

D H Froula

List of Publications by Year in descending order

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249
papers

7,119
citations

57631

44
h-index

95083

68
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253
all docs

253
docs citations

253
times ranked

2680
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-Guided Laser Wakefield Acceleration beyond 1ÂGeV Using Ionization-Induced Injection. Physical Review Letters, 2010, 105, 105003.	2.9	338
2	Observation of magnetic field generation via the Weibel instability in interpenetrating plasma flows. Nature Physics, 2015, 11, 173-176.	6.5	236
3	Demonstration of a Narrow Energy Spread, $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> < mml:mo > \hat{1}^4 < /mml:mo > < mml:mn > 0.5 < /mml:mn > < mml:mtext > \hat{\epsilon} \% < /mml:mtext > < mml:mtext > \hat{\epsilon} \% < /mml:mtext >$ Beam from a Two-Stage Laser Wakefield Accelerator. Physical Review Letters, 2011, 107, 045001.	2.9	213
4	Spatiotemporal control of laser intensity. Nature Photonics, 2018, 12, 262-265.	15.6	149
5	Improving the hot-spot pressure and demonstrating ignition hydrodynamic equivalence in cryogenic deuteriumâ€tritium implosions on OMEGA. Physics of Plasmas, 2014, 21, .	0.7	139
6	Crossed-beam energy transfer in direct-drive implosions. Physics of Plasmas, 2012, 19, .	0.7	133
7	Measurements of the Critical Power for Self-Injection of Electrons in a Laser Wakefield Accelerator. Physical Review Letters, 2009, 103, 215006.	2.9	128
8	Self-organized electromagnetic field structures in laser-produced counter-streaming plasmas. Nature Physics, 2012, 8, 809-812.	6.5	118
9	Laboratory evidence of dynamo amplification of magnetic fields in a turbulent plasma. Nature Communications, 2018, 9, 591.	5.8	105
10	Tripled yield in direct-drive laser fusion through statistical modelling. Nature, 2019, 565, 581-586.	13.7	103
11	Characterizing counter-streaming interpenetrating plasmas relevant to astrophysical collisionless shocks. Physics of Plasmas, 2012, 19, .	0.7	101
12	Effects of ion trapping on crossed-laser-beam stimulated Brillouin scattering. Physics of Plasmas, 2004, 11, 231-244.	0.7	87
13	Quenching of the Nonlocal Electron Heat Transport by Large External Magnetic Fields in a Laser-Produced Plasma Measured with Imaging Thomson Scattering. Physical Review Letters, 2007, 98, 135001.	2.9	84
14	Dephasingless Laser Wakefield Acceleration. Physical Review Letters, 2020, 124, 134802.	2.9	82
15	Multiple-beam laserâ€plasma interactions in inertial confinement fusion. Physics of Plasmas, 2014, 21, .	0.7	79
16	Measurements of Nonlinear Growth of Ion-Acoustic Waves in Two-Ion-Species Plasmas with Thomson Scattering. Physical Review Letters, 2002, 88, 105003.	2.9	78
17	Experiments and multiscale simulations of laser propagation through ignition-scale plasmas. Nature Physics, 2007, 3, 716-719.	6.5	72
18	Demonstration of Fuel Hot-Spot Pressure in Excess of 50ÂGbar for Direct-Drive, Layered Deuterium-Tritium Implosions on OMEGA. Physical Review Letters, 2016, 117, 025001.	2.9	72

