i>Physical Review Letters</i> , 2013, 111, 045001.	7.8	135
13	Capsule implosion optimization during the indirect-drive National Ignition Campaign. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	131
14	Implosion dynamics measurements at the National Ignition Facility. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	125
15	Neutron spectrometry—An essential tool for diagnosing implosions at the National Ignition Facility (invited). <i>Review of Scientific Instruments</i> , 2012, 83, 10D308.	1.3	117
16	National Ignition Campaign Hohlraum energetics. <i>Physics of Plasmas</i> , 2010, 17, .	1.9	115
17	Shock timing experiments on the National Ignition Facility: Initial results and comparison with simulation. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	115
18	A high-resolution integrated model of the National Ignition Campaign cryogenic layered experiments. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	108

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19	Hot-spot mix in ignition-scale implosions on the NIF. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	107
20	Multistep redirection by cross-beam power transfer of ultrahigh-power lasers in a plasma. <i>Nature Physics</i> , 2012, 8, 344-349.	16.7	104
21	Symmetry tuning for ignition capsules via the symcap technique. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	101
22	Demonstration of High Performance in Layered Deuterium-Tritium Capsule Implosions in Uranium Hohlräume at the National Ignition Facility. <i>Physical Review Letters</i> , 2015, 115, 055001.	7.8	101
23	Measuring symmetry of implosions in cryogenic <i>Hohlräume</i> at the NIF using gated x-ray detectors (invited). <i>Review of Scientific Instruments</i> , 2010, 81, 10E316.	1.3	95
24	Cryogenic thermonuclear fuel implosions on the National Ignition Facility. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	95
25	Observation of a Transition from Fluid to Kinetic Nonlinearities for Langmuir Waves Driven by Stimulated Raman Backscatter. <i>Physical Review Letters</i> , 2005, 94, 175003.	7.8	94
26	A review of laser-plasma interaction physics of indirect-drive fusion. <i>Plasma Physics and Controlled Fusion</i> , 2013, 55, 103001.	2.1	86
27	How high energy fluxes may affect Rayleigh-Taylor instability growth in young supernova remnants. <i>Nature Communications</i> , 2018, 9, 1564.	12.8	84
28	Precision Shock Tuning on the National Ignition Facility. <i>Physical Review Letters</i> , 2012, 108, 215004.	7.8	83
29	Backscatter measurements for NIF ignition targets (invited). <i>Review of Scientific Instruments</i> , 2010, 81, 10D921.	1.3	82
30	Analysis of the National Ignition Facility ignition hohlraum energetics experiments. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	82
31	Dynamic symmetry of indirectly driven inertial confinement fusion capsules on the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	81
32	Exploring the limits of case-to-capsule ratio, pulse length, and picket energy for symmetric hohlraum drive on the National Ignition Facility Laser. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	79
33	Performance metrics for inertial confinement fusion implosions: Aspects of the technical framework for measuring progress in the National Ignition Campaign. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	78
34	The velocity campaign for ignition on NIF. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	76
35	Electron temperature measurement by a helium line intensity ratio method in helicon plasmas. <i>Physics of Plasmas</i> , 2001, 8, 5303-5314.	1.9	75
36	rf Absorption and Ion Heating in Helicon Sources. <i>Physical Review Letters</i> , 2002, 88, 195002.	7.8	70

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37	The first measurements of soft x-ray flux from ignition scale <i>Hohlraums</i> at the National Ignition Facility using DANTE (invited). <i>Review of Scientific Instruments</i> , 2010, 81, 10E321.	1.3	66
