



Siegfried Glenzer

Professor of Photon Science and, by courtesy, of Mechanical Engineering
Photon Science Directorate

Bio

BIO

Siegfried Glenzer, who is the recipient of the recent E. O. Lawrence award, is Professor and High-Energy-Density division director at SLAC National Accelerator Laboratory. He joined SLAC as a distinguished scientist in 2013 to build a new discovery-class program in exploring matter in extreme conditions using high-power lasers and the world-class Linac Coherent Light Source x-ray beam. Before joining SLAC, he held the plasma physics group leader position at the Lawrence Livermore National Laboratory for 12 years, where he led the first inertial confinement fusion experiments on the National Ignition Facility. He has also been visiting lecturer at the University of California, Berkeley. Siegfried is the individual recipient of the American Physical Society "Excellence in Plasma Physics" Award (2003). He also won two DOE Excellence in Publications Awards (2011 & 2014) and two Science and Technology Awards (2005 & 2012). In 2004, he received the Alexander-von-Humboldt senior research prize and spent a research and teaching year at the Universität Rostock and at the Deutsche Elektronen Synchrotron in Hamburg, Germany. Since then, he has been the host for two Alexander-von-Humboldt Lynen postdoctoral fellows, two Lawrence postdoctoral fellows, three Peter-Paul-Ewald fellows, and has supervised more than 30 postdoctoral scientists both at LLNL and SLAC.

Siegfried authored and co-authored more than 400 journal publications. Siegfried published the textbook "Plasma Scattering of Electromagnetic Radiation" by D. H. Froula, S. H. Glenzer, N. C. Luhamn, Jr., J. Sheffield, 2nd edition (Elsevier, 2010) and is a fellow of the American Physical Society.

ACADEMIC APPOINTMENTS

- Professor, Photon Science Directorate
- Professor (By courtesy), Mechanical Engineering
- Member, Bio-X
- Principal Investigator, Stanford PULSE Institute

HONORS AND AWARDS

- Dr. rer. nat. h. c., Rostock University (2019)
- E. O. Lawrence Award, US Department of Energy (2014)
- Humboldt Senior Research Prize, Alexander from Humboldt foundation (2004)
- Excellence in Plasma Physics Award, American Physical Society (2003)
- Fellow, American Physical Society (2001)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Advisory Committee of MIT's Center of Excellence HEDP Science (2018 - present)
- Member, National Ignition Facility Discovery Science Technical Review Committee (2016 - present)

- Member, INERTIAL CONFINEMENT FUSION IGNITION & HIGH YIELD (ICF) PROGRAM RED TEAM (ICF RED TEAM) (2017 - present)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Please see our website for detailed information: <https://heds.slac.stanford.edu>

Teaching

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Derek Kuldinow

Postdoctoral Faculty Sponsor

Armin Bergermann, Maitrayee Ghosh, Eric Sung

Doctoral Dissertation Advisor (AC)

Umang Agarwal, Danielle Brown, Jhonnatan Gama Vazquez, Kaden Loring, Willow Martin, Claudia Parisuaña, Matthew Ricks, Isleydys Silva Torrecilla, Katie Wootten

