

Paul A Keiter

List of Publications by Year in descending order

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88
papers

1,327
citations

394421

19
h-index

377865

34
g-index

90
all docs

90
docs citations

90
times ranked

1206
citing authors

#	ARTICLE	IF	CITATIONS
1	The time scale for the transition to turbulence in a high Reynolds number, accelerated flow. Physics of Plasmas, 2003, 10, 614-622.	1.9	113
2	Measurement of Charged-Particle Stopping in Warm Dense Plasma. Physical Review Letters, 2015, 114, 215002.	7.8	107
3	An experimental testbed for the study of hydrodynamic issues in supernovae. Physics of Plasmas, 2001, 8, 2446-2453.	1.9	92
4	High-Energy-Density Laboratory Astrophysics Studies of Jets and Bow Shocks. Astrophysical Journal, 2005, 634, L77-L80.	4.5	90
5	Observation of a Hydrodynamically Driven, Radiative-Precursor Shock. Physical Review Letters, 2002, 89, 165003.	7.8	64
6	Control of ion temperature anisotropy in a helicon plasma. Plasma Sources Science and Technology, 1998, 7, 186-191.	3.1	61
7	Frequency dependent effects in helicon plasmas. Physics of Plasmas, 1997, 4, 2741-2747.	1.9	59
8	Ion temperature anisotropy limitation in high beta plasmas. Physics of Plasmas, 2000, 7, 2157-2165.	1.9	57
9	Two laser-driven mix experiments to study reshock and shear. High Energy Density Physics, 2013, 9, 496-499.	1.5	43
10	Ion heating in the HELIX helicon plasma source. Physics of Plasmas, 1999, 6, 4767-4772.	1.9	35
11	Development of intense point x-ray sources for backlighting high energy density experiments (invited). Review of Scientific Instruments, 2004, 75, 3915-3920.	1.3	35
12	Experimental study of energy transfer in double shell implosions. Physics of Plasmas, 2019, 26, .	1.9	32
13	Instability, mixing, and transition to turbulence in a laser-driven counterflowing shear experiment. Physics of Plasmas, 2013, 20, .	1.9	31
14	Imaging x-ray Thomson scattering spectrometer design and demonstration (invited). Review of Scientific Instruments, 2012, 83, 10E108.	1.3	28
15	Ion dynamics in helicon sources. Physics of Plasmas, 2003, 10, 2127-2135.	1.9	22
16	A design of a two-dimensional, supersonic KH experiment on OMEGA-EP. High Energy Density Physics, 2013, 9, 672-686.	1.5	20
17	Radiation transport in inhomogeneous media. Physics of Plasmas, 2008, 15, .	1.9	19
18	A design of a two-dimensional, multimode RM experiment on OMEGA-EP. High Energy Density Physics, 2013, 9, 122-131.	1.5	19

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19	The hot hELicon eXperiment (HELIX) and the large experiment on instabilities and anisotropy (LEIA). Journal of Plasma Physics, 2015, 81, .	2.1	19
20	Experimental results from magnetized-jet experiments executed at the Jupiter Laser Facility. High Energy Density Physics, 2015, 17, 52-62.	1.5	19
21	Laser experiments to simulate supernova remnants. Physics of Plasmas, 2000, 7, 2142-2148.	1.9	18
22	Constraining computational modeling of indirect drive double shell capsule implosions using experiments. Physics of Plasmas, 2021, 28, .	1.9	17
23	Beta-dependent upper bound on ion temperature anisotropy in a laboratory plasma. Physics of Plasmas, 2000, 7, 779-783.	1.9	15
24	REVERSE RADIATIVE SHOCK LASER EXPERIMENTS RELEVANT TO ACCRETING STREAM-DISK IMPACT IN INTERACTING BINARIES. Astrophysical Journal Letters, 2013, 762, L2.	8.3	14
25	Mitigation of hot electrons from laser-plasma instabilities in high-Z, highly ionized plasmas. Physics of Plasmas, 2017, 24, .	1.9	14
26	Origin and dynamics of the heliospheric streamer belt and current sheet. Journal of Geophysical Research, 2005, 110, .	3.3	13
27	Radiative reverse shock laser experiments relevant to accretion processes in cataclysmic variables. Physics of Plasmas, 2013, 20, .	1.9	13
28	Conversion efficiency of high-Z backlighter materials. Review of Scientific Instruments, 2008, 79, 10E918.	1.3	12
29	An evaluation of high energy bremsstrahlung background in point-projection x-ray radiography experiments. Review of Scientific Instruments, 2012, 83, 10E528.	1.3	12
30	Implementation of a Talbot-Lau x-ray deflectometer diagnostic platform for the OMEGA EP laser. Review of Scientific Instruments, 2020, 91, 023511.	1.3	12
31	Detrimental effects and mitigation of the joint feature in double shell implosion simulations. Physics of Plasmas, 2021, 28, .	1.9	12
32	Tracking the density evolution in counter-propagating shock waves using imaging X-ray scattering. Applied Physics Letters, 2016, 109, 031108.	3.3	11
33	Experiments to Study Radiation Transport in Clumpy Media. Astrophysics and Space Science, 2007, 307, 213-217.	1.4	10
34	A technique for measuring the propagation of a supersonic radiation front in foam via spatially resolved spectral imaging of a tracer layer. Review of Scientific Instruments, 2012, 83, 023506.	1.3	10
35	Spatially-resolved X-ray scattering measurements of a planar blast wave. High Energy Density Physics, 2014, 11, 75-79.	1.5	9
36	Rayleigh-Taylor growth at decelerating interfaces. Physics of Plasmas, 2002, 9, 382-384.	1.9	8

