

# Anatoliy Kudryavtsev

## List of Publications by Year in descending order

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959  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Probe measurements of electron energy distribution function at intermediate and high pressures and in a magnetic field. <i>Plasma Sources Science and Technology</i> , 1994, 3, 528-538.                                | 3.1 | 92        |
| 2  | On the hollow-cathode effect: conventional and modified geometry. <i>Plasma Sources Science and Technology</i> , 1998, 7, 310-322.  | 3.1 | 89        |
| 3  | Anomalous High Near-Wall Sheath Potential Drop in a Plasma with Nonlocal Fast Electrons. <i>Physical Review Letters</i> , 2005, 95, 215002.   | 7.8 | 66        |
| 4  | On the accuracy and reliability of different fluid models of the direct current glow discharge. <i>Physics of Plasmas</i> , 2012, 19, .   | 1.9 | 63        |
| 5  | Role of nonlocal ionization in formation of the short glow discharge. <i>Technical Physics</i> , 2008, 53, 1029.  | 0.7 | 58        |
| 6  | Simulation of pulsed dielectric barrier discharge xenon excimer lamp. <i>Journal Physics D: Applied Physics</i> , 2004, 37, 2987-2995.  | 2.8 | 56        |
| 7  | Account of nonlocal ionization by fast electrons in the fluid models of a direct current glow discharge. <i>Physics of Plasmas</i> , 2012, 19, .  | 1.9 | 45        |
| 8  | Energy balance of the bulk, Maxwellian electrons in spatially inhomogeneous negative-glow plasmas. <i>Physical Review E</i> , 1998, 58, 6539-6552.  | 2.1 | 39        |
| 9  | Modeling of nonlocal electron kinetics in a low-pressure afterglow plasma. <i>Physical Review E</i> , 1998, 58, 7785-7798.  | 2.1 | 33        |
| 10 | Electron-distribution-function cutoff mechanism in a low-pressure afterglow plasma. <i>Physical Review E</i> , 2001, 64, 016401.  | 2.1 | 32        |
| 11 | Self-consistent fluid modeling and simulation on a pulsed microwave atmospheric-pressure argon plasma jet. <i>Journal of Applied Physics</i> , 2014, 116, .   | 2.5 | 32        |
| 12 | Transition From Glow Microdischarge to Arc Discharge With Thermionic Cathode in Argon at Atmospheric Pressure. <i>IEEE Transactions on Plasma Science</i> , 2016, 44, 2536-2544.  | 1.3 | 31        |
| 13 | Bullet-shaped ionization front of plasma jet plumes driven by microwave pulses at atmospheric gas pressure. <i>Journal of Applied Physics</i> , 2017, 122, .  | 2.5 | 31        |
| 14 | The conditions for realization of the Boltzmann distribution of negative ions in a plasma. <i>Technical Physics Letters</i> , 2001, 27, 905-907.  | 0.7 | 30        |
| 15 | 1D kinetic simulations of a short glow discharge in helium. <i>Physics of Plasmas</i> , 2017, 24, .   | 1.9 | 29        |
| 16 | Self-consistent model of high current density segmented hollow cathode discharges. <i>Journal of Applied Physics</i> , 1997, 81, 554-568.   | 2.5 | 28        |
| 17 | Substantiation of the two-temperature kinetic model by comparing calculations within the kinetic and fluid models of the positive column plasma of a dc oxygen discharge. <i>Technical Physics</i> , 2003, 48, 983-994. | 0.7 | 28        |
| 18 | Paradoxical Nonmonotonic Behavior of Excitation-Rate Spatial Profiles in Bounded Plasmas. <i>Physical Review Letters</i> , 2005, 94, 015001.  | 7.8 | 26        |

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|----|--|-----|-----------|
| 19 | Nonlocal effects in a bounded low-temperature plasma with fast electrons. <i>Physics of Plasmas</i> , 2007, 14, 057101.  | 1.9 | 24        |
| 20 | Two-dimensional hybrid Monte Carlo fluid modelling of dc glow discharges: Comparison with fluid models, reliability, and accuracy. <i>Physics of Plasmas</i> , 2015, 22, .   | 1.9 | 24        |
| 21 | Modeling of nonlocal slow-electron kinetics in a low-pressure negative-glow plasma. <i>Physics of Plasmas</i> , 1999, 6, 1003-1016.  | 1.9 | 23        |
| 22 | Townsend discharge instability on the right-hand branch of the Paschen curve. <i>Technical Physics Letters</i> , 2002, 28, 1036-1039.  | 0.7 | 23        |
| 23 | Fundamental Nonambipolarity of Electron Fluxes in 2D Plasmas. <i>Physical Review Letters</i> , 2011, 106, 195001.  | 7.8 | 23        |
| 24 | Registration of gas impurities in nonlocal plasma of helium microdischarge by an additional electrode $\alpha^P$ sensor. <i>Journal of Instrumentation</i> , 2012, 7, P07002-P07002.                                       | 1.2 | 23        |
