Publications and Conference Presentations

Publications

K. L. Baker, R. P. Drake, B. S. Bauer, K. G. Estabrook, A. M. Rubenchik, C. Labaune, H. A. Baldis, N. Renard, S. D. Baton, E. Schifano, A. Michard, W. Seka, and R. E. Bahr, "Thomson Scattering Measurements of the Langmuir Wave Spectra Resulting from Stimulated Raman Scattering," Phys. Rev. Lett. **77**, 67 (1996).

S.-H. Chen, J. C. Mastrangelo, and H. Shi, "Electroluminescent Diodes Using Cyclohexane-Based Glass-Forming Liquid Crystals and Their Analogues," in *Liquid Crystals for Advanced Technologies*, edited by T. J. Bunning, S.-H. Chen, W. Hawthorne, N. Koide, and T. Kajiyama, Materials Research Society Symposium Proceedings (Materials Research Society, Pittsburgh, PA, 1996), Vol. 425, pp. 233–238.

S.-H. Chen, H. Shi, B. M. Conger, J. C. Mastrangelo, and T. Tsutsui, "Novel Vitrifiable Liquid Crystals as Optical Materials," Adv. Mater. **8**, 998 (1996).

S.-H. Chen, H. Shi, B. M. Conger, D. Katsis, and J. C. Mastrangelo, "Novel Vitrified Liquid Crystals and Potential Applications," in *Liquid Crystals for Advanced Technologies*, edited by T. J. Bunning, S.-H. Chen, W. Hawthorne, N. Koide, and T. Kajiyama, Materials Research Society Symposium Proceedings (Materials Research Society, Pittsburgh, PA, 1996), Vol. 425, pp. 13–18.

S.-H. Chen, H. Shi, and J. C. Mastrangelo "Use of Glass-Forming Liquid Crystal Materials for Electroluminescent Diodes," in *Liquid Crystals for Advanced Technologies*, edited by T. J. Bunning, S.-H. Chen, W. Hawthorne, N. Koide, and T. Kajiyama, Materials Research Society Symposium Proceedings (Materials Research Society, Pittsburgh, PA, 1996), Vol. 425, pp. 225–232.

B. M. Conger, H. Shi, S.-H. Chen, and T. Tsutsui, "Polarized Fluorescence from Vitrified Liquid Crystalline Films," in *Liquid Crystals for Advanced Technologies*, edited by T. J. Bunning, S.-H. Chen, W. Hawthorne, N. Koide, and T. Kajiyama, Materials Research Society Symposium Proceedings (Materials Research Society, Pittsburgh, PA, 1996), Vol. 425, pp. 239–244.

V. N. Goncharov, R. Betti, R. L. McCrory, and C. P. Verdon, "Self-Consistent Stability Analysis of Ablation Fronts with Small Froude Numbers," Phys. Plasmas **3**, 4665 (1996).

J. C. Mastrangelo, S.-H. Chen, T. N. Blanton, and A. Bashir-Hashemi, "Vitrification and Morphological Stability of Liquid Crystals," in *Liquid Crystals for Advanced Technologies*, edited by T. J. Bunning, S.-H. Chen, W. Hawthorne, N. Koide, and T. Kajiyama, Materials Research Society Symposium Proceedings (Materials Research Society, Pittsburgh, PA, 1996), Vol. 425, pp. 19–25.

C. J. McKinstrie and E. J. Turano, "Spatiotemporal Evolution of Parametric Instabilities Driven by Short Laser Pulses: One-Dimensional Analysis," Phys. Plasmas **3**, 4683 (1996).

A. V. Okishev, M. D. Skeldon, S. A. Letzring, W. R. Donaldson, A. Babushkin, and W. Seka, "The Pulse-Shaping System for the 60-Beam, 30-kJ (UV) OMEGA Laser," in *Superintense Laser Fields*, edited by A. A. Andreev and V. M. Gordienko (SPIE, Bellingham, WA, 1995), Vol. 2770, pp. 10–17.

