# Karel Å˜ezÃ¡Ä•

List of Publications by Year
in descending order

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Version: 2024-02-01

| 63 | 829 | 430874 | 552781 |
|---|---|---|---|
| papers | citations | 18 | 26 |
| | | h-index | g-index |

| 63 | 63 | 63 | 370 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Temporal behavior of hard x-ray and neutron production in plasma focus discharges. Physics of Plasmas, 2022, 29, . | 1.9 | 4 |
| 2 | Optimizing of Experimental Load of PFZ-200 Plasma Focus. IEEE Transactions on Plasma Science, 2021, 49, 450-454. | 1.3 | 3 |
| 3 | Mapping of azimuthal B-fields in Z-pinch plasmas using Z-pinch-driven ion deflectometry. Physics of Plasmas, 2021, 28, . | 1.9 | 4 |
| 4 | K-shell radiation and neutron emission from z-pinch plasmas generated by hybrid gas-puff implosions onto on-axis wires. Physics of Plasmas, 2021, 28, 062708. | 1.9 | 3 |
| 5 | Characteristics of fast deuteron sources generated in a dense plasma focus. European Physical Journal Plus, 2021, 136, 1. | 2.6 | 5 |
| 6 | Features of Neutron Emission in Experiments with Deuterium Hybrid Gas-Puff. , 2021, , . | | 0 |
| 7 | Scenario of a magnetic dynamo and magnetic reconnection in a plasma focus discharge. Matter and Radiation at Extremes, 2020, 5, 046401. | 3.9 | 5 |
| 8 | Characteristics of closed currents and magnetic fields outside the dense pinch column in a plasma focus discharge. Physics of Plasmas, 2020, 27, . | 1.9 | 6 |
| 9 | Ion acceleration and neutron production in hybrid gas-puff z-pinches on the GIT-12 and HAWK generators. Matter and Radiation at Extremes, 2020, 5, . | 3.9 | 18 |
| 10 | Neutron fluence distribution in experiments with 3 MA deuterium gas-puff z-pinch. Physics of Plasmas, 2020, 27, 072705. | 1.9 | 3 |
| 11 | Spatial distribution of ion emission in gas-puff z-pinches and dense plasma foci. Plasma Physics and Controlled Fusion, 2020, 62, 035009. | 2.1 | 6 |
| 12 | Production of energetic protons, deuterons, and neutrons up to 60 MeV via disruption of a current-carrying plasma column at 3 MA. New Journal of Physics, 2020, 22, 103036. | 2.9 | 3 |
| 13 | Laser-Target Experiments at PALS for Deuterium Plasma Beam Fusion. Acta Physica Polonica A, 2020, 138, 579-585. | 0.5 | 2 |
| 14 | Features of fast deuterons emitted from plasma focus discharges. Physics of Plasmas, 2019, 26, 032702. | 1.9 | 14 |
| 15 | Initial conditions in the hawk dense plasma focus. , 2019, , . | | 0 |
| 16 | Evolution of a Pinch Column During the Acceleration of Fast Electrons and Deuterons in a Plasma-Focus Discharge. IEEE Transactions on Plasma Science, 2019, 47, 339-345. | 1.3 | 15 |
| 17 | Acceleration of protons and deuterons up to 35 MeV and generation of 10<sup>13</sup> neutrons in a megaampere deuterium gas-puff z-pinch. Plasma Physics and Controlled Fusion, 2019, 61, 014018. | 2.1 | 12 |
| 18 | Evolution of the Pinched Column During Hard X-ray and Neutron Emission in a Dense Plasma Focus. Journal of Fusion Energy, 2019, 38, 490-498. | 1.2 | 7 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 19 | Characterization of fast deuterons involved in the production of fusion neutrons in a dense plasma focus. Physics of Plasmas, 2018, 25, . | 1.9 | 9 |
| 20 | Production of relativistic electrons, MeV deuterons and protons by sub-nanosecond terawatt laser. Physics of Plasmas, 2018, 25, . | 1.9 | 12 |
| 21 | Investigation of Magnetic Fields in Z-Pinches via Multi-MeV Proton Deflectometry. IEEE Transactions on Plasma Science, 2018, 46, 3891-3900. | 1.3 | 8 |
| 22 | Ion acceleration mechanism in mega-ampere gas-puff z-pinches. New Journal of Physics, 2018, 20, 053064. | 2.9 | 31 |
| 23 | Initial Results from a Dense Plasma Focus Driven by a High-Inductance Generator. , 2018, , . | | 0 |
| 24 | Measurements of Early-Time Plasma Evolution in the Hawk Dense Plasma Focus. , 2018, , . | | 0 |
| 25 | Target current: a useful parameter for characterizing laser ablation. Laser and Particle Beams, 2017, 35, 170-176. | 1.0 | 6 |
| 26 | Filamentation in the pinched column of the dense plasma focus. Physics of Plasmas, 2017, 24, 032706. | 1.9 | 17 |
| 27 | Increase in the neutron yield from a dense plasma-focus experiment performed with a conical tip placed in the centre of the anode end. Physics of Plasmas, 2017, 24, . | 1.9 | 15 |
| 28 | Transformation of the ordered internal structures during the acceleration of fast charged particles in a dense plasma focus. Physics of Plasmas, 2017, 24, 072706. | 1.9 | 7 |
| 29 | Neutron Spectrum Measured by Activation Diagnostics in Deuterium Gas-Puff Experiments on the 3 MA GIT-12 Z-Pinch. IEEE Transactions on Plasma Science, 2017, 45, 3209-3217. | 1.3 | 6 |
| 30 | Deuterium z-pinch as a powerful source of multi-MeV ions and neutrons for advanced applications. Physics of Plasmas, 2016, 23, . | 1.9 | 15 |
| 31 | The influence of the nitrogen admixture on the evolution of a deuterium pinch column. Physics of Plasmas, 2016, 23, 082704. | 1.9 | 12 |
| 32 | MCNP calculations of neutron emission anisotropy caused by the GIT-12 hardware. Nukleonika, 2015, 60, 323-326. | 0.8 | 2 |
| 33 | Existence of a return direction for plasma escaping from a pinched column in a plasma focus discharge. Physics of Plasmas, 2015, 22, 052706. | 1.9 | 16 |
| 34 | Efficient generation of fast neutrons by magnetized deuterons in an optimized deuterium gas-puff z-pinch. Plasma Physics and Controlled Fusion, 2015, 57, 044005. | 2.1 | 25 |
| 35 | Temporal distribution of linear densities of the plasma column in a plasma focus discharge. Nukleonika, 2015, 60, 315-318. | 0.8 | 1 |
| 36 | Influence of an external magnetic field on the dynamics of a modified plasma focus. Physica Scripta, 2014, T161, 014042. | 2.5 | 1 |

