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## Publications and Conference Presentations

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### Publications

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H. M. P. Chen, D. Katsis, and S. H. Chen, "Deterministic Synthesis and Optical Properties of Glassy Chiral-Nematic Liquid Crystals," *Chem. Mater.* **15**, 2534 (2003).

C. Dorrer and D. N. Maywar, "Ultrafast RF Spectrum Analyzer for Optical Signals," *Electron. Lett.* **39**, 1004 (2003).

G. N. Gol'tsman, K. Smirnov, P. Kouminov, B. Voronov, N. Kaurova, V. Drakinsky, J. Zhang, A. Verevkin, and R. Sobolewski, "Fabrication of Nanostructured Superconducting Single-Photon Detectors," *IEEE Trans. Appl. Supercond.* **13**, 192 (2003).

V. N. Goncharov, J. P. Knauer, P. W. McKenty, P. B. Radha, T. C. Sangster, S. Skupsky, R. Betti, R. L. McCrory, and D. D. Meyerhofer, "Improved Performance of Direct-Drive Inertial Confinement Fusion Target Designs with Adiabatic Shaping Using an Intensity Picket," *Phys. Plasmas* **10**, 1906 (2003) (invited).

C. K. Li, F. H. Séguin, J. A. Frenje, R. D. Petrasso, J. R. Rygg, S. Kurebayashi, B. E. Schwartz, R. L. Keck, J. A. Delettrez, J. M. Soures, P. W. McKenty, V. N. Goncharov, J. P. Knauer, F. J. Marshall, D. D. Meyerhofer, P. B. Radha, S. P. Regan, T. C. Sangster, W. Seka, and C. Stoeckl, "Capsule Areal-Density Asymmetries and Time Evolution Inferred from 14.7-MeV Proton Line Structure in OMEGA D<sup>3</sup>He Implosions," *Phys. Plasmas* **10**, 1919 (2003) (invited).

A. Nobile, H. Reichert, R. T. Janezic, D. R. Harding, L. D. Lund, and W. T. Shmayda, "Design of the OMEGA Laser Target Chamber Tritium Removal System," *Fusion Sci. Technol.* **43**, 522 (2003).

S. Papernov and A. W. Schmid, "Damage Behavior of SiO<sub>2</sub> Thin Films Containing Gold Nanoparticles Lodged at Predetermined Distances from the Film Surface," in *Laser-*

*Induced Damage in Optical Materials: 2002*, edited by G. J. Exarhos, A. H. Guenther, N. Kaiser, K. L. Lewis, M. J. Soileau, C. J. Stolz, A. Giesen, and H. Weber (SPIE, Bellingham, WA, 2003), Vol. 4932, pp. 66–74.

T. C. Sangster, J. A. Delettrez, R. Epstein, V. Yu. Glebov, V. N. Goncharov, D. R. Harding, J. P. Knauer, R. L. Keck, J. D. Kilkenny, S. J. Loucks, L. D. Lund, R. L. McCrory, P. W. McKenty, F. J. Marshall, D. D. Meyerhofer, S. F. B. Morse, S. P. Regan, P. B. Radha, S. Roberts, W. Seka, S. Skupsky, V. A. Smalyuk, C. Sorce, J. M. Soures, C. Stoeckl, K. A. Thorp, J. A. Frenje, C. K. Li, R. D. Petrasso, F. H. Séguin, K. A. Fletcher, S. Padalino, C. Freeman, N. Izumi, J. A. Koch, R. A. Lerche, M. J. Moran, T. W. Phillips, and G. J. Schmid, "Direct-Drive Cryogenic Target Implosion Performance on OMEGA," *Phys. Plasmas* **10**, 1937 (2003) (invited).

V. A. Smalyuk, J. A. Delettrez, S. B. Dumanis, V. Yu. Glebov, V. N. Goncharov, J. P. Knauer, F. J. Marshall, D. D. Meyerhofer, P. B. Radha, S. P. Regan, S. Roberts, T. C. Sangster, S. Skupsky, J. M. Soures, C. Stoeckl, R. P. J. Town, B. Yaakobi, J. A. Frenje, C. K. Li, R. D. Petrasso, F. H. Séguin, D. L. McCrory, R. C. Mancini, and J. A. Koch, "Hydrodynamic Growth of Shell Modulations in the Deceleration Phase of Spherical Direct-Drive Implosions," *Phys. Plasmas* **10**, 1861 (2003) (invited).

