

Igor Timofeev

List of Publications by Year in descending order

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times ranked

260
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1 | Electron beam-plasma discharge in GDT mirror trap: particle-in-cell simulations. Nuclear Fusion, 2022, 62, 066033. | 3.5 | 6 |
| 2 | Electron beam-plasma discharge in GDT mirror trap: experiments on plasma start-up with electron gun. Nuclear Fusion, 2022, 62, 066034. | 3.5 | 6 |
| 3 | Energy Content and Spectral Composition of a Submillimeter Radiation Flux Generated by a High-Current Electron Beam in a Plasma Column With Density Gradients. IEEE Transactions on Plasma Science, 2022, 50, 2348-2363. | 1.3 | 4 |
| 4 | Generation of a Directed Flux of Megawatt THz Radiation as a Result of Strong REB-Plasma Interaction in a Plasma Column. IEEE Transactions on Plasma Science, 2021, 49, 3371-3376. | 1.3 | 3 |
| 5 | Electromagnetic emission due to nonlinear interaction of laser wakefields colliding in plasma at an oblique angle. Plasma Physics and Controlled Fusion, 2021, 63, 045001. | 2.1 | 4 |
| 6 | Particle-in-Cell Simulations of High-Power THz Generator Based on the Collision of Strongly Focused Relativistic Electron Beams in Plasma. Photonics, 2021, 8, 172. | 2.0 | 4 |
| 7 | Optimal synchronization of laser pulses in THz generation scheme with colliding plasma wakes. Physics of Plasmas, 2021, 28, 013103. | 1.9 | 6 |
| 8 | Beam-Plasma Interaction System Providing Ten Megawatt Power of THz Radiation Flux in Microsecond Pulse. , 2021, , . | | 1 |
| 9 | PIC simulations of high-power THz radiation produced by the collision of profiled plasma wakefields. Journal of Physics: Conference Series, 2021, 2028, 012008. | 0.4 | 2 |
| 10 | Coherent THz Emission Produced in Plasma by Transversely Modulated Colliding Laser Beams. , 2021, , . | | 0 |
| 11 | Simulations of electromagnetic emission from colliding laser wakefields. Plasma Physics and Controlled Fusion, 2020, 62, 045017. | 2.1 | 7 |
| 12 | Well-directed flux of megawatt sub-mm radiation generated by a relativistic electron beam in a magnetized plasma with strong density gradients. Plasma Physics and Controlled Fusion, 2020, 62, 045002. | 2.1 | 25 |
| 13 | Electromagnetic Emission Produced by Three-wave Interactions in a Plasma with Continuously Injected Counterstreaming Electron Beams. Astrophysical Journal, 2020, 904, 88. | 4.5 | 8 |
| 14 | Coherent terahertz emission from a plasma layer due to linear conversion of laser wakefields on pre-modulated ion density. Plasma Physics and Controlled Fusion, 2019, 61, 125006. | 2.1 | 9 |
| 15 | Highly efficient electromagnetic emission during 100 keV electron beam relaxation in a thin magnetized plasma. Physics of Plasmas, 2019, 26, . | 1.9 | 13 |
| 16 | Second harmonic electromagnetic emission in a beam-driven plasma antenna. Plasma Physics and Controlled Fusion, 2019, 61, 055005. | 2.1 | 12 |
| 17 | Mechanisms of submillimeter wave generation by kiloampere REB in a plasma column with strong density gradients. , 2019, , . | | 1 |
| 18 | Comparison of open boundary conditions realizations for continuous injection of an electron beam into a plasma in the case of the PIC and parabolic form-factors. Journal of Physics: Conference Series, 2018, 1103, 012022. | 0.4 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Theory for High-Field Narrowband THz Generation via Colliding at an Oblique Angle Plasma Wakefields. , 2018, , . | | 0 |
| 20 | Narrowband Thz generation by colliding plasma waves with different transverse sizes. , 2018, , . | | 0 |
| 21 | High-power terahertz emission from a plasma penetrated by counterstreaming different-size electron beams. Physics of Plasmas, 2018, 25, . | 1.9 | 19 |
| 22 | Characterization of wavebreaking time and dissipation of weakly nonlinear wakefields due to ion motion. Physics of Plasmas, 2018, 25, 103103. | 1.9 | 10 |
| 23 | Comment on the paper "Radially polarized terahertz radiation in laser-induced linear plasma wake", Optik, 2017, 130, 1347-1348. | 2.9 | 0 |
| 24 | Generation of high-field narrowband terahertz radiation by counterpropagating plasma wakefields. Physics of Plasmas, 2017, 24, . | 1.9 | 26 |
| 25 | Simulations of a beam-driven plasma antenna in the regime of plasma transparency. Physics of Plasmas, 2017, 24, . | 1.9 | 16 |
| 26 | Impact of the dipole contribution on the terahertz emission of air-based plasma induced by tightly focused femtosecond laser pulses. Physical Review E, 2017, 95, 043209. | 2.1 | 32 |
| 27 | Study of 0.3-0.8 THz flux generated by magnetized plasma column due to relaxation of high-current REB. EPJ Web of Conferences, 2017, 149, 05006. | 0.3 | 0 |
| 28 | Beam-plasma system as a source of powerful submillimeter and terahertz radiation (experimental and theoretical). Journal of Plasma Physics, 2017, 97, 175001. | 0.4 | 2 |
| 29 | Mechanisms of enhanced electromagnetic emission in laboratory beam-plasma systems. AIP Conference Proceedings, 2016, , . | 0.4 | 0 |
| 30 | Particle-in-cell simulations of 100 keV electron beam interaction with a thin magnetized plasma. AIP Conference Proceedings, 2016, , . | 0.4 | 4 |
| 31 | Theory of a beam-driven plasma antenna. Physics of Plasmas, 2016, 23, . | 1.9 | 19 |
| 32 | Theory of electromagnetic wave generation via a beam-plasma antenna. AIP Conference Proceedings, 2016, , . | 0.4 | 0 |
| 33 | Simulations of electromagnetic emissions produced in a thin plasma by a continuously injected electron beam. Physics of Plasmas, 2016, 23, . | 1.9 | 27 |
| 34 | Dynamics and Spectral Composition of Subterahertz Emission From Plasma Column Due to Two-Stream Instability of Strong Relativistic Electron Beam. IEEE Transactions on Terahertz Science and Technology, 2016, 6, 245-252. | 3.1 | 36 |
| 35 | Generation of high-power electromagnetic radiation by a beam-driven plasma antenna. Plasma Physics and Controlled Fusion, 2016, 58, 045009. | 2.1 | 27 |
| 36 | Intense Beam-Plasma Interaction As A Source Of Sub-Millimeter Radiation. Vestnik Novosibirskogo Gosudarstvennogo Universiteta Seriya Fizika, 2016, 11, 78-104. | 0.1 | 1 |

