

Suxing Hu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8361375/publications.pdf>

Version: 2024-02-01

209
papers

7,344
citations

50276

46
h-index

71685

76
g-index

213
all docs

213
docs citations

213
times ranked

3460
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct-drive inertial confinement fusion: A review. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	521
2	Relativistic high-power laser-matter interactions. <i>Physics Reports</i> , 2006, 427, 41-155.	25.6	412
3	First-principles equation-of-state table of deuterium for inertial confinement fusion applications. <i>Physical Review B</i> , 2011, 84, .	3.2	167
4	Filamentation Instability of Counterstreaming Laser-Driven Plasmas. <i>Physical Review Letters</i> , 2013, 111, 225002.	7.8	158
5	Electron Vortices in Photoionization by Circularly Polarized Attosecond Pulses. <i>Physical Review Letters</i> , 2015, 115, 113004.	7.8	141
6	Improving the hot-spot pressure and demonstrating ignition hydrodynamic equivalence in cryogenic deuterium-tritium implosions on OMEGA. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	139
7	Strong Coupling and Degeneracy Effects in Inertial Confinement Fusion Implosions. <i>Physical Review Letters</i> , 2010, 104, 235003.	7.8	137
8	Subcycle ac Stark Shift of Helium Excited States Probed with Isolated Attosecond Pulses. <i>Physical Review Letters</i> , 2012, 109, 073601.	7.8	136
9	Bogoliubov-Ehrenkov Radiation in a Bose-Einstein Condensate Flowing against an Obstacle. <i>Physical Review Letters</i> , 2006, 97, 260403.	7.8	131
10	Attosecond Pump Probe: Exploring Ultrafast Electron Motion inside an Atom. <i>Physical Review Letters</i> , 2006, 96, 073004.	7.8	120
11	Demonstration of the Highest Deuterium-Tritium Areal Density Using Multiple-Picket Cryogenic Designs on OMEGA. <i>Physical Review Letters</i> , 2010, 104, 165001.	7.8	111
12	Spin Signatures in Intense Laser-Ion Interaction. <i>Physical Review Letters</i> , 1999, 83, 4709-4712.	7.8	110
13	Measurement of Charged-Particle Stopping in Warm Dense Plasma. <i>Physical Review Letters</i> , 2015, 114, 215002.	7.8	107
14	Tripled yield in direct-drive laser fusion through statistical modelling. <i>Nature</i> , 2019, 565, 581-586.	27.8	103
15	Parallel solver for the time-dependent linear and nonlinear Schrödinger equation. <i>Physical Review E</i> , 2006, 73, 036708.	2.1	101
16	Magnetic Reconnection between Colliding Magnetized Laser-Produced Plasma Plumes. <i>Physical Review Letters</i> , 2014, 113, 105003.	7.8	97
17	Performance of direct-drive cryogenic targets on OMEGA. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	92
18	Triple-differential cross-sections for two-photon double ionization of He near threshold. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2005, 38, L35-L45.	1.5	86

