Charlie Jarrott

List of Publications by Year in descending order

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471509 610901 1,109 25 17 24 h-index citations g-index papers 25 25 25 860 docs citations times ranked citing authors all docs

#	Article	IF	Citations
1	Burning plasma achieved in inertial fusion. Nature, 2022, 601, 542-548.	27.8	233
2	The high velocity, high adiabat, "Bigfoot―campaign and tests of indirect-drive implosion scaling. Physics of Plasmas, 2018, 25, .	1.9	90
3	Design of inertial fusion implosions reaching the burning plasma regime. Nature Physics, 2022, 18, 251-258.	16.7	87
4	Approaching a burning plasma on the NIF. Physics of Plasmas, 2019, 26, .	1.9	83
5	Production of neutrons up to 18 MeV in high-intensity, short-pulse laser matter interactions. Physics of Plasmas, 2011, 18, .	1.9	80
6	Exploring the limits of case-to-capsule ratio, pulse length, and picket energy for symmetric hohlraum drive on the National Ignition Facility Laser. Physics of Plasmas, 2018, 25, .	1.9	79
7	Development of Improved Radiation Drive Environment for High Foot Implosions at the National Ignition Facility. Physical Review Letters, 2016, 117, 225002.	7.8	61
8	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
9	Hotspot conditions achieved in inertial confinement fusion experiments on the National Ignition Facility. Physics of Plasmas, 2020, 27, .	1.9	50
10	Visualizing fast electron energy transport into laser-compressed high-density fast-ignitionÂtargets. Nature Physics, 2016, 12, 499-504.	16.7	49
11	The influence of hohlraum dynamics on implosion symmetry in indirect drive inertial confinement fusion experiments. Physics of Plasmas, 2018, 25, .	1.9	42
12	Thermal Temperature Measurements of Inertial Fusion Implosions. Physical Review Letters, 2018, 121, 085001.	7.8	31
13	$\hat{\text{Kl}}_{\pm}$ and bremsstrahlung x-ray radiation backlighter sources from short pulse laser driven silver targets as a function of laser pre-pulse energy. Physics of Plasmas, 2014, 21, .	1.9	29
14	Hotspot electron temperature from x-ray continuum measurements on the NIF. Review of Scientific Instruments, 2016, 87, 11E534.	1.3	21
15	On krypton-doped capsule implosion experiments at the National Ignition Facility. Physics of Plasmas, 2017, 24, .	1.9	20
16	Achieving 280 Gbar hot spot pressure in DT-layered CH capsule implosions at the National Ignition Facility. Physics of Plasmas, 2020, 27, .	1.9	20
17	Observation of Hydrodynamic Flows in Imploding Fusion Plasmas on the National Ignition Facility. Physical Review Letters, 2021, 127, 125001.	7.8	20
18	Calibration and characterization of a highly efficient spectrometer in von Hamos geometry for 7-10 keV x-rays. Review of Scientific Instruments, 2017, 88, 043110.	1.3	15

#	Article	IF	CITATION
19	Performance of beryllium targets with full-scale capsules in low-fill 6.72-mm hohlraums on the National Ignition Facility. Physics of Plasmas, 2017, 24, .	1.9	14
20	Development of a krypton-doped gas symmetry capsule platform for x-ray spectroscopy of implosion cores on the NIF. Review of Scientific Instruments, 2016, 87, 11E327.	1.3	13
21	Laboratory measurements of geometrical effects in the x-ray emission of optically thick lines for ICF diagnostics. Physics of Plasmas, 2019, 26, .	1.9	9
22	Transport and spatial energy deposition of relativistic electrons in copper-doped fast ignition plasmas. Physics of Plasmas, 2017, 24, 102710.	1.9	6
23	Implementing time resolved electron temperature capability at the NIF using a streak camera. Review of Scientific Instruments, 2018, 89, 10K117.	1.3	5
24	Demonstration of Geometric Effects and Resonant Scattering in the X-Ray Spectra of High-Energy-Density Plasmas. Physical Review Letters, 2021, 126, 085001.	7.8	2
25	Particle transport and electric fields in a laser-generated focused proton beam. , 2012, , .		0