# F N Beg

List of Publications by Year
in descending order



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|---|---|---|---|
| 188 papers | 6,302 citations | 76294 40 h-index | 74108 75 g-index |
| 190 all docs | 190 docs citations | 190 times ranked | 2491 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Measurements of Energetic Proton Transport through Magnetized Plasma from Intense Laser Interactions with Solids. Physical Review Letters, 2000, 84, 670-673. | 2.9 | 664 |
| 2 | A study of picosecond laserâ€“solid interactions up to 1019 Wâ€‰cmâ¯2. Physics of Plasmas, 1997, 4, 447-457. | 0.7 | 583 |
| 3 | Energetic Heavy-Ion and Proton Generation from Ultraintense Laser-Plasma Interactions with Solids. Physical Review Letters, 2000, 85, 1654-1657. | 2.9 | 470 |
| 4 | Effect of discrete wires on the implosion dynamics of wire array Z pinches. Physics of Plasmas, 2001, 8, 3734-3747. | 0.7 | 300 |
| 5 | Plasma Ion Emission from High Intensity Picosecond Laser Pulse Interactions with Solid Targets. Physical Review Letters, 1994, 73, 1801-1804. | 2.9 | 191 |
| 6 | Effect of Laser Intensity on Fast-Electron-Beam Divergence in Solid-Density Plasmas. Physical Review Letters, 2008, 100, 015003. | 2.9 | 180 |
| 7 | Hot-Electron Temperature and Laser-Light Absorption in Fast Ignition. Physical Review Letters, 2009, 102, 045008. | 2.9 | 161 |
| 8 | Plasma Formation on the Front and Rear of Plastic Targets due to High-Intensity Laser-Generated Fast Electrons. Physical Review Letters, 1998, 81, 999-1002. | 2.9 | 127 |
| 9 | Energetic proton production from relativistic laser interaction with high density plasmas. Physics of Plasmas, 2000, 7, 2055-2061. | 0.7 | 115 |
| 10 | Limitation on Prepulse Level for Cone-Guided Fast-Ignition Inertial Confinement Fusion. Physical Review Letters, 2010, 104, 055002. | 2.9 | 101 |
| 11 | A Bremsstrahlung spectrometer using k-edge and differential filters with image plate dosimeters. Review of Scientific Instruments, 2008, 79, 10E305. | 0.6 | 100 |
| 12 | Gigabar Spherical Shock Generation on the OMEGA Laser. Physical Review Letters, 2015, 114, 045001. | 2.9 | 100 |
| 13 | Study of x-ray emission from a table top plasma focus and its application as an x-ray backlighter. Journal of Applied Physics, 2000, 88, 3225-3230. | 1.1 | 99 |
| 14 | X-ray backlighting of wire array Z-pinch implosions using X pinch. Review of Scientific Instruments, 2001, 72, 671-673. | 0.6 | 92 |
| 15 | Initial cone-in-shell fast-ignition experiments on OMEGA. Physics of Plasmas, 2011, 18, . | 0.7 | 82 |
| 16 | Bremsstrahlung and KÎ± fluorescence measurements for inferring conversion efficiencies into fast ignition relevant hot electrons. Physics of Plasmas, 2009, 16, . | 0.7 | 80 |
| 17 | Production of neutrons up to 18 MeV in high-intensity, short-pulse laser matter interactions. Physics of Plasmas, 2011, 18, . | 0.7 | 80 |
| 18 | Demonstration of Fusion-Evaporation and Direct-Interaction Nuclear Reactions using High-Intensity Laser-Plasma-Accelerated Ion Beams. Physical Review Letters, 2003, 91, 075006. | 2.9 | 71 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Laser generated neutron source for neutron resonance spectroscopy. Physics of Plasmas, 2010, 17, . | 0.7 | 67 |
| 20 | Hot Electron Temperature and Coupling Efficiency Scaling with Prepulse for Cone-Guided Fast Ignition. Physical Review Letters, 2012, 108, 115004. | 2.9 | 60 |
| 21 | Laser-driven strong magnetostatic fields with applications to charged beam transport and magnetized high energy-density physics. Physics of Plasmas, 2018, 25, . | 0.7 | 58 |
| 22 | Titanium K-shell x-ray production from high velocity wire array implosions on the 20-MA Z accelerator. Physics of Plasmas, 1999, 6, 2081-2088. | 0.7 | 57 |
