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Conference Presentations

C. Z. R. Huang, R. W. Wood, and S. G. Demos, "Microscopy with Ultraviolet Surface Excitation for Enhancing K–12 and Undergraduate Education in Life Science," presented at the 2017 Biomedical Engineering Society Annual Meeting, Phoenix, AZ, 11–14 October 2017.

The following presentations were made at the 59th Annual Meeting of the APS Division of Plasma Physics, Milwaukee, WI, 23–27 October 2017:

K. S. Anderson, P. W. McKenty, A. Shvydky, T. J. B. Collins, C. J. Forrest, J. P. Knauer, P. B. Radha, F. J. Marshall, A. Sefkow, and M. M. Marinak, "Three-Dimensional Modeling of Low-Mode Asymmetries in OMEGA Cryogenic Implosions."

R. Betti, V. Gopalaswamy, J. P. Knauer, A. R. Christopherson, D. Patel, K. M. Woo, A. Bose, K. S. Anderson, T. J. B. Collins, S. X. Hu, D. T. Michel, C. J. Forrest, R. Shah, P. B. Radha, V. N. Goncharov, V. Yu. Glebov, A. V. Maximov, C. Stoeckl, F. J. Marshall, M. J. Bonino, D. R. Harding, R. T. Janezic, J. H. Kelly, S. Sampat, T. C. Sangster, S. P. Regan, E. M. Campbell, M. Gatu Johnson, J. A. Frenje, C. K. Li, and R. D. Petrasso, "The 1-D Cryogenic Implosion Campaign on OMEGA" (invited).

T. R. Boehly, C. A. McCoy, D. E. Fratanduono, P. Celliers, M. C. Gregor, D. N. Polsin, Y. Ding, S. X. Hu, J. R. Rygg, and G. W. Collins, "Measurements of Sound Velocity and Grüneisen Parameter in CH Shocked to 800 GPa."

A. Bose, R. Betti, and K. M. Woo, D. Shvarts, D. S. Clark, S. W. Haan, A. L. Kritcher, O. L. Landen, J. Lindl, J. H. Nuckolls, and M. D. Rosen, "The Physics of Low- and Mid-Mode Asymmetries of the Hot Spot."

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A. R. Christopherson, and R. Betti, "Definition of Ignition in Inertial Confinement Fusion."

T. J. B. Collins, J. A. Marozas, D. Cao, J. A. Delettrez, P. W. McKenty, P. B. Radha, S. Skupsky, and G. Moses, "Advances in Modeling Direct-Drive Ignition-Scale Designs for the National Ignition Facility."

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A. K. Davis, D. T. Michel, A. B. Sefkow, Y. H. Ding, R. Epstein, S. X. Hu, J. P. Knauer, and D. H. Froula, "Conduction-Zone Measurements Using X-Ray Self-Emission Images."

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Y. H. Ding, and S. X. Hu, "Density-Functional-Theory–Based Equation-of-State Table of Beryllium for Inertial Confinement Fusion Applications."

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R. Epstein, C. Stoeckl, V. N. Goncharov, P. W. McKenty, S. P. Regan, and P. B. Radha, "Simulation and Analysis of Time-Gated Monochromatic Radiographs of Cryogenic Implosions on OMEGA."

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C. R. Stillman, P. M. Nilson, S. T. Ivancic, C. Mileham, D. H. Froula, and I. E. Golokin, "Picosecond Time-Resolved Temperature and Density Measurements with K-Shell Spectroscopy."

C. Stoeckl, R. Epstein, R. Betti, C. J. Forrest, V. Yu. Glebov, V. N. Goncharov, V. Gopalaswamy, D. R. Harding, I. V. Igumenshchev, D. W. Jacobs-Perkins, R. Janezic, J. H. Kelly, D. T. Michel, F. J. Marshall, S. F. B. Morse, S. P. Regan, P. B. Radha, T. C. Sangster, M. J. Shoup III, W. T. Shmayda, C. Sorce, W. Theobald, J. Ulreich, J. Zhang, M. Gatu Johnson, J. A. Frenje, R. D.

Petrasso, M. Farrell, A. Greenwood, M. Schoff, and W. Sweet, "Comparison of the Performance of Polystyrene and Glow-Discharge Polymer Ablators Used in Cryogenic Implosions."

W. Theobald, C. Sorce, R. Epstein, R. L. Keck, C. Kellogg, T. J. Kessler, J. Kwiatkowski, F. J. Marshall, S. P. Regan, W. Seka, R. Shah, A. Shvydky, C. Stoeckl, and L. J. Waxer, "Inferred UV Fluence Focal-Spot Profiles from Soft X-Ray Pinhole-Camera Measurements on OMEGA."

K. M. Woo, R. Betti, A. Bose, D. Patel, and V. Gopalaswamy, "Three-Dimensional Studies of the Effect of Residual Kinetic Energy on Yield Degradation."

M. Zaghoo, and I. F. Silvera, "Dynamic Conductivity and Partial Ionization in Metallic Hydrogen."

H. Zhang, R. Betti, V. Gopalaswamy, R. Yan, and H. Aluie, "Nonlinear Excitation of the Linearly Stable Ablative Rayleigh–Taylor Instability for All Wave Numbers."

R. Betti, V. Gopalaswamy, J. P. Knauer, A. Bose, K. S. Anderson, T. J. B. Collins, S. X. Hu, D. T. Michel, C. J. Forrest, R. Shah, P. B. Radha, V. N. Goncharov, V. Yu. Glebov, A. V. Maximov, C. Stoeckl, F. J. Marshall, M. J. Bonino, D. R. Harding, R. T. Janezic, J. H. Kelly, S. Sampat, T. C. Sangster, S. P. Regan, E. M. Campbell, M. Gatu Johnson, J. A. Frenje, C. K. Li, and R. Petrasso, "Tripling the Fusion Yield of OMEGA Direct-Drive Implosions Through Data-Driven Statistical Modeling," presented at the Cornell Engineering Seminar, Ithaca, NY, 30 November 2017.

The following presentations were made at the Materials Research Society Fall Meeting, Boston, MA, 26 November–1 December 2017:

D. R. Harding, B. P. Chock, and T. B. Jones, "Digital Microfluidic Methods for Forming Droplets of Low-Surface-Energy Fluids, Combining Them into Emulsions, and Transforming Them into Polymer Shells."

N. D. Viza, and D. R. Harding, "Microfluidic Devices for Producing Millimeter-Size Droplets, Emulsions, and Polystyrene Shells for Inertial Fusion Confinement Experiments."

