# Ivan Zhelyazkov

## List of Publications by Year in descending order

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| | | 394421 | 434195 |
|---|---|---|---|
| 114 | 1,338 | 19 | 31 |
| papers | citations | h-index | g-index |

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|---|---|---|---|
| 117 | 117 | 117 | 528 |
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Occurrence and transmission potential of asymptomatic and presymptomatic SARS-CoV-2 infections: Update of a living systematic review and meta-analysis. PLoS Medicine, 2022, 19, e1003987. | 8.4 | 44 |
| 2 | Outbreaks of publications about emerging infectious diseases: the case of SARS-CoV-2 and Zika virus. BMC Medical Research Methodology, 2021, 21, 50. | 3.1 | 8 |
| 3 | Hall-magnetohydrodynamic waves in flowing ideal incompressible solar-wind plasmas: reconsidered. Astrophysics and Space Science, 2020, 365, 1. | 1.4 | 1 |
| 4 | How Rotating Solar Atmospheric Jets Become Kelvinâ€“Helmholtz Unstable. Frontiers in Astronomy and Space Sciences, 2019, 6, . | 2.8 | 2 |
| 5 | Kinematics and Energetics of the EUV Waves on 11 April 2013. Solar Physics, 2019, 294, 1. | 2.5 | 8 |
| 6 | Can High-Mode Magnetohydrodynamic Waves Propagating in a Spinning Macrospicule Be Unstable Due to the Kelvinâ€“Helmholtz Instability?. Solar Physics, 2019, 294, 1. | 2.5 | 4 |
| 7 | Kelvinâ€“Helmholtz Instability in a Cool Solar Jet in the Framework of Hall Magnetohydrodynamics: A Case Study. Solar Physics, 2018, 293, 1. | 2.5 | 1 |
| 8 | Solar jet on 2014 April 16 modeled by Kelvinâ€“Helmholtz instability. New Astronomy, 2018, 63, 75-87. | 1.8 | 7 |
| 9 | Kelvinâ€“Helmholtz instability in a twisting solar polar coronal hole jet observed by SDO/AIA. Advances in Space Research, 2018, 61, 628-638. | 2.6 | 13 |
| 10 | High mode magnetohydrodynamic waves propagation in a twisted rotating jet emerging from a filament eruption. Monthly Notices of the Royal Astronomical Society, 2018, 478, 5505-5513. | 4.4 | 6 |
| 11 | Can Rotating Hot Plasma Jets In The Solar Corona Become Unstable?. , 2018, , . | | 0 |
| 12 | Investigation of recurrent EUV jets from highly dynamic magnetic field region. Astrophysics and Space Science, 2017, 362, 1. | 1.4 | 13 |
| 13 | Modeling Kelvinâ€“Helmholtz Instability in Soft X-Ray Solar Jets. Advances in Astronomy, 2017, 2017, 1-18. | 1.1 | 3 |
| 14 | Kelvinâ€“Helmholtz instability in coronal mass ejections and solar surges. AIP Conference Proceedings, 2016, , . | 0.4 | 0 |
| 15 | Kelvinâ€“Helmholtz instability in an active region jet observed with Hinode. Astrophysics and Space Science, 2016, 361, 1. | 1.4 | 16 |
| 16 | Kelvinâ€“Helmholtz instability in solar cool surges. Advances in Space Research, 2015, 56, 2727-2737. | 2.6 | 17 |
| 17 | Kelvin-Helmholtz instability in coronal mass ejecta in the lower corona. Astronomy and Astrophysics, 2015, 574, A55. | 5.1 | 14 |
| 18 | On Modeling the Kelvinâ€“Helmholtz Instability in Solar Atmosphere. Journal of Astrophysics and Astronomy, 2015, 36, 233-254. | 1.0 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | STABILITY OF ROTATING MAGNETIZED JETS IN THE SOLAR ATMOSPHERE. I. KELVINâ€“HELMHOLTZ INSTABILITY. Astrophysical Journal, 2015, 813, 123. | 4.5 | 63 |
| 20 | Kelvinâ€“Helmholtz instability of magnetohydrodynamic waves propagating on solar surges. Astrophysics and Space Science, 2015, 356, 231-240. | 1.4 | 17 |
| 21 | Kelvin-Helmholtz instability of twisted magnetic flux tubes in the solar wind. Astronomy and Astrophysics, 2014, 561, A62. | 5.1 | 36 |