Orals Evaluator

Andy Castillo, Derek Kuldinow

Publications

PUBLICATIONS

- **Time-resolved X-ray imaging of the current filamentation instability in solid-density plasmas.** *Nature communications*
Schoenwaelder, C., Marret, A., Assenbaum, S., Curry, C. B., Cunningham, E., Dyer, G., Funk, S., Glenn, G. D., Goede, S., Khaghani, D., Rehwald, M., Schramm, U., Treffert, et al
2026
- **Unveiling structural effects on the DC conductivity of warm dense matter via terahertz spectroscopy and ultrafast electron diffraction.** *Nature communications*
Ofori-Okai, B. K., Descamps, A., Toro, E. R., Ikeya, M., Hansen, S. B., Mo, M., Baczewski, A. D., Brown, D., Fletcher, L. B., McBride, E. E., Shen, X., Weinmann, A., Yang, et al
2025; 16 (1): 10541
- **Replenishing liquid sheet targets to enable high-intensity high-repetition-rate laser-plasma interactions for ion-beam technology.** *The Review of scientific instruments*
Faubel, S., Glenn, G. D., Jain, G., Gauthier, M., Glenzer, S. H.
2025; 96 (9)
- **Synthesis of Gold Hydride at High Pressure and High Temperature.** *Angewandte Chemie (International ed. in English)*
Frost, M., Abraham, K., Goncharov, A. F., McWilliams, R. S., Husband, R. J., Andrzejewski, M., Appel, K., Baehtz, C., Bergermann, A., Brown, D., Bykova, E., Celeste, A., Edmund, et al
2025: e202505811
- **Structural evolution of liquid silicates under conditions in Super-Earth interiors.** *Nature communications*
Morard, G., Hernandez, J. A., Pege, C., Nagy, C., Libon, L., Lacquement, A., Sokaras, D., Lee, H. J., Galtier, E., Heimann, P., Cunningham, E., Glenzer, S. H., Vinci, et al
2024; 15 (1): 8483
- **X-ray diffraction of metastable structures from supercooled liquid hydrogen.** *Scientific reports*
Fletcher, L. B., Levitan, A. L., McBride, E. E., Kim, J. B., Alves, E. P., Aquila, A., Frost, M., Goede, S., King, G., Lane, T. J., Liang, M., MacDonald, M. J., Ofori-Okai, et al

2024; 14 (1): 17283

- **Release dynamics of nanodiamonds created by laser-driven shock-compression of polyethylene terephthalate.** *Scientific reports*
Heuser, B., Bergermann, A., Stevenson, M. G., Ranjan, D., He, Z., Lütgert, J., Schumacher, S., Bethkenhagen, M., Descamps, A., Galtier, E., Gleason, A. E., Khaghani, D., Glenn, et al
2024; 14 (1): 12239
- **Dynamically assisted nuclear fusion in the strong-field regime** *PHYSICAL REVIEW C*
Lindsey, M., Bekx, J., Schlesinger, K., Glenzer, S.
2024; 109 (4)
- **Evidence for phonon hardening in laser-excited gold using x-ray diffraction at a hard x-ray free electron laser.** *Science advances*
Descamps, A., Ofori-Okai, B. K., Bistoni, O., Chen, Z., Cunningham, E., Fletcher, L. B., Hartley, N. J., Hastings, J. B., Khaghani, D., Mo, M., Nagler, B., Recoules, V., Redmer, et al
