T Craig Sangster

List of Publications by Year
in descending order

177 papers	9,302 citations	31976 53 h-index	49909 87 g-index
178 all docs	178 docs citations	178 times ranked	2522 citing authors

#	Article	IF	Citations
1	Causes of fuelâ€“ablator mix inferred from modeling of monochromatic time-gated radiography of OMEGA cryogenic implosions. Physics of Plasmas, 2022, 29, .	1.9	8
2	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
3	Direct-drive laser fusion: status, plans and future. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200011.	3.4	20
4	A novel photomultiplier tube neutron time-of-flight detector. Review of Scientific Instruments, 2021, 92, 013509.	1.3	4
5	Density evolution after shock release from laser-driven polystyrene (CH) targets in inertial confinement fusion. Physics of Plasmas, 2021, 28, .	1.9	2
6	Novel Hot-Spot Ignition Designs for Inertial Confinement Fusion with Liquid-Deuterium-Tritium Spheres. Physical Review Letters, 2020, 125, 065001.	7.8	9
7	Deuteron breakup induced by 14-MeV neutrons from inertial confinement fusion. Physical Review C, 2019, 100, .	2.9	9
8	Tripled yield in direct-drive laser fusion through statistical modelling. Nature, 2019, 565, 581-586.	27.8	103
9	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
10	First Observation of Cross-Beam Energy Transfer Mitigation for Direct-Drive Inertial Confinement Fusion Implosions Using Wavelength Detuning at the National Ignition Facility. Physical Review Letters, 2018, 120, 085001.	7.8	65
11	The National Direct-Drive Program: OMEGA to the National Ignition Facility. Fusion Science and Technology, 2018, 73, 89-97.	1.1	12
12	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, 10I131.	1.3	21
13	Measurement of apparent ion temperature using the magnetic recoil spectrometer at the OMEGA laser facility. Review of Scientific Instruments, 2018, 89, 10I129.	1.3	12
14	Properties of hot-spot emission in a warm plastic-shell implosion on the OMEGA laser system. Physical Review E, 2018, 98, .	2.1	2
15	The single-line-of-sight, time-resolved x-ray imager diagnostic on OMEGA. Review of Scientific Instruments, 2018, 89, 10G117.	1.3	26
16	Testing a Cherenkov neutron time-of-flight detector on OMEGA. Review of Scientific Instruments, 2018, 89, 10I122.	1.3	7
17	Mitigating laser-imprint effects in direct-drive inertial confinement fusion implosions with an above-critical-density foam layer. Physics of Plasmas, 2018, 25, .	1.9	16
18	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

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19	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 Energies in the Range of 16â€“50ÂkeV. Physical Review Letters, 2018, 121, 042501.	7.8	6
20	Wavelength-detuning cross-beam energy transfer mitigation scheme for direct drive: Modeling and evidence from National Ignition Facility implosions. Physics of Plasmas, 2018, 25, 056314.	1.9	40
21	10.1063/1.5022181.1. , 2018, , .		0
22	Applications and results of X-ray spectroscopy in implosion experiments on the National Ignition Facility. AIP Conference Proceedings, 2017, , .	0.4	3
23	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
24	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
25	Three-dimensional hydrodynamic simulations of OMEGA implosions. Physics of Plasmas, 2017, 24, .	1.9	26
26	Monochromatic backlighting of direct-drive cryogenic DT implosions on OMEGA. Physics of Plasmas, 2017, 24, .	1.9	21
27	A framed, 16-image Kirkpatrickâ€“Baez x-ray microscope. Review of Scientific Instruments, 2017, 88, 093702.	1.3	29
28	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
29	National direct-drive program on OMEGA and the National Ignition Facility. Plasma Physics and Controlled Fusion, 2017, 59, 014008.	2.1	50
30	Polar-direct-drive experiments at the National Ignition Facility. Journal of Physics: Conference Series, 2016, 717, 012009.	0.4	1
31	Isolating and quantifying cross-beam energy transfer in direct-drive implosions on OMEGA and the National Ignition Facility. Physics of Plasmas, 2016, 23, .	1.9	19
32	High-dynamic-range neutron time-of-flight detector used to infer the D(t,n)4He and D(d,n)3He reaction yield and ion temperature on OMEGA. Review of Scientific Instruments, 2016, 87, 11D814.	1.3	10
33	Direct drive: Simulations and results from the National Ignition Facility. Physics of Plasmas, 2016, 23, 056305.	1.9	36
34	Neutron temporal diagnostic for high-yield deuteriumâ€“tritium cryogenic implosions on OMEGA. Review of Scientific Instruments, 2016, 87, 053501.	1.3	33
35	Optical smoothing of laser imprinting in planar-target experiments on OMEGA EP using multi-FM 1-D smoothing by spectral dispersion. Physics of Plasmas, 2016, 23, .	1.9	9
36	Effects of fuel-capsule shimming and drive asymmetry on inertial-confinement-fusion symmetry and yield. Physics of Plasmas, 2016, 23, .	1.9	17

