

## SELECTED KEYWORDS FOR ANNALES GEOPHYSICAE

### ATMOSPHERIC COMPOSITION AND STRUCTURE

0305 Aerosols and particles  
0310 Airglow and aurora  
0315 Biosphere-atmosphere interactions  
0320 Cloud physics and chemistry  
0325 Evolution of the atmosphere  
0330 Geochemical cycles  
0335 Ion chemistry of the atmosphere  
0340 Middle atmosphere – composition and chemistry  
0345 Pollution-urban and regional  
0350 Pressure, density, and temperature  
0355 Thermosphere-composition and chemistry  
0360 Transmission and scattering of radiation  
0365 Troposphere-composition and chemistry  
0370 Volcanic effects  
0394 Instruments and techniques  
0399 General or miscellaneous

### ELECTROMAGNETICS

0604 Antenna arrays  
0609 Antennas  
0614 Biological effects  
0619 Electromagnetic theory  
0624 Guided waves  
0629 Inverse scattering  
0634 Measurement and standards  
0639 Nonlinear electromagnetics  
0644 Numerical methods  
0649 Optics  
0654 Plasmas  
0659 Random media and rough surfaces  
0664 Reflectors and feeds  
0669 Scattering and diffraction  
0674 Signal processing and adaptive antennas  
0679 Singularity expansion method  
0684 Transient and time domain  
0689 Wave propagation  
0694 Instrumentation and techniques  
0699 General or miscellaneous

### GEOMAGNETISM AND PALEOMAGNETISM

1505 Biomagnetism  
1510 Dynamo theories  
1515 Geomagnetic induction  
1520 Paleomagnetic secular variation

1525 Paleomagnetism applied to tectonics  
1530 Rapid time variations  
1535 Reversals (process, time scale, magnetostratigraphy)  
1540 Rock and mineral magnetism  
1545 Spatial variations (all harmonics and anomalies)  
1550 Spatial variations attributed to sea floor spreading  
1555 Time variations, diurnal to secular  
1560 Time variations, secular and long term  
1594 Instruments and technique.  
1599 General or miscellaneous

### HISTORY OF GEOPHYSICS

1704 Atmospheric sciences  
1709 Geodesy  
1714 Geomagnetism and paleomagnetism  
1719 Hydrology  
1724 Ocean sciences  
1729 Planetology  
1734 Seismology  
1739 Solar-planetary relationships  
1744 Tectonophysics  
1749 Volcanology, geochemistry, and petrology  
1794 Instruments and techniques  
1799 General or miscellaneous

### HYDROLOGY

1803 Anthropogenic effects  
1806 Chemistry of fresh water  
1809 Desertification  
1812 Drought  
1815 Erosion and sedimentation  
1818 Evapotranspiration  
1821 Floods  
1824 Geomorphology  
1827 Glaciology  
1830 Groundwater  
1833 Hydroclimatology  
1836 Hydrologic budget  
1839 Infiltration  
1842 Irrigation  
1845 Limnology  
1848 Networks  
1851 Plant ecology  
1854 Precipitation  
1857 Reservoirs  
1860 Runoff and streamflow

1863 Snow and ice  
1866 Soil moisture  
1869 Stochastic processes  
1872 Transport  
1875 Water balance  
1878 Water-energy interactions  
1881 Water quality  
1884 Water supply  
1894 Instruments and techniques  
1899 General or miscellaneous

### INTERPLANETARY PHYSICS

2104 Cosmic rays  
2109 Discontinuities  
2114 Energetic particles  
2119 Flare and stream dynamics  
2124 Heliopause and solar wind termination  
2129 Interplanetary dust  
2134 Interplanetary magnetic fields  
2139 Interplanetary shocks  
2144 Interstellar gas  
2149 MHD waves and turbulence  
2154 Planetary bow shocks  
2159 Plasma waves and turbulence  
2164 Solar wind plasma  
2169 Sources of the solar wind  
2194 Instruments and techniques  
2199 General or miscellaneous

### IONOSPHERE

2403 Active experiments  
2407 Auroral ionosphere  
2411 Electric fields and currents  
2415 Equatorial ionosphere  
2419 Ion chemistry and composition  
2423 Ionization mechanisms  
2427 Ionosphere-atmosphere interactions  
2431 Ionosphere-magnetosphere interactions  
2435 Ionospheric disturbances  
2439 Ionospheric irregularities  
2443 Mid-latitude ionosphere  
2447 Modeling and forecasting  
2451 Particle acceleration  
2455 Particle precipitation  
2459 Planetary ionospheres  
2463 Plasma convection