| # | ARTICLE | IF | CITATIONS |
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| 37 | Filamentary structure of plasma produced by compression of puffing deuterium by deuterium or neon plasma sheath on plasma-focus discharge. Physics of Plasmas, 2014, 21, 122706. | 1.9 | 27 |
| 38 | Measurement of the target current by inductive probe during laser interaction on terawatt laser system PALS. Review of Scientific Instruments, 2014, 85, 103507. | 1.3 | 41 |
| 39 | Efficient Neutron Production from a Novel Configuration of Deuterium Gas-Puff<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Z</mml:mi></mml:math>-Pinch. Physical Review Letters, 2014, 112, 095001. | 7.8 | 31 |
| 40 | Search for Drive Parameter of Neutron-Optimized Z-Pinches and Dense Plasma Foci. IEEE Transactions on Plasma Science, 2013, 41, 3129-3134. | 1.3 | 7 |
| 41 | Scenario of pinch evolution in a plasma focus discharge. Plasma Physics and Controlled Fusion, 2013, 55, 035011. | 2.1 | 34 |
| 42 | Characterization of neutron emission from mega-ampere deuterium gas puff Z-pinch at microsecond implosion times. Plasma Physics and Controlled Fusion, 2013, 55, 085012. | 2.1 | 20 |
| 43 | Improvement of time-of-flight methods for reconstruction of neutron energy spectra from D(d,n)<sup>3</sup>He fusion reactions. Plasma Physics and Controlled Fusion, 2012, 54, 105011. | 2.1 | 42 |
| 44 | Search for thermonuclear neutrons in a mega-ampere plasma focus. Plasma Physics and Controlled Fusion, 2012, 54, 015001. | 2.1 | 22 |
| 45 | Response to â€œComment on â€˜Experimental evidence of thermonuclear neutrons in a modified plasma focusâ€™â€•[Appl. Phys. Lett. 100, 016101 (2012)]. Applied Physics Letters, 2012, 100, 016102. | 3.3 | 4 |
| 46 | Energy Transformations in Column of Plasma-Focus Discharges With Megaampere Currents. IEEE Transactions on Plasma Science, 2012, 40, 481-486. | 1.3 | 8 |
| 47 | Deuterium gas puff Z-pinch at currents of 2 to 3 mega-ampere. Physics of Plasmas, 2012, 19, 032706. | 1.9 | 23 |
| 48 | Neutron Production From a Small Modified Plasma Focus Device. IEEE Transactions on Plasma Science, 2012, 40, 3298-3302. | 1.3 | 2 |
| 49 | Characterization of the Neutron Production in the Modified MA Plasma Focus. IEEE Transactions on Plasma Science, 2012, 40, 1075-1081. | 1.3 | 9 |
| 50 | Spontaneous Transformation in the Pinched Column of the Plasma Focus. IEEE Transactions on Plasma Science, 2011, 39, 562-568. | 1.3 | 27 |
| 51 | Fusion neutron detector for time-of-flight measurements in z-pinch and plasma focus experiments. Review of Scientific Instruments, 2011, 82, 033505. | 1.3 | 29 |
| 52 | Experimental evidence of thermonuclear neutrons in a modified plasma focus. Applied Physics Letters, 2011, 98, . | 3.3 | 25 |
| 53 | Interaction of Cu and plastic plasmas as a method of forming laser produced Cu plasma streams with a narrow jet or pipe geometry. Physics of Plasmas, 2011, 18, 044503. | 1.9 | 7 |
| 54 | Efficient production of 100â€‰keV deuterons in deuterium gas puff Z-pinches at 2â€‰MA current. Plasma Physics and Controlled Fusion, 2010, 52, 065013. | 2.1 | 23 |

