Johan A Frenje

List of Publications by Year
in descending order

254 papers	9,935 citations	24978 57 h-index	56606 83 g-index
260 all docs	260 docs citations	260 times ranked	2771 citing authors

#	Article	IF	Citations
1	Design of inertial fusion implosions reaching the burning plasma regime. Nature Physics, 2022, 18, 251-258.	6.5	87
2	Enhanced laser-energy coupling with small-spot distributed phase plates (SG5-650) in OMEGA DT cryogenic target implosions. Physics of Plasmas, 2022, 29, .	0.7	9
3	Burning plasma achieved in inertial fusion. Nature, 2022, 601, 542-548.	13.7	233
4	Design of the ion-optics for the MRSt neutron spectrometer at the National Ignition Facility (NIF). Review of Scientific Instruments, 2022, 93, 033505.	0.6	6
5	Response of CR-39 nuclear track detectors to protons with non-normal incidence. Review of Scientific Instruments, 2021, 92, 013504.	0.6	4
6	Scaling of laser-driven electron and proton acceleration as a function of laser pulse duration, energy, and intensity in the multi-picosecond regime. Physics of Plasmas, 2021, 28, .	0.7	18
7	First observation of increased DT yield over prediction due to addition of hydrogen. Physics of Plasmas, 2021, 28, 012707.	0.7	4
8	A second order yield-temperature relation for accurate inference of burn-averaged quantities in multi-species plasmas. Physics of Plasmas, 2021, 28, 022701.	0.7	3
9	A multi-channel x-ray temporal diagnostic for measurement of time-resolved electron temperature in cryogenic deuteriumâ€“tritium implosions at OMEGA. Review of Scientific Instruments, 2021, 92, 023507.	0.6	3
10	Using millimeter-sized carbonâ€“deuterium foils for high-precision deuteriumâ€“tritium neutron spectrum measurements in direct-drive inertial confinement fusion at the OMEGA laser facility. Review of Scientific Instruments, 2021, 92, 023503.	0.6	2
11	Reconstructing 3D asymmetries in laser-direct-drive implosions on OMEGA. Review of Scientific Instruments, 2021, 92, 033529.	0.6	11
12	Top-level physics requirements and simulated performance of the MRSt on the National Ignition Facility. Review of Scientific Instruments, 2021, 92, 033514.	0.6	8
13	An x-ray penumbral imager for measurements of electronâ€“temperature profiles in inertial confinement fusion implosions at OMEGA. Review of Scientific Instruments, 2021, 92, 043548.	0.6	10
14	Three dimensional low-mode areal-density non-uniformities in indirect-drive implosions at the National Ignition Facility. Physics of Plasmas, 2021, 28, .	0.7	12
15	Yield degradation due to laser drive asymmetry in D3He backlit proton radiography experiments at OMEGA. Review of Scientific Instruments, 2021, 92, 043551.	0.6	4
16	A new tri-particle backlighter for high-energy-density plasmas (invited). Review of Scientific Instruments, 2021, 92, 063524.	0.6	6
17	Reaching 30% energy coupling efficiency for a high-density-carbon capsule in a gold rugby hohlraum on NIF. Nuclear Fusion, 2021, 61, 086028.	1.6	4
18	Thermal decoupling of deuterium and tritium during the inertial confinement fusion shock-convergence phase. Physical Review E, 2021, 104, L013201.	0.8	9

#	Article	IF	Citations
19	Extension of charged-particle spectrometer capabilities for diagnosing implosions on OMEGA, Z, and the NIF. Review of Scientific Instruments, 2021, 92, 083506.	0.6	4
20	Nuclear diagnostics for Inertial Confinement Fusion (ICF) plasmas. Plasma Physics and Controlled Fusion, 2020, 62, 023001.	0.9	31
21	CR-39 nuclear track detector response to inertial confinement fusion relevant ions. Review of Scientific Instruments, 2020, 91, 053502.	0.6	10
