

Istvan Ballai

List of Publications by Year in descending order

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68
papers

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580821

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docs citations

68
times ranked

456
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Small-scale solar jet formation and their associated waves and instabilities. <i>Advances in Space Research</i> , 2023, 71, 1866-1892. | 2.6 | 7 |
| 2 | The Importance of Horizontal Poynting Flux in the Solar Photosphere. <i>Astrophysical Journal</i> , 2022, 927, 146. | 4.5 | 7 |
| 3 | Magnetohydrodynamic Wave Mode Identification in Circular and Elliptical Sunspot Umbrae: Evidence for High-order Modes. <i>Astrophysical Journal</i> , 2022, 927, 201. | 4.5 | 3 |
| 4 | New Approach for Analyzing Dynamical Processes on the Surface of Photospheric Vortex Tubes. <i>Astrophysical Journal</i> , 2022, 928, 3. | 4.5 | 7 |
| 5 | Critical Science Plan for the Daniel K. Inouye Solar Telescope (DKIST). <i>Solar Physics</i> , 2021, 296, 1. | 2.5 | 65 |
| 6 | Generation of Localised Vertical Streams in Unstable Stratified Atmosphere. <i>Fluids</i> , 2021, 6, 454. | 1.7 | 1 |
| 7 | Generation of Low-Frequency Kinetic Waves at the Footpoints of Pre-Flare Coronal Loops. <i>Solar Physics</i> , 2020, 295, 1. | 2.5 | 3 |
| 8 | Diagnostics of plasma ionisation using torsional Alfvén waves. <i>Astronomy and Astrophysics</i> , 2020, 635, L2. | 5.1 | 1 |
| 9 | Linear Waves in Partially Ionized Plasmas in Ionization Non-equilibrium. <i>Frontiers in Astronomy and Space Sciences</i> , 2019, 6, . | 2.8 | 10 |
| 10 | Dispersive shock waves in partially ionised plasmas. <i>Advances in Space Research</i> , 2019, 63, 1472-1482. | 2.6 | 5 |
| 11 | Propagation of Leaky MHD Waves at Discontinuities with Tilted Magnetic Field. <i>Solar Physics</i> , 2018, 293, 139. | 2.5 | 5 |
| 12 | Propagation of leaky surface waves on contact magnetohydrodynamic discontinuities in incompressible plasmas. <i>Physics of Plasmas</i> , 2018, 25, . | 1.9 | 3 |
| 13 | Rayleigh-Taylor instabilities with sheared magnetic fields in partially ionised plasmas. <i>Astronomy and Astrophysics</i> , 2018, 609, A23. | 5.1 | 10 |
| 14 | Dissipative instabilities in a partially ionised prominence plasma slab. <i>Astronomy and Astrophysics</i> , 2018, 610, A56. | 5.1 | 6 |
| 15 | Dissipative instability in a partially ionised prominence plasma slab. <i>Astronomy and Astrophysics</i> , 2017, 603, A78. | 5.1 | 4 |
| 16 | Statistical study of spatio-temporal distribution of precursor solar flares associated with major flares. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 459, 3532-3539. | 4.4 | 7 |
| 17 | Dissipative instability in partially ionised prominence plasmas. <i>Astronomy and Astrophysics</i> , 2015, 577, A82. | 5.1 | 16 |
| 18 | Statistical relationship between the succeeding solar flares detected by the RHESSI satellite. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 441, 1157-1165. | 4.4 | 3 |

