R. Paul Drake

List of Publications by Year
in descending order

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252	7,537	57758	66911
papers	citations	44 h-index	78 g-index

255	255	255	3128
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental astrophysics with high power lasers andZpinches. Reviews of Modern Physics, 2006, 78, 755-807.	45.6	640
2	Modeling Astrophysical Phenomena in the Laboratory with Intense Lasers. Science, 1999, 284, 1488-1493.	12.6	369
3	Observation of magnetic field generation via the Weibel instability in interpenetrating plasma flows. Nature Physics, 2015, 11, 173-176.	16.7	236
4	A review of astrophysics experiments on intense lasers. Physics of Plasmas, 2000, 7, 1641-1652.	1.9	188
5	Criteria for Scaled Laboratory Simulations of Astrophysical MHD Phenomena. Astrophysical Journal, Supplement Series, 2000, 127, 465-468.	7.7	184
6	Magnetohydrodynamic scaling: From astrophysics to the laboratory. Physics of Plasmas, 2001, 8, 1804-1816.	1.9	178
7	On Validating an Astrophysical Simulation Code. Astrophysical Journal, Supplement Series, 2002, 143, 201-229.	7.7	176
8	Nova experimental facility (invited). Review of Scientific Instruments, 1986, 57, 2101-2106.	1.3	157
9	Measurements of inverse bremsstrahlung absorption and non-Maxwellian electron velocity distributions. Physical Review Letters, 1994, 72, 2717-2720.	7.8	149
10	The frequency and damping of ion acoustic waves in hydrocarbon (CH) and twoâ€ionâ€species plasmas. Physics of Plasmas, 1995, 2, 129-138.	1.9	136
11	Laser-plasma interactions in long-scale-length plasmas under direct-drive National Ignition Facility conditions. Physics of Plasmas, 1999, 6, 2072-2080.	1.9	123
12	Supernova hydrodynamics experiments on the Nova laser. Physics of Plasmas, 1997, 4, 1994-2003.	1.9	121
13	Self-organized electromagnetic field structures in laser-produced counter-streaming plasmas. Nature Physics, 2012, 8, 809-812.	16.7	118
14	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
15	Generation of scaled protogalactic seed magnetic fields in laser-produced shock waves. Nature, 2012, 481, 480-483.	27.8	113
16	Perspectives on high-energy-density physics. Physics of Plasmas, 2009, 16, .	1.9	105
17	Electrostatic Plasma-Confinement Experiments in a Tandem Mirror System. Physical Review Letters, 1980, 44, 1132-1135.	7.8	103
18	CRASH: A BLOCK-ADAPTIVE-MESH CODE FOR RADIATIVE SHOCK HYDRODYNAMICSâ€”IMPLEMENTATION AND VERIFICATION. Astrophysical Journal, Supplement Series, 2011, 194, 23.	7.7	91