#	ARTICLE	IF	CITATIONS
19	X-ray scattering from solid density plasmas. <i>Physics of Plasmas</i> , 2003, 10, 2433-2441.	0.7	69
20	Three-dimensional modeling of direct-drive cryogenic implosions on OMEGA. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	69
21	Effect of Nonlocal Transport on Heat-Wave Propagation. <i>Physical Review Letters</i> , 2004, 92, 205006.	2.9	68
22	Increasing Hydrodynamic Efficiency by Reducing Cross-Beam Energy Transfer in Direct-Drive-Implosion Experiments. <i>Physical Review Letters</i> , 2012, 108, 125003.	2.9	67
23	Ideal Laser-Beam Propagation through High-Temperature Ignition Hohlraum Plasmas. <i>Physical Review Letters</i> , 2007, 98, 085001.	2.9	59
24	Saturation of the Two-Plasmon Decay Instability in Long-Scale-Length Plasmas Relevant to Direct-Drive Inertial Confinement Fusion. <i>Physical Review Letters</i> , 2012, 108, 165003.	2.9	58
25	Experimental Validation of the Two-Plasmon-Decay Common-Wave Process. <i>Physical Review Letters</i> , 2012, 109, 155007.	2.9	57
26	Benchmark Measurements of the Ionization Balance of Non-Local-Thermodynamic-Equilibrium Gold Plasmas. <i>Physical Review Letters</i> , 2007, 99, 195001.	2.9	56
27	Precision Mapping of Laser-Driven Magnetic Fields and Their Evolution in High-Energy-Density Plasmas. <i>Physical Review Letters</i> , 2015, 114, 215003.	2.9	54
28	Thomson-scattering measurements of high electron temperature hohlraum plasmas for laser-plasma interaction studies. <i>Physics of Plasmas</i> , 2006, 13, 052704.	0.7	53
29		0.7	52
30	Raman Amplification with a Flying Focus. <i>Physical Review Letters</i> , 2018, 120, 024801.	2.9	52
31	Ray-based calculations of backscatter in laser fusion targets. <i>Physics of Plasmas</i> , 2008, 15, .	0.7	51
32	Collisionless shock experiments with lasers and observation of Weibel instabilities. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	51
33	Thresholds of absolute instabilities driven by a broadband laser. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	51
34	National direct-drive program on OMEGA and the National Ignition Facility. <i>Plasma Physics and Controlled Fusion</i> , 2017, 59, 014008.	0.9	50
35	Experimental basis for laser-plasma interactions in ignition hohlraums at the National Ignition Facility. <i>Physics of Plasmas</i> , 2010, 17, .	0.7	49
36	Transition from Collisional to Collisionless Regimes in Interpenetrating Plasma Flows on the National Ignition Facility. <i>Physical Review Letters</i> , 2017, 118, 185003.	2.9	49

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37	Improving cryogenic deuterium-tritium implosion performance on OMEGA. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	48
38	Thomson-scattering techniques to diagnose local electron and ion temperatures, density, and plasma wave amplitudes in laser produced plasmas (invited). <i>Review of Scientific Instruments</i> , 2006, 77, 10E522.	0.6	47
39	Measured hot-electron intensity thresholds quantified by a two-plasmon-decay resonant common-wave gain in various experimental configurations. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	47
40	Fast-electron generation in long-scale-length plasmas. <i>Physics of Plasmas</i> , 2012, 19, .	0.7	46
41	Scaled laboratory experiments explain the kink behaviour of the Crab Nebula jet. <i>Nature Communications</i> , 2016, 7, 13081.	5.8	46
42	Observation of the Parametric Two-Ion Decay Instability with Thomson Scattering. <i>Physical Review Letters</i> , 2004, 93, 045004.	2.9	45
43	Radiation-Driven Hydrodynamics of High-Z Hohlraums on the National Ignition Facility. <i>Physical Review Letters</i> , 2005, 95, 215004.	2.9	45
44	Use of external magnetic fields in hohlraum plasmas to improve laser-coupling. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	45
45	Suppression of Stimulated Brillouin Scattering by Increased Landau Damping in Multiple-Ion-Species Hohlraum Plasmas. <i>Physical Review Letters</i> , 2008, 100, 105001.	2.9	43
46	Lorentz Mapping of Magnetic Fields in Hot Dense Plasmas. <i>Physical Review Letters</i> , 2009, 103, 085001.	2.9	43
47	Magnetic Field Generation by the Rayleigh-Taylor Instability in Laser-Driven Planar Plastic Targets. <i>Physical Review Letters</i> , 2012, 109, 115001.	2.9	42
48	Photon Acceleration in a Flying Focus. <i>Physical Review Letters</i> , 2019, 123, 124801.	2.9	42
49	Modeling the nonlinear saturation of stimulated Brillouin backscatter in laser heated plasmas. <i>Physics of Plasmas</i> , 2003, 10, 1822-1828.	0.7	41
50	Observation of Relativistic Effects in Collective Thomson Scattering. <i>Physical Review Letters</i> , 2010, 104, 105001.	2.9	41
51	Plasma characterization using ultraviolet Thomson scattering from ion-acoustic and electron plasma waves (invited). <i>Review of Scientific Instruments</i> , 2016, 87, 11E401.	0.6	41
52	A wave-based model for cross-beam energy transfer in direct-drive inertial confinement fusion. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	40
53	Full-aperture backscatter measurements on the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2004, 75, 4168-4170.	0.6	39
54	Ionization waves of arbitrary velocity driven by a flying focus. <i>Physical Review A</i> , 2018, 97, .	1.0	39