22	The conceptual design of 1-ps time resolution neutron detector for fusion reaction history measurement at OMEGA and the National Ignition Facility. Review of Scientific Instruments, 2020, 91, 063304.	0.6	7
23	A neutron recoil-spectrometer for measuring yield and determining liner areal densities at the Z facility. Review of Scientific Instruments, 2020, 91, 073501.	0.6	5
24	Impact of stalk on directly driven inertial confinement fusion implosions. Physics of Plasmas, 2020, 27, 032704.	0.7	15
25	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi mathvariant="normal">H</mml:mi><mml:mprescripts /><mml:none /><mml:mn>2</mml:mn></mml:mmultiscripts><mml:mo>(</mml:mo><mml:mi>p</mml:mi><mml:mo>,</mml:mo><mml:mi>Î³</mml:mi><mml:mo>)</mml:mo><mml:mmultiscripts><mml:mi mathvariant="normal">He</mml:mi><mml:mprescripts /><mml:none /><mml:mn>3</mml:mn></mml:mmultiscripts></mml:mrow></mml:math> cross section measurement using high-energy-density plasmas. Physical Review C, 2020, 101, .	1.1	11
26	Collisionless Shocks Driven by Supersonic Plasma Flows with Self-Generated Magnetic Fields. Physical Review Letters, 2019, 123, 055002.	2.9	26
27	Probing ion species separation and ion thermal decoupling in shock-driven implosions using multiple nuclear reaction histories. Physics of Plasmas, 2019, 26, 072703.	0.7	5
28	Tripled yield in direct-drive laser fusion through statistical modelling. Nature, 2019, 565, 581-586.	13.7	103
29	Impact of imposed mode 2 laser drive asymmetry on inertial confinement fusion implosions. Physics of Plasmas, 2019, 26, .	0.7	15
30	Observations of Multiple Nuclear Reaction Histories and Fuel-Ion Species Dynamics in Shock-Driven Inertial Confinement Fusion Implosions. Physical Review Letters, 2019, 122, 035001.	2.9	15
31	Response of a lead-free borosilicate-glass microchannel plate to 14-MeV neutrons and Î³-rays. Review of Scientific Instruments, 2019, 90, 103306.	0.6	3
32	Modified parameterization of the Li-Petrasso charged-particle stopping power theory. Physics of Plasmas, 2019, 26, .	0.7	10
33	A 3D dynamic model to assess the impacts of low-mode asymmetry, aneurysms and mix-induced radiative loss on capsule performance across inertial confinement fusion platforms. Nuclear Fusion, 2019, 59, 032009.	1.6	40
34	Experimental Validation of Low- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Z</mml:mi></mml:math> Ion-Stopping Formalisms around the Bragg Peak in High-Energy-Density Plasmas. Physical Review Letters, 2019, 122, 015002.	2.9	32
35	The National Direct-Drive Program: OMEGA to the National Ignition Facility. Fusion Science and Technology, 2018, 73, 89-97.	0.6	12
36	Dynamic high energy density plasma environments at the National Ignition Facility for nuclear science research. Journal of Physics G: Nuclear and Particle Physics, 2018, 45, 033003.	1.4	47

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37	The high velocity, high adiabat, â€œBigfootâ€•campaign and tests of indirect-drive implosion scaling. Physics of Plasmas, 2018, 25, .	0.7	90
38	Optimization of a high-yield, low-areal-density fusion product source at the National Ignition Facility with applications in nucleosynthesis experiments. Physics of Plasmas, 2018, 25, .	0.7	10
39	Impact of asymmetries on fuel performance in inertial confinement fusion. Physical Review E, 2018, 98, .	0.8	16
40	One dimensional imager of neutrons on the Z machine. Review of Scientific Instruments, 2018, 89, 10I132.	0.6	12
41	Measurement of apparent ion temperature using the magnetic recoil spectrometer at the OMEGA laser facility. Review of Scientific Instruments, 2018, 89, 10I129.	0.6	12
42	Implementation of the foil-on-hohlraum technique for the magnetic recoil spectrometer for time-resolved neutron measurements at the National Ignition Facility. Review of Scientific Instruments, 2018, 89, 113508.	0.6	6
