


“High Laser-Damage-Threshold Polymer Coatings for Planarization and Index Matching of Freeform Polarization-Smoothing Optics,” N. D. Urban, J. Zhao, M. Stehlik, J. A.


“Raman Amplification with a $1 \times 10^{15}$ W/cm² Seed,” J. L. Shaw, M. V. Ambat, K. R. McMillen, J. Pigeon, S. Bucht, D. Haberberger, D. Turnbull, J. P. Palastro, J. Bromage,


“The Laboratory for Laser Energetics,” C. Deeney, presented at Optica Rochester, Rochester, NY, 16 May 2023


“Intense Laser-Material Interactions: Stars, Exoplanets, and Unique States of Matter in
the Laboratory,” C. Deeney, presented at the Weizmann Institute Colloquium, Tel Aviv,
Israel, 9 May 2023.

“Tritium Science at the University of Rochester Laboratory for Laser Energetics,” W. T.
Shmayda, presented at the visit of Tokamak Energy, Rochester, NY, 8 May 2023.

“Analysis of the Nonlinear Propagation of Incoherent Laser Pulses,” C. Dorrer,
presented at the Conference on Lasers and Electro-Optics (CLEO) 2023, San Jose, CA,
7–12 May 2023.

“Femtosecond Spin-to-Charge Current Conversion in FeCo/Graphene Nanobilayers
Excited by Femtosecond Optical Laser Pulses,” I. Komissarov, J. Cheng, G. Chen,
D. Chakraborty, R. Sobolewski, L. Gładczuk, P. Przystupski, S. L. Prischepa, A. Łaszcz,
R. Adam, D. Bürgler, S. Heidtfeld, C. M. Schneider, M. Mikulics, and H. Hardtdeegan,
presented at the Conference on Lasers and Electro-Optics (CLEO) 2023, San Jose, CA,
7–12 May 2023.

“Generalized Energy Conservation Relation in a Space-Time Varying Medium,”

“High Spatial Resolution Terahertz Time-Domain Imaging of Murine Pancreatic Ductal
Adenocarcinoma Tissues,” D. Chakraborty, B. N. Mills, J. Cheng, I. Komissarov,
S. Gerber, and R. Sobolewski, presented at the Conference on Lasers and Electro-Optics
(CLEO) 2023, San Jose, CA, 7–12 May 2023.

“Impact of Longitudinal Phase-Matching Variations on Three-Wave Nonlinear
Interactions,” C. Dorrer, presented at the Conference on Lasers and Electro-Optics
(CLEO) 2023, San Jose, CA, 7–12 May 2023.

“Impact of Mid-Spatial Frequency Errors in Stretcher Optics on the Temporal Contrast of
Short Optical Pulses,” B. Webb, S.-W. Bahk, S. Bucht, C. Dorrer, C. Feng, C. Jeon,
R. Roides, and J. Bromage, presented at the Conference on Lasers and Electro-Optics
(CLEO) 2023, San Jose, CA, 7–12 May 2023.

“Interferometric Measurements of the Focal Velocity and Effective Pulse Duration of an
Ultrafast ‘Flying Focus,’” J. J. Pigeon, P. Franke, M. Lim Pac Chong, J. Katz, R. Boni,
C. Dorrer, J. P. Palastro, and D. H. Froula, presented at the Conference on Lasers and
Electro-Optics (CLEO) 2023, San Jose, CA, 7–12 May 2023 (invited).

“Nonlinear Regenerative Amplifier with Net Negative Nonlinearity for Ultrashort-
Pulse Generation,” C. Feng, R. Holcomb, G. W. Jenkins, C. Dorrer, and J. Bromage,
presented at the Conference on Lasers and Electro-Optics (CLEO) 2023, San Jose, CA,
7–12 May 2023.


“New Class of Laboratory Astrophysics Experiments: Application to Radiative Accretion Processes,” V. Tranchant, N. Charpentier, L. Van Box Som, E. Falize, and A. Ciardi,


“LLE in FY25 (2nd Year of the Cooperative Agreement),” C. Deeney, presented at the Office of Experimental Sciences Executive Meeting, Livermore, CA, 2 March 2023.


2022


“InInvestigation of Converging Ultra-Fast Jets in Cylindrical Implosions: A New Platform to Study Complex Hydrodynamic Effects Relevant to Inertial Confinement Fusion,” P. S.
“A Simulation Resource Team for Innovative Fusion Concepts in the BETHE Program,”
M. B. P. Adams, and A. Armstrong, presented at the X Computational Physics Seminar,
Los Alamos, NM, 17 November 2022.

“Stimulating the Plasma Liner Experiment (PLX) with the FLASH Code,”
E. C. Hansen, P. Farmakis, D. Michta, C. Ren, A. C. Reyes, H. Wen, S. Langendorf, and P. Tzeferacos,

“Unit Testing the Extended MHD Capabilities in the FLASH Code,”
A. Mohapatra, A. Reyes, E.C. Hansen, F. García-Rubio, Y. Lu, E. Blackman, and P. Tzeferacos,

“Unraveling Implosion Physics in Inertial Confinement Fusion: Direct-Drive Simulations, Experiments, and Physics-Informed Data Science,”
P. B. Radha, presented at the University of Michigan, Ann Arbor, MI, 16 November 2022.

