Ke Lan

List of Publications by Year
in descending order

55 papers	924 citations	430874 18 h-index	501196 28 g-index
55 all docs	55 docs citations	55 times ranked	361 citing authors

#	Article	IF	Citations
1	Progress in octahedral spherical hohlraum study. Matter and Radiation at Extremes, 2016, 1, 8-27.	3.9	106
2	High flux symmetry of the spherical hohlraum with octahedral 6LEHs at the hohlraum-to-capsule radius ratio of 5.14. Physics of Plasmas, 2014, 21, 010704.	1.9	67
3	Octahedral spherical hohlraum and its laser arrangement for inertial fusion. Physics of Plasmas, 2014, 21, .	1.9	56
4	Novel spherical hohlraum with cylindrical laser entrance holes and shields. Physics of Plasmas, 2014, 21, .	1.9	43
5	First demonstration of improving laser propagation inside the spherical hohlraums by using the cylindrical laser entrance hole. Matter and Radiation at Extremes, 2016, 1, 2-7.	3.9	39
6	First Investigation on the Radiation Field of the Spherical Hohlraum. Physical Review Letters, 2016, 117, 025002.	7.8	35
7	Determination of the Hohlraum<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>M</mml:mi></mml:math>-band Fraction by a Shock-Wave Technique on the SGIII-Prototype Laser Facility. Physical Review Letters, 2012, 109, 145004.	7.8	33
8	A novel method for determining the M-band fraction in laser-driven gold hohlraums. Physics of Plasmas, 2011, 18, .	1.9	28
9	Experimental demonstration of low laser-plasma instabilities in gas-filled spherical hohlraums at laser injection angle designed for ignition target. Physical Review E, 2017, 95, 031202.	2.1	28
10	Simulation study of Hohlraum experiments on SGIII-prototype laser facility. Physics of Plasmas, 2010, 17, .	1.9	26
11	Theoretical study on discharge-pumped soft x-ray laser in Ne-like Ar. Physics of Plasmas, 1999, 6, 4343-4348.	1.9	25
12	An initial design of hohlraum driven by a shaped laser pulse. Laser and Particle Beams, 2010, 28, 421-427.	1.0	23
13	Initial study and design on ignition ellipraum. Laser and Particle Beams, 2012, 30, 175-182.	1.0	23
14	Neutron Generation by Laser-Driven Spherically Convergent Plasma Fusion. Physical Review Letters, 2017, 118, 165001.	7.8	23
15	Study on AuÂ+ÂUÂ+ÂAu sandwich Hohlraum wall for ignition targets. Laser and Particle Beams, 2010, 28, 75-81.	1.0	22
16	Insensitivity of the octahedral spherical hohlraum to power imbalance, pointing accuracy, and assemblage accuracy. Physics of Plasmas, 2014, 21, .	1.9	22
17	Photopumping of XUV lasers by XFEL radiation. Laser and Particle Beams, 2004, 22, 261-266.	1.0	19
18	Direct measurement of x-ray flux for a pre-specified highly-resolved region in hohlraum. Optics Express, 2015, 23, A1072.	3.4	19