#	ARTICLE	IF	CITATIONS
19	Demonstration of the shock-timing technique for ignition targets on the National Ignition Facility. <i>Physics of Plasmas</i> , 2009, 16, .	1.9	82
20	Spherical shock-ignition experiments with the 40 + 20-beam configuration on OMEGA. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	78
21	Multistart spiral electron vortices in ionization by circularly polarized UV pulses. <i>Physical Review A</i> , 2016, 94, .	2.5	78
22	Spin and radiation in intense laser fields. <i>Physical Review A</i> , 2002, 65, .	2.5	73
23	Demonstration of Fuel Hot-Spot Pressure in Excess of 50ÅGbar for Direct-Drive, Layered Deuterium-Tritium Implosions on OMEGA. <i>Physical Review Letters</i> , 2016, 117, 025001.	7.8	72
24	Imaging Molecular Structures by Electron Diffraction Using an Intense Few-Cycle Pulse. <i>Physical Review Letters</i> , 2005, 94, 073004.	7.8	71
25	Quantum-mechanical model for ultrahigh-order harmonic generation in the moderately relativistic regime. <i>Physical Review A</i> , 2000, 63, .	2.5	70
26	Mitigating Laser Imprint in Direct-Drive Inertial Confinement Fusion Implosions with High- Z Dopants. <i>Physical Review Letters</i> , 2012, 108, 195003.	7.8	70
27	Dynamics of multiply charged ions in intense laser fields. <i>Physical Review A</i> , 2001, 63, .	2.5	69
28	First-principles thermal conductivity of warm-dense deuterium plasmas for inertial confinement fusion applications. <i>Physical Review E</i> , 2014, 89, 043105.	2.1	69
29	Theory of hydro-equivalent ignition for inertial fusion and its applications to OMEGA and the National Ignition Facility. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	68
30	First-principles equation of state of polystyrene and its effect on inertial confinement fusion implosions. <i>Physical Review E</i> , 2015, 92, 043104.	2.1	68
31	Enhanced harmonic emission from ionized clusters in intense laser pulses. <i>Applied Physics Letters</i> , 1997, 71, 2605-2607.	3.3	67
32	Generation and Evolution of High-Mach-Number Laser-Driven Magnetized Collisionless Shocks in the Laboratory. <i>Physical Review Letters</i> , 2017, 119, 025001.	7.8	66
33	First Measurements of Rayleigh-Taylor-Induced Magnetic Fields in Laser-Produced Plasmas. <i>Physical Review Letters</i> , 2012, 108, 255006.	7.8	64
34	GeV Electrons from Ultraintense Laser Interaction with Highly Charged Ions. <i>Physical Review Letters</i> , 2002, 88, 245003.	7.8	61
35	Boosting Photoabsorption by Attosecond Control of Electron Correlation. <i>Physical Review Letters</i> , 2013, 111, 123003.	7.8	61
36	Saturation of the Two-Plasmon Decay Instability in Long-Scale-Length Plasmas Relevant to Direct-Drive Inertial Confinement Fusion. <i>Physical Review Letters</i> , 2012, 108, 165003.	7.8	58

#	ARTICLE	IF	CITATIONS
37	Experimental Validation of the Two-Plasmon-Decay Common-Wave Process. Physical Review Letters, 2012, 109, 155007.	7.8	57
38	Continuum Lowering and Fermi-Surface Rising in Strongly Coupled and Degenerate Plasmas. Physical Review Letters, 2017, 119, 065001.	7.8	55
39	Velocity and Timing of Multiple Spherically Converging Shock Waves in Liquid Deuterium. Physical Review Letters, 2011, 106, 195005.	7.8	54
40	A Review of Equation-of-State Models for Inertial Confinement Fusion Materials. High Energy Density Physics, 2018, 28, 7-24.	1.5	54
41	First-principles opacity table of warm dense deuterium for inertial-confinement-fusion applications. Physical Review E, 2014, 90, 033111.	2.1	53
42	Rayleigh-Taylor Growth Measurements in the Acceleration Phase of Spherical Implosions on OMEGA. Physical Review Letters, 2009, 103, 105001.	7.8	52
43	National direct-drive program on OMEGA and the National Ignition Facility. Plasma Physics and Controlled Fusion, 2017, 59, 014008.	2.1	50
44	Attosecond photoelectron microscopy of H^+ . Physical Review A, 2009, 80, .	2.5	49
45	Improving cryogenic deuterium-tritium implosion performance on OMEGA. Physics of Plasmas, 2013, 20, .	1.9	48
46	Measured hot-electron intensity thresholds quantified by a two-plasmon-decay resonant common-wave gain in various experimental configurations. Physics of Plasmas, 2013, 20, .	1.9	47
47	Fast-electron generation in long-scale-length plasmas. Physics of Plasmas, 2012, 19, .	1.9	46
48	Scaled laboratory experiments explain the kink behaviour of the Crab Nebula jet. Nature Communications, 2016, 7, 13081.	12.8	46
49	<i>Ab Initio</i> Studies on the Stopping Power of Warm Dense Matter with Time-Dependent Orbital-Free Density Functional Theory. Physical Review Letters, 2018, 121, 145001.	7.8	44
50	Two-dimensional simulations of the neutron yield in cryogenic deuterium-tritium implosions on OMEGA. Physics of Plasmas, 2010, 17, 102706.	1.9	43
51	Inelastic X-Ray Scattering from Shocked Liquid Deuterium. Physical Review Letters, 2012, 109, 265003.	7.8	43
52	Validation of Thermal-Transport Modeling with Direct-Drive, Planar-Foil Acceleration Experiments on OMEGA. Physical Review Letters, 2008, 101, 055002.	7.8	42
53	Magnetic Field Generation by the Rayleigh-Taylor Instability in Laser-Driven Planar Plastic Targets. Physical Review Letters, 2012, 109, 115001.	7.8	42
54	Shock-ignition relevant experiments with planar targets on OMEGA. Physics of Plasmas, 2014, 21, 022702.	1.9	42