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|----|--|-----|-----------|
| 19 | Sausage Mode Propagation in a Thick Magnetic Flux Tube. <i>Solar Physics</i> , 2014, 289, 1203-1214. | 2.5 | 4 |
| 20 | The P_1/P_2 period ratio for kink oscillations of an asymmetrical coronal loop. <i>Astronomische Nachrichten</i> , 2013, 334, 948-951. | 1.2 | 5 |
| 21 | Three-dimensional numerical simulation of magnetohydrodynamic-gravity waves and vortices in the solar atmosphere. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 436, 1268-1277. | 4.4 | 10 |
| 22 | The effect of the environment on the P_1/P_2 period ratio for kink oscillations of coronal loops. <i>Astronomy and Astrophysics</i> , 2012, 537, A41. | 5.1 | 12 |
| 23 | Transverse kink oscillations of expanding coronal loops. <i>Astronomy and Astrophysics</i> , 2012, 545, A118. | 5.1 | 5 |
| 24 | Nonlinear Effects in Resonant Layers in Solar and Space Plasmas. <i>Space Science Reviews</i> , 2011, 158, 421-450. | 8.1 | 6 |
| 25 | TRACE observations of driven loop oscillations. <i>Astronomy and Astrophysics</i> , 2011, 534, A13. | 5.1 | 18 |
| 26 | Magnetoacoustic surface gravity waves at a spherical interface. <i>Astronomy and Astrophysics</i> , 2011, 527, A12. | 5.1 | 9 |
| 27 | The dynamical solar atmosphere. <i>Journal of Physics: Conference Series</i> , 2010, 218, 012002. | 0.4 | 3 |
| 28 | Resonant Absorption of Fast Magnetoacoustic Waves due to Coupling into the Slow and Alfvén Continua in the Solar Atmosphere. <i>Solar Physics</i> , 2010, 264, 311-327. | 2.5 | 1 |
| 29 | The effect of longitudinal flow on resonantly damped kink oscillations. <i>Astronomy and Astrophysics</i> , 2010, 515, A46. | 5.1 | 29 |
| 30 | On the validity of nonlinear Alfvén resonance in space plasmas. <i>Astronomy and Astrophysics</i> , 2009, 494, 317-327. | 5.1 | 7 |
| 31 | Nonlinear resonant absorption of fast magnetoacoustic waves in strongly anisotropic and dispersive plasmas. <i>Physics of Plasmas</i> , 2009, 16, 042305. | 1.9 | 2 |
| 32 | Mean shear flows generated by nonlinear resonant Alfvén waves. <i>Physics of Plasmas</i> , 2009, 16, . | 1.9 | 6 |
| 33 | The problem of phase mixed shear Alfvén waves in the solar corona revisited. <i>Astronomische Nachrichten</i> , 2008, 329, 780-785. | 1.2 | 7 |
| 34 | Nonlinear theory of resonant slow waves in anisotropic and dispersive plasmas. <i>Physics of Plasmas</i> , 2008, 15, 082310. | 1.9 | 10 |
| 35 | Forced oscillations of coronal loops driven by EIT waves. <i>Astronomy and Astrophysics</i> , 2008, 488, 1125-1132. | 5.1 | 20 |
| 36 | Sampling the Coronal Magnetic Field. <i>AIP Conference Proceedings</i> , 2007, , . | 0.4 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Thermally Damped Waves in the Solar Corona. AIP Conference Proceedings, 2007, , . | 0.4 | 0 |
| 38 | MHD waves in stratified and dissipative plasmas. AIP Conference Proceedings, 2007, , . | 0.4 | 0 |
| 39 | Dispersive shock waves in the solar wind. Astronomische Nachrichten, 2007, 328, 734-737. | 1.2 | 11 |
| 40 | MHD waves at a spherical interface modelling EIT waves. Astronomische Nachrichten, 2007, 328, 769-772. | 1.2 | 3 |
| 41 | Heating of the solar and stellar coronae: a review. Astronomische Nachrichten, 2007, 328, 726-733. | 1.2 | 77 |
| 42 | Editors' note: Astron. Nachr. 8/2007. Astronomische Nachrichten, 2007, 328, 725-725. | 1.2 | 0 |
| 43 | Global Coronal Seismology. Solar Physics, 2007, 246, 177-185. | 2.5 | 35 |
| 44 | Slow magnetohydrodynamic waves in stratified and viscous plasmas. Physics of Plasmas, 2006, 13, 042108. | 1.9 | 11 |
| 45 | Diagnostics of local and global coronal magnetic field using global coronal waves. Proceedings of the International Astronomical Union, 2006, 2, 132. | 0.0 | 0 |
| 46 | Nonlinear waves in solar plasmas - a review. Journal of Physics: Conference Series, 2006, 44, 20-29. | 0.4 | 6 |
| 47 | Magnetohydrodynamic modes in a periodic magnetic steady state medium. Astronomy and Astrophysics, 2006, 449, 1193-1202. | 5.1 | 4 |
| 48 | On the Nature of Coronal EIT Waves. Astrophysical Journal, 2005, 633, L145-L148. | 4.5 | 70 |
| 49 | The sound of the Sun. Astronomy and Geophysics, 2005, 46, 4.27-4.30. | 0.2 | 3 |
| 50 | The Sun: for academics, students and idiots. Astronomy and Geophysics, 2004, 45, 4.44-4.45. | 0.2 | 0 |
| 51 | The effect of anisotropy on the propagation of linear compressional waves in magnetic flux tubes: Applications to astrophysical plasmas. Astronomy and Astrophysics, 2004, 415, 691-703. | 5.1 | 7 |
| 52 | Linear and non-linear MHD wave propagation in steady-state magnetic cylinders. Solar Physics, 2003, 217, 199-223. | 2.5 | 61 |
| 53 | Solitary waves in a Hall solar wind plasma. Astronomy and Astrophysics, 2003, 404, 701-707. | 5.1 | 23 |
| 54 | On dissipative effects in solar prominences. Astronomy and Astrophysics, 2003, 410, L17-L19. | 5.1 | 22 |