| 22 | Fast magnetohydrodynamic oscillation of longitudinally inhomogeneous prominence threads: an analogue with quantum harmonic oscillator. Astronomy and Astrophysics, 2014, 565, A35. | 5.1 | 3 |
| 23 | Excitonic and vibronic spectra of Frenkel excitons in a two-dimensional simple lattice. Chemical Physics, 2013, 410, 71-80. | 1.9 | 6 |
| 24 | Coupling of charge-transfer excitons, Frenkel excitons, and vibrations in a two-dimensional quadratic lattice. Chemical Physics, 2013, 423, 127-134. | 1.9 | 2 |
| 25 | Kelvin-Helmholtz instability of kink waves in photospheric, chromospheric, and X-ray solar jets. , 2013, , . | | 6 |
| 26 | Magnetohydrodynamic waves and their stability status in solar spicules. Astronomy and Astrophysics, 2012, 537, A124. | 5.1 | 23 |
| 27 | Kelvin-Helmholtz instability of kink waves in photospheric twisted flux tubes. Astronomy and Astrophysics, 2012, 547, A14. | 5.1 | 20 |
| 28 | Observation of standing kink waves in solar spicules. Astrophysics and Space Science, 2012, 337, 33-37. | 1.4 | 23 |
| 29 | Solar Spicules: Recent Challenges in Observations and Theory. , 2011, , . | | 6 |
| 30 | Mixing of Frenkel and Charge-transfer Excitons in One-component Molecular Stacks. , 2010, , . | | 1 |
| 31 | Hall-magnetohydrodynamic waves in flowing ideal incompressible solar-wind plasmas. Plasma Physics and Controlled Fusion, 2010, 52, 065008. | 2.1 | 6 |
| 32 | Pre- and post-processing of data for simulation of gyrotrons by the GYREOSS software package. Journal of Physics: Conference Series, 2010, 207, 012032. | 0.4 | 4 |
| 33 | MHD waves and instabilities in flowing solar flux-tube plasmas in the framework of Hall magnetohydrodynamics. European Physical Journal D, 2009, 55, 127-137. | 1.3 | 8 |
| 34 | Combination bands in vibronic spectra of molecular crystals. Chemical Physics, 2008, 352, 185-196. | 1.9 | 5 |
| 35 | Waves and stability of flowing solar wind structures in the framework of the Hall magnetohydrodynamics. AIP Conference Proceedings, 2008, , . | 0.4 | 2 |
| 36 | Model of a stationary microwave argon discharge at atmospheric pressure. AIP Conference Proceedings, 2008, , . | 0.4 | 1 |

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|---|---|---|---|
| 37 | Surface wave propagation characteristics in atmospheric pressure plasma column. Journal of Physics: Conference Series, 2007, 63, 012023. | 0.4 | 1 |
| 38 | Vibronic Spectra of Mixed Frenkel and Charge-Transfer Excitons. AIP Conference Proceedings, 2007, , . | 0.4 | 0 |
| 39 | Vibronic approach in the theory of the excitonic spectra of molecular crystals. Physical Review B, 2007, 75, . | 3.2 | 15 |
| 40 | Modelling of microwave sustained capillary plasma columns at atmospheric pressure. Journal of Physics: Conference Series, 2006, 44, 110-115. | 0.4 | 3 |
| 41 | Parameter study on Kelvinâ€“Helmholtz instability in solar wind type flowing structures. Proceedings of the International Astronomical Union, 2006, 2, 309. | 0.0 | 0 |
| 42 | Excitonic and vibronic structure of absorption spectra of Me-PTCDI and PTCDA crystals. Chemical Physics, 2006, 321, 223-231. | 1.9 | 8 |
| 43 | Vibronic spectra of mixed Frenkel and charge transfer excitons. Physical Review B, 2006, 74, . | 3.2 | 11 |
| 44 | Surface wave propagation in an ideal Hall-magnetohydrodynamic plasma jet in flowing environment. Physics of Plasmas, 2004, 11, 4904-4910. | 1.9 | 1 |
| 45 | Self-Consistent Modelling of Argon Microwave Discharge Sustained by Electromagnetic Wave in Dipole Mode. European Physical Journal D, 2004, 54, 211-223. | 0.4 | 1 |
| 46 | Ion flux's pressure dependence in an asymmetric capacitively coupled rf discharge in NF3. Open Physics, 2004, 2, 1-11. | 1.7 | 3 |