#	ARTICLE	IF	CITATIONS
55	Electron Shock Ignition of Inertial Fusion Targets. <i>Physical Review Letters</i> , 2017, 119, 195001.	7.8	42
56	Experimental reduction of laser imprinting and Rayleigh-Taylor growth in spherically compressed, medium-Z-doped plastic targets. <i>Physics of Plasmas</i> , 2012, 19, 062704.	1.9	41
57	Dynamics of an intense laser-driven multiwell system: A model of ionized clusters. <i>Physical Review A</i> , 1997, 56, 3916-3922.	2.5	40
58	First-principles investigations on ionization and thermal conductivity of polystyrene for inertial confinement fusion applications. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	40
59	Kinematical vortices in double photoionization of helium by attosecond pulses. <i>Physical Review A</i> , 2017, 96, .	2.5	40
60	First-principles prediction of the softening of the silicon shock Hugoniot curve. <i>Physical Review B</i> , 2016, 94, .	3.2	39
61	Rayleigh-Taylor Growth Stabilization in Direct-Drive Plastic Targets at Laser Intensities of 10^{14} W/cm ² . <i>Physical Review Letters</i> , 2008, 101, 025002.	7.8	38
62	Impact of first-principles properties of deuterium-tritium on inertial confinement fusion target designs. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	38
63	Understanding the effects of laser imprint on plastic-target implosions on OMEGA. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	38
64	Angular momentum exchange between coherent light and matter fields. <i>Physical Review A</i> , 2008, 77, .	2.5	37
65	Properties of warm dense polystyrene plasmas along the principal Hugoniot. <i>Physical Review E</i> , 2014, 89, 063104.	2.1	37
66	Direct drive: Simulations and results from the National Ignition Facility. <i>Physics of Plasmas</i> , 2016, 23, 056305.	1.9	36
67	Effects of electron-ion temperature equilibration on inertial confinement fusion implosions. <i>Physical Review E</i> , 2011, 84, 016408.	2.1	35
68	Mitigation of cross-beam energy transfer: Implication of two-state focal zooming on OMEGA. <i>Physics of Plasmas</i> , 2013, 20, 082704.	1.9	35
69	Structure and Dynamics of Colliding Plasma Jets. <i>Physical Review Letters</i> , 2013, 111, 235003.	7.8	35
70	Hydrodynamic simulations of long-scale-length two-plasmon decay experiments at the Omega Laser Facility. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	35
71	Laser acceleration of electrons to giga-electron-volt energies using highly charged ions. <i>Physical Review E</i> , 2006, 73, 066502.	2.1	34
72	Multiple spherically converging shock waves in liquid deuterium. <i>Physics of Plasmas</i> , 2011, 18, 092706.	1.9	34

