M Gatu-Johnson

List of Publications by Year
in descending order

203 papers	6,239 citations	53794 45 h-index	95266 68 g-index
207 all docs	207 docs citations	207 times ranked	2338 citing authors

#	Article	IF	Citations
1	Burning plasma achieved in inertial fusion. Nature, 2022, 601, 542-548.	27.8	233
2	Fusion Energy Output Greater than the Kinetic Energy of an Imploding Shell at the National Ignition Facility. Physical Review Letters, 2018, 120, 245003.	7.8	205
3	The high-foot implosion campaign on the National Ignition Facility. Physics of Plasmas, 2014, 21, .	1.9	149
4	Inertially confined fusion plasmas dominated by alpha-particle self-heating. Nature Physics, 2016, 12, 800-806.	16.7	144
5	Improving the hot-spot pressure and demonstrating ignition hydrodynamic equivalence in cryogenic deuteriumâ€"tritium implosions on OMEGA. Physics of Plasmas, 2014, 21, .	1.9	139
6	The 2.5-MeV neutron time-of-flight spectrometer TOFOR for experiments at JET. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 591, 417-430.	1.6	122
7	Neutron spectrometryâ€"An essential tool for diagnosing implosions at the National Ignition Facility (invited). Review of Scientific Instruments, 2012, 83, 10D308.	1.3	117
8	First High-Convergence Cryogenic Implosion in a Near-Vacuum Hohlraum. Physical Review Letters, 2015, 114, 175001.	7.8	117
9	High-density carbon ablator experiments on the National Ignition Facility. Physics of Plasmas, 2014, 21, .	1.9	116
10	Measurement of Charged-Particle Stopping in Warm Dense Plasma. Physical Review Letters, 2015, 114, 215002.	7.8	107
11	Tripled yield in direct-drive laser fusion through statistical modelling. Nature, 2019, 565, 581-586.	27.8	103
12	Demonstration of High Performance in Layered Deuterium-Tritium Capsule Implosions in Uranium Hohlraums at the National Ignition Facility. Physical Review Letters, 2015, 115, 055001.	7.8	101
13	Cryogenic thermonuclear fuel implosions on the National Ignition Facility. Physics of Plasmas, 2012, 19, .	1.9	95
14	The high velocity, high adiabat, â€œBigfootâ€• campaign and tests of indirect-drive implosion scaling. Physics of Plasmas, 2018, 25, .	1.9	90
15	Neutron activation diagnostics at the National Ignition Facility (invited). Review of Scientific Instruments, 2012, 83, 10D313.	1.3	88
16	Design of inertial fusion implosions reaching the burning plasma regime. Nature Physics, 2022, 18, 251-258.	16.7	87
17	High-Performance Indirect-Drive Cryogenic Implosions at High Adiabat on the National Ignition Facility. Physical Review Letters, 2018, 121, 135001.	7.8	86
18	Diagnosing implosion performance at the National Ignition Facility (NIF) by means of neutron spectrometry. Nuclear Fusion, 2013, 53, 043014.	3.5	84

#	Article	IF	Citations
19	Precision Shock Tuning on the National Ignition Facility. Physical Review Letters, 2012, 108, 215004.	7.8	83
20	Exploration of the Transition from the Hydrodynamiclike to the Strongly Kinetic Regime in Shock-Driven Implosions. Physical Review Letters, 2014, 112, 185001.	7.8	77
21	Demonstration of Fuel Hot-Spot Pressure in Excess of 50Gbar for Direct-Drive, Layered Deuterium-Tritium Implosions on OMEGA. Physical Review Letters, 2016, 117, 025001.	7.8	72
22	Observation of a Reflected Shock in an Indirectly Driven Spherical Implosion at the National Ignition Facility. Physical Review Letters, 2014, 112, 225002.	7.8	68
23	Ion Thermal Decoupling and Species Separation in Shock-Driven Implosions. Physical Review Letters, 2015, 114, 025001.	7.8	67
24	The response of CR-39 nuclear track detector to 1â€"9 MeV protons. Review of Scientific Instruments, 2011, 82, 103303.	1.3	66
25	Nuclear imaging of the fuel assembly in ignition experiments. Physics of Plasmas, 2013, 20, 056320.	1.9	65
26	Measurements of Ion Stopping Around the Bragg Peak in High-Energy-Density Plasmas. Physical Review Letters, 2015, 115, 205001.	7.8	64
27	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
28	Evidence for Stratification of Deuterium-Tritium Fuel in Inertial Confinement Fusion Implosions. Physical Review Letters, 2012, 108, 075002.	7.8	61
29	Hydrodynamic instability growth and mix experiments at the National Ignition Facility. Physics of Plasmas, 2014, 21, .	1.9	60
30	Measurements of an Ablator-Gas Atomic Mix in Indirectly Driven Implosions at the National Ignition Facility. Physical Review Letters, 2014, 112, 025002.	7.8	60
31	The magnetic recoil spectrometer for measurements of the absolute neutron spectrum at OMEGA and the NIF. Review of Scientific Instruments, 2013, 84, 043506.	1.3	59
32	First Observations of Nonhydrodynamic Mix at the Fuel-Shell Interface in Shock-Driven Inertial Confinement Implosions. Physical Review Letters, 2014, 112, 135001.	7.8	58
33	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.	7.8	58
34	Thin Shell, High Velocity Inertial Confinement Fusion Implosions on the National Ignition Facility. Physical Review Letters, 2015, 114, 145004.	7.8	56
35	An artificial neural network based neutronâ€"gamma discrimination and pile-up rejection framework for the BC-501 liquid scintillation detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 610, 534-539.	1.6	54
36	High-resolution spectroscopy used to measure inertial confinement fusion neutron spectra on Omega (invited). Review of Scientific Instruments, 2012, 83, 10D919.	1.3	54

