

# Fuel gain exceeding unity in an inertially confined fusion

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Citation Report

#	ARTICLE	IF	CITATIONS
1	The Promise of Nuclear Fusion. PAM Review Energy Science & Technology, 0, 1, 43-69.	0.2	1
2	Nonlinear motion of non-uniform current vortices in MHD Richtmyer-Meshkov instability. Physica Scripta, 2014, 89, 088003.	1.2	1
3	Electron-positron pair production observed from laser-induced processes in ultra-dense deuterium D(-1). Laser and Particle Beams, 2014, 32, 537-548.	0.4	15
4	Anomalous radiochemical recovery of post-detonation gold residues at the National Ignition Facility. Journal of Radioanalytical and Nuclear Chemistry, 2015, 303, 1851.	0.7	1
5	A wedged-peak-pulse design with medium fuel adiabat for indirect-drive fusion. Physics of Plasmas, 2014, 21, .	0.7	15
6	The great downside dilemma for risky emerging technologies. Physica Scripta, 2014, 89, 128004.	1.2	13
7	Development of multichannel low-energy neutron spectrometer. Review of Scientific Instruments, 2014, 85, 11E125.	0.6	5
8	Investigation of ion kinetic effects in direct-drive exploding-pusher implosions at the NIF. Physics of Plasmas, 2014, 21, 122712.	0.7	33
9	On thermonuclear ignition criterion at the National Ignition Facility. Physics of Plasmas, 2014, 21, .	0.7	16
10	A concept to collect neutron and x-ray images on the same line of sight at NIF. Review of Scientific Instruments, 2014, 85, 11E614.	0.6	6
11	A survey of pulse shape options for a revised plastic ablator ignition design. Physics of Plasmas, 2014, 21, .	0.7	50
12	Intense ionizing radiation from laser-induced processes in ultra-dense deuterium D(-1). International Journal of Modern Physics E, 2014, 23, 1450050.	0.4	7
13	Self characterization of a coded aperture array for neutron source imaging. Review of Scientific Instruments, 2014, 85, 123506.	0.6	14
14	Simulations of indirectly driven gas-filled capsules at the National Ignition Facility. Physics of Plasmas, 2014, 21, .	0.7	12
16	Octahedral spherical hohlraum and its laser arrangement for inertial fusion. Physics of Plasmas, 2014, 21, .	0.7	56
17	The figure simulation of the polishing pad in the continuous polishing process. , 2014, , .		1
18	The high-foot implosion campaign on the National Ignition Facility. , 2014, , .		0
19	Measurement of reaction-in-flight neutrons using thulium activation at the National Ignition Facility. Proceedings of SPIE, 2014, , .	0.8	5

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20	Theory of hydro-equivalent ignition for inertial fusion and its applications to OMEGA and the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	68
21	Time-resolved compression of a capsule with a cone to high density for fast-ignition laser fusion. <i>Nature Communications</i> , 2014, 5, 5785.	5.8	50
22	Mitigating hydrodynamic mix at the gas-ice interface with a combination of magnetic, ablative, and viscous stabilization. <i>Europhysics Letters</i> , 2014, 107, 65001.	0.7	13
23	AB INITIO EQUATIONS OF STATE FOR HYDROGEN (H-REOS.3) AND HELIUM (He-REOS.3) AND THEIR IMPLICATIONS FOR THE INTERIOR OF BROWN DWARFS. <i>Astrophysical Journal, Supplement Series</i> , 2014, 215, 21.	3.0	121
24	Role of hydrodynamic instability growth in hot-spot mass gain and fusion performance of inertial confinement fusion implosions. <i>Physics of Plasmas</i> , 2014, 21, 102704.	0.7	8
25	The effect of turbulent kinetic energy on inferred ion temperature from neutron spectra. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	104
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32	Design of an Indirect-Drive Pulse Shape for $\sim 1.6$ MJ Inertial Confinement Fusion Ignition Capsules. <i>Chinese Physics Letters</i> , 2014, 31, 045201.	1.3	4
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35	Design of magnetized liner inertial fusion experiments using the Z facility. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	123
36	Hydrodynamic instabilities in beryllium targets for the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, 092701.	0.7	27
37	Species separation and modification of neutron diagnostics in inertial-confinement fusion. <i>Europhysics Letters</i> , 2014, 107, 65003.	0.7	37

