# Alexander Stepanov

List of Publications by Year
in descending order



| 94 | 1,101 | 471509 17 | 434195 31 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 96 | 96 | 96 | 431 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The plasma radiation of flare kernels. Solar Physics, 1983, 88, 297. | 2.5 | 108 |
| 2 | Pulsations of type IV solar radio emission: The bounce-resonance effects. Solar Physics, 1978, 58, 165-179. | 2.5 | 97 |
| 3 | Towards the circuit theory of solar flares. Solar Physics, 1992, 139, 343-356. | 2.5 | 61 |
| 4 | Microwave plasma emission of a flare on AD Leo. Astronomy and Astrophysics, 2001, 374, 1072-1084. | 5.1 | 56 |
| 5 | Oscillations of coronal loops and second pulsations of solar radio emission. Astronomy Letters, 2007, 33, 706-713. | 1.0 | 47 |
| 6 | Electronâ€“Whistler Interaction in Coronal Loops and Radiation Signatures. Solar Physics, 2002, 211, 135-154. | 2.5 | 46 |
| 7 | Consequences of strong pitch-angle diffusion of particles in solar flares. Astrophysical Journal, 1991, 374, 369. | 4.5 | 41 |
| 8 | Secondâ€Harmonic Plasma Radiation of Magnetically Trapped Electrons in Stellar Coronae. Astrophysical Journal, 1999, 524, 961-973. | 4.5 | 39 |
| 9 | Microwave Observations of the Rapid Propagation of Nonthermal Sources in a Solar Flare by the Nobeyama Radioheliograph. Astrophysical Journal, 2002, 576, L87-L90. | 4.5 | 39 |
| 10 | Radial oscillations of coronal loops and microwave radiation from solar flares. Astronomy Letters, 2002, 28, 783-791. | 1.0 | 30 |
| 11 | Pulsations of microwave emission and flare plasma diagnostics. Astronomy Letters, 2004, 30, 480-488. | 1.0 | 29 |
| 12 | Radio signature of fragmented electron injection into a coronal loop. Solar Physics, 1994, 153, 403-417. | 2.5 | 27 |
| 13 | Pulsating microwave emission from the star AD Leo. Astronomy Letters, 2004, 30, 319-324. | 1.0 | 26 |
| 14 | Ballooning Instability in Coronal Flare Loops. Solar Physics, 2008, 253, 161-172. | 2.5 | 22 |
| 15 | On the Possible Connection between Photospheric 5-Min Oscillation and Solar Flare Microwave Emission. Solar Physics, 2006, 233, 89-106. | 2.5 | 21 |
| 16 | Sub-terahertz emission from solar flares: The plasma mechanism of chromospheric emission. Astronomy Letters, 2013, 39, 650-659. | 1.0 | 19 |
| 17 | Particle Acceleration and Plasma Heating in the Chromosphere. Solar Physics, 2015, 290, 3559-3572. | 2.5 | 18 |
| 18 | Diagnostics of solar flare and evaporated plasma using mm-wave emission. Solar Physics, 1992, 140, 139-148. | 2.5 | 17 |

