
Publications and Conference Presentations

Publications

- M. A. Barrios, T. R. Boehly, D. G. Hicks, D. E. Fratanduono, J. H. Eggert, G. W. Collins, and D. D. Meyerhofer, "Precision Equation-of-State Measurements on National Ignition Facility Ablator Materials from 1 to 12 Mbar Using Laser-Driven Shock Waves," *J. Appl. Phys.* **111**, 093515 (2012).
- J. Bromage, C. Dorrer, and R. K. Jungquist, "Temporal Contrast Degradation at the Focus of Ultrafast Pulses from High-Frequency Spectral Phase Modulation," *J. Opt. Soc. Am. B* **29**, 051125 (2012).
- T. Caillaud, O. Landoas, M. Briat, S. Kime, B. Rossé, I. Thfoin, J. L. Bourgade, L. Disdier, V. Yu. Glebov, F. J. Marshall, and T. C. Sangster, "Development of the Large Neutron Imaging System for Inertial Confinement Fusion Experiments," *Rev. Sci. Instrum.* **83**, 033502 (2012).
- D. A. Callahan, N. B. Meezan, S. H. Glenzer, A. J. MacKinnon, L. R. Benedetti, D. K. Bradley, J. R. Celeste, P. M. Celliers, S. N. Dixit, T. Döppner, E. G. Dzenitis, S. Glenn, S. W. Haan, C. A. Haynam, D. G. Hicks, D. E. Hinkel, O. S. Jones, O. L. Landen, R. A. London, A. G. MacPhee, P. A. Michel, J. D. Moody, J. E. Ralph, H. F. Robey, M. D. Rosen, M. B. Schneider, D. J. Strozzi, L. J. Suter, R. P. J. Town, K. Widmann, E. A. Williams, M. J. Edwards, B. J. MacGowan, J. D. Lindl, L. J. Atherton, G. A. Kyrala, J. L. Kline, R. E. Olson, D. Edgell, S. P. Regan, A. Nikroo, H. Wilkins, J. D. Kilkenny, and A. S. Moore, "The Velocity Campaign for Ignition on NIF," *Phys. Plasmas* **19**, 056305 (2012).
- T. J. B. Collins, J. A. Marozas, R. L. McCrory, P. B. Radha, D. R. Harding, P. W. McKenty, R. S. Craxton, A. Shvydky, V. N. Goncharov, S. Skupsky, and J. D. Zuegel, R. Betti, F. J. Marshall, J. A. Delettrez, K. S. Anderson, and D. D. Meyerhofer, "A Polar-Drive-Ignition Design for the National Ignition Facility," *Phys. Plasmas* **19**, 056308 (2012).
- K. Falk, S. P. Regan, J. Vorberger, M. A. Barrios, T. R. Boehly, D. E. Fratanduono, S. H. Glenzer, D. G. Hicks, S. X. Hu, C. D. Murphy, P. B. Radha, S. Rothman, A. P. Jephcoat, J. S. Wark, D. O. Gericke, and G. Gregori, "Self-Consistent Measurement of the Equation of State of Liquid Deuterium," *High Energy Density Phys.* **8**, 76 (2012).
- G. Fiksel, S. X. Hu, V. N. Goncharov, D. D. Meyerhofer, T. C. Sangster, V. A. Smalyuk, B. Yaakobi, M. J. Bonino, and R. Jungquist, "Experimental Reduction of Laser Imprinting and Rayleigh–Taylor Growth in Spherically Compressed, Medium-Z–Doped Plastic Targets," *Phys. Plasmas* **19**, 062704 (2012).
- D. H. Froula, B. Yaakobi, S. X. Hu, P.-Y. Chang, R. S. Craxton, D. H. Edgell, R. Follett, D. T. Michel, J. F. Myatt, W. Seka, R. W. Short, A. A. Solodov, and C. Stoeckl, "Saturation of the Two-Plasmon Decay Instability in Long-Scale-Length Plasmas Relevant to Direct-Drive Inertial Confinement Fusion," *Phys. Rev. Lett.* **108**, 165003 (2012).
- S. H. Glenzer, D. A. Callahan, A. J. MacKinnon, J. L. Kline, G. Grim, E. T. Alger, R. L. Berger, L. A. Bernstein, R. Betti, D. L. Bleuel, T. R. Boehly, D. K. Bradley, S. C. Burkhart, R. Burr, J. A. Caggiano, C. Castro, D. T. Casey, C. Choate, D. S. Clark, P. Celliers, C. J. Cerjan, G. W. Collins, E. L. Dewald, P. DiNicola, J. M. DiNicola, L. Divol, S. Dixit, T. Döppner, R. Dylla-Spears, E. Dzenitis, M. Eckart, G. Erbert, D. Farley, J. Fair, D. Fittinghoff, M. Frank, L. J. A. Frenje, S. Friedrich, D. T. Casey, M. Gatu Johnson, C. Gibson, E. Giraldez, V. Glebov, S. Glenn, N. Guler, S. W. Haan, B. J. Haid, B. A. Hammel, A. V. Hamza, C. A. Haynam, G. M. Heestand, M. Hermann, H. W. Hermann, D. G. Hicks, D. E. Hinkel, J. P. Holder, D. M. Holunda, J. B. Horner, W. W. Hsing, H. Huang, N. Izumi, M. Jackson, O. S. Jones, D. H. Kalantar, R. Kauffman, J. D. Kilkenny, R. K. Kirkwood, J. Klingmann, T. Kohut, J. P. Knauer, J. A. Koch, B. Koziolowski, G. A.

