

CONTENTS / MAY 1990-VOL. 17, NO. 3

TECHNICAL PAPERS

SHIELDING

371 An Analysis of Radiation Streaming Through Inhomogeneities in the Fusion Reactor Blanket and Shield / Sergei A. Zimin

MATERIALS ENGINEERING

385 Testing of Neutron-Irradiated Ceramic-to-Metal Seals / Harold N. Barr, Fred Hittman, Robert D. Brown, Frank W. Clinard, Jr., Manuel R. Lopez, Horace Martinez, Tobias J. Romero, Jay H. Cook

PLASMA ENGINEERING

- 391 Linear Optimal Control of Tokamak Fusion Devices / Charles E. Kessel, Marc A. Firestone, Robert W. Conn
- 412 A Simple One-Dimensional Personal Computer-Based Plasma-Edge Engineering Model for Divertor Design Calculations / Michael D. Baehre, Don Steiner

ICF TARGETS

427 Bubble Preforms for Producing Glass Macroshells for Inertial Confinement Fusion Targets / Simon C. P. Wang, Delbert E. Day

ENERGY CONVERSION

439 Assessment of the Potential of Magnetohydrodynamic Energy Conversion for Tokamak Reactors / P. Massee, L. H. Th. Rietjens, A. J. D. Lambert

BLANKET ENGINEERING

452 LOTUS Lithium-Lead Fusion Blanket Concept for Neutronics Experiments / Saber Azam, Anil Kumar

TECHNICAL NOTES

SHIELDING

466 Shielding Studies for the Confinement Physics Research Facility / William P. Kelleher, J. Wiley Davidson, Gary R. Thayer, Donald J. Dudziak

(Continued)

ON THIS COVER

Our artist depicts tokamak fusion side by side with inertial confinement fusion. The left side of the illustration is taken from Fig. A.2 in the paper by Massee et al., while the right side is taken from Fig. 7 in the paper by Wang and Day.

CONTENTS / MAY 1990-VOL. 17, NO. 3

(Continued)

ICF TARGETS

476 Neutronic Effects in Inertial Confinement Fusion Targets / José M. Martínez-Val

TECHNICAL NOTES ON COLD FUSION

- 484 Coulomb-Assisted Cold Fusion in Solids / Michael Danos
- 490 Cold Fusion Observed with Ordinary Water / Takaaki Matsumoto
- **493** Cold Fusion in a Confining Phase of Quantum Electrodynamics / *Magnus Jändel*
- 500 On Fusion/Fission Chain Reactions in the Fleischmann-Pons "Cold Fusion" Experiment / Samim Anghaie, Piotr Froelich, Hendrik J. Monkhorst
- 507 Cross Section for Cold Deuterium-Deuterium Fusion / Yeong E. Kim

DEPARTMENTS

- 365 Authors
- 509 Call for Technical Notes on Cold Fusion in Fusion Technology