Ciaran Lewis

List of Publications by Year
in descending order

29 papers	852 citations	623734 14 h-index	552781 26 g-index
29 all docs	29 docs citations	29 times ranked	932 citing authors

#	Article	IF	Citations
1	Coherent synchrotron emission from electron nanobunches formed in relativistic laserâ€“plasma interactions. Nature Physics, 2012, 8, 804-808.	16.7	132
2	Demonstration of Saturation in a Ni-like Ag X-Ray Laser at 14 nm. Physical Review Letters, 1997, 78, 3856-3859.	7.8	99
3	Saturated operation of a transient collisional x-ray laser. Physical Review A, 1998, 57, 4778-4783.	2.5	90
4	Picosecond metrology of laser-driven proton bursts. Nature Communications, 2016, 7, 10642.	12.8	80
5	Demonstration of a 2-ps transient x-ray laser. Physical Review A, 2002, 65, .	2.5	76
6	The Langmuir probe as a diagnostic of the electron component within low temperature laser ablated plasma plumes. Review of Scientific Instruments, 1999, 70, 1801-1805.	1.3	49
7	Saturated x-ray lasers at 196 and 73 Ã... pumped by a picosecond traveling-wave excitation. Physical Review A, 2001, 64, .	2.5	49
8	An ultra-high gain and efficient amplifier based on Raman amplification in plasma. Scientific Reports, 2017, 7, 2399.	3.3	44
9	Polar distribution of ablated atomic material during the pulsed laser deposition of Cu in vacuum: Dependence on focused laser spot size and power density. Journal of Applied Physics, 1996, 79, 7216-7222.	2.5	42
10	Characterisation of deuterium spectra from laser driven multi-species sources by employing differentially filtered image plate detectors in Thomson spectrometers. Review of Scientific Instruments, 2014, 85, 093303.	1.3	34
11	Comparison of the electron density measurements using Thomson scattering and emission spectroscopy for laser induced breakdown in one atmosphere of helium. Applied Physics Letters, 2011, 99, 261504.	3.3	18
12	Optical Thomson scatter from a laser-ablated magnesium plume. Journal of Applied Physics, 2009, 106, 083304.	2.5	17
13	Experimental measurements of the collisional absorption of XUV radiation in warm dense aluminium. Physical Review E, 2016, 94, 023203.	2.1	16
14	Near-field spatial imaging of a Ni-like Ag 140-Ã... x-ray laser. Physical Review A, 1997, 56, 3161-3165.	2.5	14
15	Efficient post-acceleration of protons in helical coil targets driven by sub-ps laser pulses. Scientific Reports, 2017, 7, 10891.	3.3	14
16	Fast-electron refluxing effects on anisotropic hard-x-ray emission from intense laser-plasma interactions. Physical Review E, 2015, 91, 033107.	2.1	13
17	Fast electron propagation in Ti foils irradiated with sub-picosecond laser pulses at Iî»2>1018â€‰Wcmâ^'2Î¼m2. Physics of Plasmas, 2014, 21, 023113.	1.9	12
18	Experimental investigation of picosecond dynamics following interactions between laser accelerated protons and water. Applied Physics Letters, 2017, 110, 104102.	3.3	12

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19	Application of a picosecond laser plasma continuum light source to a dual-laser plasma photoabsorption experiment. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, 1159-1168.	1.5	9
20	Time-dependent effects in melting and phase change for laser-shocked iron. Physical Review Research, 2020, 2, .	3.6	9
21	Study of ground-state titanium ion velocity distributions in laser-produced plasma plumes. Applied Physics Letters, 1999, 74, 3465-3467.	3.3	5
22	Saturated and Short Pulse Duration X-Ray Lasers. AIP Conference Proceedings, 2002, , .	0.4	5
23	Comparing optical Thomson scattering with emission spectroscopy in He plasmas induced by laser breakdown at 1 atmosphere. , 2012, , .		3
24	Probing ultrafast proton induced dynamics in transparent dielectrics. Plasma Physics and Controlled Fusion, 2018, 60, 054004.	2.1	3
25	Absolute calibration of Fujifilm BAS-TR image plate response to laser driven protons up to 40 MeV. Review of Scientific Instruments, 2022, 93, .	1.3	3
26	Thomson Scattering as a Diagnostic of Second-Harmonic Nd:YAG-Laser-Ablated Mg Plasma Plume. IEEE Transactions on Plasma Science, 2011, 39, 2824-2825.	1.3	2
27	Recent progress in coherent XUV generation at RAL. , 1998, , .		1
28	Fast electron penetration in laser-irradiated solids. European Physical Journal D, 2012, 66, 1.	1.3	1
29	Application Prospects for Soft X-ray Lasers. AIP Conference Proceedings, 2002, , .	0.4	0