

APPENDIX 4. List of Publications I (NIFS Series)

- NIFS-832 N. Hatano, R. Shirasaki and H. Nakamura
Magnetization of a Two-Dimensional Electron Gas with a Spin-orbit Interaction
Apr. 2006
- NIFS-833 M. Rajkovic and M. Skoric
Multifractal Characterization of L- and H-mode Plasma Edge Turbulence
June 2006
- NIFS-834 O. Motojima et al
Extended Steady-State and High-Beta Regimes of Net-Current Free Heliotron Plasmas in the Large Helical Device
Oct. 2006
- NIFS-835 A. Fujisawa et al.
Experimental Progress on Zonal Flow Physics in Toroidal Plasmas
Oct. 2006
- NIFS-836 J. Miyazawa et al.
Density Regime of Complete Detachment and Operational Density Limit in LHD
Oct. 2006
- NIFS-837 M. Yokoyama et al.
Core Electron-Root Confinement (CERC) in Helical Plasmas
Oct. 2006
- NIFS-838 T.-H. Watanabe and H. Sugama
Gyrokinetic Theory and Simulation of Zonal Flows and Turbulence in Helical Systems
Oct. 2006
- NIFS-839 S. Okamura et al.
Progress of Confinement Physics Study in Compact Helical System
Oct. 2006
- NIFS-840 N. Tamura et al.
Impact of Nonlocal Electron Heat Transport on the High Temperature Plasmas of LHD
Oct. 2006
- NIFS-841 S. Sakakibara et al.
Stability in High-Beta Plasmas of LHD
Oct. 2006
- NIFS-842 N. Ohyaibu et al.
Super Dense Core Plasma due to Internal Diffusion Barrier in LHD
Oct. 2006
- NIFS-843 K. Toi et al.
Characteristic Features of Edge Transport Barrier Formed in Helical Divertor Configuration of the Large Helical Device
Oct. 2006
- NIFS-844 T. Mutoh et al.
Steady-State Operation of ICRF Heated Plasma in the Large Helical Device
Oct. 2006
- NIFS-845 S. Masuzaki et al.
Particle Balance Study in the Large Helical Device
Oct. 2006

- NIFS-846 N. Ohno et al.
Bursty Fluctuation Characteristics in SOL/Divertor Plasmas of Large Helical Device
Oct. 2006
- NIFS-847 M. Tokitani et al.
Quantitative Analysis of Plasma Particles in Materials Exposed to LHD Divertor Plasmas
Oct. 2006
- NIFS-848 K. Ida et al.
Dynamic Transport Study of the Plasmas with Transport Improvement in LHD and JT-60U
Oct. 2006
- NIFS-849 Y. Takeiri et al.
Confinement Improvement in High-ion Temperature Plasmas Heated with High-energy
Negative-NBI in LHD
Oct. 2006
- NIFS-850 M. Isobe et al.
Fast Ion-Driven MHD Instabilities and Consequent Fast Ion Losses in the Compact Helical System
Oct. 2006
- NIFS-851 K. Saito et al.
Study of High-energy Ion Tail Formation with Second Harmonic ICRF Heating and NBI in LHD
Oct. 2006
- NIFS-852 M. Yoshinuma
Formation of Radial Electric Field Shear at Boundary of Magnetic Island in LHD
Oct. 2006
- NIFS-853 S. Kado et al.
Dynamics of the Pedestal Structure in the Edge Transport Barrier in CHS
Oct. 2006
- NIFS-854 S. Morita et al.
Characteristic Features of Edge Localized Mode under the Presence of Edge Ergodic Magnetic Field
Layer in LHD
Oct. 2006
- NIFS-855 H. Yamada et al.
Density Limit in Discharges with High Internal Inductance on JT-60U
Oct. 2006
- NIFS-856 S. Ohdachi et al.
Two-Dimensional Structure of MHD Instabilities and their Non-Linear Evolution in the Large
Helical Device
Oct. 2006
- NIFS-857 N. Nakajima
Thermal Diffusion by Stochastic Electromagnetic Fluctuations
Oct. 2006
- NIFS-858 S. Satake
Global Simulation of the GAM Oscillation and Damping in a Drift Kinetic Model
Oct. 2006
- NIFS-859 A. Ishizawa et al.
Multi-Scale-Nonlinear Interactions among Micro-turbulence, Magnetic Islands, and Zonal Flows
Oct. 2006
- NIFS-860 R. Ishizaki et al.
MHD Simulation on Ablation Cloud in Tokamak and Heliotron
Oct. 2006