“Bayesian Inference to Constrain Atomic Physics Models in Spherical Implosions,”

“Dense Plasma Opacity via the Multiple-Scattering Method,”

“Instability Seeding Mechanisms due to Internal Target Defects,”

“What are the Indications of a Role of Target Defects in LLE Cryogenic Implosions?”

“Selecting Optimal Substrate Mounts in Terahertz Time Domain Spectroscopic Imaging of Murine Radiation-Treated Pancreatic Ductal Adenocarcinoma,”

J. L. Shaw, G. Bruhaug, M. S. Wei, J. R. Rygg, G. W. Collins, H. Rinderknecht,
M. Freeman, F. Merrill, L. P. Neukirch, C. Wilde, C. A. Walsh, and E. Tubman,


K. Zhai, presented at the 64th American Physical Society Division of Plasma Physics, Spokane, WA, 17–21 October 2022.


“Omega User Programs Update and Perspective on FY22 OLUG Findings and Recommendations Status,” M. S. Wei and S. F. B. Morse, presented at the 64th American Physical Society Division of Plasma Physics, Spokane, WA, 17–21 October 2022.


“Cross-Beam Energy Transfer-Induced Nonuniformity in Direct-Drive Implosions on OMEGA,” D. H. Edgell, A. Colaïtis, M. J. Guardalben, A. Kalb, J. Katz, J. Kwiatkowski,


“Interrogating the Atomic Structure of Dense Plasmas by X-Ray Absorption Spectroscopy of Implosion Shells,” D. Bishel, P. M. Nilson, D. A. Chin, E. Smith, S. X.


“User Community,” M. S. Wei, presented at the Panchanathan Visit, Rochester, NY, 11 April 2022.


“Perspectives on Inertial Fusion Energy (IFE),” E. M. Campbell, presented at the Plasma Science and Fusion Center Seminar, virtual, 7 March 2022.


“Implementation and Verification of Braginskii Viscosity in the FLAS Code,”
A. Armstrong, A. Reyes, M. B. P. Adams, P. Farmakis, E. C. Hansen, Y. Lu, D. Michta,
K. Moczulski, D. Q. Lamb, and P. Tzeferacos, presented at the NIF and JLF User
Meeting, Livermore, CA, 7–9 February 2022.

“Implementation and Verification of LC Circuit for Z-Pinch FLAS Simulations,”
D. Michta, D. Q. Lamb, and P. Tzeferacos, presented at the NIF and JLF User
Meeting, Livermore, CA, 7–9 February 2022.

“Numerical Modeling of Laser-Driven Plasma Experiments Aiming to Study Turbulent
Dynamo and Thermal Conduction at the National Ignition Facility,” Y. Lu, S. Feister,
J. Meinecke, F. Miniati, G. Gregori, A. Bott, A. Reyes, E. C. Hansen, J. T. Laune,
B. Reville, J. S. Ross, D. Q. Lamb, and P. Tzeferacos, presented at the NIF and JLF User
Meeting, Livermore, CA, 7–9 February 2022.

“Observing the Effects of Ablation and Perforation on the Deeply Nonlinear Rayleigh–
Taylor Instability,” L. Ceuvorst, L. Masse, S. F. Khan, D. Martinez, N. Izumi,
V. Smalyuk, T. Goudal, V. Bouffetier, A. Casner, B. Canaud, V. N. Goncharov, and I. V.
Igumenshchev, presented at the NIF and JLF User Meeting, Livermore, CA,
7–9 February 2022.

“Transforming Simple Metals to Topological Insulators: Sodium to 18 Mbar,” D. N.
Polsin, G. W. Collins, J. R. Rygg, X. Gong, M. Huff, M. K. Ginnane, M. McMahon,
E. Zurek, A. Lazicki, S. Bonev, M. Gorman, R. Briggs, J. H. Eggert, and J. Wark,
presented at the NIF and JLF User Meeting, Livermore, CA, 7–9 February 2022.

“Short-Pulse Lasers for Directed-Energy Hypersonic Defense, Swarms, and More,” R. B.
Spielman, E. M. Campbell, C. Deeney, P. Tzeferacos, and J. D. Zuegel, presented at the

“Open Source Software and Data Formats for High-Energy-Density Physics,” P. V.
Heuer, S. Feister, N. A. Murphy, and J. R. Davies, presented at LPA Control Systems and

“Interdigitated Electrode Geometry Variation and External Quantum Efficiency of
GaN/AlGaN-Based Metal–Semiconductor–Metal UV Photodetectors,” S. F.
Nwabunwanne and W. R. Donaldson, presented at Photonics West 2022, San Francisco,

“Perspectives on Inertial Fusion Energy (IFE),” E. M. Campbell, presented at LLE
Research and Review, 14 January 2021.


“Magnetized Target Capabilities and Diagnostic Needs at LLE,” J. L. Peebles, presented at the National Diagnostic Workshop, virtual, 7–9 December 2021.