H. Shi, D. Katsis, S.-H. Chen, M. E. De Rosa, W. W. Adams, and T. J. Bunning, "Dynamics of Defect Annihilation in Vitrified Liquid Crystalline (VLC) Thin Films Upon Thermal Annealing," in *Liquid Crystals for Advanced Technologies*, edited by T. J. Bunning, S.-H. Chen, W. Hawthorne, N. Koide, and T. Kajiyama, Materials Research Society Symposium Proceedings (Materials Research Society, Pittsburgh, PA, 1996), Vol. 425, pp. 27–32.

H. Shi and S.-H. Chen, "Theory of Circularly Polarized Light Emission from Chiral Nematic Liquid Crystalline Films," in *Liquid Crystals for Advanced Technologies*, edited by T. J. Bunning, S.-H. Chen, W. Hawthorne, N. Koide, and T. Kajiyama, Materials Research Society Symposium Proceedings (Materials Research Society, Pittsburgh, PA, 1996), Vol. 425, pp. 245–251.

B. Yaakobi, F. J. Marshall, and R. Epstein, "High Temperature of Laser-Compressed Shells Measured with Kr^{34+} and Kr^{35+} X-Ray Lines," Phys. Rev. E **54**, 5848 (1996).

Forthcoming Publications

S. Alexandrou, C.-C. Wang, M. Currie, R. Sobolewski, and T. Y. Hsiang, "Characterization of Coplanar Transmission Lines at Subterahertz Frequencies," to be published in IEEE Transactions on Microwave Theory and Techniques.

E. L. Alfonso, S.-H. Chen, M. D. Wittman, S. Papernov, and D. Harding, "A Parametric Study of Microencapsulation Approach to the Preparation of Polystyrene Shells," to be published in Polymer.

R. Betti, V. N. Goncharov, R. L. McCrory, and C. P. Verdon, "Linear Theory of the Ablative Rayleigh-Taylor Instability," to be published in the Proceedings of the 24th ECLIM, Madrid, Spain, 3–7 June 1996.

T. R. Boehly, D. L. Brown, R. S. Craxton, R. L. Keck, J. P. Knauer, J. H. Kelly, T. J. Kessler, S. A. Kumpan, S. J. Loucks, S. A. Letzring, F. J. Marshall, R. L. McCrory, S. F. B. Morse, W. Seka, J. M. Soures, and C. P. Verdon, "Initial Performance Results of the OMEGA Laser System," to be published in Optics Communications.

J. L. Chaloupka, T. J. Kessler, and D. D. Meyerhofer, "A Single-Beam, Ponderomotive-Optical Trap for Free Electrons and Neutral Atoms," to be published in Optics Letters.

S.-H. Chen, J. C. Mastrangelo, H. Shi, T. N. Blanton, and A. Bashir-Hashemi, "Novel Glass-Forming Organic Materials. 3. Cubane with Pendant Nematogens, Carbazole, and Disperse Red 1," to be published in Macromolecules.

S.-H. Chen, H. Shi, J. C. Mastrangelo, and J. J. Ou, "Thermotropic Chiral Nematic Side-Chain Polymers and Cyclic Oligomers," to be published in Progress in Polymer Science.

A. V. Chirokikh, W. Seka, A. Simon, and R. S. Craxton, "Brillouin Scattering in Long-Scale-Length Laser Plasmas," to be published in Physics of Plasmas.

B. DeMarco, C. W. Barnes, K. Kearney, and R. L. Kremens, "Neutron Yield Measurement on the OMEGA Laser System," to be published in the Review of Scientific Instruments.

R. Epstein, "Properties of the Speckle of Focused, Phase-Converted Laser Beams and the Reduction of Time-Averaged Irradiation Nonuniformity in Laser-Driven Plasmas due to Target Ablation," to be published in the Journal of Applied Physics.

P. M. Fauchet, Ju. V. Vandyshev, Z. Xu, C. W. Rella, H. A. Schwettman, and G. W. Wicks, "Mid-Infrared Femtosecond Spectroscopy of Intersubband Hot-Hole Relaxation in Quantum Wells," to be published in the Proceedings of OSA's Tenth International Topical Meeting on Ultrafast Phenomena, San Diego, CA, 28 May–1 June 1996.

