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## Publications and Conference Presentations

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### Publications

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R. Betti, V. Lobatchev, and R. L. McCrory, "Feedout, Secular Distortion, and R-T Seeding Induced by Long-Wavelength Perturbations in Accelerated Planar Foils," *Phys. Rev. Lett.* **81**, 5560 (1998).

S.-H. Chen, B. M. Conger, J. C. Mastrangelo, and A. S. Kende, "Synthesis and Optical Properties of Thermotropic Polythiophene and Poly(p-Phenylene) Derivatives," *Macromolecules* **31**, 8051 (1998).

T. J. B. Collins, H. L. Helfer, and H. M. Van Horn, "A Model for Quasi-Periodic Oscillations in Cataclysmic Variables Based on Boundary-Layer Oscillations," *Astrophys. J.* **508**, L159 (1998).

B. M. Conger, J. C. Mastrangelo, D. Katsis, and S.-H. Chen, "Fluorescence of Pyrenyl and Carbazolyl Derivatives in Liquid Solution and Solid Film," *J. Phys. Chem. A* **102**, 9213 (1998).

S. Cremer, C. P. Verdon, and R. D. Petrasso, "Tertiary Proton Diagnostics in Future ICF Experiments," *Phys. Plasmas* **5**, 4009 (1998).

M. Currie, R. Sobolewski, and T. Y. Hsiang, "Subterahertz Signal Crosstalk in Transmission Line Interconnects," *Appl. Phys. Lett.* **73**, 1910 (1998).

F. Dahmani, A. W. Schmid, J. C. Lambropoulos, and S. J. Burns, "Dependence of Birefringence and Residual Stress Near Laser-Induced Cracks in Fused Silica on Laser Fluence and on Laser-Pulse Number," *Appl. Opt.* **37**, 7772 (1998).

K. S. Il'in, I. I. Milostnaya, A. A. Verevkin, G. N. Gol'tsman, E. M. Gershenson, and R. Sobolewski, "Ultimate Quantum Efficiency of a Superconducting Hot-Electron Photodetector," *Appl. Phys. Lett.* **73**, 3938 (1998).

A. V. Kanaev and C. J. McKinstrie, "Exact Green's Function for a Class of Parametric Instabilities," *Phys. Plasmas* **5**, 4511 (1998).

R. W. Short and A. Simon, "Collisionless Damping of Localized Plasma Waves in Laser-Produced Plasmas and Application to Stimulated Raman Scattering in Filaments," *Phys. Plasmas* **5**, 4134 (1998).

R. W. Short and A. Simon, "Landau Damping and Transit-Time Damping of Localized Plasma Waves in General Geometries," *Phys. Plasmas* **5**, 4124 (1998).

V. A. Smalyuk, T. R. Boehly, D. K. Bradley, V. N. Goncharov, J. A. Delettrez, J. P. Knauer, D. D. Meyerhofer, D. Oron, and D. Shvarts, "Saturation of the Rayleigh-Taylor Growth of Broad-Bandwidth, Laser-Imposed Nonuniformities in Planar Targets," *Phys. Rev. Lett.* **81**, 5342 (1998).

B. Yaakobi, F. J. Marshall, and D. K. Bradley, "Pinhole-Array X-Ray Spectrometer for Laser-Fusion Experiments," *Appl. Opt.* **37**, 8074 (1998).

## Forthcoming Publications

E. L. Alfonso, S.-H. Chen, R. Q. Gram, D. R. Harding, and F.-Y. Tsai, "Fabrication of Polyimide Shells by Vapor Phase Deposition for Use as ICF Targets," to be published in *Fusion Technology*.

A. Babushkin, J. H. Kelly, C. T. Cotton, M. Labuzeta, M. Miller, T. A. Safford, R. G. Roides, W. Seka, I. Will, M. D. Tracy, and D. L. Brown, "Compact Nd<sup>3+</sup>-Based Laser System with Gain  $G_{ss} 10^{13}$  and 20-J Output Energy," to be published in SPIE's Proceedings of Solid State Lasers for Application (SSLA) to Inertial Confinement Fusion, 3rd Annual International Conference, Monterey, CA, 7–12 June 1998.