| 23 | Numerical modeling of fast electron generation in the presence of preformed plasma in laser-matter interaction at relativistic intensities. Physical Review E, 2011, 83, 046401. | 0.8 | 57 |
| 24 | A Primer on Pulsed Power and Linear Transformer Drivers for High Energy Density Physics Applications. IEEE Transactions on Plasma Science, 2018, 46, 3928-3967. | 0.6 | 57 |
| 25 | Optical and x-ray observations of carbon and aluminium fibreZ-pinch plasmas. Plasma Physics and Controlled Fusion, 1997, 39, 1-25. | 0.9 | 55 |
| 26 | Absolute calibration of image plates for electrons at energy between 100keV and 4MeV. Review of Scientific Instruments, 2008, 79, 033301. | 0.6 | 52 |
| 27 | Table-top X-pinch for x-ray radiography. Applied Physics Letters, 2003, 82, 4602-4604. | 1.5 | 51 |
| 28 | Time-resolved compression of a capsule with a cone to high density for fast-ignition laser fusion. Nature Communications, 2014, 5, 5785. | 5.8 | 50 |
| 29 | Fast electron energy transport in solid density and compressed plasma. Nuclear Fusion, 2014, 54, 054004. | 1.6 | 49 |
| 30 | Spherical strong-shock generation for shock-ignition inertial fusion. Physics of Plasmas, 2015, 22, . | 0.7 | 49 |
| 31 | Visualizing fast electron energy transport into laser-compressed high-density fast-ignitionÂtargets. Nature Physics, 2016, 12, 499-504. | 6.5 | 49 |
| 32 | Fast electron generation in cones with ultraintense laser pulses. Physics of Plasmas, 2008, 15, 056304. | 0.7 | 47 |
| 33 | Dynamics of high-energy proton beam acceleration and focusing from hemisphere-cone targets by high-intensity lasers. Physical Review E, 2013, 87, 013108. | 0.8 | 47 |
| 34 | Studies on the transport of high intensity laser-generated hot electrons in cone coupled wire targets. Physics of Plasmas, 2009, 16, . | 0.7 | 46 |
| 35 | Generation of Superponderomotive Electrons in Multipicosecond Interactions of Kilojoule Laser Beams with Solid-Density Plasmas. Physical Review Letters, 2016, 116, 155001. | 2.9 | 46 |
| 36 | Intense laser-plasma interactions: New frontiers in high energy density physics. Physics of Plasmas, 2009, 16, . | 0.7 | 45 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Magnetically Guided Fast Electrons in Cylindrically Compressed Matter. Physical Review Letters, 2011, 107, 065004. | 2.9 | 45 |
| 38 | Surface heating of wire plasmas using laser-irradiated cone geometries. Nature Physics, 2007, 3, 853-856. | 6.5 | 44 |
| 39 | Compact X-pinch based point x-ray source for phase contrast imaging of inertial confinement fusion capsules. Applied Physics Letters, 2006, 89, 101502. | 1.5 | 43 |
| 40 | Radiative properties of high wire number tungsten arrays with implosion times up to 250 ns. Physics of Plasmas, 1999, 6, 3576-3586. | 0.7 | 41 |
| 41 | Measurements of fast electron scaling generated by petawatt laser systems. Physics of Plasmas, 2009, 16, . | 0.7 | 40 |
| 42 | Dynamics of Relativistic Laser-Plasma Interaction on Solid Targets. Physical Review Letters, 2012, 109, 145006. | 2.9 | 40 |
| 43 | Effect of Target Material on Fast-Electron Transport and Resistive Collimation. Physical Review Letters, 2013, 110, 025001. | 2.9 | 40 |
| 44 | Transport study of intense-laser-produced fast electrons in solid targets with a preplasma created by a long pulse laser. Physics of Plasmas, 2010, 17, . | 0.7 | 37 |
| 45 | Relativistic High-Current Electron-Beam Stopping-Power Characterization in Solids and Plasmas: Collisional Versus Resistive Effects. Physical Review Letters, 2012, 109, 255002. | 2.9 | 35 |
| 46 | Mechanism of heating of pre-formed plasma electrons in relativistic laser-matter interaction. Physics of Plasmas, 2012, 19, 060703. | 0.7 | 35 |