2024; 10 (6): eadh5272
- **Ultrafast x-ray detection of low-spin iron in molten silicate under deep planetary interior conditions.** *Science advances*
Shim, S. H., Ko, B., Sokaras, D., Nagler, B., Lee, H. J., Galtier, E., Glenzer, S., Granados, E., Vinci, T., Fiquet, G., Dolinschi, J., Tappan, J., Kulka, et al
2023; 9 (42): eadi6153
- **On the control of electron heating for optimal laser radiation pressure ion acceleration** *JOURNAL OF PLASMA PHYSICS*
Chou, H., Grassi, A., Glenzer, S. H., Fiuza, F.
2022; 88 (6)
- **Diamond formation kinetics in shock-compressed C–H–O samples recorded by small-angle x-ray scattering and x-ray diffraction.** *Science advances*
He, Z., Rodel, M., Lutgert, J., Bergermann, A., Bethkenhagen, M., Chekrygina, D., Cowan, T. E., Descamps, A., French, M., Galtier, E., Gleason, A. E., Glenn, G. D., Glenzer, et al
2022; 8 (35): eabo0617
- **The high-pressure lithium-palladium and lithium-palladium-hydrogen systems.** *Scientific reports*
Frost, M., McBride, E. E., Smith, J. S., Glenzer, S. H.
2022; 12 (1): 12341
- **Applicability of semiclassical methods for modeling laser-enhanced fusion rates in a realistic setting** *PHYSICAL REVIEW C*
Bekx, J., Lindsey, M., Glenzer, S., Schlesinger, K.
2022; 105 (5)
- **Sub-micron thick liquid sheets produced by isotropically etched glass nozzles.** *Lab on a chip*
Crissman, C. J., Mo, M., Chen, Z., Yang, J., Huyke, D. A., Glenzer, S. H., Ledbetter, K., F Nunes, J. P., Ng, M. L., Wang, H., Shen, X., Wang, X., DePonte, et al
2022
- **Ultrafast visualization of incipient plasticity in dynamically compressed matter.** *Nature communications*
Mo, M., Tang, M., Chen, Z., Peterson, J. R., Shen, X., Baldwin, J. K., Frost, M., Kozina, M., Reid, A., Wang, Y., E, J., Descamps, A., Ofori-Okai, et al
2022; 13 (1): 1055
- **Ultrafast structural response of shock-compressed plagioclase** *METEORITICS & PLANETARY SCIENCE*
Gleason, A. E., Park, S., Rittman, D. R., Ravasio, A., Langenhorst, F., Bolis, R. M., Granados, E., Hok, S., Kroll, T., Sikorski, M., Weng, T., Lee, H., Nagler, et al
2022
- **High Pressure Brillouin Spectroscopy and X-ray Diffraction of Cerium Dioxide** *MATERIALS*
Frost, M., Lazarz, J. D., Levitan, A. L., Prakapenka, V. B., Sun, P., Tkachev, S. N., Yang, H., Glenzer, S. H., Gleason, A. E.
2021; 14 (13)
- **Structure retrieval in liquid-phase electron scattering.** *Physical chemistry chemical physics : PCCP*
Yang, J., Nunes, J. P., Ledbetter, K., Biasin, E., Centurion, M., Chen, Z., Cordones, A. A., Crissman, C., Deponte, D. P., Glenzer, S. H., Lin, M., Mo, M., Rankine, et al
2020