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55	Ionization Waves of Arbitrary Velocity. <i>Physical Review Letters</i> , 2018, 120, 225001.	2.9	39
56	Implementation of a high energy 41% probe beam on the Omega laser. <i>Review of Scientific Instruments</i> , 2004, 75, 3906-3908.	0.6	38
57	Understanding the effects of laser imprint on plastic-target implosions on OMEGA. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	38
58	Impact of the Langdon effect on crossed-beam energy transfer. <i>Nature Physics</i> , 2020, 16, 181-185.	6.5	37
59	High magnetic field generation for laser-plasma experiments. <i>Review of Scientific Instruments</i> , 2006, 77, 114703.	0.6	36
60	Thomson-scattering measurements in the collective and noncollective regimes in laser produced plasmas (invited). <i>Review of Scientific Instruments</i> , 2010, 81, 10D523.	0.6	36
61	A reflective optical transport system for ultraviolet Thomson scattering from electron plasma waves on OMEGA. <i>Review of Scientific Instruments</i> , 2012, 83, 10E349.	0.6	36
62	Shell trajectory measurements from direct-drive implosion experiments. <i>Review of Scientific Instruments</i> , 2012, 83, 10E530.	0.6	36
63	Visualizing electromagnetic fields in laser-produced counter-streaming plasma experiments for collisionless shock laboratory astrophysics. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	36
64	Direct drive: Simulations and results from the National Ignition Facility. <i>Physics of Plasmas</i> , 2016, 23, 056305.	0.7	36
65	Suppressing Two-Plasmon Decay with Laser Frequency Detuning. <i>Physical Review Letters</i> , 2018, 120, 135005.	2.9	36
66	Observation of Nonlocal Heat Flux Using Thomson Scattering. <i>Physical Review Letters</i> , 2018, 121, 125001.	2.9	36
67	Mitigation of cross-beam energy transfer: Implication of two-state focal zooming on OMEGA. <i>Physics of Plasmas</i> , 2013, 20, 082704.	0.7	35
68	Structure and Dynamics of Colliding Plasma Jets. <i>Physical Review Letters</i> , 2013, 111, 235003.	2.9	35
69	Hydrodynamic simulations of long-scale-length two-plasmon decay experiments at the Omega Laser Facility. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	35
70	Measurement of Radiative Shock Properties by X-Ray Thomson Scattering. <i>Physical Review Letters</i> , 2012, 108, 145001.	2.9	34
71	Picosecond time-resolved measurements of dense plasma line shifts. <i>Physical Review E</i> , 2017, 95, 063204.	0.8	34
72	Demonstration of the Improved Rocket Efficiency in Direct-Drive Implosions Using Different Ablator Materials. <i>Physical Review Letters</i> , 2013, 111, 245005.	2.9	33

