

# Konstantin Kabin

## List of Publications by Year in descending order

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Version: 2024-02-01

58  
papers

1,218  
citations

361413

20  
h-index

395702

33  
g-index

58  
all docs

58  
docs citations

58  
times ranked

1153  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Interaction of Mercury with the Solar Wind. <i>Icarus</i> , 2000, 143, 397-406.  | 2.5 | 146       |
| 2  | Drift resonant generation of peaked relativistic electron distributions by Pc 5 ULF waves. <i>Journal of Geophysical Research</i> , 2008, 113, .                             | 3.3 | 77        |
| 3  | Optical characterization of the growth and spatial structure of a substorm onset arc. <i>Journal of Geophysical Research</i> , 2010, 115, .                                  | 3.3 | 53        |
| 4  | Analysis of the 3-D shape of the terrestrial bow shock by interball/magion 4 observations. <i>Advances in Space Research</i> , 2001, 28, 857-862.                            | 2.6 | 47        |
| 5  | Modeling ULF waves in a compressed dipole magnetic field. <i>Journal of Geophysical Research</i> , 2010, 115, .  | 3.3 | 47        |
| 6  | Characterization of ULF pulsations by THEMIS. <i>Geophysical Research Letters</i> , 2009, 36, .  | 4.0 | 46        |
| 7  | Open-closed field line boundary position: A parametric study using an MHD model. <i>Journal of Geophysical Research</i> , 2004, 109, .                                       | 3.3 | 43        |
| 8  | A three-dimensional high Mach number asymmetric magnetopause model from global MHD simulation. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 5645-5666. | 2.4 | 43        |
| 9  | Wind observations of the terrestrial bow shock: 3-D shape and motion. <i>Earth, Planets and Space</i> , 2001, 53, 1001-1009.   | 2.5 | 41        |
| 10 | Three dimensional shape of the magnetopause: Global MHD results. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.  | 3.3 | 39        |
| 11 | Internal reconnection for northward interplanetary magnetic field. <i>Journal of Geophysical Research</i> , 2005, 110, .   | 3.3 | 36        |
| 12 | THEMIS observations of the spatial extent and pressure-pulse excitation of field line resonances. <i>Geophysical Research Letters</i> , 2010, 37, .                          | 4.0 | 36        |
| 13 | Comparison of photometer and global MHD determination of the open-closed field line boundary. <i>Journal of Geophysical Research</i> , 2004, 109, .                          | 3.3 | 35        |
| 14 | Planetary bow shocks: Gasdynamic analytic approach. <i>Journal of Geophysical Research</i> , 2003, 108, .  | 3.3 | 34        |
| 15 | Magnetospheric field-line resonances: Ground-based observations and modeling. <i>Journal of Geophysical Research</i> , 2005, 110, .  | 3.3 | 34        |
| 16 | The IMF dependence of the magnetopause from global MHD simulations. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 3113-3125.                            | 2.4 | 31        |
| 17 | Divergence-free magnetic field interpolation and charged particle trajectory integration. <i>Journal of Geophysical Research</i> , 2006, 111, .                              | 3.3 | 28        |
| 18 | Dipole tilt control of the magnetopause for southward IMF from global magnetohydrodynamic simulations. <i>Journal of Geophysical Research</i> , 2012, 117, .                 | 3.3 | 28        |

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|----|---|-----|-----------|
| 19 | Origin of the interhemispheric potential mismatch of merging cells for interplanetary magnetic field-dominated periods. <i>Journal of Geophysical Research</i> , 2007, 112, .   | 3.3 | 22        |
| 20 | Energy transfer across the magnetopause for northward and southward interplanetary magnetic fields. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 2021-2033.                                       | 2.4 | 22        |
| 21 | Dynamic response of Earth's magnetosphere to By-reversals. <i>Journal of Geophysical Research</i> , 2003, 108, .  | 3.3 | 21        |
| 22 | Theory of dispersive shear Alfvén wave focusing in Earth's magnetosphere. <i>Geophysical Research Letters</i> , 2005, 32, .   | 4.0 | 19        |
| 23 | Nonlinear effects in the ionospheric Alfvén resonator. <i>Journal of Geophysical Research</i> , 2008, 113, .  | 3.3 | 19        |
| 24 | Comparison of the open-closed separatrix in a global magnetospheric simulation with observations: The role of the ring current. <i>Journal of Geophysical Research</i> , 2010, 115, .                                   | 3.3 | 19        |
| 25 | A note on the compression ratio in MHD shocks. <i>Journal of Plasma Physics</i> , 2001, 66, 259-274.  | 2.1 | 18        |
| 26 | Velocity distributions of energetic atoms in planetary exospheres from dissociative recombination. <i>Journal of Geophysical Research</i> , 2002, 107, 7-1.   | 3.3 | 18        |
| 27 | A 3D Parametric Martian Bow Shock Model with the Effects of Mach Number, Dynamic Pressure, and the Interplanetary Magnetic Field. <i>Astrophysical Journal</i> , 2020, 903, 125.  | 4.5 | 18        |
| 28 | Ionospheric signatures of internal reconnection for northward interplanetary magnetic field: Observation of reciprocal cells and magnetosheath ion precipitation. <i>Journal of Geophysical Research</i> , 2006, 111, . | 3.3 | 17        |
| 29 | Pressure balance across the magnetopause: Global MHD results. <i>Planetary and Space Science</i> , 2015, 106, 108-115.  | 1.7 | 16        |
| 30 | MHD simulation of energy transfer across magnetopause during sudden changes of the IMF orientation. <i>Planetary and Space Science</i> , 2014, 97, 50-59.   | 1.7 | 14        |
| 31 | The dipole tilt angle dependence of the bow shock for southward IMF: MHD results. <i>Planetary and Space Science</i> , 2015, 106, 99-107.   | 1.7 | 14        |
| 32 | Deformation and evolution of solar wind discontinuities through their interactions with the Earth's bow shock. <i>Journal of Geophysical Research</i> , 2009, 114, .  | 3.3 | 13        |
| 33 | Test kinetic modelling of collisionless perpendicular shocks. <i>Journal of Plasma Physics</i> , 2008, 74, 301-318.   | 2.1 | 11        |
| 34 | The influence of IMF clock angle on the cross section of the tail bow shock. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 11,077.   | 2.4 | 10        |
| 35 | Influence of the Interplanetary Magnetic Field Cone Angle on the Geometry of Bow Shocks. <i>Astronomical Journal</i> , 2020, 159, 227.  | 4.7 | 10        |
| 36 | Particle energization by a substorm dipolarization. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 349-367.   | 2.4 | 9         |