#	ARTICLE	IF	CITATIONS
73	Shock-tuned cryogenic-deuterium-tritium implosion performance on Omega. <i>Physics of Plasmas</i> , 2010, 17, 056312.	1.9	33
74	High-performance inertial confinement fusion target implosions on OMEGA. <i>Nuclear Fusion</i> , 2011, 51, 053010.	3.5	33
75	Measurements of electron density profiles using an angular filter refractometer. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	33
76	Optimizing the FEDVR-TDCC code for exploring the quantum dynamics of two-electron systems in intense laser pulses. <i>Physical Review E</i> , 2010, 81, 056705.	2.1	32
77	Laser-plasma interactions in direct-drive ignition plasmas. <i>Plasma Physics and Controlled Fusion</i> , 2012, 54, 124016.	2.1	31
78	Systematic study of Rayleigh-Taylor growth in directly driven plastic targets in a laser-intensity range from 1.4×10^{14} to $1.5 \times 10^{15} \text{ W/cm}^2$. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	30
79	Nonlinear Dichroism in Back-to-Back Double Ionization of He by an Intense Elliptically Polarized Few-Cycle Extreme Ultraviolet Pulse. <i>Physical Review Letters</i> , 2014, 113, 223002.	7.8	29
80	Studies of Plastic-Ablator Compressibility for Direct-Drive Inertial Confinement Fusion on Omega. <i>Physical Review Letters</i> , 2008, 100, 185003.	7.8	28
81	Dynamical electron vortices in attosecond double photoionization of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:msub} \langle \text{mml:mi mathvariant="normal"} \rangle \text{H} \langle \text{mml:mi} \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle$. <i>Physical Review A</i> , 2018, 98, .	2.5	28
82	Coherent x-ray pulse generation in the sub- \AA - μm regime. <i>Applied Physics Letters</i> , 2002, 80, 541-543.	3.3	27
83	Neutron yield study of direct-drive, low-adiabat cryogenic D2 implosions on OMEGA laser system. <i>Physics of Plasmas</i> , 2009, 16, 112706.	1.9	27
84	A review on <i>ab initio</i> studies of static, transport, and optical properties of polystyrene under extreme conditions for inertial confinement fusion applications. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	27
85	Time-dependent orbital-free density functional theory for electronic stopping power: Comparison to the Mermin-Kohn-Sham theory at high temperatures. <i>Physical Review B</i> , 2018, 98, .	3.2	27
86	Intense laser-induced recombination: The inverse above-threshold ionization process. <i>Physical Review A</i> , 2004, 70, .	2.5	26
87	Kinetic simulation of magnetic field generation and collisionless shock formation in expanding laboratory plasmas. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	26
88	Collisionless Shocks Driven by Supersonic Plasma Flows with Self-Generated Magnetic Fields. <i>Physical Review Letters</i> , 2019, 123, 055002.	7.8	26
89	Controlling H^+ detachment with few-cycle pulses. <i>Physical Review A</i> , 2003, 68, .	2.5	25
90	Enhanced asymmetry in few-cycle attosecond pulse ionization of He in the vicinity of autoionizing resonances. <i>New Journal of Physics</i> , 2012, 14, 095010.	2.9	25

#	ARTICLE	IF	CITATIONS
91	Coherent x-ray generation with laser driven ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, L411-L417.	1.5	24
92	Soft x-ray backlighting of cryogenic implosions using a narrowband crystal imaging system (invited). Review of Scientific Instruments, 2014, 85, 11E501.	1.3	24
93	Hollowing out single ions with high-power lasers. Europhysics Letters, 1999, 47, 318-323.	2.0	23
94	Nontunnelling high-order harmonics from ultra-intense laser-driven tightly bound systems. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 627-650.	1.5	23
95	High-Mach number, laser-driven magnetized collisionless shocks. Physics of Plasmas, 2017, 24, .	1.9	23
96	Experimentally Inferred Fusion Yield Dependencies of OMEGA Inertial Confinement Fusion Implosions. Physical Review Letters, 2021, 127, 105001.	7.8	23
97	Spherical Rayleigh-Taylor growth of three-dimensional broadband perturbations on OMEGA. Physics of Plasmas, 2009, 16, 112701.	1.9	22
98	Optical properties of highly compressed polystyrene: An ab initio study. Physical Review B, 2017, 96, .	3.2	22
99	Exchange-correlation thermal effects in shocked deuterium: Softening the principal Hugoniot and thermophysical properties. Physical Review B, 2019, 99, .	3.2	22
100	Strong-field ionization of molecules in circularly polarized few-cycle pulses. Physical Review A, 2006, 73, .	2.5	21
101	Progress towards polar-drive ignition for the NIF. Nuclear Fusion, 2013, 53, 113021.	3.5	20
102	Direct observation of the two-plasmon-decay common plasma wave using ultraviolet Thomson scattering. Physical Review E, 2015, 91, 031104.	2.1	20
103	First-principles equation-of-state table of beryllium based on density-functional theory calculations. Physics of Plasmas, 2017, 24, 062702.	1.9	20
104	Isolating and quantifying cross-beam energy transfer in direct-drive implosions on OMEGA and the National Ignition Facility. Physics of Plasmas, 2016, 23, .	1.9	19
105	High-order regime of harmonic generation with two active electrons. Physical Review A, 2001, 64, .	2.5	18
106	Al $1s - 2p$ absorption spectroscopy of shock-wave heating and compression in laser-driven planar foil. Physics of Plasmas, 2009, 16, .	1.9	18
107	Modeling the solid-to-plasma transition for laser imprinting in direct-drive inertial confinement fusion. Physical Review E, 2019, 100, 033201.	2.1	18
108	Direct-drive double-shell implosion: A platform for burning-plasma physics studies. Physical Review E, 2019, 100, 063204.	2.1	18