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91	Laboratory observation of secondary shock formation ahead of a strongly radiative blast wave. <i>Physics of Plasmas</i> , 2006, 13, 022105.	0.7	27
92	Green Frequency-Doubled Laser-Beam Propagation in High-Temperature Hohlraum Plasmas. <i>Physical Review Letters</i> , 2008, 100, 045002.	2.9	27
93	Direct Measurements of an Increased Threshold for Stimulated Brillouin Scattering with Polarization Smoothing in Ignition Hohlraum Plasmas. <i>Physical Review Letters</i> , 2008, 101, 115002.	2.9	27
94	Two-Plasmon Decay Mitigation in Direct-Drive Inertial-Confinement-Fusion Experiments Using Multilayer Targets. <i>Physical Review Letters</i> , 2016, 116, 155002.	2.9	27
95	Hot-electron generation at direct-drive ignition-relevant plasma conditions at the National Ignition Facility. <i>Physics of Plasmas</i> , 2020, 27, .	0.7	27
96	Intensity Limits for Propagation of 0.527- μm Laser Beams through Large-Scale-Length Plasmas for Inertial Confinement Fusion. <i>Physical Review Letters</i> , 2005, 94, 085005.	2.9	26
97	Plasma filling in reduced-scale hohlraums irradiated with multiple beam cones. <i>Physics of Plasmas</i> , 2006, 13, 112701.	0.7	26
98	Energetics of multiple-ion species hohlraum plasmas. <i>Physics of Plasmas</i> , 2008, 15, .	0.7	26
99	Measurements of Non-Maxwellian Electron Distribution Functions and Their Effect on Laser Heating. <i>Physical Review Letters</i> , 2021, 127, 015001.	2.9	26
100	Laser beam propagation through inertial confinement fusion hohlraum plasmas. <i>Physics of Plasmas</i> , 2007, 14, 055705.	0.7	25
101	Direct Observation of the Saturation of Stimulated Brillouin Scattering by Ion-Trapping-Induced Frequency Shifts. <i>Physical Review Letters</i> , 2004, 93, 035001.	2.9	24
102	Role of hydrodynamics simulations in laser-plasma interaction predictive capability. <i>Physics of Plasmas</i> , 2007, 14, 056304.	0.7	24
103	Simulations and measurements of hot-electron generation driven by the multibeam two-plasmon-decay instability. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	24
104	Laser coupling to reduced-scale hohlraum targets at the Early Light Program of the National Ignition Facility. <i>Physics of Plasmas</i> , 2005, 12, 056305.	0.7	23
105	Highly Resolved Measurements of a Developing Strong Collisional Plasma Shock. <i>Physical Review Letters</i> , 2018, 120, 095001.	2.9	23
106	Flying focus: Spatial and temporal control of intensity for laser-based applications. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	23
107	Characterization of single and colliding laser-produced plasma bubbles using Thomson scattering and proton radiography. <i>Physical Review E</i> , 2012, 86, 056407.	0.8	22
108	StarDriver: A Flexible Laser Driver for Inertial Confinement Fusion and High Energy Density Physics. <i>Journal of Fusion Energy</i> , 2014, 33, 476-488.	0.5	22