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37	Core conditions for alpha heating attained in direct-drive inertial confinement fusion. Physical Review E, 2016, 94, 011201.	2.1	30
38	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.	7.8	72
39	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, 116, 035002.	7.8	27
40	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
41	Three-dimensional modeling of direct-drive cryogenic implosions on OMEGA. Physics of Plasmas, 2016, 23, .	1.9	69
42	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
43	Measurements of Ion Stopping Around the Bragg Peak in High-Energy-Density Plasmas. Physical Review Letters, 2015, 115, 205001.	7.8	64
44	Direct-drive inertial confinement fusion: A review. Physics of Plasmas, 2015, 22, .	1.9	521
45	Assessment of ion kinetic effects in shock-driven inertial confinement fusion implosions using fusion burn imaging. Physics of Plasmas, 2015, 22, .	1.9	27
46	Ion Thermal Decoupling and Species Separation in Shock-Driven Implosions. Physical Review Letters, 2015, 114, 025001.	7.8	67
47		1.9	52
48	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.	1.3	12
49	Approximate models for the ion-kinetic regime in inertial-confinement-fusion capsule implosions. Physics of Plasmas, 2015, 22, 052707.	1.9	38
50	In-flight observations of low-mode ÏR asymmetries in NIF implosions. Physics of Plasmas, 2015, 22, .	1.9	24
51	Mass-ablation-rate measurements in direct-drive cryogenic implosions using x-ray self-emission images. Review of Scientific Instruments, 2014, 85, 11D616.	1.3	2
52	Investigation of ion kinetic effects in direct-drive exploding-pusher implosions at the NIF. Physics of Plasmas, 2014, 21, 122712.	1.9	33
53	The effect of shock dynamics on compressibility of ignition-scale National Ignition Facility implosions. Physics of Plasmas, 2014, 21, .	1.9	20
54	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

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55	A new neutron time-of-flight detector for fuel-areal-density measurements on OMEGA. Review of Scientific Instruments, 2014, 85, 11E102.	1.3	23
56	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.	1.3	15
57	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
58	Soft x-ray backlighting of cryogenic implosions using a narrowband crystal imaging system (invited). Review of Scientific Instruments, 2014, 85, 11E501.	1.3	24
59	Theory of hydro-equivalent ignition for inertial fusion and its applications to OMEGA and the National Ignition Facility. Physics of Plasmas, 2014, 21, .	1.9	68
60	Time-resolved compression of a capsule with a cone to high density for fast-ignition laser fusion. Nature Communications, 2014, 5, 5785.	12.8	50
61	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
62	Kinetic mix mechanisms in shock-driven inertial confinement fusion implosions. Physics of Plasmas, 2014, 21, .	1.9	15
63	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
64	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
65	Progress towards ignition on the National Ignition Facility. Physics of Plasmas, 2013, 20, .	1.9	259
66	Effects of local defect growth in direct-drive cryogenic implosions on OMEGA. Physics of Plasmas, 2013, 20, .	1.9	42
67	Laser-Beam Zooming to Mitigate Crossed-Beam Energy Losses in Direct-Drive Implosions. Physical Review Letters, 2013, 110, 145001.	7.8	31
68	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
69	Nuclear imaging of the fuel assembly in ignition experiments. Physics of Plasmas, 2013, 20, 056320.	1.9	65
70	Improving cryogenic deuteriumâ€“tritium implosion performance on OMEGA. Physics of Plasmas, 2013, 20, .	1.9	48
71	Polar-drive implosions on OMEGA and the National Ignition Facility. Physics of Plasmas, 2013, 20, .	1.9	28
72	Study of Rayleighâ€“Taylor growth in laser irradiated planar SiO₂ targets at ignition-relevant conditions. Physics of Plasmas, 2013, 20, 072707.	1.9	6