T. R. Boehly, A. Babushkin, D. K. Bradley, R. S. Craxton, J. A. Delettrez, R. Epstein, T. J. Kessler, J. P. Knauer, R. L. McCrory, P. W. McKenty, D. D. Meyerhofer, S. P. Regan, W. Seka, S. Skupsky, V. A. Smalyuk, R. P. J. Town, and B. Yaakobi, "Laser-Uniformity and Hydrodynamic-Stability Experiments at the OMEGA Laser Facility," to be published in *Laser and Particle Beams*.

T. R. Boehly, R. L. McCrory, C. P. Verdon, W. Seka, S. J. Loucks, A. Babushkin, R. E. Bahr, R. Boni, D. K. Bradley, R. S. Craxton, J. A. Delettrez, W. R. Donaldson, R. Epstein, D. Harding, P. A. Jaanimagi, S. D. Jacobs, K. Kearney, R. L. Keck, J. H. Kelly, T. J. Kessler, R. L. Kremens, J. P. Knauer, D. J. Lonobile, L. D. Lund, F. J. Marshall, P. W. McKenty, D. D. Meyerhofer, S. F. B. Morse, A. Okishev, S. Papernov, G. Pien, T. Safford, J. D. Schnittman, R. Short, M. J. Shoup III, M. Skeldon, S. Skupsky, A. W. Schmid, V. A. Smalyuk, D. J. Smith, J. M. Soures, M. Wittman, and B. Yaakobi, "Inertial Confinement Fusion Experiments with OMEGA—a 30-kJ, 60-Beam UV Laser," to be published in the Proceedings of the 1997 IAEA Conference, Osaka, Japan, 10–14 March 1997.

T. R. Boehly, V. A. Smalyuk, D. D. Meyerhofer, J. P. Knauer, D. K. Bradley, R. S. Craxton, M. J. Guardalben, S. Skupsky, and T. J. Kessler, "The Reduction of Laser Imprinting Using Polarization Smoothing on a Solid-State Fusion Laser," to be published in the *Journal of Applied Physics*.

S.-H. Chen, D. Katsis, A. W. Schmid, J. C. Mastrangelo, T. Tsutsui, and T. N. Blanton, "Circularly Polarized Light Generated by Photoexcitation of Luminophores in Vitrified Liquid-Crystal Films," to be published in *Nature*.

S.-H. Chen, J. C. Mastrangelo, B. M. Conger, and D. Katsis, "Design, Synthesis, and Potential Application of Glass-Forming Functional Organic Materials," to be published in the Proceedings of the 6th International Polymer Conference, Kusatsu, Japan, 20–24 October 1997 (invited).

T. J. B. Collins, A. Frank, J. E. Bjorkman, and M. Livio, "Supernova 1987A: Rotation and a Binary Companion," to be published in *Astrophysical Journal*.

F. Dahmani, S. J. Burns, and J. C. Lambropoulos, "Arresting UV-Laser Damage in Fused Silica," to be published in *Optics Letters*.

F. Dahmani, J. C. Lambropoulos, S. Burns, S. Papernov, and A. W. Schmid, "How Small Stresses Affect 351-nm Damage Onset in Fused Silica," to be published in SPIE's Proceedings of the XXX Annual Symposium on Optical Materials for High Power Lasers, Boulder, CO, 28 September–1 October 1998.

F. Dahmani, J. C. Lambropoulos, A. W. Schmid, S. J. Burns, and C. Pratt, "Nanoindentation Technique for Measuring Residual Stress Field Around a Laser-Induced Crack in Fused Silica," to be published in the *Journal of Materials Science*.

F. Dahmani, J. C. Lambropoulos, A. W. Schmid, S. Papernov, and S. J. Burns, "Fracture of Fused Silica with 351-nm-Laser-Generated Surface Cracks," to be published in the *Journal of Materials Research*.

F. Dahmani, A. W. Schmid, J. C. Lambropoulos, and S. J. Burns, "Lifetime Prediction of Laser-Precracked Fused Silica Subjected to Subsequent Cyclic Laser Pulses," to be published in the *Journal of Materials Science*.