“VASP 6.2.1 Runtime Comparison for Extreme Thermodynamic Condition Simulations Using Graphics-Processing Units,” D. E Keller and V. V. Karasiev, presented at PMBS21, virtual, 14–19 November 2021.


presented at the 63rd Annual Meeting of the American Physical Society Division of Plasma Physics, Pittsburgh, PA, 8–12 November 2021 (invited).


and J. P. Palastro, presented at the 63rd Annual Meeting of the American Physical Society Division of Plasma Physics, Pittsburgh, PA, 8–12 November 2021.


the 63rd Annual Meeting of the American Physical Society Division of Plasma Physics, Pittsburgh, PA, 8–12 November 2021.


“Low-Mode Asymmetry Induced by Polarized Cross-Beam Energy Transfer Interaction in Laser-Direct-Drive Spherical Implosions on OMEGA,” A. Colaïtis, D. H. Edgell, I. V.


“Revealing the Atomic Motion Composing the B1-B2 Structural Transformation of MgO Under High Pressures,” B. McLellan, S. Zhang, and S. X. Hu, presented at the 63rd
Annual Meeting of the American Physical Society Division of Plasma Physics, Pittsburgh, PA, 8–12 November 2021.


“Phase Diagram of Ternary Carbon-Sulfur-Hydrogen System up to 300 GPa,” R. Paul, S. X. Hu, V. V. Karasiev, R. Dias, presented at the APS March Meeting, virtual, 15–19 March 2021

“Progress in Development of Thermal Hybrid Exchange-Correlation Density Functionals for Improving the Description of Warm Dense Matter,” D. I. Mihaylov, V. V. Karasiev, and S. X. Hu, presented at the APS March Meeting, virtual, 15–19 March 2021.


2020


“Novel Hot-Spot–Ignition Designs for Inertial Confinement Fusion with Liquid Deuterium–Tritium Spheres,” V. N. Goncharov, I. V. Igumenshchev, D. R. Harding,


“A Systematic Study of Laser Imprint for Direct Drive—From Seeds to Integrated Implosions,” J. P. Knauer, R. Betti, V. Gopalaswamy, D. Cao, D. Patel, A. Lees,


at the 62nd Annual Meeting of the American Physical Society Division of Plasmas Physics, virtual, 9–13 November 2020.


2019


“Status FY19 OLGU Findings and Recommendations,” M. S. Wei, presented at APS DPP OLGU Update, Fort Lauderdale, FL, 22 October 2019.


Meeting of the American Physical Society Division of Plasma Physics, Fort Lauderdale, FL, 21–25 October 2019.


“Investigating Small-Scale Mix in Direct-Drive Cryogenic DT Implosions with Radiography on OMEGA,” C. Stoeckl, T. J. B. Collins, R. Epstein, V. N. Goncharov,


the 61st Meeting of the American Physical Society Division of Plasma Physics, Fort Lauderdale, FL, 21–25 October 2019.


“Status and Prospects for Nuclear Fusion with Lasers,” R. Betti, presented at FisMat 2019, Catania, Italy, 30 September–4 October 2019 (invited).


“Precision Coatings for Large Optics,” J. B. Oliver, presented at Optical Interference Coatings, Santa Ana Pueblo, NM, 2–7 June 2019.


“Ultrabroadband THz Radiation Transients Emitted from Ta/NiFe/Pt Nanolayers upon Excitation by Femtosecond Laser Pulses,” G. Chen, R. Adam, D. E. Burgler, I. Komissarov, S. Heidtfeld, H. Hardtdegen, M. Mikulics, C. M. Schneider, and


“High-Pressure Structural and Electronic Properties of Ramp-Compressed Sodium,”


“Warming Up Density Functional Theory (DFT) for High-Energy-Density Plasmas,”


“Broadband Reflectivity Diagnostic Development for Dynamic Compression Experiments on OMEGA EP,”

“Shock Physicists: Today’s Explorers of the Universe,”

“X-Ray Diffraction in the Terapascal Regime,”


“High-Efficiency, Large-Aperture Fifth-Harmonic–Generation of 211-nm Pulses in Ammonium Dihydrogen Phosphate Crystals for Fusion Diagnostics,” I. A. Begishev,


2018


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“Status of FY18 OLUG Findings and Recommendations,” M. S. Wei, presented at the APS DPP OLUG Update, Portland, OR, 6 November 2018.


“High-Pressure Phase Diagram of Silicon,” R. Paul, S. X. Hu, and V. V. Karasiev, presented at the 60th Annual APS Division of Plasma Physics, Portland, OR, 5–9 November 2018.


and S. Sepke, presented at the 60th Annual APS Division of Plasma Physics, Portland, OR, 5–9 November 2018.


“Perturbation Evolution at Early Stages of Inertial Confinement Fusion Implosions,” V. N. Goncharov, presented at the 60th Annual APS Division of Plasma Physics, Portland, OR, 5–9 November 2018.


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


“Nuclear Science Experiments at the University of Rochester’s Omega Laser Facility,” C. J. Forrest, V. Yu, Glebov, J. P. Knauer, P. B. Radha, S. P. Regan, J. R. Rygg,


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


“Three-Dimensional Simulations of Direct-Drive Implosions on OMEGA,” I. V. Igumenshchev, presented at the 14th Direct-Drive and Fast-Ignition Workshop, York, United Kingdom, 20–22 March 2018.