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73	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
74	OMEGA polar-drive target designs. Physics of Plasmas, 2012, 19, .	1.9	25
75	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
76	High-resolution spectroscopy used to measure inertial confinement fusion neutron spectra on Omega (invited). Review of Scientific Instruments, 2012, 83, 10D919.	1.3	54
77	Experimental reduction of laser imprinting and Rayleighâ€“Taylor growth in spherically compressed, medium-Z-doped plastic targets. Physics of Plasmas, 2012, 19, 062704.	1.9	41
78	Crossed-beam energy transfer in direct-drive implosions. Physics of Plasmas, 2012, 19, .	1.9	133
79	Laserâ€“plasma interactions in direct-drive ignition plasmas. Plasma Physics and Controlled Fusion, 2012, 54, 124016.	2.1	31
80	Charged-particle spectroscopy for diagnosing shock ÏR and strength in NIF implosions. Review of Scientific Instruments, 2012, 83, 10D901.	1.3	38
81	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
82	South pole bang-time diagnostic on the National Ignition Facility (invited). Review of Scientific Instruments, 2012, 83, 10E119.	1.3	25
83	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.	7.8	27
84	Advances in compact proton spectrometers for inertial-confinement fusion and plasma nuclear science. Review of Scientific Instruments, 2012, 83, 10D908.	1.3	41
85	Increasing Hydrodynamic Efficiency by Reducing Cross-Beam Energy Transfer in Direct-Drive-Implosion Experiments. Physical Review Letters, 2012, 108, 125003.	7.8	67
86	Spherical shock-ignition experiments with the 40 + 20-beam configuration on OMEGA. Physics of Plasmas, 2012, 19, .	1.9	78
87	Total energy loss to fast ablator-ions and target capacitance of direct-drive implosions on OMEGA. Applied Physics Letters, 2012, 101, 114102.	3.3	10
88	Neutron spectrometryâ€”An essential tool for diagnosing implosions at the National Ignition Facility (invited). Review of Scientific Instruments, 2012, 83, 10D308.	1.3	117
89	Using high-intensity laser-generated energetic protons to radiograph directly driven implosions. Review of Scientific Instruments, 2012, 83, 013511.	1.3	58
90	Evidence for Stratification of Deuterium-Tritium Fuel in Inertial Confinement Fusion Implosions. Physical Review Letters, 2012, 108, 075002.	7.8	61

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91	Hot-spot mix in ignition-scale implosions on the NIF. Physics of Plasmas, 2012, 19, .	1.9	107
92	Measurements of the Differential Cross Sections for the Elastic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>n</mml:mi><mml:mtext mathvariant="normal">â^'</mml:mtext><mml:mmultiscripts><mml:mi mathvariant="normal">H</mml:mi><mml:mprescripts /><mml:none /><mml:mn>3</mml:mn></mml:mmultiscripts></mml:math>and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>n</mml:mi><mml:mtext	7.8	43
93	Initial cone-in-shell fast-ignition experiments on OMEGA. Physics of Plasmas, 2011, 18, .	1.9	82
94	High-Power, Kilojoule Class Laser Channeling in Millimeter-Scale Underdense Plasma. Physical Review Letters, 2011, 106, 105002.	7.8	58
95	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
96	Atomic mix in directly driven inertial confinement implosions. Physics of Plasmas, 2011, 18, .	1.9	44
97	The experimental plan for cryogenic layered target implosions on the National Ignition Facilityâ€"The inertial confinement approach to fusion. Physics of Plasmas, 2011, 18, .	1.9	148
98	Triple-picket warm plastic-shell implosions on OMEGA. Physics of Plasmas, 2011, 18, 012705.	1.9	32
99	The National Ignition Facility neutron time-of-flight system and its initial performance (invited). Review of Scientific Instruments, 2010, 81, 10D325.	1.3	121
100	A gated liquid-scintillator-based neutron detector for fast-ignitor experiments and down-scattered neutron measurements. Review of Scientific Instruments, 2010, 81, 10D302.	1.3	29
101	Implosion Experiments using Glass Ablators for Direct-Drive Inertial Confinement Fusion. Physical Review Letters, 2010, 104, 165002.	7.8	39
102	National Ignition Facility neutron time-of-flight measurements (invited). Review of Scientific Instruments, 2010, 81, 10D319.	1.3	27
103	Demonstration of the Highest Deuterium-Tritium Areal Density Using Multiple-Picket Cryogenic Designs on OMEGA. Physical Review Letters, 2010, 104, 165001.	7.8	111
104	Two-dimensional simulations of the neutron yield in cryogenic deuterium-tritium implosions on OMEGA. Physics of Plasmas, 2010, 17, 102706.	1.9	43
105	Shock-tuned cryogenic-deuterium-tritium implosion performance on Omega. Physics of Plasmas, 2010, 17, 056312.	1.9	33
106	Probing high areal-density cryogenic deuterium-tritium implosions using downscattered neutron spectra measured by the magnetic recoil spectrometer. Physics of Plasmas, 2010, 17, .	1.9	91
107	Cryogenic-target performance and implosion physics studies on OMEGA. Physics of Plasmas, 2009, 16, 056301.	1.9	13
108	The effects of target mounts in direct-drive implosions on OMEGA. Physics of Plasmas, 2009, 16, .	1.9	45

