

# Owen Mannion

## List of Publications by Year in descending order

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Version: 2024-02-01

26  
papers

401  
citations

840776

11  
h-index

752698

20  
g-index

26  
all docs

26  
docs citations

26  
times ranked

366  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced laser-energy coupling with small-spot distributed phase plates (SG5-650) in OMEGA DT cryogenic target implosions. <i>Physics of Plasmas</i> , 2022, 29, .	1.9	9
2	Measurements of the temperature and velocity of the dense fuel layer in inertial confinement fusion experiments. <i>Physical Review E</i> , 2022, 105, .	2.1	5
3	Neutron backscatter edges as a diagnostic of burn propagation. <i>Physics of Plasmas</i> , 2022, 29, 062707.	1.9	2
4	Analysis of limited coverage effects on areal density measurements in inertial confinement fusion implosions. <i>Physics of Plasmas</i> , 2022, 29, .	1.9	1
5	A novel photomultiplier tube neutron time-of-flight detector. <i>Review of Scientific Instruments</i> , 2021, 92, 013509.	1.3	4
6	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.	1.9	3
7	The effect of areal density asymmetries on scattered neutron spectra in ICF implosions. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	8
8	Reconstructing 3D asymmetries in laser-direct-drive implosions on OMEGA. <i>Review of Scientific Instruments</i> , 2021, 92, 033529.	1.3	11
9	Application of an energy-dependent instrument response function to analysis of nTOF data from cryogenic DT experiments. <i>Review of Scientific Instruments</i> , 2021, 92, 043546.	1.3	4
10	Mitigation of mode-one asymmetry in laser-direct-drive inertial confinement fusion implosions. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	26
11	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.	1.3	10
12	Thermal decoupling of deuterium and tritium during the inertial confinement fusion shock-convergence phase. <i>Physical Review E</i> , 2021, 104, L013201.	2.1	9
13	Experimentally Inferred Fusion Yield Dependencies of OMEGA Inertial Confinement Fusion Implosions. <i>Physical Review Letters</i> , 2021, 127, 105001.	7.8	23
14	Using statistical modeling to predict and understand fusion experiments. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	4
15	Effect of cross-beam energy transfer on target-offset asymmetry in direct-drive inertial confinement fusion implosions. <i>Physics of Plasmas</i> , 2020, 27, 112713.	1.9	6
16	Inferring thermal ion temperature and residual kinetic energy from nuclear measurements in inertial confinement fusion implosions. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	15
17	Theory of ignition and burn propagation in inertial fusion implosions. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	21
18	Neutron backscatter edge: A measure of the hydrodynamic properties of the dense DT fuel at stagnation in ICF experiments. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	13

#	ARTICLE	IF	CITATIONS
19	Impact of stalk on directly driven inertial confinement fusion implosions. <i>Physics of Plasmas</i> , 2020, 27, 032704.	1.9	15
20	A generalized forward fit for neutron detectors with energy-dependent response functions. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	6
21	Deuteron breakup induced by 14-MeV neutrons from inertial confinement fusion. <i>Physical Review C</i> , 2019, 100, .	2.9	9
22	Tripled yield in direct-drive laser fusion through statistical modelling. <i>Nature</i> , 2019, 565, 581-586.	27.8	103
23	Calibration of a neutron time-of-flight detector with a rapid instrument response function for measurements of bulk fluid motion on OMEGA. <i>Review of Scientific Instruments</i> , 2018, 89, 101131.	1.3	21
24	Impact of three-dimensional hot-spot flow asymmetry on ion-temperature measurements in inertial confinement fusion experiments. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	22
25	Analysis of trends in experimental observables: Reconstruction of the implosion dynamics and implications for fusion yield extrapolation for direct-drive cryogenic targets on OMEGA. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	18
26	Effects of residual kinetic energy on yield degradation and ion temperature asymmetries in inertial confinement fusion implosions. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	33