Christian Brabetz

List of Publications by Year
in descending order

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31	690	567281 15	580821 25
papers	citations	h-index	g-index

31	31	31	943
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reaching the Millijoule-Regime via Ultrafast Optical Parametric Amplification â€“ An Alternative to First Stage Regenerative Amplification Stages?. , 2021, , .		0
2	First on-line detection of radioactive fission isotopes produced by laser-accelerated protons. Scientific Reports, 2020, 10, 17183.	3.3	4
3	Enhancement of the laser-driven proton source at PHELIX. High Power Laser Science and Engineering, 2020, 8, .	4.6	25
4	Ion acceleration from microstructured targets irradiated by high-intensity picosecond laser pulses. Physical Review E, 2020, 102, 021201.	2.1	23
5	Spaceâ€“charge effect of laser accelerated protons on beam profile and permanent magnet quadrupole focal line. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 981, 164523.	1.6	0
6	Energy absorption and coupling to electrons in the transition from surface- to volume-dominant intense laserâ€“plasma interaction regimes. New Journal of Physics, 2020, 22, 053044.	2.9	5
7	High dynamic range, large temporal domain laser pulse measurement. Applied Physics B: Lasers and Optics, 2019, 125, 1.	2.2	13
8	Propagation-based imaging phase-contrast enhanced imaging setup for single shot acquisition using laser-generated X-ray sources. Journal of Instrumentation, 2019, 14, C03005-C03005.	1.2	5
9	X-ray phase-contrast imaging for laser-induced shock waves. Europhysics Letters, 2019, 125, 35002.	2.0	24
10	Quantitative phase contrast imaging of a shock-wave with a laser-plasma based X-ray source. Scientific Reports, 2019, 9, 18805.	3.3	17
11	Focusing of multi-MeV, subnanosecond proton bunches from a laser-driven source. Physical Review Accelerators and Beams, 2019, 22, .	1.6	9
12	First application studies at the laser-driven LIGHT beamline: Improving proton beam homogeneity and imaging of a solid target. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 909, 173-176.	1.6	12
13	Enhanced laser-energy coupling to dense plasmas driven by recirculating electron currents. New Journal of Physics, 2018, 20, 033021.	2.9	16
14	Chemical-vapor deposited ultra-fast diamond detectors for temporal measurements of ion bunches. Review of Scientific Instruments, 2018, 89, 093304.	1.3	3
15	Soft X-ray backlighter source driven by a short-pulse laser for pump-probe characterization of warm dense matter. Review of Scientific Instruments, 2018, 89, 10F122.	1.3	3
16	Temporally resolved proton radiography of rapidly varying electric and magnetic fields in laser-driven capacitor coil targets. Proceedings of SPIE, 2017, , .	0.8	2
17	Studying the Dynamics of Relativistic Laser-Plasma Interaction on Thin Foils by Means of Fourier-Transform Spectral Interferometry. Physical Review Letters, 2017, 118, 255003.	7.8	17
18	Maximum Proton Energy above 85ÂMeV from the Relativistic Interaction of Laser Pulses with Micrometer Thick<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CH</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mr Physical Review Letters, 2016, 116, 205002.	7.8	234

#	Article	IF	Citations
19	Accelerating ions with high-energy short laser pulses from submicrometer thick targets. High Power Laser Science and Engineering, 2016, 4, .	4.6	26
20	Towards highest peak intensities for ultra-short MeV-range ion bunches. Scientific Reports, 2015, 5, 12459.	3.3	42
21	Laser-driven ion acceleration with hollow laser beams. Physics of Plasmas, 2015, 22, .	1.9	60
22	Optimization of plasma mirror reflectivity and optical quality using double laser pulses. New Journal of Physics, 2015, 17, 033027.	2.9	34
23	Commissioning of a compact laser-based proton beam line for high intensity bunches around 10ÂMeV. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	24
24	Shaping laser accelerated ions for future applications â€“ The LIGHT collaboration. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 740, 94-98.	1.6	37
25	Initial experimental evidence of self-collimation of target-normal-sheath-accelerated proton beam in a stack of conducting foils. Physics of Plasmas, 2013, 20, .	1.9	3
26	Focusing and transport of high-intensity multi-MeV proton bunches from a compact laser-driven source. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	31
27	Far-field characteristics of a petawatt-class laser using plasma mirrors. , 2013, , .		0
28	Plasma cavity enhanced ion acceleration. , 2012, , .		0
29	Reference-free focal spot optimization of a petawatt laser using adaptive optics. , 2012, , .		0
30	Multi-pulse enhanced laser ion acceleration using plasma half cavity targets. Applied Physics Letters, 2012, 101, .	3.3	20
31	Hollow Beam creation with continuous diffractive phase mask at PHELIX. , 2012, , .		1