

# PUBLICATIONS AND CONFERENCE PRESENTATIONS

## Publications

D. Agassi, "Phenomenological Model for Picosecond-Pulse Laser Annealing of Semiconductor," *J. Appl. Phys.* **55**, 4376-4383 (1984).

R. S. Craxton and R. L. McCrory, "Hydrodynamics of Thermal Self-Focusing in Laser Plasmas," *J. Appl. Phys.* **56**, 108-117 (1984).

J. M. Forsyth and R. D. Frankel, "Experimental Facility for Nanosecond Time-Resolved, Low-Angle X-Ray Diffraction Experiments Using a Laser-Produced Plasma Source," *Rev. Sci. Instrum.* **55**, 1235-1242 (1984).

N. S. Murthy and H. Kim, "Molecular Packing in Alkylated and Chlorinated Poly-p-xylylenes," *Polymer* **25**, 1093-1096 (1984).

W. Seka, E. A. Williams, R. S. Craxton, L. M. Goldman, R. W. Short, and K. Tanaka, "Convective Stimulated Raman Scattering Instability in UV Laser Plasmas," *Phys. Fluids* **27**, 2181-2186 (1984).

K. Tanaka, W. Seka, L. M. Goldman, M. C. Richardson, R. W. Short, J. M. Soures, and E. A. Williams, "Evidence of Parametric Instabilities in Second Harmonic Spectra from 1054-nm Laser-Produced Plasmas," *Phys. Fluids* **27**, 2187-2190 (1984).

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## Forthcoming Publications

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

W. E. Behring, J. F. Seely, S. Goldsmith, L. Cohen, M. C. Richardson, and V. Feldman, "Transitions of the Type  $2s-2p$  in Highly Ionized Zn, Ga, and Ge," accepted for publication by *Journal of the Optical Society of America*.

H. L. Helfer, R. L. McCrory, and H. M. Van Horn, "Further Monte Carlo Calculations for the Classical One-Component Plasma in the Range  $100 \leq \Gamma \leq 160$ : The FCC Lattice," accepted for publication by *Journal of Statistical Physics*.

S. Kacenjar, L. M. Goldman, A. Entenberg, and S. Skupsky, " $\langle \rho R \rangle$  Measurements in Laser-Produced Implosions Using Elastically Scattered Ions," accepted for publication by *Journal of Applied Physics*.

R. Keck, L. M. Goldman, M. Richardson, W. Seka, and K. Tanaka, "Observation of High Energy Electron Distributions in Laser Plasmas," accepted for publication by *Physical Review*.

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

C. J. McKinstrie, A. Simon, and E. A. Williams, "Nonlinear Saturation of Stimulated Raman Scattering in Homogeneous Plasma," accepted for publication by *Physics of Fluids*.

G. A. Mourou and K. E. Meyer, "Subpicosecond Electro-Optic Sampling Using Coplanar Strip Transmission Lines," accepted for publication by *Applied Physics Letters*.

A. Schmid, D. Smith, M. Guardalben, and J. Abate, "Photothermal-Deflection Analysis of UV Optical Thin Films," accepted for publication by *SPIE Volume 476, Technical Symposium East—Excimer Lasers, Their Applications and New Frontiers in Lasers*.

J. M. Soures, review of *The High-Power Iodine Laser*, by G. Brederlow, E. Fill, and K. J. Witte, accepted for publication by *Journal of Quantum Electronics*.

M. Strauss, G. Hazak, D. Shvarts, and R. S. Craxton, "Magnetic-Field Effects on Electron Heat Transport in Laser-Produced Plasmas," accepted for publication by *Physical Review A*.

K. Tanaka, L. M. Goldman, W. Seka, R. W. Short, and E. A. Williams, "Spectroscopic Study of Scattered Light at Around the Fundamental Wavelength in UV Laser-Produced Plasmas," accepted for publication by *Physics of Fluids*.

B. Yaakobi, "X-Ray Lithography Using Laser Plasma as a Source," accepted for publication by *Solid State Technology*.

## Conference Presentations

H. Kim, S. D. Jacobs, and K. A. Cerqua, "Liquid-Crystal Laser-Blocking Filters," presented at the Thirteenth Congress of the International Commission of Optics, Sapporo, Japan, August 1984.

R. L. McCrory, O. Barnouin, R. S. Craxton, J. Delettrez, R. Epstein, L. Forsley, L. M. Goldman, R. J. Hutchison, R. L. Keck, H. Kim, W. Lampeter, S. A. Letzring, R. S. Marjoribanks, P. McKenty, M. C. Richardson, W. Seka, R. W. Short, A. Simon, S. Skupsky, J. M. Soures, K. Swartz, K. Tanaka, C. Verdon, and B. Yaakobi, "Short-Wavelength, Direct-Drive Laser Fusion at the Laboratory for Laser Energetics," presented at the Tenth International Conference on Plasma Physics and Controlled Nuclear Fusion Research of the International Atomic Energy Agency, London, England, September 1984.

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