Kyrala, A. L. Kritcher, J. Kroll, K. La Fortune, L. Lagin, O. L. Landen, D. W. Larson, D. LaTray, R. J. Leeper, S. Le Pape, J. D. Lindl, R. Lowe-Webb, T. Ma, J. McNaney, A. G. MacPhee, T. N. Malsbury, E. Mapoles, C. D. Marshall, N. B. Meezan, F. Merrill, P. Michel, J. D. Moody, A. S. Moore, M. Moran, K. A. Moreno, D. H. Munro, B. R. Nathan, A. Nikroo, R. E. Olson, C. D. Orth, A. E. Pak, P. K. Patel, T. Parham, R. Petrasso, J. E. Ralph, H. Rinderknecht, S. P. Regan, H. F. Robey, J. S. Ross, M. D. Rosen, R. Sacks, J. D. Salmonson, R. Saunders, J. Sater, C. Sangster, M. B. Schneider, F. H. Séguin, M. J. Shaw, B. K. Spears, P. T. Springer, W. Stoeffl, L. J. Suter, C. A. Thomas, R. Tommasini, R. P. J. Town, C. Walters, S. Weaver, S. V. Weber, P. J. Wegner, P. K. Whitman, K. Widmann, C. C. Widmayer, C. H. Wilde, D. C. Wilson, B. Van Wonterghem, B. J. MacGowan, L. J. Atherton, M. J. Edwards, and E. I. Moses, "Cryogenic Thermonuclear Fuel Implosions on the National Ignition Facility," *Phys. Plasmas* **19**, 056318 (2012).

A. J. Harvey-Thompson, S. V. Lebedev, S. Patankar, S. N. Bland, G. Burdiak, J. P. Chittenden, A. Colaitis, P. De Grouchy, H. W. Doyle, G. N. Hall, E. Khoory, M. Hohenberger, L. Pickworth, F. Suzuki-Vidal, R. A. Smith, J. Skidmore, L. Suttle, and G. F. Swadling, "Optical Thomson Scattering Measurements of Plasma Parameters in the Ablation Stage of Wire Array Z Pinches," *Phys. Rev. Lett.* **108**, 145002 (2012).

M. Hohenberger, P.-Y. Chang, G. Fiksel, J. P. Knauer, D. D. Meyerhofer, R. Betti, F. J. Marshall, F. H. Séguin, and R. D. Petrasso, "Inertial Confinement Fusion Implosions with Imposed Magnetic Field Compression Using the OMEGA Laser," *Phys. Plasmas* **19**, 056306 (2012).

S. X. Hu, G. Fiksel, V. N. Goncharov, S. Skupsky, D. D. Meyerhofer, and V. A. Smalyuk, "Mitigating Laser Imprint in Direct-Drive Inertial Confinement Fusion Implosions with High-Z Dopants," *Phys. Rev. Lett.* **108**, 195003 (2012).

