
Publications and Conference Presentations

Publications

C. Dorrer, R. Roides, R. Cuffney, A. V. Okishev, W. A. Bittle, G. Balonek, A. Consentino, E. Hill, and J. D. Zuegel, "Fiber Front End With Multiple Phase Modulations and High-Bandwidth Pulse Shaping for High-Energy Laser-Beam Smoothing," *IEEE J. Sel. Top. Quantum Electron.* **19**, 3500112 (2013).

W. Fox, G. Fiksel, A. Bhattacharjee, P.-Y. Chang, K. Germaschewski, S. X. Hu, and P. M. Nilson, "Filamentation Instability of Counterstreaming Laser-Driven Plasmas," *Phys. Rev. Lett.* **111**, 225002 (2013).

M. Hohenberger, N. E. Palmer, G. LaCaille, E. L. Dewald, L. Divol, E. J. Bond, T. Döppner, J. J. Lee, R. L. Kauffman, J. D. Salmonson, C. A. Thomas, D. K. Bradley, C. Stoeckl, and T. C. Sangster, "Measuring the Hot-Electron Population Using Time-Resolved, Hard X-Ray Detectors on the NIF," in *Target Diagnostics Physics and Engineering for Inertial Confinement Fusion II*, edited by P. M. Bell and G. P. Grim (SPIE, Bellingham, WA, 2013), Vol. 8850, Paper 88500F.

J. Katz, J. S. Ross, C. Sorce, and D. H. Froula, "A Reflective Image-Rotating Periscope for Spatially Resolved Thomson-Scattering Experiments on OMEGA," *J. Inst.* **8**, C12009 (2013).

H. P. H. Liddell, K. Mehrotra, J. C. Lambropoulos, and S. D. Jacobs, "Fracture Mechanics of Delamination Defects in Multilayer Dielectric Coatings," *Appl. Opt.* **52**, 7689 (2013).

K. L. Marshall, D. Saulnier, H. Xianyu, S. Serak, and N. Tabiryan, "Liquid Crystal Near-IR Laser Beam Shapers Employing Photoaddressable Alignment Layers for High-Peak-Power Applications," in *Liquid Crystals XVII*, edited by I. C. Khoo (SPIE, Bellingham, WA, 2013), Vol. 8828, Paper 88280N.

R. L. McCrory, D. D. Meyerhofer, R. Betti, T. R. Boehly, T. J. B. Collins, R. S. Craxton, J. A. Delettrez, D. H. Edgell, R. Epstein, D. H. Froula, V. Yu. Glebov, V. N. Goncharov, D. R. Harding, S. X. Hu, I. V. Igumenshchev, J. P. Knauer, S. J. Loucks, J. A. Marozas, F. J. Marshall, P. W. McKenty, T. Michel, P. M.

Nilson, P. B. Radha, S. P. Regan, T. C. Sangster, W. Seka, W. T. Shmayda, R. W. Short, D. Shvarts, S. Skupsky, J. M. Soures, C. Stoeckl, W. Theobald, B. Yaakobi, J. A. Frenje, D. T. Casey, C. K. Li, R. D. Petrasso, F. H. Séguin, S. J. Padalino, K. A. Fletcher, P. M. Celliers, G. W. Collins, and H. F. Robey, "Progress in Direct-Drive Inertial Confinement Fusion," *EPJ Web of Conferences* **59**, 01004 (2013).

P. W. McKenty, T. J. B. Collins, J. A. Marozas, T. J. Kessler, J. D. Zuegel, M. J. Shoup, R. S. Craxton, F. J. Marshall, A. Shvydky, S. Skupsky, V. N. Goncharov, P. B. Radha, R. Epstein, T. C. Sangster, D. D. Meyerhofer, R. L. McCrory, J. D. Kilkeny, A. Nikroo, M. L. Hoppe, A. J. MacKinnon, S. LePape, M. M. Marinak, M. J. Schmitt, P. A. Bradley, N. S. Krasheninnikova, G. R. Magelssen, and T. J. Murphy, "Preparing for Polar-Drive Ignition on the National Ignition Facility," *EPJ Web of Conferences* **59**, 02014 (2013).