Y. Zhao, and W. R. Donaldson, "Systematic Study on the Photoreseponse in $Al_xGa_{1-x}N$ UV Photodetectors."

The following presentations were made at the 38th Annual Meeting and Symposium Fusion Power Associates, Pathways and Progress Toward Fusion Power, Washington, DC, 6–7 December 2017:

R. Betti, V. Gopalaswamy, J. P. Knauer, A. R. Christopherson, D. Patel, K. M. Woo, A. Bose, K. S. Anderson, T. J. B. Collins, S. X. Hu, D. T. Michel, C. J. Forrest, R. Shah, P. B. Radha, V. N. Goncharov, V. Yu. Glebov, A. V. Maximov, C. Stoeckl, F. J. Marshall, M. J. Bonino, D. R. Harding, R. T. Janezic, J. H. Kelly, S. Sampat, T. C. Sangster, S. P. Regan, E. M. Campbell, M. Gatu Johnson, J. A. Frenje, C. K. Li, and R. Petrasso, "Achieving Record Fusion Yields in Direct-Drive Laser-Fusion Experiments Using Statistical Mapping."

G. W. Collins, "High-Energy-Density Microphysics: Progress and Plans."

V. N. Goncharov, "Progress Toward Demonstration of Ignition Hydroequivalence on OMEGA."

R. Betti, V. Gopalaswamy, J. Knauer, A. Bose, K. S. Anderson, T. J. B. Collins, S. X. Hu, D. T. Michel, C. J. Forrest, R. Shah, P. B. Radha, V. N. Goncharov, V. Yu. Glebov, A. V. Maximov, C. Stoeckl, F. J. Marshall, M. J. Bonino, D. R. Harding, R. T. Janezic, J. H. Kelly, S. Sampat, T. C. Sangster, S. P. Regan, E. M. Campbell, M. Gatu Johnson, J. A. Frenje, C. K. Li, and R. Petrasso, "Tripling the Fusion Yield of OMEGA Direct-Drive Implosions Through Data-Driven Statistical Modeling," presented at the Physics Colloquium at the Shanghai Institute of Laser Plasma, Shanghai, China, 7 December 2017.

C. Z. R. Huang, R. W. Wood, and S. G. Demos, "Microscopy with Ultraviolet Surface Excitation (MUSE) for Enhancing K–12 and Undergraduate Education in Life Sciences," presented at SPIE Photonics West, San Francisco, CA, 27 January–1 February 2018.

The following presentations were made at LASE, San Francisco, CA, 27 January–1 February 2018:

S. Sampat, J. H. Kelly, T. Z. Kosc, A. L. Rigatti, J. Kwiatkowski, W. R. Donaldson, M. H. Romanofsky, L. J. Waxer, R. Dean, and R. Moshier, "Power Balance on a Multibeam Laser."

L. J. Waxer, C. Dorrer, A. Kalb, E. M. Hill, and W. Bittle, "Single-Shot Temporal Characterization of a Kilojoule-Level, Picosecond Pulses on OMEGA EP."

M. J. Rosenberg, A. A. Solodov, W. Seka, R. K. Follett, S. P. Regan, A. V. Maximov, T. J. B. Collins, V. N. Goncharov, R. Epstein, R. W. Short, D. Turnbull, D. H. Froula, P. B. Radha, J. F. Myatt, P. Michel, M. Hohenberger, G. Swadling, J. S. Ross, T. Chapman, L. Masse, C. Goyon, J. E. Ralph, J. D. Moody, J. W. Bates, and A. J. Schmitt, "Planar Laser-Plasma Interaction Experiments at the Direct-Drive Ignition-Relevant Scale Lengths at the National Ignition Facility," presented at the NIF User Group Meeting, Livermore, CA, 5–7 February 2018.

The following presentations were made at the 14th Direct-Drive and Fast-Ignition Workshop, York, United Kingdom, 20–22 March 2018:

I. V. Igumenshchev, "Three-Dimensional Simulations of Direct-Drive Implosions on OMEGA."

R. C. Shah, D. Cao, S. P. Regan, R. Epstein, C. Sorce, W. Theobald, B. Kraus, K. Hill, L. Gao, B. Stratton, P. Efthimion, H. Sio, N. Kabadi, J. A. Frenje, D. Thorn, B. Bachmann, C. Jarrot, P. K. Patel, M. B. Schneider, and J. D. Kilkenny, "Hot-Spot Electron Temperature Inferred from X-Ray Continuum Emission."

J. P. Palastro, D. Turnbull, S.-W. Bahk, R. K. Follett, J. L. Shaw, D. Haberberger, A. Davies, J. Viera, N. Vafaei-Najafabadi, J. Bromage, and D. H. Froula, "Spatiotemporal Control of Laser Intensity for Plasma-Based Applications," presented at the 2018 U.S.-Japan Workshop on Theory and Simulations of High-Field and High Energy Density Physics, Hiroshima, Japan, 27–28 March 2018.

J. Bromage, S.-W. Bahk, I. A. Begishev, C. Dorrer, M. J. Guardalben, B. N. Hoffman, J. B. Oliver, R. G. Roides, E. M. Schiesser, M. J. Shoup III, M. Spilatro, B. Webb, D. Weiner, and J. D. Zuegel, "Technology Development for Ultra-Intense All-OPCPA Systems," presented at the 3rd International Symposium on High Power Laser Science and Engineering, Suzhou, China, 9–12 April 2018.

M. Singh, J. Cady, Y. Akbas, G. Chen, R. Sobolewski, and O. Mukhanov, "Superconducting Single-Photon Detectors as Smart Sensors," presented at CEIS 2018, Rochester, NY, 12 April 2018.

The following presentations were made at the March for Science, Rochester, NY, 14 April 2018:

N. Bose, "Compensation for Self-Focusing on OMEGA EP by Use of Frequency Conversion of Light."

R. S. Craxton, "University of Rochester, Laboratory for Laser Energetics."

Y. Yang and R. S. Craxton, "Improving the Uniformity of *Revolver* Designs for the National Ignition Facility."

The following presentations were made at the 22nd Topical Conference on High Temperature Plasma Diagnostics, San Diego, CA, 16–19 April 2018:

D. H. Edgell, J. Katz, D. Turnbull, and D. H. Froula, "Unabsorbed Light Beamlets for Diagnosing Cross-Beam Energy Transfer."

V. Yu. Glebov, M. J. Eckart, C. J. Forrest, G. P. Grim, E. P. Hartouni, R. Hatarik, J. P. Knauer, A. S. Moore, S. P. Regan, T. C. Sangster, D. J. Schlossberg, and C. Stoeckl, "Testing a Cherenkov Neutron Time-of-Flight Detector on OMEGA."

