

# Richard D Petrasso

## List of Publications by Year in descending order

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198  
papers

8,081  
citations

34016

52  
h-index

64668

79  
g-index

200  
all docs

200  
docs citations

200  
times ranked

2608  
citing authors

#	ARTICLE	IF	CITATIONS
1	Strong suppression of heat conduction in a laboratory replica of galaxy-cluster turbulent plasmas. <i>Science Advances</i> , 2022, 8, eabj6799.	4.7	11
2	Experiments on the dynamics and scaling of spontaneous-magnetic-field saturation in laser-produced plasmas. <i>Physical Review E</i> , 2022, 105, .	0.8	1
3	Insensitivity of a turbulent laser-plasma dynamo to initial conditions. <i>Matter and Radiation at Extremes</i> , 2022, 7, .	1.5	3
4	Response of CR-39 nuclear track detectors to protons with non-normal incidence. <i>Review of Scientific Instruments</i> , 2021, 92, 013504.	0.6	4
5	A second order yield-temperature relation for accurate inference of burn-averaged quantities in multi-species plasmas. <i>Physics of Plasmas</i> , 2021, 28, 022701.	0.7	3
6	A multi-channel x-ray temporal diagnostic for measurement of time-resolved electron temperature in cryogenic deuterium-tritium implosions at OMEGA. <i>Review of Scientific Instruments</i> , 2021, 92, 023507.	0.6	3
7	Using millimeter-sized carbon-deuterium foils for high-precision deuterium-tritium neutron spectrum measurements in direct-drive inertial confinement fusion at the OMEGA laser facility. <i>Review of Scientific Instruments</i> , 2021, 92, 023503.	0.6	2
8	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
9	Developing inverted-corona-fusion targets as high-fluence neutron sources. <i>Review of Scientific Instruments</i> , 2021, 92, 033544.	0.6	4
10	An x-ray penumbral imager for measurements of electron-temperature profiles in inertial confinement fusion implosions at OMEGA. <i>Review of Scientific Instruments</i> , 2021, 92, 043548.	0.6	10
11	Yield degradation due to laser drive asymmetry in D3He backlit proton radiography experiments at OMEGA. <i>Review of Scientific Instruments</i> , 2021, 92, 043551.	0.6	4
12	A new tri-particle backlighter for high-energy-density plasmas (invited). <i>Review of Scientific Instruments</i> , 2021, 92, 063524.	0.6	6
13	Reaching 30% energy coupling efficiency for a high-density-carbon capsule in a gold rugby hohlraum on NIF. <i>Nuclear Fusion</i> , 2021, 61, 086028.	1.6	4
14	Thermal decoupling of deuterium and tritium during the inertial confinement fusion shock-convergence phase. <i>Physical Review E</i> , 2021, 104, L013201.	0.8	9
15	Extension of charged-particle spectrometer capabilities for diagnosing implosions on OMEGA, Z, and the NIF. <i>Review of Scientific Instruments</i> , 2021, 92, 083506.	0.6	4
16	Symmetry tuning and high energy coupling for an Al capsule in a Au rugby hohlraum on NIF. <i>Physics of Plasmas</i> , 2020, 27, .	0.7	5
17	CR-39 nuclear track detector response to inertial confinement fusion relevant ions. <i>Review of Scientific Instruments</i> , 2020, 91, 053502.	0.6	10
18	The conceptual design of 1-ps time resolution neutron detector for fusion reaction history measurement at OMEGA and the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2020, 91, 063304.	0.6	7