V. A. Smalyuk, P. B. Radha, J. A. Delettrez, V. Yu. Glebov, V. N. Goncharov, D. D. Meyerhofer, S. P. Regan, S. Roberts, T. C. Sangster, J. M. Soures, C. Stoeckl, J. A. Frenje, C. K. Li, R. D. Petrasso, and F. H. Séguin, "Time-Resolved Areal-Density Measurements with Proton Spectroscopy in Spherical Implosions," *Phys. Rev. Lett.* **90**, 135002 (2003).

R. Sobolewski, A. Verevkin, G. N. Gol'tsman, A. Lipatov, and K. Wilsher, "Ultrafast Superconducting Single-Photon Optical Detectors and Their Applications," *IEEE Trans. Appl. Supercond.* **13**, 1151 (2003).

E. A. Startsev and C. J. McKinstrie, "Particle-in-Cell Simulations of Ponderomotive Particle Acceleration in a Plasma," *Phys. Plasmas* **10**, 2552 (2003).

C. Stoeckl, R. E. Bahr, B. Yaakobi, W. Seka, S. P. Regan, R. S. Craxton, J. A. Delettrez, R. W. Short, J. Myatt, A. V. Maximov, and H. A. Baldis, "Multibeam Effects on Fast-Electron Generation from Two-Plasmon-Decay Instability," *Phys. Rev. Lett.* **90**, 235002 (2003).

F.-Y. Tsai, T. N. Blanton, D. R. Harding, and S. H. Chen, "Temperature Dependence of the Properties of Vapor-Deposited Polyimide," *J. Appl. Phys.* **93**, 3760 (2003).

Y. Xu, M. Khafizov, A. Plecenik, P. Kús, L. Satrapinsky, and R. Sobolewski, "Femtosecond Optical Characterization of MgB<sub>2</sub> Superconducting Thin Films," *IEEE Trans. Appl. Supercond.* **13**, 3316 (2003).

J. Zhang, W. Slysz, A. Pearlman, A. Verevkin, R. Sobolewski, O. Okunev, G. Chulkova, and G. N. Gol'tsman, "Time Delay of the Resistive-State Formation in Superconducting NbN Stripes Excited by Single Optical Photons," *Phys. Rev. B* **67**, 132508 (2003).

J. Zhang, W. Slysz, A. Verevkin, O. Okunev, G. Chulkova, A. Korneev, A. Lipatov, G. N. Gol'tsman, and R. Sobolewski, "Response-Time Characterization of NbN Superconducting Single-Photon Detectors," *IEEE Trans. Appl. Supercond.* **13**, 180 (2003).

X. Zheng, S. Wu, R. Sobolewski, R. Adam, M. Mikulics, P. Kordoš, and M. Siegel, "Electro-Optic Sampling System with a Single-Crystal 4-N, N-Dimethylamino-4'-N'-Methyl-Stilbazolium Tosylate Sensor," *Appl. Phys. Lett.* **82**, 2383 (2003).

### Forthcoming Publications

A. Babushkin, M. J. Harvey, and M. D. Skeldon, "The Output Signal-to-Noise Ratio of a Nd:YLF Regenerative Amplifier," to be published in *Applied Optics*.

I. A. Begishev, V. Bagnoud, M. J. Guardalben, L. J. Waxer, J. Puth, and J. D. Zuegel, "Optimization of an Optical Parametric Chirped-Pulse Amplification System for the OMEGA EP Laser System," to be published in *Advanced Solid-State Photonics Technical Digest*.

S. H. Chen, P. H.-M. Chen, Y. Geng, S. D. Jacobs, K. L. Marshall, and T. N. Blanton, "Novel Glassy-Nematic Liquid Crystals for Nondestructive Rewritable Optical Memory and Photonic Switching," to be published in *Advanced Materials*.

S. W. Culligan, Y. Geng, S. H. Chen, K. Klubek, K. M. Vaeth, and C. W. Tang, "Strongly Polarized and Efficient Blue Organic Light-Emitting Diodes Using Monodisperse Glassy-Nematic Oligo(fluorene)s," to be published in *Advanced Materials*.

I. V. Igumenshchev, R. Narayan, and M. A. Abramowicz, "Three-Dimensional MHD Simulations of Radiatively

Inefficient Accretion Flows," to be published in the *Astrophysical Journal*.

A. Jukna and R. Sobolewski, "Time-Resolved Photoresponse in the Flux-Flow State in Y-Ba-Cu-O Superconducting Microbridges," to be published in *Superconductors Science and Technology*.