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|----|---|-----|-----------|
| 55 | Extended Leibovichâ€“Roberts equation in rarefied plasmas. <i>Physics of Plasmas</i> , 2002, 9, 4280-4284. | 1.9 | 7 |
| 56 | Nonlinear theory of resonant slow MHD waves in twisted magnetic flux tubes. <i>Journal of Plasma Physics</i> , 2002, 67, 79-97. | 2.1 | 8 |
| 57 | Linear and nonlinear wave propagation in rarefied plasmas. <i>Physics of Plasmas</i> , 2002, 9, 2593-2603. | 1.9 | 13 |
| 58 | Dynamics of nonlinear resonant slow MHD waves in twisted flux tubes. <i>Nonlinear Processes in Geophysics</i> , 2002, 9, 79-86. | 1.3 | 3 |
| 59 | Ducted compressional waves in the magnetosphere in the double-polytropic approximation. <i>Annales Geophysicae</i> , 2002, 20, 1553-1558. | 1.6 | 7 |
| 60 | Nonlinear resonant absorption of fast magnetoacoustic waves due to coupling into slow continua in the solar atmosphere. <i>Astronomy and Astrophysics</i> , 2001, 368, 662-675. | 5.1 | 9 |
| 61 | Linear and nonlinear resonant interaction of sound waves in dissipative layers. <i>Journal of Plasma Physics</i> , 2000, 64, 235-247. | 2.1 | 4 |
| 62 | Nonlinear theory of non-axisymmetric resonant slow waves in straight magnetic flux tubes. <i>Journal of Plasma Physics</i> , 2000, 64, 579-599. | 2.1 | 4 |
| 63 | Linear and nonlinear waves in dilute plasmas. <i>AIP Conference Proceedings</i> , 2000, , . | 0.4 | 0 |
| 64 | Absorption of fast magnetosonic waves in the solar atmosphere in the limit of weak nonlinearity. <i>AIP Conference Proceedings</i> , 2000, , . | 0.4 | 0 |
| 65 | Title is missing!. <i>Solar Physics</i> , 1999, 186, 67-97. | 2.5 | 17 |
| 66 | Resonant Absorption of Nonlinear Slow MHD Waves in Isotropic Steady Plasmas - I. Theory. <i>Solar Physics</i> , 1998, 180, 65-79. | 2.5 | 13 |
| 67 | Nonlinear theory of slow dissipative layers in anisotropic plasmas. <i>Physics of Plasmas</i> , 1998, 5, 252-260. | 1.9 | 34 |
| 68 | Interaction of sound waves with slow dissipative layers in anisotropic plasmas in the approximation of weak nonlinearity. <i>Physics of Plasmas</i> , 1998, 5, 2264-2273. | 1.9 | 14 |