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| 19 | Turbulent propagation of high-energy electrons in a solar coronal loop. Astronomy and Astrophysics, 2007, 465, 613-619. | 5.1 | 17 |
| 20 | Pulsations of type IV radio bursts as an indicator of protonarility of solar flares. Solar Physics, 1984, 93, 363-377. | 2.5 | 16 |
| 21 | Oscillations of optical emission from flare stars and coronal loop diagnostics. Astronomy Letters, 2005, 31, 612-619. | 1.0 | 15 |
| 22 | Energy Flux of AlfvÃ©n Waves in Weakly Ionized Plasma and Coronal Heating of the Sun. Solar Physics, 2011, 270, 205-211. | 2.5 | 15 |
| 23 | On the Origin of Pulsations of Sub-THz Emission from Solar Flares. Solar Physics, 2014, 289, 3017-3032. | 2.5 | 15 |
| 24 | Rayleighâ€“Taylor Instability and Excitation of Super-Dreicer Electric Fields in the Solar Chromosphere. Solar Physics, 2016, 291, 3451-3459. | 2.5 | 15 |
| 25 | Particle acceleration in flares. Solar Physics, 1994, 153, 33-53. | 2.5 | 14 |
| 26 | Spectral-temporal evolution of low-frequency pulsations in the microwave radiation of solar flares. Astronomy Reports, 2003, 47, 873-882. | 0.9 | 14 |
| 27 | Frequency rising sub-THz emission from solar flare ribbons. Astronomy and Astrophysics, 2018, 620, A95. | 5.1 | 13 |
| 28 | Quasi-periodic Pulsations as a Diagnostic Tool for Coronal Plasma Parameters. , 2007, , 221-250. | | 13 |
| 29 | Comparison of mm-wave and X-ray diagnostics of flare plasma. Solar Physics, 1994, 154, 317-334. | 2.5 | 12 |
| 30 | Prominence activation by increase in electric current. Journal of Atmospheric and Solar-Terrestrial Physics, 2018, 179, 149-153. | 1.6 | 12 |
| 31 | On the relation between solar-flare gamma-ray emission and proton escape into interplanetary space. Solar Physics, 1985, 99, 313-321. | 2.5 | 11 |
| 32 | On the Stabilization of a Twisted Magnetic Flux Tube. Astrophysical Journal, 2020, 901, 99. | 4.5 | 10 |
| 33 | Acceleration and Storage of Energetic Electrons in Magnetic Loops in the Course of Electric Current Oscillations. Solar Physics, 2017, 292, 1. | 2.5 | 9 |
| 34 | Ballooning instability and oscillations of coronal loops. Astronomy Reports, 2006, 50, 1026-1035. | 0.9 | 8 |
| 35 | Soft X-ray oscillations from AT Mic: Flare plasma diagnostics. Astronomy Letters, 2006, 32, 569-573. | 1.0 | 8 |
| 36 | Diagnostics of a flare on EQ Peg B from optical pulsations. Astronomy Letters, 2011, 37, 49-54. | 1.0 | 8 |

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| 37 | On the Possibility of Heating the Solar Corona by Heat Fluxes from Coronal Magnetic Structures. Solar Physics, 2020, 295, 1. | 2.5 | 7 |
| 38 | On the origin of time delays in hard X-ray and gamma-ray emission of solar flares. Solar Physics, 1988, 114, 127. | 2.5 | 6 |
| 39 | Microwave burst of November 17, 1991: Evidence of fragmented particle injection into a coronal loop. Space Science Reviews, 1994, 68, 205-210. | 8.1 | 6 |
| 40 | Electrostatic Wave Instability and Plasma Radiation from Coronal Loops. Solar Physics, 1997, 176, 147-152. | 2.5 | 6 |
| 41 | Ambipolar diffusion and magnetic reconnection. Astronomy Reports, 2012, 56, 138-145. | 0.9 | 6 |
| 42 | Acoustic and Slow Sausage Oscillations in the Stratified Solar Photosphere: Hinode Observations and Phase Relationships. Solar Physics, 2016, 291, 3349-3356. | 2.5 | 6 |
| 43 | On the Origin of Intense Radio Emission from the Brown Dwarfs. Radiophysics and Quantum Electronics, 2017, 59, 867-875. | 0.5 | 6 |
| 44 | Energy transport and dynamics. Solar Physics, 1994, 153, 55-72. | 2.5 | 5 |
| 45 | Radio-wave diagnostics of interstellar flares in binary systems. New Astronomy Reviews, 1997, 41, 203-206. | 0.3 | 5 |
| 46 | Alfven modes of solar coronal magnetic arches: Excitation of ballooning instability and modulation of flare emission. Cosmic Research, 2008, 46, 294-300. | 0.6 | 5 |
| 47 | The challenges of the models of solar flares. Geomagnetism and Aeronomy, 2016, 56, 952-971. | 0.8 | 5 |
| 48 | On the intensity of the radio emission from the front of a collisionless shock wave. Radiophysics and Quantum Electronics, 1970, 13, 1034-1039. | 0.5 | 4 |
| 49 | The structure of the turbulent shock wave propagating in the solar atmosphere across the magnetic field. Solar Physics, 1978, 60, 279-291. | 2.5 | 4 |
| 50 | Peculiarities of the plasma mechanism of radio emission from late-type stars. Astronomy Letters, 2000, 26, 736-742. | 1.0 | 4 |
| 51 | Low-Frequency Pulsations of Coronal Magnetic Loops. Radiophysics and Quantum Electronics, 2001, 44, 36-52. | 0.5 | 4 |
| 52 | Strongly Beamed, Polarized Radio Emission from CU Virginis. Radiophysics and Quantum Electronics, 2001, 44, 726-732. | 0.5 | 4 |
| 53 | Polarization of the HÎ± emission and proton isotropization in solar flares. Astronomy Letters, 2008, 34, 52-58. | 1.0 | 4 |
| 54 | On the origin of the high-Q high-frequency oscillations of magnetars. Astronomy Letters, 2011, 37, 276-280. | 1.0 | 4 |

