Eyal Kroupp

List of Publications by Year in descending order

46 papers	691 citations	567281 15 h-index	552781 26 g-index
46 all docs	46 docs citations	46 times ranked	416 citing authors

#	Article	IF	Citations
1	Spectroscopic determination of the magnetic-field distribution in an imploding plasma. Physics of Plasmas, 1998, 5, 1068-1075.	1.9	75
2	Mitigation of Instabilities in a Z-Pinch Plasma by a Preembedded Axial Magnetic Field. IEEE Transactions on Plasma Science, 2014, 42, 2524-2525.	1.3	70
3	Study of gas-puff Z-pinches on COBRA. Physics of Plasmas, 2014, 21, .	1.9	57
4	Evolution of MHD Instabilities in Plasma Imploding Under Magnetic Field. IEEE Transactions on Plasma Science, 2011, 39, 2392-2393.	1.3	46
5	Ion Temperature and Hydrodynamic-Energy Measurements in a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Z</mml:mi></mml:math>-Pinch Plasma at Stagnation. Physical Review Letters, 2011, 107, 105001.	7.8	40
6	Pressure and Energy Balance of Stagnating Plasmas in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>z</mml:mi></mml:math>-Pinch Experiments: Implications to Current Flow at Stagnation. Physical Review Letters, 2013, 111, 035001.	7.8	39
7	Ion-Kinetic-Energy Measurements and Energy Balance in aZ-Pinch Plasma at Stagnation. Physical Review Letters, 2007, 98, 115001.	7.8	37
8	Effects of a Preembedded Axial Magnetic Field on the Current Distribution in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Z</mml:mi></mml:math> -Pinch Implosion. Physical Review Letters, 2019, 122, 045001.	7.8	29
9	Temperature andKÎ±-yield radial distributions in laser-produced solid-density plasmas imaged with ultrahigh-resolution x-ray spectroscopy. Physical Review E, 2010, 81, 026406.	2.1	28
10	Turbulent stagnation in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Z</mml:mi></mml:math> -pinch plasma. Physical Review E, 2018, 97, 013202.	2.1	23
11	Progress in line-shape modeling of K-shell transitions in warm dense titanium plasmas. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 214056.	2.1	18
12	Beyond Zeeman spectroscopy: Magnetic-field diagnostics with Stark-dominated line shapes. Physics of Plasmas, 2011, 18, .	1.9	18
13	Effective versus ion thermal temperatures in the Weizmann Ne Z-pinch: Modeling and stagnation physics. Physics of Plasmas, 2014, 21, .	1.9	18
14	Local measurements of the spatial magnetic field distribution in a z-pinch plasma during and near stagnation using polarization spectroscopy. Physics of Plasmas, 2020, 27, .	1.9	18
15	Measurements of the spatial magnetic field distribution in a z-pinch plasma throughout the stagnation process. Journal of Instrumentation, 2017, 12, P09004-P09004.	1.2	17
16	Determination of magnetic fields based on the Zeeman effect in regimes inaccessible by Zeeman-splitting spectroscopy. High Energy Density Physics, 2014, 10, 56-60.	1.5	15
17	Use of emission-line intensities for a self-consistent determination of the particle densities in a transient plasma. Physical Review E, 2003, 67, 016404.	2.1	14
18	Electron-temperature and energy-flow history in an imploding plasma. Physical Review E, 2005, 71, 056402.	2.1	14