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I. Iñiguez-de-la-Torre, H. Rodilla, J. Mateos, T. González, H. Irie, and R. Sobolewski, "Monte Carlo Studies of the Intrinsic Time-Domain Response of Nanoscale Three-Branch Junctions," *J. Appl. Phys.* **111**, 084511 (2012).

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- M. J. E. Manuel, C. K. Li, F. H. Séguin, J. Frenje, D. T. Casey, R. D. Petrasso, S. X. Hu, R. Betti, J. D. Hager, D. D. Meyerhofer, and V. A. Smalyuk, *Phys. Rev. Lett.* **108**, 255006 (2012).
- A. V. Okishev, "Highly Efficient Room-Temperature Yb:YAG Ceramic Laser and Regenerative Amplifier," *Opt. Lett.* **37**, 1199 (2012).
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- J. E. Schoenly, W. Seka, J. D. B. Featherstone, and P. Rechmann, "Near-UV Laser Treatment of Extrinsic Dental Enamel Stains," *Lasers Surg. Med.* **44**, 339 (2012).
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Forthcoming Publications

B. Beeman, A. G. MacPhee, J. R. Kimbrough, G. A. Lacaille, M. A. Barrios, J. Emig, J. R. Hunter, E. K. Miller, and W. R. Donaldson, "Mach-Zehnder Modulator Performance Using the Comet Laser Facility and Implications for Use on NIF," to be published in the Proceedings of SPIE.

J. Bromage, C. Dorrer, M. Millecchia, J. Bunkenburg, R. Jungquist, and J. D. Zuegel, "A Front End for Ultra-Intense OPCPA," to be published in AIP Conference Proceedings.

D. T. Casey, J. A. Frenje, M. Gatu Johnson, M. J.-E. Manuel, N. Sinenian, A. B. Zylstra, F. H. Séguin, C. K. Li, R. D. Petrasso, V. Yu Glebov, P. B. Radha, D. D. Meyerhofer, T. C. Sangster, D. P. McNabb, P. A. Amendt, R. N. Boyd, S. P. Hatchett, S. Quaglioni, J. R. Rygg, I. J. Thompson, A. D. Bacher, H. W. Herrmann, and Y. H. Kim, "Measurements of the $T(t,2n)^4\text{He}$ Neutron Spectrum at Low Reactant Energies from Inertial Confinement Implosions," to be published in Physical Review Letters.

G. Fiksel, F. J. Marshall, C. Mileham, and C. Stoeckl, "Spatial Resolution of Fuji BAS TR and SR Imaging," to be published in Review of Scientific Instruments.

L. Gao, P. M. Nilson, I. V. Igumenshchev, J. R. Davies, S. X. Hu, C. Stoeckl, M. G. Haines, D. H. Froula, R. Betti, and D. D. Meyerhofer, "Magnetic-Field Generation by Rayleigh-Taylor Instability in Laser-Driven Planar Plastic Targets," to be published in Physical Review Letters.

R. Q. Gram, A. She, R. S. Craxton, and D. R. Harding, "Thermal Conductivity of Solid Deuterium by the 3ω Method," to be published in Journal of Applied Physics.

J. D. Hager, V. A. Smalyuk, S. X. Hu, J. P. Knauer, D. D. Meyerhofer, and T. C. Sangster, "Study of Rayleigh-Taylor

Growth in Directly Driven Cryogenic Deuterium Targets," to be published in Physics of Plasmas.

S. X. Hu, V. N. Goncharov, and S. Skupsky, "Burning Plasmas with Ultrashort X-Ray Flashing," to be published in Physics of Plasmas.

M. Mikulics, J. Zhang, J. Serafini, R. Adam, D. Grützmacher, and R. Sobolewski, "Subpicosecond Electron-Hole Recombination Time and Terahertz-Bandwidth Photoresponse in Freestanding GaAs Epitaxial Mesoscopic Structures," to be published in Applied Physics Letters.

J. B. Oliver, P. Kupinski, A. L. Rigatti, A. W. Schmid, J. C. Lambropoulos, S. Papernov, A. Kozlov, S. Smith, and R. D. Hand, "Stress Compensation in Hafnia/Silica Optical Coatings by Inclusion of Alumina Layers," to be published in Optics Express.

