

Nasr A M Hafz

List of Publications by Year in descending order

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docs citations

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citing authors

#	ARTICLE	IF	CITATIONS
1	A laser wakefield acceleration facility using SG-II petawatt laser system. Review of Scientific Instruments, 2022, 93, 033504.	1.3	1
2	1 kHz laser accelerated electron beam feasible for radiotherapy uses: A PICâ€“Monte Carlo based study. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 987, 164841.	1.6	13
3	Generation of high-quality GeV-class electron beams utilizing attosecond ionization injection. New Journal of Physics, 2021, 23, 043016.	2.9	1
4	Highly efficient few-cycle laser wakefield electron accelerator. Plasma Physics and Controlled Fusion, 2021, 63, 065019.	2.1	8
5	Ultrashort, MeV-scale laser-plasma positron source for positron annihilation lifetime spectroscopy. Physical Review Accelerators and Beams, 2021, 24, .	1.6	10
6	Generation and collective interaction of giant magnetic dipoles in laser cluster plasma. Scientific Reports, 2021, 11, 15971.	3.3	2
7	Substantial enhancement of betatron radiation in cluster targets. Physical Review E, 2020, 102, 053205.	2.1	5
8	Control of electron beam energy-spread by beam loading effects in a laser-plasma accelerator. Plasma Physics and Controlled Fusion, 2020, 62, 055004.	2.1	12
9	Enhanced laser wakefield acceleration using dual-color relativistic pulses. Plasma Physics and Controlled Fusion, 2020, 62, 095012.	2.1	3
10	High Stability Positron Beam Generation Based on Ultra-intense Laser. Acta Physica Polonica A, 2020, 137, 156-159.	0.5	1
11	New injection and acceleration scheme of positrons in the laser-plasma bubble regime. Physical Review Accelerators and Beams, 2020, 23, .	1.6	10
12	Self-induced ionization injection LWFA and generation of sub-fs electron bunches with few-cycle sub-TW laser pulses. Laser and Particle Beams, 2019, 37, 165-170.	1.0	1
13	Ultrafast dynamics of magnetic vortices and pulse collapse in a laser-under dense plasma interaction. Physics of Plasmas, 2019, 26, 022306.	1.9	2
14	A laser-plasma accelerator driven by two-color relativistic femtosecond laser pulses. Science Advances, 2019, 5, eaav7940.	10.3	23
15	Effect of injection-gas concentration on the electron beam quality from a laser-plasma accelerator. Physics of Plasmas, 2018, 25, 043106.	1.9	10
16	Generation of GeV Electron Beam From a Laser-Plasma Accelerator and Its Prospect as a Desktop Source of Energetic Positrons and Gamma Rays For Applications. IEEE Transactions on Nuclear Science, 2018, 65, 2671-2678.	2.0	5
17	Correlation between macroscopic plasma dynamics and electron beam parameters in a laser-plasma accelerator. Plasma Physics and Controlled Fusion, 2018, 60, 085020.	2.1	2
18	Laser wakefield acceleration in Krâ€“He plasmas and its application to positron beam generation. Plasma Physics and Controlled Fusion, 2018, 60, 085012.	2.1	8

#	ARTICLE	IF	CITATIONS
19	Generation of 20â€‰kA electron beam from a laser wakefield accelerator. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	38
20	On-Line plasma diagnostics of a laser-produced plasma. <i>Plasma Science and Technology</i> , 2017, 19, 015506.	1.5	7
21	Laser Wakefield Acceleration Using Mid-Infrared Laser Pulses. <i>Chinese Physics Letters</i> , 2016, 33, 095202.	3.3	11
22	Resonantly Enhanced Betatron Hard X-rays from Ionization Injected Electrons in a Laser Plasma Accelerator. <i>Scientific Reports</i> , 2016, 6, 27633.	3.3	31
23	Generation of high-quality electron beams by ionization injection in a single acceleration stage. <i>High Power Laser Science and Engineering</i> , 2016, 4, .	4.6	12
24	Laser acceleration in argon clusters and gas media. <i>Plasma Physics and Controlled Fusion</i> , 2016, 58, 034014.	2.1	10
25	Demonstration of self-truncated ionization injection for GeV electron beams. <i>Scientific Reports</i> , 2015, 5, 14659.	3.3	98
26	Enhanced electron yield from laser-driven wakefield acceleration in high-Z gas jets. <i>Review of Scientific Instruments</i> , 2015, 86, 103502.	1.3	9
27	High-Quality Laser-Driven Electron Beams by Ionization Injection in Low-Density Nitrogen Gas Jet. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 539-543.	1.3	1
28	Enhanced electron injection in laser-driven bubble acceleration by ultra-intense laser irradiating foil-gas targets. <i>Physics of Plasmas</i> , 2015, 22, 083110.	1.9	3
29	Generation of high-quality electron beams from a laser-based advanced accelerator. <i>Chinese Physics C</i> , 2015, 39, 067003.	3.7	0
30	Simultaneous generation of quasi-monoenergetic electron and betatron X-rays from nitrogen gas via ionization injection. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	23
31	Enhanced single-stage laser-driven electron acceleration by self-controlled ionization injection. <i>Optics Express</i> , 2014, 22, 29578.	3.4	17
32	Diagnosis of bubble evolution in laser-wakefield acceleration via angular distributions of betatron x-rays. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	13
33	Quasimonoenergetic collimated electron beams from a laser wakefield acceleration in low density pure nitrogen. <i>Physics of Plasmas</i> , 2014, 21, 073102.	1.9	15
34	Generation of quasi-monoenergetic electron beams with small normalized divergences angle from a 2 TW laser facility. <i>Optics Express</i> , 2014, 22, 12836.	3.4	5
35	Generation of electron beams from a laser wakefield acceleration in pure neon gas. <i>Physics of Plasmas</i> , 2014, 21, 083108.	1.9	4
36	Concurrence of monoenergetic electron beams and bright X-rays from an evolving laser-plasma bubble. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 5825-5830.	7.1	43