| 25 | Study on hairpin-shaped argon plasma jets resonantly excited by microwave pulses at atmospheric pressure. <i>Journal of Applied Physics</i> , 2015, 118, .   | 2.5 | 23        |
| 26 | Donut shape plasma jet plumes generated by microwave pulses even without air mole fractions. <i>Journal of Applied Physics</i> , 2017, 121, .  | 2.5 | 23        |
| 27 | Measurement of plasma parameters in He microdischarge by means of additional sensor electrode. <i>Physics of Plasmas</i> , 2017, 24, 054507.   | 1.9 | 23        |
| 28 | Determining the spectrum of penning electrons by current to a wall probe in nonlocal negative glow plasma. <i>Physics of Plasmas</i> , 2018, 25, 104501.   | 1.9 | 23        |
| 29 | Mechanisms for formation of the electron distribution function in the positive column of discharges under Langmuir-paradox conditions. <i>Technical Physics</i> , 1999, 44, 1290-1297.                                     | 0.7 | 22        |
| 30 | Nonlocal phenomena in the positive column of a medium-pressure glow discharge. <i>Technical Physics</i> , 2004, 49, 849-857.   | 0.7 | 22        |
| 31 | Nonlocal effects in a bounded afterglow plasma with fast electrons. <i>IEEE Transactions on Plasma Science</i> , 2006, 34, 825-833.  | 1.3 | 22        |
| 32 | Influence of the transverse dimension on the structure and properties of dc glow discharges. <i>Physics of Plasmas</i> , 2010, 17, 103502.   | 1.9 | 22        |
| 33 | Is the negative glow plasma of a direct current glow discharge negatively charged?. <i>Physics of Plasmas</i> , 2015, 22, .  | 1.9 | 22        |
| 34 | Use of dc Ar microdischarge with nonlocal plasma for identification of metal samples. <i>Journal of Applied Physics</i> , 2015, 117, 133303.   | 2.5 | 22        |
| 35 | The influence of metastable atoms and the effect of the nonlocal character of the electron distribution on the characteristics of the positive column in an argon discharge. <i>Technical Physics</i> , 2004, 49, 698-706. | 0.7 | 21        |
| 36 | Cage discharge: theory and experiment. <i>IEEE Transactions on Plasma Science</i> , 1996, 24, 1079-1094.   | 1.3 | 20        |

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|----|---|-----|-----------|
| 37 | Different approaches to fluid simulation of the longitudinal structure of the atmospheric-pressure microdischarge in helium. <i>Technical Physics</i> , 2010, 55, 1430-1442.            | 0.7 | 20        |
| 38 | Recycling of silicon: from industrial waste to biocompatible nanoparticles for nanomedicine. <i>Materials Research Express</i> , 2017, 4, 095026.                                       | 1.6 | 20        |
| 39 | 2D Simulations of Short-Pulsed Dielectric Barrier Discharge Xenon Excimer Lamp. <i>Contributions To Plasma Physics</i> , 2006, 46, 807-816.   | 1.1 | 19        |
| 40 | Metastable atom and electron density diagnostic in the initial stage of a pulsed discharge in Ar and other rare gases by emission spectroscopy. <i>Physics of Plasmas</i> , 2012, 19, . | 1.9 | 19        |
| 41 | Longer Microwave Plasma Jet With Different Discharge Performances Originated by Plasma-Surface Interactions. <i>IEEE Transactions on Plasma Science</i> , 2014, 42, 2768-2769.          | 1.3 | 19        |
| 42 | Numerical and Experimental Diagnostics of Dusty Plasma in a Coaxial Gridded Hollow Cathode Discharge. <i>IEEE Transactions on Plasma Science</i> , 2016, 44, 2973-2978.                 | 1.3 | 19        |
| 43 | On the electron and vibrational temperatures in a nitrogen afterglow plasma. <i>Physica Scripta</i> , 1996, 53, 597-602.  | 2.5 | 18        |
| 44 | 2-D Modeling of Orificed Hollow Cathodes of Stationary Plasma Thrusters SPT-100. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 4024-4033.                                      | 1.3 | 18        |
| 45 | Scaling laws for oxygen discharge plasmas. <i>Technical Physics</i> , 2002, 47, 946-954.  | 0.7 | 16        |
| 46 | Scaling laws for the spatial distributions of the plasma parameters in the positive column of a dc oxygen discharge. <i>Technical Physics</i> , 2003, 48, 1151-1158.                    | 0.7 | 16        |
| 47 | Probe diagnostics of electron distributions in plasma with spatial and angular resolution. <i>Physics of Plasmas</i> , 2014, 21, 093506.  | 1.9 | 16        |
| 48 | Slow electron energy balance for hybrid models of direct-current glow discharges. <i>Physics of Plasmas</i> , 2017, 24, 093503.   | 1.9 | 16        |