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| 55 | Pulsations of optical radiation during the flare of YZ CMi occurred on February 9, 2008. Kinematics and Physics of Celestial Bodies, 2011, 27, 154-159. | 0.6 | 4 |
| 56 | Oscillating Magnetic Trap and Non-Thermal Emission from Solar Flares. Publication of the Astronomical Society of Japan, 2013, 65, S6. | 2.5 | 4 |
| 57 | Particle Acceleration by Induced Electric Fields in Course of Electric Current Oscillations in Coronal Magnetic Loops. Geomagnetism and Aeronomy, 2018, 58, 831-840. | 0.8 | 3 |
| 58 | Flare Energy Release and Electron Acceleration to Relativistic Energies by Quasi-Stationary Electric Fields in the Lower Atmosphere of the Sun. Geomagnetism and Aeronomy, 2019, 59, 789-792. | 0.8 | 3 |
| 59 | Microwave Burst of November 17, 1991: Evidence of Fragmented Particle Injection into a Coronal Loop. , 1994, , 205-210. | | 3 |
| 60 | Evolution of Electric Current and Resistance in the Flare Loop in the Course of Loop Shrinkage. Geomagnetism and Aeronomy, 2020, 60, 915-920. | 0.8 | 3 |
| 61 | On the Origin of Persistent Radio and X-ray Emission from Brown Dwarf TVLM 513-46546. Universe, 2022, 8, 77. | 2.5 | 3 |
| 62 | Quasi-periodic pulsations and diagnostics of flaring plasma. Geomagnetism and Aeronomy, 2014, 54, 969-981. | 0.8 | 2 |
| 63 | On the Description of Transverse Wave Propagation Along Thin Magnetic Flux Tubes. Geomagnetism and Aeronomy, 2018, 58, 942-946. | 0.8 | 2 |
| 64 | Parametric interaction of coronal loops with p modes. Communications in Asteroseismology, 0, 159, 30-32. | 0.0 | 2 |
| 65 | Origin of electron streams generating the ?herringbone? structure of type II bursts. Radiophysics and Quantum Electronics, 1974, 17, 936-943. | 0.5 | 1 |
| 66 | On the nature of optical oscillations on the flare stars. Proceedings of the International Astronomical Union, 2004, 2004, 391-392. | 0.0 | 1 |
| 67 | Dynamics of accelerated electron beams and X rays in solar flares with sub-THz radiation. Geomagnetism and Aeronomy, 2012, 52, 1015-1020. | 0.8 | 1 |
| 68 | Accumulation of accelerated electrons in coronal loops and time delays of solar flare nonthermal emission. Geomagnetism and Aeronomy, 2015, 55, 979-982. | 0.8 | 1 |
| 69 | Frozen-In Magnetic Field Lines and AlfvÃ©n Wave Generation in Weakly Ionized Plasma. Solar Physics, 2015, 290, 1923-1929. | 2.5 | 1 |
| 70 | Generation of superDreicer electric fields in the solar chromosphere. Geomagnetism and Aeronomy, 2016, 56, 903-907. | 0.8 | 1 |
| 71 | Modification of â€œPressedâ€•Atmospheres in Active Regions of Ultracool Stars. Geomagnetism and Aeronomy, 2017, 57, 859-863. | 0.8 | 1 |
| 72 | Slowly Varying Component of Radio Emission from TVLM 513-46546 and Continuous Sources of High Energy Electrons in the Coronae of UltraCool Stars. Geomagnetism and Aeronomy, 2018, 58, 1144-1148. | 0.8 | 1 |