#	ARTICLE	IF	CITATIONS
109	Time-dependent study of photon-induced autoionization decay. <i>Physical Review A</i> , 2005, 71, .	2.5	17
110	Comparison between x-ray scattering and velocity-interferometry measurements from shocked liquid deuterium. <i>Physical Review E</i> , 2013, 87, 043112.	2.1	17
111	First-principles equation-of-state table of silicon and its effects on high-energy-density plasma simulations. <i>Physical Review E</i> , 2017, 95, 043210.	2.1	17
112	Three-Body Recombination of Atomic Ions with Slow Electrons. <i>Physical Review Letters</i> , 2007, 98, 133201.	7.8	16
113	Self-consistent measurement of the equation of state of liquid deuterium. <i>High Energy Density Physics</i> , 2012, 8, 76-80.	1.5	16
114	Measurement of the shell decompression in direct-drive inertial-confinement-fusion implosions. <i>Physical Review E</i> , 2017, 95, 051202.	2.1	16
115	Mitigating laser-imprint effects in direct-drive inertial confinement fusion implosions with an above-critical-density foam layer. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	16
116	Thermal hybrid exchange-correlation density functional for improving the description of warm dense matter. <i>Physical Review B</i> , 2020, 101, .	3.2	16
117	Meta-GGA exchange-correlation free energy density functional to increase the accuracy of warm dense matter simulations. <i>Physical Review B</i> , 2022, 105, .	3.2	16
118	High-efficiency high-order harmonic generation without tunneling. <i>Physical Review A</i> , 2001, 64, .	2.5	15
119	Molecular-Dynamics Simulations of Cold Antihydrogen Formation in Strongly Magnetized Plasmas. <i>Physical Review Letters</i> , 2005, 95, 163402.	7.8	15
120	Instability-driven electromagnetic fields in coronal plasmas. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	15
121	Direct-drive measurements of laser-imprint-induced shock velocity nonuniformities. <i>Physical Review E</i> , 2019, 99, 063208.	2.1	15
122	Anharmonic and Anomalous Trends in the High-Pressure Phase Diagram of Silicon. <i>Physical Review Letters</i> , 2019, 122, 125701.	7.8	15
123	Plasma Density Measurements of the Inner Shell Release. <i>Physical Review Letters</i> , 2019, 123, 235001.	7.8	15
124	Fully consistent density functional theory determination of the insulator-metal transition boundary in warm dense hydrogen. <i>Physical Review Research</i> , 2020, 2, .	3.6	15
125	Classical dynamics of H ₂ ⁺ interacting with an ultrashort intense laser pulse. <i>Physical Review A</i> , 1998, 57, 2219-2222.	2.5	14
126	Cryogenic-target performance and implosion physics studies on OMEGA. <i>Physics of Plasmas</i> , 2009, 16, 056301.	1.9	13