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37	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
38	Fast-ion distributions from third harmonic ICRF heating studied with neutron emission spectroscopy. Nuclear Fusion, 2013, 53, 113009.	3.5	51
39	The near vacuum hohlraum campaign at the NIF: A new approach. Physics of Plasmas, 2016, 23, .	1.9	51
40	National direct-drive program on OMEGA and the National Ignition Facility. Plasma Physics and Controlled Fusion, 2017, 59, 014008.	2.1	50
41	2015, 22, 056314.	1.9	49
42	Indications of flow near maximum compression in layered deuterium-tritium implosions at the National Ignition Facility. Physical Review E, 2016, 94, 021202.	2.1	49
43	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
44	Improving cryogenic deuteriumâ€"tritium implosion performance on OMEGA. Physics of Plasmas, 2013, 20, .	1.9	48
45	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
46	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.	3.6	47
47	Measurements of collective fuel velocities in deuterium-tritium exploding pusher and cryogenically layered deuterium-tritium implosions on the NIF. Physics of Plasmas, 2013, 20, .	1.9	42
48	Development of the CD Symcap platform to study gas-shell mix in implosions at the National Ignition Facility. Physics of Plasmas, 2014, 21, .	1.9	42
49	The thin-foil magnetic proton recoil neutron spectrometer MPRu at JET. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 610, 682-699.	1.6	41
50	Advances in compact proton spectrometers for inertial-confinement fusion and plasma nuclear science. Review of Scientific Instruments, 2012, 83, 10D908.	1.3	41
51	First implosion experiments with cryogenic thermonuclear fuel on the National Ignition Facility. Plasma Physics and Controlled Fusion, 2012, 54, 045013.	2.1	41
52	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.	3.5	40
53	Charged-particle spectroscopy for diagnosing shock ÏR and strength in NIF implosions. Review of Scientific Instruments, 2012, 83, 10D901.	1.3	38
54	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.	1.3	38

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55	Progress in the indirect-drive National Ignition Campaign. Plasma Physics and Controlled Fusion, 2012, 54, 124026.	2.1	38
56	Approximate models for the ion-kinetic regime in inertial-confinement-fusion capsule implosions. Physics of Plasmas, 2015, 22, 052707.	1.9	38
57	Performance of indirectly driven capsule implosions on the National Ignition Facility using adiabat-shaping. Physics of Plasmas, 2016, 23, 056303.	1.9	38
58	Thermonuclear reactions probed at stellar-coreÂconditions with laser-based inertial-confinementÂfusion. Nature Physics, 2017, 13, 1227-1231.	16.7	38
59	Progress of indirect drive inertial confinement fusion in the United States. Nuclear Fusion, 2019, 59, 112018.	3.5	38
60	D-T gamma-to-neutron branching ratio determined from inertial confinement fusion plasmas. Physics of Plasmas, 2012, 19, .	1.9	37
61	Measuring the absolute deuteriumâ€"tritium neutron yield using the magnetic recoil spectrometer at OMEGA and the NIF. Review of Scientific Instruments, 2012, 83, 10D912.	1.3	35
62	High-resolution gamma ray spectroscopy measurements of the fast ion energy distribution in JET ⁴He plasmas. Nuclear Fusion, 2012, 52, 063009.	3.5	35
63	Structure and Dynamics of Colliding Plasma Jets. Physical Review Letters, 2013, 111, 235003.	7.8	35
64	Measurements of fast ions and their interactions with MHD activity using neutron emission spectroscopy. Nuclear Fusion, 2010, 50, 084006.	3.5	34
65	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.	7.8	34
66	Investigation of ion kinetic effects in direct-drive exploding-pusher implosions at the NIF. Physics of Plasmas, 2014, 21, 122712.	1.9	33
67	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.	7.8	32
68	Advanced neutron diagnostics for JET and ITER fusion experiments. Nuclear Fusion, 2005, 45, 1191-1201.	3.5	31
69	Modelling and TOFOR measurements of scattered neutrons at JET. Plasma Physics and Controlled Fusion, 2010, 52, 085002.	2.1	31
70	Neutron emission generated by fast deuterons accelerated with ion cyclotron heating at JET. Nuclear Fusion, 2010, 50, 022001.	3.5	31
71	Core conditions for alpha heating attained in direct-drive inertial confinement fusion. Physical Review E, 2016, 94, 011201.	2.1	30
72	A new model to account for track overlap in CR-39 data. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 681, 84-90.	1.6	29