| 47 | Self-Consistent Simulation of Transport and Energy Deposition of Intense Laser-Accelerated Proton Beams in Solid-Density Matter. Physical Review Letters, 2015, 115, 054801. | 2.9 | 35 |
| 48 | Generation of heavy ion beams using femtosecond laser pulses in the target normal sheath acceleration and radiation pressure acceleration regimes. Physics of Plasmas, 2016, 23, . | 0.7 | 35 |
| 49 | First demonstration of ARC-accelerated proton beams at the National Ignition Facility. Physics of Plasmas, 2019, 26, . | 0.7 | 34 |
| 50 | The effect of current prepulse on wire array Z-pinch implosions. Physics of Plasmas, 2002, 9, 375-377. | 0.7 | 32 |
| 51 | Comparison of sensitivities of MoirÃ© deflectometry and interferometry to measure electron densities inz-pinch plasmas. Journal Physics D: Applied Physics, 2007, 40, 2026-2032. | 1.3 | 32 |
| 52 | Thermal conductivity measurements of proton-heated warm dense aluminum. Scientific Reports, 2017, 7, 7015. | 1.6 | 32 |
| 53 | Collisional particle-in-cell modeling for energy transport accompanied by atomic processes in dense plasmas. Physics of Plasmas, 2013, 20, . | 0.7 | 30 |
| 54 | Generation of high-energy (>15 MeV) neutrons using short pulse high intensity lasers. Physics of Plasmas, 2012, 19, 093106. | 0.7 | 29 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | KÎ± and bremsstrahlung x-ray radiation backlighter sources from short pulse laser driven silver targets as a function of laser pre-pulse energy. Physics of Plasmas, 2014, 21, . | 0.7 | 29 |
| 56 | Z-pinch discharges in aluminum and tungsten wires. Physics of Plasmas, 1999, 6, 2579-2587. | 0.7 | 28 |
| 57 | Fast electron temperature and conversion efficiency measurements in laser-irradiated foil targets using a bremsstrahlung x-ray detector. Physics of Plasmas, 2011, 18, . | 0.7 | 26 |
| 58 | Optimization of laser-nanowire target interaction to increase the proton acceleration efficiency. Plasma Physics and Controlled Fusion, 2019, 61, 065016. | 0.9 | 26 |
| 59 | Effect of insulator sleeve material on neutron emission from a plasma focus. Physica Scripta, 1992, 46, 152-154. | 1.2 | 25 |
| 60 | Investigation of laser pulse length and pre-plasma scale length impact on hot electron generation on OMEGA-EP. New Journal of Physics, 2017, 19, 023008. | 1.2 | 25 |
| 61 | 250ÂkA compact linear transformer driver for wire array<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>z</mml:mi></mml:math>-pinch loads. Physical Review Special Topics: Accelerators and Beams, 2011, 14, . | 1.8 | 23 |
| 62 | Supersonic jet formation and propagation in x-pinches. Astrophysics and Space Science, 2011, 336, 33-40. | 0.5 | 23 |
| 63 | Enhanced Relativistic-Electron-Beam Energy Loss in Warm Dense Aluminum. Physical Review Letters, 2015, 114, 095004. | 2.9 | 23 |
| 64 | Computational modeling of proton acceleration with multi-picosecond and high energy, kilojoule, lasers. Physics of Plasmas, 2018, 25, 083109. | 0.7 | 23 |
| 65 | Ion acceleration from microstructured targets irradiated by high-intensity picosecond laser pulses. Physical Review E, 2020, 102, 021201. | 0.8 | 23 |
| 66 | Study of relativistic electron beam production and transport in high-intensity laser interaction with a wire target by integratedLSPmodeling. Physics of Plasmas, 2008, 15, 083101. | 0.7 | 22 |
| 67 | Mapping return currents in laser-generated Z-pinch plasmas using proton deflectometry. Applied Physics Letters, 2012, 100, . | 1.5 | 21 |
| 68 | Study of the effect of current rise time on the formation of the precursor column in cylindrical wire array Z pinches at 1 MA. Physics of Plasmas, 2009, 16, . | 0.7 | 20 |