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19	Efficient Raman Sidescatter and Hot-Electron Production in Laser-Plasma Interaction Experiments. Physical Review Letters, 1984, 53, 1739-1742.	7.8	87
20	Observation of a Kelvin-Helmholtz Instability in a High-Energy-Density Plasma on the Omega Laser. Physical Review Letters, 2009, 103, 045005.	7.8	86
21	Observation of collapsing radiative shocks in laboratory experiments. Physics of Plasmas, 2006, 13, 082901.	1.9	85
22	Direct Evidence of Ponderomotive Filamentation in a Laser-Produced Plasma. Physical Review Letters, 1988, 61, 2336-2339.	7.8	84
23	Turbulent amplification of magnetic fields in laboratory laser-produced shock waves. Nature Physics, 2014, 10, 520-524.	16.7	84
24	How high energy fluxes may affect Rayleighâ€“Taylor instability growth in young supernova remnants. Nature Communications, 2018, 9, 1564.	12.8	84
25	Studying astrophysical collisionless shocks with counterstreaming plasmas from high power lasers. High Energy Density Physics, 2012, 8, 38-45.	1.5	82
26	The design of laboratory experiments to produce collisionless shocks of cosmic relevance. Physics of Plasmas, 2000, 7, 4690-4698.	1.9	81
27	Evidence for Collisional Damping in High-Energy Raman-Scattering Experiments at 0.26 Î¼m. Physical Review Letters, 1985, 54, 189-192.	7.8	74
28	An Evaluation of the Richtmyerâ€Meshkov Instability in Supernova Remnant Formation. Astrophysical Journal, 1999, 511, 335-340.	4.5	70
29	TWO-DIMENSIONAL BLAST-WAVE-DRIVEN RAYLEIGH-TAYLOR INSTABILITY: EXPERIMENT AND SIMULATION. Astrophysical Journal, 2009, 696, 749-759.	4.5	61
30	Evidence that stimulated Raman scattering in laser-produced plasmas is an absolute instability. Physical Review Letters, 1988, 60, 1018-1021.	7.8	60
31	Electron acceleration in laboratory-produced turbulent collisionless shocks. Nature Physics, 2020, 16, 916-920.	16.7	60
32	The influence of subsidiary Langmuir decay on the spectrum of stimulated Raman scattering. Physics of Fluids B, 1991, 3, 2936-2938.	1.7	59
33	Theory of radiative shocks in optically thick media. Physics of Plasmas, 2007, 14, 043301.	1.9	59
34	Observation of Forward Raman Scattering in Laser-Produced Plasmas. Physical Review Letters, 1986, 57, 1725-1728.	7.8	55
35	Experiments to Produce a Hydrodynamically Unstable, Spherically Diverging System of Relevance to Instabilities in Supernovae. Astrophysical Journal, 2002, 564, 896-908.	4.5	55
36	Competition between the stimulated Raman and Brillouin scattering instabilities in 0.35-Î¼m irradiated CH foil targets. Physical Review Letters, 1989, 62, 2829-2832.	7.8	53

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37	Developed turbulence and nonlinear amplification of magnetic fields in laboratory and astrophysical plasmas. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8211-8215.	7.1	52
38	Studies of Raman scattering from overdense targets irradiated by several kilojoules of 0.53 Î¼m laser light. Physics of Fluids, 1988, 31, 3130.	1.4	51
39	The impact of recent advances in laboratory astrophysics on our understanding of the cosmos. Reports on Progress in Physics, 2012, 75, 036901.	20.1	51
40	Collisionless shock experiments with lasers and observation of Weibel instabilities. Physics of Plasmas, 2015, 22, .	1.9	51
41	What is certain and what is not so certain in our knowledge of Rayleighâ€“Taylor mixing?. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20130266.	3.4	50
42	Nonlinear mixing behavior of the three-dimensional Rayleighâ€“Taylor instability at a decelerating interface. Physics of Plasmas, 2004, 11, 2829-2837.	1.9	46
43	Radiative Shocks in Astrophysics and the Laboratory. Astrophysics and Space Science, 2005, 298, 49-59.	1.4	46
44	Laboratory experiments to simulate the hydrodynamics of supernova remnants and supernovae. Journal of Geophysical Research, 1999, 104, 14505-14515.	3.3	44
45	Laser-intensity scaling experiments in long-scalelength, laser-produced plasmas. Physics of Fluids, 1988, 31, 1795.	1.4	43
46	Laser-induced fluorescence characterization of ions emitted from hollow cathodes. IEEE Transactions on Plasma Science, 2000, 28, 1664-1675.	1.3	41
47	Ambipolar potential formation and axial confinement in TMX. Nuclear Fusion, 1982, 22, 223-234.	3.5	39
48	Validation of a Turbulent Kelvin-Helmholtz Shear Layer Model Using a High-Energy-Density OMEGA Laser Experiment. Physical Review Letters, 2012, 109, 155004.	7.8	39
49	Wall shocks in high-energy-density shock tube experiments. Physics of Plasmas, 2009, 16, 112705.	1.9	38
50	Classification of and recent research involving radiative shocks. Astrophysics and Space Science, 2009, 322, 77-84.	1.4	38
51	Radiative effects in radiative shocks in shock tubes. High Energy Density Physics, 2011, 7, 130-140.	1.5	38
52	DESIGN CONSIDERATIONS FOR UNMAGNETIZED COLLISIONLESS-SHOCK MEASUREMENTS IN HOMOLOGOUS FLOWS. Astrophysical Journal, 2012, 749, 171.	4.5	38
53	Dual, orthogonal, backlit pinhole radiography in OMEGA experiments. Review of Scientific Instruments, 2006, 77, 10E327.	1.3	37
54	Current Filamentation Instability in Laser Wakefield Accelerators. Physical Review Letters, 2011, 106, 105001.	7.8	37