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73	The National Ignition Facility Diagnostic Set at the Completion of the National Ignition Campaign, September 2012. Fusion Science and Technology, 2016, 69, 420-451.	1.1	29
74	The coincidence counting technique for orders of magnitude background reduction in data obtained with the magnetic recoil spectrometer at OMEGA and the NIF. Review of Scientific Instruments, 2011, 82, 073502.	1.3	27
75	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 /><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.	7.8	27
76	Assessment of ion kinetic effects in shock-driven inertial confinement fusion implosions using fusion burn imaging. Physics of Plasmas, 2015, 22, .	1.9	27
77	Experimental results of radiation-driven, layered deuterium-tritium implosions with adiabat-shaped drives at the National Ignition Facility. Physics of Plasmas, 2016, 23, .	1.9	27
78	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></mm /><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.	7.8	27
79	Neutron emission from beryllium reactions in JET deuterium plasmas with ³He minority. Nuclear Fusion, 2010, 50, 045005.	3.5	26
80	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.	1.3	26
81	Mitigation of mode-one asymmetry in laser-direct-drive inertial confinement fusion implosions. Physics of Plasmas, 2021, 28, .	1.9	26
82	Determination of the deuterium-tritium branching ratio based on inertial confinement fusion implosions. Physical Review C, 2012, 85, .	2.9	25
83	Hotspot parameter scaling with velocity and yield for high-adiabat layered implosions at the National Ignition Facility. Physical Review E, 2020, 102, 023210.	2.1	25
84	In-flight observations of low-mode <i>Ï•</i>R asymmetries in NIF implosions. Physics of Plasmas, 2015, 22, .	1.9	24
85	Progress toward ignition at the National Ignition Facility. Plasma Physics and Controlled Fusion, 2013, 55, 124015.	2.1	23
86	Using multiple secondary fusion products to evaluate fuel <i>Ï•R</i>, electron temperature, and mix in deuterium-filled implosions at the NIF. Physics of Plasmas, 2015, 22, .	1.9	23
87	Note: A monoenergetic proton backlighter for the National Ignition Facility. Review of Scientific Instruments, 2015, 86, 116104.	1.3	23
88	New MPRu instrument for neutron emission spectroscopy at JET. Review of Scientific Instruments, 2006, 77, 10E717.	1.3	22
89	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.	1.3	22
90	Development and modeling of a polar-direct-drive exploding pusher platform at the National Ignition Facility. Physics of Plasmas, 2018, 25, 072710.	1.9	22