J. Leuthold, R. Ryf, D. N. Maywar, S. Cabot, and J. Jacques, "Demonstration of Nonblocking Cross Connect Concept Based on Regenerative All-Optical Wavelength Converter over 42 Nodes and 16800 km," to be published in the *Journal of Lightwave Technology*.

J. Li, W. R. Donaldson, and T. Y. Hsiang, "Very Fast Metal-Semiconductor-Metal Ultraviolet Photodetectors on GaN with Submicron Finger Width," to be published in *IEEE Photonics Technology Letters*.

D. N. Maywar, S. Banjeree, A. Agarwal, D. F. Grosz, M. Movassaghi, A. P. Küng, and T. H. Wood, "Impact of Relaxed Dispersion Map and Gain Ripple on Ultra-Wideband 10-Gb/s Transmission," to be published in *Electronics Letters*.

D. L. McCrorey, R. C. Mancini, V. A. Smalyuk, S. P. Regan, and B. Yaakobi, "Spectroscopic Determination of Compressed-Shell Conditions in OMEGA Implosions Based on Ti *K*-Shell Line Absorption Analysis," to be published in *Review of Scientific Instruments*.

R. L. McCrory, D. D. Meyerhofer, R. Betti, T. R. Boehly, R. S. Craxton, T. J. B. Collins, J. A. Delettrez, R. Epstein, V. Yu. Glebov, V. N. Goncharov, D. R. Harding, R. L. Keck, J. H. Kelly, J. P. Knauer, S. J. Loucks, L. Lund, J. A. Marozas, P. W. McKenty, F. J. Marshall, S. F. B. Morse, P. B. Radha, S. P. Regan, S. Roberts, W. Seka, S. Skupsky, V. A. Smalyuk, C. Sorce, C. Stoeckl, J. M. Soures, R. P. J. Town, B. Yaakobi, J. A. Frenje, C. K. Li, R. D. Petrasso, F. H. Séguin, K. A. Fletcher, S. Padalino, C. Freeman, and T. C. Sangster, "Direct-Drive Inertial Confinement Fusion Research at the Laboratory for Laser Energetics," to be published in the proceedings of *Current Trends in International Fusion Research: A Review*.

R. L. McCrory, D. D. Meyerhofer, S. J. Loucks, S. Skupsky, R. E. Bahr, R. Betti, T. R. Boehly, R. S. Craxton, T. J. B.

Collins, J. A. Delettrez, W. R. Donaldson, R. Epstein, J. A. Frenje, V. Yu. Glebov, V. N. Goncharov, D. R. Harding, P. A. Jaanimagi, R. L. Keck, J. H. Kelly, T. J. Kessler, J. P. Knauer, C. K. Li, L. D. Lund, J. A. Marozas, P. W. McKenty, F. J. Marshall, S. F. B. Morse, R. D. Petrasso, P. B. Radha, S. P. Regan, S. Roberts, T. C. Sangster, F. H. Séguin, W. Seka, V. A. Smalyuk, C. Sorce, J. M. Soures, C. Stoeckl, R. P. J. Town, B. Yaakobi, and J. D. Zuegel, "Progress in Direct-Drive Inertial Confinement Fusion Research at the Laboratory for Laser Energetics," to be published in the *Nuclear Fusion*.

A. Sunahara, J. A. Delettrez, C. Stoeckl, R. W. Short, and S. Skupsky, "Time-Dependent Electron-Thermal-Flux Inhibition in Direct-Drive Laser Implosion," to be published in *Physical Review Letters*.

L. J. Waxer, V. Bagnoud, I. A. Begishev, M. J. Guardalben, J. Puth, and J. D. Zuegel, "High-Conversion-Efficiency, Optical Parametric Chirped-Pulse-Amplification System Using Spatiotemporally Shaped Pulses," to be published in *Optics Letters*.

## Conference Presentations

T. C. Sangster, "New Results in Direct-Drive Inertial Confinement Fusion," APS April 2003 Meeting, Philadelphia, PA, 5–8 April 2003.

Q. Guo, X. Teng, and H. Yang, "Surface Patterns of Tetragonal Phase FePt Thin Films from Pt at Fe<sub>2</sub>O<sub>3</sub> Core-Shell Nanoparticles Using Combined Langmuir-Blodgett and Soft Lithographic Techniques," 2003 MRS Spring Meeting and Exhibit, San Francisco, CA, 21–25 April 2003.