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


the 59th Annual Meeting of the APS Division of Plasma Physics, Milwaukee, WI, 23–27 October 2017.


“Measurements of Sound Velocity and Grüneisen Parameter in CH Shocked to 800 GPa,” T. R. Boehly, C. A. McCoy, D. E. Fratanduono, P. Celliers, M. C. Gregor, D. N.


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“Dependence of Readout Fade Rate on X-Ray Energy for BaFBr$_{0.85}$I$_{0.15}$:Eu Image Plates,” M. Stoeckl, and A. Kozlov, presented at High Energy Density Science Summer School, La Jolla, CA, 30 July–11 August 2017.


“Adventures in ICF and HEDP with Magnetic Fields,” A. B. Sefkow, presented at the Sixth International Conference on High Energy Density Physics, Shirahama, Japan, 5–9 June 2017.


2016


“A Streaked X-Ray Spectroscopy Platform for Rapidly Heated, Near-Solid Density Plasmas,” C. R. Stillman, P. M. Nilson, S. Ivancic, C. Mileham, I. A. Begishev,


2015


“A High-Average-Power, Degenerate, 2.06 µm BiB3O6 Femtosecond Optical Parametric Oscillator,” T. Petersen and J. Bromage, presented at Frontiers in Optics, San Jose, CA, 18–22 October 2015.


Mackinnon, S. Le Pape, and T. Ma, presented at CEA Seminar, Bruyères le Châtel, France, 1 September 2015.


2014


Froula, D. D. Meyerhofer, T. Iwawaki, H. Habara, and K. Tanaka, presented at the 56th

“Particle-in-Cell Modeling of Laser–Plasma Interactions in Three Dimensions,” H. Wen,
A. V. Maximov, R. Yan, J. Li, C. Ren, and J. F. Myatt, presented at the 56th Annual

“A Pathway to Ignition-Hydrodynamic-Equivalent Implosions in OMEGA Direct Drive
Through the Reduction of Cross-Beam Energy Transfer,” D. H. Froula, G. Fiksel, V. N.
T. Michel, T. C. Sangster, A. Shvydky, and J. D. Zuegel, presented at the 56th Annual

“Polar-Direct-Drive Experiments on the National Ignition Facility,” M. Hohenberger,
Collins, R. S. Craxton, J. A. Delettrez, D. H. Edgell, R. Epstein, G. Fiksel,
Kalantar, M. Karasik, T. J. Kessler, J. D. Kilkenny, J. P. Knauer, C. Kurz, M. Lafon,
K. N. LaFortune, S. LePape, B. MacGowan, A. J. Mackinnon, A. MacPhee, J. A.
Regan, H. G. Rinderknecht, M. Rosenberg, T. C. Sangster, A. J. Schmitt, W. Seka,
A. Shvydky, S. Skupsky, A. A. Solodov, C. Stoeckl, R. J. Wallace, J. Weaver,
C. Widmeyer, B. Yaakobi, and J. D. Zuegel, presented at the 56th Annual Meeting of the

“A Polar-Drive, Alpha-Heating Platform for the National Ignition Facility,” T. J. B.
Collins, J. A. Marozas, J. A. Delettrez, P. W. McKenty, S. Skupsky, D. Cao, J. Chenhall,
and G. Moses, presented at the 56th Annual Meeting of the APS DPP, New Orleans, LA,
27–31 October 2014.

“Polar Drive on the National Ignition Facility,” P. B. Radha, M. Hohenberger, F. J.
Regan, T. C. Sangster, W. Seka, A. Shvydky, J. A. Frenje, M. Rosenberg, R. D. Petraso,
S. LePape, and A. J. Mckinnon, presented at the 56th Annual Meeting of the APS DPP,

“Preparing for Polar-Drive Imprint Experiments at the National Ignition Facility,”
A. Shvydky, M. Hohenberger, P. B. Radha, R. S. Craxton, V. N. Goncharov, J. P.
Sangster, presented at the 56th Annual Meeting of the APS DPP, New Orleans, LA,
27–31 October 2014.


“Studying the Equation of State of Isochorically Heated Al Using Streaked Optical
Pyrometry,” D. Haberberger, P. M. Nilson, M. C. Gregor, T. R. Boehly, and D. H.
Froula, presented at the 56th Annual Meeting of the APS DPP, New Orleans, LA,
27–31 October 2014.

D. Stutman, M. P. Valdivia, M. Finkenthal, S. P. Regan, C. Stoeckl, and B. Stoeckl,

“A Three-Dimensional Hydrocode to Study the Deceleration Phase and Hot-Spot
Formation in Inertial Confinement Fusion Implosions,” K. M. Woo, A. Bose, R. Betti,
J. A. Delettrez, K. S. Anderson, and R. Epstein, presented at the 56th Annual Meeting of

“Time-Resolved Imaging of Cryogenic Target X-Ray Emission at Peak Compression on
OMEGA,” F. J. Marshall, J. A. Delettrez, R. Epstein, V. N. Goncharov, D. T. Michel,
T. C. Sangster, and C. Stoeckl, presented at the 56th Annual Meeting of the APS DPP,

“Time-Resolved Tandem Faraday Cup for High Energy TNSA Particles,” S. Padalino,
A. Simone, E. Turner, M. K. Ginnane, N. Dubois, T. C. Sangster, and S. P. Regan,

“Understanding the Performance of Low-Adiabat Cryogenic Implosions on OMEGA,”
V. N. Goncharov, T. C. Sangster, R. Epstein, S. X. Hu, I. V. Igumenshchev, C. J. Forrest,
and M. Gatu Johnson, presented at the 56th Annual Meeting of the APS DPP, New

“Laser-Driven Fusion at the University of Rochester and Parallels Between Laser/Optical
and Radio-Frequency/Microwave Techniques,” J. H. Kelly, presented at Microwave

“Spectral Changes Induced by a Phase Modulator Acting as a Time Lens,” B. W.