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109	High-Current, Relativistic Electron-Beam Transport in Metals and the Role of Magnetic Collimation. Physical Review Letters, 2009, 102, 235004.	7.8	50
110	Rayleigh-Taylor Growth Measurements in the Acceleration Phase of Spherical Implosions on OMEGA. Physical Review Letters, 2009, 103, 105001.	7.8	52
111	Neutron yield study of direct-drive, low-adiabat cryogenic D2 implosions on OMEGA laser system. Physics of Plasmas, 2009, 16, 112706.	1.9	27
112	Demonstration of the shock-timing technique for ignition targets on the National Ignition Facility. Physics of Plasmas, 2009, 16, .	1.9	82
113	Advanced-ignition-concept exploration on OMEGA. Plasma Physics and Controlled Fusion, 2009, 51, 124052.	2.1	33
114	Spherical Rayleighâ€“Taylor growth of three-dimensional broadband perturbations on OMEGA. Physics of Plasmas, 2009, 16, 112701.	1.9	22
115	Systematic study of Rayleighâ€“Taylor growth in directly driven plastic targets in a laser-intensity range from âˆ¼2Ã—1014toâˆ¼1.5Ã—1015Wâˆ•cm2. Physics of Plasmas, 2008, 15, .	1.9	30
116	Performance of direct-drive cryogenic targets on OMEGA. Physics of Plasmas, 2008, 15, .	1.9	92
117	High-Areal-Density Fuel Assembly in Direct-Drive Cryogenic Implosions. Physical Review Letters, 2008, 100, 185006.	7.8	49
118	Tests and calibration of NIF neutron time of flight detectors. Review of Scientific Instruments, 2008, 79, 10E527.	1.3	20
119	Progress in direct-drive inertial confinement fusion. Physics of Plasmas, 2008, 15, .	1.9	107
120	First measurements of the absolute neutron spectrum using the magnetic recoil spectrometer at OMEGA (invited). Review of Scientific Instruments, 2008, 79, 10E502.	1.3	78
121	Time-resolved absorption in cryogenic and room-temperature direct-drive implosions. Physics of Plasmas, 2008, 15, .	1.9	64
122	Role of Hot-Electron Preheating in the Compression of Direct-Drive Imploding Targets with Cryogenic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi mathvariant="normal">D</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>Ablators. Physical Review Letters, 2008, 100, 185005.	7.8	69
123	Initial experiments on the shock-ignition inertial confinement fusion concept. Physics of Plasmas, 2008, 15, .	1.9	86
124	Validation of Thermal-Transport Modeling with Direct-Drive, Planar-Foil Acceleration Experiments on OMEGA. Physical Review Letters, 2008, 101, 055002.	7.8	42
125	Rayleigh-Taylor Growth Stabilization in Direct-Drive Plastic Targets at Laser Intensities of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mo>âˆ¼</mml:mo><mml:mn>1</mml:mn><mml:mo>Ã—</mml:mo><mml:msup><mml:mn>10</mml:mn><mml:mn><m mathvariant="normal">W</mml:mi><mml:mo>/</mml:mo><mml:msup><mml:mi>cm</mml:mi><mml:mn>2</mml:mn></mml:msup> Physical Review Letters, 2008, 101, 025002.	7.8	38
126	Shock ignition of thermonuclear fuel with high areal densities. Journal of Physics: Conference Series, 2008, 112, 022024.	0.4	45

