

Robbie Wilson

List of Publications by Year in descending order

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Version: 2024-02-01

18
papers

559
citations

1040056

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h-index

839539

18
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18
all docs

18
docs citations

18
times ranked

788
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	Towards optical polarization control of laser-driven proton acceleration in foils undergoing relativistic transparency. Nature Communications, 2016, 7, 12891.	12.8	54
3	Optically controlled dense current structures driven by relativistic plasma aperture-induced diffraction. Nature Physics, 2016, 12, 505-512.	16.7	48
4	Laser-plasma-based Space Radiation Reproduction in the Laboratory. Scientific Reports, 2017, 7, 42354.	3.3	34
5	Ellipsoidal plasma mirror focusing of high power laser pulses to ultra-high intensities. Physics of Plasmas, 2016, 23, 033106.	1.9	27
6	High order mode structure of intense light fields generated via a laser-driven relativistic plasma aperture. Scientific Reports, 2020, 10, 105.	3.3	14
7	Development of Focusing Plasma Mirrors for Ultraintense Laser-Driven Particle and Radiation Sources. Quantum Beam Science, 2018, 2, 1.	1.2	13
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	Intra-pulse transition between ion acceleration mechanisms in intense laser-foil interactions. Physics of Plasmas, 2016, 23, 063116.	1.9	9
10	The role of the gas/plasma plume and self-focusing in a gas-filled capillary discharge waveguide for high-power laser-plasma applications. Physics of Plasmas, 2013, 20, .	1.9	7
11	Radiation Pressure-Driven Plasma Surface Dynamics in Ultra-Intense Laser Pulse Interactions with Ultra-Thin Foils. Applied Sciences (Switzerland), 2018, 8, 336.	2.5	7
12	Influence of laser polarization on collective electron dynamics in ultraintense laser-foil interactions. High Power Laser Science and Engineering, 2016, 4, .	4.6	6
13	Role of magnetic field evolution on filamentary structure formation in intense laser-foil interactions. High Power Laser Science and Engineering, 2019, 7, .	4.6	5
14	Energy absorption and coupling to electrons in the transition from surface- to volume-dominant intense laser-plasma interaction regimes. New Journal of Physics, 2020, 22, 053044.	2.9	5
15	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
16	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
17	Influence of spatial-intensity contrast in ultraintense laser-plasma interactions. Scientific Reports, 2022, 12, 1910.	3.3	3
18	High order modes of intense second harmonic light produced from a plasma aperture. Matter and Radiation at Extremes, 2022, 7, 054401.	3.9	3