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55	Measurements of Radial Heat Wave Propagation in Laser-Produced Exploding-Foil Plasmas. Physical Review Letters, 1994, 73, 2055-2058.	7.8	36
56	Visualizing electromagnetic fields in laser-produced counter-streaming plasma experiments for collisionless shock laboratory astrophysics. Physics of Plasmas, 2013, 20, .	1.9	36
57	Creating High-Energy-Density Conditions. , 2006, , 335-390.		36
58	Structure and Dynamics of Colliding Plasma Jets. Physical Review Letters, 2013, 111, 235003.	7.8	35
59	Development of a Laboratory Environment to Test Modelsof Supernova Remnant Formation. Astrophysical Journal, 1998, 500, L157-L161.	4.5	34
60	Transition to turbulence and effect of initial conditions on three-dimensional compressible mixing in planar blast-wave-driven systems. Physics of Plasmas, 2005, 12, 056317.	1.9	34
61	Measurement of Radiative Shock Properties by X-Ray Thomson Scattering. Physical Review Letters, 2012, 108, 145001.	7.8	34
62	The effect of a short-wavelength mode on the evolution of a long-wavelength perturbation driven by a strong blast wave. Physics of Plasmas, 2004, 11, 5507-5519.	1.9	33
63	X-ray emission caused by Raman scattering in long-scale-length plasmas. Physical Review A, 1989, 40, 3219-3225.	2.5	32
64	Distributed absorption model for moderate to high laser powers. Physics of Fluids B, 1992, 4, 701-707.	1.7	32
65	Observation of Single-Mode, Kelvin-Helmholtz Instability in a Supersonic Flow. Physical Review Letters, 2015, 115, 145001.	7.8	32
66	Production of large-radius, high-beta, confined mirror plasmas. Nuclear Fusion, 1980, 20, 655-664.	3.5	31
67	Thomson Scattering Measurements of the Langmuir Wave Spectra Resulting from Stimulated Raman Scattering. Physical Review Letters, 1996, 77, 67-70.	7.8	31
68	Observation of Forward Shocks and Stagnated Ejecta Driven by High-Energy-Density Plasma Flow. Physical Review Letters, 1998, 81, 2068-2071.	7.8	31
69	Temporal dispersion of a spectrometer. Review of Scientific Instruments, 2008, 79, 10F545.	1.3	31
70	Backscattered light near the incident laser wavelength from 0.35 Î¼m irradiated long scale length plasmas. Physics of Fluids B, 1990, 2, 1907-1917.	1.7	30
71	Theory of radiative shocks in the mixed, optically thick-thin case. Physics of Plasmas, 2010, 17, .	1.9	30
72	Richtmyer-Meshkov evolution under steady shock conditions in the high-energy-density regime. Applied Physics Letters, 2015, 106, .	3.3	30