O. M. Efimov, L. B. Glebov, S. Papernov, A. W. Schmid, and E. Van Stryland "Laser-Induced Damage of Photo-Thermo-Refractive Glasses for Optical Holographic Elements Writing," to be published in SPIE's Proceedings of the XXX Annual Symposium on Optical Materials for High Power Lasers, Boulder, CO, 28 September–1 October 1998.

V. N. Goncharov, "Ablation Front Oscillations During the Shock Transit Time," to be published in *Physical Review Letters*.

K. Green, W. Seka, M. D. Skeldon, R. L. Keck, A. V. Okishev, and R. Sobolewski, "Transient Bandwidth Analysis of Photoconductive Microwave Switches Implemented in the OMEGA Pulse-Shaping System," to be published in SPIE's Proceedings of Solid State Lasers for Application (SSLA) to Inertial Confinement Fusion, 3rd Annual International Conference, Monterey, CA, 7–12 June 1998.

D. Katsis, A. W. Schmid, and S.-H. Chen, "Mechanistic Insight into Circularly Polarized Photoluminescence from a Chiral-Nematic Film," to be published in *Liquid Crystals*.

J. P. Knauer, R. Betti, D. K. Bradley, T. R. Boehly, T. J. B. Collins, V. N. Goncharov, P. W. McKenty, D. D. Meyerhofer, V. A. Smalyuk, C. P. Verdon, S. G. Glendinning, D. H. Kalantar, and R. G. Watt, "Single-Mode Rayleigh–Taylor Growth-Rate Measurements with the OMEGA Laser System," to be published in *Physics of Plasmas*.

E. M. Korenic, S. D. Jacobs, S. M. Faris, and L. Li, "Cholesteric Liquid Crystal Flakes—A New Form of Domain," to be published in *Molecular Crystals and Liquid Crystals*.

E. M. Korenic, S. D. Jacobs, S. M. Faris, and L. Li, "Cholesteric Liquid Crystal Transmission Profile Asymmetry," to be published in *Molecular Crystals and Liquid Crystals*.

J. M. Larkin, W. R. Donaldson, T. H. Foster, and R. S. Knox, "Reverse Intersystem Crossing from a Triplet State of Rose Bengal Populated by Sequential 532- + 1064-nm Laser Excitation," to be published in *Chemical Physics*.

M. Lindgren, M. Currie, C. Williams, T. Y. Hsiang, P. M. Fauchet, R. Sobolewski, S. H. Moffat, R. A. Hughes, J. S. Preston, and F. A. Hegmann, "Intrinsic Picosecond Response Times of Y-Ba-Cu-O Superconducting Photodetectors," to be published in *Applied Physics Letters*.

M. Lindgren, W.-S. Zeng, M. Currie, R. Sobolewski, S. Cherednichenko, B. Voronov, and G. N. Gol'tsman, "Picosecond Response of a Superconducting Hot-Electron NbN Photodetector," to be published in *Applied Superconductivity*.

J. A. Marozas, "The Cross-Phase Modulation Between Two Intense Orthogonally Polarized Laser Beams Co-Propagating through a Kerr-like Medium," to be published in SPIE's Proceedings of Solid State Lasers for Application (SSLA) to Inertial Confinement Fusion, 3rd Annual International Conference, Monterey, CA, 7–12 June 1998.

F. J. Marshall and G. R. Bennett, "A High-Energy X-Ray Microscope for Inertial Confinement Fusion," to be published in the *Review of Scientific Instruments*.

K. L. Marshall, J. Haddock, N. Bickel, D. Singel, and S. D. Jacobs, "Angular-Scattering Characteristics of Ferroelectric Liquid Crystal Electro-Optical Devices Operating in the TSM and ESM Modes," to be published in *Applied Optics*.

R. L. McCrory and J. M. Soures, "Status of Direct-Drive Inertial Confinement Fusion Research at the Laboratory for Laser Energetics," to be published in the Proceedings of the 2nd Symposium on Current Trends in International Fusion Research Review and Assessment, Washington, DC, 10–14 March 1997 (invited).

P. W. McKenty, "Direct-Drive Capsule Requirements for the National Ignition Facility and OMEGA Laser Systems," to be published in *Fusion Technology*.

