

## CONTENTS

Preface	v
An Introduction of the Controlled Nuclear Fusion on the Physical Basis <i>D. Palumbo</i>	1
Tokamak Plasma: A Complex Physical System <i>B. B. Kadomtsev</i>	20
Advanced Tokamak Research on the DIII-D Tokamak <i>V. S. Chan</i>	39
Refractometric Techniques in Plasma Diagnostics <i>H. Soltwisch</i>	55
Internal Magnetic Field Measurements <i>H. Soltwisch</i>	74
Superconducting Tokamak Program HT-7 in ASIPP <i>Huo Yu-ping</i>	91
The Status and Future Plans of the Helical System Research <i>M. Fujiwara</i>	99
Review of Plasma Confinement in Helical Systems <i>M. Fujiwara</i>	130
Review of Lower Hybrid Current Drive Experiments <i>K. Ushigusa</i>	154
Trajectories in Tokamak <i>L. Laurent</i>	212
Physics of Long Pulse Experiments and Tore Supra Results <i>L. Laurent</i>	237

The First Fusion Experiments Using D-T Plasmas in the JET Tokamak <i>A. Gibson</i>	269
Status, Programmes and Schedules for JET Experiments in 1994 <i>A. Gibson</i>	270
Onset of Poloidal Rotation in Tokamak Plasmas <i>Liu, Sagdeev, Galeev &amp; Guzdar</i>	278
H-mode Studies with Emphasis on the Results from ASDEX and W7-AS <i>F. Wagner</i>	290