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|----|--|------|-----------|
| 37 | Effect of solar wind density and velocity on the subsolar standoff distance of the Martian magnetic pileup boundary. <i>Astronomy and Astrophysics</i> , 2021, 651, A22.   | 5.1  | 9         |
| 38 | The Influence of IMF $B_y$ on the Bow Shock: Observation Result. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 1915-1926.   | 2.4  | 8         |
| 39 | Earth's Bow Shock: A New Three-Dimensional Asymmetric Model With Dipole Tilt Effects. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 5396-5407.  | 2.4  | 7         |
| 40 | Dipole tilt effects on the magnetosphere-ionosphere convection system during interplanetary magnetic field $B_y$ -dominated periods: MHD modeling. <i>Journal of Geophysical Research</i> , 2010, 115, .                                 | 3.3  | 6         |
| 41 | Modeling the relationship between substorm dipolarization and dispersionless injection. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.   | 3.3  | 6         |
| 42 | Motion of a charged particle in an axisymmetric longitudinal magnetic field that is inversely proportional to the radius. <i>Computer Physics Communications</i> , 2015, 189, 155-161.   | 7.5  | 6         |
| 43 | Theoretical aspects of kinetic and inertial scale dispersive Alfvén waves in Earth's magnetosphere. <i>Geophysical Monograph Series</i> , 2006, , 91-108.  | 0.1  | 5         |
| 44 | Mercury redux. <i>Nature Geoscience</i> , 2008, 1, 564-564.  | 12.9 | 4         |
| 45 | Faraday Rotation of Automatic Dependent Surveillance-Broadcast (ADS-B) Signals as a Method of Ionospheric Characterization. <i>Radio Science</i> , 2017, 52, 1293-1300.  | 1.6  | 4         |
| 46 | Two examples of exact calculations of the adiabatic invariant for charged particle motion in non-uniform axisymmetric magnetic fields. <i>Physics of Plasmas</i> , 2019, 26, 012114.   | 1.9  | 4         |
| 47 | Exact Evaluation of Collision Integrals for the Nonlinear Boltzmann Equation. <i>AIP Conference Proceedings</i> , 2003, , .  | 0.4  | 3         |
| 48 | Faraday Rotation, Total Electron Content, and Their Sensitivity to the Average Parallel Component of the Magnetic Field. <i>Radio Science</i> , 2018, 53, 1075-1088.   | 1.6  | 3         |
| 49 | Physics-Based Analytical Model of the Planetary Bow Shock Position and Shape. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029104.  | 2.4  | 3         |
| 50 | Analytical Description of the Near Planetary Bow Shock Based on Gas-Dynamic and Magneto-Gas-Dynamic Modeling for the Magnetic Field Parallel and Perpendicular to the Plasma Flow. <i>Geomagnetism and Aeronomy</i> , 2020, 60, 162-170. | 0.8  | 3         |
| 51 | Adiabatic invariant of a charged particle moving in a magnetic field with a constant gradient. <i>Physics of Plasmas</i> , 2021, 28, .   | 1.9  | 3         |
| 52 | Excitation and steepening of ion-acoustic waves in the ionospheric Alfvén resonator. <i>Journal of Geophysical Research</i> , 2010, 115, .   | 3.3  | 2         |
| 53 | Threshold speed for two-dimensional confinement of charged particles in certain axisymmetric magnetic fields. <i>Canadian Journal of Physics</i> , 2018, 96, 519-523.  | 1.1  | 2         |
| 54 | POLARIZATION PROPERTIES OF THE ULTRA-LOW FREQUENCY WAVES IN NON-AXISYMMETRIC BACKGROUND MAGNETIC FIELDS. , 2009, , 225-235.  |      | 2         |

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|----|---|-----|-----------|
| 55 | Ion temperature anisotropy effects on the dispersion relation and threshold conditions of a sheared current-driven electrostatic ion-acoustic instability with applications to the collisional high-latitude F-region. <i>Journal of Plasma Physics</i> , 2015, 81, . | 2.1 | 1         |
| 56 | SPATIAL DISTRIBUTION AND ENERGY SPECTRUM OF HEAVY IONS IN THE HERMEAN MAGNETOSPHERE WITH APPLICATIONS TO MESSENGER FLYBYS. , 2009, , 1-16.  |     | 1         |
| 57 | ANALYTICAL MODEL OF THE PLANETARY BOW SHOCK FOR VARIOUS MAGNETIC FIELD DIRECTIONS BASED ON MHD CALCULATIONS. <i>SolneĀno-zemnaĀ Fizika</i> , 2020, 6, 44-49.  | 0.9 | 1         |
| 58 | Epicycloid fits to trajectories of particles confined to the equatorial plane of a magnetic dipole. <i>Physics of Plasmas</i> , 2021, 28, 102505.   | 1.9 | 1         |