P. W. McKenty and M. D. Wittman, "Characterization of Thick Cryogenic Layers Using an Interferometric Imaging System," to be published in *Fusion Technology*.

C. J. McKinstrie, R. E. Giacone, and E. A. Startsev, "Accurate Formulas for the Landau Damping Rates of Electrostatic Waves," to be published in *Physics of Plasmas*.

S. J. McNaught and D. D. Meyerhofer, "Precision Measurement of Electron Initial Conditions for Tunneling Ionization in an Elliptically Polarized Laser," to be published in the Proceedings of the Sixteenth International Conference on Atomic Physics, Windsor, Ontario, Canada, 3–7 August 1998.

B. Nodland and C. J. McKinstrie, "Propagation of a Short Laser Pulse in a Plasma," to be published in *Physical Review E*.

A. V. Okishev, M. D. Skeldon, and W. Seka, "Multipurpose, Diode-Pumped Nd:YLF Laser for OMEGA Pulse Shaping and Diagnostics Applications," to be published in SPIE's Proceedings on Solid State Lasers for Application (SSLA) to Inertial Confinement Fusion, 3rd Annual International Conference, Monterey, CA, 7–12 June 1998.

S. P. Regan, D. K. Bradley, J. J. Carroll III, A. V. Chirikikh, R. S. Craxton, R. P. Drake, D. D. Meyerhofer, W. Seka, R. W. Short, A. Simon, R. P. J. Town, and B. Yaakobi, "Laser–Plasma Interactions in Long-Scale-Length Plasmas Under Direct-

Drive National Ignition Facility Conditions,” to be published in *Physics of Plasmas*.

A. L. Rigatti, D. J. Smith, A. W. Schmid, S. Papernov, and J. H. Kelly, “Damage in Fused-Silica Spatial-Filter Lenses on the OMEGA Laser System,” in *SPIE’s Proceedings of the XXX Annual Symposium on Optical Materials for High Power Lasers*, Boulder, CO, 28 September–1 October 1998.

A. B. Shorey, L. L. Gregg, H. J. Romanofsky, S. R. Arrasmith, I. A. Kozhinova, and S. D. Jacobs, “A Study of Material Removal During Magnetorheological Finishing (MRF),” to be published in *Optical Manufacturing and Testing*.

M. D. Skeldon, A. V. Okishev, R. L. Keck, W. Seka, and S. A. Letzring, “An Optical Pulse Shaping System Based on Aperture-Coupled Stripline for OMEGA Pulse Shaping Applications,” to be published in *SPIE’s Proceedings of Solid State Lasers for Application (SSLA) to Inertial Confinement Fusion*, 3rd Annual International Conference, Monterey, CA, 7–12 June 1998.

M. D. Skeldon, R. Saager, and W. Seka, “Quantitative Pump-Induced Wavefront Distortions in Laser-Diode- and Flash-Lamp-Pumped Nd:YLF Laser Rods,” to be published in the *IEEE Journal of Quantum Electronics*.

S. Skupsky and R. S. Craxton, “Irradiation Uniformity for High-Compression Laser Fusion Experiments,” to be published in *Physics of Plasmas*.

V. A. Smalyuk, T. R. Boehly, D. K. Bradley, V. N. Goncharov, J. A. Delettrez, J. P. Knauer, D. D. Meyerhofer, D. Oron, D. Shvarts, and Y. Srebro, “Nonlinear Evolution of Broad-Bandwidth, Laser-Imposed Nonuniformities in Planar Targets,” to be published in *Physics of Plasmas*.

V. A. Smalyuk, T. R. Boehly, D. K. Bradley, J. P. Knauer, and D. D. Meyerhofer, “Characterization of an X-Ray Radiographic System Used for Laser-Driven Planar Target Experiments,” to be published in *Review of Scientific Instruments*.

D. J. Smith, J. A. Warner, N. E. LeBarron, T. J. Kessler, S. LaDelia, J. P. Knauer, D. D. Meyerhofer, D. Oron, and D. Shvarts, “The Development of Ion-Etched Phase Plates,” to be published in *Applied Optics*.