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19	Transport of High-energy Charged Particles through Spatially Intermittent Turbulent Magnetic Fields. <i>Astrophysical Journal</i> , 2020, 892, 114.	1.6	8
20	A neutron recoil-spectrometer for measuring yield and determining liner areal densities at the Z facility. <i>Review of Scientific Instruments</i> , 2020, 91, 073501.	0.6	5
21	Impact of stalk on directly driven inertial confinement fusion implosions. <i>Physics of Plasmas</i> , 2020, 27, 032704.	0.7	15
22	Collisionless Shocks Driven by Supersonic Plasma Flows with Self-Generated Magnetic Fields. <i>Physical Review Letters</i> , 2019, 123, 055002.	2.9	26
23	Fuel-ion diffusion in shock-driven inertial confinement fusion implosions. <i>Matter and Radiation at Extremes</i> , 2019, 4, .	1.5	3
24	Probing ion species separation and ion thermal decoupling in shock-driven implosions using multiple nuclear reaction histories. <i>Physics of Plasmas</i> , 2019, 26, 072703.	0.7	5
25	Tripled yield in direct-drive laser fusion through statistical modelling. <i>Nature</i> , 2019, 565, 581-586.	13.7	103
26	Impact of imposed mode 2 laser drive asymmetry on inertial confinement fusion implosions. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	15
27	Observations of Multiple Nuclear Reaction Histories and Fuel-Ion Species Dynamics in Shock-Driven Inertial Confinement Fusion Implosions. <i>Physical Review Letters</i> , 2019, 122, 035001.	2.9	15
28	Mega-Gauss Plasma Jet Creation Using a Ring of Laser Beams. <i>Astrophysical Journal Letters</i> , 2019, 873, L11.	3.0	12
29	Kinetic effects on neutron generation in moderately collisional interpenetrating plasma flows. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	12
30	Numerical simulation of magnetized jet creation using a hollow ring of laser beams. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	10
31	Response of a lead-free borosilicate-glass microchannel plate to 14-MeV neutrons and $\hat{\text{I}}^3$ -rays. <i>Review of Scientific Instruments</i> , 2019, 90, 103306.	0.6	3
32	Modified parameterization of the Li-Petrasso charged-particle stopping power theory. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	10
33	Experimental Validation of Low- $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mi} \rangle Z \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ Ion-Stopping Formalisms around the Bragg Peak in High-Energy-Density Plasmas. <i>Physical Review Letters</i> , 2019, 122, 015002.	2.9	32
34	Laboratory evidence of dynamo amplification of magnetic fields in a turbulent plasma. <i>Nature Communications</i> , 2018, 9, 591.	5.8	105
35	The National Direct-Drive Program: OMEGA to the National Ignition Facility. <i>Fusion Science and Technology</i> , 2018, 73, 89-97.	0.6	12
36	Visualizing deceleration-phase instabilities in inertial confinement fusion implosions using an enhanced self-emission technique at the National Ignition Facility. <i>Physics of Plasmas</i> , 2018, 25, 054502.	0.7	22

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37	Optimization of a high-yield, low-areal-density fusion product source at the National Ignition Facility with applications in nucleosynthesis experiments. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	10
38	Impact of asymmetries on fuel performance in inertial confinement fusion. <i>Physical Review E</i> , 2018, 98, .	0.8	16
39	One dimensional imager of neutrons on the Z machine. <i>Review of Scientific Instruments</i> , 2018, 89, 10I132.	0.6	12
40	Measurement of apparent ion temperature using the magnetic recoil spectrometer at the OMEGA laser facility. <i>Review of Scientific Instruments</i> , 2018, 89, 10I129.	0.6	12
41	Implementation of the foil-on-hohlraum technique for the magnetic recoil spectrometer for time-resolved neutron measurements at the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2018, 89, 113508.	0.6	6
42	Experimental Evidence of a Variant Neutron Spectrum from the $T_j$ ETJ	2.9	6
43	Energies in the Range of 16–50 keV. <i>Physical Review Letters</i> , 2018, 121, 042501. Development of new platforms for hydrodynamic instability and asymmetry measurements in deceleration phase of indirectly driven implosions on NIF. <i>Physics of Plasmas</i> , 2018, 25, 082705.	0.7	15
44	A broadband proton backlighting platform to probe shock propagation in low-density systems. <i>Review of Scientific Instruments</i> , 2017, 88, 013503.	0.6	6
45	Development of an inertial confinement fusion platform to study charged-particle-producing nuclear reactions relevant to nuclear astrophysics. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	20
46	Numerical modeling of laser-driven experiments aiming to demonstrate magnetic field amplification via turbulent dynamo. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	31
47	Monochromatic backlighting of direct-drive cryogenic DT implosions on OMEGA. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	21
48	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
49	${}^3\text{He} + {}^3\text{He} \rightarrow {}^4\text{He} + 2p$ and ${}^3\text{He} + {}^4\text{He} \rightarrow {}^7\text{Li} + p$	2.9	16
50	A novel method to recover DD fusion proton CR-39 data corrupted by fast ablator ions at OMEGA and the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2016, 87, 11D812.	0.6	2
51	Application of the coincidence counting technique to DD neutron spectrometry data at the NIF, OMEGA, and Z. <i>Review of Scientific Instruments</i> , 2016, 87, 11D801.	0.6	3
52	Kinetic studies of ICF implosions. <i>Journal of Physics: Conference Series</i> , 2016, 717, 012027.	0.3	1
53	Understanding the stagnation and burn of implosions on NIF. <i>Journal of Physics: Conference Series</i> , 2016, 688, 012048.	0.3	4
54	Development of a WDM platform for charged-particle stopping experiments. <i>Journal of Physics: Conference Series</i> , 2016, 717, 012118.	0.3	4