| 49 | Ionization kinetics and H mode transition in a noble gas, low-pressure pulsed ICP discharge. <i>Plasma Sources Science and Technology</i> , 2004, 13, 600-603.                          | 3.1 | 15        |
| 50 | Use of nonlocal helium microplasma for gas impurities detection by the collisional electron spectroscopy method. <i>Physics of Plasmas</i> , 2015, 22, .                                | 1.9 | 15        |
| 51 | Ambipolar field role in formation of electron distribution function in gas discharge plasma. <i>Scientific Reports</i> , 2017, 7, 14613.  | 3.3 | 15        |
| 52 | Influence of dust particles on positive column of DC glow discharge. <i>Journal of Applied Physics</i> , 2018, 123, .   | 2.5 | 15        |
| 53 | Nonmonotonic excitation rates in argon positive column. <i>Applied Physics Letters</i> , 2004, 85, 3396-3398.   | 3.3 | 14        |
| 54 | Modification of a nonlocal electron energy distribution in a bounded plasma. <i>Physical Review E</i> , 2005, 72, 036410.   | 2.1 | 14        |

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|----|--|-----|-----------|
| 55 | Transition to the obstructed discharge and a sharp change in the voltage-current characteristic as a result of gas heating in a short (positive-column-free) high-pressure glow discharge. <i>Technical Physics</i> , 2011, 56, 55-60. | 0.7 | 14        |
| 56 | Fundamental limitations of the local approximation for electron distribution function and fluid model in bounded plasmas. <i>Physics of Plasmas</i> , 2014, 21, .  | 1.9 | 14        |
| 57 | Nonlocal control of electron temperature in short direct current glow discharge plasma. <i>Physics of Plasmas</i> , 2014, 21, .  | 1.9 | 14        |
| 58 | Investigation of Low-Pressure Glow Discharge in a Coaxial Gridded Hollow Cathode. <i>IEEE Transactions on Plasma Science</i> , 2016, 44, 2965-2972.  | 1.3 | 14        |
| 59 | Probe Diagnostics of Plasma Parameters in a Large-Volume Glow Discharge With Coaxial Gridded Hollow Electrodes. <i>IEEE Transactions on Plasma Science</i> , 2017, 45, 3110-3113.  | 1.3 | 14        |
| 60 | Bactericidal Effect of a Dielectric Barrier Discharge Plasma Jet Generated in Laminar and Preturbulent Helium Flows. <i>Plasma Medicine</i> , 2017, 7, 187-200.  | 0.6 | 14        |
| 61 | Influence of dust particles on DC glow discharge plasma. <i>Physics of Plasmas</i> , 2018, 25, .   | 1.9 | 14        |
| 62 | Formation of inverse electron distribution function and absolute negative conductivity in nonlocal plasma of a dc glow discharge. <i>Physical Review E</i> , 2020, 101, 031202.  | 2.1 | 14        |
| 63 | Cathode boundary conditions for fluid model discharges on the right-hand branch of the Paschen curve. <i>Technical Physics Letters</i> , 2002, 28, 621-624.  | 0.7 | 13        |
| 64 | Nonmonotonic spatial profiles of excitation rates in bounded plasmas caused by effects of EDF nonlocality. <i>IEEE Transactions on Plasma Science</i> , 2006, 34, 834-843.   | 1.3 | 13        |
| 65 | Control of plasma properties in a short direct-current glow discharge with active boundaries. <i>Physics of Plasmas</i> , 2016, 23, .  | 1.9 | 13        |
| 66 | Characteristic plume morphologies of atmospheric Ar and He plasma jets excited by a pulsed microwave hairpin resonator. <i>Chinese Physics B</i> , 2018, 27, 055202.   | 1.4 | 13        |
| 67 | 1D photonic crystal filled with low-temperature plasma for controlling broadband microwave transmission. <i>AIP Advances</i> , 2019, 9, 065302.  | 1.3 | 13        |
| 68 | Use of plasma electron spectroscopy method to detect hydrocarbons, alcohols, and ammonia in nonlocal plasma of short glow discharge. <i>Plasma Sources Science and Technology</i> , 2021, 30, 117001.                                  | 3.1 | 13        |
| 69 | Influence of heat and particle fluxes nonlocality on spatial distribution of plasma density in two-chamber inductively coupled plasma sources. <i>Physics of Plasmas</i> , 2012, 19, 073504.   | 1.9 | 12        |
| 70 | Modeling a short dc discharge with thermionic cathode and auxiliary anode. <i>Physics of Plasmas</i> , 2013, 20, .   | 1.9 | 12        |
| 71 | Energy spectra of Penning electrons in non-local plasma at middle and high pressures. <i>Journal of Physics: Conference Series</i> , 2014, 514, 012052.  | 0.4 | 12        |
| 72 | More Efficient Microwave Argon Plasma Jet With a Symmetric Hairpin Copper Wire at Atmospheric Pressure. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 906-907.  | 1.3 | 12        |