A. Hansen, D. Haberberger, J. Katz, R. K. Follett, and D. H. Froula, "Supersonic Gas-Jet Characterization with Interferometry and Thomson Scattering on the OMEGA Laser System."

A. Howard, D. Haberberger, R. Boni, R. Brown, and D. H. Froula, "Implementation of a Wollaston Interferometry Diagnostic on OMEGA EP."

J. Katz, R. Boni, A. Davies, and D. H. Froula, "A High-Throughput, Pulse-Front-Tilt–Compensated Streaked Spectrometer for Picosecond Optical Thomson Scattering."

O. M. Mannion, C. J. Forrest, V. Yu. Glebov, V. N. Goncharov, J. P. Knauer, S. P. Regan, T. C. Sangster, C. Stoeckl, and M. Gatu Johnson, "Measurements of Bulk-Fluid Motion in Direct-Drive Implosions."

A. L. Milder and D. H. Froula, "Measuring Electron Distribution Functions Using Collective Thomson Scattering."

P. M. Nilson, F. Ehrne, C. Taylor, C. Mileham, D. Mastrosimone, R. K. Jungquist, R. Boni, J. Hassett, C. R. Stillman, S. T. Ivancic, D. J. Lonobile, R. W. Kidder, M. J. Shoup III, A. A. Solodov, A. B. Sefkow, C. Stoeckl, W. Theobald, D. H. Froula, K. W. Hill, L. Gao, M. Bitter, P. Efthimion, and D. D. Meyerhofer, "High-Resolving-Power, Streaked X-Ray Spectroscopy on the OMEGA EP Laser System."

R. C. Shah, D. Cao, R. Epstein, S. P. Regan, W. Theobald, B. Kraus, L. Gao, K. Hill, B. Stratton, P. Efthimion, and B. Bachmann, "Multichannel X-Ray Hot-Spot Imager Operating in the 5- to 3-KeV Range on OMEGA."

C. Stoeckl, T. Filkins, R. K. Jungquist, C. Mileham, S. P. Regan, M. J. Shoup III, and W. Theobald, "Characterization of Shaped Bragg Crystal Assemblies for Narrowband X-Ray Imaging."

W. Theobald, C. Sorce, M. Bedzyk, S. T. Ivancic, F. J. Marshall, C. Stoeckl, R. Shah, M. Lawrie, S. P. Regan, T. C. Sangster, E. M. Campbell, T. Hilsabeck, K. Engelhorn, J. D. Kilkenny, D. Morris, M. Chung, J. D. Hares, A. K. L. Dymoke-Bradshaw, P. Bell, J. Celeste, A. Carpenter, M. Dayton, D. K. Bradley, M. C. Jackson, L. Pickworth, S. R. Nagel, G. Rochau, J. Porter, M. Sanchez, L. Claus, G. Robertson, and Q. Looker, "The Single Line-of-Sight, Time-Resolved X-Ray Imager Diagnostic on OMEGA."

The following presentations were made at the Meeting on Magnetic Fields in Laser Plasmas, Rochester, NY, 23–24 April 2018:

D. H. Barnak, R. Betti, P.-Y. Chang, J. R. Davies, V. Yu. Glebov, E. C. Hansen, J. P. Knauer, J. Peebles, S. P. Regan, R. Epstein, A. B. Sefkow, E. M. Campbell, K. J. Peterson, D. B. Sinars, and S. A. Slutz, "Laser-Driven Magnetized Liner Inertial Fusion on OMEGA."

J. Peebles, J. R. Davies, D. H. Barnak, G. Brent, D. Mastrosimone, D. W. Jacobs-Perkins, G. Fiksel, M. J. Shoup III, T. Lewis, G. Gates, P. A. Gourdain, R. Shapovalov, R. Moshier, T. Burgett, and R. Betti, "Current Capabilities of the MIFEDS System."

J. Peebles, J. R. Davies, D. H. Barnak, A. B. Sefkow, P. A. Gourdain, R. Betti, and A. Arefiev, "Laser Driven Coils on OMEGA EP."

S. G. Demos, A. A. Kozlov, K. Kafka, J. B. Oliver, S. Papernov, B. Hoffman, T. J. Kessler, S. M. Gracewski, and J. C. Lambropoulos, "Mechanisms of Laser Damage in Optical Components for Petawatt-Class Laser Systems," presented at Pacific Rim Laser Damage 2018, Yokohama, Japan, 24–27 April 2018.

The following presentations were made at the Omega Laser Facility Users Group Workshop, Rochester, NY, 25–27 April 2018:

A. Bose, R. Betti, D. Mangino, K. M. Woo, D. Patel, A. R. Christopherson, V. Gopalaswamy, O. M. Mannion, S. P. Regan, V. N. Goncharov, C. J. Forrest, J. A. Frenje, M. Gatu Johnson, V. Yu. Glebov, J. P. Knauer, F. J. Marshall, R. Nora, P. B. Radha, R. C. Shah, C. Stoeckl, W. Theobald, T. C. Sangster, D. Shvarts, and E. M. Campbell, "Analysis of Trends in Experimental Observables for Direct-Drive Cryogenic Implosions on OMEGA, Reconstruction of the Implosion Core and Extrapolation to National Ignition Facility Energy."

N. R. Bose, "Compensation for Self-Focusing on OMEGA EP by Use of Frequency Conversion."

R. Brown, C. Dorrer, and E. M. Hill, "High-Stability Sub-10-ps Fourth-Harmonic Probe Seed Source."

A. Consentino, C. Dorrer, R. Cuffney, I. A. Begishev, E. M. Hill, B. E. Kruschwitz, and A. Szydlowski, "A New Spectrally

Tunable Narrowband Front-End Source for Cross-Beam Energy Transfer Mitigation Experiments."

M. C. Cornelius, T. W. Walker, and G. A. Brent, "Characterization and Detection of the Deterioration of Electrical Connectors in a Flash-Lamp System."

B. E. Kruschwitz, M. Barczys, A. Consentino, C. Dorrer, M. J. Guardalben, E. M. Hill, J. Kwiatkowski, D. Nelson, J. C. Puth, D. Turnbull, and L. J. Waxer, "Development of a Tunable UV Capability for Cross-Beam Energy Transfer Mitigation Studies in the OMEGA Target Chamber."

D. Mastrosimone, G. Weselak, R. Mosier, C. Sorce, D. Haberberger, D. H. Froula, J. Katz, and A. Hansen, "Fielding a Gas Jet on OMEGA and OMEGA EP."