#	Article	IF	Citations
19	High-resolution radial KÎ± spectra obtained from a multi-keV electron distribution in solid-density titanium foils generated by relativistic laserâ€“matter interaction. High Energy Density Physics, 2011, 7, 47-53.	1.5	13
20	Self-Generated Plasma Rotation in a Z-Pinch Implosion with Preembedded Axial Magnetic Field. Physical Review Letters, 2022, 128, 015001.	7.8	10
21	Electron density and ionization dynamics in an imploding z-pinch plasma. Physics of Plasmas, 2005, 12, 092704.	1.9	9
22	Investigation of Ne IX and Ne X line emission from dense plasma using Ross-filter systems. Journal of Applied Physics, 2002, 92, 4947-4951.	2.5	8
23	Study of Triple Ar Gas Puff Z-Pinches on 0.9-MA, 200-ns COBRA. IEEE Transactions on Plasma Science, 2018, 46, 3864-3870.	1.3	8
24	Determination of the Ion Temperature in a High-Energy-Density Plasma Using the Stark Effect. Physical Review Letters, 2019, 122, 095001.	7.8	8
25	Laser-plasma proton acceleration with a combined gas-foil target. New Journal of Physics, 2020, 22, 103068.	2.9	8
26	Commissioning and first results from the new 2 Ã— 100ÂTW laser at the WIS. Matter and Radiation at Extremes, 2022, 7, .	3.9	8
27	On the Stark Effect of the O I 777-nm Triplet in Plasma and Laser Fields. Atoms, 2020, 8, 84.	1.6	7
28	K-line emission profiles with focus on the self-consistent calculation of plasma polarization. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 214061.	2.1	6
29	Current channel evolution in ideal Z pinch for general velocity profiles. Physics of Plasmas, 2019, 26, .	1.9	5
30	Diagnostics and Investigations of the Plasma and Field Properties in Pulsed-Plasma Configurations. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 501-508.	0.2	4
31	Absorption-aided x-ray emission tomography of planar targets. Physics of Plasmas, 2014, 21, 033303.	1.9	4
32	K-shell spectroscopy of silicon ions as diagnostic for high electric fields. Review of Scientific Instruments, 2012, 83, 113507.	1.3	3
33	Azimuthal magnetic field distribution in gas-puff <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Z</mml:mi></mml:mrow></mml:math> -pinch implosions with and without external magnetic stabilization. Physical Review E, 2021, 103, 053205.	2.1	3
34	High-resolution spectroscopic X-ray diagnostics for studying the ion kinetic energy and plasma properties in a Z-pinch at stagnation. , 0, , .		2
35	X-ray polarization-dependent measurements of solid-density plasmas generated by fs laser pulses. High Energy Density Physics, 2007, 3, 297-301.	1.5	2
36	Target heating in femtosecond laserâ€“plasma interactions: Quantitative analysis of experimental data. Physics of Plasmas, 2021, 28, .	1.9	2

#	Article	IF	Citations
37	High-resolution spectroscopic X-ray diagnostics for studying the ion-lunetic energies at the stagnation of a Z-pinch plasma. , 0, , .		1
38	Examination of the spatial-response uniformity of a microchannel-plate detector using a pulsed high-voltage electron gun. Journal of Instrumentation, 2014, 9, P05004-P05004.	1.2	1
39	Recent Simulations of Nozzle Gas Flow and Gas-Puff Z-Pinch Implosions with Magnetic Fields in the Weizmann Z-Pinch. , 2021, , .		1
40	Experimental Investigation of the Inductance of an Imploding Z-Pinch Plasma Column Close to Stagnation. , 2021, , .		1
41	Study of a Current Loss at A Z-Pinch Stagnation Due to Fast Current Redistribution. , 2022, , .		1
42	Energy balance and ionization dynamics in an imploding Z-pinch plasma. , 0, , .		0
43	Experimental study of the ion thermalization at a Z-pinch at stagnation. , 2008, , .		0
44	Hydrodynamic-dissipation relation for characterizing flow stagnation. Physical Review E, 2021, 103, 063204.	2.1	0
45	Simultaneous Measurements of Gas-Puff Z-Pinch Parameters Using Visible Spectroscopy. , 2020, , .		0
46	Observation of Self-Generated Plasma Rotation and its Effects in A Z-Pinch With Preembedded Axial Magnetic Field. , 2022, , .		0