43	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.	0.6	11
44	The control of hot-electron preheat in shock-ignition implosions. Physics of Plasmas, 2018, 25, .	0.7	20
45	Analysis of trends in experimental observables: Reconstruction of the implosion dynamics and implications for fusion yield extrapolation for direct-drive cryogenic targets on OMEGA. Physics of Plasmas, 2018, 25, .	0.7	18
46	Experimental Evidence of a Variant Neutron Spectrum from the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>T</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>t</mml:mi><mml:mo>,</mml:mo><mml:mn>2</mml:mn><mml:mi>n</mml:mi><mml:mo) Tj ET	2.9	6
47	Energies in the Range of 16â€“50ÂkeV. Physical Review Letters, 2018, 121, 042501. Development of an inertial confinement fusion platform to study charged-particle-producing nuclear reactions relevant to nuclear astrophysics. Physics of Plasmas, 2017, 24, .	0.7	20
48	The role of hot spot mix in the low-foot and high-foot implosions on the NIF. Physics of Plasmas, 2017, 24, .	0.7	49
49	Monochromatic backlighting of direct-drive cryogenic DT implosions on OMEGA. Physics of Plasmas, 2017, 24, .	0.7	21
50	Thermonuclear reactions probed at stellar-coreÂconditions with laser-based inertial-confinementÂfusion. Nature Physics, 2017, 13, 1227-1231.	6.5	38
51	display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>He</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:mmultiscripts><mml:mo>+</mml:mo><mml:mi mathvariant="normal">T</mml:mi></mml:mrow></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts>	2.9	16
52	Direct-drive DT implosions with Knudsen number variations. Journal of Physics: Conference Series, 2016, 717, 012030.	0.3	2
53	A novel method to recover DD fusion proton CR-39 data corrupted by fast ablator ions at OMEGA and the National Ignition Facility. Review of Scientific Instruments, 2016, 87, 11D812.	0.6	2
54	Application of the coincidence counting technique to DD neutron spectrometry data at the NIF, OMEGA, and Z. Review of Scientific Instruments, 2016, 87, 11D801.	0.6	3

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55	A stretch/compress scheme for a high temporal resolution detector for the magnetic recoil spectrometer time (MRSt). Review of Scientific Instruments, 2016, 87, 11D807.	0.6	16
56	Improvements in Fabrication of Elastic Scattering Foils Used to Measure Neutron Yield by the Magnetic Recoil Spectrometer. Fusion Science and Technology, 2016, 70, 365-371.	0.6	3
57	Kinetic studies of ICF implosions. Journal of Physics: Conference Series, 2016, 717, 012027.	0.3	1
58	Understanding the stagnation and burn of implosions on NIF. Journal of Physics: Conference Series, 2016, 688, 012048.	0.3	4
59	Development of a WDM platform for charged-particle stopping experiments. Journal of Physics: Conference Series, 2016, 717, 012118.	0.3	4
60	Polar-direct-drive experiments at the National Ignition Facility. Journal of Physics: Conference Series, 2016, 717, 012009.	0.3	1
61	Scaled laboratory experiments explain the kink behaviour of the Crab Nebula jet. Nature Communications, 2016, 7, 13081.	5.8	46
62	High-resolution measurements of the DT neutron spectrum using new CD foils in the Magnetic Recoil neutron Spectrometer (MRS) on the National Ignition Facility. Review of Scientific Instruments, 2016, 87, 11D816.	0.6	7
63	Direct drive: Simulations and results from the National Ignition Facility. Physics of Plasmas, 2016, 23, 056305.	0.7	36