38	Nuclear imaging of the fuel assembly in ignition experiments. <i>Physics of Plasmas</i> , 2013, 20, 056320.	1.9	65
39	Indirect drive ignition at the National Ignition Facility. <i>Plasma Physics and Controlled Fusion</i> , 2017, 59, 014021.	2.1	64
40	Progress in hohlraum physics for the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	62
41	Control of ion temperature anisotropy in a helicon plasma. <i>Plasma Sources Science and Technology</i> , 1998, 7, 186-191.	3.1	61
42	Different $k\perp D$ regimes for nonlinear effects on Langmuir waves. <i>Physics of Plasmas</i> , 2006, 13, 055906.	1.9	61
43	Increased efficiency of short-pulse laser-generated proton beams from novel flat-top cone targets. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	61
44	Development of Improved Radiation Drive Environment for High Foot Implosions at the National Ignition Facility. <i>Physical Review Letters</i> , 2016, 117, 225002.	7.8	61
45	Hydrodynamic instability growth and mix experiments at the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	60
46	Measurements of an Ablator-Gas Atomic Mix in Indirectly Driven Implosions at the National Ignition Facility. <i>Physical Review Letters</i> , 2014, 112, 025002.	7.8	60
47	Hohlraum energetics scaling to 520 TW on the National Ignition Facility. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	59
48	Hot electron measurements in ignition relevant <i>Hohlraums</i> on the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2010, 81, 10D938.	1.3	58
49	Ion temperature anisotropy limitation in high beta plasmas. <i>Physics of Plasmas</i> , 2000, 7, 2157-2165.	1.9	57
50	Imaging of high-energy x-ray emission from cryogenic thermonuclear fuel implosions on the NIF. <i>Review of Scientific Instruments</i> , 2012, 83, 10E115.	1.3	57
51	Assembly of High-Areal-Density Deuterium-Tritium Fuel from Indirectly Driven Cryogenic Implosions. <i>Physical Review Letters</i> , 2012, 108, 215005.	7.8	57
52	Equation of state of CH <sub>2</sub> : First-principles molecular dynamics simulations and shock-and-release wave speed measurements. <i>Physical Review B</i> , 2012, 86, .	3.2	57
53	Observation of High Soft X-Ray Drive in Large-Scale Hohlraums at the National Ignition Facility. <i>Physical Review Letters</i> , 2011, 106, 085003.	7.8	55
54	Optimized beryllium target design for indirectly driven inertial confinement fusion experiments on the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, 022701.	1.9	55

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55	Three-wavelength scheme to optimize hohlraum coupling on the National Ignition Facility. Physical Review E, 2011, 83, 046409.	2.1	54
56	X-ray driven implosions at ignition relevant velocities on the National Ignition Facility. Physics of Plasmas, 2013, 20, .	1.9	54
57	First Liquid Layer Inertial Confinement Fusion Implosions at the National Ignition Facility. Physical Review Letters, 2016, 117, 245001.	7.8	53
58	Onset and saturation of backward stimulated Raman scattering of laser in trapping regime in three spatial dimensions. Physics of Plasmas, 2009, 16, 113101.	1.9	50
59	Trapping induced nonlinear behavior of backward stimulated Raman scattering in multi-speckled laser beams. Physics of Plasmas, 2012, 19, .	1.9	50
60	2015, 22, 056314.	1.9	49
61	The role of hot spot mix in the low-foot and high-foot implosions on the NIF. Physics of Plasmas, 2017, 24, .	1.9	49
62	Ion heating and density production in helicon sources near the lower hybrid frequency. Plasma Sources Science and Technology, 2001, 10, 284-294.	3.1	48
63	X-ray conversion efficiency in vacuum hohlraum experiments at the National Ignition Facility. Physics of Plasmas, 2012, 19, 053301.	1.9	48
64	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
65	On the importance of minimizing "coast-time" in x-ray driven inertially confined fusion implosions. Physics of Plasmas, 2017, 24, .	1.9	47