D. T. Michel, V. N. Goncharov, I. V. Igumenshchev, R. Epstein, and D. H. Froula, "Demonstration of the Improved Rocket Efficiency in Direct-Drive Implosions Using Different Ablator Materials," *Phys. Rev. Lett.* **111**, 245005 (2013).

P. B. Radha, F. J. Marshall, T. R. Boehly, T. J. B. Collins, R. S. Craxton, D. Edgell, R. Epstein, J. Frenje, V. N. Goncharov, J. A. Marozas, R. L. McCrory, P. W. McKenty, D. D. Meyerhofer, R. D. Petrasso, T. C. Sangster, A. Shvydky, and S. Skupsky, "Polar Drive on OMEGA," *EPJ Web of Conferences* **59**, 02013 (2013).

S. Salzman, H. J. Romanofsky, Y. I. Clara, L. J. Giannechini, G. West, J. C. Lambropoulos, and S. D. Jacobs, "Magnetorheological Finishing with Chemically Modified Fluids for Studying Material Removal of Single-Crystal ZnS," in *Optifab 2013*, edited by J. L. Bentley and M. Pfaff, (SPIE, Bellingham, WA, 2013), Vol. 8884, Paper 888407.

D. Saulnier, B. Taylor, K. L. Marshall, T. J. Kessler, and S. D. Jacobs, "Liquid Crystal Chiroptical Polarization Rotators for

the Near-UV Region: Theory, Materials, and Device Applications,” in *Liquid Crystals XVII*, edited by I. C. Khoo (SPIE, Bellingham, WA, 2013), Vol. 8828, Paper 882807.

M. Storm, B. Eichman, Z. Zhong, W. Theobald, P. Schiebel, C. Mileham, C. Stoeckl, I. A. Begishev, G. Fiksel, R. B. Stephens, R. R. Freeman, and K. U. Akli, “Note: Characterization of a High-Photon-Energy X-Ray Imager,” *Rev. Sci. Instrum.* **84**, 106103 (2013).

W. Theobald, A. Casner, R. Nora, X. Ribeyre, M. Lafon, K. S. Anderson, R. Betti, R. S. Craxton, J. A. Delettrez, J. A. Frenje, V. Yu. Glebov, O. V. Gotchev, M. Hohenberger, S. X. Hu, F. J. Marshall, R. L. McCrory, D. D. Meyerhofer, L. J. Perkins, T. C. Sangster, G. Schurtz, W. Seka, V. A. Smalyuk, C. Stoeckl, and B. Yaakobi, “Progress in the Shock-Ignition Inertial Confinement Fusion Concept,” *EPJ Web of Conferences* **59**, 03001 (2013).

Forthcoming Publications

H.-M. P. Chen and S. H. Chen, “Glassy Liquid Crystals as Self-Organized Solid Films for Opto-electronics,” to be published in *Nanoscience with Liquid Crystals: From Organized Nanostructures to Applications*.

C. Dorrer, “Spectral and Temporal Properties of Optical Signals with Multiple Sinusoidal Phase Modulations,” to be published in *Applied Optics*.

D. Haberberger, S. Ivancic, S. X. Hu, R. Boni, M. Barczys, R. S. Craxton, and D. H. Froula, “Measurements of the Electron Density Profiles Using an Angular Filter Refractometer,” to be published in *Physics of Plasmas*.

M. Hohenberger, W. Theobald, S. X. Hu, K. S. Anderson, R. Betti, T. R. Boehly, A. Casner, D. E. Fratanduono, M. Lafon, D. D. Meyerhofer, R. Nora, X. Ribeyre, T. C. Sangster, G. Schurtz, W. Seka, C. Stoeckl, and B. Yaakobi, “Shock-Ignition—Relevant Experiments with Planar Targets on OMEGA,” to be published in *Physics of Plasmas*.

M. Mikulics, H. Hardtdegen, R. Adam, D. Grützmacher, D. Gregušová, J. Novák, P. Kordoš, Z. Sofer, J. Serafini,

J. Zhang, R. Sobolewski, and M. Marso, “Impact of Thermal Annealing on Nonequilibrium Carrier Dynamics in Single-Crystal, Free-Standing GaAs Mesostructures,” to be published in *Semiconductor Science and Technology*.