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| 73 | Dynamic Model of Magnetic Flux Ropes. Geomagnetism and Aeronomy, 2019, 59, 806-809. | 0.8 | 1 |
| 74 | Coronal Loops and Optical Radiation from Flaring Stars. Geomagnetism and Aeronomy, 2020, 60, 1067-1070. | 0.8 | 1 |
| 75 | X-Ray Emission from Utracool Stars. Radiophysics and Quantum Electronics, 2021, 64, 379-387. | 0.5 | 1 |
| 76 | Magnetic-Field Concentration and the Twisted Solar Coronal Loops. Geomagnetism and Aeronomy, 2021, 61, 1052-1056. | 0.8 | 1 |
| 77 | Type-II Spicules as Important Sources of Both Heating and Sustain the Mass Loss of Solar Corona. Geomagnetism and Aeronomy, 2021, 61, 1116-1121. | 0.8 | 1 |
| 78 | Energetic Particles in a Flare Loop: Spectra and Radiation Signatures. Symposium - International Astronomical Union, 1990, 142, 421-427. | 0.1 | 0 |
| 79 | Multifrequency Analysis of a UV Ceti Flare on 1991 December 31. International Astronomical Union Colloquium, 1995, 151, 89-90. | 0.1 | 0 |
| 80 | Microwave imaging observation of an electron stream in a solar flare. Advances in Space Research, 2003, 32, 2517-2520. | 2.6 | 0 |
| 81 | Plasma processes in coronal magnetic arcs. Journal of Optical Technology (A Translation of) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T | 0.4 | 0 |
| 82 | QUASI-PERIODIC OSCILLATIONS FROM STELLAR FLARES AND DIAGNOSTICS OF FLARING PLASMA. , 2011, , 195-217. | | 0 |
| 83 | Pulsations of non-thermal emissions from the solar flare of November 5, 1992 and the trap-plus-precipitation model. Bulletin of the Crimean Astrophysical Observatory, 2013, 109, 90-97. | 0.1 | 0 |
| 84 | Time delay in pulsations of the nonthermal radiation of solar flares. Geomagnetism and Aeronomy, 2013, 53, 827-830. | 0.8 | 0 |
| 85 | Time delays in the nonthermal radiation of solar flares according to observations of the CORONAS-F satellite. Cosmic Research, 2016, 54, 285-289. | 0.6 | 0 |
| 86 | Comparative analysis of loss-cone instabilities in the coronae of the Sun and stars. KosmÃ¬Ämna Nauka Ã¬ TehnologÃ¬Ã¢, 2003, 8, 144-146. | 0.5 | 0 |
| 87 | Coronal loops and pulsations of radiation from flare stars. KosmÃ¬Ämna Nauka Ã¬ TehnologÃ¬Ã¢, 2004, 10, 141-144. | 0.5 | 0 |
| 88 | 10.1007/s11443-008-1006-9. , 2010, 34, 52. | | 0 |
| 89 | 10.1007/s11447-008-1013-4. , 2010, 106, 154. | | 0 |
| 90 | On the Origin of Pulsations of Sub-THz Emission from Solar Flares. , 2014, , 395-410. | | 0 |

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| 91 | Energetic Particles in a Flare Loop: Spectra and Radiation Signatures. , 1990, , 421-427. | | 0 |
| 92 | On the Origin of Intense Radio Emission from Solar and Stellar Flares. , 1996, , 281-282. | | 0 |
| 93 | X-Ray Emission From Utracool Stars. Izvestiya Vysshikh Uchebnykh Zavedenij Radiofizika, 2021, 64, 419-429. | 0.1 | 0 |
| 94 | Photospheric Source of White-Light Flare Energy. Geomagnetism and Aeronomy, 2021, 61, 917-922. | 0.8 | 0 |