

PUBLICATIONS AND CONFERENCE PRESENTATIONS

Publications

W. Seka, R. S. Craxton, J. Delettrez, L. M. Goldman, R. Keck, R. L. McCrory, D. Shvarts, J. M. Soures, and R. Boni, "Measurements and Interpretation of the Absorption of 0.35 μm Laser Radiation on Planar Targets", *Opt. Commun.* **40** (6), 437-440 (1982).

G. Mourou and T. Sizer, "Generation of Pulses Shorter than 70 fs with a Synchronously-Pumped CW Dye Laser", *Opt. Commun.* **41** (1), 47-48 (1982).

Forthcoming Publications

G. F. Albrecht, "Temporal Shape Analysis of NA: YLiF Active Mode-locked/Q-Switched Oscillator", accepted for publication by *Optics Communications*.

D. Glocker and R. Wiseman, "A New Method for the Batch Production of Micro-Fresnel Zone Plates", accepted for publication by *Journal of Vacuum Science and Technology*.

D. A. Glocker, J. P. Drumheller, and J. R. Miller, "Ion Beam Sputter Deposition onto Levitated and Stalk-Mounted Laser Fusion Targets", accepted for publication by *Journal of Vacuum Science and Technology*.

T. F. Powers, "Improved Nonconcentricity Characterization of Trans-

parent Laser Fusion Targets by Interferometry", accepted for publication by *Journal of Vacuum Science and Technology*.

B. A. Brinker and J. R. Miller, "Capillary Gas-Filling of Inertial Fusion Targets", accepted for publication by *Journal of Vacuum Science and Technology*.

B. Yaakobi, J. Delettrez, L. M. Goldman, R. L. McCrory, W. Seka, and J. M. Soures, "Preheat Measurements in UV-Laser Target Interaction", accepted for publication by *Optics Communications*.

G. Mourou, W. Knox, and S. Williamson, "Picosecond High-Power Switching and Application", accepted for publication by *Laser Focus*.

K. Tanaka, L. M. Goldman, W. Seka, M. C. Richardson, J. M. Soures, and E. A. Williams, "Stimulated Raman Scattering from UV-Laser-Produced Plasmas", accepted for publication by *Physical Review Letters*.

G. Mourou and S. Williamson, "Picosecond Electron Diffraction", accepted for publication by *Applied Physics Letters*.

G. Mourou, W. Knox, and S. Williamson, "Advances in Picosecond Optoelectronics", accepted for publication by *S.P.I.E., Picosecond Lasers and Application*.

H. Kim, T. F. Powers, and J. Mason, "Real-Time Parylene Coating Thickness Measurement Using Optical Reflectometry", accepted for publication by *Journal of Vacuum Science Technology*.

S. Williamson, G. F. Albrecht, and G. Mourou, "Laser-Triggered Cr:GaAs HV Sparkgap with High Trigger", accepted for publication by *Review of Scientific Instruments*.

C. P. Verdon and R. L. McCrory, "Nonlinear Effects of Multifrequency Hydrodynamic Instabilities on Ablatively Accelerated Thin Shells", accepted for publication by *Physics of Fluids*.

S. Kacendar, S. Skupsky, A. Entenberg, L. M. Goldman, and M. C. Richardson, "Direct Measurement of the Fuel Density-Radius Product in Laser-Fusion Experiments", accepted for publication by *Physical Review Letters*.

Conference Presentations

R. E. Hopkins and M. Morris, "White Light Fourier Transform Lens", presented at Cuernavaca International Conference on Optical Instruments, Cuernavaca, Mexico, January 1982.

B. Yaakobi, "The Physics of Inertial Fusion", presented at the Latin-American Workshop on Plasma Physics and Controlled Nuclear Fusion Research, Cambuquira, Brazil, February 1982.

J. Forsyth and R. Frankel, "Nanosecond Exposure X-Ray Diffraction Patterns from Biological Specimens Using a Laser-Plasma Source", presented at the Biophysical Society Annual Meeting, Boston, Massachusetts, February 1982.

R. Frankel and J. Forsyth, "Time-Resolved X-Ray Diffraction Studies on

Purple Membrane from Halobacterium Halobium", presented at the Biophysical Society Meeting, Boston, Massachusetts, February 1982.

A. Simon, "Fusion Energy—Is It Coming?", presented at the American Society of Mechanical Engineers, Rochester, New York, February 1982.

Y. Conturie, B. Yaakobi, J. Delettrez, and J. Forsyth, "Soft X-Ray Population Inversions Observed in a Line-Focus Laser Plasma", presented at Laser Techniques for Extreme Ultraviolet Spectroscopy, Boulder, Colorado, March 1982.

R. Frankel, "Time-Resolved X-Ray and Optical Studies of Purple Membrane", presented at March Meeting of American Physical Society, Dallas, Texas, March 1982.

H. Kim and T. Powers, "Fabrication of Large-Aspect-Ratio Plastic-Coated Metal Shell Targets Using Leachable Polystyrene Mandrel", presented at Target Fabrication Specialists Meeting, Denver, Colorado, March 1982.

H. Kim, J. Mason, and J. R. Miller, "Ablation Layer Coating Using Alkylated DPX", presented at Target Fabrication Specialists Meeting, Denver, Colorado, March 1982.

J. R. Miller, "Overview of Laboratory for Laser Energetics Target Fabrication Program", presented at Target Fabrication Specialists Meeting, Denver, Colorado, March 1982.

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