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|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Regimes of enhanced electromagnetic emission in beam-plasma interactions. <i>Physics of Plasmas</i> , 2015, 22, . | 1.9 | 38 |
| 38 | GOL-PET experiments on THz-emission from dense plasma at relativistic electron beam relaxation. , 2015, , . | | 0 |
| 39 | Linear conversion of upper-hybrid to electromagnetic waves as a mechanism of sub-THz emission in laboratory REB-plasma experiments. , 2015, , . | | 0 |
| 40 | High-power terahertz emission at plasma and double plasma frequencies during REB-plasma interaction. , 2015, , . | | 0 |
| 41 | Note on quantitatively correct simulations of the kinetic beam-plasma instability. <i>Physics of Plasmas</i> , 2015, 22, . | 1.9 | 12 |
| 42 | Current treatment approach to non-clear cell renal carcinoma. <i>Onkourologiya</i> , 2015, 11, 24. | 0.3 | 0 |
| 43 | Efficient regime of electromagnetic emission in a plasma with counterstreaming electron beams. <i>Physics of Plasmas</i> , 2014, 21, . | 1.9 | 10 |
| 44 | Generation of High-Power Sub-THz Waves in Magnetized Turbulent Electron Beam Plasmas. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2014, 35, 81-90. | 2.2 | 30 |
| 45 | Exact kinetic theory for the instability of an electron beam in a hot magnetized plasma. <i>Physics of Plasmas</i> , 2013, 20, . | 1.9 | 14 |
| 46 | Modulational instability of a Langmuir wave in plasmas with energetic tails of superthermal electrons. <i>Physics of Plasmas</i> , 2013, 20, 012115. | 1.9 | 3 |
| 47 | Development of Extended Heating Pulse Operation Mode at GOL-3. <i>Fusion Science and Technology</i> , 2013, 63, 29-34. | 1.1 | 21 |
| 48 | Experimental and Theoretical Investigations of High Power Sub-Millimeter Wave Emission at Two-Stream Instability of High-Current REB. <i>Fusion Science and Technology</i> , 2013, 63, 82-87. | 1.1 | 10 |
| 49 | Generation of powerful terahertz emission in a beam-driven strong plasma turbulence. <i>Plasma Physics and Controlled Fusion</i> , 2012, 54, 105004. | 2.1 | 35 |
| 50 | Generation of terahertz electromagnetic radiation in a beam-driven turbulent plasma. , 2012, , . | | 0 |
| 51 | Two-dimensional simulations of nonlinear beam-plasma interaction in isotropic and magnetized plasmas. <i>Physics of Plasmas</i> , 2012, 19, . | 1.9 | 11 |
| 52 | Second harmonic electromagnetic emission of a turbulent magnetized plasma driven by a powerful electron beam. <i>Physics of Plasmas</i> , 2012, 19, . | 1.9 | 19 |
| 53 | Simulations of Turbulent Plasma Heating by Powerful Electron Beams. <i>Fusion Science and Technology</i> , 2011, 59, 70-73. | 1.1 | 4 |
| 54 | Concept of Fusion Reactor Based on Multiple-Mirror Trap. <i>Fusion Science and Technology</i> , 2011, 59, 9-16. | 1.1 | 35 |

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|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Simulations of turbulent plasma heating by powerful electron beams. <i>Physics of Plasmas</i> , 2010, 17, 083111. | 1.9 | 15 |
| 56 | Two-Dimensional Numerical Model for Studies of Collective Beam-Plasma Interaction. <i>Vestnik Novosibirskogo Gosudarstvennogo Universiteta Seriya Fizika</i> , 2010, 5, 85-97. | 0.1 | 0 |
| 57 | Direct computation of the growth rate for the instability of a warm relativistic electron beam in a cold magnetized plasma. <i>Physics of Plasmas</i> , 2009, 16, . | 1.9 | 16 |
| 58 | Saturation of two-stream instability of an electron beam in plasma. <i>Plasma Physics Reports</i> , 2009, 35, 518-525. | 0.9 | 13 |
| 59 | Transient regime of one-dimensional two-stream instability. <i>Vestnik Novosibirskogo Gosudarstvennogo Universiteta Seriya Fizika</i> , 2008, 3, 62-65. | 0.1 | 0 |
| 60 | Relaxation of a relativistic electron beam in plasma in the trapping regime. <i>Physics of Plasmas</i> , 2006, 13, 062312. | 1.9 | 20 |
| 61 | Ion dynamics in plasma compensation scheme. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2002, 485, 228-233. | 1.6 | 0 |