J. B. Oliver, J. Bromage, C. Smith, D. Sadowski, C. Dorrer, and A. L. Rigatti, “Plasma-Ion—Assisted Coatings for 15-fs Laser Systems,” to be published in *Applied Optics*.

H. F. Robey, P. M. Celliers, J. D. Moody, J. Sater, T. Parham, B. Koziowski, R. Dylla-Spears, J. S. Ross, S. LePape, J. E. Ralph, M. Hohenberger, E. L. Dewald, L. Berzak Hopkins, J. J. Kroll, B. E. Yoxall, A. V. Hamza, T. R. Boehly, A. Nikroo, O. L. Landen, and M. J. Edwards, “Shock-Timing Measurements and Analysis in Deuterium—Tritium Ice-Layered Capsule Implosions on the NIF,” to be published in *Physics of Plasmas*.

J. E. Schoenly, W. Seka, and P. Rechmann, “Pulsed-Laser Ablation of Dental Calculus in the Near-Ultraviolet,” to be published in the *Journal of Biomedical Optics*.

Conference Presentations

The following presentations were made at the SLAC High-Power Laser Workshop, Menlo Park, CA, 1–2 October 2013:

D. H. Froula, “Direct-Drive Fusion and High-Energy-Density Research at the Laboratory for Laser Energetics.”

R. J. Henchen, R. K. Follett, D. H. Edgell, V. N. Goncharov, J. S. Ross, J. Katz, C. Sorce, and D. H. Froula, “Collective Ultraviolet Thomson Scattering from High-Power Laser-Produced Plasmas.”

P. W. McKenty, "Current Status of NIF Polar-Drive-Ignition Designs," ICF Burning Plasma Platforms, Livermore, CA, 2–3 October 2013.

R. Epstein, S. P. Regan, B. A. Hammel, L. J. Suter, H. A. Scott, M. A. Barrios, D. K. Bradley, D. A. Callahan, C. Cerjan, G. W. Collins, S. N. Dixit, T. Döppner, M. J. Edwards, D. R. Farley, K. B. Fournier, S. Glenn, S. H. Glenzer, I. E. Golovkin, A. Hamza, D. G. Hicks, N. Izumi, O. S. Jones, M. H. Key, J. D. Kilkenny, J. L. Kline, G. A. Kyrala, O. L. Landen, T. Ma, J. J. MacFarlane, A. J. Mackinnon, R. C. Mancini, R. L. McCrory, D. D. Meyerhofer, N. B. Meezan, A. Nikroo, H.-S. Park, P. K. Patel, J. E. Ralph, B. A. Remington, T. C. Sangster, V. A. Smalyuk, P. T. Springer, R. P. J. Town, and J. L. Tucker, "Applications and Results of X-Ray Spectroscopy in Implosion Experiments on the National Ignition Facility," 18th Annual International Conference on Atomic Processes in Plasmas, Auburn, AL, 7–10 October 2013 (invited).

S. Salzman, H. J. Romanofsky, Y. I. Clara, L. J. Giannechini, G. West, J. C. Lambropoulos, and S. D. Jacobs, "Magneto-rheological Finishing with Chemically Modified Fluids for Studying Material Removal of Single Crystal ZnS," Optifab 2013, Rochester, NY, 14–17 October 2013.

The following presentations were made at the Sixth International Symposium on Ultrafast Photonics Technologies, Rochester, NY, 21–22 October 2013:

J. Bromage, R. G. Roides, S.-W. Bahk, J. B. Oliver, C. Mileham, C. Dorrer, and J. D. Zuegel, "Noncollinear Optical Parametric Amplifiers for Ultra-Intense Lasers."

D. D. Meyerhofer, "The University of Rochester is a Pioneer in Laser Fusion."

W. T. Shmayda and N. Redden, "New Tritium Facilities at the University of Rochester's Laboratory for Laser Energetics," 10th International Conference on Tritium Science and Technology, Nice, France, 21–25 October 2013.

The following presentations were made at the 55th Annual Meeting of the APS Division of Plasma Physics, Denver, CO, 11–15 November 2013:

K. S. Anderson, P. W. McKenty, T. J. B. Collins, J. A. Marozas, and R. Betti, "An Implosion-Velocity Survey for Shock Ignition on the NIF."