| 69 | Study of silver KÎ± and bremsstrahlung radiation from short-pulse laser-matter interactions with applications for x-ray radiography. Physics of Plasmas, 2010, 17, 082703. | 0.7 | 20 |
| 70 | Enhanced hot-electron production and strong-shock generation in hydrogen-rich ablators for shock ignition. Physics of Plasmas, 2017, 24, . | 0.7 | 19 |
| 71 | Transport of energy by ultraintense laser-generated electrons in nail-wire targets. Physics of Plasmas, 2009, 16, 112702. | 0.7 | 18 |
| 72 | Proton trajectories and electric fields in a laser-accelerated focused proton beam. Physics of Plasmas, 2012, 19, 056702. | 0.7 | 18 |

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|---|---|---|---|
| 73 | Target material dependence of positron generation from high intensity laser-matter interactions. Physics of Plasmas, 2016, 23, . | 0.7 | 18 |
| 74 | Measurement of pulsed-power-driven magnetic fields via proton deflectometry. Applied Physics Letters, 2014, 105, . | 1.5 | 17 |
| 75 | Focussing Protons from a Kilojoule Laser for Intense Beam Heating using Proximal Target Structures. Scientific Reports, 2020, 10, 9415. | 1.6 | 17 |
| 76 | MA-class linear transformer driver for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Z</mml:mi></mml:math> -pinch research. Physical Review Accelerators and Beams, 2020, 23, . | 0.6 | 17 |
| 77 | Observations of proton beam enhancement due to erbium hydride on gold foil targets. Physics of Plasmas, 2009, 16, 093113. | 0.7 | 16 |
| 78 | Laser-driven cylindrical compression of targets for fast electron transport study in warm and dense plasmas. Physics of Plasmas, 2011, 18, 043108. | 0.7 | 16 |
| 79 | Heavy ion acceleration in the radiation pressure acceleration and breakout afterburner regimes. Plasma Physics and Controlled Fusion, 2017, 59, 075003. | 0.9 | 16 |
| 80 | Experimental study of hot electron generation in shock ignition relevant high-intensity regime with large scale hot plasmas. Physics of Plasmas, 2020, 27, 023111. | 0.7 | 16 |
| 81 | X-ray spectroscopy of buried layer foils irradiated at laser intensities in excess of 1020â€‚W/cm2. Physics of Plasmas, 2009, 16, . | 0.7 | 15 |
| 82 | Laser-accelerated proton conversion efficiency thickness scaling. Physics of Plasmas, 2009, 16, 123108. | 0.7 | 15 |
| 83 | Unraveling resistive versus collisional contributions to relativistic electron beam stopping power in cold-solid and in warm-dense plasmas. Physics of Plasmas, 2014, 21, 033101. | 0.7 | 15 |
| 84 | Calibration and characterization of a highly efficient spectrometer in von Hamos geometry for 7-10 keV x-rays. Review of Scientific Instruments, 2017, 88, 043110. | 0.6 | 15 |
| 85 | Characterization of fast electron divergence and energy spectrum from modeling of angularly resolved bremsstrahlung measurements. Physics of Plasmas, 2018, 25, . | 0.7 | 15 |
| 86 | Study of stability in a liner-on-target gas puff Z-pinch as a function of pre-embedded axial magnetic field. Physics of Plasmas, 2020, 27, . | 0.7 | 15 |
| 87 | Effect of the global to local magnetic field ratio on the ablation modulations on X-pinches driven by 80 kA peak current. New Journal of Physics, 2012, 14, 043021. | 1.2 | 14 |
| 88 | Effect of wire number on x-pinch discharges. Applied Physics Letters, 2006, 88, 261501. | 1.5 | 13 |
| 89 | Electron and ion dynamics during the expansion of a laser-heated plasma under vacuum. Physics of Plasmas, 2012, 19, 033109. | 0.7 | 13 |
| 90 | Characterizing the energy distribution of laser-generated relativistic electrons in cone-wire targets. Physics of Plasmas, 2012, 19, . | 0.7 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Study of X-pinch dynamics using a low current (25â€‰kA) and slower current (400â€‰ns) pulse. Physics of Plasmas, 2013, 20, 042704. | 0.7 | 13 |