P. B. Radha, J. A. Marozas, F. J. Marshall, A. Shvydky, T. J. B. Collins, V. N. Goncharov, R. L. McCrory, P. W. McKenty, D. D. Meyerhofer, T. C. Sangster, and S. Skupsky, "OMEGA Polar-Drive Target Designs," to be published in Physics of Plasmas.

H. G. Rinderknecht, M. Gatu Johnson, A. B. Zylstra, N. Sinenian, M. J. Rosenberg, J. A. Frenje, C. J. Waugh, C. K. Li, F. H. Séguin, R. D. Petrasso, J. R. Rygg, J. R. Kimbrough, A. MacPhee, G. W. Collins, D. Hicks, A. Mackinnon, P. Bell, R. Bionta, T. Clancy, R. Zacharias, T. Döppner, H. S. Park, S. LePape, O. Landen, N. Meezan, E. I. Moses, V. U. Glebov, C. Stoeckl, T. C. Sangster, R. Olson, J. Kline, and J. Kilkenny, "A Novel Particle Time of Flight Diagnostic for Measurements of Shock- and Compression-Bang Times in D^3He and DT Implosions at the NIF," to be published in Review of Scientific Instruments.

Conference Presentations

The following presentations were made at the 2012 Materials Research Society Spring Meeting and Exhibit, San Francisco, CA, 9–13 April 2012:

K. Mehrotra, H. P. Howard, S. D. Jacobs, and J. C. Lambropoulos, "Mechanical Characterization of 'Blister' Defects on Optical Oxide Multilayers Using Nanoindentation."

K. Mehrotra, H. P. Howard, S. D. Jacobs, and J. C. Lambropoulos, "Nanoindentation Probing of High-Aspect-Ratio Pillar Structures on Optical Multilayer Dielectric Diffraction Gratings."

The following presentations were made at the Omega Laser Facility Users Group Workshop, Rochester, NY, 25–27 April 2012:

D. Canning, “Omega EP Facility Update and Progress on OLUG Recommendations.”

G. Fiksel, P.-Y. Chang, M. Hohenberger, R. Betti, M. J. Shoup III, C. Taylor, T. Duffy, D. Lonobile, and W. Bittle, “Developing Magnetic Platforms for Inertial Confinement Fusion and Basic High-Energy-Density Science.”

D. H. Froula, R. Boni, M. Bedzyk, R. Brown, R. S. Craxton, T. Duffy, F. Ehrne, S. Ivancic, R. Jungquist, N. Kugland, J. Puth, R. G. Roides, M. C. Rushford, W. Seka, M. J. Shoup III, W. Theobald, and D. Weiner, “Optical Diagnostic Suite (Schlieren, Interferometry, and Grid Refractometry) on OMEGA EP Using a 10-ps, 263-nm Probe Beam.”

R. Jungquist, “Laser Retroreflected and Reflected Light Management.”

J. Katz, R. Boni, D. Froula, G. Gates, A. Nauss, J. Szczepanski, M. Shoup, and T. Agliata, “OMEGA Thomson-Scattering System Upgrade.”

J. Kwiatkowski, S. Stagnitto, S. F. B. Morse, M. Labuzeta, and V. Guiliano, “Characterizing Debris-Shield Transmission Degradation and Estimating On-Target Energy.”

S. F. B. Morse, “Omega Facility Updates: Progress on OLUG Recommendations.”

G. Pien and J. Puth, “Omega Experimental Systems Performance and Improvements Since OLUG 2011.”

S. P. Regan, G. Gregori, P. B. Radha, S. X. Hu, T. R. Boehly, B. Crowley, S. H. Glenzer, O. L. Landen, D. O. Gericke, T. Doeppner, D. D. Meyerhofer, C. D. Murphy, T. C. Sangster, and J. Vorberger, “X-Ray Thomson Scattering: An Incisive Probe for Warm, Dense Matter.”

W. T. Shmayda, “Isotope Separation System and Gas Chromatograph Support Non-Standard Fills.”

C. Sorce, M. Millecchia, D. Mastrosimone, A. Sorce, J. Katz, S. Ingraham, A. Pruyne, R. Bahr, D. Hassett, and D. Guy, “Omega Facility Diagnostic Highlights.”