66	The Shock/Shear platform for planar radiation-hydrodynamics experiments on the National Ignition Facility. Physics of Plasmas, 2015, 22, .	1.9	45
67	Use of external magnetic fields in hohlraum plasmas to improve laser-coupling. Physics of Plasmas, 2015, 22, .	1.9	45
68	Early-Time Symmetry Tuning in the Presence of Cross-Beam Energy Transfer in ICF Experiments on the National Ignition Facility. Physical Review Letters, 2013, 111, 235001.	7.8	44
69	Parametric decay instabilities in the HELIX helicon plasma source. Physics of Plasmas, 2003, 10, 135-144.	1.9	43
70	Nonlinear backward stimulated Raman scattering from electron beam acoustic modes in the kinetic regime. Physics of Plasmas, 2006, 13, 072701.	1.9	42
71	Images of the laser entrance hole from the static x-ray imager at NIF. Review of Scientific Instruments, 2010, 81, 10E538.	1.3	42
72	Self-organized coherent bursts of stimulated Raman scattering and speckle interaction in multi-speckled laser beams. Physics of Plasmas, 2013, 20, 012702.	1.9	42

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73	Development of the CD Symcap platform to study gas-shell mix in implosions at the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	42
74	Demonstration of Scale-Invariant Rayleigh-Taylor Instability Growth in Laser-Driven Cylindrical Implosion Experiments. <i>Physical Review Letters</i> , 2020, 124, 185003.	7.8	42
75	TRIDENT high-energy-density facility experimental capabilities and diagnostics. <i>Review of Scientific Instruments</i> , 2008, 79, 10F305.	1.3	41
76	First implosion experiments with cryogenic thermonuclear fuel on the National Ignition Facility. <i>Plasma Physics and Controlled Fusion</i> , 2012, 54, 045013.	2.1	41
77	Multi-beam effects on backscatter and its saturation in experiments with conditions relevant to ignition. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	38
78	Charged-particle spectroscopy for diagnosing shock IR and strength in NIF implosions. <i>Review of Scientific Instruments</i> , 2012, 83, 10D901.	1.3	38
79	A novel particle time of flight diagnostic for measurements of shock- and compression-bang times in D3He and DT implosions at the NIF. <i>Review of Scientific Instruments</i> , 2012, 83, 10D902.	1.3	38
80	Progress in the indirect-drive National Ignition Campaign. <i>Plasma Physics and Controlled Fusion</i> , 2012, 54, 124026.	2.1	38
81	First beryllium capsule implosions on the National Ignition Facility. <i>Physics of Plasmas</i> , 2016, 23, 056310.	1.9	37
82	Ion heating in the HELIX helicon plasma source. <i>Physics of Plasmas</i> , 1999, 6, 4767-4772.	1.9	35
83	Measuring the absolute deuterium-tritium neutron yield using the magnetic recoil spectrometer at OMEGA and the NIF. <i>Review of Scientific Instruments</i> , 2012, 83, 10D912.	1.3	35
84	Robustness to hydrodynamic instabilities in indirectly driven layered capsule implosions. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	35
85	Measurement of the $\langle T \rangle + \langle T \rangle$ Neutron Spectrum Using the National Ignition Facility. <i>Physical Review Letters</i> , 2013, 111, 052501.	7.8	34
86	Development of a Big Area BackLighter for high energy density experiments. <i>Review of Scientific Instruments</i> , 2014, 85, 093501.	1.3	33
87	Symmetry tuning of a near one-dimensional 2-shock platform for code validation at the National Ignition Facility. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	33
88	The effects of convergence ratio on the implosion behavior of DT layered inertial confinement fusion capsules. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	33
89	Characterization of supersonic radiation diffusion waves. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2015, 159, 19-28.	2.3	32
90	Experimental study of energy transfer in double shell implosions. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	32