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|----|---|-----|-----------|
| 73 | Pulsed microwave-driven argon plasma jet with distinctive plume patterns resonantly excited by surface plasmon polaritons. Chinese Physics B, 2015, 24, 025203.                               | 1.4 | 12        |
| 74 | Numerical simulation and analysis of electromagnetic-wave absorption of a plasma slab created by a direct-current discharge with gridded anode. Journal of Applied Physics, 2018, 123, .      | 2.5 | 12        |
| 75 | Atmospheric Plasma Jet Relay Driven by a 40-kHz Power Supply and Its Representative Characteristics. IEEE Transactions on Plasma Science, 2015, 43, 1825-1831.                                | 1.3 | 11        |
| 76 | 2-D Extended Fluid Model of Applied-Field Magnetoplasma-dynamic Thruster With Solid and Hollow Cathodes. IEEE Transactions on Plasma Science, 2015, 43, 4034-4042.                            | 1.3 | 11        |
| 77 | Boundary conditions for drift-diffusion equations in gas-discharge plasmas. Physics of Plasmas, 2020, 27, .   | 1.9 | 11        |
| 78 | On the possibility of negative ion concentration growth between pulses of discharge current in oxygen. Technical Physics Letters, 2000, 26, 582-587.  | 0.7 | 10        |
| 79 | Approximate description of the nonmaxwellian electron distribution in a global model. Technical Physics Letters, 2002, 28, 841-844.   | 0.7 | 10        |
| 80 | Influence of an additional ballast volume on a pulsed ICP discharge. Plasma Sources Science and Technology, 2007, 16, 697-702.  | 3.1 | 10        |
| 81 | Asymptotic behavior of the threshold minimizing the average probability of error in calculation of wavelet coefficients. Doklady Mathematics, 2016, 93, 295-299.                              | 0.6 | 10        |
| 82 | Diagnostics of large volume coaxial gridded hollow cathode DC discharge. Plasma Sources Science and Technology, 2019, 28, 067001.   | 3.1 | 10        |
| 83 | Creation of resonance photoplasma by concentrated solar/gas lamp irradiation. Self-consistent modeling. Physics of Plasmas, 2019, 26, 103509.   | 1.9 | 10        |
| 84 | A criterion for electric field reversal in the negative glow region of a short DC glow discharge. Technical Physics Letters, 2005, 31, 370-373.   | 0.7 | 9         |
| 85 | Formation of nonmonotonic profiles of densities and fluxes of charged particles and ambipolar field reversal in argon dusty plasmas. Plasma Sources Science and Technology, 2019, 28, 095020. | 3.1 | 9         |
| 86 | Analysis and optimization of microwave reflections in a plasma-metal model. Journal of Applied Physics, 2019, 125, 163306.  | 2.5 | 9         |
| 87 | 2-D Simulation of Two-Chamber Photoplasma for Conversion of Light Radiation to Electrical Energy. IEEE Transactions on Plasma Science, 2020, 48, 394-401.                                     | 1.3 | 9         |
| 88 | Machine learning combined with Langmuir probe measurements for diagnosis of dusty plasma of a positive column. Plasma Science and Technology, 2021, 23, 095403.                               | 1.5 | 9         |
| 89 | A physical model of the short glow discharge in plasma display panels. Technical Physics Letters, 2001, 27, 284-288.  | 0.7 | 8         |
| 90 | Spatial Distribution of Parameters in Normal Micro-DC Glow Discharge in Air. IEEE Transactions on Plasma Science, 2014, 42, 2560-2561.  | 1.3 | 8         |

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|-----|--|-----|-----------|
| 91  | Comment on "Two-dimensional positive column structure in a discharge tube with radius discontinuity" [Phys. Plasmas 21, 113503 (2014)]. Physics of Plasmas, 2015, 22, 094701.  | 1.9 | 8         |
| 92  | Particle in cell/Monte Carlo collision analysis of the problem of identification of impurities in the gas by the plasma electron spectroscopy method. Physics of Plasmas, 2016, 23, .                                      | 1.9 | 8         |
| 93  | On self-sustainment of DC discharges with gridded anode. Journal of Applied Physics, 2017, 122, .  | 2.5 | 8         |
| 94  | Influence of metastable atoms on the formation of nonlocal EDF, electron reaction rates, and transport coefficients in argon plasma. Plasma Sources Science and Technology, 2019, 28, 035017.                              | 3.1 | 8         |
| 95  | Formation of inverse EDF in glow discharges with an inhomogeneous electric field. Plasma Sources Science and Technology, 2021, 30, 095006.   | 3.1 | 8         |
