

# SUBJECT INDEX

# Fusion Science and Technology



American Nuclear Society  
Scientific Publications

Volume 68, Number 1  
July 2015

CITATIONS ARE BY PAGE NUMBER

1-D horn-antenna mixer array, 178  
3-D numerical simulation, 185

## A

Advanced fusion, 166  
Antenna phasing, 161  
Atomic collision, 50  
Axial losses, 15

## C

Charged potential, 157  
Compact toroid, 44  
Correlation analysis, 125

## D

DEGAS 2, 76  
Detached plasma, 130  
Direct energy conversion, 166  
Divertor simulation, 28, 81, 120  
D-module, 125  
Dusty plasma, 157

## E

ECCD, 147  
ECH, 142, 147  
ECRH, 87  
Electrode bias, 50  
Electron attachment, 157  
Electron cyclotron resonance, 1

Electron temperature and density  
distribution, 81

## F

Field-reversed configuration, 44  
Frequency-multiplied interferometer  
system, 178  
Fusion neutron source, 70

## G

GAMMA 10, 99, 125, 136, 185  
GAMMA 10/PDX, 28, 120, 130, 178  
Gas dynamic trap, 70, 87  
Gas injection, 81, 120  
GNBP, 125  
GOL-3, 92  
Gyrotron, 142, 147

## H

Helium, 190  
Hydrogen plasma, 171  
 $H_{\alpha}$  spectroscopy, 171

## I

ICRF  
heating, 63, 136, 185  
wave, 161  
Impurity transport, 130  
Inductively coupled plasma, 105

Ion  
beam injection, 190  
source, 105

## J

JULE-PSI, 8

## K

KMAX, 50  
KSTAR, 113

## L

Linear trap, 21  
Long-pulse operation, 36

## M

Magnetic mirror, 21, 56, 87  
MHD stability control, 56  
Minimum B, 136, 161  
configuration, 185  
Mirror trap, 1, 15  
Molecular assisted recombination, 176  
Multi-pass Thomson scattering system,  
99  
Multiple-mirror confinement, 92  
Mutual neutralization, 171

## N

Negative ion, 171  
Negatively charged dust, 157

Neutron source, 1

## O

Open trap, 92

Operational regime, 63

## P

PFC embrittlement, 113

Plasma

detachment, 28, 120

diagnostics, 152

heating, 56

Plasma-facing material, 8

Plasma-material interaction, 8

Plasma-metal wall interaction, 36

Potential confinement, 136

PSI-2, 8

## R

Radio-frequency, 190

Reactive diffusion barrier model, 113

Reflectometer, 161

RF-driven dual antenna, 105

## S

Secondary electron, 166

Sloshing ions, 21

## T

Tandem mirror, 50, 63, 142

Thomson scattering, 152

TPD-SheetIV, 76

Transverse transport, 15

Tungsten technology, 36

## V

Volumetric recombination, 190