#	ARTICLE	IF	CITATIONS
127	Shock-compressed silicon: Hugoniot and sound speed up to 2100 GPa. <i>Physical Review B</i> , 2021, 103, .	3.2	13
128	Proton stopping measurements at low velocity in warm dense carbon. <i>Nature Communications</i> , 2022, 13, .	12.8	13
129	Classical simulation for one-dimensional H ₂ interacting with intense ultrashort laser pulses. <i>Physical Review A</i> , 1998, 57, 4528-4532.	2.5	12
130	High-order harmonic generation from intense laser-driven inner electrons of Rydberg atoms. <i>Physical Review A</i> , 2004, 69, .	2.5	12
131	Measurements of the Conduction-Zone Length and Mass Ablation Rate in Cryogenic Direct-Drive Implosions on OMEGA. <i>Physical Review Letters</i> , 2015, 114, 155002.	7.8	12
132	The National Direct-Drive Program: OMEGA to the National Ignition Facility. <i>Fusion Science and Technology</i> , 2018, 73, 89-97.	1.1	12
133	Biermann-Battery-Mediated Magnetic Reconnection in 3D Colliding Plasmas. <i>Physical Review Letters</i> , 2018, 121, 095001.	7.8	12
134	On the liquid-liquid phase transition of dense hydrogen. <i>Nature</i> , 2021, 600, E12-E14.	27.8	12
135	Electron-correlation effects in intense-field ionization of hydrogen molecules. <i>Physical Review A</i> , 1998, 57, 3770-3774.	2.5	11
136	Phase control of the inverse above-threshold-ionization process with few-cycle pulses. <i>Physical Review A</i> , 2004, 70, .	2.5	11
137	Species Separation and Hydrogen Streaming upon Shock Release from Polystyrene under Inertial Confinement Fusion Conditions. <i>Physical Review Letters</i> , 2020, 125, 105001.	7.8	11
138	Melting of magnesium oxide up to two terapascals using double-shock compression. <i>Physical Review B</i> , 2021, 104, .	3.2	11
139	Generating a single attosecond pulse from dissociated molecules driven by a few-cycle pulse. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006, 39, L185-L193.	1.5	10
140	Probing ultrafast electron correlation with double attosecond pulses. <i>Journal of Modern Optics</i> , 2007, 54, 943-952.	1.3	10
141	Rayleigh-Taylor-induced magnetic fields in laser-irradiated plastic foils. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	10
142	Asymmetries in production of He $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">n \langle \text{mml:mrow} \langle \text{mml:msup} \langle \text{mml:mrow} / \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:msup} \langle \text{mml:mrow} \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle n \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle = \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mo} \rangle$ an intense few-cycle attosecond pulse. <i>Physical Review A</i> , 2013, 88, .	2.5	10
143	Thermal effects on the electronic properties of sodium electride under high pressures. <i>Physical Review B</i> , 2020, 102, .	3.2	10
144	Hybrid target design for imprint mitigation in direct-drive inertial confinement fusion. <i>Physical Review E</i> , 2020, 101, 063207.	2.1	10

#	ARTICLE	IF	CITATIONS
145	Interspecies radiative transition in warm and superdense plasma mixtures. Nature Communications, 2020, 11, 1989.	12.8	10
146	Unraveling the intrinsic atomic physics behind x-ray absorption line shifts in warm dense silicon plasmas. Physical Review E, 2021, 103, 033202.	2.1	10
147	Redistributing populations of Rydberg atoms with half-cycle pulses. Physical Review A, 2004, 69, .	2.5	9
148	Quantum study of slow electron collisions with Rydberg atoms. Physical Review A, 2006, 74, .	2.5	9
149	Implosion dynamics in direct-drive experiments. Plasma Physics and Controlled Fusion, 2015, 57, 014023.	2.1	9
150	Crystalline phase transitions and vibrational spectra of silicon up to multiterapascal pressures. Physical Review B, 2019, 100, .	3.2	9
151	Novel Hot-Spot Ignition Designs for Inertial Confinement Fusion with Liquid-Deuterium-Tritium Spheres. Physical Review Letters, 2020, 125, 065001.	7.8	9
152	Measurement of the sound velocity and Grüneisen parameter of polystyrene at inertial confinement fusion conditions. Physical Review B, 2020, 102, .	3.2	9
153	Enhanced laser-energy coupling with small-spot distributed phase plates (SG5-650) in OMEGA DT cryogenic target implosions. Physics of Plasmas, 2022, 29, .	1.9	9
154	Enhanced ionization of in ultra-short intense laser fields. Journal of Physics B: Atomic, Molecular and Optical Physics, 1998, 31, 1523-1531.	1.5	8
155	Formation of antihydrogen atoms and ions in a strongly magnetized plasma: A molecular dynamics simulation. Physical Review A, 2005, 72, .	2.5	8
156	Favorable target positions for intense laser acceleration of electrons in hydrogen-like, highly-charged ions. Physics of Plasmas, 2015, 22, 093111.	1.9	8
157		1.9	8
158	Demonstrating ignition hydrodynamic equivalence in direct-drive cryogenic implosions on OMEGA. Journal of Physics: Conference Series, 2016, 717, 012008.	0.4	8
159	Simulated refraction-enhanced X-ray radiography of laser-driven shocks. Physics of Plasmas, 2019, 26, .	1.9	8
160	Improved first-principles equation-of-state table of deuterium for high-energy-density applications. Physical Review B, 2021, 104, .	3.2	8
161	Causes of fuel-â€‘ablator mix inferred from modeling of monochromatic time-gated radiography of OMEGA cryogenic implosions. Physics of Plasmas, 2022, 29, .	1.9	8
162	Energy enhancement of harmonic photons with a half-period-delayed pulse. Applied Physics Letters, 1997, 70, 1065-1067.	3.3	7

