

## PUBLICATIONS

S. Skupsky, R. L. McCrory, R. S. Craxton, J. Delettrez, R. Epstein, K. Lee, and C. Verdon, "Uniformity of Energy Deposition for Laser-Driven Fusion," *Laser Interaction and Related Plasma Phenomena*, edited by H. Hora and G. Miley (Plenum Press, New York, 1984), p. 751.

B. A. Yaakobi, J. Delettrez, L. Goldman, R. L. McCrory, R. Marjoribanks, M. C. Richardson, D. Shvarts, S. Skupsky, J. M. Soures, C. Verdon, D. Villeneuve, T. Boehly, R. Hutchison, and S. Letzring, "Thermal Transport Measurements in  $1.05\mu\text{m}$  Laser Irradiation of Spherical Targets," *Phys. Fluids* 27, 516 (1984).

M. C. Richardson, T. R. Boehly, B. A. Brinker, T. C. Bristow, R. S. Craxton, J. A. Delettrez, G. Enright, A. Entenberg, W. Friedman, L. M. Goldman, J. Hoose, R. J. Hutchison, L. Iwan, S. Kacenjar, K. Lee, S. A. Letzring, L. D. Lund, R. S. Marjoribanks, R. L. McCrory, J. M. Miller, J. Rizzo, W. D. Seka, S. Skupsky, J. M. Soures, C. P. Verdon, D. M. Villeneuve, E. A. Williams, and B. Yaakobi, "Progress Toward Direct Drive Laser Fusion," *Laser Interaction and Related Plasma Phenomena*, edited by H. Hora and G. Miley (Plenum Press, New York, 1984), p. 903.

B. Yaakobi, J. Delettrez, R. L. McCrory, R. Marjoribanks, M. C. Richardson, D. Shvarts, J. M. Soures, C. Verdon, D. M. Villeneuve, T. Boehly, R. Hutchison, and S. Letzring, "Thermal Transport Measurements in  $1.05\mu\text{m}$  Laser Irradiation of Spherical Targets," *Laser Interaction and Related Plasma Phenomena*, edited by H. Hora and G. Miley (Plenum Press, New York, 1984), p. 731.

B. Yaakobi and A. Burek, "Crystal Diffraction Systems for X-Ray Spectroscopy Imaging and Interferometry on Laser Fusion Targets," *IEEE J. Quantum Electron.* **QE-19**, 1841 (1983).

M. C. Richardson, R. Marjoribanks, S. Letzring, J. Forsyth, and D. Villeneuve, "Spectrally Discriminating Time-Resolved and Space-Resolved X-Ray Plasma Diagnostics," *IEEE J. Quantum Electron.* **QE-19**, 1861 (1983).

D. M. Villeneuve, R. Keck, B. Afeyan, W. Seka, and E. Williams, "Production of Hot Electrons by Two Plasmon Decay Instability in UV Laser Plasma," *Phys. Fluids*, **27**, 721 (1984).

J. A. Valdmanis, G. A. Mourou, and C. W. Gabel, "Picosecond and Subpicosecond Optoelectronics for Measurements of Future High Speed Electronic Devices," *Proceedings of the IEEE International Electron Devices Meeting*, December 1983.

## Forthcoming Publications

R. W. Short, W. Seka, K. Tanaka, and E. A. Williams, "Two-Plasmon Decay and Three Halves Harmonic Generation in Filaments in a Laser Plasma," accepted for publication by *Physical Review Letters*.

E. L. Lindman and K. Swartz, "Some Applications of the Hot Electron Transport Equation," to be published in CECAM Workshop Report *The Flux Limiter and Heat Flow Instabilities in Laser-Fusion Plasmas* (1983).

H. Kim, T. Powers, and J. Mason, "Inertial Fusion Target Fabrication Using Polystyrene Mandrels," accepted for publication by *Journal of Vacuum Science and Technology*.

N. S. Murty and H. Kim, "Molecular Packing in Alkylated and Chlorinated Poly-p-paraxylylenes," accepted for publication by *Polymer*.

M. C. Richardson, S. Skupsky, J. Kelly, L. Iwan, R. Hutchison, R. Peck, R. L. McCrory, and J. M. Soures, "Laser Fusion Target Irradiation Uniformity with the 24-Beam OMEGA Facility," accepted for publication in *SPIE Volume 380, Proceedings of 1983 Los Alamos Conference on Optics*.

M. C. Richardson, S. A. Letzring, W. Friedman, and G. Gregory, "Time Resolved X-Ray Photography of Uniformly Irradiated Spherical Targets," accepted for publication in *SPIE Volume 427, Proceedings of the High-Speed Photography, Videography, and Photonics*, San Diego, CA, 1983.

B. Yaakobi, H. Kim, and J. M. Soures, "Submicron X-Ray Lithography Using UV Laser Produced Plasma as a Source," accepted for publication by *1983 Proceedings of the American Vacuum Society Conference*.

R. S. Craxton and R. L. McCrory, "Hydrodynamics of Thermal Self-focusing in Laser Plasmas," accepted for publication by *Journal of Applied Physics*.

J. Abate, A. Schmid, M. Guardalben, D. Smith, and S. Jacobs, "Characterization of Micron-Sized, Optical Coating Defects by Photothermal Deflection Microscopy," accepted for publication in the *Proceedings of the 15th Annual Symposium on Optical Materials for High Powered Lasers*.

The work described in this volume includes current research at the Laboratory for Laser Energetics which is supported by Empire State Electric Energy Research Corporation, General Electric Company, New York State Energy Research and Development Authority, Northeast Utilities Service Company, Southern California Edison Company, The Standard Oil Company, University of Rochester, and the U.S. Department of Energy Office of Inertial Fusion under contract DE-AC08-80DP40124.