“Self-Phase Modulation Compensation in a Regenerative Amplifier Using Cascaded
Second-Order Nonlinearities,” C. Dorrer, R. G. Roides, J. Bromage, and J. D. Zuegel,

Bahk, C. Mileham, J. B. Oliver, C. Dorrer, and J. D. Zuegel, presented at ICUIL 2014,
Goa, India, 12–17 October 2014.


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“Hydrodynamic Scaling of the Deceleration Phase from OMEGA to NIF Implosions,”
A. Bose, K. Woo, R. Nora, and R. Betti, presented at the Sixth Omega Laser Facility

“Initial Operation of the Isotope Separation System using Protium and Deuterium,”
M. D. Wittman, N. Redden, J. Reid, and W. T. Shmayda, presented at the Sixth Omega Laser

“LLE Resources Are Established to Provide Access to Information for External Users,”
R. W. Kidder and C. Kingsley, presented at the Sixth Omega Laser Facility Users Group

M. Heimbueger, and F. J. Marshall, presented at the Sixth Omega Laser Facility Users

“Omega Facility Update: OLUG Recommendations and Items of General Interest,”
S. F. B. Morse, presented at the Sixth Omega Laser Facility Users Group Workshop,

“Omega Laser Facility Diagnostic Highlights,” C. Sorce, A. Sorce, J. Katz, R. E. Bahr,
and P. M. Nilson, presented at the Sixth Omega Laser Facility Users Group Workshop,

“OMEGA SSD Arbitrary Waveform Generation Installation and Activation,”
E. Hill, G. Balonek, R. Cuffney, J. H. Kelly, and T. Z. Kosc, presented at the Sixth Omega Laser

“Optical Probing Measurements on OMEGA EP,” D. Haberberger, R. Boni, M. Barczys,
J. Brown, R. Huff, S. X. Hu, S. Ivancic, R. G. Roides, M. Bedzyk, R. S. Craxton,
D. Turnbull, B. Pollock, S. Ross, and A. Harvey-Thompson, presented at the Sixth

“Target Diagnostic Timing Manager (TDTM),” W. J. Armstrong, J. Puth, and
R. Rombaut, presented at the Sixth Omega Laser Facility Users Group Workshop,

Donaldson, presented at the Sixth Omega Laser Facility Users Group Workshop,

“X-Ray Emission from DT-Filled Targets,” R. A. Hamilton, W. T. Shmayda, and
N. Redden, presented at the Sixth Omega Laser Facility Users Group Workshop,


2013


“Direct-Drive Inertial Confinement Fusion: Where We Started (60 kJ), Where We Stand Today (1.5 MJ), and Where We Will be in 50 Years (100 kJ),” D. H. Froula, presented at Intense Laser and Beam Plasma Interactions Workshop, Los Angeles, CA, 19–20 July 2013 (invited).


2012


54th Annual Meeting of the APS Division of Plasma Physics, Providence, RI, 29 October–2 November 2012.


Hicks, presented at the 54th Annual Meeting of the APS Division of Plasma Physics, Providence, RI, 29 October–2 November 2012.


“A Three-Dimensional Zakharov Model of the Two-Plasmon-Decay Instability in Inhomogeneous Plasmas Driven by Multiple Laser Beams,” J. Zhang, J. F. Myatt, R. W.


the International Committee on Ultra-High Intensity Lasers, Mamaia, Romania, 16–21 September 2012.


Schneider, presented at the 43rd Annual APS Division of Atomic, Molecular, and Optical Physics Meeting, Anaheim, CA, 4–8 June 2012.


Annual Meeting of the APS Division of Plasma Physics, Salt Lake City, UT, 14–18 November 2011.


Séguin, presented at the 53rd Annual Meeting of the APS Division of Plasma Physics, Salt Lake City, UT, 14–18 November 2011.


R. D. Petrasso, presented at the 53rd Annual Meeting of the APS Division of Plasma Physics, Salt Lake City, UT, 14–18 November 2011.


presented at the 7th International Conference on Inertial Fusion Sciences and Applications, Bordeaux, France, 12–16 September 2011.


2010


“Angular Dependence of Two-Plasmon Decay in Multibeam Direct-Drive Irradiation Geometries,” R. W. Short, presented at the 52nd Annual Meeting of the APS Division of Plasma Physics, Chicago, IL, 8–12 November 2010.