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91	Review of hydrodynamic instability experiments in inertially confined fusion implosions on National Ignition Facility. <i>Plasma Physics and Controlled Fusion</i> , 2020, 62, 014007.	2.1	31
92	Experimental demonstration of early time, hohlraum radiation symmetry tuning for indirect drive ignition experiments. <i>Physics of Plasmas</i> , 2011, 18, 092703.	1.9	30
93	Microwave interferometer for steady-state plasmas. <i>Review of Scientific Instruments</i> , 2001, 72, 1672.	1.3	29
94	Experimental Demonstration of Plasma-Drag Acceleration of a Dust Cloud to Hypervelocities. <i>Physical Review Letters</i> , 2008, 100, 155002.	7.8	28
95	NIF Ignition Campaign Target Performance and Requirements: Status May 2012. <i>Fusion Science and Technology</i> , 2013, 63, 67-75.	1.1	28
96	Plasma stopping-power measurements reveal transition from non-degenerate to degenerate plasmas. <i>Nature Physics</i> , 2020, 16, 432-437.	16.7	28
97	Slow wave ion heating in the HELIX helicon source. <i>Plasma Sources Science and Technology</i> , 2002, 11, 413-425.	3.1	27
98	Hydrodynamic instabilities in beryllium targets for the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, 092701.	1.9	27
99	Implosion performance of subscale beryllium capsules on the NIF. <i>Physics of Plasmas</i> , 2019, 26, 052707.	1.9	26
100	Late-Time Mixing Sensitivity to Initial Broadband Surface Roughness in High-Energy-Density Shear Layers. <i>Physical Review Letters</i> , 2016, 117, 225001.	7.8	25
101	Using cylindrical implosions to investigate hydrodynamic instabilities in convergent geometry. <i>Matter and Radiation at Extremes</i> , 2019, 4, 065403.	3.9	25
102	Plasma jet acceleration of dust particles to hypervelocities. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	24
103	In-flight observations of low-mode $\ell=1$ R asymmetries in NIF implosions. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	24
104	Measurement of electron temperature of imploded capsules at the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2012, 83, 10E121.	1.3	23
105	Progress toward ignition at the National Ignition Facility. <i>Plasma Physics and Controlled Fusion</i> , 2013, 55, 124015.	2.1	23
106	Using multiple secondary fusion products to evaluate fuel $\bar{r}$ , electron temperature, and mix in deuterium-filled implosions at the NIF. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	23
107	Quantifying equation-of-state and opacity errors using integrated supersonic diffusive radiation flow experiments on the National Ignition Facility. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	23
108	Conceptual design of initial opacity experiments on the national ignition facility. <i>Journal of Plasma Physics</i> , 2017, 83, .	2.1	23

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109	Ion dynamics in helicon sources. <i>Physics of Plasmas</i> , 2003, 10, 2127-2135.	1.9	22
110	Soft x-ray images of the laser entrance hole of ignition hohlraums. <i>Review of Scientific Instruments</i> , 2012, 83, 10E525.	1.3	22
111	Late-time mixing and turbulent behavior in high-energy-density shear experiments at high Atwood numbers. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	22
112	Stimulated scattering in laser driven fusion and high energy density physics experiments. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	21
113	Development of a short duration backlit pinhole for radiography on the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2010, 81, 10E536.	1.3	20
114	The effect of shock dynamics on compressibility of ignition-scale National Ignition Facility implosions. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	20
115	Beryllium capsule implosions at a case-to-capsule ratio of 3.7 on the National Ignition Facility. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	20