| 96  | Electron energy spectra in helium observed in a microplasma collisional electron spectroscopy detector. Technical Physics, 2012, 57, 1325-1330.  | 0.7 | 7         |
| 97  | Gas Heating and Transition to Obstructed Mode in DC Glow Microdischarge in Air. IEEE Transactions on Plasma Science, 2014, 42, 2558-2559.  | 1.3 | 7         |
| 98  | Asymptotically optimal wavelet thresholding in models with non-Gaussian noise distributions. Doklady Mathematics, 2016, 94, 615-619.   | 0.6 | 7         |
| 99  | Vortex electron flux and EDF nonlocality of moderate and high-pressure gas discharge plasmas. Plasma Sources Science and Technology, 2018, 27, 045007.   | 3.1 | 7         |
| 100 | Influence of dust particles on spatial distributions of particles and fluxes in positive column of glow discharge. Plasma Science and Technology, 2019, 21, 115404.  | 1.5 | 7         |
| 101 | Influence of the Spatial Distribution of the Dust Particle Density on the Radial Profile Formation of Particles and Fluxes in a Dusty Plasma of DC Glow Discharge. IEEE Transactions on Plasma Science, 2020, 48, 375-387. | 1.3 | 7         |
| 102 | Optimization of Photoelectric Converter Based on a Two-Chamber Na-Ar Gas Photoplasma. IEEE Transactions on Plasma Science, 2020, 48, 402-409.  | 1.3 | 7         |
| 103 | The Possibility of Measuring Electron Density of Plasma at Atmospheric Pressure by a Microwave Cavity Resonance Spectroscopy. IEEE Transactions on Plasma Science, 2021, 49, 1001-1008.                                    | 1.3 | 7         |
| 104 | Paschen curves and current-voltage characteristics of large-area short glow discharge with different electrode structures. Physics of Plasmas, 2020, 27, .   | 1.9 | 7         |
| 105 | 2D simulation of solar/lamp two-chamber photoelectric converter with different sodium-noble gas mixtures. Plasma Sources Science and Technology, 2020, 29, 115005.   | 3.1 | 7         |
| 106 | Evolution of the density profiles and flows of charged particles during the diffusive decay of an electronegative gas plasma. Technical Physics, 2001, 46, 404-410.  | 0.7 | 6         |
| 107 | Effect of metastable atoms on near-wall voltage drop in the afterglow of a noble-gas radio-frequency inductive coupled plasma. Physics of Plasmas, 2004, 11, 5350-5353.  | 1.9 | 6         |
| 108 | Nonlocal phenomena in the positive column of a glow discharge in molecular gases. Technical Physics, 2009, 54, 810-819.  | 0.7 | 6         |

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|-----|---|-----|-----------|
| 109 | Electric field reversal in near-cathode region of glow discharge in helium. <i>Technical Physics Letters</i> , 2011, 37, 838-841.   | 0.7 | 6         |
| 110 | The role of the ambipolar field and the local approximation inapplicability in determination of the electron distribution function at high pressures. <i>Technical Physics Letters</i> , 2015, 41, 43-45. | 0.7 | 6         |
| 111 | Simulation of electron streamline distribution and coupling voltage in the coupling area of a Hall thruster. <i>Plasma Sources Science and Technology</i> , 2019, 28, 035016.                             | 3.1 | 6         |
| 112 | Influence of electron-electron collisions on the formation of a nonlocal EDF. <i>Plasma Sources Science and Technology</i> , 2019, 28, 015001.  | 3.1 | 6         |
| 113 | The Influence of Plasma Distribution on Microwave Reflection in a Plasma-Metal Model. <i>IEEE Transactions on Plasma Science</i> , 2020, 48, 359-363.   | 1.3 | 6         |
| 114 | Kinetics of high pressure beam-produced heavy inert gas plasmas. <i>Physica Scripta</i> , 1996, 53, 490-502.  | 2.5 | 5         |
| 115 | The effect of electron detachment on the diffusive decay of a low-pressure electronegative plasma. <i>Technical Physics Letters</i> , 2001, 27, 652-655.  | 0.7 | 5         |
| 116 | Nonlocal Behavior of Electron Fluxes and Excitation Rates for Local and EEDF in Moderate and High Pressures DC Positive Column Plasmas. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 2580-2581. | 1.3 | 5         |
| 117 | Distribution of plasma parameters in the cathode region of a glow discharge in nitrogen. <i>Technical Physics</i> , 2012, 57, 1188-1191.  | 0.7 | 5         |
| 118 | Stable homogeneous microdischarge at atmospheric pressure between a flat cathode and point anode. <i>Technical Physics Letters</i> , 2014, 40, 816-818.   | 0.7 | 5         |