“A CVD Diamond-Based Proton-Bang-Time Detector for OMEGA and the NIF,” H. Rinderknecht, presented at the 52nd Annual Meeting of the APS Division of Plasma Physics, Chicago, IL, 8–12 November 2010.


T. C. Sangster, W. Seka, N. Sinenian, T. Ma, F. N. Beg, E. Giraldez, and R. B. Stephens, presented at the 52nd Annual Meeting of the APS Division of Plasma Physics, Chicago, IL, 8–12 November 2010 (invited).


“Low-Adiabat, High-Compression Cryogenic Deuterium–Tritium Implosions on OMEGA,” V. N. Goncharov, presented at the 52nd Annual Meeting of the APS Division of Plasma Physics, Chicago, IL, 8–12 November 2010 (invited).


“Saturation of Two-Plasmon-Decay and Ion-Density Fluctuations,” R. Yan, A. V. Maximov, and C. Ren, presented at the 52nd Annual Meeting of the APS Division of Plasma Physics, Chicago, IL, 8–12 November 2010.


“Smoothing by Spectral Dispersion (SSD) for Multiple-Picket Pulses on OMEGA and the NIF,” J. A. Marozas, T. J. B. Collins, and J. D. Zuegel, presented at the 52nd Annual Meeting of the APS Division of Plasma Physics, Chicago, IL, 8–12 November 2010.


“Study of Self-Generated Magnetic Fields in Implosion Experiments on OMEGA,” I. V. Igumenshchev, V. N. Goncharov, P. M. Nilson, T. C. Sangster, C. K. Li, R. D. Petrocco,
and M. G. Haines, presented at the 52nd Annual Meeting of the APS Division of Plasma Physics, Chicago, IL, 8–12 November 2010.


“Yield and Ion-Temperature Measurements in Exploding Pusher Experiments on OMEGA and the NIF,” M. Rosenberg, presented at the 52nd Annual Meeting of the APS Division of Plasma Physics, Chicago, IL, 8–12 November 2010.


2009

D. Shvarts, presented at the 51st Annual Meeting of the APS Division of Plasma Physics, Atlanta, GA, 2–6 November 2009.


Annual Meeting of the APS Division of Plasma Physics, Atlanta, GA, 2–6 November 2009.


“Intensity Dependence of Target Performance in Low-Adiabat, Warm Implosions on OMEGA,” P. B. Radha, C. Stoeckl, V. N. Goncharov, J. A. Delettrez, T. C. Sangster,


“Single- and Multidimensional Robustness Studies of the NIF Ignition Point Design,” K. S. Anderson, R. Betti, P. Y. Chang, R. Nora, M. Fatenejad, and D. Shvarts, presented...
at the 51st Annual Meeting of the APS Division of Plasma Physics, Atlanta, GA, 2–6 November 2009.


“2-D Simulations of a 1-MJ CH-Foam Ignition Target on the NIF with 0.5 THz of 1-D Multi-FM SSD Bandwidth Using an Analytic Model,” J. A. Marozas, T. J. B. Collins, and J. D. Zuegel, presented at the 51st Annual Meeting of the APS Division of Plasma Physics, Atlanta, GA, 2–6 November 2009.


2008


2007


“Optical Control of Flip-Flops Based on Resonant-Type SOA’s,” D. N. Maywar, presented at the University of Tokyo Seminar, Tokyo, Japan, 18 September 2007.


2006


“Adding Chemistry and Glass Composition Data into a Mechanical Material Removal Model for Magnetorheological Finishing (MRF),” J. E. DeGroote, J. P. Wilson, T. M.


“Performance of the Cryogenic Test Facility Used to Simulate the Effect of Injecting an Inertial Fusion Energy Target into a Hot Target Chamber,” S. Scarantino, M. Bobeica, and D. R. Harding, presented at the 17th Target Fabrication Meeting, San Diego, CA, 1–5 October 2006.


2005


“Numerical Study of Temporal Density Variation Effects on Nonlinear Perturbation Evolution in Classical Rayleigh–Taylor Instability,” D. Li and V. N. Goncharov,


“Stimulated Brillouin Scattering in Plasmas Relevant to Direct-Drive Laser Fusion,” W. Seka, H. Baldis, J. Myatt, A. V. Maximov, R. W. Short, R. S. Craxton, R. E. Bahr,


“Direct-Drive Inertial Fusion: Basic Concepts and Ignition Target Designing,” V. N. Goncharov, presented at the 60th Scottish Universities Summer School in Physics, St. Andrew, Scotland UK, 14–27 August 2005.


2004


“A Front End for Multipetawatt Lasers Based on a High-Energy, High-Average-Power Optical Parametric Chirped-Pulse Amplifier,” V. Bagnoud, presented at Frontiers in


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2001


presented at the 10th International Conference on Precision Engineering (ICPE), Yokohama, Japan, 18–20 July 2001.


“The Role of Improved Target Surface Roughness in Recent OMEGA Gas-Filled Implosion Experiments,” P. W. McKenty, C. Stoeckl, V. N. Goncharov, M. J. Bonino,


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“Imprint Reduction with Shaped Pulses,” T. J. B. Collins and S. Skupsky, presented at the 42nd Annual Meeting of the APS Division of Plasma Physics, Quebec City, Canada, 23–27 October 2000.


