

# SUBJECT INDEX

Transactions of

**Fusion Science**



and Technology

Volume 43, Number 1T

January 2003

CITATIONS ARE BY PAGE NUMBER

- A**
- AIC instability, 274
  - Alfvén
    - ion cyclotron (AIC) waves, 213
    - waves, 213
  - Axisymmetry, 195
- B**
- Beam
    - plasma heating, 30
    - plasma interaction, 172
    - probe, 274, 283
  - Bounce motion, 105
- C**
- Chaos, 180
  - Closed field lines, 147
  - CUSP, 309
    - magnetic field, 312
- D**
- D-<sup>3</sup>He fusion, 309, 312
  - Diagnostic
    - beam, 265
    - neutral beam, 286
  - Diamagnetic
    - flux, 256
    - loop, 256
  - Direct energy converter, 299, 309, 312
  - Drift-wave instabilities, 216
- E**
- EC discharge cleaning, 162
  - ECRH, 98
  - Edge plasma, 177
  - Electric propulsion, 3, 111, 118
  - Electron cyclotron
    - damping, 95, 208
    - heating, 73
  - End loss
    - analyzer, 268
    - ion current, 268, 289
- F**
- Fast injection probe, 248
  - Field reversed configuration (FRC),
    - 295, 299, 304
  - Fixed array probes, 248
- G**
- Gamma-10, 10, 37, 86, 98, 135, 167,
    - 177, 189, 213
  - Gas puffing, 58
- H**
- Hanbit mirror device, 180
  - Helicon, 111, 125
  - HHRW (high harmonic fast wave), 69,
    - 86
  - High temperature superconductor, 203
  - Hot electrons, 73
- I**
- ICRF, 69, 101, 111, 118, 125
    - antenna, 83
    - heating, 105
    - modeling, 65
  - Impurity transport, 231
  - Internal coil device, 203
  - Ion
    - current detector, 262
    - energy spectrometer, 262, 289
    - heating, 268
- L**
- L and R waves, 95, 208
  - Linked mirror, 147, 225
- M**
- Macroscopic instability, 130
  - Magnetic
    - divertor, 44
    - mirror, 3, 16, 23, 51, 78, 92, 259
    - nozzle, 118
    - probe, 274
    - well, 219
  - Materials testing, 315
  - MHD stability, 152, 225

Microwave diagnostics, 243  
Millimeter-wave imaging, 237  
Mirror  
  discharge, 105, 183  
  field, 318  
  trap, 58, 65  
MSE diagnostics, 265  
Multi mirror, 172  
Multimirror trap, 30, 253

## N

Negative ions, 216  
Neutral beams, 51, 78, 89, 259  
  fueling, 135  
  injection, 295  
Neutron  
  damage, 271  
  source, 152, 315  
Neutrons, 259

## P

Particle  
  diffusion, 216  
  transport, 183  
Plasma  
  confinement, 16, 30, 51, 78, 147,  
  157  
  density profile, 283

diagnostics, 231, 237, 253  
flow velocity, 277  
flow velocity shear, 186, 208  
heating, 16, 89  
potential, 277  
rotation, 189  
source, 58  
spectroscopy, 189, 286  
stability, 23  
transport, 157  
Plug potential, 167  
Polarization reversal, 95  
Potential confinement, 10, 37  
Potential formation, 37  
Potential profile diagnostics, 289

## R

Radial  
  drift, 142  
  potential, 142  
  transport, 183  
Reflectometry, 243  
RF  
  heating, 23, 44, 65, 92, 125, 157,  
  295  
  plasma source, 318  
  test, 83  
  transmission, 101

## S

Secondary electron emission, 262  
Semiconductor  
  detector, 271  
  X-ray detector, 280  
Space transportation, 3  
Spectroscopy, 253  
Supersonic plasma flow, 130

## T

Tandem mirror, 10, 44, 69, 73, 86, 98,  
  135, 142, 167, 177, 195,  
  219, 222  
Thermal-barrier potential, 222  
Traveling wave, 299  
Two-component plasma, 152

## V

VUV imaging spectroscopy, 231

## W

Wall  
  conditioning, 162  
  recycling, 162

## X

X-ray detector, 271