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40	Enhanced Delamination of Ultrathin Free-Standing Polymer Films via Self-Limiting Surface Modification. <i>Langmuir</i> , 2014, 30, 5126-5132.	1.6	48
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43	First-principles opacity table of warm dense deuterium for inertial-confinement-fusion applications. <i>Physical Review E</i> , 2014, 90, 033111.	0.8	53
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45	The Effect of Wedge Angle on the Evolution of a Stagnation Layer in a Colliding Plasma Experiment. <i>Journal of Physics: Conference Series</i> , 2014, 548, 012036.	0.3	9
46	Kinetic Simulations of Rayleigh-Taylor Instabilities. <i>Journal of Physics: Conference Series</i> , 2014, 535, 012032.	0.3	2
47	Low temperature photoionized Ne plasmas induced by laser-plasma EUV sources. <i>Laser and Particle Beams</i> , 2015, 33, 193-200.	0.4	4
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55	Generalized Lenard-Balescu calculations of electron-ion temperature relaxation in beryllium plasma. <i>Physical Review E</i> , 2015, 92, 033103.	0.8	7

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57	Alpha Heating and Burning Plasmas in Inertial Confinement Fusion. <i>Physical Review Letters</i> , 2015, 114, 255003.	2.9	83
58	Improved Performance of High Areal Density Indirect Drive Implosions at the National Ignition Facility using a Four-Shock Adiabatic Shaped Drive. <i>Physical Review Letters</i> , 2015, 115, 105001.	2.9	58
59	Free-Electron X-Ray Laser Measurements of Collisional-Damped Plasmons in Isochorically Heated Warm Dense Matter. <i>Physical Review Letters</i> , 2015, 115, 115001.	2.9	111
60	Luminescence from Collapsing Centimeter Bubbles Expanded by Chemical Reaction. <i>Physical Review Letters</i> , 2015, 115, 094501.	2.9	10
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67	Differential heating: A versatile method for thermal conductivity measurements in high-energy-density matter. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	16
68	Role of tool marks inside spherical mitigation pit fabricated by micro-milling on repairing quality of damaged KH <sub>2</sub> PO <sub>4</sub> crystal. <i>Scientific Reports</i> , 2015, 5, 14422.	1.6	13
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70	Target geometrical effects on the stagnation layer formed by colliding a pair of laser produced copper plasmas. <i>Physics of Plasmas</i> , 2015, 22, 093506.	0.7	17
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91	Three-dimensional simulations of National Ignition Facility implosions: Insight into experimental	0.7	28
92	Photo-oxidation of polymer-like amorphous hydrogenated carbon under visible light illumination. <i>Polymer Degradation and Stability</i> , 2015, 122, 133-138.	2.7	11

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120	Sensitivity of inertial confinement fusion hot spot properties to the deuterium-tritium fuel adiabat. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	14
121	Impact of first-principles properties of deuterium-tritium on inertial confinement fusion target designs. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	38
122	Gamma Reaction History ablator areal density constraints upon correlated diagnostic modeling of National Ignition Facility implosion experiments. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	21
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145	Combustion phenomena in modern physics: I. Inertial confinement fusion. <i>Progress in Energy and Combustion Science</i> , 2015, 47, 32-59.	15.8	18
146	Electron-ion temperature equilibration in warm dense tantalum. <i>High Energy Density Physics</i> , 2015, 14, 1-5.	0.4	20

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148	Signatures of asymmetry in neutron spectra and images predicted by three-dimensional radiation hydrodynamics simulations of indirect drive implosions. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	29
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