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73	Radial transport in the central cell of the tandem mirror experiment. Physics of Fluids, 1982, 25, 2110.	1.4	29
74	Hydrodynamic instabilities in astrophysics and in laboratory high-energyâ€“density systems. Plasma Physics and Controlled Fusion, 2005, 47, B419-B440.	2.1	28
75	Simultaneous Spectrally and Spatially Resolved Measurements of3Ï‰02Emission from Laser-Produced Plasmas. Physical Review Letters, 1988, 61, 2766-2769.	7.8	27
76	Hydrodynamic expansion of explodingâ€foil targets irradiated by 0.53 Î¼m laser light. Physics of Fluids B, 1989, 1, 1089-1096.	1.7	26
77	Detection of Ion Plasma Waves by Collective Thomson Scattering. Physical Review Letters, 1995, 74, 3604-3607.	7.8	26
78	Experimental observations of turbulent mixing due to Kelvinâ€“Helmholtz instability on the OMEGA Laser Facility. Physics of Plasmas, 2012, 19, .	1.9	26
79	Intensity scaling of stimulated Raman forward scattering in laser-produced plasmas. Physical Review Letters, 1991, 66, 2324-2327.	7.8	25
80	Repeatability in radiative shock tube experiments. High Energy Density Physics, 2010, 6, 157-161.	1.5	24
81	The effect of end-cell stability on the confinement of the central-cell plasma in TMX. Nuclear Fusion, 1981, 21, 359-364.	3.5	23
82	Measurement of Richtmyerâ€“Meshkov mode coupling under steady shock conditions and at high energy density. High Energy Density Physics, 2015, 17, 263-269.	1.5	23
83	The possible effects of magnetic fields on laser experiments of Rayleighâ€“Taylor instabilities. High Energy Density Physics, 2010, 6, 162-165.	1.5	22
84	A Laboratory Investigation of Supersonic Clumpy Flows: Experimental Design and Theoretical Analysis. Astrophysical Journal, 2004, 604, 213-221.	4.5	21
85	Evidence for neutral-beam-injected oxygen impurities in 2XIIB. Nuclear Fusion, 1979, 19, 407-410.	3.5	20
86	Narrow Raman spectra: The competition between collisional and Landau damping. Physics of Fluids B, 1989, 1, 2217-2223.	1.7	20
87	Investigation of ion-acoustic-decay-instability thresholds in laser-plasma interactions. Physical Review Letters, 1990, 65, 428-431.	7.8	20
88	Dependence of stimulated Brillouin scattering on focusing opticFnumber in long scaleâ€length plasmas. Physics of Plasmas, 1996, 3, 1091-1095.	1.9	20
89	Development of a short duration backlit pinhole for radiography on the National Ignition Facility. Review of Scientific Instruments, 2010, 81, 10E536.	1.3	20
90	A design of a two-dimensional, supersonic KH experiment on OMEGA-EP. High Energy Density Physics, 2013, 9, 672-686.	1.5	20

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91	Astrophysically relevant radiation hydrodynamics experiment at the National Ignition Facility. Astrophysics and Space Science, 2011, 336, 207-211.	1.4	19
92	A design of a two-dimensional, multimode RM experiment on OMEGA-EP. High Energy Density Physics, 2013, 9, 122-131.	1.5	19
93	Experimental results from magnetized-jet experiments executed at the Jupiter Laser Facility. High Energy Density Physics, 2015, 17, 52-62.	1.5	19
94	Density and temperature profiles in strongly absorbing plasma with distributed absorption. Physics of Fluids B, 1991, 3, 1241-1244.	1.7	18
95	Observation of plasma waves by Thomson scattering: Saturation of stimulated Raman scattering. Physical Review Letters, 1993, 71, 368-371.	7.8	18
96	Laser experiments to simulate supernova remnants. Physics of Plasmas, 2000, 7, 2142-2148.	1.9	18
97	Three-dimensional modeling and analysis of a high energy density Kelvin-Helmholtz experiment. Physics of Plasmas, 2012, 19, .	1.9	18
98	The production and evolution of multiple converging radiative shock waves in gas-filled cylindrical liner z-pinch experiments. High Energy Density Physics, 2013, 9, 52-62.	1.5	18
99	Observation of dual-mode, Kelvin-Helmholtz instability vortex merger in a compressible flow. Physics of Plasmas, 2017, 24, .	1.9	18
100	Ablative stabilization of Rayleigh-Taylor instabilities resulting from a laser-driven radiative shock. Physics of Plasmas, 2018, 25, .	1.9	18
101	Electron heat transport with nonâ€Maxwellian distributions. Physics of Plasmas, 1994, 1, 3570-3576.	1.9	17
102	Supernova Experiments on the Nova Laser. Astrophysical Journal, Supplement Series, 2000, 127, 365-369.	7.7	17
103	Measurements of turbulent mixing due to Kelvinâ€“Helmholtz instability inÂhigh-energy-density plasmas. High Energy Density Physics, 2013, 9, 47-51.	1.5	17
104	The scaling of absolutely unstable, stimulated Raman scattering from planar, laserâ€produced plasmas. Physics of Fluids B, 1989, 1, 1082-1088.	1.7	16
105	Experimental studies of stimulated Raman scattering in reactorâ€size, laserâ€produced plasmas. Physics of Fluids B, 1991, 3, 1473-1478.	1.7	16
106	Test of the Landau cutoff of stimulated Raman scattering spectra as an electron-temperature diagnostic in laser-produced plasmas. Physical Review Letters, 1992, 68, 484-487.	7.8	16
107	Progress Toward the Study of Laboratory Scale, Astrophysically Relevant, Turbulent Plasmas. Astrophysics and Space Science, 2005, 298, 9-16.	1.4	16
108	Modeling HEDLA magnetic field generation experiments on laser facilities. High Energy Density Physics, 2013, 9, 172-177.	1.5	16