64	Experimental results of radiation-driven, layered deuterium-tritium implosions with adiabat-shaped drives at the National Ignition Facility. Physics of Plasmas, 2016, 23, .	0.7	27
65	Effects of fuel-capsule shimming and drive asymmetry on inertial-confinement-fusion symmetry and yield. Physics of Plasmas, 2016, 23, .	0.7	17
66	Polar-direct-drive experiments with contoured-shell targets on OMEGA. Physics of Plasmas, 2016, 23, 012711.	0.7	10
67	Time history prediction of direct-drive implosions on the Omega facility. Physics of Plasmas, 2016, 23, .	0.7	6
68	The magnetic recoil spectrometer (MRSt) for time-resolved measurements of the neutron spectrum at the National Ignition Facility (NIF). Review of Scientific Instruments, 2016, 87, 11D806.	0.6	26
69	Proton pinhole imaging on the National Ignition Facility. Review of Scientific Instruments, 2016, 87, 11E704.	0.6	4
70	Inertially confined fusion plasmas dominated by alpha-particle self-heating. Nature Physics, 2016, 12, 800-806.	6.5	144
71	Indications of flow near maximum compression in layered deuterium-tritium implosions at the National Ignition Facility. Physical Review E, 2016, 94, 021202.	0.8	49
72	Core conditions for alpha heating attained in direct-drive inertial confinement fusion. Physical Review E, 2016, 94, 011201.	0.8	30

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73	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
74	Using Inertial Fusion Implosions to Measure the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">T</mml:mi><mml:mo>+</mml:mo><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>He</mml:mi></mml:mrow><mml:none /><mml:none /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:mrow></mml:math>Fusion Cross Section at Nucleosynthesis-Relevant Energies. Physical Review Letters, 2016, 117, 035002.	2.9	27
75	Signal and background considerations for the MRSt on the National Ignition Facility (NIF). Review of Scientific Instruments, 2016, 87, 11D808.	0.6	6
76	Sensitivity of chemical vapor deposition diamonds to DD and DT neutrons at OMEGA and the National Ignition Facility. Review of Scientific Instruments, 2016, 87, 11D817.	0.6	3
77	A Particle X-ray Temporal Diagnostic (PXTD) for studies of kinetic, multi-ion effects, and ion-electron equilibration rates in Inertial Confinement Fusion plasmas at OMEGA (invited). Review of Scientific Instruments, 2016, 87, 11D701.	0.6	22
78	The National Ignition Facility Diagnostic Set at the Completion of the National Ignition Campaign, September 2012. Fusion Science and Technology, 2016, 69, 420-451.	0.6	29
79	Improved Performance of High Areal Density Indirect Drive Implosions at the National Ignition Facility using a Four-Shock Adiabat Shaped Drive. Physical Review Letters, 2015, 115, 105001.	2.9	58
80	Measurements of Ion Stopping Around the Bragg Peak in High-Energy-Density Plasmas. Physical Review Letters, 2015, 115, 205001.	2.9	64
81	Using multiple secondary fusion products to evaluate fuel ÏR, electron temperature, and mix in deuterium-filled implosions at the NIF. Physics of Plasmas, 2015, 22, .	0.7	23
82	Impact of x-ray dose on track formation and data analysis for CR-39-based proton diagnostics. Review of Scientific Instruments, 2015, 86, 123511.	0.6	6
83	2015, 22, 056314.	0.7	49
84	Performance and Mix Measurements of Indirect Drive Cu-Doped Be Implosions. Physical Review Letters, 2015, 114, 205002.	2.9	18
85	Assessment of ion kinetic effects in shock-driven inertial confinement fusion implosions using fusion burn imaging. Physics of Plasmas, 2015, 22, .	0.7	27
86	Measurement of Charged-Particle Stopping in Warm Dense Plasma. Physical Review Letters, 2015, 114, 215002.	2.9	107