| 92 | Characterization of the fast electrons distribution produced in a high intensity laser target interaction. Physics of Plasmas, 2014, 21, 031212. | 0.7 | 13 |
| 93 | Experimental evidence for the enhanced and reduced stopping regimes for protons propagating through hot plasmas. Scientific Reports, 2018, 8, 14586. | 1.6 | 13 |
| 94 | Ar and Kr on deuterium gas-puff staged Z-pinch implosions on a 1-MA driver: Experiment and simulation. Physics of Plasmas, 2019, 26, . | 0.7 | 13 |
| 95 | Direct comparison of wire, foil, and hybrid X-pinches on a 200 kA, 150 ns current driver. Journal of Applied Physics, 2021, 129, . | 1.1 | 13 |
| 96 | Proton stopping measurements at low velocity in warm dense carbon. Nature Communications, 2022, 13, . | 5.8 | 13 |
| 97 | Varying stopping and self-focusing of intense proton beams as they heat solid density matter. Physics of Plasmas, 2016, 23, . | 0.7 | 12 |
| 98 | Single-shot divergence measurements of a laser-generated relativistic electron beam. Physics of Plasmas, 2010, 17, . | 0.7 | 11 |
| 99 | Collimated Propagation of Fast Electron Beams Accelerated by High-Contrast Laser Pulses in Highly Resistive Shocked Carbon. Physical Review Letters, 2017, 118, 205001. | 2.9 | 11 |
| 100 | Characterization of a Liner-on-Target Gas Injector for Staged Z-Pinch Experiments. IEEE Transactions on Plasma Science, 2018, 46, 3855-3863. | 0.6 | 11 |
| 101 | Investigation into the dynamics of laser-cut foil X-pinches and their potential use for high repetition rate operation. Applied Physics Letters, 2014, 105, 024101. | 1.5 | 10 |
| 102 | The response function of Fujifilm BAS-TR imaging plates to laser-accelerated titanium ions. Review of Scientific Instruments, 2019, 90, 083302. | 0.6 | 10 |
| 103 | Self-Generated Magnetic and Electric Fields at a Mach-6 Shock Front in a Low Density Helium Gas by Dual-Angle Proton Radiography. Physical Review Letters, 2019, 123, 215001. | 2.9 | 10 |
| 104 | Cross-point coronal plasma dynamics in two- and four-wire x-pinches. Physics of Plasmas, 2008, 15, . | 0.7 | 9 |
| 105 | Improved laser-to-proton conversion efficiency in isolated reduced mass targets. Applied Physics Letters, 2013, 103, . | 1.5 | 9 |
| 106 | Acceleration of high charge-state target ions in high-intensity laser interactions with sub-micron targets. New Journal of Physics, 2016, 18, 113032. | 1.2 | 9 |
| 107 | Effect of krypton admixture in deuterium on neutron yield in a megaampere dense plasma focus. Journal of Applied Physics, 2020, 128, . | 1.1 | 9 |
| 108 | A quasi-monoenergetic short time duration compact proton source for probing high energy density states of matter. Scientific Reports, 2021, 11, 6881. | 1.6 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Heating of solid target in electron refluxing dominated regime with ultra-intense laser. Journal of Physics: Conference Series, 2008, 112, 022063. | 0.3 | 8 |
| 110 | Supra-thermal electron beam stopping power and guiding in dense plasmas. Journal of Plasma Physics, 2013, 79, 429-435. | 0.7 | 8 |
| 111 | Shock formation in Ne, Ar, Kr, and Xe on deuterium gas puff implosions. Physics of Plasmas, 2016, 23, . | 0.7 | 8 |
| 112 | Proton acceleration from high-contrast short pulse lasers interacting with sub-micron thin foils. Journal of Applied Physics, 2016, 119, . | 1.1 | 8 |
| 113 | Study of self-generated fields in strongly-shocked, low-density systems using broadband proton radiography. Applied Physics Letters, 2017, 111, . | 1.5 | 8 |
| 114 | Measurement of temperature and density using non-collective X-ray Thomson scattering in pulsed power produced warm dense plasmas. Scientific Reports, 2018, 8, 8432. | 1.6 | 8 |