P. M. Fauchet, "Photoluminescence and Electroluminescence from Porous Silicon," to be published in the Journal of Photoluminescence (invited).

P. M. Fauchet, "Porous Silicon: Photoluminescence and Electroluminescent Devices," to be published in the Light Emission in Silicon, Semiconductors, and Semimetals Series.

D. Fried, R. E. Glena, J. D. B. Featherstone, and W. Seka, "Permanent and Transient Changes in the Reflectance of CO_2 Laser-Irradiated Dental Hard Tissues at $\lambda = 9.3$, 9.6, 10.3, and 10.6 μm and at Fluences between 1–20 J/cm^2," to be published in Lasers in Surgery and Medicine.

V. N. Goncharov and R. Betti, "Growth Rate of the Ablative Rayleigh-Taylor Instability for Indirect-Drive ICF," to be published in Physics of Plasmas.

M. J. Guardalben, "Canoscopic Alignment Methods for Birefringent Optical Elements in Fusion Lasers," to be published in Optics & Photonics News.

O. E. Hanuch, V. B. Agrawal, S. Papernov, M. delCerro, and J. V. Aquavella, "Posterior Capsular Polishing with the Nd:YLF Picosecond Laser: Model Eye Study," to be published in Investigative Ophthalmology.

D. Jacobs-Perkins, M. Currie, C.-C. Wang, C. Williams, W. R. Donaldson, R. Sobolewski, and T. Y. Hsiang, "Subpicosecond Imaging System Based on Electro-Optic Effect," to be published in the IEEE Journal on Selected Topics in Quantum Electronics.

J. H. Kelly, T. R. Boehly, J. M. Soures, D. L. Brown, R. Boni, R. S. Craxton, R. L. Keck, T. J. Kessler, R. L. Kremens, S. A. Kumpan, S. A. Letzring, S. J. Loucks, R. L. McCrory, S. F. B. Morse, W. Seka, S. Skupsky, and C. P. Verdon, "The Activation of the Upgraded OMEGA Laser at the University of Rochester," to be published in the SPIE Proceedings of the 1st Annual International Conference on Solid-State Lasers for Application to Inertial Confinement Fusion (ICF), Monterey, CA, 30 May–2 June 1995.

J. H. Kelly, T. R. Boehly, J. M. Soures, D. L. Brown, R. Boni, R. S. Craxton, R. L. Keck, T. J. Kessler, R. Kremens, S. A. Kumpan, S. A. Letzring, S. J. Loucks, R. L. McCrory, S. F. B. Morse, W. Seka, S. Skupsky, and C. P. Verdon, "The Activation of the Upgraded OMEGA Laser at the University of Rochester," to be published in the SPIE Proceedings of the 15th International Conference on Coherent and Nonlinear Optics, St. Petersburg, Russia, 27 June–1 July 1995.

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K. S. Lebedev, E. A. Magulariya, S. G. Lukishova, S. V. Belyaev, N. V. Malimonenko, and A. W. Schmid, "Reflective Nonlinearities of Nonabsorbing Chiral Liquid Crystals: Frustration of Selective Reflection by Powerful Laser Radiation," to be published in the Bulletin of the American Physical Society.

M. Lindgren, M. Currie, C. Williams, T. Y. Hsiang, P. M. Fauchet, S. H. Moffat, R. A. Hughes, J. S. Preston, and F. A. Hegmann, "Ultrafast Photoresponse and Pulse Propagation in High-T_c Superconducting Y-Ba-Cu-O Thin-Film Devices," to be published in the IEEE Journal on Selected Topics in Quantum Electronics.

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 Photoresponse of a Y-Ba-Cu-O Superconductor," to be published in Physical Review Letters.

S. G. Lukishova, S. V. Belyaev, K. S. Lebedev, E. A. Magulariya, A. W. Schmid, and N. V. Malimonenko, "cw and High-Repetition-Rate Lasing in Nd:YAG Resonators with Chiral-Nematic Liquid-Crystal Mirrors: A Study of Nonlinear Responses," to be published in Quantum Electronics.