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“SBS from Fast and Slow Waves in Two-Ion Plasmas,” C. J. McKinstrie and M. V. Kozlov, presented at the 42nd Annual Meeting of the APS Division of Plasma Physics, Quebec City, Canada, 23–27 October 2000.


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Fusion Sciences and Applications (IFSA) 1999, Bordeaux, France, 12–17 September 1999.


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“A High-Bandwidth Optical Pulse-Shaping/Fiber-Optic Distribution System for the 
High-Energy OMEGA Laser Fusion Facility,” A. V. Okishev, M. D. Skeldon, R. L. 
Keck, R. G. Roides, K. Green, and W. Seka, presented at OFC/IOOC ‘99, 

“Effects of SSD on Forward SBS and Filamentation,” R. W. Short, presented at the Banff 

“Recent SBS and SRS Results Under Direct-Drive NIF Conditions,” W. Seka, S. P. 
Regan, D. D. Meyerhofer, B. Yaakobi, R. S. Craxton, A. Simon, and R. W. Short, 
presented at the Banff Workshop on Laser Plasma Interaction Physics, Banff, Canada, 

“A Highly Stable, Diode-Pumped Master Oscillator for the OMEGA Laser Facility,” 
A. V. Okishev, M. D. Skeldon, and W. Seka, presented at the 1999 Advanced Solid-State 

“UV-Power Balance on the OMEGA Laser,” W. R. Donaldson, R. Boni, R. L. Keck, and 

“Theory of the Ablative Richtmyer–Meshkov Instability,” V. N. Goncharov, presented at 
Hydrodynamic and Magnetohydrodynamic Interface Instabilities: Unsteady or 

1998

“Accurate Formulas for the Landau Damping Rates of Electrostatic Waves,” R. E. 
Giacone, C. J. McKinstrie, and E. A. Startsev, presented at the 40th Annual Meeting, 

“Analysis of the Forward and Backward Stimulated Brillouin Scattering of Crossed Laser 
Beams,” C. J. McKinstrie and E. A. Startsev, presented at the 40th Annual Meeting, APS 

and R. Boni, presented at the 40th Annual Meeting, APS Division of Plasma Physics, 

“Capsule Implosion Symmetry in OMEGA Trehedral Hohlraums,” 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, presented at the 40th Annual 

“Charged-Particle Spectroscopy on OMEGA: Initial Results,” R. D. Petrasso, C. K. Li, 
D. G. Hicks, F. H. Séguin, J. M. Soures, V. Y. Glebov, D. R. Harding, J. P. Knauer,


“Neutron Burn History Measurements on OMEGA,” C. Stoekl, P. W. McKenty, V. Y. Glebov, D. D. Meyerhofer, N. S. Rogers, J. D. Zuegel, M. D. Cable, T. J. Ognibene, and


“How Small Stresses Affect 351-nm Damage Onset in Fused Silica,” F. Dahmani, J. C. Lambropoulos, S. Burns, S. Papernov, and A. W. Schmid, presented at the XXX Annual


“Inertial Confinement Fusion: Status, Challenges, and Future,” J. P. Knauer, presented at the Department of Physics and Astronomy at the University of Hawaii, Honolulu, HI, 10 September 1998.


“Transit-Time Damping and a New Physical Picture for Landau Damping,” A. Simon, presented at the Physics Department of the National Cheng Kung University, Taiwan, China, 9 March 1998.

“Stimulated Brillouin Scattering in Long-Scale-Length Plasmas on the OMEGA Laser System,” A. Chirokikh, D. D. Meyerhofer, W. Seka, R. S. Craxton, and A. Simon,


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“Picosecond Nodal Testing of Centimeter-Size Superconducting Nb Microstrip Interconnects,” M. Currie, C.-C. Wang, R. Sobolewski, and T. Y. Hsiang, presented at


“Oblique Stimulated Raman Scattering of a Short Laser Pulse in a Plasma Channel,”
A. V. Kanaev, C. J. McKinstrie, and E. J. Turano, presented at the 27th Annual

“Oblique Stimulated Raman Scattering of a Short Laser Pulse in a Plasma Channel,”
E. J. Turano, C. J. McKinstrie, and A. V. Kanaev, presented at the 27th Annual Anomalous

“Performance of Planar Foam-Buffered Direct-Drive Targets on the OMEGA Laser
R. L. Keck, R. J. Taylor, V. A. Smalyuk, W. Seka, C. P. Verdon, R. G. Watt, and
O. Willi, presented at the 27th Annual Anomalous Absorption Conference, Vancouver,

“Propagation of a Short Laser Pulse in a Plasma,” B. Nodland, C. J. McKinstrie, and E.
A. Startsev, presented at the 27th Annual Anomalous Absorption Conference,

“Simulation of Mix in Laser-Driven Implosions—Compressible Flow in Multimode
Verdon, presented at the 27th Annual Anomalous Absorption Conference,

“Single-Mode, Rayleigh–Taylor Growth-Rate Measurements with the OMEGA Laser
L. Gobby, O. Willi, and R. J. Taylor, presented at the 27th Annual Anomalous Absorption Conference,