| 115 | Clarket al.Reply:. Physical Review Letters, 2006, 96, . | 2.9 | 7 |
| 116 | Three-channel x-ray crystal spectrometer for diagnosing high energy density plasmas. Review of Scientific Instruments, 2006, 77, 103104. | 0.6 | 6 |
| 117 | Study of instability formation and EUV emission in thin liners driven with a compact 250â€‰kA, 150â€‰ns linear transformer driver. Physics of Plasmas, 2014, 21, 031208. | 0.7 | 6 |
| 118 | Characterization of laser-cut copper foil X-pinches. Physics of Plasmas, 2016, 23, . | 0.7 | 6 |
| 119 | A broadband proton backlighting platform to probe shock propagation in low-density systems. Review of Scientific Instruments, 2017, 88, 013503. | 0.6 | 6 |
| 120 | Transport and spatial energy deposition of relativistic electrons in copper-doped fast ignition plasmas. Physics of Plasmas, 2017, 24, 102710. | 0.7 | 6 |
| 121 | A semi-analytic model of gas-puff liner-on-target magneto-inertial fusion. Physics of Plasmas, 2019, 26, 032708. | 0.7 | 6 |
| 122 | Pump depletion and hot-electron generation in long-density-scale-length plasma with shock-ignition high-intensity laser. Physical Review E, 2020, 101, 033206. | 0.8 | 6 |
| 123 | Mitigation of magneto-Rayleigh-Taylor instability growth in a triple-nozzle, neutron-producing gas-puff Z pinch. Physical Review E, 2021, 104, L023201. | 0.8 | 6 |
| 124 | Investigation of fast-electron-induced<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>K</mml:mi></mml:math>Î± x rays in laser-produced blow-off plasma. Physical Review E, 2014, 89, 033105. | 0.8 | 5 |
| 125 | Injector design for liner-on-target gas-puff experiments. Review of Scientific Instruments, 2017, 88, 113509. | 0.6 | 5 |
| 126 | High-angle deflection of the energetic electrons by a voluminous magnetic structure in near-normal intense laser-plasma interactions. Physical Review E, 2018, 98, . | 0.8 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Anomalous material-dependent transport of focused, laser-driven proton beams. Scientific Reports, 2018, 8, 17538. | 1.6 | 5 |
| 128 | Development of broadband x-ray radiography for diagnosing magnetically driven cylindrically compressed matter. Physics of Plasmas, 2019, 26, 083104. | 0.7 | 5 |
| 129 | Laser-driven acceleration of quasi-monoenergetic, near-collimated titanium ions via a transparency-enhanced acceleration scheme. New Journal of Physics, 2019, 21, 103005. | 1.2 | 5 |
| 130 | Overview of recent progress in US fast ignition research. European Physical Journal Special Topics, 2006, 133, 95-100. | 0.2 | 5 |
| 131 | Determination of electron-heated temperatures of petawatt laser-irradiated foil targets with 256 and 68 eV extreme ultraviolet imaging. Review of Scientific Instruments, 2008, 79, 093507. | 0.6 | 4 |
| 132 | Proton Focusing Characteristics Relevant to Fast Ignition. IEEE Transactions on Plasma Science, 2011, 39, 2818-2819. | 0.6 | 4 |
| 133 | Characterization of an imploding cylindrical plasma for electron transport studies using x-ray emission spectroscopy. Physics of Plasmas, 2020, 27, . | 0.7 | 4 |
| 134 | Laser reflection as a catalyst for direct laser acceleration in multipicosecond laser-plasma interaction. Physics of Plasmas, 2020, 27, 013106. | 0.7 | 4 |
| 135 | Role of collisionality and radiative cooling in supersonic plasma jet collisions of different materials. Physical Review E, 2020, 101, 023205. | 0.8 | 4 |
| 136 | Dynamics and energy coupling of gas puff Z-pinches on a fast linear transformer driver. Journal of Applied Physics, 2021, 130, . | 1.1 | 4 |
| 137 | Kinematics of femtosecond laser-generated plasma expansion: Determination of sub-micron density gradient and collisionality evolution of over-critical laser plasmas. Physics of Plasmas, 2021, 28, . | 0.7 | 4 |