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37	Recent Experimental Results and Modelling of High-Mach-Number Jets and the Transition to Turbulence. <i>Astrophysics and Space Science</i> , 2005, 298, 121-128.	1.4	8
38	DESIGN OF LABORATORY EXPERIMENTS TO STUDY PHOTOIONIZATION FRONTS DRIVEN BY THERMAL SOURCES. <i>Astrophysical Journal</i> , 2016, 833, 249.	4.5	8
39	Soft X-ray emission from laser-irradiated gold foils. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	8
40	Static characterization of aerogel targets for high energy density physics using x-ray radiography. <i>Review of Scientific Instruments</i> , 2004, 75, 4057-4059.	1.3	7
41	Simultaneous measurements of several state variables in shocked carbon by imaging x-ray scattering. <i>Physics of Plasmas</i> , 2014, 21, 042701.	1.9	7
42	Design of a supernova-relevant Rayleigh-Taylor experiment on the National Ignition Facility. I. Planar target design and diagnostics. <i>High Energy Density Physics</i> , 2014, 12, 35-45.	1.5	7
43	Measurements of laser generated soft X-ray emission from irradiated gold foils. <i>Review of Scientific Instruments</i> , 2016, 87, 11D609.	1.3	7
44	Magnetized Disruption of Inertially Confined Plasma Flows. <i>Physical Review Letters</i> , 2019, 122, 225001.	7.8	7
45	Mechanisms of shape transfer and preheating in indirect-drive double shell collisions. <i>Physics of Plasmas</i> , 2022, 29, .	1.9	7
46	Measurement and simulation of jet mass caused by a high-aspect ratio hole perturbation. <i>Physics of Plasmas</i> , 2010, 17, .	1.9	6
47	An experimental concept to measure opacities under solar-relevant conditions. <i>High Energy Density Physics</i> , 2013, 9, 319-324.	1.5	6
48	Demonstration of x-ray fluorescence imaging of a high-energy-density plasma. <i>Review of Scientific Instruments</i> , 2014, 85, 11E602.	1.3	6
49	Enhanced accuracy of x-ray spectra reconstruction from filtered diode array measurements by adding a time integrated spectrometer. <i>Review of Scientific Instruments</i> , 2017, 88, 043507.	1.3	6
50	Spatially resolved density and ionization measurements of shocked foams using x-ray fluorescence. <i>Journal of Applied Physics</i> , 2016, 120, 125901.	2.5	5
51	Neural network for 3D inertial confinement fusion shell reconstruction from single radiographs. <i>Review of Scientific Instruments</i> , 2021, 92, 033547.	1.3	5
52	Target Fabrication: A View from the Users. <i>Fusion Science and Technology</i> , 2004, 45, 286-295.	1.1	4
53	Late-time breakup of laser-driven hydrodynamics experiments. <i>High Energy Density Physics</i> , 2012, 8, 360-365.	1.5	4
54	Comparison between Kelvin-Helmholtz instability experiments on OMEGA and simulation results using the CRASH code. <i>High Energy Density Physics</i> , 2013, 9, 148-151.	1.5	4

