John Pasley

List of Publications by Year in descending order

48 papers	480 citations	840776 11 h-index	713466 21 g-index
49 all docs	49 docs citations	49 times ranked	609 citing authors

#	Article	IF	Citations
1	Laser Heating of Solid Matter by Light-Pressure-Driven Shocks at Ultrarelativistic Intensities. Physical Review Letters, 2008, 100, 165002.	7.8	75
2	High energy conversion efficiency in laser-proton acceleration by controlling laser-energy deposition onto thin foil targets. Applied Physics Letters, 2014, 104, 081123.	3.3	55
3	Magnetically Guided Fast Electrons in Cylindrically Compressed Matter. Physical Review Letters, 2011, 107, 065004.	7.8	45
4	Controlling Fast-Electron-Beam Divergence Using Two Laser Pulses. Physical Review Letters, 2012, 109, 015001.	7.8	45
5	Doppler Spectrometry for Ultrafast Temporal Mapping of Density Dynamics in Laser-Induced Plasmas. Physical Review Letters, 2010, 105, 105002.	7.8	34
6	Proton radiography of laser-driven imploding target in cylindrical geometry. Physics of Plasmas, 2011, 18, 012704.	1.9	30
7	Terahertz Acoustics in Hot Dense Laser Plasmas. Physical Review Letters, 2015, 114, 115001.	7.8	23
8	Laser-driven cylindrical compression of targets for fast electron transport study in warm and dense plasmas. Physics of Plasmas, 2011, 18, 043108.	1.9	16
9	Rapid embedded wire heating via resistive guiding of laser-generated fast electrons as a hydrodynamic driver. Physics of Plasmas, 2013, 20, 122701.	1.9	16
10	Ultrafast dynamics of a near-solid-density layer in an intense femtosecond laser-excited plasma. Physics of Plasmas, 2014, 21, .	1.9	13
11	Cavitation and shock wave formation in dense plasmas by relativistic electron beams. Plasma Physics and Controlled Fusion, 2010, 52, 125007.	2.1	11
12	Present states and future prospect of fast ignition realization experiment (FIREX) with Gekko and LFEX Lasers at ILE. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 653, 84-88.	1.6	10
13	Controlling femtosecond-laser-driven shock-waves in hot, dense plasma. Physics of Plasmas, 2017, 24, 072702.	1.9	9
14	Observation of extremely strong shock waves in solids launched by petawatt laser heating. Physics of Plasmas, 2017, 24, .	1.9	8
15	Recombination of Protons Accelerated by a High Intensity High Contrast Laser. Physical Review Letters, 2018, 121, 134801.	7.8	8
16	Innovative Education and Training in high power laser plasmas (PowerLaPs) for plasma physics, high power laserâ€“matter interactions and high energy density physics â€“ theory and experiments. High Power Laser Science and Engineering, 2019, 7, .	4.6	7
17	Optimizing laser focal spot size using self-focusing in a cone-guided fast-ignition ICF target. European Physical Journal Plus, 2021, 136, 1.	2.6	7
18	Probing ultrafast dynamics of solid-density plasma generated by high-contrast intense laser pulses. Physics of Plasmas, 2018, 25, .	1.9	6