#	Article	IF	Citations
19	First experimental comparisons of laser-plasma interactions between spherical and cylindrical hohlraums at SGIII laser facility. Matter and Radiation at Extremes, 2017, 2, 77-86.	3.9	18
20	First Octahedral Spherical Hohlraum Energetics Experiment at the SGIII Laser Facility. Physical Review Letters, 2018, 120, 165001.	7.8	16
21	First Inertial Confinement Fusion Implosion Experiment in Octahedral Spherical Hohlraum. Physical Review Letters, 2021, 127, 245001.	7.8	16
22	Novel Target Designs to Mitigate Hydrodynamic Instabilities Growth in Inertial Confinement Fusion. Physical Review Letters, 2021, 126, 185001.	7.8	15
23	Radiation-temperature shock scaling of 1 ns laser-driven hohlraums. Physics of Plasmas, 2010, 17, .	1.9	14
24	Radiation flux study of spherical hohlraums at the SGIII prototype facility. Physics of Plasmas, 2016, 23, .	1.9	14
25	Non-equilibrium between ions and electrons inside hot spots from National Ignition Facility experiments. Matter and Radiation at Extremes, 2017, 2, 3-8.	3.9	14
26	P2 asymmetry of Au's M-band flux and its smoothing effect due to high-Z ablator dopants. Matter and Radiation at Extremes, 2017, 2, 69-76.	3.9	14
27	Study on two-dimensional transfer of radiative heating wave. Laser and Particle Beams, 2005, 23, .	1.0	13
28	Analysis of hohlraum energetics of the SG series and the NIF experiments with energy balance model. Matter and Radiation at Extremes, 2017, 2, 22-27.	3.9	13
29	Electron heat conduction under non-Maxwellian distribution in hohlraum simulation. Physics of Plasmas, 2012, 19, .	1.9	11
30	Two-photon group radiation transfer study in low-density foam cylinder. Laser and Particle Beams, 2006, 24, 495-501.	1.0	10
31	The radiation temperature andM-band fraction inside hohlraum on the SGIII-prototype laser facility. Physics of Plasmas, 2014, 21, 022704.	1.9	10
32	Uranium hohlraum with an ultrathin uraniumâ€“nitride coating layer for low hard x-ray emission and high radiation temperature. New Journal of Physics, 2015, 17, 113004.	2.9	10
33	A method to determine the flux limiter via the motion of the M-band emission region in Au hohlraum. Laser and Particle Beams, 2012, 30, 387-396.	1.0	9
34	Comparison of the laser spot movement inside cylindrical and spherical hohlraums. Physics of Plasmas, 2017, 24, 072711.	1.9	9
35	Design of octahedral spherical hohlraum for CH Rev5 ignition capsule. Physics of Plasmas, 2017, 24, .	1.9	9
36	Foam Au driven by 4Ï‰â€“2Ï‰ ignition laser pulse for inertial confinement fusion. Physics of Plasmas, 2017, 24, .	1.9	8

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37	Study on size of laser entrance hole shield for ignition octahedral spherical hohlraums. Laser and Particle Beams, 2015, 33, 731-739.	1.0	7
38	Study on laser-irradiated Au plasmas by detailed configuration accounting atomic physics. Physics of Plasmas, 2017, 24, 102706.	1.9	6
39	High coupling efficiency of foam spherical hohlraum driven by 2Ï‰ laser light. Physics of Plasmas, 2018, 25, .	1.9	6
40	Octahedral spherical Hohlraum for Rev. 6 NIF beryllium capsule. Physics of Plasmas, 2018, 25, 102701.	1.9	6
41	Study of high-Z-coated ignition target by detailed configuration accounting atomic physics for direct-drive inertial confinement fusion. Plasma Physics and Controlled Fusion, 2019, 61, 014006.	2.1	6
42	Effects of the P2 M-band flux asymmetry of laser-driven gold Hohlraums on the implosion of ICF ignition capsule. Physics of Plasmas, 2016, 23, 072705.	1.9	5
43	First exploration of radiation temperatures of the laser spot, re-emitting wall and entire hohlraum drive source. Scientific Reports, 2019, 9, 5050.	3.3	5
44	Study on expanding recombination plasma. Physics of Plasmas, 1999, 6, 1631-1635.	1.9	4
45	Calibration of the linear response range of x-ray imaging plates and their reader based on image grayscale values. Review of Scientific Instruments, 2017, 88, 083115.	1.3	4
46	Quantitative observation of monochromatic X-rays emitted from implosion hotspot in high spatial resolution in inertial confinement fusion. Scientific Reports, 2021, 11, 14492.	3.3	4
47	Experimental and simulation studies on radiative properties of uranium planar target coated with an ultrathin aluminum layer. Nuclear Fusion, 2018, 58, 026020.	3.5	3
48	Application of the space-resolving flux detector for radiation measurements from an octahedral-aperture spherical hohlraum. Review of Scientific Instruments, 2018, 89, 063502.	1.3	3
49	New two-dimensional space-resolving flux detection technique for measurement of hohlraum inner radiation in Shenguang-III prototype. Review of Scientific Instruments, 2015, 86, 103112.	1.3	2
50	Escape of Î±-particle from hot-spot for inertial confinement fusion. Physics of Plasmas, 2019, 26, 122701.	1.9	2
51	Editorial for special issue on laser fusion. Matter and Radiation at Extremes, 2017, 2, 1-2.	3.9	1
52	Numerical Simulation on Laser Fusion in China. , 2009, , .		0
53	First measurement of plasma stagnation radiation in a hohlraum in the Shenguang-III prototype. Plasma Physics and Controlled Fusion, 2017, 59, 085006.	2.1	0
54	Matter and radiation at extremes: Prospects and impacts. Matter and Radiation at Extremes, 2021, 6, 013002.	3.9	0

#	Article	IF	Citations
55	Some recent studies on hohlraum physics. EPJ Web of Conferences, 2013, 59, 02003.	0.3	0