D. H. Barnak, P.-Y. Chang, G. Fiksel, R. Betti, and C. Taylor, "Increasing the Magnetic-Field Capability of MIFEDS Using an Inductively Coupled Coil."

R. Betti, K. S. Anderson, M. Lafon, R. Nora, W. Theobald, J. A. Delettrez, A. Solodov, J. R. Davies, C. Stoeckl, R. Yan, J. Li, and C. Ren, "Electron Shock Ignition."

A. Bose, R. Betti, R. Nora, K. Woo, P.-Y. Chang, J. R. Davies, A. Christopherson, J. A. Delettrez, and K. S. Anderson, "Hydrodynamic Scaling of the Deceleration-Phase Rayleigh-Taylor Instability."

P.-Y. Chang, G. Fiksel, D. Barnak, J. R. Davies, and R. Betti, "Neutron Yield Enhancement by Magnetizing Implosions on OMEGA."

T. J. B. Collins, J. A. Marozas, J. A. Delettrez, P. W. McKenty, K. S. Anderson, A. Shvydky, F. J. Marshall, D. Cao, J. Chenhall, A. Prochaska, and G. Moses, "Optimization of the NIF Polar-Drive-Ignition Point Design."

R. S. Craxton, P. B. Radha, A. K. Davis, D. H. Froula, M. Hohenberger, P. W. McKenty, D. T. Michel, P. A. Olson, T. C. Sangster, S. LePape, T. Ma, and A. J. Mackinnon, "Optimization of Azimuthal Uniformity in NIF Polar-Drive Implosions."

A. K. Davis, D. T. Michel, R. S. Craxton, R. Epstein, M. Hohenberger, T. C. Sangster, P. B. Radha, T. Mo, and D. H. Froula, "Three-Dimensional Modeling of X-Ray Self-Emission Images on NIF Polar-Drive Implosions."

J. A. Delettrez, T. J. B. Collins, P. W. McKenty, P. B. Radha, S. X. Hu, S. Skupsky, F. J. Marshall, S. To, A. Shvydky, D. Cao, A. Prochaska, J. Chenhall, and G. Moses, "Effect of Nonlocal Thermal-Electron Transport on the Symmetry of Polar-Drive Experiments."

D. F. DuBois, D. A. Russell, H. X. Vu, J. F. Myatt, and W. Seka, "Half-Harmonic Radiation from Turbulence Driven by the Two-Plasmon-Decay Instability."

D. H. Edgell, D. Haberberger, S. X. Hu, D. T. Michel, J. F. Myatt, C. Stoeckl, B. Yaakobi, and D. H. Froula, "Measurements of the Two-Plasmon–Decay Generated Hot-Electron Fraction as a Function of the Quarter-Critical Density Scale Length."

R. Epstein, F. J. Marshall, V. N. Goncharov, R. Betti, A. R. Christopherson, R. Nora, I. E. Golovkin, and J. J. MacFarlane, "A Pressure Diagnostic Based on X-Ray Continuum Images of Compressed Isobaric Hydrogen Implosion Cores."

G. Fiksel, D. Barnak, P.-Y. Chang, S. X. Hu, P. M. Nilson, R. Betti, W. Fox, A. Bhattacharjee, and K. Germaschewski, "Magnetic Reconnection of an Externally Applied Magnetic Field in a High-Energy-Density Plasma."

R. K. Follett, D. H. Edgell, R. Henchen, S. X. Hu, D. T. Michel, J. F. Myatt, and D. H. Froula, "Observation of Two-Plasmon–Decay Electron Plasma Waves Driven by Multiple Beams Using UV Thomson Scattering."

C. J. Forrest, V. Yu. Glebov, V. N. Goncharov, S. X. Hu, D. D. Meyerhofer, P. B. Radha, T. C. Sangster, C. Stoeckl, J. A. Frenje, and M. Gatu Johnson, "Diagnosing Cryogenic DT Implosion Performance Using Neutron Spectroscopy on OMEGA."