116	Astrophysically relevant radiation hydrodynamics experiment at the National Ignition Facility. <i>Astrophysics and Space Science</i> , 2011, 336, 207-211.	1.4	19
117	The hot hELicon eXperiment (HELIX) and the large experiment on instabilities and anisotropy (LEIA). <i>Journal of Plasma Physics</i> , 2015, 81, .	2.1	19
118	Modifying mixing and instability growth through the adjustment of initial conditions in a high-energy-density counter-propagating shear experiment on OMEGA. <i>Physics of Plasmas</i> , 2015, 22, 062306.	1.9	19
119	Uncertainties in radiation flow experiments. <i>High Energy Density Physics</i> , 2016, 18, 45-54.	1.5	19
120	Ablative stabilization of Rayleigh-Taylor instabilities resulting from a laser-driven radiative shock. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	18
121	Modeling of direct-drive cylindrical implosion experiments with an Eulerian radiation-hydrodynamics code. <i>Physics of Plasmas</i> , 2019, 26, 042701.	1.9	18
122	A mechanism for reduced compression in indirectly driven layered capsule implosions. <i>Physics of Plasmas</i> , 2022, 29, .	1.9	18
123	Tuning indirect-drive implosions using cone power balance. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	17
124	Radiative shocks produced from spherical cryogenic implosions at the National Ignition Facility. <i>Physics of Plasmas</i> , 2013, 20, 056315.	1.9	17
125	Simulations of fill tube effects on the implosion of high-foot NIF ignition capsules. <i>Journal of Physics: Conference Series</i> , 2016, 717, 012013.	0.4	17
126	Capsule implosions for continuum x-ray backlighting of opacity samples at the National Ignition Facility. <i>Physics of Plasmas</i> , 2017, 24, 063301.	1.9	17



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127	Update 2015 on Target Fabrication Requirements for NIF Layered Implosions, with Emphasis on Capsule Support and Oxygen Modulations in GDP. Fusion Science and Technology, 2016, 70, 121-126.	1.1	16
128	Shock-driven discrete vortex evolution on a high-Atwood number oblique interface. Physics of Plasmas, 2018, 25, .	1.9	16
129	Implosion shape control of high-velocity, large case-to-capsule ratio beryllium ablators at the National Ignition Facility. Physics of Plasmas, 2018, 25, 072708.	1.9	16
130	Cross-code comparison of the impact of the fill tube on high yield implosions on the National Ignition Facility. Physics of Plasmas, 2020, 27, .	1.9	16
131	Beta-dependent upper bound on ion temperature anisotropy in a laboratory plasma. Physics of Plasmas, 2000, 7, 779-783.	1.9	15
132	Variable convergence liquid layer implosions on the National Ignition Facility. Physics of Plasmas, 2018, 25, .	1.9	15
133	Hydro-scaling of direct-drive cylindrical implosions at the OMEGA and the National Ignition Facility. Physics of Plasmas, 2020, 27, 042708.	1.9	15
134	Observation of strong electromagnetic fields around laser-entrance holes of ignition-scale hohlraums in inertial-confinement fusion experiments at the National Ignition Facility. New Journal of Physics, 2013, 15, 025040.	2.9	14
135	Performance of beryllium targets with full-scale capsules in low-fill 6.72-mm hohlraums on the National Ignition Facility. Physics of Plasmas, 2017, 24, .	1.9	14
136	Gas-filled hohlraum experiments at the National Ignition Facility. Physics of Plasmas, 2006, 13, 056319.	1.9	13
137	A magnetic particle time-of-flight (MagPTOF) diagnostic for measurements of shock- and compression-bang time at the NIF (invited). Review of Scientific Instruments, 2014, 85, 11D901.	1.3	12
138	Simulations of indirectly driven gas-filled capsules at the National Ignition Facility. Physics of Plasmas, 2014, 21, .	1.9	12
139	Wetted foam liquid fuel ICF target experiments. Journal of Physics: Conference Series, 2016, 717, 012042.	0.4	12
140	Development of Indirectly Driven Shock Tube Targets for Counter-Propagating Shear-Driven Kelvin-Helmholtz Experiments on the National Ignition Facility. Fusion Science and Technology, 2016, 70, 316-323.	1.1	12
