

Contents

	PAGE
Introduction <i>Donald J. Williams and Gilbert D. Mead</i>	1
Solar Wind Interaction with the Geomagnetic Field <i>E. N. Parker</i>	3
Plasma Flow around the Magnetosphere .. <i>J. R. Spreiter and A. Y. Alksne</i>	11
Laboratory Experiments Related to the Solar Wind and the Magnetosphere <i>K. Schindler</i>	51
Quantitative Models of the Magnetosphere <i>J. G. Roederer</i>	77
The Geomagnetic Tail <i>N. F. Ness</i>	97
Auroras and Polar Substorms: Observations and Theory <i>B. Hultqvist</i>	129
Polar Auroras, Polar Substorms, and Their Relationships with the Dynamics of the Magnetosphere <i>Y. I. Feldstein</i>	179
Main Mechanisms in the Formation of the Earth's Radiation Belts <i>B. A. Tverskoy</i>	219
Charged Particles in the Magnetosphere <i>J. A. Van Allen</i>	233
Particle Fluxes in the Outer Geomagnetic Field <i>S. N. Vernov, E. V. Gorchakov, S. N. Kuznetsov, Yu. I. Logachev, E. N. Sosnovets, and V. G. Stolpovsky</i>	257
Low-Frequency Waves in the Magnetosphere <i>R. A. Helliwell</i>	281
Pitch-Angle Diffusion of Electrons in the Magnetosphere ... <i>C. S. Roberts</i>	305
Low-Energy Plasma in the Earth's Magnetosphere <i>K. I. Gringauz</i>	339
Consequences of a Magnetospheric Plasma <i>C. F. Kennel</i>	379
Magnetospheric Convection <i>W. I. Axford</i>	421