“Studies of the 3-D Evolution of Imprinting in Planar Targets Accelerated by UV Light,”
W. Seka, D. Shvarts, and C. P. Verdon, presented at the 27th Annual Anomalous Absorption Conference,

“Three-Dimensional Analysis of the Power Transfer Between Crossed Laser Beams,”
C. J. McKinstrie, A. V. Kanaev, V. T. Tikhonchuk, R. E. Giacone, and H. X. Vu,
presented at the 27th Annual Anomalous Absorption Conference, Vancouver, BC,

“Two-Dimensional Modeling of Imprint and Feedthrough in OMEGA Mix Spherical
Experiments” by J. A. Delettrez, D. K. Bradley, and C. P. Verdon, presented at the
27th Annual Anomalous Absorption Conference, Vancouver, BC, Canada,


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“Convergence Studies of ICF Implosions Utilizing Doped-CH Ablators to Mitigate Instability Growth,” P. W. McKenty, P. A. Jaanimagi, R. L. Kremens, K. J. Kearney,
C. P. Verdon, and M. D. Cable, presented at the 38th Annual Meeting, APS Division of Plasma Physics, Denver, CO, 11–15 November 1996.


presented at the 16th IAEA Fusion Energy Conference Montreal, Canada, 7–11 October 1996.


1995


“Characterization of Y-Ba-Cu-O Thin Films Containing Regions of Different Oxygen
Content and Superconducting/Semiconducting Interfaces,” W. Kula, W. Xiong,
B. McIntyre, R. Sobolewski, D. B. Dukes, and A. D. Caplin, presented at the

“Photo-Induced Changes of the Transport Properties in Y-Ba-Cu-O Step-Edge Josephson
Junctions,” R. Adam, W. Kula, R. Sobolewski, J. M. Murduck, and C. Patiette-Hall,
presented at the 1995 International Workshop on Superconductivity, Maui, HI,
18–21 June 1995.

“Y-Ba-Cu-O Thin Films with a Controlled, Oxygen In-Depth Profile for Hybrid
Superconducting/Semiconducting Device Applications,” W. Kula, R. Adam, and
R. Sobolewski, presented at the 1995 International Workshop on Superconductivity,
Maui, HI, 18–21 June 1995.

“Atomic Force Microscopy in Support of the Laser-Driven ICF Program,” S. Papernov,
A. W. Schmid, D. J. Smith, A. Anzelotti, J. P. Knauer, P. W. McKenty, and M. D.
Wittman, presented at the Scanning Microscopy 1995 Meeting, Houston, TX,

“Applications and Processes for High-Damage-Threshold Sol-Gel Coatings,” A. R.
Staley and D. J. Smith, presented at the Optical Interference Coatings Topical Meeting,

“Characterization of Surface Particulate on Large Optics for Laser Fusion,” A. L. Rigatti,
D. J. Smith, L. D. Lund, P. Glenn, and J. Glenn, presented at the Optical Interference

“The Improvement of Evaporated Dielectric Polarizer and Beam Splitter Coatings
Through the Use of Multiple Crystal Monitoring,” J. F. Anzellotti, D. J. Smith, and Z. R.
Chrzan, presented at the Optical Interference Coatings Topical Meeting, Tucson, AZ, 5–9
June 1995.

“Induced Stresses to Optical Substrates Due to High-Energy-Laser HR Thin-Film
Coatings,” S. J. Van Kerkhove, and D. J. Smith, presented at the Optical Interference

Sczupak and D. J. Smith, presented at the Optical Interference Coatings Topical Meeting,

“Magnetorheological Finishing: A Deterministic Process for Optics Manufacturing,”
S. D. Jacobs, D. Golini, Y. Hsu, B. E. Puchebner, D. Strafford, W. I. Kordonsky, I. V.
Prokhorov, E. Fess, D. Pietrowski, and V. W. Kordonsky, presented at the SPIE Japan
Chapter International Joint Conference on Optical Fabrication and Testing and
Applications of Optical Holography, Tokyo, Japan, 5–7 June 1995 (invited).


1994


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1993


“Measurement of the Angular Distribution of High-Order Harmonics Emitted from Ionizing Low-Density Gas,”  J. Peatross and D. D. Meyerhofer, presented at the


“Sequential Ionization of $^3$He with 1.5-ps, 1-$\mu$m Laser Pulse,” D. D. Meyerhofer, B. Buerke, and J. Peatross, presented at SILAP III, Belgium, 8–14 January 1993.


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“Complexation, Morphology, and Fluorescence Life Time Measurement of the Neodymium Doped Poly(ethylene Oxide),” C. Twomey, S. H. Chen, and A. W. Schmid,


532


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536


“CB1 Observation of Barrier Suppression Ionization at Laser Intensities of 1 Atomic Unit,” D. D. Meyerhofer, presented at the APS Division Meeting, Monterey, CA, 21–23 May 1990 (invited).


1989


“The Role of the Rayleigh–Taylor Instability in Spherical Burnthrough Experiments at 0.35 µm,” J. Delettrez, C. P. Verdon, D. K. Bradley, and P. A. Jaanimagi, presented at the


“The Use of X-Ray Contact Microradiography in the Study of Silica Deposition in the Leaf Blade of Maize,” P.-C. Cheng and H. Kim, presented at the Botanical Society


