

Rachel Dance

List of Publications by Year in descending order

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Version: 2024-02-01

24
papers

756
citations

759233

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610901

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24
times ranked

1041
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of spatial-intensity contrast in ultraintense laser-plasma interactions. <i>Scientific Reports</i> , 2022, 12, 1910.	3.3	3
2	Influence of target-rear-side short scale length density gradients on laser-driven proton acceleration. <i>Plasma Physics and Controlled Fusion</i> , 2021, 63, 114001.	2.1	3
3	Energy absorption and coupling to electrons in the transition from surface- to volume-dominant intense laser-plasma interaction regimes. <i>New Journal of Physics</i> , 2020, 22, 053044.	2.9	5
4	Role of magnetic field evolution on filamentary structure formation in intense laser-foil interactions. <i>High Power Laser Science and Engineering</i> , 2019, 7, .	4.6	5
5	Near-100 MeV protons via a laser-driven transparency-enhanced hybrid acceleration scheme. <i>Nature Communications</i> , 2018, 9, 724.	12.8	307
6	Enhanced laser-energy coupling to dense plasmas driven by recirculating electron currents. <i>New Journal of Physics</i> , 2018, 20, 033021.	2.9	16
7	Time-resolved measurements of fast electron recirculation for relativistically intense femtosecond scale laser-plasma interactions. <i>Scientific Reports</i> , 2018, 8, 4525.	3.3	8
8	Dual Ion Species Plasma Expansion from Isotopically Layered Cryogenic Targets. <i>Physical Review Letters</i> , 2018, 120, 204801.	7.8	11
9	Radiation Pressure-Driven Plasma Surface Dynamics in Ultra-Intense Laser Pulse Interactions with Ultra-Thin Foils. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 336.	2.5	7
10	Development of Focusing Plasma Mirrors for Ultraintense Laser-Driven Particle and Radiation Sources. <i>Quantum Beam Science</i> , 2018, 2, 1.	1.2	13
11	Micron-scale mapping of megagauss magnetic fields using optical polarimetry to probe hot electron transport in petawatt-class laser-solid interactions. <i>Scientific Reports</i> , 2017, 7, 8347.	3.3	7
12	Ellipsoidal plasma mirror focusing of high power laser pulses to ultra-high intensities. <i>Physics of Plasmas</i> , 2016, 23, 033106.	1.9	27
13	Influence of laser polarization on collective electron dynamics in ultraintense laser-foil interactions. <i>High Power Laser Science and Engineering</i> , 2016, 4, .	4.6	6
14	Intra-pulse transition between ion acceleration mechanisms in intense laser-foil interactions. <i>Physics of Plasmas</i> , 2016, 23, 063116.	1.9	9
15	Plasma scale-length effects on electron energy spectra in high-irradiance laser plasmas. <i>Physical Review E</i> , 2016, 93, 043201.	2.1	21
16	Towards optical polarization control of laser-driven proton acceleration in foils undergoing relativistic transparency. <i>Nature Communications</i> , 2016, 7, 12891.	12.8	54
17	Optically controlled dense current structures driven by relativistic plasma aperture-induced diffraction. <i>Nature Physics</i> , 2016, 12, 505-512.	16.7	48
18	Measurement of the angle, temperature and flux of fast electrons emitted from intense laser-solid interactions. <i>Journal of Plasma Physics</i> , 2015, 81, .	2.1	23

#	ARTICLE	IF	CITATIONS
19	Laboratory measurements of resistivity in warm dense plasmas relevant to the microphysics of brown dwarfs. <i>Nature Communications</i> , 2015, 6, 8742.	12.8	17
20	High efficiency proton beam generation through target thickness control in femtosecond laser-plasma interactions. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	55
21	Hot electron production in laser solid interactions with a controlled pre-pulse. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	22
22	Detailed analysis of hollow ions spectra from dense matter pumped by X-ray emission of relativistic laser plasma. <i>Physics of Plasmas</i> , 2014, 21, 031213.	1.9	33
23	Single shot, temporally and spatially resolved measurements of fast electron dynamics using a chirped optical probe. <i>Journal of Instrumentation</i> , 2014, 9, P03003-P03003.	1.2	7
24	Exotic Dense-Matter States Pumped by a Relativistic Laser Plasma in the Radiation-Dominated Regime. <i>Physical Review Letters</i> , 2013, 110, 125001.	7.8	49