Rapid Communications

Expansion of Scaling Law of Field-Aligned Potential Difference with Increased Plug ECRH Power in GAMMA10
SAITO Teruo, TATEMATSU Yoshinori, IKEGAMI Hirokazu, SEKINE Takayuki, NAGAI Daichi, NOZAKI Kiyoshi, YOSHIDA Maiko, ISHII Kameo and CHO Teruji

Special Topic Article

Study of Equation of State Using Laser-Induced Shock-Wave Compression

1. Generation and Properties of Laser-Induced Shock Waves
SAITO Teruo

2. Laser-Driven Equation-of-State Measurements
OZAKI Norimasa and TANAKA Kazuo

3. High-Pressure Physics Using Laser-Driven Shocks
KOENIG Michel, BENUZZI-MOUNAIX Alessandra, HENRY Emeric, HUSER Gael and BATANI Dimitri

4. Equation-of-State Measurements for Inertial-Fusion Pellet Materials
ONO Takatoshi, TANAKA Kazuo A. and OZAKI Norimasa

WAKABAYASHI Kunihiko

4.1 Flyer Acceleration by Laser-Induced Plasmas
YOSHIDA Masatake

4.2 Analysis of Laser Plasma and Shock-Compressed Matter Using Femtosecond Laser
HIRONAKA Yoichiro, OKANO Yasuaki, NAKAMURA Kazutaka and KONDO Ken-ichi

4.3 Simulation of Orbital-Debris Impact Using Laser-Accelerated Flyer
NAKANO Motohiro and YAMAUCHI Yoshiaki

5. Summary
YOSHIDA Masatake

Contributed Papers

Laser-Shock Compression of Rhodamine 6G Dye in Ethanol Solution Studied by Time-Resolved Fluorescence Spectroscopy
ICHYANAGI Kouhei, IGARASHI Yoshitaka, MATSUDA Akitaka, KONDO Kinya and NAKAMURA Kazutaka

Simultaneous Measurement of Temperature, Pressure and Shock-Wave Velocity of Compressed Polystyrene
ONO Takatoshi, TANAKA Kazuo A., OZAKI Norimasa and SHIOTA Takeshi, NAGAI Keiji, SHIGEMORI Keisuke, NAKANO Motohiro and KATAOKA Katsuhiko

Femtosecond-Laser-Driven Shock Quenching of the High-Pressure Phase of Iron
SANO Tomokazu, MORI Hiroaki, OIHMURA Etsuji and MIYAMOTO Isamu

Review Paper

Characterization of GEKKO/HIPER-Driven Shock Waves for Equation-of-State Experiments in Ultra-High-Pressure Regime
OZAKI Norimasa, TANAKA Kazuo A., ONO Takatoshi, TAKAMATSU Kikuo, NAGAI Keiji, SHIGEMORI Keisuke, NAKAI Mitsuo, MIYANAGA Noriaki, AZECHI Hiroaki and YAMANAKA Tatsuhiko

Lecture Note

Multiscale Modeling of Fusion Materials Behavior under Irradiation
3. How can we bridge the multiple lengthscale models of radiation damage processes?
KURAMOTO Eiichi, HIRATANI Masato, ORITA Taiga, MORISHITA Kazunori, SEKIMURA Naoto and SONEDA Naoki

Contributed Papers

Impurity Transport and Its Application to Ion Temperature Measurement in JT-60U Divertor Plasmas
NAKAO Tomohide, KUBO Hirofumi, ASAKURA Nobuyuki, SHIMIZU Katsuhiko and HIGASHIJIMA Satoru

Effect of Toroidal Electric Field on Non-Linear Effect on Electron Cyclotron Current Drive in JT-60U
SUZUKI Takahiro, IDE Shunsuke, HAMAMATSU Kiyotaka, PETTY C.C., LAO L.L, ISAYAMA Akihiko, FUJITA Takao, IKEDA Yoshihiko, SEKI Masami, MORIYAMA Shinichi and FUKUYAMA Atsushi

Time Evolution Measurement of Ion Energy Spectrum in Reversed Field Pinch Plasma
MAKI Shinuake, WATARAI Nobuyuki, YAMBE Kiyotomo, SEIKIKAWA Junya, ARIMOTO Hideki and SATO Koichiro

Recent Progress of Varying Temperature Irradiation Experiments on Microstructure Development in Austenitic Stainless Steels
WATANabe Hideo, MUROGA Takeo and YOSHIDA Naoko

Opinion

Prospects for the Future Nuclear Fusion Research

Introduction of Research Group
S.-I. Itoh Laboratory, Advanced Energy Engineering Science, Interdisciplinary Graduate School of Engineering Sciences, Kyushu University