S. G. Lukishova, S. V. Belyaev, K. S. Lebedev, E. A. Magulariya, A. W. Schmid, and N. V. Malimonenko, "Nonlinear Bleaching in the Selective Reflection of Nonabsorbing Chiral-Nematic Liquid-Crystal Thin Films," to be published in JETP Letters and in Molecular Crystals and Liquid Crystals.

F. J. Marshall and J. A. Oertel, "A Framed Monochromatic X-Ray Microscope for ICF," to be published in the Review of Scientific Instruments.

J. C. Mastrangelo and S.-H. Chen, "Novel Glass-Forming Organic Materials. 2. Structure and Fluorescence of Pyrene- and Carbazole-Containing Cyclohexane, Bicyclooctene, and Adamantane," to be published in Chemistry of Materials.

S. M. McCormack, D. Fried, J. D. B. Featherstone, R. E. Glena, and W. Seka, "Scanning Electron Microscope Observations of CO_2 Laser Effects on Dental Enamel," to be published in the Journal of Dental Research.

R. L. McCrory, "The LLE Direct-Drive Target Physics Experimental Program: First Year of ICF Experiments on OMEGA," to be published in the Proceedings of the 24th ECLIM, Madrid, Spain, 3–7 June 1996 (invited).

C. J. McKinstrie, V. A. Smalyuk, R. E. Giacone, and H. X. Vu, "Power Transfer between Crossed Laser Beams and the Associated Frequency Cascade," to be published in Physical Review E.

A. V. Okishev and W. Seka, "Diode-Pumped Nd:YLF Master Oscillator for the 30-kJ (UV), 60-Beam OMEGA Laser Facility," to be published in the IEEE Journal of Selected Topics in Quantum Electronics.

A. V. Okishev and W. Seka, "Diode-Pumped Single-Frequency Nd:YLF Laser for the 60-Beam OMEGA Laser Pulse-Shaping System," to be published in Solid State Lasers VI.

R. D. Petrasso, C. K. Li, M. D. Cable, S. M. Pollaine, S. W. Haan, T. P. Bernat, J. D. Kilkenny, S. Cremer, J. P. Knauer, C. P. Verdon, and R. L. Kremens, "Implosion Symmetry and ρR Measurements of the National Ignition Facility from Nascent 31-MeV Tertiary Protons," to be published in Physical Review Letters.

J. Z. Roach, A. Ninkov, S. W. Swales, and T. Morris, "Design and Evaluation of a Screen CCD Imaging System," to be published in Optical Engineering.

J. Z. Roach and S. W. Swales, "A Network-Based Imaging System for the OMEGA Laser System," to be published in SPIE's Proceedings of the European Symposium on Lasers, Optics, and Vision for Productivity in Manufacturing I, Micropolis, Besangon, France, 10–14 June 1996.

A. W. Schmid, T. J. Kessler, S. Papernov, and J. Barone, "Low-Surface-Energy Photoresist as a Medium for Optical Replication," to be published in Applied Physics Letters.

H. Shi, B. M. Conger, and S.-H. Chen, "Circularly Polarized Fluorescence from Chiral Nematic Liquid Crystalline Films: Theory and Experiment," to be published in Liquid Crystals.

M. J. Shoup III, J. H. Kelly, and D. L. Smith, "Design and Testing of a Large-Aperture, High-Gain, Brewster's-Angle Zigzag Nd:Glass Slab Amplifier," to be published in Applied Optics.

A. Simon, "Comparison Between SBS Theories and Experiment," to be published in the Proceedings of the LaJolla Summer School '95, Plasma Physics and Technology (AIP).

J. M. Soures, "Inertial Fusion Research Using the OMEGA Laser Facility," to be published in Physics Today.

J. M. Soures, S. J. Loucks, R. L. McCrory, C. P. Verdon, A. Babushkin, R. E. Bahr, T. R. Boehly, R. Boni, D. K. Bradley, D. L. Brown, J. A. Delettrez, R. S. Craxton, W. R. Donaldson, R. Epstein, R. Gram, D. R. Harding, P. A. Jaanimagi, S. D. Jacobs, K. Kearney, R. L. Keck, J. H. Kelly, T. J. Kessler, R. L. Kremens, J. P. Knauer, S. A. Letzring, 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, W. Seka, R. W. Short, M. J. Shoup, III, M. D. Skeldon, S. Skupsky, A. W. Schmid, D. J. Smith, S. Swales, M. D. Wittman, and B. Yaakobi, "The Role of the Laboratory for Laser Energetics in the National Ignition Facility Project," to be published in Fusion Technology.

