

Joseph Katz

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9598782/publications.pdf>

Version: 2024-02-01

35
papers

537
citations

623734

14
h-index

677142

22
g-index

35
all docs

35
docs citations

35
times ranked

593
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental observations of detached bow shock formation in the interaction of a laser-produced plasma with a magnetized obstacle. <i>Physics of Plasmas</i> , 2022, 29, .	1.9	6
2	Cross-beam energy transfer saturation: ion heating and pump depletion. <i>Plasma Physics and Controlled Fusion</i> , 2022, 64, 034003.	2.1	4
3	Novel design for a polarizing DUV spectrometer using a Wollaston prism and its application as a diagnostic for measuring Thomson scattering data in the presence of strong self-emission backgrounds. <i>Review of Scientific Instruments</i> , 2022, 93, 013501.	1.3	0
4	Quantitative assessment of fitting errors associated with streak camera noise in Thomson scattering data analysis. <i>Review of Scientific Instruments</i> , 2022, 93, 043503.	1.3	2
5	Beam Spray Thresholds in ICF-Relevant Plasmas. <i>Physical Review Letters</i> , 2022, 129, .	7.8	6
6	Insensitivity of a turbulent laser-plasma dynamo to initial conditions. <i>Matter and Radiation at Extremes</i> , 2022, 7, .	3.9	3
7	A multi-channel x-ray temporal diagnostic for measurement of time-resolved electron temperature in cryogenic deuterium-tritium implosions at OMEGA. <i>Review of Scientific Instruments</i> , 2021, 92, 023507.	1.3	3
8	Using millimeter-sized carbon-deuterium foils for high-precision deuterium-tritium neutron spectrum measurements in direct-drive inertial confinement fusion at the OMEGA laser facility. <i>Review of Scientific Instruments</i> , 2021, 92, 023503.	1.3	2
9	Investigation of heat transport using directly driven gold spheres. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	11
10	A transmitted-beam diagnostic for the wavelength-tunable UV drive beam on OMEGA. <i>Review of Scientific Instruments</i> , 2021, 92, 033526.	1.3	5
11	Unabsorbed light beamlets for diagnosing coronal density profiles and absorption nonuniformity in direct-drive implosions on OMEGA. <i>Review of Scientific Instruments</i> , 2021, 92, 043525.	1.3	2
12	Measurements of Non-Maxwellian Electron Distribution Functions and Their Effect on Laser Heating. <i>Physical Review Letters</i> , 2021, 127, 015001.	7.8	26
13	Nonuniform Absorption and Scattered Light in Direct-Drive Implosions Driven by Polarization Smoothing. <i>Physical Review Letters</i> , 2021, 127, 075001.	7.8	11
14	Statistical analysis of non-Maxwellian electron distribution functions measured with angularly resolved Thomson scattering. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	10
15	Impact of the Langdon effect on crossed-beam energy transfer. <i>Nature Physics</i> , 2020, 16, 181-185.	16.7	37
16	Validation of heat transport modeling using directly driven beryllium spheres. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	15
17	Requirements for a 4% Thomson scattering system on megajoule scale laser facilities. <i>Review of Scientific Instruments</i> , 2020, 91, 083508.	1.3	2
18	Measurement of Kinetic-Scale Current Filamentation Dynamics and Associated Magnetic Fields in Interpenetrating Plasmas. <i>Physical Review Letters</i> , 2020, 124, 215001.	7.8	25

#	ARTICLE	IF	CITATIONS
19	Evolution of the Electron Distribution Function in the Presence of Inverse Bremsstrahlung Heating and Collisional Ionization. <i>Physical Review Letters</i> , 2020, 124, 025001.	7.8	19
20	Mitigation of self-focusing in Thomson scattering experiments. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	10
21	Picosecond Thermodynamics in Underdense Plasmas Measured with Thomson Scattering. <i>Physical Review Letters</i> , 2019, 122, 155001.	7.8	12
22	Measurement of apparent ion temperature using the magnetic recoil spectrometer at the OMEGA laser facility. <i>Review of Scientific Instruments</i> , 2018, 89, 101129.	1.3	12
23	Implementation of a Faraday rotation diagnostic at the OMEGA laser facility. <i>High Power Laser Science and Engineering</i> , 2018, 6, .	4.6	6
24	Observation of Nonlocal Heat Flux Using Thomson Scattering. <i>Physical Review Letters</i> , 2018, 121, 125001.	7.8	36
25	Unabsorbed light beamlets for diagnosing cross-beam energy transfer. <i>Review of Scientific Instruments</i> , 2018, 89, 10E101.	1.3	3
26	Supersonic gas-jet characterization with interferometry and Thomson scattering on the OMEGA Laser System. <i>Review of Scientific Instruments</i> , 2018, 89, 10C103.	1.3	18
27	A pulse-front-tilt-compensated streaked optical spectrometer with high throughput and picosecond time resolution. <i>Review of Scientific Instruments</i> , 2016, 87, 11E535.	1.3	10
28	Plasma characterization using ultraviolet Thomson scattering from ion-acoustic and electron plasma waves (invited). <i>Review of Scientific Instruments</i> , 2016, 87, 11E401.	1.3	41
29	Simulated performance of the optical Thomson scattering diagnostic designed for the National Ignition Facility. <i>Review of Scientific Instruments</i> , 2016, 87, 11E510.	1.3	19
30	Neutron temporal diagnostic for high-yield deuterium-tritium cryogenic implosions on OMEGA. <i>Review of Scientific Instruments</i> , 2016, 87, 053501.	1.3	33
31	Experimental Evidence of the Collective Brillouin Scattering of Multiple Laser Beams Sharing Acoustic Waves. <i>Physical Review Letters</i> , 2016, 116, 235002.	7.8	23
32	A Particle X-ray Temporal Diagnostic (PXTD) for studies of kinetic, multi-ion effects, and ion-electron equilibration rates in Inertial Confinement Fusion plasmas at OMEGA (invited). <i>Review of Scientific Instruments</i> , 2016, 87, 11D701.	1.3	22
33	The magnetic recoil spectrometer for measurements of the absolute neutron spectrum at OMEGA and the NIF. <i>Review of Scientific Instruments</i> , 2013, 84, 043506.	1.3	59
34	A reflective image-rotating periscope for spatially resolved Thomson-scattering experiments on OMEGA. <i>Journal of Instrumentation</i> , 2013, 8, C12009-C12009.	1.2	8
35	A reflective optical transport system for ultraviolet Thomson scattering from electron plasma waves on OMEGA. <i>Review of Scientific Instruments</i> , 2012, 83, 10E349.	1.3	36