#	ARTICLE	IF	CITATIONS
163	Stability of above threshold ionization spectrum during intense-field ionization of H ₂ ⁺ near R _c . Applied Physics Letters, 1998, 73, 2552-2554.	3.3	7
164	Attosecond timing the ultrafast charge-transfer process in atomic collisions. Physical Review A, 2011, 83, .	2.5	7
165	Electron-electron correlation in two-photon double ionization of He-like ions. Physical Review A, 2018, 97, .	2.5	7
166	Hu Replies:. Physical Review Letters, 2018, 120, 119502.	7.8	7
167	A case study of using x-ray Thomson scattering to diagnose the in-flight plasma conditions of DT cryogenic implosions. Physics of Plasmas, 2022, 29, 072703.	1.9	7
168	Recent Advances in Computational Methods for the Solution of the Time-Dependent Schrödinger Equation for the Interaction of Short, Intense Radiation with One and Two Electron Systems. , 2011, , 149-208.		6
169	Burning plasmas with ultrashort soft-x-ray flashing. Physics of Plasmas, 2012, 19, 072703.	1.9	6
170	Effects of laser-plasma instabilities on hydro evolution in an OMEGA-EP long-scale-length experiment. Physics of Plasmas, 2017, 24, 022706.	1.9	6
171	Breakdown of Fermi Degeneracy in the Simplest Liquid Metal. Physical Review Letters, 2019, 122, 085001.	7.8	6
172	Mixed Stochastic-Deterministic Time-Dependent Density Functional Theory: Application to Stopping Power of Warm Dense Carbon. Journal of Physics Condensed Matter, 2022, , .	1.8	6
173	Radiative and atomic properties of C and CH plasmas in the warm-dense-matter regime. Physical Review E, 2018, 98, .	2.1	5
174	Modeling the electron collision frequency during solid-to-plasma transition of polystyrene ablator for direct-drive inertial confinement fusion applications. Physics of Plasmas, 2020, 27, .	1.9	5
175	Symmetric fragmentation of polyatomic molecular ions in ultrashort intense laser pulses. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 235, 379-384.	2.1	4
176	Producing ultracold and trappable antihydrogen atoms. Physical Review A, 2007, 75, .	2.5	4
177	Direct-drive implosion physics: Results from OMEGA and the National Ignition Facility. Journal of Physics: Conference Series, 2016, 688, 012006.	0.4	4
178	Development of a WDM platform for charged-particle stopping experiments. Journal of Physics: Conference Series, 2016, 717, 012118.	0.4	4
179	Simulation and analysis of time-gated monochromatic radiographs of cryogenic implosions on OMEGA. High Energy Density Physics, 2017, 23, 167-177.	1.5	4
180	Implementing a microphysics model in hydrodynamic simulations to study the initial plasma formation in dielectric ablator materials for direct-drive implosions. Physical Review E, 2020, 101, 063202.	2.1	4