| 47 | Hall-magnetohydrodynamic surface waves in solar wind flow-structures. New Journal of Physics, 2004, 6, 14-14. | 2.9 | 4 |
| 48 | Surface wave propagation in steady ideal Hall-magnetohydrodynamic magnetic slabs. Physics of Plasmas, 2003, 10, 4463-4471. | 1.9 | 10 |
| 49 | Oblique propagation of surface waves in an ideal Hall-magnetohydrodynamic finite Î² plasma slab. Physics of Plasmas, 2003, 10, 484-494. | 1.9 | 4 |
| 50 | Fast Surface Waves Obliquely Propagating in a Hall-Magnetohydrodynamic Low-Î² Plasma Layer. Contributions To Plasma Physics, 2000, 40, 569-579. | 1.1 | 4 |
| 51 | Populations of excited atomic states along argon surface-wave plasma columns at low and intermediate pressures. Journal of Applied Physics, 2000, 87, 7652-7659. | 2.5 | 24 |
| 52 | Nonprobe radio-frequency plasma diagnostics method based on the power balance in an asymmetric capacitively coupled discharge. Journal of Applied Physics, 2000, 87, 3263-3269. | 2.5 | 9 |
| 53 | Fast Surface Waves Obliquely Propagating in a Hall-Magnetohydrodynamic Low- Plasma Layer. Contributions To Plasma Physics, 2000, 40, 569-579. | 1.1 | 1 |
| 54 | Macroscopic model for the energy balance of an asymmetric capacitively coupled rf discharge. Journal Physics D: Applied Physics, 1999, 32, 3019-3024. | 2.8 | 7 |

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|---|---|---|---|
| 55 | Self-consistent axial modeling of surface-wave-produced discharges at low and intermediate pressures. Physical Review E, 1999, 60, 875-886. | 2.1 | 39 |
| 56 | Propagation of fast surface waves in an ideal Hall-magnetohydrodynamic plasma slab. Physics of Plasmas, 1999, 6, 2340-2348. | 1.9 | 8 |
| 57 | Effects of nonlocal electron kinetics and transition from Î± to Î³ regime in an RF capacitive discharge in nitrogen. IEEE Transactions on Plasma Science, 1998, 26, 167-174. | 1.3 | 8 |
| 58 | Modeling of an axially inhomogeneous microwave argon plasma column at a moderate pressure. Journal of Applied Physics, 1998, 84, 147-153. | 2.5 | 23 |
| 59 | Dispersion of dipolar electromagnetic waves in a radially inhomogeneous axially magnetized plasma column. Journal of Plasma Physics, 1997, 58, 633-646. | 2.1 | 5 |
| 60 | Self-consistent kinetic model of a surface-wave-sustained discharge in nitrogen. Journal Physics D: Applied Physics, 1997, 30, 2663-2676. | 2.8 | 39 |
| 61 | Conditions for sustaining low-pressure plasma columns by travelling electromagnetic UHF waves. Physica Scripta, 1997, 56, 381-387. | 2.5 | 4 |
| 62 | Axial distributions of metastable atoms and charged particles in an ultrahigh frequency argon plasma column at moderate pressures. Journal of Applied Physics, 1996, 79, 3848. | 2.5 | 3 |
| 63 | MHD surface waves in a complex (longitudinal + sheared) magnetic field. Solar Physics, 1996, 165, 99-114. | 2.5 | 7 |
| 64 | Fast surface waves in an ideal Hallâ€magnetohydrodynamic plasma slab. Physics of Plasmas, 1996, 3, 4346-4354. | 1.9 | 17 |
| 65 | Leaky electromagnetic wave resonances of a plasma sphere. Physics of Plasmas, 1996, 3, 3540-3544. | 1.9 | 2 |
| 66 | Axial structure of low-pressure high-frequency discharges sustained by travelling electromagnetic surface waves. Physics Reports, 1995, 255, 79-201. | 25.6 | 89 |
| 67 | Comment on â€˜â€˜AlfvÃ©n â€˜resonanceâ€™ reconsidered: Exact equations for wave propagation across a cold inhomogeneous plasmaâ€™â€™ [Phys. Plasmas 1, 3523 (1994)]. Physics of Plasmas, 1995, 2, 3547-3549. | 1.9 | 9 |
| 68 | Axial structure of a shielded axially magnetized plasma column sustained by a dipolar electromagnetic mode. Plasma Physics and Controlled Fusion, 1994, 36, 1355-1370. | 2.1 | 4 |