S. F. B. Morse, "Omega Facility OLUG 2018 Update: Progress on Recommendations and Items of General Interest."

G. Pien, W. J. Armstrong, and M. Krieger, "Use of CAD for Real-Time Target-Position Guidance and Geometry Validation."

S. Sampat, J. H. Kelly, T. Z. Kosc, A. L. Rigatti, J. Kwiatkowski, W. R. Donaldson, M. H. Romanofsky, L. J. Waxer, R. Dean, and R. Moshier, "Power Balance on a Multibeam Laser."

L. J. Waxer, M. Heimbueger, J. H. Kelly, S. F. B. Morse, D. Nelson, D. Weiner, and G. Weselak, "On-Shot Focal-Spot Characterization in the OMEGA Target Chamber."

The following presentations were made at the 3rd International Conference on Matter and Radiation at Extremes, Qingdao, China, 6–11 May 2018:

E. M. Campbell, "Laser–Plasma Interaction Physics and Direct Drive: Challenges and Path Forward."

J. A. Marozas, M. J. Rosenberg, D. Turnbull, T. J. B. Collins, D. Cao, P. W. McKenty, P. B. Radha, T. C. Sangster, S. P. Regan, V. N. Goncharov, E. M. Campbell, M. W. Bowers, J.-M. G. DiNicola, G. Erbert, M. Hohenberger, B. J. MacGowan, J. D. Moody, L. J. Pelz, and S. T. Yang, "Wavelength Detuning $\Delta\lambda_0$ Cross-Beam Energy Transfer Mitigation for Polar Direct Drive on Shen Guang (SG)-III."

S. P. Regan, V. N. Goncharov, T. C. Sangster, E. M. Campbell, R. Betti, T. R. Boehly, M. J. Bonino, A. Bose, D. Cao, R. Chapman, T. J. B. Collins, R. S. Craxton, A. K. Davis, 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, D. W. Jacobs-Perkins, R. T. Janezic, J. H. Kelly, T. J. Kessler, J. P. Knauer, T. Z. Kosc, S. J. Loucks, J. A. Marozas, F. J. Marshall, R. L. McCrory, P. W. McKenty, D. T. Michel, J. F. Myatt, P. B. Radha, M. J. Rosenberg, W. Seka, R. W. Short, W. T. Shmayda, M. J. Shoup III, A. Shvydky, A. A. Solodov, C. Sorce, C. Stoeckl, C. Taylor, R. Taylor, W. Theobald, D. Turnbull, J. Ulreich, M. D. Wittman, K. M. Woo, J. D. Zuegel, M. A. Barrios, T. Chapman, C. Gibson, C. Goyon, M. Hohenberger, P. Michel, J. D. Moody, J. E. Ralph, J. W. Bates, M. Karasik, S. P. Obenschain, A. J. Schmitt, T. Bernat, J. Hund, N. etta, M. Farrell, A. Greenwood, H. Huang, M. Schoff, W. Sweet, J. A. Frenje, M. Gatu Johnson, R. D. Petrasso, and M. J. Schmitt, "The U.S. National Direct-Drive Inertial Confinement Fusion Program."

The following presentations were made at the 12th Department of Energy Laser Safety Officer Workshop, Rochester, NY, 8–10 May 2018:

J. Bromage, "Laser Science and Technology at LLE."

G. W. Collins, "LLE: A Unique University-Based Research Center of Scale Supporting National Security and Extreme Science."

K. R. P. Kafka, "Introduction to Optics."

J. C. Puth, "Laser Safety at the Omega Laser Facilities."

The following presentations were made at CLEO 2018, San Jose, CA, 13–18 May 2018:

S.-W. Bahk, B. E. Kruschwitz, A. L. Rigatti, J. B. Oliver, and J. Bromage, "Variable Astigmatism Corrector for High-Power Lasers."

C. Dorrer, and S.-W. Bahk, "Characterization of Spatiotemporal Coupling with a Hyperspectral Hartmann Wavefront Sensor."

C. Dorrer and R. J. Brown, "High-Stability Time-Lens–Based Picosecond Seed Source."

C. Dorrer, A. Consentino, R. Cuffney, I. A. Begishev, E. M. Hill, and J. Bromage, "Spectrally Tunable, Temporally Shaped Parametric Front End to Seed High-Energy Laser Systems."

C. Dorrer and J. Qiao, "Improved Spatially Dithered Beam Shapers Using Direct Binary Search."

B. Webb, M. J. Guardalben, C. Dorrer, S. Bucht, and J. Bromage, "Pulse-Compressor Grating Alignment Tolerances for Varied Geometries and Bandwidths."

J. B. Oliver, S. MacNally, C. Smith, B. N. Hoffman, J. Spaulding, J. Foster, S. Papernov, and T. J. Kessler, "Fabrication of a Glancing-Angle–Deposited Distributed Polarization Rotator for Ultraviolet Applications," presented at SPIE Advances in Optical Thin Films, Frankfurt, Germany, 14–17 May 2018.

The following presentations were made at the Tritium Focus Group Meeting, Oak Ridge, TN, 15–17 May 2018:

D. Bassler, W. T. Shmayda, and W. U. Schröder, "The Effect of Surface Chemistry of ALD Films on Tritium Retention in Stainless Steel."

C. Fagan, M. Sharpe, W. T. Shmayda, and W. U. Schröder, "Tritium Retention in Hexavalent Chromate-Conversion–Coated Aluminum Alloy."

A. Schwemmlein, W. U. Schröder, and W. T. Shmayda, "Using the T-LIANS Platform to Explore Nuclear Reactions."

M. Sharpe, C. Fagan, and W. T. Shmayda, "Distribution of Tritium in the Near Surface of Stainless-Steel 316."

W. T. Shmayda and N. Redden, "Assaying Hydrogen Isotopes with Gas Chromatography."

E. M. Campbell, "LLE: A Unique University-Based Research Center of Scale Supporting National Security and Extreme Science," presented at DOE OFES, Washington, DC, 30 May 2018.

C. J. Forrest, V. Yu. Glebov, J. P. Knauer, P. B. Radha, J. R. Rygg, W. U. Schröder, C. Stoeckl, J. A. Frenje, M. Gatu Johnson, F. H. Séguin, R. D. Petrasso, H. Sio, D. T. Casey, C. Cerjan, D. Dearborn, M. J. Edwards, G. Grim, R. Hatarik, S. P. Hatchett, O. S. Jones, O. L. Landen, A. J. Mackinnon, D. McNabb, S. Quaglioni, D. Sayre, S. Sepke, P. Springer, I. Thomson, R. E. Tipton, C. Brune, A. Vionov, J. D. Kilkenny, B. Appelbe, A. Crilly, G. Hale, H. W. Herrmann, Y. H. Kim, M. Paris, and A. B. Zylstra, "Nuclear Science Experiments at the University of Rochester's Omega Laser Facility," presented at Triangle University National Laboratory, Durham, NC, 31 May 2018.