| 138 | Approach to the study of fast electron transport in cylindrically imploded targets. Laser and Particle Beams, 2015, 33, 525-534. | 0.4 | 3 |
| 139 | Investigation of Current Transport in <inline-formula> <tex-math notation="LaTeX">$2imes 2$ </tex-math></inline-formula> Wire Array Plasmas. IEEE Transactions on Plasma Science, 2015, 43, 2527-2531. | 0.6 | 3 |
| 140 | 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. | 0.6 | 3 |
| 141 | Gated liquid scintillator detector for neutron time of flight measurements in a gas-puff Z-pinch experiment. Review of Scientific Instruments, 2019, 90, 073505. | 0.6 | 3 |
| 142 | Effect of target material on relativistic electron beam transport. Physics of Plasmas, 2019, 26, 033111. | 0.7 | 3 |
| 143 | Magnetohydrodynamic simulations of a megaampere-class Kr-doped deuterium dense plasma focus. Physics of Plasmas, 2021, 28, 022707. | 0.7 | 3 |
| 144 | Azimuthal magnetic field distribution in gas-puff <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Z</mml:mi></mml:mrow></mml:math> -pinch implosions with and without external magnetic stabilization. Physical Review E, 2021, 103, 053205. | 0.8 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Talbot-Lau x-ray deflectometer: Refraction-based HEDP imaging diagnostic. Review of Scientific Instruments, 2021, 92, 065110. | 0.6 | 3 |
| 146 | Effect of insulator surface conditioning on the pinch dynamics and x-ray production of a Ne-filled dense plasma focus. Journal of Applied Physics, 2021, 129, . | 1.1 | 3 |
| 147 | Advanced Laser Particle Accelerator Development at LANL: From Fast Ignition to Radiation Oncology. , 2010, , . | | 2 |
| 148 | Investigation of magnetic flux transport and shock formation in a staged Z-pinch. Physics of Plasmas, 2017, 24, . | 0.7 | 2 |
| 149 | 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>â^’</mml:mo><mml:mn>2</mml:mn></mml:r mathvariant. Physical Review E, 2021, 103, 033203. | 0.8 | 2 |
| 150 | Pump-depletion dynamics and saturation of stimulated Brillouin scattering in shock ignition relevant experiments. Physical Review E, 2021, 103, 063208. | 0.8 | 2 |
| 151 | Stability Measurements of a Staged Z-Pinch with Applied Axial Magnetic Field. , 2018, , . | | 2 |
| 152 | Dynamic focusing of laser driven positron jets by self-generated fields. New Journal of Physics, 2020, 22, 123020. | 1.2 | 2 |
| 153 | Fast electron transport dynamics and energy deposition in magnetized, imploded cylindrical plasma. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200052. | 1.6 | 2 |
| 154 | Material effects on dynamics in triple-nozzle gas-puff <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Z</mml:mi></mml:math> pinches. Physical Review E, 2022, 105, 045205. | 0.8 | 2 |
| 155 | Time Resolved X-ray Plasma Emission in low Current X-Pinches. , 2007, , . | | 1 |
| 156 | Temporally resolved characterization of shock-heated foam target with Al absorption spectroscopy for fast electron transport study. Physics of Plasmas, 2012, 19, 092705. | 0.7 | 1 |
| 157 | Effect of defocusing on picosecond laser-coupling into gold cones. Physics of Plasmas, 2014, 21, 012702. | 0.7 | 1 |
| 158 | Pulsed power produced counter-propagating plasma flows and the study of shock wave formation for laboratory astrophysical phenomena. , 2014, , . | | 1 |
| 159 | Transport of kJ-laser-driven relativistic electron beams in cold and shock-heated vitreous carbon and diamond. New Journal of Physics, 2020, 22, 033031. | 1.2 | 1 |
| 160 | The effects of laser pulse length and collisional ionization on the acceleration of titanium ions. Plasma Physics and Controlled Fusion, 2021, 63, 065011. | 0.9 | 1 |