S. Stagnitto, W. R. Donaldson, E. Hill, M. Labuzeta, and M. Millecchia, “OMEGA Performance Metrics and Status Update on OLUG Recommendations.”

C. Stoeckl, G. Fiksel, R. Jungquist, P. M. Nilson, and W. Theobald, “Spherical Crystal X-Ray Imaging for OMEGA and OMEGA EP.”

The following presentations were made at the 19th Topical Conference on High-Temperature Plasma Diagnostics, Monterey, CA, 6–10 May 2012:

M. A. Barrios, A. MacPhee, S. P. Regan, J. Kimbrough, S. R. Nagel, L. R. Benedetti, S. F. Khan, D. Bradley, P. Bell, D. H. Edgell, and G. W. Collins, “X-Ray Bang-Time Measurements at the National Ignition Facility (NIF) Using a Polar Diamond Detector.”

W. R. Donaldson, C. Zhao, L. Ji, R. G. Roides, K. Miller, and B. Beeman, “A Single-Shot, Multiwavelength Electro-Optic Data-Acquisition System for ICF Applications” (invited).

D. H. Edgell, A. MacPhee, D. K. Bradley, E. Bond, S. Burns, J. Celeste, M. J. Eckart, V. Yu. Glebov, D. S. Hey, G. Lacaille, J. D. Kilkenny, J. R. Kimbrough, A. J. Mackinnon, J. Magoon, J. Parker, T. C. Sangster, M. J. Shoup III, C. Stoeckl, and T. Thomas, “South Pole Bang-Time Diagnostic on the NIF.”

C. J. Forrest, V. Yu. Glebov, V. N. Goncharov, A. Pruyne, J. P. Knauer, P. B. Radha, M. Romanofsky, T. C. Sangster, M. J. Shoup III, C. Stoeckl, D. T. Casey, M. Gatu-Johnson, and S. Gardner, “High-Resolution Spectroscopy Used to Measure ICF Neutron Spectra on OMEGA.”

D. H. Froula, R. Boni, M. Bedzyk, R. Brown, R. S. Craxton, T. Duffy, F. Ehrne, S. Ivancic, R. Jungquist, N. Kugland, J. Puth, R. G. Roides, M. C. Rushford, W. Seka, M. J. Shoup III, W. Theobald, and D. Weiner, “Optical Diagnostic Suite (Schlieren, Interferometry, and Grid-Image Refractometry) on OMEGA EP Using a 10-ps, 263-nm Probe Beam.”

V. Yu. Glebov, C. Forrest, J. P. Knauer, A. Pruyne, M. Romanofsky, T. C. Sangster, M. J. Shoup III, C. Stoeckl, J. A. Caggiano, M. L. Carman, T. J. Clancy, R. Hatarik, J. McNaney, and N. P. Zautseva, “Testing a New NIF Neutron Time-of-Flight Detector with a Bibenzyl Scintillator on OMEGA.”

J. Katz, R. Boni, M. J. Shoup III, R. Follett, and D. H. Froula, "A Reflective Optical Transport for Streaked Thomson Scattering and Gated Imaging on OMEGA."

J. P. Knauer, V. Yu. Glebov, C. Forrest, C. Stoeckl, T. C. Sangster, D. D. Meyerhofer, J. A. Caggiano, M. J. Moran, R. Hatarik, J. M. McNaney, S. Friedrich, E. J. Bond, M. J. Eckart, S. J. Padalino, and J. D. Kilkenny, "Neutron Spectra from 1 to 15 MeV Measured with Time-of-Flight Detectors at the National Ignition Facility."

F. J. Marshall, "Compact Kirkpatrick–Baez Microscope Mirrors for Imaging Laser–Plasma X-Ray Emission."

D. T. Michel, C. Sorce, R. Epstein, N. Whiting, I. V. Igumenshchev, R. Jungquist, and D. H. Froula, "Shell-Trajectory Measurements from Direct-Drive Experiments."

M. Millecchia, S. P. Regan, C. Sorce, R. E. Bahr, C. M. Romanofsky, and "Streaked X-Ray Spectrometer (SXS) Having a Discrete Selection of Bragg Geometries for Omega."