141	Progress Toward Fabrication of Machined Metal Shells for the First Double-Shell Implosions at the National Ignition Facility. Fusion Science and Technology, 2018, 73, 344-353.	1.1	12
142	Hohlraum modeling for opacity experiments on the National Ignition Facility. Physics of Plasmas, 2018, 25, .	1.9	12
143	Computational study of instability and fill tube mitigation strategies for double shell implosions. Physics of Plasmas, 2019, 26, .	1.9	12
144	Particle-in-cell studies of laser-driven hot spots and a statistical model for mesoscopic properties of Raman backscatter. European Physical Journal Special Topics, 2006, 133, 253-257.	0.2	11

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145	The first target experiments on the National Ignition Facility. <i>European Physical Journal D</i> , 2007, 44, 273-281.	1.3	11
146	Laser irradiance scaling in polar direct drive implosions on the National Ignition Facility. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	11
147	Shock-driven hydrodynamic instability of a sinusoidally perturbed, high-Atwood number, oblique interface. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	11
148	Detailed characterization of plasma wave behavior using collective Thomson scattering (invited). <i>Review of Scientific Instruments</i> , 2004, 75, 3793-3799.	1.3	10
149	Investigation of laser plasma instabilities using picosecond laser pulses. <i>Journal of Physics: Conference Series</i> , 2008, 112, 022042.	0.4	10
150	Multimode instability evolution driven by strong, high-energy-density shocks in a rarefaction-reflected geometry. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	10
151	Lasnex simulations of NIF vacuum hohlraum commissioning experiments. <i>Journal of Physics: Conference Series</i> , 2010, 244, 032057.	0.4	9
152	Iron X-ray Transmission at Temperature Near 150 eV Using the National Ignition Facility: First Measurements and Paths to Uncertainty Reduction. <i>Atoms</i> , 2018, 6, 57.	1.6	9
153	Implementation of a 1-2 keV point-projection x-ray spectrometer on the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2018, 89, 10F101.	1.3	9
154	A simple apparatus for quick qualitative analysis of CR39 nuclear track detectors. <i>Review of Scientific Instruments</i> , 2008, 79, 10E536.	1.3	8
155	NIF unconverted light and its influence on DANTE measurements. <i>Review of Scientific Instruments</i> , 2009, 80, 063104.	1.3	8
156	First hot electron measurements in near-ignition scale hohlraums on the National Ignition Facility. <i>Journal of Physics: Conference Series</i> , 2010, 244, 022074.	0.4	8
157	Hard x-ray (>100 keV) imager to measure hot electron preheat for indirectly driven capsule implosions on the NIF. <i>Review of Scientific Instruments</i> , 2012, 83, 10E508.	1.3	8
158	Recent and planned hydrodynamic instability experiments on indirect-drive implosions on the National Ignition Facility. <i>High Energy Density Physics</i> , 2020, 36, 100820.	1.5	8
159	Exploring Sensitivity of ICF Outputs to Design Parameters in Experiments Using Machine Learning. <i>IEEE Transactions on Plasma Science</i> , 2021, 49, 2238-2246.	1.3	8
160	Measuring electron heat conduction in non-uniform laser-produced plasmas using imaging Thomson scattering. <i>Journal of Instrumentation</i> , 2010, 5, P11005-P11005.	1.2	7
161	Influence of binary Coulomb collisions on nonlinear stimulated Raman backscatter in the kinetic regime. <i>Physics of Plasmas</i> , 2011, 18, 032707.	1.9	7
162	A soft x-ray transmission grating imaging-spectrometer for the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2012, 83, 10E132.	1.3	7

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163	Investigating Turbulent Mix in HEDLP Experiments. Journal of Physics: Conference Series, 2016, 688, 012018.	0.4	7