| 119 | Comment on "A large volume uniform plasma generator for the experiments of electromagnetic wave propagation in plasma" [Phys. Plasmas 20, 012101 (2013)]. <i>Physics of Plasmas</i> , 2016, 23, 094701.   | 1.9 | 5         |
| 120 | Calculation of nonlocal EDF using a one-dimensional Boltzmann equation solver. <i>Physics of Plasmas</i> , 2019, 26, .  | 1.9 | 5         |
| 121 | Diffusive decay of a low-pressure electronegative plasma. <i>Technical Physics Letters</i> , 2001, 27, 373-377.   | 0.7 | 4         |
| 122 | Main Scenarios of Spatial Distribution of Charged and Neutral Components in $\{m SF\}_6$ Plasma. <i>IEEE Transactions on Plasma Science</i> , 2013, 41, 3254-3267.  | 1.3 | 4         |
| 123 | A criterion of field reversal in a short glow discharge and its dependence on the parameters of the fluid model used. <i>Technical Physics Letters</i> , 2014, 40, 581-583.                               | 0.7 | 4         |
| 124 | Violation of the boltzmann distribution for plasma electron number density in two-chamber inductively coupled plasma discharges. <i>Technical Physics</i> , 2015, 60, 1570-1573.                          | 0.7 | 4         |
| 125 | A morphological study of the changes in the ultrastructure of a bacterial biofilm disrupted by an ac corona discharge in air. <i>Journal of Applied Physics</i> , 2016, 120, .                            | 2.5 | 4         |
| 126 | Correlation between reversion of signs of the electric field in the near-cathode plasma and anode fall potential in a short DC glow discharge. <i>Technical Physics</i> , 2017, 62, 1122-1125.            | 0.7 | 4         |



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|-----|---|-----|-----------|
| 127 | Effect of anode material on the breakdown in low-pressure helium gas. Journal of Physics: Conference Series, 2017, 927, 012001.   | 0.4 | 4         |
| 128 | DC glow microdischarge with a self-determined length in helium and argon at atmospheric pressure. Journal of Applied Physics, 2018, 123, 083304.  | 2.5 | 4         |
| 129 | The nonlocal electron kinetics for a low-pressure glow discharge dusty plasma. Physics of Plasmas, 2018, 25, .  | 1.9 | 4         |
| 130 | The Influence of the Ambipolar Field on the Levitation Conditions of Dust Particles in the Positive Column of the Glow Discharge With a Change the Spatial Orientation of the Discharge Tube. IEEE Transactions on Plasma Science, 2019, 47, 4391-4395. | 1.3 | 4         |
| 131 | Evidence of effective local control of a plasma's nonlocal electron distribution function. Plasma Sources Science and Technology, 2020, 29, 077001.   | 3.1 | 4         |
| 132 | Influence of Discharge Current, Pressure, and Magnetic Field on the Spatial Distribution of Particles and Fluxes in the Dusty Plasma of the Positive Column of DC Glow Discharge. IEEE Transactions on Plasma Science, 2021, 49, 878-885.               | 1.3 | 4         |
| 133 | On the Validity of Two-Chamber Configuration for the Generation of Electromotive Force in Photoplasma. IEEE Transactions on Plasma Science, 2021, 49, 990-996.  | 1.3 | 4         |
| 134 | Influence of Vortex Electron Currents on Transport Processes in 2-D Photoplasma of Sodium's Noble Gas Mixtures. IEEE Transactions on Plasma Science, 2021, 49, 1009-1016.   | 1.3 | 4         |
| 135 | Research progress on atmospheric pressure lower-power microwave plasma sources and their application prospects. Scientia Sinica: Physica, Mechanica Et Astronomica, 2018, 48, 125201.   | 0.4 | 4         |
| 136 | Spectral characteristics of a short glow discharge with a grid anode. AIP Advances, 2022, 12, .   | 1.3 | 4         |
| 137 | Effect of electron detachment on the wall potential and plasma evolution in the afterglow stage. Applied Physics Letters, 2006, 89, 021501.   | 3.3 | 3         |
| 138 | On the possibility of determining the energy-distribution function of nonlocal penning electrons by measuring the current to wall electrode in afterglow plasma. Technical Physics Letters, 2014, 40, 949-952.  | 0.7 | 3         |
| 139 | Response to "Comment on "Use of dc Ar microdischarge with nonlocal plasma for identification of metal samples". J. Appl. Phys. 119, 136101 (2016)]. Journal of Applied Physics, 2016, 119, 136102.  | 2.5 | 3         |
| 140 | Collisional electron spectroscopy method for gas analysis. Journal of Physics: Conference Series, 2016, 715, 012010.  | 0.4 | 3         |
| 141 | Using two-chamber photoplasma for creating photovoltaic converter. Journal of Physics: Conference Series, 2017, 927, 012004.  | 0.4 | 3         |
