Richard Olson

List of Publications by Year
in descending order

28 papers	1,620 citations	516710 16 h-index	501196 28 g-index
28 all docs	28 docs citations	28 times ranked	845 citing authors

#	Article	IF	Citations
1	Point design targets, specifications, and requirements for the 2010 ignition campaign on the National Ignition Facility. Physics of Plasmas, 2011, 18, .	1.9	534
2	Capsule implosion optimization during the indirect-drive National Ignition Campaign. Physics of Plasmas, 2011, 18, .	1.9	131
3	Implosion dynamics measurements at the National Ignition Facility. Physics of Plasmas, 2012, 19, .	1.9	125
4	Shock timing experiments on the National Ignition Facility: Initial results and comparison with simulation. Physics of Plasmas, 2012, 19, .	1.9	115
5	A high-resolution integrated model of the National Ignition Campaign cryogenic layered experiments. Physics of Plasmas, 2012, 19, .	1.9	108
6	The first measurements of soft x-ray flux from ignition scale Hohlraums at the National Ignition Facility using DANTE (invited). Review of Scientific Instruments, 2010, 81, 10E321.	1.3	66
7	Observation of High Soft X-Ray Drive in Large-Scale Hohlraums at the National Ignition Facility. Physical Review Letters, 2011, 106, 085003.	7.8	55
8	Shock propagation, preheat, and x-ray burnthrough in indirect-drive inertial confinement fusion ablator materials. Physics of Plasmas, 2004, 11, 2778-2789.	1.9	53
9	First Liquid Layer Inertial Confinement Fusion Implosions at the National Ignition Facility. Physical Review Letters, 2016, 117, 245001.	7.8	53
10	Preheat Effects on Shock Propagation in Indirect-Drive Inertial Confinement Fusion Ablator Materials. Physical Review Letters, 2003, 91, 235002.	7.8	51
11	X-ray conversion efficiency in vacuum hohlraum experiments at the National Ignition Facility. Physics of Plasmas, 2012, 19, 053301.	1.9	48
12	Observation of persistent species temperature separation in inertial confinement fusion mixtures. Nature Communications, 2020, 11, 544.	12.8	41
13	Robustness to hydrodynamic instabilities in indirectly driven layered capsule implosions. Physics of Plasmas, 2019, 26, .	1.9	35
14	The effects of convergence ratio on the implosion behavior of DT layered inertial confinement fusion capsules. Physics of Plasmas, 2017, 24, .	1.9	33
15	Alternative hot spot formation techniques using liquid deuterium-tritium layer inertial confinement fusion capsules. Physics of Plasmas, 2013, 20, 092705.	1.9	32
16	Progress in the development of the MARBLE platform for studying thermonuclear burn in the presence of heterogeneous mix on OMEGA and the National Ignition Facility. Journal of Physics: Conference Series, 2016, 717, 012072.	0.4	24
17	The rate of development of atomic mixing and temperature equilibration in inertial confinement fusion implosions. Physics of Plasmas, 2020, 27, .	1.9	17
18	Variable convergence liquid layer implosions on the National Ignition Facility. Physics of Plasmas, 2018, 25, .	1.9	15

#	Article	IF	Citations
19	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
20	Wetted foam liquid fuel ICF target experiments. Journal of Physics: Conference Series, 2016, 717, 012042.	0.4	12
21	A polar direct drive liquid deuteriumâ€“tritium wetted foam target concept for inertial confinement fusion. Physics of Plasmas, 2021, 28, .	1.9	12
22	Development of the Marble experimental platform at the National Ignition Facility. Physics of Plasmas, 2020, 27, .	1.9	11
23	Lasnex simulations of NIF vacuum hohlraum commissioning experiments. Journal of Physics: Conference Series, 2010, 244, 032057.	0.4	9
24	Instruments, 2012, 83, 10D310.	1.3	8
25	Experimental quantification of the impact of heterogeneous mix on thermonuclear burn. Physics of Plasmas, 2022, 29, .	1.9	7
26	Preparations for a European R&D roadmap for an inertial fusion demo reactor. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200005.	3.4	6
27	Experimental validation of shock propagation through a foam with engineered macro-pores. Physics of Plasmas, 2021, 28, 012702.	1.9	5
28	Radiation driven Hohlraum using 2Ï‰ for ICF implosions at the NIF. Physics of Plasmas, 2020, 27, 082708.	1.9	2