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109	Reduction of emission in the stimulated Raman scattering frequency band to thermal noise levels by collisional damping in a laser-produced plasma. Physical Review A, 1989, 39, 3536-3540.	2.5	15
110	Observation of stimulated Compton scattering from resonant electrons in a laser-produced plasma. Physical Review Letters, 1990, 64, 423-426.	7.8	15
111	Spline-Based Emulators for Radiative Shock Experiments With Measurement Error. Journal of the American Statistical Association, 2013, 108, 411-428.	3.1	15
112	Laboratory analogue of a supersonic accretion column in a binary star system. Nature Communications, 2016, 7, ncomms11899.	12.8	15
113	Dynamic gas flow during plasma operation in TMXâ€U. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1983, 1, 1288-1292.	2.1	14
114	Observation of near-forward stimulated Brillouin scattering from a laser-produced plasma. Physical Review Letters, 1993, 70, 802-805.	7.8	14
115	Comment on â€œCollisionless shock and supernova remnant simulations on VULCANâ€•[Phys. Plasmas8, 2439 (2001)]. Physics of Plasmas, 2002, 9, 727-728.	1.9	14
116	A physics informed emulator for laser-driven radiating shock simulations. Reliability Engineering and System Safety, 2011, 96, 1194-1207.	8.9	14
117	Mitigation of hot electrons from laser-plasma instabilities in high-Z, highly ionized plasmas. Physics of Plasmas, 2017, 24, .	1.9	14
118	Raman upâ€scattering in longâ€scaleâ€length, laserâ€produced plasmas. Physics of Fluids B, 1991, 3, 448-454.	1.7	13
119	Onset and Saturation of the Spectral Intensity of Stimulated Brillouin Scattering in Inhomogeneous Laser-Produced Plasmas. Physical Review Letters, 1996, 77, 79-82.	7.8	13
120	Simulating radiative shocks in nozzle shock tubes. High Energy Density Physics, 2012, 8, 161-169.	1.5	13
121	Simulating radiative shocks with the CRASH laser package. High Energy Density Physics, 2013, 9, 8-16.	1.5	13
122	Calculation of Debye-Scherrer diffraction patterns from highly stressed polycrystalline materials. Journal of Applied Physics, 2016, 119, .	2.5	13
123	Measurements of absorption and Brillouin sidescattering from planar plasmas produced by 0.53 Î¼m laser light. Physics of Fluids B, 1989, 1, 1295-1300.	1.7	12
124	Production of very large, subâ€tenthâ€critical plasmas for laserâ€fusion research. Physics of Fluids B, 1991, 3, 2898-2905.	1.7	12
125	Three-wave parametric amplification in time-dependent media, with application to stimulated Brillouin scattering. Physical Review Letters, 1991, 67, 2477-2480.	7.8	12
126	Energy Balance and Structural Regimes of Radiative Shocks in Optically Thick Media. IEEE Transactions on Plasma Science, 2007, 35, 171-180.	1.3	12