D. H. Froula, T. J. Kessler, I. V. Igumenshchev, V. N. Goncharov, H. Huang, S. X. Hu, E. Hill, J. H. Kelly, D. T. Michel, D. D. Meyerhofer, A. Shvydky, J. D. Zuegel, and R. Epstein, "Mitigation of Cross-Beam Energy Transfer in Direct-Drive Implosions on OMEGA."

V. Yu. Glebov, C. J. Forrest, K. L. Marshall, A. Pruyne, M. Romanofsky, T. C. Sangster, M. J. Shoup III, and C. Stoeckl, "A New Neutron Time-of-Flight Detector for Areal Density Measurements on OMEGA."

V. N. Goncharov, T. C. Sangster, R. Betti, T. R. Boehly, T. J. B. Collins, R. S. Craxton, J. A. Delettrez, D. H. Edgell, R. Epstein, C. J. Forrest, D. H. Froula, V. Yu. Glebov, D. R. Harding, S. X. Hu, I. V. Igumenshchev, R. Janezic, J. H. Kelly, T. J. Kessler, T. Z. Kosc, S. J. Loucks, J. A. Marozas, F. J. Marshall, A. V. Maximov, R. L. McCrory, P. W. McKenty, D. D. Meyerhofer, D. T. Michel, J. F. Myatt, R. Nora, P. B. Radha, S. P. Regan, W. Seka, W. T. Shmayda, R. W. Short, A. Shvydky, S. Skupsky, C. Sorce, C. Stoeckl, B. Yaakobi, J. A. Frenje, M. Gatu Johnson, R. D. Petrasso, and D. T. Casey, "Demonstrating Ignition Hydrodynamic Equivalence in Cryogenic DT Implosions on OMEGA" (invited).

M. C. Gregor, R. Boni, A. Sorce, C. A. McCoy, M. Millot, J. H. Eggert, P. M. Celliers, T. R. Boehly, and D. D. Meyerhofer, "The Absolute Calibration of the Streaked Optical Pyrometer at the Omega Laser Facility."

D. Haberberger, D. H. Edgell, S. X. Hu, S. Ivancic, B. Yaakobi, R. Boni, and D. H. Froula, "Coronal Plasma Density Characterization in Long-Scale-Length High-Energy-Density Plasmas" (invited).

R. J. Henchen, V. N. Goncharov, D. T. Michel, R. K. Follett, J. Katz, and D. H. Froula, "Ultraviolet Thomson Scattering from Direct-Drive Coronal Plasmas."

M. Hohenberger, A. Shvydky, J. A. Marozas, T. J. B. Collins, D. Canning, M. J. Bonino, G. Fiksel, T. J. Kessler, P. W. McKenty, D. D. Meyerhofer, J. D. Zuegel, and T. C. Sangster, "Measurement of 1-D Multi-FM SSD Smoothing Performance on OMEGA EP."

S. X. Hu, P. B. Radha, V. N. Goncharov, R. Betti, R. Epstein, F. J. Marshall, R. L. McCrory, D. D. Meyerhofer, T. C. Sangster, and S. Skupsky, "Integrated Two-Dimensional DRACO Simulations of Cryogenic DT Target Performance on OMEGA."

I. V. Igumenshchev, P. M. Nilson, V. N. Goncharov, A. B. Zylstra, C. K. Li, and R. D. Petrasso, "Investigation of Electric and Self-Generated Magnetic Fields in Implosion Experiments on OMEGA."

S. Ivancic, W. Theobald, D. Haberberger, D. H. Froula, C. Stoeckl, K. S. Anderson, D. D. Meyerhofer, K. Tanaka, H. Habara, and T. Iwawaki, "Optical-Probe Measurements of a Plasma Channel for Fast Ignition."

J. P. Knauer, J. A. Caggiano, R. Hatarik, J. M. McNaney, B. K. Spears, M. Gatu Johnson, J. A. Frenje, and J. D. Kilkenny, "Bulk Fluid Velocity Construction from NIF Neutron Spectral Diagnostics."

M. Lafon, R. Betti, K. S. Anderson, T. J. B. Collins, J. Li, R. Nora, C. Ren, and P. W. McKenty, "Direct-Drive–Ignition Designs with Moderate-Z Ablators."

J. Li, C. Ren, X. Kong, M. C. Huang, and W. B. Mori, "Adapting a Collision Package in Particle-in-Cell Simulations on a GPU."