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|---|---|---|---|
| 55 | Transformation of the Pinched Column at a Period of the Neutron Production. IEEE Transactions on Plasma Science, 2010, 38, 672-679. | 1.3 | 27 |
| 56 | Reconstruction of Time-Resolved Neutron Energy Spectra in Z-Pinch Experiments Using Time-of-flight Method. , 2009, , . | | 0 |
| 57 | Determination of Deuteron Energy Distribution From Neutron Diagnostics in a Plasma-Focus Device. IEEE Transactions on Plasma Science, 2009, 37, 83-87. | 1.3 | 24 |
| 58 | Neutron Energy Distribution Function Reconstructed From Time-of-Flight Signals in Deuterium Gas-Puff $Z$-Pinch. IEEE Transactions on Plasma Science, 2009, 37, 425-432. | 1.3 | 60 |
| 59 | Neutron Production at the Small Plasma-Focus Device With Antianode. IEEE Transactions on Plasma Science, 2009, 37, 1786-1791. | 1.3 | 6 |
| 60 | Deuteron Acceleration and Fusion Neutron Production in Z-pinch plasmas. , 2009, , . | | 0 |
| 61 | Neutron emission generated during wire array Z-pinch implosion onto deuterated fiber. Physics of Plasmas, 2008, 15, 032701. | 1.9 | 23 |
| 62 | Time delay of the hard X-ray and neutron emission at PF 1000 facility. European Physical Journal D, 2006, 56, B273-B279. | 0.4 | 4 |
| 63 | Monte Carlo simulations for reconstruction of neutron time-resolving energy distribution in D-D fusion reactions. European Physical Journal D, 2006, 56, B357-B363. | 0.4 | 11 |