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127	Assessing Mix Layer Amplitude in 3D Decelerating Interface Experiments. Astrophysics and Space Science, 2007, 307, 115-119.	1.4	12
128	Stellar explosions, instabilities, and turbulence. Physics of Plasmas, 2009, 16, 041004.	1.9	12
129	An evaluation of high energy bremsstrahlung background in point-projection x-ray radiography experiments. Review of Scientific Instruments, 2012, 83, 10E528.	1.3	12
130	Implementation of a Talbotâ€“Lau x-ray deflectometer diagnostic platform for the OMEGA EP laser. Review of Scientific Instruments, 2020, 91, 023511.	1.3	12
131	Progress toward the Laboratory Simulation of Young Supernova Remnants. Astrophysical Journal, Supplement Series, 2000, 127, 305-310.	7.7	11
132	Late-time hohlraum pressure dynamics in supernova remnant experiments. Physics of Plasmas, 2001, 8, 2609-2612.	1.9	11
133	Anti-diffusive radiation flow in the cooling layer of a radiating shock. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2095-2105.	2.3	11
134	of Scientific Instruments, 2012, 83, 10E114.	1.3	11
135	SPIKE PENETRATION IN BLAST-WAVE-DRIVEN INSTABILITIES. Astrophysical Journal, 2012, 744, 184.	4.5	11
136	Tracking the density evolution in counter-propagating shock waves using imaging X-ray scattering. Applied Physics Letters, 2016, 109, 031108.	3.3	11
137	Ion acoustic parametric decay instability in laserâ€produced plasma with varying ionic charge. Physics of Fluids B, 1991, 3, 1983-1989.	1.7	10
138	Observation of the Langmuir decay instability driven by stimulated Raman scattering. Physics of Plasmas, 1997, 4, 3012-3020.	1.9	10
139	Design of experiments to observe radiation stabilized Rayleigh-Taylor instability growth at an embedded decelerating interface. Physics of Plasmas, 2011, 18, .	1.9	10
140	Hybrid Vlasovâ€“Fokkerâ€“Planckâ€“Maxwell simulations of fast electron transport and the time dependance ofK-shell excitation in a mid-Zmetallic target. New Journal of Physics, 2013, 15, 015017.	2.9	10
141	Modeling of aspheric, diverging hydrodynamic instability experiments on the National Ignition Facility. High Energy Density Physics, 2013, 9, 439-447.	1.5	10
142	Using simultaneous x-ray diffraction and velocity interferometry to determine material strength in shock-compressed diamond. Applied Physics Letters, 2020, 116, .	3.3	10
143	An extreme ultraviolet study of the 2XIIB neutral-beam-heated mirror machine. Nuclear Fusion, 1980, 20, 599-610.	3.5	9
144	Drake, Williams, Young, Estabrook, Kruer, Baldis, and Johnston Reply. Physical Review Letters, 1988, 61, 2387-2387.	7.8	9

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145	Evaluating the accuracy of opticalâ€streakâ€camera sweep rates using uncertain data. Review of Scientific Instruments, 1992, 63, 4322-4326.	1.3	9
146	Spatially-resolved X-ray scattering measurements of a planar blast wave. High Energy Density Physics, 2014, 11, 75-79.	1.5	9
147	Collisional regimes of radiationâ€driven Langmuir turbulence. Physics of Plasmas, 1995, 2, 1947-1960.	1.9	8
148	Rayleighâ€“Taylor growth at decelerating interfaces. Physics of Plasmas, 2002, 9, 382-384.	1.9	8
149	Design of flyer-plate-driven compressible turbulent mix experiments using Z. Physics of Plasmas, 2002, 9, 3545-3551.	1.9	8
150	Recent Experimental Results and Modelling of High-Mach-Number Jets and the Transition to Turbulence. Astrophysics and Space Science, 2005, 298, 121-128.	1.4	8
151	Using wall shocks to measure preheat in laser-irradiated, high-energy-density, hydrodynamics experiments. High Energy Density Physics, 2010, 6, 215-218.	1.5	8
152	DESIGN OF LABORATORY EXPERIMENTS TO STUDY PHOTOIONIZATION FRONTS DRIVEN BY THERMAL SOURCES. Astrophysical Journal, 2016, 833, 249.	4.5	8
153	Soft X-ray emission from laser-irradiated gold foils. Physics of Plasmas, 2018, 25, .	1.9	8
154	Energy confinement studies in the tandem mirror experiment (TMX): Power flow. Physics of Fluids, 1983, 26, 1987.	1.4	7
155	Initial wall conditioning for the TMXâ€U fusion experiment. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1983, 1, 916-919.	2.1	7
156	Multiangle, Time-Resolved Spectroscopy of Laser-Light Scattering in Underdense, Inhomogeneous Laser Plasmas. Physical Review Letters, 1995, 74, 3157-3160.	7.8	7
157	A Validation Test of the Fluxâ€limited Diffusion Approximation for Radiation Hydrodynamics. Astrophysical Journal, 2005, 626, 616-625.	4.5	7
158	Preheat Issues in Hydrodynamic Hedla Experiments. Astrophysics and Space Science, 2005, 298, 267-271.	1.4	7
159	Numerical evaluation of the impact of laser preheat on interface structure and instability. Physics of Plasmas, 2007, 14, 062703.	1.9	7
160	How to see a black hole. Nature Physics, 2009, 5, 786-787.	16.7	7
161	Imaging scattered x-ray radiation for measurement of local electron density in high-energy-density experiments. High Energy Density Physics, 2010, 6, 194-199.	1.5	7
162	Laser driven supersonic flow over a compressible foam surface on the Nike laser. Physics of Plasmas, 2010, 17, 056310.	1.9	7