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37	Stable laser-plasma accelerators at low densities. Journal of Applied Physics, 2014, 116, .	2.5	14
38	Bright betatron X-ray radiation from a laser-driven-clustering gas target. Scientific Reports, 2013, 3, 1912.	3.3	70
39	Controlled ionization-induced injection by tailoring the gas-density profile in laser wakefield acceleration. Journal of Plasma Physics, 2012, 78, 363-371.	2.1	15
40	Effect of pulse profile and chirp on a laser wakefield generation. Physics of Plasmas, 2012, 19, .	1.9	42
41	Controlling the betatron oscillations of a wakefield-accelerated electron beam by temporally asymmetric laser pulses. Physics of Plasmas, 2011, 18, .	1.9	36
42	Utilizing asymmetric laser pulses for the generation of high-quality wakefield-accelerated electron beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 654, 592-596.	1.6	5
43	Evolution of self-injected quasi-monoenergetic electron beams in a plasma bubble. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 637, S51-S53.	1.6	18
44	On the Pointing Angle of Electron Beams from Laser Wakefield Accelerators. , 2010, , .		0
45	Controlling the Pointing Angle of a Relativistic Electron Beam in a Weakly-Nonlinear Laser Wakefield Accelerator. Applied Physics Express, 2010, 3, 076401.	2.4	14
46	Laser-driven electron acceleration research at APRI and future application to compact light sources. Journal of the Korean Physical Society, 2010, 56, 241-246.	0.7	2
47	Ion spectrometer composed of time-of-flight and Thomson parabola spectrometers for simultaneous characterization of laser-driven ions. Review of Scientific Instruments, 2009, 80, 053302.	1.3	21
48	Diagnostic of laser contrast using target reflectivity. Applied Physics Letters, 2009, 94, .	3.3	33
49	Laser-driven electron beam acceleration and future application to compact light sources. , 2009, , .		0
50	On-Target Contrast Diagnostic via Specular Reflectivity Measurement. , 2009, , .		0
51	Laser Acceleration of Electron Beams to the GeV-class Energies in Gas Jets. Journal of the Optical Society of Korea, 2009, 13, 8-14.	0.6	1
52	Radiography with Low Energy Protons Generated from Ultraintense Laser-plasma Interactions. Journal of the Optical Society of Korea, 2009, 13, 28-32.	0.6	2
53	Absolute calibration of a time-of-flight spectrometer and imaging plate for the characterization of laser-accelerated protons. Measurement Science and Technology, 2009, 20, 115112.	2.6	16
54	Target Diagnostic Systems for Proton, Electron, and X-ray Generation Experiments Based on Ultraintense Laser-Target Interactions. Journal of the Korean Physical Society, 2009, 55, 517-527.	0.7	6