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91	Mix and hydrodynamic instabilities on NIF. Journal of Instrumentation, 2017, 12, C06001-C06001.	1.2	21
92	Monochromatic backlighting of direct-drive cryogenic DT implosions on OMEGA. Physics of Plasmas, 2017, 24, .	1.9	21
93	Calibration of a neutron time-of-flight detector with a rapid instrument response function for measurements of bulk fluid motion on OMEGA. Review of Scientific Instruments, 2018, 89, 101131.	1.3	21
94	Doppler broadening of gamma ray lines and fast ion distribution in JET plasmas. Nuclear Fusion, 2010, 50, 084001.	3.5	20
95	Progress towards polar-drive ignition for the NIF. Nuclear Fusion, 2013, 53, 113021.	3.5	20
96	The effect of shock dynamics on compressibility of ignition-scale National Ignition Facility implosions. Physics of Plasmas, 2014, 21, .	1.9	20
97	Development of an inertial confinement fusion platform to study charged-particle-producing nuclear reactions relevant to nuclear astrophysics. Physics of Plasmas, 2017, 24, .	1.9	20
98	Observation of Hydrodynamic Flows in Imploding Fusion Plasmas on the National Ignition Facility. Physical Review Letters, 2021, 127, 125001.	7.8	20
99	Minority and mode conversion heating in (³He)â€“H JET plasmas. Plasma Physics and Controlled Fusion, 2012, 54, 074009.	2.1	18
100	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.	1.3	18
101	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.	1.3	18
102	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, .	1.9	18
103	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, .	1.9	18
104	Direct Measurements of DT Fuel Preheat from Hot Electrons in Direct-Drive Inertial Confinement Fusion. Physical Review Letters, 2021, 127, 055001.	7.8	18
105	Optimizing ion-cyclotron resonance frequency heating for ITER: dedicated JET experiments. Plasma Physics and Controlled Fusion, 2011, 53, 124019.	2.1	17
106	The TOFOR neutron spectrometer and its first use at JET. Review of Scientific Instruments, 2006, 77, 10E702.	1.3	16
107	Neutron spectroscopy as a fuel ion ratio diagnostic: Lessons from JET and prospects for ITER. Review of Scientific Instruments, 2010, 81, 10D324.	1.3	16
108	Proton Spectra from <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" 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	7.8	16

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109	Impact of asymmetries on fuel performance in inertial confinement fusion. Physical Review E, 2018, 98, .	2.1	16
110	Copper activation deuterium-tritium neutron yield measurements at the National Ignition Facility. Review of Scientific Instruments, 2012, 83, 10D918.	1.3	15
111	A compact proton spectrometer for measurement of the absolute DD proton spectrum from which yield and <i>ÏR</i> are determined in thin-shell inertial-confinement-fusion implosions. Review of Scientific Instruments, 2014, 85, 103504.	1.3	15
112	Kinetic mix mechanisms in shock-driven inertial confinement fusion implosions. Physics of Plasmas, 2014, 21, .	1.9	15
113	Impact of imposed mode 2 laser drive asymmetry on inertial confinement fusion implosions. Physics of Plasmas, 2019, 26, .	1.9	15
114	Observations of Multiple Nuclear Reaction Histories and Fuel-Ion Species Dynamics in Shock-Driven Inertial Confinement Fusion Implosions. Physical Review Letters, 2019, 122, 035001.	7.8	15
115	Impact of stalk on directly driven inertial confinement fusion implosions. Physics of Plasmas, 2020, 27, 032704.	1.9	15
116	Finite Larmor radii effects in fast ion measurements with neutron emission spectrometry. Plasma Physics and Controlled Fusion, 2013, 55, 015008.	2.1	14
117	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.	1.3	13
118	Ion kinetic dynamics in strongly-shocked plasmas relevant to ICF. Nuclear Fusion, 2017, 57, 066014.	3.5	13
119	New developments in the diagnostics for the fusion products on JET in preparation for ITER (invited). Review of Scientific Instruments, 2010, 81, 10E136.	1.3	12
120	Neutron spectroscopy results of JET high-performance plasmas and extrapolations to DT performance. Review of Scientific Instruments, 2010, 81, 10D337.	1.3	12
121	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
122	Simulations of indirectly driven gas-filled capsules at the National Ignition Facility. Physics of Plasmas, 2014, 21, .	1.9	12
123	Impact of x-ray dose on the response of CR-39 to 1â€“5.5 MeV alphas. Review of Scientific Instruments, 2015, 86, 033501.	1.3	12
124	The National Direct-Drive Program: OMEGA to the National Ignition Facility. Fusion Science and Technology, 2018, 73, 89-97.	1.1	12
125	One dimensional imager of neutrons on the Z machine. Review of Scientific Instruments, 2018, 89, 101132.	1.3	12
126	Measurement of apparent ion temperature using the magnetic recoil spectrometer at the OMEGA laser facility. Review of Scientific Instruments, 2018, 89, 101129.	1.3	12