| 142 | Nonlocal control of plasma conductivity. Physics of Plasmas, 2019, 26, .  | 1.9 | 3         |
| 143 | Estimation of the Loss Function When Using Wavelet-Vaguelette Decomposition for Solving Ill-Posed Problems. Journal of Mathematical Sciences, 2019, 237, 804-809.   | 0.4 | 3         |
| 144 | Effects of Non-Maxwellian Electron Distribution Function to the Propagation Coefficients of Electromagnetic Waves in Plasma. IEEE Transactions on Plasma Science, 2019, 47, 100-103.  | 1.3 | 3         |

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|-----|---|-----|-----------|
| 145 | Monopole Antenna With Reconfigurable Quarter Wavelength Plasma Reflector. IEEE Transactions on Plasma Science, 2020, 48, 364-368.   | 1.3 | 3         |
| 146 | Features of the EEDF formation in the dusty plasma of the positive column of a glow discharge. Plasma Sources Science and Technology, 2021, 30, 047001.   | 3.1 | 3         |
| 147 | Electron vortexes in two-dimensional steady photoplasma. Chinese Journal of Physics, 2022, 75, 69-75.   | 3.9 | 3         |
| 148 | Influence of collisional broadening on resonance photoplasma parameters in a sodium-argon mixture. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 288, 108256.              | 2.3 | 3         |
| 149 | Probe Measurements in Electronegative Plasmas: Modeling the Perturbative Effects of the Probe Holder. Contributions To Plasma Physics, 2009, 49, 373-380.                                       | 1.1 | 2         |
| 150 | Ionization of an air-methane mixture in a near-critical electric field. Russian Journal of Physical Chemistry B, 2009, 3, 30-35.  | 1.3 | 2         |
| 151 | Fluxes of Charged Particles in Two-Chamber ICP Discharge in Oxygen. IEEE Transactions on Plasma Science, 2011, 39, 2562-2563.   | 1.3 | 2         |
| 152 | Fluid model of dc glow discharge with nonlocal ionization source term. Journal of Physics: Conference Series, 2012, 406, 012032.  | 0.4 | 2         |
| 153 | Comment on "Effect of the electron energy distribution on total energy loss with argon in inductively coupled plasmas" [Phys. Plasmas 22, 013501 (2015)]. Physics of Plasmas, 2015, 22, 044701. | 1.9 | 2         |
| 154 | PIC/MCC analysis of a photoresonance plasma sustained in a sodium vapor. Physics of Plasmas, 2017, 24, 083505.  | 1.9 | 2         |
| 155 | The Asymptotic Behavior of the Optimal Threshold Minimizing the Probability-of-Error Criterion. Journal of Mathematical Sciences, 2018, 234, 810-815.   | 0.4 | 2         |
| 156 | A kinetic model for investigating the dielectric properties of rocket exhaust dusty plasmas. Physics of Plasmas, 2019, 26, .  | 1.9 | 2         |
| 157 | Measurement of Microwave Propagation in Weakly Ionized Dusty Plasma. IEEE Transactions on Plasma Science, 2019, 47, 109-112.  | 1.3 | 2         |
| 158 | Measurement of the densities of plasma and ambient gas particles using a short direct current discharge. Physics of Plasmas, 2020, 27, 053508.  | 1.9 | 2         |
| 159 | Analysis of parameters of coaxial dielectric barrier discharges in argon flow at atmospheric pressure. Journal of Applied Physics, 2021, 129, 153305.   | 2.5 | 2         |
| 160 | Peculiarities of plasma decay in the afterglow of a low-pressure pulsed discharge in oxygen. Technical Physics, 2001, 46, 299-306.  | 0.7 | 1         |
| 161 | Electron Kinetics in the Cathode Region of Glow Discharges. Plane and Hollow Cathodes. , 2002, , 161-178.   |     | 1         |
| 162 | Penning electrons energy spectra in dc He-Ar microdischarge. , 2015, , .  |     | 1         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 163 | Limit distribution of a risk estimate using the vaguelette-wavelet decomposition of signals in a model with correlated noise. Moscow University Computational Mathematics and Cybernetics, 2015, 39, 6-13.   | 0.3 | 1         |
| 164 | Local Magnetic Control in a Large-Scale Low-Pressure Nonlocal Plasma Source. IEEE Transactions on Plasma Science, 2017, 45, 3114-3117.   | 1.3 | 1         |
| 165 | EXPERIMENTAL INVESTIGATION OF A SHORT GLOW DISCHARGE IN HELIUM FOR GAS ANALYZERS BASED ON PLES METHODS. High Temperature Material Processes, 2014, 18, 91-98.  | 0.6 | 1         |
| 166 | Parametric study of coaxial dielectric barrier discharge in atmospheric pressure argon. Physics of Plasmas, 2021, 28, 113505.  | 1.9 | 1         |
| 167 | Attenuation of Microwave Radiation by Post-Anode Plasma in a Composite Grid Electrode Structure. IEEE Access, 2022, 10, 7675-7683.   | 4.2 | 1         |