S. D. Jacobs, T. Z. Kosc, and K. L. Marshall, "Electro-Optics of Glassy Cholesteric Liquid Crystal Flakes," NSF Workshop on Fundamental Research Needs in Photonic Materials Synthesis and Processing at the Interface, Rochester, NY, 28–30 April 2003.

N. L. Bassett, J. B. Oliver, O. V. Gotchev, and J. P. Knauer, "Deposition of Low-Surface-Roughness Iridium for Use in an X-Ray Microscope," The International Conference on Metallurgical Coatings and Thin Films, San Diego, CA, 28 April–2 May 2003.

J. B. Oliver and D. Talbot, "Optimization of Deposition Uniformity for Large-Aperture NIF Substrates in a Planetary Rotation System," 46th Annual SVC Technical Conference, San Francisco, CA, 5–6 May 2003.

The following presentations were made at the 4th Laser Operations Workshop, Aldermaston, United Kingdom, 13–15 May 2003:

D. R. Harding, "Experiences Imploding Cryogenic Targets on OMEGA."

S. J. Loucks, "Overview of OMEGA Performance."

S. F. B. Morse, "OMEGA EP Architecture and Linkage to OMEGA."

L. J. Waxer, "Laser Design Considerations for Optimizing the Performance of OMEGA EP."

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T. Z. Kosci, K. L. Marshall, and S. D. Jacobs, "Polymer Cholesteric Liquid Crystal Flakes for Particle Displays," SID International Symposium, Seminar, and Exhibition, Baltimore, MD, 18–23 May 2003.

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The following presentations were made at Optifab 2003, Rochester, NY, 19–22 May 2003:

J. E. DeGroot, S. D. Jacobs, J. M. Schoen, H. J. Romanofsky, and I. A. Kozhinova, "Magnetorheological Finishing of a Diamond-Turned Poly(Methylmethacrylate) Flat."

A. E. Marino, J. Hayes, L. L. Gregg, and S. D. Jacobs, "Grain Decoration in Aluminum Oxynitride (ALON) from Polishing on Bound-Abrasive Laps."

J. A. Randi, J. C. Lambropoulos, S. D. Jacobs, and S. N. Shafir, "Determination of Subsurface Damage in Single Crystalline Optical Materials."

A. E. Schoeffler, L. L. Gregg, S. D. Jacobs, J. M. Schoen, and E. M. Fess, "Pre-Polishing on a CNC Platform with Bound-Abrasive Contour Tools."

J. L. Sternal, S. N. Shafir, J. A. Randi, L. L. Gregg, and S. D. Jacobs, "Refractive Index Anisotropy in Optics Using a Birefringence Mapper."

R. Varshneya, J. E. DeGroot, L. L. Gregg, and S. D. Jacobs, "Characterizing Optical Polishing Pitch."

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B. Yaakobi, T. R. Boehly, F. J. Marshall, R. Epstein, D. D. Meyerhofer, B. A. Remington, S. M. Pollaine, and J. J. Rehr, "EXAFS Measurements of Shocked Materials," 2003 National Synchrotron Light Source Users' Meeting, Upton, NY, 20–21 May 2003.

W. T. Shmayda, "Recovery of Tritium from Tritiated Pharmaceutical Mixed Wastes for Reuse: A Commercial Reality," 8th International Symposium on the Synthesis and Applications of Isotopes and Isotopically Labeled Compounds, Boston, MA, 1–5 June 2003.

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The following presentations were made at the 15th Target Fabrication Specialists' Meeting, Gleneden Beach, OR, 1–5 June 2003:

E. L. Alfonso, R. Q. Gram, and D. R. Harding, "Modeling Temperature and Pressure Gradients During Cooling of Thin-Walled Cryogenic Targets."

L. M. Elasky, D. J. Lonobile, W. A. Bittle, D. R. Harding, A. V. Okishev, and J. D. Zuegel, "Implementation and Effects of Closed-Loop Controls on OPO IR Sources for Cryogenic Target Layering."

V. N. Goncharov, P. W. McKenty, D. D. Meyerhofer, S. Skupsky, T. J. B. Collins, P. B. Radha, and T. C. Sangster, "Advanced Target Designs for the Direct-Drive Inertial Confinement Fusion."

R. Q. Gram, E. L. Alfonso, and D. R. Harding, "Heat Conduction and Absorption in Condensed Deuterium Layers."

D. R. Harding, M. D. Wittman, L. M. Elasky, J. Sailor, and E. L. Alfonso, "Status of the Ice-Layering Development Effort on OMEGA."