R. Betti, J. P. Knauer, V. Gopalaswamy, D. Patel, K. M. Woo, A. Bose, N. Luciani, K. S. Anderson, T. J. B. Collins, V. Yu. Glebov, V. N. Goncharov, A. V. Maximov, F. J. Marshall, P. W. McKenty, P. B. Radha, S. P. Regan, T. C. Sangster, C. Stoeckl, and E. M. Campbell, "Progress in Direct-Drive Inertial Fusion," presented at the 19th International Congress on Plasma Physics, Vancouver, Canada, 4–8 June 2018.

D. H. Froula, M. Glinsky, P. Michel, J. F. Myatt, J. Weaver, and L. Yin, "Update on the National LPI Workshop," presented at the NNSA Update, Washington, DC, 12 June 2018.

E. M. Campbell, "LLE Program in 2019," presented at the ICF Executives Meeting, Washington, DC, 12–13 June 2018.

E. M. Campbell, "Overview of Inertial Fusion Energy Concepts Being Developed in the Private Sector," presented at the First IAEA Workshop on Fusion Enterprises, Santa Fe, NM, 13–15 June 2018.

C. R. Stillman, P. M. Nilson, S. T. Ivancic, A. B. Sefkow, C. Mileham, D. J. Nelson, I. A. Begishev, D. H. Froula, I. E. Golovkin, R. A. London, and M. E. Martin, "Ultrafast X-Ray Spectroscopy of Hot-Dense-Matter Systems," presented at the Stewardship Science Fellowship, San Francisco, CA, 18–21 June 2018.

S. P. Regan, "Laser-Direct-Drive Inertial Confinement Fusion Research on OMEGA," presented at Extreme Light Infrastructure Nuclear Physics, Bucharest, Romania, 22 June 2018.

D. H. Froula, J. S. Ross, B. Pollock, R. K. Follett, R. J. Henchen, A. Davies, A. M. Hansen, A. L. Milder, J. P. Palastro, J. Katz, and R. Boni, "Optical Thomson Scattering in High-Energy-Density Plasmas," presented at the 45th International Conference on Plasma Science, Denver, CO, 24–28 June 2018.

S. P. Regan, V. N. Goncharov, T. C. Sangster, E. M. Campbell, R. Betti, K. S. Anderson, J. W. Bates, K. Bauer, T. P. Bernat, S. D. Bhandarkar, T. R. Boehly, M. J. Bonino, A. Bose, D. Cao, T. Chapman, G. W. Collins, T. J. B. Collins, R. S. Craxton, J. A. Delettrez, D. H. Edgell, R. Epstein, M. Farrell, C. J. Forrest, J. A. Frenje, D. H. Froula, M. Gatu Johnson, C. Gibson, V. Gopalaswamy, V. Yu. Glebov, A. Greenwood, D. R. Harding, M. Hohenberger, S. X. Hu, H. Huang, J. Hund, I. V. Igumenshchev, D. W. Jacobs-Perkins, R. T. Janezic, M. Karasik, J. H. Kelly, T. J. Kessler, J. P. Knauer, T. Z. Kosc, J. A. Marozas, F. J. Marshall, P. W. McKenty, D. T. Michel, P. Michel, J. D. Moody, J. F. Myatt, A. Nikroo, S. P. Obenschain, J. P. Palastro, J. L. Peebles, R. D. Petrasso, N. Petta, P. B. Radha, J. E. Ralph, M. J. Rosenberg, S. Sampat, A. J. Schmitt, M. J. Schmitt, M. Schoff, W. Seka, R. Shah, R. W. Short, W. T. Shmayda, M. J. Shoup III, A. Shvydky, A. A. Solodov, C. Sorce, C. Stoeckl, W. Sweet, C. Taylor, R. Taylor, W. Theobald, D. Turnbull, J. Ulreich, M. D. Wittman, K. M. Woo, and J. D. Zuegel, "Laser-Direct-Drive Inertial Confinement Fusion Research on OMEGA," presented at Nuclear Photonics 2018, Brasov, Romania, 24–29 June 2018.

K. R. P. Kafka, "Optical Materials Research for 100-PW-Class Laser Systems," presented at Advanced Materials for Powerful Lasers, Rochester, NY, 25–26 June 2018.

S.-W. Bahk, and C. Dorrer, "Multispectral Wavefront Sensing for Characterizating Spatiotemporal Coupling in Ultrashort Pulses," presented at Computational Optical Sensing and Imaging, Orlando, FL, 25–28 June 2018.

E. M. Campbell, "Inertial Confinement Fusion (ICF) Overview; Status, Plans, and Future Prospects," presented at Laser Precision Microfabrication 2018, Edinburgh, UK, 25–28 June 2018.

C. Dorrer, B. E. Kruschwitz, S.-W. Bahk, J. Bromage, J. H. Kelly, and V. Bagnoud, "Adaptive Optics and Wavefront Metrology for High-Intensity Laser Systems," presented at Adaptive Optics: Methods, Analysis, and Applications, Orlando, FL, 25–28 June 2018.

The following presentations were made at the 45th EPS Conference on Plasma Physics, Prague, Czech Republic, 2–6 July 2018:

R. Betti, V. Gopalaswamy, J. P. Knauer, A. R. Christopherson, D. Patel, K. M. Woo, A. Bose, K. S. Anderson, T. J. B. Collins, S. X. Hu, D. T. Michel, C. J. Forrest, R. C. Shah, P. B. Radha, V. N. Goncharov, V. Yu. Glebov, A. V. Maximov, C. Stoeckl, F. J. Marshall, M. J. Bonino, D. R. Harding, R. T. Janezic, J. H. Kelly, S. Sampat, T. C. Sangster, S. P. Regan, E. M. Campbell, M. Gatu Johnson, J. A. Frenje, C. K. Li, R. D. Petrasso, and O. A. Hurricane, "Progress in Inertial Confinement Fusion via Lasers: How Close to Ignition and Burn?"

R. K. Follett, J. G. Shaw, J. F. Myatt, D. H. Froula, R. W. Short, and J. P. Palastro, "Suppressing Two-Plasmon Decay with Laser Frequency Detuning."