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127	Measurements of the effects of the intensity pickets on laser imprinting for direct-drive, adiabat-shaping designs on OMEGA. Physics of Plasmas, 2007, 14, 032702.	1.9	17
128	Hydrodynamics studies of direct-drive cone-in-shell, fast-ignitor targets on OMEGA. Physics of Plasmas, 2007, 14, 112702.	1.9	11
129	Time-Dependent Nuclear Measurements of Mix in Inertial Confinement Fusion. Physical Review Letters, 2007, 98, 215002.	7.8	24
130	Cryogenic DT and D2 targets for inertial confinement fusion. Physics of Plasmas, 2007, 14, 058101.	1.9	55
131	Inertial confinement fusion neutron images. Physics of Plasmas, 2006, 13, 056317.	1.9	56
132	Monoenergetic proton backlighter for measuring E and B fields and for radiographing implosions and high-energy density plasmas (invited). Review of Scientific Instruments, 2006, 77, 10E725.	1.3	58
133	X-ray preheating of window materials in direct-drive shock-wave timing experiments. Physics of Plasmas, 2006, 13, 122702.	1.9	29
134	Early stage of implosion in inertial confinement fusion: Shock timing and perturbation evolution. Physics of Plasmas, 2006, 13, 012702.	1.9	155
135	Measured dependence of nuclear burn region size on implosion parameters in inertial confinement fusion experiments. Physics of Plasmas, 2006, 13, 082704.	1.9	14
136	Tests of the hydrodynamic equivalence of direct-drive implosions with different D2 and He3 mixtures. Physics of Plasmas, 2006, 13, 052702.	1.9	60
137	High-yield bang time detector for the OMEGA laser. Review of Scientific Instruments, 2006, 77, 10E712.	1.3	13
138	Proton core imaging of the nuclear burn in inertial confinement fusion implosions. Review of Scientific Instruments, 2006, 77, 043503.	1.3	17
139	Polar-direct-drive simulations and experiments. Physics of Plasmas, 2006, 13, 056311.	1.9	58
140	Development of nuclear diagnostics for the National Ignition Facility (invited). Review of Scientific Instruments, 2006, 77, 10E715.	1.3	84
141	Polar direct drive â€“ Ignition at 1 MJ. European Physical Journal Special Topics, 2006, 133, 233-235.	0.2	4
142	Using nuclear data and Monte Carlo techniques to study areal density and mix in D2 implosions. Physics of Plasmas, 2005, 12, 032703.	1.9	18
143	Improved target stability using picket pulses to increase and shape the ablator adiabat. Physics of Plasmas, 2005, 12, 056306.	1.9	29
144	Direct-drive, cryogenic target implosions on OMEGA. Physics of Plasmas, 2005, 12, 056302.	1.9	27

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145	Two-dimensional simulations of plastic-shell, direct-drive implosions on OMEGA. Physics of Plasmas, 2005, 12, 032702.	1.9	126
146	Multidimensional analysis of direct-drive, plastic-shell implosions on OMEGA. Physics of Plasmas, 2005, 12, 056307.	1.9	95
147	Performance of 1-THz-bandwidth, two-dimensional smoothing by spectral dispersion and polarization smoothing of high-power, solid-state laser beams. Journal of the Optical Society of America B: Optical Physics, 2005, 22, 998.	2.1	80
148	Effects of Nonuniform Illumination on Implosion Asymmetry in Direct-Drive Inertial Confinement Fusion. Physical Review Letters, 2004, 92, 205001.	7.8	37
149	Dependence of Shell Mix on Feedthrough in Direct Drive Inertial Confinement Fusion. Physical Review Letters, 2004, 92, 185002.	7.8	29
150	Direct-drive cryogenic target implosion performance on OMEGA. Physics of Plasmas, 2004, 11, 2790-2797.	1.9	39
151	Polar direct drive on the National Ignition Facility. Physics of Plasmas, 2004, 11, 2763-2770.	1.9	139
152	Measuring shock-bang timing and ÏR evolution of D3He implosions at OMEGA. Physics of Plasmas, 2004, 11, 2798-2805.	1.9	41
153	D3He-proton emission imaging for inertial-confinement-fusion experiments (invited). Review of Scientific Instruments, 2004, 75, 3520-3525.	1.3	46
154	Prototypes of National Ignition Facility neutron time-of-flight detectors tested on OMEGA. Review of Scientific Instruments, 2004, 75, 3559-3562.	1.3	77
155	Direct-drive cryogenic target implosion performance on OMEGA. Physics of Plasmas, 2003, 10, 1937-1945.	1.9	32
156	Spectrometry of charged particles from inertial-confinement-fusion plasmas. Review of Scientific Instruments, 2003, 74, 975-995.	1.3	214
157	Hydrodynamic growth of shell modulations in the deceleration phase of spherical direct-drive implosions. Physics of Plasmas, 2003, 10, 1861-1866.	1.9	9
158	Ten-inch manipulator-based neutron temporal diagnostic for cryogenic experiments on OMEGA. Review of Scientific Instruments, 2003, 74, 1713-1716.	1.3	30
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