A. K. Knight, F.-Y. Tsai, M. J. Bonino, and D. R. Harding, "Status of the Polyimide Target Development Activities at LLE."

D. D. Meyerhofer, "Progress in Direct-Drive Inertial Confinement Fusion Research at the Laboratory for Laser Energetics" (invited).

W. Seka, A. Warrick, M. D. Wittman, R. S. Craxton, L. M. Elasky, D. R. Harding, R. L. Keck, M. Pandina, and T. G. Brown, "Cryogenic Target Characterization at LLE—A Status Report."

M. D. Wittman, L. M. Elasky, D. R. Harding, W. Seka, and A. Warrick, "Effects of Cooling and Hydrogen-Ice Formation on the Out-of-Roundness of Cryogenic Fuel Capsules."

The following presentations were made at CLEO 2003, Baltimore, MD, 1–6 June 2003:

V. Bagnoud, A. Stout, and J. D. Zuegel, "Independent Spatial Phase and Amplitude Laser Beam Control with a Single Spatial Light Modulator."

J. Bunkenburg, T. J. Kessler, H. Hu, C. Kellogg, and C. Kelly, "Coherent Summation of Holographic Gratings for Pulse Compression Within Petawatt Laser Systems."

C. Dorrer, D. N. Maywar, and T. Lakoba, "Polarization-Mode Dispersion Study of a Circulating Loop."

J. Li, W. R. Donaldson, and T. Y. Hsiang, "Screening Effect in Very Fast Submicron Metal–Semiconductor–Metal Ultraviolet Photodetectors."

J.-R. Park, W. R. Donaldson, and R. Sobolewski, "Measurement for the Time-Resolved Spatial Profile of a Laser."

J. D. Zuegel, V. Bagnoud, I. A. Begishev, M. J. Guardalben, J. Keegan, J. Puth, and L. J. Waxer, "Prototype Front End for a Petawatt Laser System Using Optical Parametric Chirped-Pulse Amplification" (invited).

S. G. Lukishova, A. W. Schmid, A. J. McNamara, R. W. Boyd, and C. R. Stroud, "Demonstration of a Room-Temperature Single-Photon Source: Laser Control of Single Dye Molecule Fluorescence in Photonic-Band-Gap Liquid Crystal Host," QELS 2003, Baltimore, MD, 1–6 June 2003.

The following presentations were made at JOWOG 37, Aldermaston, United Kingdom, 9–13 June 2003:

T. R. Boehly, T. J. B. Collins, E. Vianello, D. Jacobs-Perkins, D. D. Meyerhofer, P. M. Celliers, G. W. Collins, D. G. Hicks, and R. C. Cauble, "Measurements of the  $D_2$  EOS in the Mbar Pressure Range."

B. Yaakobi, D. D. Meyerhofer, T. R. Boehly, F. J. Marshall, D. Salzmann, R. Epstein, B. A. Remington, S. M. Pollaine, and J. J. Rehr, "EXAFS Detection of Laser Shock Heating."

The following presentations were made at the 33rd Anomalous Absorption Conference, Lake Placid, NY, 22–27 June 2003:

R. S. Craxton, "Two-Dimensional SAGE Simulations of Polar Direct Drive on the NIF."

J. DeCiantis, B. E. Schwartz, J. A. Frenje, F. H. Séguin, S. Kurebayashi, C. K. Li, R. D. Petrasso, J. A. Delettrez, J. M. Soures, V. Yu. Glebov, V. N. Goncharov, D. D. Meyerhofer, P. B. Radha, S. Roberts, T. C. Sangster, C. Stoeckl, and S. P. Hatchett, "Proton Core Imaging Spectroscopy on OMEGA Implosions."

J. A. Delettrez, S. Skupsky, and P. B. Radha, "Transport of Relativistic Electrons for Modeling Fast Ignition in the 2-D Hydrocode DRACO."

R. Epstein, "On the Bell–Plesset Effects: The Effects of Uniform Compression and Geometrical Convergence on the Classical Rayleigh–Taylor Instability."

J. A. Frenje, C. K. Li, F. H. Séguin, J. DeCiantis, J. R. Rygg, S. Kurebayashi, B. E. Schwartz, R. D. Petrasso, J. A. Delettrez, V. Yu. Glebov, D. D. Meyerhofer, T. C. Sangster, J. M. Soures, C. Stoeckl, and S. P. Hatchett, "First Measurement of Shock-Coalescence Timing and  $\rho R$  Evolution of  $D^3He$  Implosions at OMEGA."