J. A. Marozas, T. J. B. Collins, J. A. Delettrez, P. B. Radha, P. W. McKenty, I. V. Igumenshchev, D. H. Edgell, D. H.

Froula, M. Hohenberger, F. J. Marshall, D. T. Michel, W. Seka, A. J. Mackinnon, S. LePape, T. Ma, D. Cao, A. Prochaska, J. Chenhall, and G. Moses, "Comparison of 2-D *DRACO* Cross-Beam Energy Transfer (CBET) Simulations with OMEGA and NIF Experiments."

F. J. Marshall, P. B. Radha, M. J. Bonino, D. R. Harding, J. A. Delettrez, R. Epstein, and E. Giraldez, "Improved Polar-Driven Implosion Performance Obtained with Contoured Shells."

A. V. Maximov, J. F. Myatt, R. W. Short, I. V. Igumenshchev, and W. Seka, "Laser-Plasma Interaction Model for Cross-Beam Energy Transfer."

P. W. McKenty, J. A. Marozas, F. J. Marshall, J. A. Delettrez, R. S. Craxton, M. Hohenberger, D. H. Froula, D. T. Michel, P. A. Olson, S. To, D. D. Meyerhofer, R. L. McCrory, D. Cao, G. Moses, S. Laffite, L. Videau, S. LePape, T. Ma, and A. J. Mackinnon, "Evaluation of Cross-Beam Energy Transfer in NIF Polar-Drive Exploding-Pusher Experiments."

D. D. Meyerhofer, R. S. Craxton, D. H. Froula, M. Hohenberger, P. W. McKenty, D. T. Michel, F. J. Marshall, J. F. Myatt, P. B. Radha, T. C. Sangster, W. Seka, S. LePape, K. N. LaFortune, B. J. MacGowan, A. J. Mackinnon, J. D. Moody, and C. Widmayer, "Initial Polar-Drive Implosions on the NIF."

D. T. Michel, V. N. Goncharov, I. V. Igumenshchev, P. B. Radha, R. J. Henchen, S. X. Hu, and D. H. Froula, "Comparison of Implosion Velocities for Be, C, and CH Ablators Measured in Direct-Drive Implosions."

J. F. Myatt, R. W. Short, A. V. Maximov, A. A. Solodov, J. Zhang, R. S. Craxton, C. Ren, R. Yan, I. V. Igumenshchev, S. X. Hu, V. N. Goncharov, W. Seka, D. H. Edgell, D. H. Froula, B. Yaakobi, D. T. Michel, D. F. DuBois, D. A. Russell, D. E. Hinkel, P. Michel, and H. X. Vu, "Multibeam Laser-Plasma Interactions in Inertial Confinement Fusion" (invited).

P. M. Nilson, C. Stillman, A. Shvydky, A. A. Solodov, R. Betti, D. H. Froula, and D. D. Meyerhofer, "Material Release at High-Energy Densities."

R. Nora, R. Betti, K. S. Anderson, A. Shvydky, A. Bose, K. M. Woo, A. R. Christopherson, J. A. Marozas, T. J. B. Collins, P. B. Radha, S. X. Hu, R. Epstein, F. J. Marshall, T. C. Sangster, and D. D. Meyerhofer, "Theory of Hydro-Equivalent Ignition for Inertial Fusion and Its Applications to OMEGA and the NIF" (invited).

P. B. Radha, M. Hohenberger, R. S. Craxton, J. A. Marozas, F. J. Marshall, D. H. Edgell, R. Epstein, D. T. Michel, D. H. Froula, V. N. Goncharov, R. L. McCrory, P. W. McKenty, D. D. Meyerhofer, T. C. Sangster, A. Shvydky, S. Skupsky, T. Ma, A. J. Mackinnon, and S. Le Pape, "Polar-Drive Implosions on the NIF."

S. P. Regan, R. Epstein, T. C. Sangster, D. D. Meyerhofer, C. A. Iglesias, B. G. Wilson, H.-S. Park, L. J. Suter, H. Scott, O. S. Jones, J. D. Kilkenny, B. A. Hammel, M. A. Barrios, V. A. Smalyuk, B. Remington, G. A. Kyrala, T. J. Murphy, J. Kline, P. A. Bradley, N. S. Krasheninnikova, and R. J. Kanzleiter, "Plasma Conditions of the Compressed Ablator at Stagnation in NIF Implosions."