#	Article	IF	Citations
19	Innovative education and training in high power laser plasmas (PowerLaPs) for plasma physics, high power laser matter interactions and high energy density physics: experimental diagnostics and simulations. High Power Laser Science and Engineering, 2020, 8, .	4.6	6
20	Enhancing relativistic electron beam propagation through the use of graded resistivity guides. Physics of Plasmas, 2018, 25, 023104.	1.9	5
21	Tracking ultrafast dynamics of intense shock generation and breakout at target rear. Physics of Plasmas, 2018, 25, .	1.9	5
22	Phase transitions in benzene under dynamic and static compression. Journal of Raman Spectroscopy, 2021, 52, 770-781.	2.5	5
23	Ignition studies in support of the European High Power Laser Energy Research Facility project. Pramana - Journal of Physics, 2010, 75, 759-767.	1.8	4
24	Enhancement of keV X-rays from low-density cellulose triacetate (TAC) foam targets. Physics of Plasmas, 2017, 24, .	1.9	4
25	Ignition criteria for x-ray fast ignition inertial confinement fusion. Physics of Plasmas, 2020, 27, .	1.9	4
26	Producing shock-ignition-like pressures by indirect drive. Plasma Physics and Controlled Fusion, 2019, 61, 105010.	2.1	3
27	Generation of a strong reverse shock wave in the interaction of a high-contrast high-intensity femtosecond laser pulse with a silicon target. Applied Physics Letters, 2019, 114, .	3.3	3
28	Quasi mono-energetic heavy ion acceleration from layered targets. Physics of Plasmas, 2021, 28, 023108.	1.9	3
29	An Object-Oriented 3-D View-Factor Code for Hohlraum Modeling. IEEE Transactions on Plasma Science, 2011, 39, 2400-2401.	1.3	2
30	Thermonuclear ignition calculations in contaminated DT fuel at high densities. Plasma Physics and Controlled Fusion, 2011, 53, 065013.	2.1	2
31	Potential for the Vishniac instability in ionizing shock waves propagating into cold gases. Physics of Plasmas, 2018, 25, .	1.9	2
32	Time-resolved Raman spectroscopy of hexafluorobenzene (C6F6) under laser-driven shock compression. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 263, 107547.	2.3	2
33	Femtosecond, two-dimensional spatial Doppler mapping of ultraintense laser-solid target interaction. Physical Review Research, 2021, 3, .	3.6	2
34	Crystallization and phase transitions of C₆H₆:C₆F₆ complex under extreme conditions using laser-driven shock. Journal of Applied Physics, 2022, 131, 115903.	2.5	2
35	Shock pressure measurements in Polyvinyl alcohol (PVA) films using multi-frame optical shadowgraphy. Journal of Physics: Conference Series, 2012, 377, 012042.	0.4	1
36	Effect of defocusing on picosecond laser-coupling into gold cones. Physics of Plasmas, 2014, 21, 012702.	1.9	1

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37	Modelling the hydrodynamics induced by the interaction of high-power short-pulse lasers with dense targets. AIP Conference Proceedings, 2017, , .	0.4	1
38	L-shell spectroscopy of neon and fluorine like copper ions from laser produced plasma. Physics of Plasmas, 2019, 26, 023301.	1.9	1
39	Innovative education and training in high power laser plasmas (PowerLaPs) for plasma physics, high power laser matter interactions and high energy density physics: experimental diagnostics and simulations â€“ CORRIGENDUM. High Power Laser Science and Engineering, 2020, 8, .	4.6	1
40	Formation and evolution of post-solitons following a high intensity laser-plasma interaction with a low-density foam target. Plasma Physics and Controlled Fusion, 2021, 63, 074001.	2.1	1
41	Controlling x-ray flux in hohlraums using burnthrough barriers. Physics of Plasmas, 2020, 27, 103301.	1.9	1
42	High-speed photon Doppler velocimetry for laser-driven flyer acceleration studies. Pramana - Journal of Physics, 2022, 96, .	1.5	1
43	Study of hot electron production and transport as a function of preplasma filling of hollow cone targets. , 2009, , .		0
44	X-ray Polarization Measurements of Dense Plasmas Heated by Fast Electrons. , 2010, , .		0
45	Hydrodynamic motion of guiding elements within a magnetic switchyard in fast ignition conditions. Physics of Plasmas, 2020, 27, 062701.	1.9	0
46	Core electrons and specific heat capacity in the fast electron heating of solids. Physics of Plasmas, 2020, 27, 072701.	1.9	0
47	Investigation of the performance of mid-Z Hohlraum wall liners for producing x-ray drive. Physics of Plasmas, 2021, 28, 012703.	1.9	0
48	Direct electron attachment to fast hydrogen in 10â^'9 contrast 1018â€‰Wâ€‰cmâ^'2 intense laser solid target interaction. Plasma Sources Science and Technology, 2020, 29, 115008.	3.1	0