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73	Using multiple secondary fusion products to evaluate fuel $\bar{r}$ , electron temperature, and mix in deuterium-filled implosions at the NIF. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	23
74	Note: A monoenergetic proton backlighter for the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2015, 86, 116104.	0.6	23
75	Impact of x-ray dose on track formation and data analysis for CR-39-based proton diagnostics. <i>Review of Scientific Instruments</i> , 2015, 86, 123511.	0.6	6
76	Laser irradiance scaling in polar direct drive implosions on the National Ignition Facility. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	11
77	Assessment of ion kinetic effects in shock-driven inertial confinement fusion implosions using fusion burn imaging. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	27
78	Collisionless shock experiments with lasers and observation of Weibel instabilities. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	51
79	Measurement of Charged-Particle Stopping in Warm Dense Plasma. <i>Physical Review Letters</i> , 2015, 114, 215002.	2.9	107
80	A laboratory study of asymmetric magnetic reconnection in strongly driven plasmas. <i>Nature Communications</i> , 2015, 6, 6190.	5.8	55
81	Ion Thermal Decoupling and Species Separation in Shock-Driven Implosions. <i>Physical Review Letters</i> , 2015, 114, 025001.	2.9	67
82	Observation of magnetic field generation via the Weibel instability in interpenetrating plasma flows. <i>Nature Physics</i> , 2015, 11, 173-176.	6.5	236
83	Slowing of Magnetic Reconnection Concurrent with Weakening Plasma Inflows and Increasing Collisionality in Strongly Driven Laser-Plasma Experiments. <i>Physical Review Letters</i> , 2015, 114, 205004.	2.9	37
84		0.7	52
85	A method for <i>in situ</i> absolute DD yield calibration of neutron time-of-flight detectors on OMEGA using CR-39-based proton detectors. <i>Review of Scientific Instruments</i> , 2015, 86, 053506.	0.6	12
86	First experiments probing the collision of parallel magnetic fields using laser-produced plasmas. <i>Physics of Plasmas</i> , 2015, 22, 042703.	0.7	6
87	Approximate models for the ion-kinetic regime in inertial-confinement-fusion capsule implosions. <i>Physics of Plasmas</i> , 2015, 22, 052707.	0.7	38
88	Impact of x-ray dose on the response of CR-39 to $\sim 5.5$ MeV alphas. <i>Review of Scientific Instruments</i> , 2015, 86, 033501.	0.6	12
89	In-flight observations of low-mode $\bar{r}$ asymmetries in NIF implosions. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	24
90	Investigation of ion kinetic effects in direct-drive exploding-pusher implosions at the NIF. <i>Physics of Plasmas</i> , 2014, 21, 122712.	0.7	33

