

PUBLICATIONS AND CONFERENCE PRESENTATIONS

Publications

K. Lee, "Comments on 'Transverse Electromagnetic Waves with $\vec{E} \parallel \vec{B}$,'" *Phys. Rev. Lett.* **50**, 138-139 (1983).

M. C. Richardson, T. Boehly, R. S. Craxton, J. Delettrez, G. D. Enright, A. Entenberg, R. Epstein, W. Friedman, J. Hoose, R. Hutchison, S. Kacenjar, K. Lee, S. Letzring, R. S. Marjoribanks, R. L. McCrory, J. Rizzo, W. Seka, R. Short, S. Skupsky, J. M. Soures, C. Verdon, D. M. Villeneuve, E. A. Williams, and B. Yaakobi, "Direct-Drive Laser-Fusion Experiments with the OMEGA Laser System," *Plasma Physics and Controlled Nuclear Fusion Research 1982*, **1**, 477-485 (1983).

W. Seka, L. M. Goldman, M. C. Richardson, J. M. Soures, K. Tanaka, B. Yaakobi, R. S. Craxton, R. L. McCrory, R. Short, E. A. Williams, T. Boehly, R. Keck, and R. Boni, "Characteristics of UV-Laser-Matter Interaction," *Plasma Physics and Controlled Nuclear Fusion Research 1982*, **1**, 131-137 (1983).

Forthcoming Publications

T. Sizer II, J. D. Kafka, I. N. Duling III, C. W. Gabel, and G. A. Mourou, "Synchronous Amplification of Subpicosecond Pulses," accepted for publication by *IEEE Journal of Quantum Electronics*.

G. F. Albrecht, L. Lund, and D. Smith, "Building a Simple, Reliable, Low-Cost Modelocker System," accepted for publication by *Applied Optics*.

S. P. Sarraf, E. A. Williams, and L. M. Goldman, "Ion-Ion Two-Stream Instability in Multispecies Laser-Produced Plasma," accepted for publication by *Physical Review A: General Physics*.

J. Reynolds, "Information-Management Data Base for Fusion-Target Fabrication Processes," accepted for publication by *Journal of Vacuum Science and Technology*.

T. F. Powers and J. R. Miller, "Rotational-Shearing Interferometric Characterization of Inertial-Fusion Targets," accepted for publication by *Journal of Vacuum Science and Technology*.

H. Kim, J. Mason, and J. R. Miller, "High-Z-Doped Laser-Fusion-Target Ablation Layers Using Metal Colloids and Metal-Substituted-Sulfonated Polystyrene," accepted for publication by *Journal of Vacuum Science and Technology*.

D. Glocker, "Biased Magnetron Sputtering of ICF Target Pusher Layers," accepted for publication by *Journal of Vacuum Science and Technology*.

Conference Presentations

M. C. Richardson, "Critical Physics Issues for Direct-Drive Laser Fusion," presented at the Thirteenth Winter Colloquium on Quantum Electronics, Snowbird, Utah, January 1983.

R. D. Frankel, J. M. Forsyth, and B. K. Fung, "Time-Resolved X-Ray Diffraction Studies of Purple Membrane from Halobacterium Halobium," presented at the Biophysical Society Conference, San Diego, California, February 1983.

D. P. Butler, T. Y. Hsiang, and G. A. Mourou, "Transient Excitation and Restoration of Tin Micro-Bridges in the Presence of a Current Bias," presented at the American Physical Society Meeting, Los Angeles, California, March 1983.

D. R. Dykaar, C. V. Stancampiano, G. A. Mourou, and T. Y. Hsiang, "Experimental Determination of the Switching Threshold of a Super-Conducting Tunnel Junction," presented at the American Physical Society Meeting, Los Angeles, California, March 1983.

W. Lampeter and J. Wandtke, "Computerized Search of Chest Radiographs for Pulmonary Nodules," presented at the Thirty-First Annual Meeting, Association of University Radiologists, Birmingham, Alabama, March 1983.

The work described in this volume includes ongoing research at the Laboratory for Laser Energetics which is supported in part by Empire State Electric Energy Research Corporation (ESEERCO), General Electric Company, New York State Energy Research and Development Authority (NYSERDA), Northeast Utilities, The Standard Oil Co. (OHIO), University of Rochester, and various United States Government agencies, including Department of Energy, Air Force Office of Scientific Research, National Institutes of Health, and National Science Foundation.

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