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


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


“High-Efficiency, Large-Aperture Fifth-Harmonic–Generation of 211-nm Pulses in


2018


“NIF-An Unexpected Journey, Lessons Learned to Secure ‘Projects of Scale’ and the


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


“Breakdown of Fermi Degeneracy in the Simplest Liquid Metal,” M. Zaghoo, G. W. Collins, T. R. Boehly, J. R. Rygg, V. V. Karasiev, S. X. Hu, and P. M. Celliers, presented
at the 60th Annual APS Division of Plasma Physics, Portland, OR, 5–9 November 2018 (invited).


Division of Plasma Physics, Portland, OR, 5–9 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.


“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.


“Using the 10 to 20 keV X-Ray Spectrum to Infer an Electron Temperature (\(T_e\)) as an


“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).


“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.


2017


“Picosecond Pulse-Damage Mechanism of Hafnia-Silica High Reflectors Investigated by High-Resolution Microscopy,” A. A. Kozlov, S. Papernov, S. G. Demos, J. B. Oliver,


A. Hosein, and M. Hanchett, presented at Liquid Crystals XXI, San Diego, CA, 6–10 August 2017 (invited).


“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.


“Studying Deceleration-Phase Rayleigh–Taylor Growth by Varying D:T Ratios in Gas-Filled Plastic Implosions,” S. Miller, J. Knauer, P. B. Radha, and V. N. Goncharov,


“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


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Sinars, and S. A. Slutz, presented at the 46th Annual Anomalous Absorption Conference, Old Saybrook, CT, 1–6 May 2016.


2015


“Numerical Simulations of Hydrodynamic Instability Growth and Imprint Experiments at the National Ignition Facility,” A. Shvydky, M. Hohenberger, P. B. Radha, M. J.


“Radiological Challenges at the Laboratory for Laser Energetics,” W. T. Shmayda, presented at the Tritium Focus Group, Los Alamos, NM, 3−5 November 2015.


2014


2013


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


and N. Tabiryan, presented at Optics and Photonics, San Diego, CA, 25–29 August 2013 (invited).


“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


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


presented at the 42nd Annual Anomalous Absorption Conference, Key West, FL, 25–29 June 2012.


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


53rd Annual Meeting of the APS Division of Plasma Physics, Salt Lake City, UT, 14–18 November 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 Physi cs, 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.


“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.

“Scaling Hot-Electron Generation to Long-Pulse, High-Intensity Lasers–Solid Interactions” by P. M. Nilson, A. A. Solodov, J. F. Myatt, W. Theobald, P. A. Jaanimagi,
L. Gao, C. Stoeckl, R. S. Craxton, J. A. Delettrez, J. D. Zuegel, B. E. Kruschwitz, 
and D. D. Meyerhofer, presented at the 52nd Annual Meeting of the APS Division of 
Plasma Physics, Chicago, IL, 8–12 November 2010 (invited).

“Shock-Ignition Studies on OMEGA,” M. Hohenberger, W. Theobald, S. X. Hu, K. S. 
A. Casner, X. Ribeyre, and G. Schurtz, presented at the 52nd Annual Meeting of the APS 
Division of Plasma Physics, Chicago, IL, 8–12 November 2010.

“Shock-Timing Measurements in ICF Targets Filled with Cryogenic Deuterium,” T. R. 
A. Marozas, T. C. Sangster, D. D. Meyerhofer, P. M. Celliers, H. F. Robey, D. G. Hicks, 
J. H. Eggert, G. W. Collins, and R. Smith, 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.

“South-Pole Bang-Time X-Ray Diagnostic for the NIF,” D. H. Edgell, J. Magoon, T. C. 
M. J. Eckart, J. D. Kilkenny, J. Kimbrough, J. Parker, and T. Thomas, presented at the 
52nd Annual Meeting of the APS Division of Plasma Physics, Chicago, IL, 8–12 November 2010.

“Spectroscopic Observations of Ablator Mass Mixed into the Hot Spot of NIF 
Implosions,” S. P. Regan, R. Epstein, T. C. Sangster, D. D. Meyerhofer, B. A. Hammel, 
Kilkenny, O. L. Landen, N. B. Meezan, R. Prasad, V. A. Smalyuk, and L. J. Suter, 
presented at the 52nd Annual Meeting of the APS Division of Plasma Physics, Chicago, 
IL, 8–12 November 2010.

C. Dorrer, J. H. Kelly, B. E. Kruschwitz, S. J. Loucks, R. L. McCrory, S. F. B. Morse, J. 
Qiao, C. Stoeckl, and L. J. Waxer, 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. Petrasso, 
and M. G. Haines, presented at the 52nd Annual Meeting of the APS Division of Plasma 
Physics, Chicago, IL, 8–12 November 2010.

“Two-Plasmon-Decay Instability and Stimulated Brillouin Scattering in Direct-Drive ICF 
the 52nd Annual Meeting of the APS Division of Plasma Physics, Chicago, IL, 8–12 November 2010.


“Preparing for Polar Drive at the National Ignition Facility,” T. J. B. Collins, J. A. Marozas, S. Skupsky, P. W. McKenty, V. N. Goncharov, P. B. Radha, R. S. Craxton, 168


“Characterization of Composition and Energy Spectra of Laser-Produced Ions with Thomson Parabola,” G. Fiksel, C. Freeman, J. A. Frenje, J. C. Mileham, P. M. Nilson, N.


2009


Delettrez, and C. Stoeckl, 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.