2467 Plasma temperature and density  
2471 Plasma waves and instabilities  
2475 Polar ionosphere  
2479 Solar radiation and cosmic ray effects  
2483 Wave-particle interactions  
2487 Wave propagation  
2494 Instruments and techniques  
2499 General or miscellaneous

#### **MAGNETOSPHERIC PHYSICS**

2704 Auroral phenomena  
2708 Current systems  
2712 Electric fields  
2716 Energetic particles, precipitating  
2720 Energetic particles, trapped  
2724 Magnetopause, cusp, and boundary layers  
2728 Magnetosheath  
2732 Magnetosphere interactions with satellites and rings  
2736 Magnetosphere-ionosphere interactions  
2740 Magnetospheric configuration and dynamics  
2744 Magnetotail  
2748 Magnetotail boundary layers  
2752 MHD waves and instabilities  
2756 Planetary magnetospheres  
2760 Plasma convection  
2764 Plasma sheet  
2768 Plasmasphere  
2772 Plasma waves and instabilities  
2776 Polar cap phenomena  
2780 Solar wind interactions with unmagnetized bodies  
2784 Solar wind-magnetosphere interactions  
2788 Storms and substorms  
2794 Instruments and techniques  
2799 General or miscellaneous

#### **METEOROLOGY AND ATMOSPHERIC DYNAMICS**

3304 Atmospheric electricity  
3309 Climatology  
3314 Convective processes  
3319 General circulation  
3324 Lightning  
3329 Mesoscale meteorology  
3334 Middle atmosphere dynamics  
3339 Ocean-atmosphere interactions  
3344 Paleoclimatology  
3349 Polar meteorology  
3354 Precipitation  
3359 Radiative processes  
3364 Synoptic-scale meteorology  
3369 Thermospheric dynamics

3374 Tropical meteorology  
3379 Turbulence  
3384 Waves and tides  
3394 Instruments and techniques  
3399 General or miscellaneous

#### **RADIO SCIENCE**

6904 Atmospheric propagation  
6909 Electromagnetic metrology  
6914 Electromagnetic noise and interference  
6919 Electro-optics  
6924 Interferometry  
6929 Ionospheric physics  
6934 Ionospheric propagation  
6939 Magnetospheric physics  
6944 Nonlinear phenomena  
6949 Radar astronomy  
6954 Radio astronomy  
6959 Radio oceanography  
6964 Radio wave propagation  
6969 Remote sensing  
6974 Signal processing  
6979 Space and satellite communication  
6984 Waves in plasma  
6994 Instruments and techniques  
6999 General or miscellaneous

#### **SOLAR PHYSICS, ASTROPHYSICS, AND ASTRONOMY**

7504 Celestial mechanics  
7509 Corona and transition region  
7514 Energetic particles  
7519 Flares and mass ejections  
7524 Magnetic fields  
7529 Photosphere and chromosphere  
7534 Radio emissions  
7539 Stellar astronomy  
7544 Stellar interiors and dynamo theory  
7549 Ultraviolet emissions  
7554 X rays and gamma rays  
7594 Instruments and techniques  
7599 General or miscellaneous

#### **SPACE PLASMA PHYSICS**

7803 Active perturbation experiments  
7807 Charged particle motion and acceleration  
7811 Discontinuities  
7815 Electrostatic structures  
7819 Experimental and mathematical techniques

7823 Ionization processes  
7827 Kinetic and MHD theory  
7831 Laboratory studies  
7835 Magnetic reconnection  
7839 Nonlinear phenomena  
7843 Numerical simulation studies  
7847 Radiation processes  
7851 Shock waves  
7855 Spacecraft sheaths, wakes, charging  
7859 Transport processes  
7863 Turbulence  
7867 Wave-particle interactions  
7871 Waves and instabilities  
7875 Wave-wave interactions  
7894 Instruments and techniques  
7899 General or miscellaneous

#### **GENERAL OR MISCELLANEOUS**

9805 Instruments useful in three or more fields  
9810 New fields (not classifiable under other headings)  
9815 Notices and announcements  
9820 Techniques applicable in three or more fields  
9900 Corrections