| 69 | Method for computing the attenuation coefficient of electromagnetic waves in anisotropic plasma columns. Physics of Plasmas, 1994, 1, 3734-3741. | 1.9 | 4 |
| 70 | High-frequency surface waves on a toroidal isotropic plasma. Plasma Physics and Controlled Fusion, 1993, 35, 1787-1791. | 2.1 | 5 |
| 71 | Axial structure of a shielded plasma column sustained by a dipolar electromagnetic wave. Journal Physics D: Applied Physics, 1993, 26, 1601-1610. | 2.8 | 5 |
| 72 | Theory of Low-Pressure Plasma Columns Produced by Electromagnetic Waves in the Presence of a Constant Axial Magnetic Field. NATO ASI Series Series B: Physics, 1993, , 95-104. | 0.2 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Modelling of a plasma column sustained by a travelling circularly polarized electromagnetic wave (m = 1 mode) in the presence of a constant axial magnetic field. Journal of Plasma Physics, 1992, 48, 37-57. | 2.1 | 6 |
| 74 | Lowâ€pressure plasma columns sustained by traveling electromagnetic surface waves in the dipolar (m=1) mode. Journal of Applied Physics, 1992, 71, 1026-1028. | 2.5 | 7 |
| 75 | Chromospheric and coronal heating due to the dissipation of fast magnetoacoustic waves. Solar Physics, 1992, 140, 7-17. | 2.5 | 4 |
| 76 | Theoretical study of the influence of a metal enclosure on the parameters of a plasma column sustained by a travelling electromagnetic surface wave. Physica Scripta, 1991, 43, 68-73. | 2.5 | 19 |
| 77 | Theoretical study of a plasma column sustained by an electromagnetic surface wave in the dipolar mode. Journal of Plasma Physics, 1991, 45, 137-152. | 2.1 | 23 |
| 78 | Modeling of a plasma column produced and sustained by a traveling electromagnetic wave in the presence of a constant axial magnetic field. Physical Review A, 1991, 44, 2625-2640. | 2.5 | 29 |
| 79 | Modeling of a plasma column produced and sustained by a traveling electromagnetic surface wave. Journal of Applied Physics, 1989, 66, 1641-1650. | 2.5 | 32 |
| 80 | Dark envelope solitons of fast magnetosonic surface waves in solar flux tubes. Solar Physics, 1988, 115, 17-32. | 2.5 | 14 |
| 81 | Nonlinear surface waves on a plasma layer. Physical Review A, 1988, 38, 6304-6315. | 2.5 | 5 |
| 82 | An experimental study of the axial structure of a gas discharge sustained by a surface electromagnetic wave in the presence of a uniform external magnetic field. Journal Physics D: Applied Physics, 1988, 21, 1371-1376. | 2.8 | 8 |
| 83 | Theoretical study of a plasma column sustained by a guided electrostatic wave in the presence of a constant axial magnetic field. Journal of Applied Physics, 1987, 62, 2713-2721. | 2.5 | 16 |
| 84 | Chromospheric and Coronal Heating Due to the Radiation and Collisional Damping of Fast Magnetosonic Surface Waves. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1987, 42, 1443-1450. | 1.5 | 6 |
| 85 | Comments on Surface Plasma Wave Solitons. Beitrage Aus Der Plasmaphysik, 1987, 27, 85-86. | 0.1 | 0 |
| 86 | Axial structure of a plasma column produced by a largeâ€amplitude electromagnetic surface wave. Journal of Applied Physics, 1986, 59, 1466-1472. | 2.5 | 58 |
| 87 | Nonlinear surface waves on a thin plasma layer. Journal of Plasma Physics, 1986, 36, 143-150. | 2.1 | 5 |
| 88 | Three-wave interaction in a cold plasma column. Journal of Plasma Physics, 1985, 34, 427-434. | 2.1 | 7 |
| 89 | Solitary surface waves on a thin plasma layer. Plasma Physics and Controlled Fusion, 1984, 26, 813-819. | 2.1 | 13 |
| 90 | Surface Plasma Wave Solitons. Beitrage Aus Der Plasmaphysik, 1983, 23, 621-623. | 0.1 | 19 |