P. M. Nilson, C. Stoeckl, G. Fiksel, P. A. Jaanimagi, C. Mileham, W. Theobald, J. R. Davies, J. F. Myatt, A. A. Solodov, D. H. Froula, R. Betti, and D. D. Meyerhofer, "Streaked X-Ray Imaging of Ultrafast Ionization Waves Inside a Metal."

C. Stoeckl, J. A. Delettrez, G. Fiksel, D. Guy, R. Jungquist, C. Mileham, P. M. Nilson, T. C. Sangster, M. J. Shoup III, and W. Theobald, "Soft X-Ray Backlighting of Direct-Drive Implosions Using a Spherical Crystal Imager on OMEGA."

The following presentations were made at CLEO 2012, San Jose, CA, 6–11 May 2012:

J. Bromage, C. Dorrer, and R. K. Jungquist, "Temporal Contrast Degradation at the Focus of Ultrashort Pulses from High-Frequency Spectral Phase Noise."

J. Bromage, C. Dorrer, M. Millecchia, J. Bunkenburg, R. Jungquist, and J. D. Zuegel, "A Front End for Ultra-Intense OPCPA."

J. Bromage, M. Millecchia, J. Bunkenburg, R. K. Jungquist, C. Dorrer, and J. D. Zuegel, "A Cylindrical Öffner Stretcher for Reduced Chromatic Aberrations and Improved Temporal Contrast."

C. Dorrer, "Broadband Operation of High-Damage-Threshold Phase and Polarization Binary Beam Shapers."

C. Dorrer, A. V. Okishev, R. G. Roides, R. Cuffney, W. Bittle, and J. D. Zuegel, "Fiber Front End for an OMEGA EP Demonstration of Beam-Smoothing Techniques for NIF Polar-Drive Ignition."

J. Qiao, P. A. Jaanimagi, R. Boni, J. Bromage, and E. Hill, "Beam-Homogenization and Space-Charge–Broadening Calibration for Accurately Measuring High-Intensity Laser Pulses Using a High-Speed Streak Camera."

M. Statt, M. Vargas, J. B. Oliver, S. H. Chen, K. L. Marshall, and C. Dorrer, "High-Damage-Threshold Components for Radially and Azimuthally Polarized Beam Generation."

R. Xin and J. D. Zuegel, "A Negative-Feedback-Stabilization System for an All-Fiber Regenerative Amplifier."

The following presentations were made at the 20th Target Fabrication Meeting, Santa Fe, NM, 20–24 May 2012:

Z. Bei, G. Randall, T. B. Jones, and D. R. Harding, "Implementation of Dielectrophoretic Droplet Centering in a Miniaturized Centering Cell for ICF Foam Capsule."

M. J. Bonino, F. J. Marshall, D. H. Froula, S. P. Regan, D. Turner, D. R. Harding, S. G. Noyes, J. Fooks, and E. Giraldez, "Overview of the Requirements and Construction of Targets for Experiments on OMEGA and OMEGA EP."

R. Q. Gram, D. R. Harding, and T. B. Jones, "Dielectrophoresis of Liquid Deuterium for IFE Target Filling."

D. R. Harding, M. D. Wittman, and D. H. Edgell, "Considerations and Requirements for Providing Cryogenic Targets for Direct-Drive Inertial Fusion Implosions at the National Ignition Facility."

W. T. Shmayda, D. R. Harding, M. J. Bonino, V. Versteeg, A. Greenwood, and M. Farrel, "Mitigating Defects on Cryotargets."

D. Turner, M. J. Bonino, D. R. Harding, S. G. Noyes, and B. Rice, "Properties and Performance of Target Mounts for Cryogenic Experiments on OMEGA."

S. X. Hu, V. N. Goncharov, S. Skupsky, L. A. Collins, M. J. N. Dijokap, A. F. Starace, and B. I. Schneider, "Probing Ultrafast Processes in Intense Laser-Matter Interactions," presented at the 43rd Annual APS Division of Atomic, Molecular, and Optical Physics Meeting, Anaheim, CA, 4-8 June 2012.

The following presentations were made at the OSA Topical Meeting on Optical Fabrication and Testing, Monterey, CA, 24-28 June 2012:

H. P. Howard, J. C. Lambropoulos, and S. D. Jacobs, "Dependence of Thermal Stresses on Substrate Thickness During Wet Processing of Large Coated Optics."