87	A laboratory study of asymmetric magnetic reconnection in strongly driven plasmas. Nature Communications, 2015, 6, 6190.	5.8	55
88	Ion Thermal Decoupling and Species Separation in Shock-Driven Implosions. Physical Review Letters, 2015, 114, 025001.	2.9	67
89	Thin Shell, High Velocity Inertial Confinement Fusion Implosions on the National Ignition Facility. Physical Review Letters, 2015, 114, 145004.	2.9	56
90	Slowing of Magnetic Reconnection Concurrent with Weakening Plasma Inflows and Increasing Collisionality in Strongly Driven Laser-Plasma Experiments. Physical Review Letters, 2015, 114, 205004.	2.9	37

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91		0.7	52
92	A method for in situ absolute DD yield calibration of neutron time-of-flight detectors on OMEGA using CR-39-based proton detectors. Review of Scientific Instruments, 2015, 86, 053506.	0.6	12
93		0.7	8
94	First experiments probing the collision of parallel magnetic fields using laser-produced plasmas. Physics of Plasmas, 2015, 22, 042703.	0.7	6
95	Approximate models for the ion-kinetic regime in inertial-confinement-fusion capsule implosions. Physics of Plasmas, 2015, 22, 052707.	0.7	38
96	Impact of x-ray dose on the response of CR-39 to 1â€“5.5 MeV alphas. Review of Scientific Instruments, 2015, 86, 033501.	0.6	12
97	In-flight observations of low-mode Ï‹/i>R asymmetries in NIF implosions. Physics of Plasmas, 2015, 22, .	0.7	24
98	Demonstration of High Performance in Layered Deuterium-Tritium Capsule Implosions in Uranium Hohlraums at the National Ignition Facility. Physical Review Letters, 2015, 115, 055001.	2.9	101
99	Investigation of ion kinetic effects in direct-drive exploding-pusher implosions at the NIF. Physics of Plasmas, 2014, 21, 122712.	0.7	33
100	The effect of shock dynamics on compressibility of ignition-scale National Ignition Facility implosions. Physics of Plasmas, 2014, 21, .	0.7	20
101	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.	0.6	12
102	A compact proton spectrometer for measurement of the absolute DD proton spectrum from which yield and ÏR are determined in thin-shell inertial-confinement-fusion implosions. Review of Scientific Instruments, 2014, 85, 103504.	0.6	15
103	Measurements of fuel and ablator ÏR in Symmetry-Capsule implosions with the Magnetic Recoil neutron Spectrometer (MRS) on the National Ignition Facility. Review of Scientific Instruments, 2014, 85, 11E104.	0.6	13
104	A technique for extending by â¼103 the dynamic range of compact proton spectrometers for diagnosing ICF implosions on the National Ignition Facility and OMEGA. Review of Scientific Instruments, 2014, 85, 11E119.	0.6	4
105	A compact neutron spectrometer for characterizing inertial confinement fusion implosions at OMEGA and the NIF. Review of Scientific Instruments, 2014, 85, 063502.	0.6	6
106	Simulations of indirectly driven gas-filled capsules at the National Ignition Facility. Physics of Plasmas, 2014, 21, .	0.7	12
107	Empirical assessment of the detection efficiency of CR-39 at high proton fluence and a compact, proton detector for high-fluence applications. Review of Scientific Instruments, 2014, 85, 043302.	0.6	18
108	Exploration of the Transition from the Hydrodynamiclike to the Strongly Kinetic Regime in Shock-Driven Implosions. Physical Review Letters, 2014, 112, 185001.	2.9	77

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109	Kinetic mix mechanisms in shock-driven inertial confinement fusion implosions. Physics of Plasmas, 2014, 21, .	0.7	15
110	Development of the CD Symcap platform to study gas-shell mix in implosions at the National Ignition Facility. Physics of Plasmas, 2014, 21, .	0.7	42