| 168 | Specificities of the Nonlocal EDF Formation in a Dusty Plasma With the Different Spatial Distribution of the Microparticle Density. IEEE Transactions on Plasma Science, 2022, 50, 1653-1660.  | 1.3 | 1         |
| 169 | Atomic distribution over excited states in a plasma with ionization nonequilibrium. Journal of Applied Spectroscopy, 1983, 38, 508-512.  | 0.7 | 0         |
| 170 | X-ray pulse method of examining the combustion wave in a self-propagating high-temperature synthesis. Combustion, Explosion and Shock Waves, 1991, 27, 326-327.  | 0.8 | 0         |
| 171 | Modern probe methods of studying the electron energy distribution function in a plasma. Journal of Engineering Physics and Thermophysics, 1992, 62, 551-552.   | 0.6 | 0         |
| 172 | Formative time of breakdown modeled for the ignition of air and n-butane mixtures using effective ionization coefficients. Applied Physics Letters, 2008, 93, .  | 3.3 | 0         |
| 173 | The influence of ambipolar electric field on the EDF formation and the electron processes in partially ionized plasmas. , 2015, , .  |     | 0         |
| 174 | Numerical study on heating gas in atmospheric pressure helium discharge. , 2015, , .   |     | 0         |
| 175 | Can the negative glow plasma have a negative charge?. , 2015, , .  |     | 0         |
| 176 | Comment on "A review on ionospheric ion plasmas created in weakly magnetized electronegative plasmas". Plasma Sources Science and Technology, 2015, 24, 038001.  | 3.1 | 0         |
| 177 | Schlieren technique as a possible way to determine gas temperature in cold non-equilibrium plasma jets. , 2015, , .  |     | 0         |
| 178 | Comment on the paper N A Dyatko, I V Kochetov and A P Napartovich 2014 Non-thermal plasma instabilities induced by deformation of the electron energy distribution function Plasma Sources Sci. Technol.23043001. Plasma Sources Science and Technology, 2016, 25, 018001. | 3.1 | 0         |
| 179 | Asymptotic behavior of the loss function in the multiplicative scaling of the wavelet coefficients of a signal function. Moscow University Computational Mathematics and Cybernetics, 2017, 41, 14-17.   | 0.3 | 0         |
| 180 | The role of the ambipolar field in the formation of the EDF and the criteria of the local approximation. Journal of Physics: Conference Series, 2017, 927, 012080.   | 0.4 | 0         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 181 | Wave propagation coefficients in non-maxwellian plasma. , 2017, , .  |     | 0         |
| 182 | Effects of Druyvesteyn Distribution to Transmission Coefficients in Plasma. , 2018, , .  |     | 0         |
| 183 | On the Choice of Thresholding Parameters for Non-Gaussian Noise Distribution. Journal of Mathematical Sciences, 2020, 246, 519-524.  | 0.4 | 0         |
| 184 | Ambipolar Trap for Dust Particles in a V-Shaped Homogeneous Positive Column of Glow Discharge at Low and Medium Pressures. IEEE Transactions on Plasma Science, 2021, 49, 997-1000.  | 1.3 | 0         |
| 185 | Estimation of the Average Error Probability for Calculating Wavelet Coefficients in the Hybrid Thresholding Method. Moscow University Computational Mathematics and Cybernetics, 2021, 45, 16-20.  | 0.3 | 0         |
| 186 | DESIGN OPTIMIZATION OF A MAGNETOPLASMADYNAMIC THRUSTER BY NUMERICAL METHODS. High Temperature Material Processes, 2014, 18, 83-90.   | 0.6 | 0         |
| 187 | NUMERICAL STUDY OF HEATING THE GAS IN AN ATMOSPHERIC PRESSURE COLD PLASMA GENERATOR. High Temperature Material Processes, 2014, 18, 155-163.   | 0.6 | 0         |
| 188 | Register impurities in the plasma forming gas helium in a large volume reactor using plasma electron spectroscopy method. Journal of Physics: Conference Series, 2019, 1328, 012073.   | 0.4 | 0         |
| 189 | Microwave Diagnostics of Cold Atmospheric Pressure Plasma Jets Based on the Radiation Pattern Measurements. IEEE Transactions on Plasma Science, 2022, 50, 1669-1674.  | 1.3 | 0         |
| 190 | On the Possibility of Creating Absolute Negative Conductivity in a Local Stationary Plasma With an Inverse EDF. IEEE Transactions on Plasma Science, 2022, 50, 1695-1699.  | 1.3 | 0         |
| 191 | Influence of Electronâ€“Electron Collisions on the Formation of Inverse Electron Distribution Function and Absolute Negative Conductivity in Nonlocal Plasma of a DC Glow Discharge. IEEE Transactions on Plasma Science, 2022, 50, 1689-1694. | 1.3 | 0         |