J. A. Frenje, R. D. Petrasso, C. K. Li, F. H. Séguin, J. DeCiantis, S. Kurebayashi, J. R. Rygg, B. E. Schwartz, J. A. Delettrez, V. Yu. Glebov, D. D. Meyerhofer, T. C. Sangster, C. Stoeckl, J. M. Soures, S. P. Hatchett, S. W. Haan, G. J. Schmid, N. Landen, N. Izumi, and D. Stelter, "A Magnetic Recoil Spectrometer (MRS) for Precise  $\rho R_{fuel}$  and  $T_i$  Measurements of Implosions at OMEGA and the NIF."

V. Yu. Glebov, C. Stoeckl, S. Roberts, T. C. Sangster, J. A. Frenje, R. D. Petrasso, R. A. Lerche, and R. L. Griffith, "Proton Temporal Diagnostic for ICF Experiments on OMEGA."

V. N. Goncharov, P. B. Radha, P. W. McKenty, D. D. Meyerhofer, S. Skupsky, T. J. B. Collins, and T. C. Sangster, "Advanced Target Designs for the Direct-Drive Inertial Confinement Fusion."

S. Kurebayashi, F. H. Séguin, J. A. Frenje, C. K. Li, R. D. Petrasso, J. R. Rygg, B. E. Schwartz, J. DeCiantis, V. Yu. Glebov, J. A. Delettrez, T. C. Sangster, J. M. Soures, S. P. Hatchett, and P. A. Amendt, "Relationship of Secondary Nuclear Production to Implosion Characteristics at OMEGA."

A. V. Maximov, J. Myatt, W. Seka, and R. W. Short, "Non-linear Propagation of Crossing Laser Beams in Direct-Drive Target Plasmas."

J. Myatt, A. V. Maximov, and R. W. Short, "Fast-Electron Transport in Dense Plasmas in the Context of Fast-Ignition Studies at LLE."

J. R. Rygg, F. H. Séguin, C. K. Li, J. A. Frenje, R. D. Petrasso, J. A. Delettrez, V. Yu. Glebov, V. N. Goncharov, R. L. Keck, J. P. Knauer, F. J. Marshall, P. W. McKenty, D. D. Meyerhofer, P. B. Radha, T. C. Sangster, V. A. Smalyuk, J. M. Soures, C. Stoeckl, and S. P. Hatchett, "The Effects of Implosion Asymmetry on Shock Dynamics in OMEGA Direct-Drive Experiments."

F. H. Séguin, J. R. Rygg, J. A. Frenje, C. K. Li, R. D. Petrasso, J. A. Delettrez, J. M. Soures, V. Yu. Glebov, V. N. Goncharov, J. P. Knauer, D. D. Meyerhofer, T. C. Sangster, R. L. Keck, P. W. McKenty, F. J. Marshall, V. A. Smalyuk, and S. P. Hatchett, "Time Evolution of Areal Density Asymmetries in OMEGA Direct-Drive Implosions."

W. Seka, H. Baldis, S. Depierreux, R. S. Craxton, S. P. Regan, C. Stoeckl, R. W. Short, A. V. Maximov, J. Myatt, and R. E. Bahr, "Investigation of the Two-Plasmon-Decay Instability Using Thomson Scattering."

R. W. Short, "Two-Plasmon Decay, Overlapping Beams, and Electron-Acoustic Waves."

C. Stoeckl, R. E. Bahr, V. Yu. Glebov, A. V. Maximov, J. Myatt, T. C. Sangster, W. Seka, B. Yaakobi, and J. P. Jadeau, "Experimental Scalings for the Two-Plasmon-Decay Instability."

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The following presentations were made at the XI Conference on Laser Optics, St. Petersburg, Russia, 30 June–4 July 2003.

A. V. Okishev, "Highly Stable, All-Solid-State Regenerative Amplifier for the OMEGA ICF Facility."

A. V. Okishev, W. A. Bittle, R. Boni, W. R. Donaldson, P. A. Jaanimagi, D. Jacobs-Perkins, R. L. Keck, J. H. Kelly, T. J. Kessler, S. F. B. Morse, R. G. Roides, W. Seka, L. J. Waxer, and J. D. Zuegel, "Modern Diagnostics for Large ICF Laser Systems."