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91	The effect of shock dynamics on compressibility of ignition-scale National Ignition Facility implosions. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	20
92	A magnetic particle time-of-flight (MagPTOF) diagnostic for measurements of shock- and compression-bang time at the NIF (invited). <i>Review of Scientific Instruments</i> , 2014, 85, 11D901.	0.6	12
93	A compact proton spectrometer for measurement of the absolute DD proton spectrum from which yield and $\langle i \rangle$ are determined in thin-shell inertial-confinement-fusion implosions. <i>Review of Scientific Instruments</i> , 2014, 85, 103504.	0.6	15
94	Measurements of fuel and ablator $\bar{R}$ in Symmetry-Capsule implosions with the Magnetic Recoil neutron Spectrometer (MRS) on the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2014, 85, 11E104.	0.6	13
95	A technique for extending by $\hat{\sim} 10^3$ the dynamic range of compact proton spectrometers for diagnosing ICF implosions on the National Ignition Facility and OMEGA. <i>Review of Scientific Instruments</i> , 2014, 85, 11E119.	0.6	4
96	Species separation and kinetic effects in collisional plasma shocks. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	46
97	A compact neutron spectrometer for characterizing inertial confinement fusion implosions at OMEGA and the NIF. <i>Review of Scientific Instruments</i> , 2014, 85, 063502.	0.6	6
98	Empirical assessment of the detection efficiency of CR-39 at high proton fluence and a compact, proton detector for high-fluence applications. <i>Review of Scientific Instruments</i> , 2014, 85, 043302.	0.6	18
99	Exploration of the Transition from the Hydrodynamiclike to the Strongly Kinetic Regime in Shock-Driven Implosions. <i>Physical Review Letters</i> , 2014, 112, 185001.	2.9	77
100	Kinetic mix mechanisms in shock-driven inertial confinement fusion implosions. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	15
101	Development of the CD Symcap platform to study gas-shell mix in implosions at the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	42
102	First Observations of Nonhydrodynamic Mix at the Fuel-Shell Interface in Shock-Driven Inertial Confinement Implosions. <i>Physical Review Letters</i> , 2014, 112, 135001.	2.9	58
103	Hydrodynamic instability growth and mix experiments at the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	60
104	High-density carbon ablator experiments on the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	116
105	Improving the hot-spot pressure and demonstrating ignition hydrodynamic equivalence in cryogenic deuterium-tritium implosions on OMEGA. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	139
106	Observation of a Reflected Shock in an Indirectly Driven Spherical Implosion at the National Ignition Facility. <i>Physical Review Letters</i> , 2014, 112, 225002.	2.9	68
107	Progress towards ignition on the National Ignition Facility. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	259
108	Performance of High-Convergence, Layered DT Implosions with Extended-Duration Pulses at the National Ignition Facility. <i>Physical Review Letters</i> , 2013, 111, 215001.	2.9	47

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109	Measurements of collective fuel velocities in deuterium-tritium exploding pusher and cryogenically layered deuterium-tritium implosions on the NIF. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	42
110	Nuclear imaging of the fuel assembly in ignition experiments. <i>Physics of Plasmas</i> , 2013, 20, 056320.	0.7	65
111	Improving cryogenic deuterium-tritium implosion performance on OMEGA. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	48
112	An empirical target discharging model relevant to hot-electron preheat in direct-drive implosions on OMEGA. <i>Plasma Physics and Controlled Fusion</i> , 2013, 55, 045001.	0.9	12
113	Polar-drive implosions on OMEGA and the National Ignition Facility. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	28
114	Observation of strong electromagnetic fields around laser-entrance holes of ignition-scale hohlraums in inertial-confinement fusion experiments at the National Ignition Facility. <i>New Journal of Physics</i> , 2013, 15, 025040.	1.2	14
115	The magnetic recoil spectrometer for measurements of the absolute neutron spectrum at OMEGA and the NIF. <i>Review of Scientific Instruments</i> , 2013, 84, 043506.	0.6	59
116	Species separation in inertial confinement fusion fuels. <i>Physics of Plasmas</i> , 2013, 20, 012701.	0.7	47
117	Time evolution of filamentation and self-generated fields in the coronae of directly driven inertial-confinement fusion capsules. <i>Physics of Plasmas</i> , 2012, 19, .	0.7	38
118	Inertial confinement fusion implosions with imposed magnetic field compression using the OMEGA Laser. <i>Physics of Plasmas</i> , 2012, 19, .	0.7	112
119	Measuring the absolute deuterium-tritium neutron yield using the magnetic recoil spectrometer at OMEGA and the NIF. <i>Review of Scientific Instruments</i> , 2012, 83, 10D912.	0.6	35
120	Measurements of hohlraum-produced fast ions. <i>Physics of Plasmas</i> , 2012, 19, .	0.7	4
121	Cryogenic thermonuclear fuel implosions on the National Ignition Facility. <i>Physics of Plasmas</i> , 2012, 19, .	0.7	95
122	Source characterization and modeling development for monoenergetic-proton radiography experiments on OMEGA. <i>Review of Scientific Instruments</i> , 2012, 83, 063506.	0.6	39
123	Charged-particle spectroscopy for diagnosing shock $\Gamma$ and strength in NIF implosions. <i>Review of Scientific Instruments</i> , 2012, 83, 10D901.	0.6	38
124	A novel particle time of flight diagnostic for measurements of shock- and compression-bang times in D3He and DT implosions at the NIF. <i>Review of Scientific Instruments</i> , 2012, 83, 10D902.	0.6	38
125	Measurements of the $\langle T \rangle$ stretch $\langle t \rangle$ $\langle n \rangle^2$ Neutron Spectrum at Low Reactant Energies from Inertial Confinement Implosions. <i>Physical Review Letters</i> , 2012, 109, 025003.	2.9	27
126	Impeding Hohlraum Plasma Stagnation in Inertial-Confinement Fusion. <i>Physical Review Letters</i> , 2012, 108, 025001.	2.9	27