D. J. Smith, J. A. Warner, N. E. LeBarron, and S. LaDelia, “Production of Distributed Phase Plates Using an Energetic Ion Process,” to be published in *SPIE’s Proceedings of the XXX Annual Symposium on Optical Materials for High Power Lasers*, Boulder, CO, 28 September–1 October 1998.

R. Sobolewski, “Ultrafast Dynamics of Nonequilibrium Quasiparticles in High-Temperature Superconductors,” to be published in *Superconducting and Related Oxides: Physics and Nanoengineering III*.

B. Yaakobi and F. J. Marshall, “Imaging the Cold, Compressed Shell in Laser Implosions Using the  $K\alpha$  Fluorescence of a Titanium Dopant,” to be published in the *Journal of Quantitative Spectroscopy and Radiative Transfer*.

B. Yaakobi, F. J. Marshall, and D. K. Bradley, “ $K\alpha$  Cold Target Imaging and Preheat Measurement Using Pinhole-Array X-Ray Spectrometer,” to be published in the *Review of Scientific Instruments*.

L. Zheng and D. D. Meyerhofer, “Self- and Cross-Plate Modulation Coefficients in a KDP Crystal Measured by a Z-Scan Technique,” to be published in the *Journal of the Optical Society of America B*.

J. D. Zuegel and W. Seka, “Upconversion and Reduced  $^4F_{3/2}$  Upper-State Lifetime in Intensely Pumped Nd:YLF,” to be published in *Applied Optics: Lasers, Photonics & Environmental Optics*.

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**Conference Presentations**


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J. L. Chaloupka and D. D. Meyerhofer, "A Single-Beam, High-Field Trap for Energetic Electrons," 1998 OSA Annual Meeting/ILS–XIV, Baltimore, MD, 4–9 October 1998.

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J. M. Soures, R. L. McCrory, P. B. Radha, R. Betti, W. Bittle, T. R. Boehly, R. Boni, D. K. Bradley, T. J. B. Collins, R. S. Craxton, J. A. Delettrez, W. R. Donaldson, R. Epstein, 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, S. J. Loucks, F. J. Marshall, P. W. McKenty, D. D. Meyerhofer, S. F. B. Morse, S. Padalino, R. Petrasso, S. Regan, W. Seka, R. W. Short, A. Simon, S. Skupsky, D. J. Smith, R. P. J. Town, B. Yaakobi, and J. D. Zuegel, "Recent Advances in Direct-Drive ICF Target Physics at the Laboratory for Laser Energetics," 1998 IAEA Conference, Yokohama, Japan, 19–24 October 1998.

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The following presentations were made at the 40th Annual Meeting APS Division of Plasma Physics, New Orleans, LA, 16–20 November 1998:

P. Amendt, R. E. Turner, O. Landen, S. G. Glendinning, D. Kalantar, M. Cable, J. Colvin, C. Decker, L. Suter, R. Wallace, D. K. Bradley, S. F. B. Morse, G. Pien, W. Seka, and J. M. Soures, "High Convergence Indirect Drive Implosions on OMEGA: Design and Simulations."

C. A. Back, J. D. Bauer, R. E. Turner, B. F. Lasinski, L. J. Suter, O. L. Landen, W. W. Hsing, and J. M. Soures, "Temporally and Radially Resolved Breakout of Heat Wave in Radiatively Heated Foam Targets."

C. W. Barnes, D. L. Tubbs, J. B. Beck, J. A. Oertel, N. Shambo, S. A. Voss, R. G. Watt, T. R. Boehly, D. K. Bradley, and J. P. Knauer, "Direct-Drive Cylindrical Implosions on the OMEGA Laser."

G. R. Bennett, J. M. Wallace, T. J. Murphy, A. A. Hauer, J. A. Oertel, D. C. Wilson, P. L. Gobby, N. D. Delamater, R. E. Chrien, R. S. Craxton, and J. D. Schnittman, "High Convergence Implosions Within Tetrahedral Hohlraums."

R. Betti and E. Fedutenko, "Stable Regimes for External Modes in High- $\beta$  Tokamak Plasmas."

T. R. Boehly, V. A. Smalyuk, O. Gotchev, J. P. Knauer, D. D. Meyerhofer, D. K. Bradley, J. A. Delettrez, S. Skupsky, and R. P. J. Town, "The Effect of Pulse Shape and Beam Smoothing on Laser Imprinting."