164	Designing radiation transport tests: Simulation-driven uncertainty-quantification of the COAX temperature diagnostic. High Energy Density Physics, 2020, 35, 100738.	1.5	7
165	Mitigation of stimulated Raman scattering in hohlraum plasmas. Journal of Physics: Conference Series, 2008, 112, 022030.	0.4	6
166	The Laser-Driven X-ray Big Area Backlighter (BABL): Design, Optimization, and Evolution. Journal of Physics: Conference Series, 2016, 717, 012062.	0.4	6
167	Experimental room temperature hohlraum performance study on the National Ignition Facility. Physics of Plasmas, 2016, 23, .	1.9	6
168	Using a 2-shock 1D platform at NIF to measure the effect of convergence on mix and symmetry. Physics of Plasmas, 2018, 25, 102702.	1.9	6
169	Beryllium implosions at smaller case-to-capsule ratio on NIF. High Energy Density Physics, 2020, 34, 100747.	1.5	6
170	A temperature profile diagnostic for radiation waves on OMEGA-60. High Energy Density Physics, 2021, 39, 100939.	1.5	6
171	Preparations for a European R&D roadmap for an inertial fusion demo reactor. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200005.	3.4	6
172	Deceleration-stage Rayleigh-Taylor growth in a background magnetic field studied in cylindrical and Cartesian geometries. Matter and Radiation at Extremes, 2022, 7, .	3.9	6
173	Increasing shot and data collection rates of the Shock/Shear experiment at the National Ignition Facility. Journal of Physics: Conference Series, 2016, 717, 012059.	0.4	5
174	Developing one-dimensional implosions for inertial confinement fusion science. High Power Laser Science and Engineering, 2016, 4, .	4.6	5
175	Experimental investigation of stimulated Raman and Brillouin scattering instabilities driven by two successive collinear picosecond laser pulses. Physical Review E, 2016, 93, 043209.	2.1	5
176	D <sub>2</sub> and D-T Liquid-Layer Target Shots at the National Ignition Facility. Fusion Science and Technology, 2018, 73, 305-314.	1.1	5
177	Neural network for 3D inertial confinement fusion shell reconstruction from single radiographs. Review of Scientific Instruments, 2021, 92, 033547.	1.3	5
178	Toward 3D data visualization using virtual reality tools. Review of Scientific Instruments, 2021, 92, 033528.	1.3	5
179	Identifying Entangled Physics Relationships Through Sparse Matrix Decomposition to Inform Plasma Fusion Design. IEEE Transactions on Plasma Science, 2021, 49, 2410-2419.	1.3	5
180	Short pulse laser train for laser plasma interaction experiments. Review of Scientific Instruments, 2007, 78, 083501.	1.3	4

#	ARTICLE	IF	CITATIONS
181	Developing High-Temperature Laser-Driven Half Hohlräume for High-Energy-Density Physics Experiments at the National Ignition Facility. <i>Fusion Science and Technology</i> , 2013, 63, 76-81.	1.1	4
182	DANTE as a primary temperature diagnostic for the NIF iron opacity campaign. <i>Review of Scientific Instruments</i> , 2021, 92, 033519.	1.3	4
183	High vacuum feedthrough for angular, linear, and rotary motion. <i>Review of Scientific Instruments</i> , 2002, 73, 1970-1971.	1.3	3
184	Electrostatic method to accelerate nanoshells to extreme hypervelocity. <i>Applied Physics Letters</i> , 2003, 83, 1662-1664.	3.3	3
185	Effects of ion composition on backward stimulated Raman and Brillouin scattering in a laser-driven hot spot. <i>European Physical Journal Special Topics</i> , 2006, 133, 335-337.	0.2	3
186	Using a short-pulse diffraction-limited laser beam to probe filamentation of a random phase plate smoothed beam. <i>Review of Scientific Instruments</i> , 2008, 79, 10F551.	1.3	3
187	Diagnosing implosions at the national ignition facility with X-ray spectroscopy. <i>AIP Conference Proceedings</i> , 2012, , .	0.4	3
188	Hydrodynamic instabilities and mix studies on NIF: predictions, observations, and a path forward. <i>Journal of Physics: Conference Series</i> , 2016, 688, 012090.	0.4	3
189	X-ray drive of beryllium capsule implosions at the National Ignition Facility. <i>Journal of Physics: Conference Series</i> , 2016, 717, 012058.	0.4	3
