

CONTENTS / SEPTEMBER 1987-VOL. 12, NO. 2

TECHNICAL PAPERS

FUSION REACTORS

- 181 Fractional Power Operation of Tokamak Reactors: Issues and Prospects / Tak Kuen Mau, Erik L. Vold, Robert W. Conn
- 197 Tokamak Power Reactor Ignition and Time-Dependent Fractional Power Operation / Erik L. Vold, Tak Kuen Mau, Robert W. Conn
- 230 Three-Cell, Large-Mirror-Ratio Tandem Mirror Magnetic Design Studies / G. L. Francis, J. R. Myra, D. A. D'Ippolito, P. J. Catto, R. E. Aamodt
- 238 Economic Considerations of Commercial Tokamak Options / Ali E. Dabiri

PLASMA ENGINEERING '

249 Self-Ignition of an Advanced Fuel Field-Reversed Configuration Reactor by Fusion Product Heating / Masami Ohnishi, Shoichi Ohi, Masao Okamoto, Hiromu Momota, Jiro Wakabayashi

EXPERIMENTAL DEVICES

257 Design and Fabrication of the Multipinch Experimental Device / Brian Curwen, Donald W. Graumann, Robert J. La Haye

SHIELDING

270 Measurements of the Neutron and Gamma-Ray Fluences in the TFTR Test Cell Due to a Point Source Simulating D-T Fusion Plasma Neutron Production / J. K. Dickens, J. W. McConnell, K. M. Chase, H. W. Hendel, E. B. Nieschmidt, Francis Y. Tsang

PLASMA HEATING SYSTEMS

- 281 Advanced Toroidal Facility Neutral Beam Injection: Optimization of Beam Alignment and Aperturing / Robert N. Morris, R. H. Fowler, James A. Rome, T. J. Schlagel
- 293 Ion Cyclotron Range of Frequencies Antenna Design for R Tokamak / Eiji Kako, Ritoku Ando, Makoto Ichimura, Yuichi Ogawa, Tsuneo Amano, Tetsuo Watari

(Continued)

ON THIS COVER

This cover was taken from figures in the paper by Vold et al., which describes the dynamical performance of a tokamak power reactor.

CONTENTS / SEPTEMBER 1987-VOL. 12, NO. 2

(Continued)

BLANKET ENGINEERING

310 An Analytical Formula for Calculating the Tritium Breeding Ratio in Fusion Reactor Blankets / Koichi Maki

TECHNICAL NOTE

PLASMA ENGINEERING

320 Enhanced Migma and Nuclear Safety / J. Rand McNally, Jr.

DEPARTMENTS

- 175 Authors
- 324 Meeting Report

Summary of the Course on Muon Catalyzed Fusion and Fusion with Polarized Nuclei, Erice, Trapani, Italy, April 3–9, 1987 / Bruno Brunelli

328 Book Reviews

Controlled Nuclear Fusion – Fundamentals of Its Utilization for Energy Supply / reviewed by *Clifford E. Singer*

Introduction to Fusion Energy / reviewed by Chan K. Choi

330 Letter to the Editor

Comments on "Neutron Streaming Through Gaps in Fusion Reactor Shielding" / M. Sawan, L. El-Guebaly, C. Maynard