J. C. Lambropoulos, K. Mehrotra, H. P. Howard, and S. D. Jacobs, "Glass Ductility and Fracture at the 50- to 100-nm Scale."

The following presentations were made at the 42nd Annual Anomalous Absorption Conference, Key West, FL, 25-29 June 2012:

D. H. Edgell, P. B. Radha, D. H. Froula, V. N. Goncharov, I. V. Igumenshchev, J. F. Myatt, and W. Seka, "Mitigation of Cross-Beam Energy Transfer in Polar-Drive Implosions."

R. K. Follett, D. T. Michel, J. F. Myatt, S. X. Hu, B. Yaakobi, and D. H. Froula, "Thomson-Scattering Measurements of Ion-Acoustic Wave Amplitudes Driven by the Two-Plasmon Decay."

D. H. Froula, I. V. Igumenshchev, D. T. Michel, D. H. Edgell, R. Follett, V. Yu. Glebov, V. N. Goncharov, J. Marozas, P. B. Radha, W. Seka, C. Sorce, and C. Stoeckl, "Mitigation of Cross-Beam Energy Transfer in Direct-Drive Plasmas."

L. Gao, P. M. Nilson, I. V. Igumenshchev, J. R. Davies, S. X. Hu, C. Stoeckl, M. G. Haines, D. H. Froula, R. Betti, and D. D. Meyerhofer, "Magnetohydrodynamic Effects in Ablatively Driven High-Energy-Density System Experiments."

S. X. Hu, D. H. Edgell, D. H. Froula, V. N. Goncharov, D. T. Michel, S. Skupsky, and B. Yaakobi, "Analyses of Long-Scale-

Length Plasma Experiments with Different Ablator Materials on the OMEGA EP Laser System."

A. V. Maximov, J. F. Myatt, R. W. Short, I. V. Igumenshchev, D. H. Edgell, and W. Seka, "Interaction of Multiple Laser Beams via Common Waves and Beam Energy Transfer."

D. T. Michel, A. V. Maximov, B. Yaakobi, S. X. Hu, J. F. Myatt, A. A. Solodov, R. W. Short, and D. H. Froula, "Experimental Validation of the Two-Plasmon-Decay Common-Wave Process."

J. F. Myatt, J. Zhang, V. N. Goncharov, A. V. Maximov, R. W. Short, D. F. DuBois, D. A. Russell, and H. X. Vu, "The Mitigating Effect of Wave Dissipation on Hot-Electron Generation Caused by the Two-Plasmon Decay in Inhomogeneous Plasmas."

D. A. Russell, H. X. Vu, D. F. DuBois, and J. F. Myatt, "Two-Plasmon-Decay Turbulence Driven by the Shared-Wave Triad of Two Crossed Beams."

W. Seka, D. H. Edgell, D. H. Froula, J. Katz, J. F. Myatt, J. Zhang, R. W. Short, T. D. Michel, A. V. Maximov, and V. N. Goncharov, "Half-Integer Harmonic Images and Spectra Point Toward Localized, Multibeam Two-Plasmon Decay."

R. W. Short, J. Myatt, A. Maximov, T. Michel, and D. Froula, "The Effects of Beam Polarization on Convective and Absolute Two-Plasmon Decay Driven by Multiple Laser Beams."

A. A. Solodov, K. S. Anderson, W. Theobald, A. Shvydky, R. Betti, J. F. Myatt, and C. Stoeckl, "Simulations of Cone-in-Shell Targets for Integrated Fast-Ignition Experiments on OMEGA."

H. X. Vu, D. Russell, D. F. DuBois, and J. F. Myatt, "Hot-Electron Generation by 'Cavitating' Langmuir Turbulence in the Nonlinear Stage of the Two Plasmon Decay Instability."

A. V. Okishev, C. Dorrer, B. E. Kruschwitz, J. H. Kelly, E. Hill, A. Consentino, G. Balonek, J. A. Marozas, M. Hohenberger, A. Shvydky, R. G. Roides, R. Cuffney, W. Bittle, and J. D. Zuegel, "Multifrequency Smoothing by Spectral Dispersion on OMEGA EP for NIF Polar-Drive Implosions," presented at Laser Optics 2012, St. Petersburg, Russia, 25-29 June 2012 (invited).