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55	Developing High-Temperature Laser-Driven Half Hohlräume for High-Energy-Density Physics Experiments at the National Ignition Facility. <i>Fusion Science and Technology</i> , 2013, 63, 76-81.	1.1	4
56	Construction of a solenoid used on a magnetized plasma experiment. <i>Review of Scientific Instruments</i> , 2014, 85, 11E812.	1.3	4
57	Development of a WDM platform for charged-particle stopping experiments. <i>Journal of Physics: Conference Series</i> , 2016, 717, 012118.	0.4	4
58	Concept to diagnose mix with imaging x-ray Thomson scattering. <i>Review of Scientific Instruments</i> , 2012, 83, 10E534.	1.3	3
59	Investigation of the hard x-ray background in backlit pinhole imagers. <i>Review of Scientific Instruments</i> , 2014, 85, 11E610.	1.3	3
60	Study of shock waves and related phenomena motivated by astrophysics. <i>Journal of Physics: Conference Series</i> , 2016, 688, 012016.	0.4	3
61	Mitigation of hard x-ray background in backlit pinhole imagers. <i>Review of Scientific Instruments</i> , 2016, 87, 11E341.	1.3	3
62	Properties of laser-produced GaAs plasmas measured from highly resolved X-ray line shapes and ratios. <i>High Energy Density Physics</i> , 2018, 26, 73-80.	1.5	3
63	Laboratory Photoionization Fronts in Nitrogen Gas: A Numerical Feasibility and Parameter Study. <i>Astrophysical Journal</i> , 2018, 858, 22.	4.5	3
64	Atomic modeling of photoionization fronts in nitrogen gas. <i>Physics of Plasmas</i> , 2019, 26, 052901.	1.9	3
65	High-speed x-ray imaging in high-power laser experiments. , 2005, , .		2
66	Spectral measurements of asymmetrically irradiated capsule backlighters. <i>Review of Scientific Instruments</i> , 2016, 87, 11E338.	1.3	2
67	Design of laboratory experiments to study radiation-driven implosions. <i>High Energy Density Physics</i> , 2017, 22, 37-40.	1.5	2
68	A platform for x-ray Thomson scattering measurements of radiation hydrodynamics experiments on the NIF. <i>Review of Scientific Instruments</i> , 2018, 89, 10F105.	1.3	2
69	The design of a photoionization front experiment using the Z-Machine as a driving source and estimated measurements. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	2
70	Preliminary Results from an Astrophysically Relevant Radiation Transfer Experiment. , 2005, , 163-170.		2
71	A mass resolving neutral atom imager. <i>Review of Scientific Instruments</i> , 1997, 68, 296-299.	1.3	1
72	High-energy point-projection radiography of a driven, shielded Hohlraum. <i>Review of Scientific Instruments</i> , 2006, 77, 10E324.	1.3	1

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73	Measurements of the energy spectrum of electrons emanating from solid materials irradiated by a picosecond laser. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	1
74	Experimental considerations to observe two ionizing fronts in systems with a sharp absorption edge. <i>Review of Scientific Instruments</i> , 2018, 89, 10G104.	1.3	1
75	Demonstration of imaging X-ray Thomson scattering on OMEGA EP. <i>Review of Scientific Instruments</i> , 2016, 87, 11E550.	1.3	1
76	Ion temperature measurements in helicon plasmas. , 0, , .		0
77	Helicon plasmas for space relevant laboratory experiments. , 0, , .		0
78	Ion cyclotron resonant heating in a helicon plasma source. , 0, , .		0
79	Temperature anisotropy measurements in LEIA. , 0, , .		0
80	High beta ion driven microinstabilities in the large experiment on instabilities and anisotropies. , 0, , .		0
81	Preliminary Results from an Astrophysically Relevant Radiation Transfer Experiment. <i>Astrophysics and Space Science</i> , 2005, 298, 163-170.	1.4	0
82	A planar-geometry platform for the experimental investigation of Be jets. <i>Physics of Plasmas</i> , 2007, 14, 034501.	1.9	0
83	INERTIAL CONFINEMENT FUSION RESEARCH AT LOS ALAMOS NATIONAL LABORATORY. , 2009, , .		0
84	Heat waves and ionization fronts. , 2015, , .		0
85	Preliminary characterization of a laser-generated plasma sheet. <i>High Energy Density Physics</i> , 2015, 17, 208-212.	1.5	0
86	Novel Target Fabrication Using 3D Printing Developed at University of Michigan. <i>Journal of Physics: Conference Series</i> , 2016, 713, 012008.	0.4	0
87	Development of a backlit-multi-pinhole radiography source. <i>Review of Scientific Instruments</i> , 2018, 89, 10G110.	1.3	0
88	Mitigating the Joint Feature in Double Shell Implosion Simulations *. , 2021, , .		0