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109	Anomalous Absorption by the Two-Plasmon Decay Instability. <i>Physical Review Letters</i> , 2020, 124, 185001.	2.9	22
110	Towards the optimisation of direct laser acceleration. <i>New Journal of Physics</i> , 2021, 23, 023031.	1.2	22
111	Polarization smoothing on the national ignition facility. <i>European Physical Journal Special Topics</i> , 2006, 133, 717-720.	0.2	21
112	Fully relativistic form factor for Thomson scattering. <i>Physical Review E</i> , 2010, 81, 036411.	0.8	21
113	Experimental demonstration of laser imprint reduction using underdense foams. <i>Physics of Plasmas</i> , 2016, 23, 042701.	0.7	21
114	Direct observation of the two-plasmon-decay common plasma wave using ultraviolet Thomson scattering. <i>Physical Review E</i> , 2015, 91, 031104.	0.8	20
115	Full-wave and ray-based modeling of cross-beam energy transfer between laser beams with distributed phase plates and polarization smoothing. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	20
116	LPSE: A 3-D wave-based model of cross-beam energy transfer in laser-irradiated plasmas. <i>Journal of Computational Physics</i> , 2019, 399, 108916.	1.9	20
117	Direct-drive laser fusion: status, plans and future. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2021, 379, 20200011.	1.6	20
118	Time-resolved turbulent dynamo in a laser plasma. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	20
119	Three-dimensional modeling of laser-plasma interaction: Benchmarking our predictive modeling tools versus experiments. <i>Physics of Plasmas</i> , 2008, 15, 056313.	0.7	19
120	Isolating and quantifying cross-beam energy transfer in direct-drive implosions on OMEGA and the National Ignition Facility. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	19
121	Simulated performance of the optical Thomson scattering diagnostic designed for the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2016, 87, 11E510.	0.6	19
122	Resonance absorption of a broadband laser pulse. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	19
123	Evolution of the Electron Distribution Function in the Presence of Inverse Bremsstrahlung Heating and Collisional Ionization. <i>Physical Review Letters</i> , 2020, 124, 025001.	2.9	19
124	Cross-Beam Energy Transfer Saturation by Ion Heating. <i>Physical Review Letters</i> , 2021, 126, 075002.	2.9	19
125	Observation of ion heating by stimulated-Brillouin-scattering-driven ion-acoustic waves using Thomson scattering. <i>Physics of Plasmas</i> , 2002, 9, 4709-4718.	0.7	18
126	First laser-plasma interaction and hohlraum experiments on the National Ignition Facility. <i>Plasma Physics and Controlled Fusion</i> , 2005, 47, B405-B417.	0.9	18

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127	Progress in indirect and direct-drive planar experiments on hydrodynamic instabilities at the ablation front. <i>Physics of Plasmas</i> , 2014, 21, 122702.	0.7	18
128	Supersonic gas-jet characterization with interferometry and Thomson scattering on the OMEGA Laser System. <i>Review of Scientific Instruments</i> , 2018, 89, 10C103.	0.6	18
129	Vacuum acceleration of electrons in a dynamic laser pulse. <i>Physical Review E</i> , 2020, 102, 043207.	0.8	18
130	Nonlinear spatiotemporal control of laser intensity. <i>Optics Express</i> , 2020, 28, 38516.	1.7	18
131	Full aperture backscatter station measurement system on the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2004, 75, 4177-4179.	0.6	17
132	Magnetically controlled plasma waveguide for laser wakefield acceleration. <i>Plasma Physics and Controlled Fusion</i> , 2009, 51, 024009.	0.9	17
133	Crossed-beam energy transfer: polarization effects and evidence of saturation. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 054017.	0.9	17
134	Study of a magnetically driven reconnection platform using ultrafast proton radiography. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	17
135	Microcoulomb ($0.7 \hat{A} \pm \frac{0.4}{0.2} \hat{A} \hat{C}$) laser plasma accelerator on OMEGA EP. <i>Scientific Reports</i> , 2021, 11, 7498.	1.6	17
136	Spatiotemporal control of laser intensity through cross-phase modulation. <i>Optics Express</i> , 2022, 30, 9878.	1.7	17
137	Measurement of the shell decompression in direct-drive inertial-confinement-fusion implosions. <i>Physical Review E</i> , 2017, 95, 051202.	0.8	16
138	Ray-based modeling of cross-beam energy transfer at caustics. <i>Physical Review E</i> , 2018, 98, .	0.8	16
139	Nonlinear Thomson scattering with ponderomotive control. <i>Physical Review E</i> , 2022, 105, .	0.8	16
140	Measurements of hot-electron temperature in laser-irradiated plasmas. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	15
141	Plasma Density Measurements of the Inner Shell Release. <i>Physical Review Letters</i> , 2019, 123, 235001.	2.9	15
142	Direct Observation of Stimulated-Brillouin-Scattering Detuning by a Velocity Gradient. <i>Physical Review Letters</i> , 2003, 90, 155003.	2.9	14
143	Optical diagnostic suite (schlieren, interferometry, and grid image refractometry) on OMEGA EP using a 10-ps, 263-nm probe beam. <i>Review of Scientific Instruments</i> , 2012, 83, 10E523.	0.6	14
144	Beyond the gain exponent: Effect of damping, scale length, and speckle length on stimulated scatter. <i>Physical Review E</i> , 2015, 91, 031103.	0.8	14

