

JOURNAL OF PLASMA AND FUSION RESEARCH

The Journal of the Japan Society of Plasma Science and Nuclear Fusion Research

Vol. 79, No.10, October 2003

Prologue		
New Research Ways Expected of Academic Plasma and Fusion Scientists	YAMANAKA Tatsuhiko 975	
Rapid Communications		
Transition of Edge Particle Transport in CHS	OKAMURA Shoichi, MINAMI Takashi, SUZUKI Chihiro, ISOBE Mitsutaka, OISHI Tetsutarou, IDA Katsumi, YOSHIMURA Yasuo, NAGAOKA Kenichi, FUJISAWA Akihito, TOI Kazuo, AKIYAMA Tsuyoshi, IGUCHI Harukazu, IKEDA Ryosuke, KADO Shinichiro, MATSUOKA Keisuke, MATSUSHITA Hiroyuki, NAKAMURA Kiichiro, NAKANO Haruhisa, NISHIMURA Shin, NISHIURA Masaki, OHSHIMA Shinsuke, SHIMIZU Akihiro, TAKAGI, Shoji, TAKAHASHI Chihiro, TAKEUCHI Masaki and YOSHINUMA Mikiro	977
Excitation of Stable MHD Mode Using Electrodes on the Compact Helical System Plasmas	MATSUNAGA Go, TOI Kazuo and CHS Group 980	
A New Method of Rapid Plasma Heating Using a Combination of NBI and Rapid Density Increase	HIRANO Yoichi 983	
Commentary		
Present and Future of Laser Accelerator	KITAGAWA Yoneyoshi 985	
Special Topic Article		
Generation of Atmospheric-Pressure Glow Discharge and Its Applications		
1. The Circumstances of Atmospheric-Pressure Glow Plasma Study	KOGOMA Masuhiro 1000	
2. Production of Atmospheric-Pressure Glow Discharge	TAKAKI Koichi, FUJIWARA Tamiya and TOCHIKUBO Fumiyoshi 1002	
3. Applications of Atmospheric-Pressure Glow Plasma		
3.1 Surface Treatment of Organic Materials	KOGOMA Masuhiro 1009	
3.2 Advanced Carbon-Based Materials Processing in Atmospheric-Pressure Glow Discharge	NOZAKI Tomohiro and OKAZAKI Ken 1016	
3.3 Practical Uses of the Atmospheric-Pressure Plasma Processing Unit "Aiplasma"	SAWADA Yasushi 1022	
4. Technical Issues and Future Prospects of Non-Thermal Atmospheric-Pressure Plasma	ITATANI Ryohei 1029	
Lecture Note		
Physics and Applications of Laser Ablation		
1. Introduction	SASAKI Koichi and OKADA Tatsuo 1033	
2. Interaction of Laser Light with Solid	MURAKAMI Kouichi 1035	
Contributed Papers		
Development of Fast Charge Exchange Recombination Spectroscopy by Using Interference Filter Method in JT-60U	KOBAYASHI Shinji, SAKASAI Akira, KOIDE Yoshihiko, SAKAMOTO Yoshiteru KAMADA Yutaka, HATAE Takaki, OYAMA Naoyuki and MIURA Yukitoshi 1043	
Spectroscopic Diagnostics for ITER	SUGIE Tatsuo, COSTLEY Alan, MALAQUIAS Artur and WALKER Chris 1051	
High Speed and High Functional Inverter Power Supplies for Plasma Generation and Control, and their Performance	UESUGI Yoshihiko, RAZZAK Mohammad A., KONDO Kenji, KIKUCHI Yusuke, TAKAMURA Shuichi, IMAI Takahiro and TOYODA Mitsuhiro 1062	
Review Paper		
Accounting and Control of Tritium at the Tritium Process Laboratory (TPL) of JAERI - Results of 15-year Operation and Research Activity -	NISHI Masataka, YAMANISHI Toshihiko, HAYASHI Takumi, YAMADA Masayuki and SUZUKI Takumi 1078	
Introduction of Research Group		
Inuzuka Laboratory, Department of Electrical and Electronic Engineering, Faculty of Engineering, Shizuoka University	1085	
Journal of Plasma and Fusion Research Prizes	1087	
News of Related Fields	1088	
Plasma and Fusion Calendar	1093	
Announcement	1095	
List of Newly Arrived Publications, NIFS	1099	

Published Monthly by

The Japan Society of Plasma Science and Nuclear Fusion Research
3-1-1, Uchiyama, Chikusa-ku, Nagoya 464-0075, Japan

Tel 052-735-3185, Fax 052-735-3485, E-mail:jspf@nifs.ac.jp, URL:<http://jspf.nifs.ac.jp/>