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163	Statistical inference in the presence of an inclination effect in laboratory radiative shock experiments. Astrophysics and Space Science, 2011, 336, 219-224.	1.4	7
164	Design of a supernova-relevant Rayleighâ€“Taylor experiment on the National Ignition Facility. I. Planar target design and diagnostics. High Energy Density Physics, 2014, 12, 35-45.	1.5	7
165	Measurements of laser generated soft X-ray emission from irradiated gold foils. Review of Scientific Instruments, 2016, 87, 11D609.	1.3	7
166	Energy confinement studies in the tandem mirror experiment (TMX): Power balance. Physics of Fluids, 1983, 26, 2003.	1.4	6
167	Nearâ€forward scattering of laser light*. Physics of Fluids B, 1993, 5, 2596-2602.	1.7	6
168	Direct Measurements of the Ion Acoustic Decay Instability in a Laser-Produced, Large-Scale, Hot Plasma. Physical Review Letters, 1994, 73, 2704-2707.	7.8	6
169	Characterization of titanium laserâ€produced plasmas. Physics of Plasmas, 1995, 2, 3792-3803.	1.9	6
170	Ion plasma waves induced by frustrated Debye shielding. Physics of Plasmas, 2002, 9, 267-274.	1.9	6
171	Modeling of multi-interface, diverging, hydrodynamic experiments for the National Ignition Facility. Astrophysics and Space Science, 2009, 322, 57-63.	1.4	6
172	Isothermal, mass-limited rarefactions in planar and spherical geometry. Physics of Plasmas, 2011, 18, .	1.9	6
173	Measurement of high-energy (10â€“60 keV) x-ray spectral line widths with eV accuracy. Review of Scientific Instruments, 2014, 85, 11D618.	1.3	6
174	Demonstration of x-ray fluorescence imaging of a high-energy-density plasma. Review of Scientific Instruments, 2014, 85, 11E602.	1.3	6
175	Enhanced accuracy of x-ray spectra reconstruction from filtered diode array measurements by adding a time integrated spectrometer. Review of Scientific Instruments, 2017, 88, 043507.	1.3	6
176	The LLNL tandem mirror experiment (TMX) upgrade vacuum system. Journal of Vacuum Science and Technology, 1982, 20, 1177-1181.	1.9	5
177	The angular dependence of the absorption of 0.35 Î¼m laser light by highâ€Z, laserâ€produced plasmas. Physics of Fluids B, 1991, 3, 3477-3484.	1.7	5
178	Linear rayâ€optics theory of the radiationâ€driven ionâ€acoustic decay instability in flowing, inhomogeneous plasmas. Physics of Plasmas, 1994, 1, 2448-2459.	1.9	5
179	Measurements of the angular and temporal structure of secondâ€harmonic emission from laserâ€produced plasmas. Physics of Plasmas, 1995, 2, 3473-3483.	1.9	5
180	Measurement of the frequency and spectral width of the Langmuir wave spectrum driven by stimulated Raman scattering. Physics of Plasmas, 1999, 6, 4284-4292.	1.9	5

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181	Zeus-2D Simulations of Laser-Driven Radiative Shock Experiments. Astrophysics and Space Science, 2005, 298, 273-276.	1.4	5
182	Three-dimensional model of x-ray induced microchannel plate output. Review of Scientific Instruments, 2006, 77, 10E312.	1.3	5
183	Flash Code Simulations of Rayleigh-Taylor and Richtmyer-Meshkov Instabilities in Laser-Driven Experiments. Astrophysics and Space Science, 2007, 307, 227-231.	1.4	5
184	Approaches to turbulence in high-energy-density experiments. Physica Scripta, 2008, T132, 014022.	2.5	5
185	Image processing of radiographs in 3D Rayleigh-Taylor decelerating interface experiments. Astrophysics and Space Science, 2009, 322, 49-55.	1.4	5
186	Rayleighâ€“Taylor instability simulations with CRASH. High Energy Density Physics, 2012, 8, 71-75.	1.5	5
187	Simulation of laser-driven, ablated plasma flows in collisionless shock experiments on OMEGA and the NIF. High Energy Density Physics, 2013, 9, 192-197.	1.5	5
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