D. K. Bradley, J. A. Delettrez, S. P. Regan, S. Skupsky, and D. D. Meyerhofer, "Spherical Rayleigh–Taylor Experiments on the 60-Beam OMEGA Laser System Using the Burn-through Technique."

T. J. B. Collins, J. P. Knauer, S. Skupsky, and C. P. Verdon, "Control of Ablation Velocity Through Prepulses in Direct-Drive ICF."

R. S. Craxton, S. Skupsky, A. Babushkin, J. H. Kelly, T. J. Kessler, J. M. Soures, and J. D. Zuegel, "Enhanced Beam Smoothing on OMEGA and the NIF."

J. A. Delettrez, V. N. Goncharov, S. Skupsky, T. R. Boehly, D. K. Bradley, J. P. Knauer, D. D. Meyerhofer, S. P. Regan, and V. A. Smalyuk, "The Effect of Pulse Shape on Laser Imprint and SSD Smoothing."

J. Dirrenberger, V. Lobatchev, and R. L. McCrory, "Seeds and Early Development of the Rayleigh–Taylor Instability in Laser-Accelerated Targets."

R. Elton, E. Iglesias, H. Griem, G. Pien, D. K. Bradley, J. A. Delettrez, and R. Epstein, "Early-Time Extreme-UV Emission from OMEGA Plasmas."

R. Epstein, T. J. B. Collins, J. A. Delettrez, S. Skupsky, and R. P. J. Town, "Simulation of the Radiative Preheat of Target Foils and Shells in Laser-Driven Ablation and Implosion Experiments."

Y. Fisher, T. R. Boehly, D. K. Bradley, D. R. Harding, D. D. Meyerhofer, and M. D. Wittman, "Shinethrough Properties of Various Barrier-Layer Materials."



C. G. R. Geddes, J. Sanchez, G. Collins, and P. W. McKenty, "Interferometric Characterization of Hydrogen Ice Layers in NIF-Scale Targets."

R. E. Giacone, C. J. McKinstrie, and E. A. Startsev, "Accurate Formulas for the Landau Damping Rates of Electrostatic Waves."

V. Yu. Glebov, J. P. Knauer, F. J. Marshall, P. W. McKenty, D. D. Meyerhofer, N. S. Rogers, C. Stoeckl, M. D. Cable, and R. E. Turner, "Recent  $\rho R$  Measurements on OMEGA Using the MEDUSA Scintillator Array."

V. N. Goncharov, R. Betti, R. L. McCrory, and C. Cherfilis, "Linear Stability Analysis of Ablation Fronts During the Shock Transit Time."

D. Haynes, C. Hooper, N. Delamater, C. Barnes, J. Oertel, G. Pollak, D. Tubbs, R. Watt, T. R. Boehly, D. K. Bradley, P. A. Jaanimagi, and J. P. Knauer, "X-Ray Spectroscopy of Directly Driven Cylindrical Implosions."

D. G. Hicks, C. K. Li, F. H. Sequin, R. D. Petrasso, J. M. Soares, D. R. Harding, D. D. Meyerhofer, W. Seka, A. Simon, R. W. Short, T. W. Phillips, T. C. Sangster, M. D. Cable, T. P. Bernat, and J. D. Schnittman, "Measurement of Accelerated Ions from OMEGA Targets."

G. C. Junkel, M. A. Gunderson, D. A. Haynes, Jr., C. F. Hooper, Jr., D. K. Bradley, J. A. Delettrez, P. A. Jaanimagi, S. P. Regan, "Multi-electron Line Broadening in Hot, Dense Plasmas Including Detailed Line Shift Calculations."

A. V. Kanaev and C. J. McKinstrie, "Exact Green Function for a Class of Parametric Instabilities."

R. L. Keck, W. R. Donaldson, W. Seka, and R. Boni, "Beam Power Matching on the OMEGA Laser."

J. P. Knauer, R. Betti, T. R. Boehly, D. K. Bradley, T. J. B. Collins, J. A. Delettrez, P. W. McKenty, D. D. Meyerhofer, V. A. Smalyuk, and R. P. J. Town, "Growth of Rayleigh–Taylor Unstable, CH Ablation Interfaces Doped with Silicon."