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|---|---|---|---|
| 91 | Comment on â€˜â€˜Electromagnetic decay into a surface plasma wave and an ion acoustic surface wave in a semiâ€infinite plasmaâ€™â€™. Journal of Applied Physics, 1983, 54, 2837-2837. | 2.5 | 1 |
| 92 | Propagation of a largeâ€amplitude surface wave in a plasma column sustained by the wave. Journal of Applied Physics, 1983, 54, 3049-3052. | 2.5 | 37 |
| 93 | Nonlinear interaction of electrostatic surface waves in a semi-infinite plasma. Part 1. Derivation of the coupled mode equations. Journal of Plasma Physics, 1981, 26, 217-230. | 2.1 | 15 |
| 94 | Nonlinear interaction of electrostatic surface waves in a semi-infinite plasma. Part 2. Time-dependent solutions to the coupled mode equations. Journal of Plasma Physics, 1981, 26, 231-252. | 2.1 | 5 |
| 95 | Nonlinear electrostatic surface waves in a semi-infinite plasma. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 86, 414-416. | 2.1 | 9 |
| 96 | Structure of the electric field of low-frequency surface waves in a semi-infinite plasma. Plasma Physics, 1979, 21, 575-581. | 0.9 | 4 |
| 97 | Parametric decay of non-ducted whistler-mode signal. Journal of Plasma Physics, 1979, 22, 377-384. | 2.1 | 7 |
| 98 | Modulation of Ionâ€Cyclotron Turbulence by Lowâ€Frequency Perturbations in a Magnetized Plasma. Beitrage Aus Der Plasmaphysik, 1978, 18, 119-123. | 0.1 | 1 |
| 99 | Ion acoustic waves in a thin radially inhomogeneous plasma column. Journal of Physics A, 1978, 11, L63-L67. | 1.6 | 1 |
| 100 | Surface waves in a homogeneous plasma sharply bounded by a dielectric. Plasma Physics, 1978, 20, 1049-1073. | 0.9 | 70 |
| 101 | Stimulated ion surface waves on a semi-infinite plasma. Plasma Physics, 1978, 20, 133-138. | 0.9 | 4 |
| 102 | Saw-tooth shaped lower hybrid waves. Journal Physics D: Applied Physics, 1978, 11, L103-L105. | 2.8 | 2 |
| 103 | Study of Parametric Instabilities in a Thin Radially Inhomogeneous Plasma Column. Physica Scripta, 1978, 18, 346-350. | 2.5 | 6 |
| 104 | Solitary surface waves. Journal of Plasma Physics, 1978, 20, 183-188. | 2.1 | 59 |
| 105 | High-frequency Surface Waves in a Current Carrying Hot Plasma Column. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1978, 33, 261-268. | 1.5 | 8 |
| 106 | Excitation of Low-Frequency Ion Acoustic Perturbations in the Presence of Stationary Lower Hybrid Turbulence. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1978, 33, 121-123. | 1.5 | 0 |
| 107 | Kinetic theory of surface wave propagation along a hot plasma column. Journal of Plasma Physics, 1976, 16, 47-55. | 2.1 | 6 |
| 108 | Interaction of a warm plasma column with high-frequency electric fields: purely growing parametric instability. Journal of Physics A: Mathematical Nuclear and General, 1974, 7, 2223-2235. | 1.0 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Low-frequency surface waves on a semi-bounded non-isothermal plasma. European Physical Journal A, 1974, 269, 215-220. | 2.5 | 8 |
| 110 | Low-frequency surface waves on bounded warm magneto-active plasma. Journal of Plasma Physics, 1974, 11, 311-323. | 2.1 | 5 |
| 111 | Ion surface waves on bounded warm plasma. Physica, 1973, 63, 182-190. | 0.9 | 16 |
| 112 | The Instability of Inhomogeneous Plasma Streams. Radio Science, 1972, 7, 857-870. | 1.6 | 0 |
| 113 | Longitudinal resonances of plasma surface waves in noble gases. Electronics Letters, 1967, 3, 253. | 1.0 | 6 |
| 114 | Resonance Absorption of Electromagnetic Power by Weakly Ionized Gasâ€. International Journal of Electronics, 1966, 20, 517-524. | 1.4 | 0 |