#	ARTICLE	IF	CITATIONS
181	Observations of anomalous x-ray emission at early stages of hot-spot formation in deuterium-tritium cryogenic implosions. <i>Physical Review E</i> , 2021, 103, 023201.	2.1	4
182	Nature of the bonded-to-atomic transition in liquid silica to TPa pressures. <i>Journal of Applied Physics</i> , 2022, 131, .	2.5	4
183	Enhanced ionization of multi-well quantum systems in intense laser fields. <i>Science in China Series A: Mathematics</i> , 1998, 41, 198-202.	0.5	3
184	Heating of frozen Rydberg gases in a strong magnetic field. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 081009.	1.5	3
185	Spectroscopic observations of Fermi-degenerate aluminum compressed and heated to four times solid density and 20ÅeV. <i>High Energy Density Physics</i> , 2011, 7, 259-262.	1.5	3
186	Study of Rayleigh-Taylor growth in directly driven cryogenic-deuterium targets. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	3
187	Improved modeling of the solid-to-plasma transition of polystyrene ablator for laser direct-drive inertial confinement fusion hydrocodes. <i>Physical Review E</i> , 2021, 104, 015210.	2.1	3
188	Cryogenic target-implosion experiments on OMEGA. <i>Journal of Physics: Conference Series</i> , 2008, 112, 022001.	0.4	2
189	Mass-ablation-rate measurements in direct-drive cryogenic implosions using x-ray self-emission images. <i>Review of Scientific Instruments</i> , 2014, 85, 11D616.	1.3	2
190	First-principles studies on the equation of state, thermal conductivity, and opacity of deuterium-tritium (DT) and polystyrene (CH) for inertial confinement fusion applications. <i>Journal of Physics: Conference Series</i> , 2016, 717, 012064.	0.4	2
191	Properties of hot-spot emission in a warm plastic-shell implosion on the OMEGA laser system. <i>Physical Review E</i> , 2018, 98, .	2.1	2
192	Molecular Symmetry-Mixed Dichroism in Double Photoionization of H ₂ . <i>Physical Review Letters</i> , 2019, 123, 143202.	7.8	2
193	Density evolution after shock release from laser-driven polystyrene (CH) targets in inertial confinement fusion. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	2
194	Ionization state and dielectric constant in cold rarefied hydrocarbon plasmas of inertial confinement fusion. <i>Physical Review E</i> , 2021, 104, 045207.	2.1	2
195	Bound on hot-spot mix in high-velocity, high-adiabat direct-drive cryogenic implosions based on comparison of absolute x-ray and neutron yields. <i>Physical Review E</i> , 2022, 106, .	2.1	2
196	Progress in cryogenic target implosions on OMEGA. <i>Journal of Physics: Conference Series</i> , 2010, 244, 012004.	0.4	1
197	Polar-direct-drive experiments at the National Ignition Facility. <i>Journal of Physics: Conference Series</i> , 2016, 717, 012009.	0.4	1
198	Planar, longitudinal, compressive waves in solids: Thermodynamics and uniaxial strain restrictions. <i>Journal of Applied Physics</i> , 2022, 131, 215904.	2.5	1

#	ARTICLE	IF	CITATIONS
199	Compression mechanism of picosecond optical pulse in far infrared waveguide free electron laser. Applied Physics Letters, 1995, 67, 3373-3375.	3.3	0
200	Extending harmonic order with a half-cycle-delayed pulse. Science Bulletin, 1997, 42, 199-203.	1.7	0
201	The evolution of molecular wave packet in superstrong laser fields. Science Bulletin, 1997, 42, 33-37.	1.7	0
202	Classical model of interaction of 1-D helium with an intense ultrashort laser pulse. Science in China Series A: Mathematics, 1998, 41, 1100-1106.	0.5	0
203	Modeling high-compression, direct-drive, ICF experiments. Journal of Physics: Conference Series, 2008, 112, 022002.	0.4	0
204	Sub-cycle AC Stark Shift. , 2012, , .		0
205	A few selected contributions to electron and photon collisions with H ₂ and H_2^+ . Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 214002.	1.5	0
206	Electron Matter-Wave Vortices in Double Photoionization of Helium by Attosecond Pulses. Journal of Physics: Conference Series, 2017, 875, 022014.	0.4	0
207	Electrons and Ions in Relativistic Laser Fields. , 2001, , 273-283.		0
208	Species separation in polystyrene shock release evidenced by molecular-dynamics simulations and laser-drive experiments. Physical Review Research, 2022, 4, .	3.6	0
209	Imprinting a Three-Dimensional Skyrmion in a Bose-Einstein Condensate Via a Raman Process. Journal of Low Temperature Physics, 0, , 1.	1.4	0