E. A. Startsev and C. J. McKinstrie, "Multiple Scale Derivation of the Relativistic Ponderomotive Force," to be published in Physical Review E.

M. D. Wittman, R. Q. Gram, H. Kim, C. K. Immesoete, S. G. Noyes, and S. Scarantino, "Increased Retention Time for Hydrogen and Other Gases by Polymer Shells Using Optically Transparent Aluminum Layers," to be published in the Journal of Vacuum Science and Technology.

W. Xiong, Y. Kostoulas, X. Weng, P. M. Fauchet, and R. Sobolewski, "Femtosecond Study of the Electronic Structure in Semiconducting Y-Ba-Cu-O," to be published in Physical Review B.

Z. Xu, Ju. V. Vandyshev, P. M. Fauchet, C. W. Rella, H. A. Schwettman, and C. C. Tsai, "Ultrafast Excitation and De-excitation of Local Vibrational Modes in a Solid Matrix: The Si-H Bond in Amorphous Silicon," to be published in the Proceedings of OSA's Tenth International Topical Meeting on Ultrafast Phenomena, San Diego, CA, 28 May–1 June 1996.

B. Yaakobi, F. J. Marshall, and J. A. Delettrez, "Abel Inversion of Cryogenic Laser Target Images," to be published in Optics Communications.

J. D. Zuegel and W. Seka, "Direct Measurements of Lower-Level Lifetime in Nd:YLF," to be published in the Bulletin of the American Physical Society.

J. D. Zuegel and W. Seka, "Upconversion and Reduced $^4F_{3/2}$ Upper-State Lifetime in Intensely Pumped Nd:YLF," to be published in Optics Letters.

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T. R. Boehly, R. L. McCrory, S. J. Loucks, J. M. Soures, C. P. Verdon, A. Babushkin, R. E. Bahr, R. Boni, D. K. Bradley, D. L. Brown, R. S. Craxton, J. A. Delettrez, W. R. Donaldson, R. Epstein, P. A. Jaanimagi, S. D. Jacobs, K. Kearney, R. L. Keck, J. H. Kelly, T. J. Kessler, R. L. Kremens, J. P. Knauer, S. A. Kumpan, S. A. Letzring, 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, W. Seka, R. Short, M. J. Shoup, III, M. Skeldon, S. Skupsky, A. W. Schmid, D. J. Smith, S. Swales, M. Wittman, and B. Yaakobi, "The First Year of ICF Experiments on OMEGA — A 60-Beam, 60-TW Laser System," 16th IAEA Fusion Energy Conference, Montreal, Canada, 7–11 October 1996.

The following presentations were made at the XXVII Annual Symposium on Optical Materials for High Power Lasers, Boulder, CO, 7–9 October 1996:

J. F. Anzellotti, D. J. Smith, R. J. Sczupak, and Z. R. Chrzan, "Stress and Environmental Shift Characteristics of HfO_2/SiO_2 Multilayer Coatings."

S. Papernov and A. W. Schmid, "Heat Transfer from Localized Absorbing Defects to the Host Coating Material in HfO_2/SiO_2 Multilayer Systems."

A. L. Rigatti and D. J. Smith, "Status of Optics on the OMEGA Laser System after 18 Months of Operation."

D. J. Smith, J. F. Anzellotti, S. Papernov, and Z. R. Chrzan, "High Laser-Induced-Damage Threshold Polarizer Coatings for 1054 nm."

The following presentations were made at the OSA Annual Meeting/ILS-XII, Rochester, NY, 20–25 October 1996:

M. S. Adams and D. D. Meyerhofer, "Near Field and Spatial Coherence of the Third Harmonic Produced in a Noble Gas Target."