- **Cryogenic Liquid Jets for High Repetition Rate Discovery Science.** *Journal of visualized experiments : JoVE*
Curry, C. B., Schoenwaelder, C., Goede, S., Kim, J. B., Rehwald, M., Treffert, F., Zeil, K., Glenzer, S. H., Gauthier, M.
2020
- **In situ X-ray diffraction of silicate liquids and glasses under dynamic and static compression to megabar pressures.** *Proceedings of the National Academy of Sciences of the United States of America*
Morard, G. n., Hernandez, J. A., Guarguaglini, M. n., Bolis, R. n., Benuzzi-Mounaix, A. n., Vinci, T. n., Fiquet, G. n., Baron, M. A., Shim, S. H., Ko, B. n., Gleason, A. E., Mao, W. L., Alonso-Mori, et al
2020
- **Femtosecond electronic structure response to high intensity XFEL pulses probed by iron X-ray emission spectroscopy.** *Scientific reports*
Alonso-Mori, R. n., Sokaras, D. n., Cammarata, M. n., Ding, Y. n., Feng, Y. n., Fritz, D. n., Gaffney, K. J., Hastings, J. n., Kao, C. C., Lemke, H. T., Maxwell, T. n., Robert, A. n., Schropp, et al
2020; 10 (1): 16837
- **High-Pressure Melt Curve and Phase Diagram of Lithium.** *Physical review letters*
Frost, M., Kim, J. B., McBride, E. E., Peterson, J. R., Smith, J. S., Sun, P., Glenzer, S. H.
2019; 123 (6): 065701
- **High-Pressure Melt Curve and Phase Diagram of Lithium** *PHYSICAL REVIEW LETTERS*
Frost, M., Kim, J. B., McBride, E. E., Peterson, J., Smith, J. S., Sun, P., Glenzer, S. H.
2019; 123 (6)
- **Author Correction: Generation and characterization of ultrathin free-flowing liquid sheets.** *Nature communications*
Koralek, J. D., Kim, J. B., Bruza, P., Curry, C. B., Chen, Z., Bechtel, H. A., Cordones, A. A., Sperling, P., Toleikis, S., Kern, J. F., Moeller, S. P., Glenzer, S. H., DePonte, et al
2019; 10 (1): 1615
- **Characterization of defect clusters in ion-irradiated tungsten by X-Ray diffuse scattering** *JOURNAL OF NUCLEAR MATERIALS*
Sun, P., Wang, Y., Frost, M., Schoenwaelder, C., Levitan, A. L., Mo, M., Chen, Z., Hastings, J. B., Tynan, G. R., Glenzer, S. H., Heimann, P.
2018; 510: 322–30
- **Author Correction: Generation and characterization of ultrathin free-flowing liquid sheets.** *Nature communications*
Koralek, J. D., Kim, J. B., Bruza, P., Curry, C. B., Chen, Z., Bechtel, H. A., Cordones, A. A., Sperling, P., Toleikis, S., Kern, J. F., Moeller, S. P., Glenzer, S. H., DePonte, et al
2018; 9 (1): 2860
- **Heterogeneous to homogeneous melting transition visualized with ultrafast electron diffraction.** *Science (New York, N.Y.)*
Mo, M. Z., Chen, Z., Li, R. K., Dunning, M., Witte, B. B., Baldwin, J. K., Fletcher, L. B., Kim, J. B., Ng, A., Redmer, R., Reid, A. H., Shekhar, P., Shen, et al
2018; 360 (6396): 1451–55
- **Generation and characterization of ultrathin free-flowing liquid sheets** *NATURE COMMUNICATIONS*
Koralek, J. D., Kim, J. B., Bruza, P., Curry, C. B., Chen, Z., Bechtel, H. A., Cordones, A. A., Sperling, P., Toleikis, S., Kern, J. F., Moeller, S. P., Glenzer, S. H., DePonte, et al
2018; 9: 1353
- **Call for papers: special issue on correlations in light-matter interactions** *JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS*
Fennel, T., Marangos, J., Mukamel, S., Ueda, K., Glenzer, S., Walmsley, I., Bostedt, C., Meiwes-Broer, K.
2017; 50 (9)
- **Relativistic Electron Streaming Instabilities Modulate Proton Beams Accelerated in Laser-Plasma Interactions** *PHYSICAL REVIEW ACCELERATORS AND BEAMS*
Goede, S., Roedel, C., Zeil, K., Mishra, R., Gauthier, M., Brack, F., Kluge, T., MacDonald, M. J., Metzkes, J., OBST, L., Rehwald, M., RUYER, C., Schlenvoigt, et al
2017; 20 (5)
- **Relativistic Electron Streaming Instabilities Modulate Proton Beams Accelerated in Laser-Plasma Interactions** *PHYSICAL REVIEW LETTERS*