111	First Observations of Nonhydrodynamic Mix at the Fuel-Shell Interface in Shock-Driven Inertial Confinement Implosions. Physical Review Letters, 2014, 112, 135001.	2.9	58
112	Hydrodynamic instability growth and mix experiments at the National Ignition Facility. Physics of Plasmas, 2014, 21, .	0.7	60
113	Measurements of an Ablator-Gas Atomic Mix in Indirectly Driven Implosions at the National Ignition Facility. Physical Review Letters, 2014, 112, 025002.	2.9	60
114	High-density carbon ablator experiments on the National Ignition Facility. Physics of Plasmas, 2014, 21, .	0.7	116
115	The high-foot implosion campaign on the National Ignition Facility. Physics of Plasmas, 2014, 21, .	0.7	149
116	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
117	Observation of a Reflected Shock in an Indirectly Driven Spherical Implosion at the National Ignition Facility. Physical Review Letters, 2014, 112, 225002.	2.9	68
118	Measurement of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>T</mml:mi><mml:mo>+</mml:mo><mml:mi>T</mml:mi></mml:math>Neutron Spectrum Using the National Ignition Facility. Physical Review Letters, 2013, 111, 052501.	2.9	34
119	Progress towards ignition on the National Ignition Facility. Physics of Plasmas, 2013, 20, .	0.7	259
120	Performance of High-Convergence, Layered DT Implosions with Extended-Duration Pulses at the National Ignition Facility. Physical Review Letters, 2013, 111, 215001.	2.9	47
121	Structure and Dynamics of Colliding Plasma Jets. Physical Review Letters, 2013, 111, 235003.	2.9	35
122	Measurements of collective fuel velocities in deuterium-tritium exploding pusher and cryogenically layered deuterium-tritium implosions on the NIF. Physics of Plasmas, 2013, 20, .	0.7	42
123	Instability-driven electromagnetic fields in coronal plasmas. Physics of Plasmas, 2013, 20, .	0.7	15
124	Nuclear imaging of the fuel assembly in ignition experiments. Physics of Plasmas, 2013, 20, 056320.	0.7	65
125	Improving cryogenic deuteriumâ€“tritium implosion performance on OMEGA. Physics of Plasmas, 2013, 20, .	0.7	48
126	An empirical target discharging model relevant to hot-electron preheat in direct-drive implosions on OMEGA. Plasma Physics and Controlled Fusion, 2013, 55, 045001.	0.9	12

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127	Polar-drive implosions on OMEGA and the National Ignition Facility. Physics of Plasmas, 2013, 20, .	0.7	28
128	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.	1.2	14
129	The magnetic recoil spectrometer for measurements of the absolute neutron spectrum at OMEGA and the NIF. Review of Scientific Instruments, 2013, 84, 043506.	0.6	59
130	Progress toward ignition at the National Ignition Facility. Plasma Physics and Controlled Fusion, 2013, 55, 124015.	0.9	23
131	Time evolution of filamentation and self-generated fields in the coronae of directly driven inertial-confinement fusion capsules. Physics of Plasmas, 2012, 19, .	0.7	38
132	Measuring the absolute deuteriumâ€“tritium neutron yield using the magnetic recoil spectrometer at OMEGA and the NIF. Review of Scientific Instruments, 2012, 83, 10D912.	0.6	35
133	Measurements of hohlraum-produced fast ions. Physics of Plasmas, 2012, 19, .	0.7	4
134	Rayleigh-Taylor-induced magnetic fields in laser-irradiated plastic foils. Physics of Plasmas, 2012, 19, .	0.7	10
135	Heavy-ion emission from short-pulse laser-plasma interactions with thin foils. Physics of Plasmas, 2012, 19, 093118.	0.7	6
136	Proton emission from cone-in-shell fast-ignition experiments at Omega. Physics of Plasmas, 2012, 19, .	0.7	2
137	The effects of laser absorption on direct-drive capsule experiments at OMEGA. Physics of Plasmas, 2012, 19, .	0.7	38