J. L. Chaloupka and D. D. Meyerhofer, "Second-Harmonic Generation from Oscillating Free Electrons in a Laser Focus."

S. D. Jacobs, "Producing Aspheres with Magnetorheological Finishing."

T. J. Kessler, L. S. Iwan, J. Barone, C. Kellogg, and W. P. Castle, "Optic Fabrication Using Photographic Lithography."

O. A. Konoplev and D. D. Meyerhofer, "Cancellation of the *B*-Integral for CPA Lasers."

E. M. Korenic, S. D. Jacobs, S. M. Faris, and L. Li, "Colorimetry of Cholesteric Liquid Crystals."

K. S. Lebedev, E. A. Magulariya, S. G. Lukishova, S. V. Belyaev, N. V. Malimonenko, and A. W. Schmid, "Reflective Nonlinearities of Nonabsorbing Chiral Liquid Crystals: Frustration of Selective Reflection by Powerful Laser Radiation."

Y. Lin, T. J. Kessler, and G. N. Lawrence, "Design of Continuous Surface-Relief Phase Plates by Simulated Annealing to Achieve Control of Focal Plane Irradiance."

D. D. Meyerhofer, J. P. Knauer, S. J. McNaught, and C. I. Moore, "Observation of Relativistic Mass Shift Effects during High-Intensity Laser-Electron Interactions."

L. Zheng and D. D. Meyerhofer, "Self- and Cross-Phase Modulation Coefficients in KDP Crystals Measured by a *Z*-Scan Technique."

The following presentations were made at the Second Annual International Conference on Solid State Lasers for Application to Inertial Confinement Fusion (ICF), Paris, France, 22–25 October 1996:

T. R. Boehly, R. L. Keck, C. Kellogg, J. H. Kelly, T. J. Kessler, J. P. Knauer, Y. Lin, D. D. Meyerhofer, W. Seka, S. Skupsky, V. A. Smalyuk, S. F. B. Morse, and J. M. Soures, "Demonstration of Three Enhancements to the Uniformity of OMEGA: 2-D SSD, New DPP's, and DPR's."

T. J. Kessler, Y. Lin, L. S. Iwan, W. P. Castle, C. Kellogg, J. Barone, E. Kowaluk, A. W. Schmid, K. L. Marshall, D. J. Smith, A. L. Rigatti, J. Warner, and A. R. Staley, "Laser Phase Conversion Using Continuous Distributed Phase Plates."

W. Seka, J. H. Kelly, S. F. B. Morse, J. M. Soures, M. D. Skeldon, A. Okishev, A. Babushkin, R. L. Keck, and R. G. Roides, "OMEGA Laser Performance with Pulse Shaping."

M. D. Skeldon, A. Babushkin, J. D. Zuegel, R. L. Keck, A. Okishev, and W. Seka, "Modeling of an Actively Stabilized Regenerative Amplifier for OMEGA Pulse-Shaping Applications."

The following presentations were made at the 22nd International Congress on High-Speed Photography and Photonics, Santa Fe, NM, 27 October–1 November 1996:

A. Babushkin, W. Seka, S. A. Letzring, W. Bittle, M. Labuzeta, M. Miller, and R. G. Roides, "Multicolor Fiducial Laser for Streak Cameras and Optical Diagnostics for the OMEGA Laser System."

D. K. Bradley and P. M. Bell, "Implementation of 30-ps Temporal Resolution Imaging on the OMEGA Laser System."

The following presentations were made at the Superabrasives Technology Meeting, 7–8 November 1996, Livermore, CA:

B. E. Gillman, Y. Zhou, and S. D. Jacobs, "Coolant/Tool Interactions in Deterministic Microgrinding of Glass."

J. C. Lambropoulos, Y. Zhou, P. D. Funkenbusch, B. Gillman, and D. Golini, "Brittleness and Grindability of Brittle Workpieces."