- NIFS-861 N. Kasuya and K. Itoh
Two-dimensionally Steep Structure of the Electric Field in Tokamak H-mode
Oct. 2006
- NIFS-862 N. Mizuguchi et al.
Nonlinear Simulation of Edge-Localized Mode in Spherical Tokamak
Oct. 2006
- NIFS-863 A. Iwamoto et al.
Development of the Foam Cryogenic Target for the FIREX Project
Oct. 2006
- NIFS-864 S. Imagawa et al.
Achievement of High Availability in Long-term Operation and Upgrading Plan of the LHD Superconducting System
Oct. 2006
- NIFS-865 O. Kaneko et al.
High Performance Operation of Negative-Ion-Based Neutral Beam Injection System for the Large Helical Device
Oct. 2006
- NIFS-866 T. Tanaka et al.
Neutronics Investigation of Advanced Self-Cooled Liquid Blanket Systems in Helical Reactor
Oct. 2006
- NIFS-867 O. Mitarai et al.
Minimization of the External Heating Power by Long Fusion Power Rise-up Time for Self-ignition Access in the Helical Reactor FFHR2m
Oct. 2006
- NIFS-868 Y. Nakamura et al.
Analysis of Net Plasma Currents in Non-Axisymmetric Plasmas
Oct. 2006
- NIFS-869 K. Itoh et al.
Physics of Electron Internal Transport Barrier in Toroidal Helical Plasmas
Oct. 2006
- NIFS-870 H. Sugama, T.-H. Watanabe and W. Horton
Collisionless Kinetic-fluid Model of Zonal Flows in Toroidal Plasmas
Dec. 2006
- NIFS-871 M. Nunami, R. Kannno, S. Satake H. Takamaru, H. Sugama and M. Okamoto
Neoclassical Transport Analysis around An $m/n = 1/1$ Magnetic Island
Mar. 2007
- NIFS-DATA-97 T. Ono, K. Shibata, T. Kenmotsu, T. Muramoto, Z. Li c T. Kawamura
Extended Incident-Angle Dependence Formula of Sputter Yield
June 2006
- NIFS-DATA-98 M. Kimura, A. Igarashi, M. Imai, Y. Itikawa, M. Kitajima, T. Kusakabe, K. Moribayashi, T. Morishita, K. Motohashi, L. Pichl, R. Suzuki, D. Kato, I. Murakami, T. Kato and M. Kato
Report on Cross Section Data Compilation for electron and Ion Collisions with Molecules of Hydrogen, Hydrogen Isotopes, Nitrogen, Oxygen, Hydrocarbons, Water and Carbon Oxide
Sep. 2006

- NIFS-DATA-99 I. Skobelev, I. Murakami and T. Kato
Recommended Data on Proton-Ion Collision Rate Coefficients for Fe XVII - Fe XXIII Ions
Jan. 2007
- NIFS-MEMO-49 Y. Ogawa and K. Okano
Socio-Economic Research for Innovative Energy Technologies
Oct. 2006
- NIFS-MEMO-50 Safety and Environmental Research Center, National Institute for Fusion Science
Report on Administrative Work for Radiation Safety from April 2004 to March 2006
Nov. 2006
- NIFS-MEMO-51 Edited by the SNET Task: R. Horiguchi (Chair), Kenzo Tsuda, Y. Nagayama, S. Ishiguro, T. Yamamoto, S. Takami (Network Manager)
Summary Report using SNET(Network for Collaboration using Super-SINET) in the 2005 fiscal year
Nov. 2006
- NIFS-MEMO-52 T. Yamamoto
Development of the Intramural Server for Distributing the Virus-definition-file.
Feb. 2007
- NIFS-MEMO-53 T. Yamamoto
Development of a File Exchange System Based on the FTP Service Using Temporary Accounts
Mar. 2007
- NIFS-PROC-62 Edited by H. Akiyama and S. Katsuki
Physics and Applications of High Energy Density Plasmas Produced by Pulsed Power
Apr. 2006
- NIFS-PROC-63 K. Toi (Ed.)
Proceedings of 9th IAEA Technical Meeting on "Energetic Particles in Magnetic Confinement Systems" 9 to 11 November 2005, Hida Earth Wisdom Center, Takayama, Japan
Apr. 2006
- NIFS-PROC-64 Ed. W. Jiang
The Frontiers of Pulse Power and Particle Beam Technology
June 2006
- NIFS-PROC-65 H. Sanuki
SOKENDAI Lecture Series "Mathematics for Physics "Maghematical Tools for Nonlinear Phenomena (Lecture series I)
June 2006
- NIFS-TECH-14 T. Watanabe, M. Yoshida, S. Masuzaki, M. Emoto and Y. Nagayama
How to Use the Numerical System "LHD_LINES_OF_FORCE.EXE" for the Visualization of Lines of Force in the Large Helical Device
Sep. 2006