138	Source characterization and modeling development for monoenergetic-proton radiography experiments on OMEGA. Review of Scientific Instruments, 2012, 83, 063506.	0.6	39
139	Charged-particle spectroscopy for diagnosing shock ĨR and strength in NIF implosions. Review of Scientific Instruments, 2012, 83, 10D901.	0.6	38
140	A novel particle time of flight diagnostic for measurements of shock- and compression-bang times in D3He and DT implosions at the NIF. Review of Scientific Instruments, 2012, 83, 10D902.	0.6	38
141	Measurements of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi mathvariant="bold">T</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>t</mml:mi><mml:mo>,</mml:mo><mml:mn>2</mml:mn><mml:mi>n</mml:mi><mml:mo) Tj ET /><mml:none /><mml:mn>4</mml:mn></mml:mmultiscripts></mml:math>Neutron Spectrum at Low Reactant Energies from Inertial Confinement Implosions. Physical Review Letters, 2012, 109, 025003.	2.9	27
142	Impeding Hohlraum Plasma Stagnation in Inertial-Confinement Fusion. Physical Review Letters, 2012, 108, 025001.	2.9	27
143	Assembly of High-Areal-Density Deuterium-Tritium Fuel from Indirectly Driven Cryogenic Implosions. Physical Review Letters, 2012, 108, 215005.	2.9	57
144	Advances in compact proton spectrometers for inertial-confinement fusion and plasma nuclear science. Review of Scientific Instruments, 2012, 83, 10D908.	0.6	41

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145	First Measurements of Rayleigh-Taylor-Induced Magnetic Fields in Laser-Produced Plasmas. Physical Review Letters, 2012, 108, 255006.	2.9	64
146	Mapping return currents in laser-generated Z-pinch plasmas using proton deflectometry. Applied Physics Letters, 2012, 100, .	1.5	21
147	Characterization of single and colliding laser-produced plasma bubbles using Thomson scattering and proton radiography. Physical Review E, 2012, 86, 056407.	0.8	22
148	Spherical shock-ignition experiments with the 40 + 20-beam configuration on OMEGA. Physics of Plasmas, 2012, 19, .	0.7	78
149	Total energy loss to fast ablator-ions and target capacitance of direct-drive implosions on OMEGA. Applied Physics Letters, 2012, 101, 114102.	1.5	10
150	Implosion dynamics measurements at the National Ignition Facility. Physics of Plasmas, 2012, 19, .	0.7	125
151	Neutron spectrometryâ€"An essential tool for diagnosing implosions at the National Ignition Facility (invited). Review of Scientific Instruments, 2012, 83, 10D308.	0.6	117
152	Neutron activation diagnostics at the National Ignition Facility (invited). Review of Scientific Instruments, 2012, 83, 10D313.	0.6	88
153	Upgrade of the MIT Linear Electrostatic Ion Accelerator (LEIA) for nuclear diagnostics development for Omega, Z and the NIF. Review of Scientific Instruments, 2012, 83, 043502.	0.6	18
154	Copper activation deuterium-tritium neutron yield measurements at the National Ignition Facility. Review of Scientific Instruments, 2012, 83, 10D918.	0.6	15
155	Determination of the deuterium-tritium branching ratio based on inertial confinement fusion implosions. Physical Review C, 2012, 85, .	1.1	25
156	Evidence for Stratification of Deuterium-Tritium Fuel in Inertial Confinement Fusion Implosions. Physical Review Letters, 2012, 108, 075002.	2.9	61
157	A high-resolution integrated model of the National Ignition Campaign cryogenic layered experiments. Physics of Plasmas, 2012, 19, .	0.7	108
158	Progress in the indirect-drive National Ignition Campaign. Plasma Physics and Controlled Fusion, 2012, 54, 124026.	0.9	38
159	Precision Shock Tuning on the National Ignition Facility. Physical Review Letters, 2012, 108, 215004.	2.9	83
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