D H Barnak

List of Publications by Year
in descending order

23 papers	559 citations	687363 13 h-index	642732 23 g-index
24 all docs	24 docs citations	24 times ranked	695 citing authors

#	Article	IF	Citations
1	Effect of laser preheat in magnetized liner inertial fusion at OMEGA. Physics of Plasmas, 2022, 29, 042703.	1.9	3
2	Diagnosing magnetic fields in cylindrical implosions with oblique proton radiography. Physics of Plasmas, 2022, 29, .	1.9	5
3	Soft x-ray spectrum unfold of K-edge filtered x-ray diode arrays using cubic splines. Review of Scientific Instruments, 2020, 91, 073102.	1.3	4
4	Neutron yield enhancement and suppression by magnetization in laser-driven cylindrical implosions. Physics of Plasmas, 2020, 27, .	1.9	15
5	Axial proton probing of magnetic and electric fields inside laser-driven coils. Physics of Plasmas, 2020, 27, .	1.9	16
6	Modeling hydrodynamics, magnetic fields, and synthetic radiographs for high-energy-density plasma flows in shock-shear targets. Physics of Plasmas, 2020, 27, .	1.9	5
7	Characterizing laser preheat for laser-driven magnetized liner inertial fusion using soft x-ray emission. Physics of Plasmas, 2020, 27, 112709.	1.9	5
8	Inferring fuel areal density from secondary neutron yields in laser-driven magnetized liner inertial fusion. Physics of Plasmas, 2019, 26, .	1.9	11
9	Increasing the magnetic-field capability of the magneto-inertial fusion electrical discharge system using an inductively coupled coil. Review of Scientific Instruments, 2018, 89, 033501.	1.3	10
10	Measuring implosion velocities in experiments and simulations of laser-driven cylindrical implosions on the OMEGA laser. Plasma Physics and Controlled Fusion, 2018, 60, 054014.	2.1	14
11	Optimization of laser-driven cylindrical implosions on the OMEGA laser. Physics of Plasmas, 2018, 25, 122701.	1.9	12
12	Inductively coupled 30 T magnetic field platform for magnetized high-energy-density plasma studies. Review of Scientific Instruments, 2018, 89, 084703.	1.3	11
13	Laser entrance window transmission and reflection measurements for preheating in magnetized liner inertial fusion. Physics of Plasmas, 2018, 25, 062704.	1.9	9
14	Laser-driven magnetized liner inertial fusion on OMEGA. Physics of Plasmas, 2017, 24, .	1.9	33
15	Laser-driven magnetized liner inertial fusion. Physics of Plasmas, 2017, 24, .	1.9	49
16	High-Mach number, laser-driven magnetized collisionless shocks. Physics of Plasmas, 2017, 24, .	1.9	23
17	Generation and Evolution of High-Mach-Number Laser-Driven Magnetized Collisionless Shocks in the Laboratory. Physical Review Letters, 2017, 119, 025001.	7.8	66
18	Target material dependence of positron generation from high intensity laser-matter interactions. Physics of Plasmas, 2016, 23, .	1.9	18

#	Article	IF	Citations
19	Diagnosing laser-preheated magnetized plasmas relevant to magnetized liner inertial fusion. Physics of Plasmas, 2015, 22, .	1.9	21
20	Note: Experimental platform for magnetized high-energy-density plasma studies at the omega laser facility. Review of Scientific Instruments, 2015, 86, 016105.	1.3	50
21	Use of external magnetic fields in hohlraum plasmas to improve laser-coupling. Physics of Plasmas, 2015, 22, .	1.9	45
22	Magnetic collimation of relativistic positrons and electrons from high intensity laserâ€“matter interactions. Physics of Plasmas, 2014, 21, .	1.9	37
23	Magnetic Reconnection between Colliding Magnetized Laser-Produced Plasma Plumes. Physical Review Letters, 2014, 113, 105003.	7.8	97