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145	Mitigation of hot electrons from laser-plasma instabilities in high-Z, highly ionized plasmas. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	14
146	Experimental signatures of direct-laser-acceleration-assisted laser wakefield acceleration. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 044012.	0.9	14
147	Impact of non-Maxwellian electron velocity distribution functions on inferred plasma parameters in collective Thomson scattering. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	14
148	Suppressing the enhancement of stimulated Raman scattering in inhomogeneous plasmas by tuning the modulation frequency of a broadband laser. <i>Physics of Plasmas</i> , 2021, 28, .	0.7	14
149	Measurement and control of large diameter ionization waves of arbitrary velocity. <i>Optics Express</i> , 2019, 27, 31978.	1.7	14
150	31% transmitted beam diagnostic at the Omega Laser Facility. <i>Review of Scientific Instruments</i> , 2006, 77, 10E507.	0.6	13
151	Pushing the Limits of Plasma Length in Inertial-Fusion Laser-Plasma Interaction Experiments. <i>Physical Review Letters</i> , 2008, 100, 015002.	2.9	13
152	Optimization of plasma amplifiers. <i>Physical Review E</i> , 2017, 95, 053211.	0.8	13
153	Measuring heat flux from collective Thomson scattering with non-Maxwellian distribution functions. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	13
154	A pulsed-laser calibration system for the laser backscatter diagnostics at the Omega laser. <i>Review of Scientific Instruments</i> , 2008, 79, 10F548.	0.6	12
155	Measurements of the Conduction-Zone Length and Mass Ablation Rate in Cryogenic Direct-Drive Implosions on OMEGA. <i>Physical Review Letters</i> , 2015, 114, 155002.	2.9	12
156	The National Direct-Drive Program: OMEGA to the National Ignition Facility. <i>Fusion Science and Technology</i> , 2018, 73, 89-97.	0.6	12
157	Picosecond Thermodynamics in Underdense Plasmas Measured with Thomson Scattering. <i>Physical Review Letters</i> , 2019, 122, 155001.	2.9	12
158	Mega-Gauss Plasma Jet Creation Using a Ring of Laser Beams. <i>Astrophysical Journal Letters</i> , 2019, 873, L11.	3.0	12
159	Flying focus and its application to plasma-based laser amplifiers. <i>Plasma Physics and Controlled Fusion</i> , 2019, 61, 014022.	0.9	12
160	Laser-driven collisionless shock acceleration of ions from near-critical plasmas. <i>Physics of Plasmas</i> , 2020, 27, .	0.7	12
161	Calibration of initial measurements from the full aperture backscatter system on the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2004, 75, 4174-4176.	0.6	11
162	Thomson scattering from a shock front. <i>Review of Scientific Instruments</i> , 2006, 77, 10E504.	0.6	11