R. C. Shah, D. T. Michel, I. V. Igumenshchev, K. S. Anderson, A. K. Davis, D. H. Edgell, C. J. Forrest, D. H. Froula, V. N. Goncharov, D. W. Jacobs-Perkins, S. P. Regan, A. Shvydky,

E. M. Campbell, and T. C. Sangster, "Improving Direct-Drive Implosion Symmetry Using 3-D X-Ray Tomography on OMEGA" (invited).

D. Turnbull, S.-W. Bahk, I. A. Begishev, R. Boni, J. Bromage, S. Bucht, A. S. Davies, P. Franke, D. Haberberger, J. Katz, T. J. Kessler, A. L. Milder, J. P. Palastro, J. L. Shaw, D. H. Froula, N. Vafaei-Najafabadi, J. Vieira, and F. Quéré, "Flying Focus and Its Application to Plasma-Based Laser Amplifiers" (invited).

The following presentations were made at the 48th Anomalous Absorption Conference, Bar Harbor, ME 8–13 July 2018:

A. S. Davies, J. Katz, S. Bucht, D. Haberberger, J. P. Palastro, J. L. Shaw, D. Turnbull, R. Boni, I. A. Begishev, S.-W. Bahk, J. Bromage, J. D. Zuegel, D. H. Froula, and W. Rozmus, "Picosecond-Resolved Collective Thomson Scattering in Underdense Collisional Plasmas."

D. H. Edgell, J. Katz, D. Turnbull, R. K. Follett, J. P. Palastro, and D. H. Froula, "Analysis of Unabsorbed Light Beamlet Images on OMEGA."

D. H. Froula, D. Turnbull, J. Bromage, A. Colaïtis, R. K. Follett, T. J. Kessler, J. P. Palastro, J. G. Shaw, V. N. Goncharov, J. D. Zuegel, T. C. Sangster, E. M. Campbell, J. W. Bates, T. Chapman, A. J. Schmitt, J. Weaver, S. P. Obenschain, L. Divol, and P. Michel, "Plasma Physics and Broadband Lasers—A Path to an Expanded Inertial Confinement Fusion Design Space."

A. M. Hansen, D. Turnbull, D. Haberberger, J. Katz, D. Mastrosimone, R. K. Follett, and D. H. Froula, "Plasma Characterization for the OMEGA Laser–Plasma Interaction Platform."

S. X. Hu, W. Theobald, P. B. Radha, J. L. Peebles, S. P. Regan, M. J. Bonino, D. R. Harding, V. N. Goncharov, N. Petta, T. C. Sangster, E. M. Campbell, and A. Nikroo, "Mitigating Laser-Imprint Effects on Direct-Drive Implosions on OMEGA with Low-Density Foam Layers."

V. V. Karasiev, S. X. Hu, and L. Calderin, "Density-Functional Theory Methods for Transport and Optical Properties: Application to Warm Dense Silicon."

A. V. Maximov, J. G. Shaw, R. W. Short, and J. P. Palastro, "Modeling of Stimulated Raman Scattering in Inhomogeneous Plasmas for Conditions Relevant to the National Ignition Facility."

J. P. Palastro, J. G. Shaw, R. K. Follett, A. Colaïtis, D. Turnbull, A. Maximov, V. N. Goncharov, and D. H. Froula, "Resonant Absorption of a Broadband Laser."

M. J. Rosenberg, A. A. Solodov, W. Seka, R. K. Follett, S. P. Regan, R. Epstein, A. R. Christopherson, R. Betti, A. V. Maximov, T. J. B. Collins, V. N. Goncharov, R. W. Short, D. Turnbull, D. H. Froula, P. B. Radha, J. F. Myatt, P. Michel, M. Hohenberger, G. Swadling, J. S. Ross, T. Chapman, L. Masse, J. D. Moody, J. W. Bates, and A. J. Schmitt, "Planar Laser–Plasma Interaction Experiments at Direct-Drive Ignition-Relevant Scale Lengths at the National Ignition Facility."

A. A. Solodov, M. J. Rosenberg, W. Seka, R. Epstein, R. W. Short, R. K. Follett, A. R. Christopherson, R. Betti, P. B. Radha, S. P. Regan, D. H. Froula, V. N. Goncharov, J. F. Myatt, P. Michel, M. Hohenberger, T. Chapman, J. D. Moody, J. W. Bates, and A. J. Schmitt, "Hot-Electron Generation and Preheat in Direct-Drive Experiments at the National Ignition Facility."

The following presentations were made at Research at High Pressure, Holderness, NH, 15–20 July 2018:

D. A. Chin, P. M. Nilson, G. W. Collins, T. R. Boehly, J. R. Rygg, Y. Ping, and F. Coppari, "Interpreting EXAFS Spectra: Toward Ramp-Compression Studies of Iron Oxide (FeO)."

L. Crandall, J. R. Rygg, G. W. Collins, T. R. Boehly, M. Zaghoo, A. E. Jenei, D. E. Fratanduono, M. C. Gregor, M. Millot, J. H. Eggert, and D. Spaulding, "Equation-of-State Measurements of Precompressed CO_2."

M. K. Ginnane, A. Sorce, J. D. Kendrick, R. Boni, B. Saltzman, D. Weiner, M. Zaghoo, D. N. Polsin, B. J. Henderson, J. Zou, M. Couch, C. M. Rogoff, M. C. Gregor, T. R. Boehly, J. R. Rygg, and G. W. Collins, "Improvements to the VISAR and Streaked Optical Pyrometer at the Omega Laser Facility."

X. Gong, D. N. Polsin, J. R. Rygg, B. J. Henderson, L. Crandall, M. Huff, R. Saha, T. R. Boehly, G. W. Collins, A. E. Lazicki,

J. H. Eggert, R. Smith, F. Coppari, M. Gorman, R. Briggs, M. McMahon, and A. Coleman, "Crystal Structure and Optical Properties of Ramp-Compressed Sodium."

B. J. Henderson, M. Zaghoo, X. Gong, D. N. Polsin, J. R. Rygg, T. R. Boehly, G. W. Collins, S. Ali, P. M. Celliers, A. E. Lazicki, M. Gorman, M. Millot, J. H. Eggert, and M. McMahon, "Broadband Reflectivity Diagnostic Development for Dynamic Compression Experiments on OMEGA EP."

M. Huff, D. E. Fratanduono, C. A. McCoy, T. R. Boehly, P. M. Celliers, J. H. Eggert, G. W. Collins, and J. R. Rygg, "Nonsteady Waves Analysis to Extract Sound Speed at High Pressures."