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55	Review on Recent High Intensity Physics Experiments Relevant to X-Ray and Quantum Beam Generation at JAEA. Springer Proceedings in Physics, 2009, , 33-42.	0.2	0
56	Stable generation of GeV-class electron beams from self-guided laserâ€“plasma channels. Nature Photonics, 2008, 2, 571-577.	31.4	291
57	Accelerators moving on. Nature Photonics, 2008, 2, 580-580.	31.4	0
58	Characteristics of a Ni-like silver x-ray laser pumped by a single profiled laser pulse. Journal of the Optical Society of America B: Optical Physics, 2008, 25, B76.	2.1	9
59	Development of Laser-Driven Proton and Electron Sources Using APRI 100-TW Ti:Sapphire Laser System. AIP Conference Proceedings, 2008, , .	0.4	0
60	Efficient production of a collimated MeV proton beam from a polyimide target driven by an intense femtosecond laser pulse. Physics of Plasmas, 2008, 15, .	1.9	42
61	Demonstration of a saturated Ni-like Ag x-ray laser pumped by a single profiled laser pulse from a 10-Hz Ti:sapphire laser system. Physical Review A, 2008, 77, .	2.5	44
62	GENERATION OF GOOD-QUALITY RELATIVISTIC ELECTRON BEAM FROM SELF-MODULATED LASER WAKEFIELD ACCELERATION. International Journal of Modern Physics B, 2007, 21, 398-406.	2.0	6
63	Generation of 1.2 X Diffraction-Limited Focal Spot from the 100 TW Ti:sapphire Laser System by use of an adaptive optics system. , 2007, , .		0
64	Development of X-ray Lasers and High-order Harmonics towards Harmonic Seeded X-ray Lasers around 13-nm Wavelength. , 2007, , .		0
65	Wavefront Correction and Customization of Focal Spot of 100 TW Ti:Sapphire Laser System. Japanese Journal of Applied Physics, 2007, 46, 7724-7730.	1.5	20
66	Enhancement of Electron Beam Generation by Using a Steep Downward Density Gradient. , 2007, , .		0
67	Dependence of the electron beam parameters on the stability of laser propagation in a laser wakefield accelerator. Applied Physics Letters, 2007, 90, 151501.	3.3	32
68	Full characterization of a GRIP Ni-like Ag amplifier for seeding with high harmonics at 13.9 nm. , 2007, , .		0
69	Generation of 1.2 X diffraction-limited focal spot from the 100 TW Ti:sapphire laser system. , 2007, , .		0
70	Quasi-Monoenergetic Electron-Beam Generation Using a Laser Accelerator for Ultra-Short X-ray Sources. Journal of the Korean Physical Society, 2007, 51, 397.	0.7	10
71	Quasimonoenergetic electron beam generation by using a pinholelike collimator in a self-modulated laser wakefield acceleration. Physical Review E, 2006, 73, 016405.	2.1	21
72	Near-GeV electron beam from a laser wakefield accelerator in the bubble regime. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 554, 49-58.	1.6	5

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73	Electron trapping and acceleration across a parabolic plasma density profile. Physical Review E, 2004, 69, 026409.	2.1	53
74	Emitance Growth of High-Energy Electrons Produced From the Laser Wakefield Acceleration. IEEE Transactions on Plasma Science, 2004, 32, 429-432.	1.3	2
75	Femtosecond X-ray generation via the thomson scattering of a terawatt laser from electron bunches produced from the LWFA utilizing a plasma density transition. IEEE Transactions on Plasma Science, 2003, 31, 1388-1394.	1.3	26
76	Computer simulations of a single-laser double-gas-jet wakefield accelerator concept. Physical Review Special Topics: Accelerators and Beams, 2002, 5, .	1.8	29
77	Laser-plasma electron linear accelerator. International Journal of Applied Electromagnetics and Mechanics, 2002, 14, 271-276.	0.6	0
78	Stability evaluation of femtosecond S-band linac with photocathode RF gun. AIP Conference Proceedings, 2001, , .	0.4	0
79	Numerical simulation for plasma electron acceleration by 12TW 50 fs laser pulse. AIP Conference Proceedings, 2001, , .	0.4	0
80	Hundreds- and tens-femtosecond time-resolved pump-and-probe analysis system. Radiation Physics and Chemistry, 2001, 60, 303-306.	2.8	11
81	Numerical analysis of 10's femtosecond relativistic electron beam generation using single 12TW50fs laser pulse. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 455, 148-154.	1.6	8
82	Experimental verification of laser photocathode RF gun as an injector for a laser plasma accelerator. IEEE Transactions on Plasma Science, 2000, 28, 1133-1142.	1.3	11
83	Electron single bunch acceleration from laser-plasma at the University of Tokyo. , 0, , .		1
84	Ultra short x-ray source based on the nonlinear thomson scattering of femtosecond lasers from plasma-accelerated electron beams. , 0, , .		0
85	Near-GeV Electron Beams from the Laser Wakefield Accelerator in the “Bubble” Regime. , 0, , .		0
86	Generation of Small Energy Spread Electron Beam from Self-Modulated Laserwakefield Accelerator. , 0, , .		0