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163	The first target experiments on the National Ignition Facility. <i>European Physical Journal D</i> , 2007, 44, 273-281.	0.6	11
164	Ultraviolet Thomson scattering measurements of the electron and ion features with an energetic 263 nm probe. <i>Journal of Instrumentation</i> , 2011, 6, P08004-P08004.	0.5	11
165	Laboratory astrophysical collisionless shock experiments on Omega and NIF. <i>Journal of Physics: Conference Series</i> , 2016, 688, 012084.	0.3	11
166	The preliminary design of the optical Thomson scattering diagnostic for the National Ignition Facility. <i>Journal of Physics: Conference Series</i> , 2016, 717, 012089.	0.3	11
167	Subpercent-Scale Control of 3D Low Modes of Targets Imploded in Direct-Drive Configuration on OMEGA. <i>Physical Review Letters</i> , 2018, 120, 125001.	2.9	11
168	Nonuniform Absorption and Scattered Light in Direct-Drive Implosions Driven by Polarization Smoothing. <i>Physical Review Letters</i> , 2021, 127, 075001.	2.9	11
169	Advanced laser development and plasma-physics studies on the multiterawatt laser. <i>Applied Optics</i> , 2021, 60, 11104.	0.9	11
170	Strong suppression of heat conduction in a laboratory replica of galaxy-cluster turbulent plasmas. <i>Science Advances</i> , 2022, 8, eabj6799.	4.7	11
171	Laboratory Simulations of Supernova Shockwave Propagation. <i>Astrophysics and Space Science</i> , 2005, 298, 61-67.	0.5	10
172	Three-Dimensional Modeling of Stimulated Brillouin Scattering in Ignition-Scale Experiments. <i>Physical Review Letters</i> , 2008, 100, 255001.	2.9	10
173	Total energy loss to fast ablator-ions and target capacitance of direct-drive implosions on OMEGA. <i>Applied Physics Letters</i> , 2012, 101, 114102.	1.5	10
174	Channeling of multikilojoule high-intensity laser beams in an inhomogeneous plasma. <i>Physical Review E</i> , 2015, 91, 051101.	0.8	10
175	A pulse-front-tilt-compensated streaked optical spectrometer with high throughput and picosecond time resolution. <i>Review of Scientific Instruments</i> , 2016, 87, 11E535.	0.6	10
176	Mitigation of self-focusing in Thomson scattering experiments. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	10
177	Numerical simulation of magnetized jet creation using a hollow ring of laser beams. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	10
178	Impact of spatiotemporal smoothing on the two-plasmon decay instability. <i>Physics of Plasmas</i> , 2020, 27, .	0.7	10
179	Multibeam absolute stimulated Raman scattering and two-plasmon decay. <i>Physical Review E</i> , 2020, 101, 043214.	0.8	10
180	Statistical analysis of non-Maxwellian electron distribution functions measured with angularly resolved Thomson scattering. <i>Physics of Plasmas</i> , 2021, 28, .	0.7	10

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181	Optical shock-enhanced self-photon acceleration. <i>Physical Review A</i> , 2021, 104, .	1.0	10
182	Implosion dynamics in direct-drive experiments. <i>Plasma Physics and Controlled Fusion</i> , 2015, 57, 014023.	0.9	9
183	Time-resolved K_{α} spectroscopy measurements of hot-electron equilibration dynamics in thin-foil solid targets: collisional and collective effects. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015, 48, 224001.	0.6	9
184	Channel optimization of high-intensity laser beams in millimeter-scale plasmas. <i>Physical Review E</i> , 2018, 97, 043208.	0.8	9
185	Implementation of a Wollaston interferometry diagnostic on OMEGA EP. <i>Review of Scientific Instruments</i> , 2018, 89, 10B107.	0.6	9
186	Novel Hot-Spot Ignition Designs for Inertial Confinement Fusion with Liquid-Deuterium-Tritium Spheres. <i>Physical Review Letters</i> , 2020, 125, 065001.	2.9	9
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