D. N. Polsin, T. R. Boehly, J. A. Delettrez, G. W. Collins, J. R. Rygg, X. Gong, B. J. Henderson, D. E. Fratanduono, R. Smith, R. Kraus, P. M. Celliers, M. Millot, F. Coppari, A.Jenei, D. C. Swift, M. C. Gregor, J. H. Eggert, C. A. McCoy, J.-P. Davis, C. T. Seagle, and M. I. McMahon, "High-Pressure Phase Transformations of Ramp-Compressed Aluminum and Sodium."

J. J. Ruby, J. R. Rygg, C. J. Forrest, B. Bachmann, Y. Ping, A. E. Jenei, J. A. Gaffney, H. Sio, N. V. Kabadi, and G. W. Collins, "Equation-of-State Measurements at High Pressure in Spherical Geometry."

J. R. Rygg, R. F. Smith, A. E. Lazicki, D. G. Braun, D. E. Fratanduono, R. G. Kraus, J. M. McNaney, D. Swift, C. E. Wehrenberg, G. W. Collins, F. Coppari, D. N. Polsin, and J. H. Eggert, "Performance and Uncertainty Analysis of the X-Ray Diffraction Platform at the National Ignition Facility."

R. Saha, J. Topp-Mugglestone, G. Gregori, T. White, S. P. Regan, G. W. Collins, and J. R. Rygg, "Atomic and Electronic Structure of Warm Dense Silicon."

G. Tabak, M. A. Millot, T. R. Boehly, L. Crandall, B. J. Henderson, M. Zaghoo, S. Ali, P. M. Celliers, D. E. Fratanduono, S. Hamel, D. G. Hicks, A. Lazicki, D. Swift, S. Brygoo, P. Loubeyre, R. Kodama, K. Miyanishi, T. Ogawa, N. Ozaki, T. Sano, R. Jeanloz, G. W. Collins, J. H. Eggert, and J. R. Rygg, "Shock-Compressed Methane to 400 GPa."

M. Zaghoo, G. W. Collins, T. R. Boehly, J. R. Rygg, S. X. Hu, I. F. Silvera, A. Salamat, R. Husband, and P. M. Celliers, "The First Metal: Bench Top Studies."

T. C. Sangster, "LLE: A Unique University-Based Research Center Supporting National Security and Science for the United States," presented at Purdue University Nuclear Engineering, West Lafayette, IN, 26 July 2018.

D. N. Polsin, T. R. Boehly, G. W. Collins, J. R. Rygg, X. Gong, A. Jenei, M. Millot, J. H. Eggert, and M. I. McMahon, "X-Ray Diffraction of Ramp-Compressed Sodium," presented at the 2018 Workshop on the International Union of Crystallography Commission on High Pressure, Honolulu, HI, 29 July–2 August 2018.

The following presentations were made at the 2018 Siegman School Lecture, Hven, Sweden, 29 July–4 August 2018:

G. W. Jenkins, C. Feng, R. Cuffney, and J. Bromage, "Thin-Disk Yb:YAG Regenerative Amplifier System for High-Average-Power Applications."

J. D. Zuegel, "Laser Science and Technology for Laser Fusion."

J. D. Zuegel, K. S. Anderson, T. R. Boehly, R. Betti, R. S. Craxton, J. H. Kelly, T. J. Kessler, J. P. Knauer, B. E. Kruschwitz, J. R. Marciante, F. J. Marshall, R. L. McCrory, S. P. Regan, T. C. Sangster, W. Seka, S. Skupsky, J. M. Soures, C. Stoeckl, W. Theobald, and D. D. Meyerhofer, "Laser Fusion for Laser Jocks: Basic Principles of a Laser Application Meeting a Great Challenge."

The following presentations were made at the 2018 Kearns Center Research Symposium, Rochester, NY, 30 July 2018:

B. Atchison, C. Wang, Y. Akbas, and R. Sobolewski, "Characterization of Ultrafast Carrier Dynamics in Semiconducting CdMnTe via Pump-Probe Spectroscopy."

T. Shou, J. Zhang, G. Chen, and R. Sobolewski, "Spintronic Terahertz Emitters."

J. Zhang, T. Y. Shou, G. Chen, and R. Sobolewski, "Time-Resolved Terahertz Emitter Spectroscopy."

C. J. Forrest, V. Yu, Glebov, J. P. Knauer, P. B. Radha, S. P. Regan, J. R. Rygg, U. Schroeder, A. Schwemmlein, C. Stoeckl, J. A. Frenje, M. Gatu Johnson, F. H. Séguin, R. D. Petrasso, H. Sio, D. T. Casey, C. Cerjan, D. Dearborn, M. J. Edwards, G. P. Grim, R. Hatarik, S. P. Hatchett, O. S. Jones, O. L. Landen, A. J. Mackinnon, D. McNabb, S. Quaglioni, D. B. Sayre, S. Sepke, P. Springer, I. Thomson, R. E. Tipton, C. Brune, A. Voinov, B. Appelbe, A. Crilly, G. Hale, H. W. Herrmann, Y. H. Kim, M. Paris, and A. B. Zylstra, "Nuclear Science Experiments at the University of Rochester's Omega Laser Facility," presented at the 2018 Low Energy Community Meeting, East Lansing, MI, 10–11 August 2018.

J. L. Shaw, D. Haberberger, A. Hansen, J. Katz, D. Mastrosimone, D. H. Froula, F. Albert, N. Lemos, J. Williams, L. D. Amorim, and N. Vafaei-Najafabadi, "Laser Wakefield Accelerator Platform for OMEGA EP," presented at Advanced Accelerator Concepts Workshop, Breckenridge, CO, 12–17 August 2018.

K. L. Marshall, "Liquid Crystals and a 35-Year Journey from Information Displays to Laser Fusion and Beyond," presented at the University of Arizona, College of Optical Sciences, Tuscon, AZ, 16 August 2018 (invited).

K. L. Marshall, J. Smith, A. Callahan, H. Carder, M. Johnston, and M. Ordway, "Optically Addressable Liquid Crystal Laser Beam Shapers Employing Photoalignment Layer Materials and Technologies," presented at Liquid Crystals XXII, San Diego, CA, 19–23 August 2018.

The following presentations were made at LaserNetUS, Lincoln, NE, 20–21 August 2018:

J. Bromage, S.-W. Bahk, I. A. Begishev, C. Dorrer, M. J. Guardalben, B. N. Hoffman, J. B. Oliver, R. G. Roides, E. M. Schiesser, M. J. Shoup III, M. Spilatro, B. Webb, D. Weiner, and J. D. Zuegel, "MTW OPAL: A Technology Development Platform for Ultra-Intense Optical Parametric Chirped-Pulse Amplifier Systems."