The following presentations were made at the 38th Annual Meeting, APS Division of Plasma Physics, 11–15 November 1996, Denver, CO:

R. Betti and J. P. Freidberg, "Shape, Pressure, and Kinetic Effects on the Resistive Wall Mode in Rotating Plasmas."

T. R. Boehly, D. D. Meyerhofer, J. P. Knauer, D. K. Bradley, R. L. Keck, J. A. Delettrez, V. A. Smalyuk, J. M. Soures, and C. P. Verdon, "Laser Imprinting Studies Using Multiple-UV-Beam Irradiation of Planar Targets."

D. K. Bradley, J. A. Delettrez, and P. A. Jaanimagi, "Initial Mix Experiments on the 60-Beam OMEGA Laser System."

R. S. Craxton, J. D. Schnittman, and S. M. Pollaine, "Uniformity in Tetrahedral Hohlraums."

J. A. Delettrez, D. K. Bradley, and C. P. Verdon, "Modeling of Mix Due to the Rayleigh-Taylor Instability in Burnthrough Experiments Using the One-Dimensional Hydrodynamic Code *LILAC*."

R. Epstein, J. A. Delettrez, D. K. Bradley, C. P. Verdon, U. Alon, and D. Shvarts, "Simulations in One Dimension of Unstable Mix in the Ablation Region in Laser-Driven Plasmas."

Y. Fisher, T. R. Boehly, D. K. Bradley, J. A. Delettrez, D. Harding, and D. D. Meyerhofer, " 'Shine-Through' Experiments Using 50-ps Laser Pulses."

A. C. Gaeris, Y. Fisher, J. A. Delettrez, and D. D. Meyerhofer, "Brillouin Scattering of Picosecond Laser Pulses in Preformed, Short-Scale-Length Plasmas."

V. Goncharov, R. Epstein, R. Betti, R. L. McCrory, and C. P. Verdon, "Feedthrough and Spatial-Temporal Evolution of the Ablative Rayleigh-Taylor Instability in ICF."

A. V. Kanaev, C. J. McKinstrie, and J. S. Li, "Spatiotemporal Interaction of Crossed Laser Beams."

J. P. Knauer, "OMEGA Experiments to Characterize the Rayleigh-Taylor Instability with Planar Foils."

J. P. Knauer, D. D. Meyerhofer, T. R. Boehly, D. Ofer, C. P. Verdon, D. K. Bradley, P. W. McKenty, and V. A. Smalyuk, "Initial Single-Mode Rayleigh-Taylor Growth Rates Measured with the OMEGA Laser System."

R. L. Kremens, K. Kearney, M. A. Russotto, B. Taylor, J. D. Zuegel, and M. D. Cable, "A Multichannel Neutron Time-of-Flight Spectrometer for Inertial Confinement Fusion Applications."

F. J. Marshall, D. K. Bradley, M. Cable, J. Delettrez, D. Harding, J. H. Kelly, J. P. Knauer, R. L. Kremens, S. A. Letzring, R. L. McCrory, S. F. B. Morse, J. M. Soures, C. P. Verdon, and B. Yaakobi, "Surrogate Cryogenic Target Implosion Experiments Performed with the OMEGA Laser System."

P. W. McKenty, P. A. Jaanimagi, R. L. Kremens, K. J. Kearney, C. P. Verdon, and M. D. Cable, "Convergence Studies of ICF Implosions Utilizing Doped-CH Ablators to Mitigate Instability Growth."

C. J. McKinstrie, E. J. Turano, and A. V. Kanaev, "Sideward Stimulated Raman Scattering of a Short Laser Pulse in a Plasma Channel."

D. D. Meyerhofer, J. P. Knauer, T. R. Boehly, D. Ofer, C. P. Verdon, P. W. McKenty, V. A. Smalyuk, O. Willi, and R. G. Watt, "Performance of Planar Foam-Buffered Targets on the OMEGA Laser System."

D. D. Meyerhofer, "Observation of Relativistic Ponderomotive Effects in Intense Laser-Electron Interactions."

W. Seka, A. V. Chirokikh, A. Babushkin, R. W. Short, and A. Simon, "Laser-Plasma Interaction Experiments on the 60-Beam OMEGA Laser System."

R. W. Short, "Diffractive Calculation of the Intensity Distribution in a Direct-Drive Laser-Fusion Target Corona."

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