| 161 | Wire, hybrid, and laser-cut X-pinches as Talbotâ€“Lau backlighters for electron density diagnostics. Plasma Physics and Controlled Fusion, 2022, 64, 035011. | 0.9 | 1 |
| 162 | Transport of an intense proton beam from a cone-structured target through plastic foam with unique proton source modeling. Physical Review E, 2022, 105, . | 0.8 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Direct Laser Ablation Of Silicon as A Function Of Pulse Length at 10<sup>15</sup> W/Cm<sup>2</sup> Intensities. , 2022, , . | | 1 |
| 164 | High intensity laser generation of proton beams for the production of Î²[sup +] sources used in positron emission tomography. AIP Conference Proceedings, 2001, , . | 0.3 | 0 |
| 165 | Nuclear diagnostics of high intensity laser plasma interactions. AIP Conference Proceedings, 2002, , . | 0.3 | 0 |
| 166 | Investigation of X-ray emission as a function of wire number and material using a compact 80 kA current generator. , 2006, , . | | 0 |
| 167 | Study of the laser plasma interaction and energetic electron beam production using the LSP code. , 2006, , . | | 0 |
| 168 | Study of Jet Formation in Wire X-pinches. AIP Conference Proceedings, 2006, , . | 0.3 | 0 |
| 169 | Time resolved x-ray plasma emission in low current x-pinches. , 2007, , . | | 0 |
| 170 | Effect of Current Rise-time on the Formation of Precursor Structures and Mass Ablation Rate in Cylindrical Wire Array Z-Pinches. , 2009, , . | | 0 |
| 171 | Suprathermal electron generation in fast ignition relevant short-pulse laser plasma interactions. , 2010, , . | | 0 |
| 172 | Particle transport and electric fields in a laser-generated focused proton beam. , 2012, , . | | 0 |
| 173 | Study of instability formation in liners driven with a compact linear transformer driver. , 2013, , . | | 0 |
| 174 | Target effects on focusing and acceleration of laser-driven ion beams. , 2013, , . | | 0 |
| 175 | Generation of heavy ion beams using short pulse lasers. , 2013, , . | | 0 |
| 176 | Examination of X-pinch dynamics using a low current (25kA) and slower rising (400ns) pulse. , 2013, , . | | 0 |
| 177 | Summary report of working group 6: Laser-plasma acceleration of ions. AIP Conference Proceedings, 2017, , . | 0.3 | 0 |
| 178 | Reduced fast electron transport in shock-heated plasma in multilayer targets due to self-generated magnetic fields. Physical Review E, 2018, 98, . | 0.8 | 0 |
| 179 | The Good, the Bad and the Ugly: The story of fast ignition and a path forward. , 2021, , . | | 0 |
| 180 | Liner on Target Gas Puff Z-Pinches with Different Gas Species on the CESZAR Linear Transformer Driver*. , 2021, , . | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Gas Puff Z-Pinch Experiments with NE, AR and KR on the Ceszar Linear Transformer Driver. , 2020, , . | | 0 |
| 182 | Simultaneous Measurements of Gas-Puff Z-Pinch Parameters Using Visible Spectroscopy. , 2020, , . | | 0 |
| 183 | Effect of Insulator and Anode Geometries on Neutron Yield in A 4.6 Kj Dense Plasma Focus. , 2022, , . | | 0 |
| 184 | Neutron-Producing Gas Puff Z-Pinches on the Ceszar Linear Transformer Driver. , 2022, , . | | 0 |
| 185 | Characterizing the Effect of Magnetization at >10 KT in Cylindrically Imploded Hot Dense Plasmas Using Dopant Spectroscopy Techniques and Benchmarked Simulations. , 2022, , . | | 0 |
| 186 | Investigation of Nanosecond Laser Ablation From Metal Targets. , 2022, , . | | 0 |
| 187 | A Pulse Length and Intensity Study of Proton Generation from Microtube Foil Targets. , 2022, , . | | 0 |
| 188 | Investigation of Resistive Magnetic Field Generation by Intense Proton Beams in Dense Plasmas. , 2022, , . | | 0 |