190	Development of a polar direct drive platform for mix and burn experiments on the National Ignition Facility. <i>Journal of Physics: Conference Series</i> , 2016, 688, 012075.	0.4	3
191	Hydrodynamic growth and mix experiments at National Ignition Facility. <i>Journal of Physics: Conference Series</i> , 2016, 688, 012113.	0.4	3
192	Applications and results of X-ray spectroscopy in implosion experiments on the National Ignition Facility. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	3
193	Three-dimensional signatures of self-similarity in a high-energy-density plasma shear-driven mixing layer. <i>Physics of Plasmas</i> , 2020, 27, 032701.	1.9	3
194	Single and double shell ignition targets for the national ignition facility at 527â€nm. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	3
195	Measurements of gas filled halfraum energetics at the national ignition facility using a single quad. <i>European Physical Journal Special Topics</i> , 2006, 133, 919-923.	0.2	3
196	Kinetic simulations of stimulated Raman and Brillouin scattering of trident short-pulse laser in a single-hot-spot. <i>Journal of Physics: Conference Series</i> , 2008, 112, 022033.	0.4	2
197	4Ï‰ Thomson scattering probe for high-density plasma characterization at Titan. <i>Review of Scientific Instruments</i> , 2010, 81, 10D524.	1.3	2
198	Hohlraum designs for high velocity implosions on NIF. <i>EPJ Web of Conferences</i> , 2013, 59, 02002.	0.3	2

#	ARTICLE	IF	CITATIONS
199	Beryllium ignition target design for indirect drive NIF experiments. Journal of Physics: Conference Series, 2016, 688, 012110.	0.4	2
200	Control of Be capsule low mode implosions symmetry at the National Ignition Facility. Journal of Physics: Conference Series, 2016, 717, 012033.	0.4	2
201	Atomic physics modeling of transmission spectra of Sc-doped aerogel foams to support OMEGA experiments. Review of Scientific Instruments, 2016, 87, 11E337.	1.3	2
202	Use of <sup>41</sup> Ar production to measure ablator areal density in NIF beryllium implosions. Physics of Plasmas, 2017, 24, .	1.9	2
203	Update 2017 on Target Fabrication Requirements for High-Performance NIF Implosion Experiments. Fusion Science and Technology, 2018, 73, 83-88.	1.1	2
204	Evidence for trapping-induced nonlinear frequency shifts in Langmuir waves driven via stimulated Raman scattering. Physics of Plasmas, 2021, 28, 092103.	1.9	2
205	10.1063/1.3491035.1. , 2010, , .		2
206	An annular Penning trap for studies of plasma confinement. , 1999, , .		1
207	A split imaging spectrometer for temporally and spatially resolved titanium absorption spectroscopy. Review of Scientific Instruments, 2014, 85, 11D601.	1.3	1
208	Using VISAR to assess the <i>M</i>-band isotropy in hohlraums. Review of Scientific Instruments, 2016, 87, 11D621.	1.3	1
209	The first experiments on the national ignition facility. European Physical Journal Special Topics, 2006, 133, 43-45.	0.2	1
210	Experimental observation of the trapped particle pinch effect. Physical Review E, 2001, 63, 056406.	2.1	0
211	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
212	Investigation of electron heat conduction in laser produced exponential plasma density profiles. , 2009, , .		0
213	PW performance ion acceleration from the LANL 200TW Trident laser facility. , 2009, , .		0
214	Proton, electron and K-alpha emission from micro-scale copper cone targets. , 2009, , .		0
215	INERTIAL CONFINEMENT FUSION RESEARCH AT LOS ALAMOS NATIONAL LABORATORY. , 2009, , .		0
216	A Simple Model of Hohlraum Power Balance and Mitigation of SRS. Journal of Physics: Conference Series, 2016, 688, 012002.	0.4	0

#	ARTICLE	IF	CITATIONS
217	Temporal evolution of the two-shock implosion on the National Ignition Facility. , 2016, , .		0
218	Assessing plasma filling in NIF cluster geometry. European Physical Journal Special Topics, 2006, 133, 309-311.	0.2	0