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127	Assembly of High-Areal-Density Deuterium-Tritium Fuel from Indirectly Driven Cryogenic Implosions. <i>Physical Review Letters</i> , 2012, 108, 215005.	2.9	57
128	Advances in compact proton spectrometers for inertial-confinement fusion and plasma nuclear science. <i>Review of Scientific Instruments</i> , 2012, 83, 10D908.	0.6	41
129	First Measurements of Rayleigh-Taylor-Induced Magnetic Fields in Laser-Produced Plasmas. <i>Physical Review Letters</i> , 2012, 108, 255006.	2.9	64
130	Mapping return currents in laser-generated Z-pinch plasmas using proton deflectometry. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	21
131	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
132	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
133	Implosion dynamics measurements at the National Ignition Facility. <i>Physics of Plasmas</i> , 2012, 19, .	0.7	125
134	Neutron spectrometry—An essential tool for diagnosing implosions at the National Ignition Facility (invited). <i>Review of Scientific Instruments</i> , 2012, 83, 10D308.	0.6	117
135	Upgrade of the MIT Linear Electrostatic Ion Accelerator (LEIA) for nuclear diagnostics development for Omega, Z and the NIF. <i>Review of Scientific Instruments</i> , 2012, 83, 043502.	0.6	18
136	Using high-intensity laser-generated energetic protons to radiograph directly driven implosions. <i>Review of Scientific Instruments</i> , 2012, 83, 013511.	0.6	58
137	Evidence for Stratification of Deuterium-Tritium Fuel in Inertial Confinement Fusion Implosions. <i>Physical Review Letters</i> , 2012, 108, 075002.	2.9	61
138	Measurements of the Differential Cross Sections for the Elastic $\hat{\alpha}^n$ $H^3$ and $\hat{\alpha}^n$	2.9	43
139	Increasing the energy dynamic range of solid-state nuclear track detectors using multiple surfaces. <i>Review of Scientific Instruments</i> , 2011, 82, 083301.	0.6	9
140	The coincidence counting technique for orders of magnitude background reduction in data obtained with the magnetic recoil spectrometer at OMEGA and the NIF. <i>Review of Scientific Instruments</i> , 2011, 82, 073502.	0.6	27
141	Changes in CR-39 proton sensitivity due to prolonged exposure to high vacuums relevant to the National Ignition Facility and OMEGA. <i>Review of Scientific Instruments</i> , 2011, 82, 095110.	0.6	12
142	Triple-picket warm plastic-shell implosions on OMEGA. <i>Physics of Plasmas</i> , 2011, 18, 012705.	0.7	32
143	The response of CR-39 nuclear track detector to $1 \times 10^9$ MeV protons. <i>Review of Scientific Instruments</i> , 2011, 82, 103303.	0.6	66
144	Charged-Particle Probing of X-ray-Driven Inertial-Fusion Implosions. <i>Science</i> , 2010, 327, 1231-1235.	6.0	86