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127	Deficiencies in compression and yield in x-ray-driven implosions. Physics of Plasmas, 2020, 27, .	1.9	12
128	Three dimensional low-mode areal-density non-uniformities in indirect-drive implosions at the National Ignition Facility. Physics of Plasmas, 2021, 28, .	1.9	12
129	First measurements of remaining shell areal density on the OMEGA laser using the Diagnostic for Areal Density (DAD). Review of Scientific Instruments, 2018, 89, 083510.	1.3	11
130	<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>t3</mml:m /><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, .	2.9	11
131	Reconstructing 3D asymmetries in laser-direct-drive implosions on OMEGA. Review of Scientific Instruments, 2021, 92, 033529.	1.3	11
132	Experiments to explore the influence of pulse shaping at the National Ignition Facility. Physics of Plasmas, 2020, 27, 112708.	1.9	11
133	Polar-direct-drive experiments with contoured-shell targets on OMEGA. Physics of Plasmas, 2016, 23, 012711.	1.9	10
134	Gamma Ray Measurements at OMEGA with the Newest Gas Cherenkov Detector â€œGCD-3â€. Journal of Physics: Conference Series, 2016, 717, 012109.	0.4	10
135	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, .	1.9	10
136	The National Direct-Drive Inertial Confinement Fusion Program. Nuclear Fusion, 2019, 59, 032007.	3.5	10
137	CR-39 nuclear track detector response to inertial confinement fusion relevant ions. Review of Scientific Instruments, 2020, 91, 053502.	1.3	10
138	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.	1.3	10
139	Neural networks based neutron emissivity tomography at JET with real-time capabilities. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 613, 295-303.	1.6	9
140	A direct-drive exploding-pusher implosion as the first step in development of a monoenergetic charged-particle backlighting platform at the National Ignition Facility. High Energy Density Physics, 2016, 18, 38-44.	1.5	9
141	First Measurements of Deuterium-Tritium and Deuterium-Deuterium Fusion Reaction Yields in Ignition-Scalable Direct-Drive Implosions. Physical Review Letters, 2017, 118, 095002.	7.8	9
142	Thermal decoupling of deuterium and tritium during the inertial confinement fusion shock-convergence phase. Physical Review E, 2021, 104, L013201.	2.1	9
143	Enhanced laser-energy coupling with small-spot distributed phase plates (SG5-650) in OMEGA DT cryogenic target implosions. Physics of Plasmas, 2022, 29, .	1.9	9
144	Demonstrating ignition hydrodynamic equivalence in direct-drive cryogenic implosions on OMEGA. Journal of Physics: Conference Series, 2016, 717, 012008.	0.4	8

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145	Neutron Time-of-Flight Measurements of Charged-Particle Energy Loss in Inertial Confinement Fusion Plasmas. Physical Review Letters, 2019, 123, 165001.	7.8	8
146	3D xRAGE simulation of inertial confinement fusion implosion with imposed mode 2 laser drive asymmetry. High Energy Density Physics, 2020, 36, 100825.	1.5	8
147	Effect of Strongly Magnetized Electrons and Ions on Heat Flow and Symmetry of Inertial Fusion Implosions. Physical Review Letters, 2022, 128, .	7.8	8
148	Modeling of neutron emission spectroscopy in JET discharges with fast tritons from (T)D ion cyclotron heating. Review of Scientific Instruments, 2006, 77, 126107.	1.3	7
149	Neutron spectrometer for ITER using silicon detectors. Review of Scientific Instruments, 2008, 79, 10E508.	1.3	7
150	A bipolar LED drive technique for high performance, stability and power in the nanosecond time scale. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 599, 243-247.	1.6	7
151	Fast ions in mode conversion heating (3He)â€“H plasmas in JET. Plasma Physics and Controlled Fusion, 2012, 54, 074010.	2.1	7
152	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.	1.3	7
153	Principal factors in performance of indirect-drive laser fusion experiments. Physics of Plasmas, 2020, 27, .	1.9	7
154	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.	1.3	7
155	Fusion Power Measurement Using a Combined Neutron Spectrometer-Camera System at JET. Fusion Science and Technology, 2010, 57, 162-175.	1.1	7
156	Development and characterization of the proton recoil detector for the MPRu neutron spectrometer. Review of Scientific Instruments, 2006, 77, 10E708.	1.3	6
157	Neutron spectrometry of JET discharges with ICRH-acceleration of helium beam ions. Review of Scientific Instruments, 2010, 81, 10D336.	1.3	6
158	A compact neutron spectrometer for characterizing inertial confinement fusion implosions at OMEGA and the NIF. Review of Scientific Instruments, 2014, 85, 063502.	1.3	6
159	Impact of x-ray dose on track formation and data analysis for CR-39-based proton diagnostics. Review of Scientific Instruments, 2015, 86, 123511.	1.3	6
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161	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.	1.3	6
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