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- Goede, S., Roedel, C., Zeil, K., Mishra, R., Gauthier, M., Brack, F., Kluge, T., MacDonald, M. J., Metzkes, J., OBST, L., Rehwald, M., RUYER, C., Schlenvoigt, et al
2017; 118 (19)
- **Ab initio simulations of the dynamic ion structure factor of warm dense lithium** *PHYSICAL REVIEW B*
Witte, B. B., Shihab, M., Glenzer, S. H., Redmer, R.
2017; 95 (14)
 - **Calibration and characterization of a highly efficient spectrometer in von Hamos geometry for 7-10 keV x-rays** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Jarrott, L. C., Wei, M. S., McGuffey, C., Beg, F. N., Nilson, P. M., Sorce, C., Stoeckl, C., Theoboald, W., Sawada, H., Stephens, R. B., Patel, P. K., McLean, H. S., Landen, et al
2017; 88 (4)
 - **Observation of Betatron X-Ray Radiation in a Self-Modulated Laser Wakefield Accelerator Driven with Picosecond Laser Pulses** *PHYSICAL REVIEW LETTERS*
Albert, F., Lemos, N., Shaw, J. L., Pollock, B. B., Goyon, C., Schumaker, W., Saunders, A. M., Marsh, K. A., Pak, A., Ralph, J. E., Martins, J. L., Amorim, L. D., Falcone, et al
2017; 118 (13)
 - **A strong diffusive ion mode in dense ionized matter predicted by Langevin dynamics** *NATURE COMMUNICATIONS*
Mabey, P., Richardson, S., WHITE, T. G., Fletcher, L. B., Glenzer, S. H., HARTLEY, N. J., Vorberger, J., Gericke, D. O., Gregori, G.
2017; 8
 - **Using neutrons to measure keV temperatures in highly compressed plastic at multi-Gbar pressures** *HIGH ENERGY DENSITY PHYSICS*
Nilsen, J., Bachmann, B., Zimmerman, G. B., Hatarik, R., Doppner, T., Swift, D., Hawreliak, J., Collins, G. W., Falcone, R. W., Glenzer, S. H., Kraus, D., Landen, O. L., Kritcher, et al
2016; 21: 20-26
 - **Experimental room temperature hohlraum performance study on the National Ignition Facility** *PHYSICS OF PLASMAS*
Ralph, J. E., Strozzzi, D., Ma, T., Moody, J. D., Hinkel, D. E., Callahan, D. A., MacGowan, B. J., Michel, P., Kline, J. L., Glenzer, S. H., ALBERT, F., Benedetti, L. R., Divol, et al
2016; 23 (12)
 - **High-intensity laser-accelerated ion beam produced from cryogenic micro-jet target** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Gauthier, M., Kim, J. B., Curry, C. B., Aurand, B., Gamboa, E. J., Gode, S., Goyon, C., Hazi, A., Kerr, S., Pak, A., PROPP, A., Ramakrishna, B., Ruby, et al
2016; 87 (11)
 - **The design of the optical Thomson scattering diagnostic for the National Ignition Facility** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Datte, P. S., Ross, J. S., Froula, D. H., Daub, K. D., Galbraith, J., Glenzer, S., Hatch, B., Katz, J., Kilkeny, J., Landen, O., Manha, D., Manuel, A. M., Molander, et al
2016; 87 (11)
 - **Simulated performance of the optical Thomson scattering diagnostic designed for the National Ignition Facility** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Ross, J. S., Datte, P., Divol, L., Galbraith, J., Froula, D. H., Glenzer, S. H., Hatch, B., Katz, J., Kilkeny, J., Landen, O., Manuel, A. M., Molander, W., Montgomery, et al
2016; 87 (11)
 - **Measurement of high-dynamic range x-ray Thomson scattering spectra for the characterization of nano-plasmas at LCLS** *REVIEW OF SCIENTIFIC INSTRUMENTS*
MacDonald, M. J., Gorkhover, T., Bachmann, B., Bucher, M., Carron, S., Coffee, R. N., Drake, R. P., Ferguson, K. R., Fletcher, L. B., Gamboa, E. J., Glenzer, S. H., Gode, S., Hau-Riege, et al
2016; 87 (11)
 - **Development of a cryogenic hydrogen microjet for high-intensity, high-repetition rate experiments** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Kim, J. B., Gode, S., Glenzer, S. H.
2016; 87 (11)
 - **A single-shot spatial chirp method for measuring initial AC conductivity evolution of femtosecond laser pulse excited warm dense matter** *REVIEW OF SCIENTIFIC INSTRUMENTS*
-