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145	Plasma Barodiffusion in Inertial-Confinement-Fusion Implosions: Application to Observed Yield Anomalies in Thermonuclear Fuel Mixtures. <i>Physical Review Letters</i> , 2010, 105, 115005.	2.9	84
146	Demonstration of the Highest Deuterium-Tritium Areal Density Using Multiple-Picket Cryogenic Designs on OMEGA. <i>Physical Review Letters</i> , 2010, 104, 165001.	2.9	111
147	Shock-tuned cryogenic-deuterium-tritium implosion performance on Omega. <i>Physics of Plasmas</i> , 2010, 17, 056312.	0.7	33
148	Compressing magnetic fields with high-energy lasers. <i>Physics of Plasmas</i> , 2010, 17, .	0.7	89
149	Probing high areal-density cryogenic deuterium-tritium implosions using downscattered neutron spectra measured by the magnetic recoil spectrometer. <i>Physics of Plasmas</i> , 2010, 17, .	0.7	91
150	Laser-Driven Magnetic-Flux Compression in High-Energy-Density Plasmas. <i>Physical Review Letters</i> , 2009, 103, 215004.	2.9	91
151	Lorentz Mapping of Magnetic Fields in Hot Dense Plasmas. <i>Physical Review Letters</i> , 2009, 103, 085001.	2.9	43
152	Electron-ion thermal equilibration after spherical shock collapse. <i>Physical Review E</i> , 2009, 80, 026403.	0.8	15
153	Observations of Electromagnetic Fields and Plasma Flow in Hohlräume with Proton Radiography. <i>Physical Review Letters</i> , 2009, 102, 205001.	2.9	69
154	Electric field and ionization-gradient effects on inertial-confinement-fusion implosions. <i>Plasma Physics and Controlled Fusion</i> , 2009, 51, 124048.	0.9	25
155	Plasma-Density Determination from X-Ray Radiography of Laser-Driven Spherical Implosions. <i>Physical Review Letters</i> , 2009, 102, 185004.	2.9	68
156	Proton Radiography of Inertial Fusion Implosions. <i>Science</i> , 2008, 319, 1223-1225.	6.0	157
157	Performance of direct-drive cryogenic targets on OMEGA. <i>Physics of Plasmas</i> , 2008, 15, .	0.7	92
158	Monoenergetic-Proton-Radiography Measurements of Implosion Dynamics in Direct-Drive Inertial-Confinement Fusion. <i>Physical Review Letters</i> , 2008, 100, 225001.	2.9	85
159	Observations of the collapse of asymmetrically driven convergent shocks. <i>Physics of Plasmas</i> , 2008, 15, .	0.7	23
160	Progress in direct-drive inertial confinement fusion. <i>Physics of Plasmas</i> , 2008, 15, .	0.7	107
161	First measurements of the absolute neutron spectrum using the magnetic recoil spectrometer at OMEGA (invited). <i>Review of Scientific Instruments</i> , 2008, 79, 10E502.	0.6	78
162	Constraining fundamental plasma physics processes using doped capsule implosions. <i>Journal of Physics: Conference Series</i> , 2008, 112, 022016.	0.3	6

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163	Observation of the Decay Dynamics and Instabilities of Megagauss Field Structures in Laser-Produced Plasmas. <i>Physical Review Letters</i> , 2007, 99, 015001.	2.9	48
164	Observation of Megagauss-Field Topology Changes due to Magnetic Reconnection in Laser-Produced Plasmas. <i>Physical Review Letters</i> , 2007, 99, 055001.	2.9	151
165	Effect of higher z dopants on implosion dynamics: X-ray spectroscopy. <i>High Energy Density Physics</i> , 2007, 3, 163-168.	0.4	7
166	Monoenergetic proton backlighter for measuring E and B fields and for radiographing implosions and high-energy density plasmas (invited). <i>Review of Scientific Instruments</i> , 2006, 77, 10E725.	0.6	58
167	Measured dependence of nuclear burn region size on implosion parameters in inertial confinement fusion experiments. <i>Physics of Plasmas</i> , 2006, 13, 082704.	0.7	14
168	Tests of the hydrodynamic equivalence of direct-drive implosions with different D2 and He3 mixtures. <i>Physics of Plasmas</i> , 2006, 13, 052702.	0.7	60
169	Proton core imaging of the nuclear burn in inertial confinement fusion implosions. <i>Review of Scientific Instruments</i> , 2006, 77, 043503.	0.6	17
170	Development of nuclear diagnostics for the National Ignition Facility (invited). <i>Review of Scientific Instruments</i> , 2006, 77, 10E715.	0.6	84
171	Measuring E and B Fields in Laser-Produced Plasmas with Monoenergetic Proton Radiography. <i>Physical Review Letters</i> , 2006, 97, 135003.	2.9	192
172	Using nuclear data and Monte Carlo techniques to study areal density and mix in D2 implosions. <i>Physics of Plasmas</i> , 2005, 12, 032703.	0.7	18
173	Direct-drive, cryogenic target implosions on OMEGA. <i>Physics of Plasmas</i> , 2005, 12, 056302.	0.7	27
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