T. C. Sangster, V. N. Goncharov, P. B. Radha, R. Betti, T. R. Boehly, C. J. Forrest, D. H. Froula, V. Yu. Glebov, S. X. Hu, I. V. Igumenshchev, J. Kwiatkowski, F. J. Marshall, R. L. McCrory, P. W. McKenty, D. D. Meyerhofer, D. T. Michel, J. F. Myatt, W. Seka, C. Stoeckl, J. A. Frenje, and M. Gatu Johnson, "Status of Ignition Hydro-Equivalent Implosion Performance on OMEGA."

W. Seka, J. F. Myatt, J. Zhang, R. W. Short, D. H. Froula, A. V. Maximov, V. N. Goncharov, and I. V. Igumenshchev, "Non-linearity of the Two-Plasmon-Decay Instability in Imploding Direct-Drive Targets."

R. W. Short, J. F. Myatt, and J. Zhang, "The Effects of Beam Geometry and Polarization on Two-Plasmon Decay Driven by Multiple Laser Beams."

A. Shvydky, M. Hohenberger, J. A. Marozas, M. J. Bonino, D. Canning, T. J. B. Collins, T. J. Kessler, B. E. Kruschwitz, P. W. McKenty, D. D. Meyerhofer, T. C. Sangster, and J. D. Zuegel, "Two-Dimensional Numerical Evaluation of 1-D Multi-FM SSD Experiments on OMEGA EP."

A. A. Solodov, W. Theobald, K. S. Anderson, A. Shvydky, R. Epstein, R. Betti, J. F. Myatt, C. Stoeckl, L. C. Jarrott, C. McGuffey, B. Qiao, F. N. Beg, M. S. Wei, and R. B. Stephens, "Simulations of Fuel Assembly and Fast-Electron Transport in Integrated Fast-Ignition Experiments on OMEGA."

C. Stoeckl, R. Epstein, G. Fiksel, D. Guy, V. N. Goncharov, D. W. Jacobs-Perkins, R. K. Jungquist, C. Mileham, P. M. Nilson, T. C. Sangster, M. J. Shoup III, and W. Theobald, "Soft X-Ray Backlighting of Cryogenic Implosions Using a Narrowband Crystal Imaging System."

B. R. Talbot, V. V. Ivanov, I. A. Begishev, A. L. Astanovitskiy, V. Nalajala, and O. Dmitriev, "Development of the Diagnostic Laser for Deep UV Probing of the Dense Z-Pinch."

W. Theobald, R. Nora, M. Lafon, K. S. Anderson, J. R. Davies, M. Hohenberger, T. C. Sangster, W. Seka, A. A. Solodov, C. Stoeckl, B. Yaakobi, R. Betti, A. Casner, C. Reverdin, X. Ribeyre, and A. Vallet, "Demonstration of 200-Mbar Ablation Pressure for Shock Ignition."

H. Wen, A. V. Maximov, R. Yan, C. Ren, J. F. Myatt, and W. B. Mori, "Three-Dimensional Modeling of the Two-Plasmon-Decay Instability and Stimulated Raman Scattering Near the Quarter-Critical Density in Plasmas."

J. Zhang, J. F. Myatt, R. W. Short, A. V. Maximov, H. X. Vu, D. A. Russell, and D. F. DuBois, "Two-Plasmon Decay Driven by Multiple Incoherent Laser Beams."

D. R. Harding, H. Goodrich, A. Caveglia, and M. Anthamatten, "Properties and Fracture Behavior of Nanoliter Size Volumes of Acrylate Adhesives at Cryogenic Temperatures," 2013 Materials Research Society Fall Meeting, Boston, MA, 1-6 December 2013.

The following presentations were made at the Fusion Power Associates 34th Annual Meeting, Washington, DC, 11 December 2013:

R. Betti and D. D. Meyerhofer, "Near-Term Issues for Inertial Confinement Fusion."

R. L. McCrory, "Perspectives on Inertial Fusion Energy."