Chen, Z., Hering, P., Brown, S. B., Curry, C., Tsui, Y. Y., Glenzer, S. H.

2016; 87 (11)

- **High resolution x-ray Thomson scattering measurements from cryogenic hydrogen jets using the linac coherent light source** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Fletcher, L. B., Zastrau, U., Galtier, E., Gamboa, E. J., Goede, S., Schumaker, W., Ravasio, A., Gauthier, M., MacDonald, M. J., Chen, Z., Granados, E., Lee, H. J., FRY, et al
2016; 87 (11)
- **Single-shot mega-electronvolt ultrafast electron diffraction for structure dynamic studies of warm dense matter** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Mo, M. Z., Shen, X., Chen, Z., Li, R. K., Dunning, M., Sokolowski-Tinten, K., Zheng, Q., WEATHERSBY, S. P., Reid, A. H., Coffee, R., Makasyuk, I., Edstrom, S., McCormick, et al
2016; 87 (11)
- **Single-shot measurements of plasmons in compressed diamond with an x-ray laser (vol 22, 056319, 2015)** *PHYSICS OF PLASMAS*
Gamboa, E. J., Fletcher, L. B., Lee, H. J., Zastrau, U., Galtier, E., MacDonald, M. J., Gauthier, M., Vorberger, J., Gericke, D. O., Granados, E., Hastings, J. B., Glenzer, S. H.
2016; 23 (10)
- **Dual crystal x-ray spectrometer at 1.8 keV for high repetition-rate single-photon counting spectroscopy experiments** *JOURNAL OF INSTRUMENTATION*
Gamboa, E. J., Bachmann, B., Kraus, D., MacDonald, M. J., Bucher, M., Carron, S., Coffee, R. N., Drake, R. P., Emig, J., Ferguson, K. R., Fletcher, L. B., Glenzer, S. H., Gorkhover, et al
2016; 11
- **X-ray scattering measurements on imploding CH spheres at the National Ignition Facility** *PHYSICAL REVIEW E*
Kraus, D., Chapman, D. A., Kritcher, A. L., Baggott, R. A., Bachmann, B., Collins, G. W., Glenzer, S. H., Hawreliak, J. A., Kalantar, D. H., Landen, O. L., Ma, T., Le Pape, S., Nilsen, et al
2016; 94 (1)
- **Tracking the density evolution in counter-propagating shock waves using imaging X-ray scattering** *APPLIED PHYSICS LETTERS*
Zastrau, U., Gamboa, E. J., Kraus, D., Benage, J. F., Drake, R. P., Efthimion, P., Falk, K., Falcone, R. W., Fletcher, L. B., Galtier, E., Gauthier, M., Granados, E., Hastings, et al
2016; 109 (3)
- **Absolute dosimetric characterization of Gafchromic EBT3 and HDv2 films using commercial flat-bed scanners and evaluation of the scanner response function variability.** *Review of scientific instruments*
Chen, S. N., Gauthier, M., Bazalova-Carter, M., Bolanos, S., Glenzer, S., Riquier, R., Revet, G., Antici, P., Morabito, A., PROPP, A., Starodubtsev, M., Fuchs, J.
2016; 87 (7): 073301-?
- **Calculation of Debye-Scherrer diffraction patterns from highly stressed polycrystalline materials** *JOURNAL OF APPLIED PHYSICS*
MacDonald, M. J., Vorberger, J., Gamboa, E. J., Drake, R. P., Glenzer, S. H., Fletcher, L. B.
2016; 119 (21)
- **Matter under extreme conditions experiments at the Linac Coherent Light Source** *JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS*
Glenzer, S. H., Fletcher, L. B., Galtier, E., Nagler, B., Alonso-Mori, R., Barbrel, B., Brown, S. B., Chapman, D. A., Chen, Z., Curry, C. B., Fiuza, F., Gamboa, E., Gauthier, et al
2016; 49 (9)
- **X-ray scattering measurements of dissociation-induced metallization of dynamically compressed deuterium** *NATURE COMMUNICATIONS*
Davis, P., Doppner, T., Rygg, J. R., FORTMANN, C., Divol, L., Pak, A., Fletcher, L., Becker, A., Holst, B., Sperling, P., Redmer, R., Desjarlais, M. P., Celliers, et al
2016; 7
- **A direct-drive exploding-pusher implosion as the first step in development of a monoenergetic charged-particle backlighting platform at the National Ignition Facility** *HIGH ENERGY DENSITY PHYSICS*
Rosenberg, M. J., Zylstra, A. B., Seguin, F. H., Rinderknecht, H. G., Frenje, J. A., Johnson, M. G., SIO, H., WAUGH, C. J., Sinenian, N., Li, C. K., Petrasso, R. D., Lepape, S., Ma, et al
2016; 18: 38-44