S. Bucht, J. Bromage, D. Haberberger, and D. H. Froula, "A High-Power Laser for Raman Amplification Studies."

E. M. Campbell, "LLE Perspective on Open Access Large-Scale PE Laser Facility in the U.S."

A. S. Davies, J. Katz, S. Bucht, D. Haberberger, J. P. Palastro, J. L. Shaw, D. Turnbull, R. Boni, I. A. Begishev, S.-W. Bahk, J. Bromage, J. D. Zuegel, D. H. Froula, and W. Rozmus, "Picosecond-Resolved Collective Thomson Scattering in Underdense Collisional Plasmas."

A. M. Hansen, D. Haberberger, J. Katz, R. K. Follett, and D. H. Froula, "OMEGA Supersonic Gas-Jet Target System Characterization."

R. J. Henchen, M. Sherlock, W. Rozmus, J. Katz, D. Cao, J. P. Palastro, and D. H. Froula, "Observation of Nonlocal Heat Flux Using Thomson Scattering."

A. L. Milder and D. H. Froula, "Measuring Electron Distribution Functions Using Collective Thomson Scattering."

H. G. Rinderknecht, S.-W. Bahk, I. A. Begishev, J. Bromage, R. Cuffney, C. Dorrer, G. Fiksel, T. Filkins, C. Freeman, D. H. Froula, S. T. Ivancic, J. Katz, C. Mileham, P. M. Nilson, J. P. Palastro, M. Spilatro, C. R. Stillman, C. Stoeckl, W. Theobald, D. Turnbull, and J. D. Zuegel, "Experimental Capabilities and Results from the Multi-Terawatt Laser at the Laboratory for Laser Energetics."

J. D. Zuegel, "Capabilities and Future Prospects for the Multi-Terawatt Laser Facility at LLE."

J. D. Zuegel, I. A. Begishev, J. Bromage, S.-W. Bahk, R. Cuffney, C. Dorrer, D. Haberberger, D. H. Froula, C. Mileham, P. M. Nilson, and C. Stoeckl, "A Multi-Terawatt Laser for Plasma Physics Research and Advanced Laser Development."

The following presentations were made at the 8th Conference of the International Committee on Ultrahigh Intensity Lasers, Lindau, Germany, 9–14 September 2018:

S.-W. Bahk and C. Dorrer, "Characterization of Spatiotemporal Coupling with Multispectral Imaging."

S.-W. Bahk, J. B. Oliver, K. R. P. Kafka, and J. Bromage, "Dynamic Field Distribution Study Inside a Dispersive Multilayer Dielectric Coating for Improving the Ultrashort Laser Pulse Damage Threshold."

D. Haberberger, A. Davies, R. Boni, J. Bromage, S. Bucht, R. K. Follett, J. Katz, P. Franke, A. Milder, J. P. Palastro, J. L. Shaw, D. Turnbull, J. D. Zuegel, D. H. Froula, R. Bingham, P. A. Norreys, and J. Sadler, "Designing an Efficient Raman Amplifier."

E. M. Campbell, "Advanced Diagnostics for Laser-Direct-Drive Inertial Confinement Fusion (ICF)," presented at ULITIMA 2018, Lemont, IL, 11–14 September 2018.

M. Zaghoo, T. R. Boehly, J. R. Rygg, P. M. Celliers, S. X. Hu, and G. W. Collins, "Breakdown of Fermi Degeneracy in the Simplest Liquid Metal," presented at Harvard Physics Scholars Research Retreat, Hull, MA, 12 September 2018.

W. T. Shmayda, "Tritium Operations at the Laboratory for Laser Energetics," 30th Symposium on Fusion Technology, Giardini Naxos, Italy, 16–21 September 2018.

The following presentations were made at Laser Damage 2018, Boulder, CO, 23–26 September 2018:

M. Chorel, S. Papernov, A. A. Kozlov, B. N. Hoffman, J. B. Oliver, S. G. Demos, L. Lamaignère, T. Lanternier, É. Lavastre, B. Bousquet, and J. Néauport, "Damage Thresholds in Sub-ps of Hafnia and Silica Monolayers and Correlation to Optical Signatures."

S. G. Demos, B. N. Hoffman, C. W. Carr, D. A. Cross, R. A. Negres, and J. D. Bude, "Laser-Induced–Damage Mechanisms Under Nanosecond Laser Irradiation in Absorbing Glasses."

B. N. Hoffman, S. Papernov, and S. G. Demos, "Investigation and Characterization of Optical Signatures in Multilayer Dielectric Gratings to Improve Cleanliness."

T. Z. Kosc, S. Papernov, A. A. Kozlov, K. Kafka, K. L. Marshall, and S. G. Demos, "Laser-Induced–Damage Thresholds of Nematic Liquid Crystals at 1 ns and Multiple Wavelengths."

A. A. Kozlov, B. Hoffman, J. B. Oliver, and S. G. Demos, "Damage Morphology at Pulse Lengths Near the Transition from Intrinsic to Defect-Driven Initiation in Hafnia-Silica High Reflectors."

J. B. Oliver, B. Charles, D. Coates, S. G. Demos, B. N. Hoffman, K. R. P. Kafka, A. A. Kozlov, J. C. Lambropoulos, S. MacNally, T. Noll, S. Papernov, A. L. Rigatti, D. Sadowski, and C. Smith, "Predictions of Electric-Field-Limited Laser Damage for Multilayer Coatings."

G. W. Collins, J. R. Rygg, T. R. Boehly, M. Zaghoo, D. N. Polsin, B. J. Henderson, X. Gong, L. Crandall, J. J. Ruby, G. Tabak, M. Huff, J. H. Eggert, A. Lazicki, R. F. Smith, F. Coppari, D. E. Fratanduono, D. G. Hicks, Y. Ping, D. Swift, P. M. Celliers, D. G. Braun, S. Hamel, M. Millot, M. Gorman, R. Briggs, S. Ali, R. Kraus, M. McMahon, A. Colman, P. Loubeyre, S. Brygoo, R. Jeanloz, R. Falcone, C. Bolme, A. Gleason, S. H. Glenzer, H. J. Lee, T. Duffy, J. Wang, J. Wark, and G. Gregori, "High Energy Density Science: A New Window to the Quantum Realm and New Worlds," presented at the SLAC Lecture, Menlo Park, CA, 26 September 2018.

J. Schoen, "History of the Center for Optics Manufacturing," presented at the AmeriCOM Symposium; Rochester, NY, 27 September 2018.