“Simple High-Sensitivity, Electro-Optic Sagnac Spectral Shearing Interferometry for Optical Pulse Characterization,” C. Dorrer and J. Bromage, presented at the Ultrafast
Optics and High Field Short Wavelength Meeting, Arcachon, France, 31 August–4 September 2009.


“Construction and Activation of Large-Aperture, Tiled-Grating Compressors for High-Energy, Petawatt-Class Chirped-Pulse–Amplification Systems,” J. Qiao, J. H. Kelly,


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


Meeting of the APS Division of Plasma Physics, Philadelphia, PA, 30 October–3 November 2006.


Meeting of the APS Division of Plasma Physics, Philadelphia, PA, 30 October–3 November 2006.


“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


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“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


“Handling Cryogenic DT Targets at the Laboratory for Laser Energetics,” W. T. Shmayda, D. R. Harding, L. D. Lund, R. Janezic, and T. W. Duffy, presented at the


“Parasitic Second-Harmonic Generation in Optical Parametric Chirped-Pulse Amplification,” I. A. Begishev, V. Bagnoud, M. J. Guardalben, J. Puth, L. J. Waxer, and


2003


2002


2000


“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.


“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.


“One-Dimensional Simulation of the Effects of Unstable Mix on Neutron and Charged Particle Spectra from Laser-Driven Implosion Experiments,” R. Epstein, J. A. Delettrez,


1999


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


1998


“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.


1997


“Precision Control of Aqueous Magnetorheological Fluids for Finishing of Optics,” S. D. Jacobs, W. I. Kordonski, and H. M. Pollicove, presented at the 6th International


“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


1996


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


“Ablative Rayleigh–Taylor Instability: Applications of the Linear Theory to Target Designs Relevant to Inertial Confinement Fusion,” V. N. Goncharov, R. Betti, R. L.


1995


“Comparison of a One-Dimensional Mix Model for the Linear and Weakly Nonlinear Regime of the Rayleigh–Taylor Instability with Two-Dimensional ORCHID Results,” J.


“Simulations of SBS in Long-Scale-Length Laser Plasmas of Variable Density: The Inability of Linear Theory to Explain Experimental Observations,” A. V. Chirokikh, A.


1994


“The Effects of Realistic Geometry on Two-Dimensional Stimulated Brillouin Scattering,” T. Kolber, C. J. McKinstrie, R. Betti, and R. E. Giacone, presented at the


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1993


“Strategies for Ultra-High Laser Uniformity Using Zero-Correlation Phase Masks,”

“Tuning a Cr:LiSAF Laser with a High-Efficiency Transmission Grating,”

“Uniformity Issues in the Manufacture of Large-Aperture Liquid-Crystal Wave Plates,”
A. W. Schmid, D. J. Smith, and S. D. Jacobs, presented at CLEO ‘93, Baltimore, MD,
2–7 May 1993.

“Electron-Hole and Electron–Plasmon Interactions Near the Fermi Edge,”
T. Gong, P. M. Fauchet, J. F. Young, and P. J. Kelly, presented at QELS ‘93, Baltimore, MD,
2–7 May 1993.

“Deterministic Microgrinding of Spherical Surfaces on Optical Glasses,”
D. Golini, M. Atwood, M. Bechtold, W. Czjakowski, A. Feltz, S. D. Jacobs, and A. Lindquist,
presented at the ASPE Spring Topical Meeting/Principles of Cutting Mechanics:
Applications to Ultra-Precision Machining and Grinding, Tucson, AZ, 13–15 April 1993.

“Measurement of the Angular Distribution of High-Order Harmonics Emitted from Rare
Gases,” J. Peatross and D. D. Meyerhofer, presented at Short Wavelength V: Physics

“Novel Gas Nozzle Design for Use in Laser Harmonic Generation,”
J. Peatross and D. D. Meyerhofer, presented at Short Wavelength V: Physics with Intense Laser Pulses, San

“Strong Kα Emission in Picosecond Laser–Plasma Interactions,”

“Superheating of Bi(0001),” E. A. Murphy, H. E. Elsayed-Ali, and J. W. Herman,

“Subpicosecond Electrical Pulse Generation in GaAs by Nonuniform Illumination of
Series and Parallel Transmission-Line Gaps,” S. Alexandrou, C.-C. Wang,
R. Sobolewski, and T. Y. Hsiang, presented at Ultrafast Electronics and Optoelectronics,

“Ultrafast Optical and Optoelectronic Response of Current Carrying Y-Ba-Cu-O Thin-
Films,” T. Gong, L. X. Zheng, Y. Kostoulas, W. Xiong, W. Kula, K. B. Ucer,
R. Sobolewski, and P. M. Fauchet, presented at Ultrafast Electronics and Optoelectronics,
“Carrier–Carrier Interactions in GaAs Investigated by Femtosecond Spectroscopy,”

“Efficient Kα Emission in High-Contrast, Short-Pulse, Laser–Plasma Interactions,”


“Large-Aperture High-Efficiency Holographic Gratings for High-Power Laser Systems,”


“Strategies for Ultra-High Laser Uniformity Using Zero-Correlation Phase Masks,”

“Temporal Pulse-Width Control of a Regenerative Amplifier with Intracavity Etalons,”

“Transmission-Line Modeling of Photoconductive Switches,” W. R. Donaldson and

“Angular Distributions of High-Order Harmonics,” D. D. Meyerhofer and J. Peatross,
SILAP III, Belgium, 8–14 January 1993.
“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.


1992


1991

380


1990


“Barrier Suppression Ionization and High-Order Harmonic Generation in Noble Gases at Laser Intensities of 1 Atomic Unit and Above,” D. D. Meyerhofer, S. Augst, C. Moore, J.


“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).


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1988


