Adam Higginson

List of Publications by Year
in descending order

15 papers	441 citations	1163117 8 h-index	1058476 14 g-index
15 all docs	15 docs citations	15 times ranked	656 citing authors

#	Article	IF	Citations
1	Near-100 MeV protons via a laser-driven transparency-enhanced hybrid acceleration scheme. Nature Communications, 2018, 9, 724.	12.8	307
2	Experimental demonstration of a compact epithermal neutron source based on a high power laser. Applied Physics Letters, 2017, 111, .	3.3	39
3	Evaluating laser-driven Bremsstrahlung radiation sources for imaging and analysis of nuclear waste packages. Journal of Hazardous Materials, 2016, 318, 694-701.	12.4	20
4	High order mode structure of intense light fields generated via a laser-driven relativistic plasma aperture. Scientific Reports, 2020, 10, 105.	3.3	14
5	Wake dynamics of air filaments generated by high-energy picosecond laser pulses at 1 kHz repetition rate. Optics Letters, 2021, 46, 5449.	3.3	12
6	High resolution Thomson Parabola Spectrometer for full spectral capture of multi-species ion beams. Review of Scientific Instruments, 2016, 87, 083304.	1.3	11
7	Dual Ion Species Plasma Expansion from Isotopically Layered Cryogenic Targets. Physical Review Letters, 2018, 120, 204801.	7.8	11
8	Enhanced laser intensity and ion acceleration due to self-focusing in relativistically transparent ultrathin targets. Physical Review Research, 2020, 2, .	3.6	10
9	Development of a Platform at the Matter in Extreme Conditions End Station for Characterization of Matter Heated by Intense Laser-Accelerated Protons. IEEE Transactions on Plasma Science, 2020, 48, 2751-2758.	1.3	4
10	Self-Referencing Spectral Interferometric Probing of the Onset Time of Relativistic Transparency in Intense Laser-Foil Interactions. Physical Review Applied, 2020, 14, .	3.8	4
11	Influence of target-rear-side short scale length density gradients on laser-driven proton acceleration. Plasma Physics and Controlled Fusion, 2021, 63, 114001.	2.1	3
12	Influence of spatial-intensity contrast in ultraintense laserâ€“plasma interactions. Scientific Reports, 2022, 12, 1910.	3.3	3
13	Electron acceleration at oblique angles via stimulated Raman scattering at laser irradiance <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mo>></mml:mo><mml:msup><mml:mn>10</mml:mn> width="0.16em" /><mml:mi mathvariant="normal">W</mml:mi><mml:mspace width="0.16em" /><mml:msup><mml:mrow><mml:mi>cm</mml:mi></mml:mrow><mml:mrow><mml:mo>âˆ’</mml:mo><mml:mn>2</mml:mn> mathvariant. Physical Review E, 2021, 103, 033203.	2.1	2
14	Transport of an intense proton beam from a cone-structured target through plastic foam with unique proton source modeling. Physical Review E, 2022, 105, .	2.1	1
15	Transverse expansion of the electron sheath during laser acceleration of protons. Physics of Plasmas, 2017, 24, 123109.	1.9	0