C. K. Li, D. G. Hicks, F. H. Sequin, R. D. Petrasso, J. M. Soares, D. R. Harding, J. P. Knauer, J. Law, P. B. Radha, S. Skupsky, S. Padilino, T. W. Phillips, T. C. Sangster, and M. D. Cable, "Measurements of Temperature and Areal Density Using Charged-Particle Spectroscopy on OMEGA."

V. Lobatchev and R. Betti, "Linear Feed-out of Rear Surface Nonuniformities in Planar Geometry."

F. J. Marshall, B. Yaakobi, D. D. Meyerhofer, R. P. J. Town, J. A. Delettrez, V. Yu. Glebov, D. K. Bradley, J. P. Knauer, M. D. Cable, and T. J. Ognibene, "Surrogate Cryogenic Target Experiments on OMEGA."

P. W. McKenty, V. Yu. Glebov, D. D. Meyerhofer, N. S. Rogers, C. Stoeckl, J. D. Zuegel, M. D. Cable, T. J. Ognibene, R. A. Lerche, and R. L. Griffith, "Neutron Burn Truncation Experiments on OMEGA."

C. J. McKinstrie and E. A. Startsev, "Analysis of the Forward and Backward Stimulated Brillouin Scattering of Crossed Laser Beams."

D. D. Meyerhofer, D. K. Bradley, J. A. Delettrez, V. Yu. Glebov, J. P. Knauer, F. J. Marshall, P. W. McKenty, S. P. Regan, S. Skupsky, C. Stoeckl, and R. P. J. Town, "Hydrodynamic Performance of Spherical CH Targets on OMEGA Using Shaped Laser Pulses."

T. J. Murphy, J. M. Wallace, K. A. Klare, N. D. Delamater, G. R. Bennett, A. A. Hauer, J. A. Oertel, S. M. Pollaine, R. S. Craxton, and J. D. Schnittman, "Analysis of Imploded Capsule Images from Spherical Hohlräume with Tetrahedral Illumination."

R. D. Petrasso, C. K. Li, D. G. Hicks, F. H. Sequin, J. M. Soares, V. Yu. Glebov, D. R. Harding, J. P. Knauer, J. Law, D. D. Meyerhofer, P. B. Radha, J. D. Schnittman, W. Seka, R. W. Short, A. Simon, S. Skupsky, C. Stoeckl, T. W. Phillips, T. C. Sangster, T. Ognibene, M. D. Cable, and S. Padilino, "Charged-Particle Spectroscopy on OMEGA: Initial Results" (invited).

P. B. Radha, S. Skupsky, J. M. Soares, and R. D. Petrasso, "A Novel Diagnostic for  $\rho R$  in ICF Targets."

S. P. Regan, T. R. Boehly, D. K. Bradley, T. J. B. Collins, J. A. Delettrez, J. P. Knauer, D. D. Meyerhofer, P. W. McKenty, and V. A. Smalyuk, "A Comparison of Planar Burnthrough Experiments with Single-Mode Rayleigh–Taylor Instability Growth Rate on OMEGA."

S. P. Regan, D. K. Bradley, J. J. Carroll III, A. V. Chirokikh, R. S. Craxton, R. P. Drake, D. D. Meyerhofer, W. Seka, R. W. Short, A. Simon, R. P. J. Town, and B. Yaakobi, "Laser–Plasma Interactions in NIF Direct-Drive-Scale Plasmas" (invited).

- J. D. Schnittman, R. S. Craxton, S. M. Pollaine, R. E. Turner, J. M. Wallace, T. J. Murphy, N. D. Delamater, J. A. Oertel, A. A. Hauer, and K. A. Klare, "Capsule Implosion Symmetry in OMEGA Tetrahedral Hohlraums."
- W. Seka, A. V. Chirikikh, D. D. Meyerhofer, S. P. Regan, D. K. Bradley, B. Yaakobi, R. S. Craxton, R. W. Short, and A. Simon, "Stimulated Brillouin Scattering in Direct-Drive NIF Conditions."
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