- **Nanosecond formation of diamond and lonsdaleite by shock compression of graphite** *NATURE COMMUNICATIONS*
Kraus, D., Rvasio, A., Gauthier, M., Gericke, D. O., Vorberger, J., Frydrych, S., Helfrich, J., Fletcher, L. B., Schaumann, G., Nagler, B., Barbrel, B., Bachmann, B., Gamboa, et al
2016; 7
- **Resonance between heat-carrying electrons and Langmuir waves in inertial confinement fusion plasmas** *PHYSICS OF PLASMAS*
Rozmus, W., Chapman, T., Brantov, A., Winjum, B. J., Berger, R. L., Brunner, S., Bychenkov, V. Y., Tableman, A., Tzoufras, M., Glenzer, S.
2016; 23 (1)
- **Development of a WDM platform for charged-particle stopping experiments** *9TH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS (IFSA 2015)*
Zylstra, A. B., Frenje, J. A., Grabowski, P. E., Li, C. K., Collins, G. W., Fitzsimmons, P., Glenzer, S., Graziani, F., Hansen, S. B., Hu, S. X., Johnson, M. G., Keiter, P., Reynolds, et al
2016; 717
- **High-Energy Density science at the Linac Coherent Light Source** *8TH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS (IFSA 2013)*
Glenzer, S. H., Fletcher, L. B., Hastings, J. B.
2016; 688
- **Hydrodynamic instabilities and mix studies on NIF: predictions, observations, and a path forward** *8TH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS (IFSA 2013)*
Remington, B. A., Atherton, L. J., Benedetti, L. R., Berzak-Hopkins, L., Bradley, D. K., Callahan, D. A., Casey, D. T., Celliers, P. M., Cerjan, C. J., Clark, D. S., Dewald, E. L., Dittrich, T. R., Dixit, et al
2016; 688
- **Shock Hugoniot measurements of CH at Gbar pressures at the NIF** *8TH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS (IFSA 2013)*
Kritcher, A. L., Doeppner, T., Swift, D., Hawreliak, J., Nilsen, J., Hammer, J., Bachmann, B., Collins, G., Landen, O., Keane, C., Glenzer, S., Rothman, S., Chapman, et al
2016; 688
- **The preliminary design of the optical Thomson scattering diagnostic for the National Ignition Facility** *9TH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS (IFSA 2015)*
Datte, P., Ross, J. S., Froula, D., Galbraith, J., Glenzer, S., Hatch, B., Kilkenny, J., Landen, O., Manuel, A. M., Molander, W., Montgomery, D., Moody, J., Swadling, et al
2016; 717
- **Platform for spectrally resolved x-ray scattering from imploding capsules at the National Ignition Facility** *9TH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS (IFSA 2015)*
Kraus, D., Doppner, T., Kritcher, A. L., Yi, A., Boehm, K., Bachmann, B., Divol, L., Fletcher, L. B., Glenzer, S. H., Landen, O. L., Masters, N., Saunders, A. M., Weber, et al
2016; 717
- **Ultrafast electron kinetics in short pulse laser-driven dense hydrogen** *JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS*
Zastrau, U., Sperling, P., Fortmann-Grote, C., Becker, A., Bornath, T., Bredow, R., Doeppner, T., Fennel, T., Fletcher, L. B., Foerster, E., Goede, S., Gregori, G., Harmand, et al
2015; 48 (22)
- **Free-Electron X-Ray Laser Measurements of Collisional-Damped Plasmons in Isochorically Heated Warm Dense Matter** *PHYSICAL REVIEW LETTERS*
Sperling, P., Gamboa, E. J., Lee, H. J., Chung, H. K., Galtier, E., Omarbakiyeva, Y., Reinholz, H., Roepke, G., Zastrau, U., Hastings, J., Fletcher, L. B., Glenzer, S. H.
2015; 115 (11)
- **Ab initio calculation of the ion feature in x-ray Thomson scattering** *PHYSICAL REVIEW E*
Plagemann, K., Rueter, H. R., Bornath, T., Shihab, M., Desjarlais, M. P., Fortmann, C., Glenzer, S. H., Redmer, R.
2015; 92 (1)
- **X-ray Thomson scattering diagnostics of impact ionization in laser-driven carbon foils** *JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS*

- Sperling, P., Zastra, U., Toleikis, S., Glenzer, S. H., Redmer, R.
2015; 48 (12)
- **Measurement of Charged-Particle Stopping in Warm Dense Plasma** *PHYSICAL REVIEW LETTERS*
Zylstra, A. B., Frenje, J. A., Grabowski, P. E., Li, C. K., Collins, G. W., Fitzsimmons, P., Glenzer, S., Graziani, F., Hansen, S. B., Hu, S. X., Johnson, M. G., Keiter, P., Reynolds, et al
2015; 114 (21)
 - **Single-shot measurements of plasmons in compressed diamond with an x-ray laser** *PHYSICS OF PLASMAS*
Gamboa, E. J., Fletcher, L. B., Lee, H. J., Zastra, U., Galtier, E., MacDonald, M. J., Gauthier, M., Vorberger, J., Gericke, D. O., Granados, E., Hastings, J. B., Glenzer, S. H.
2015; 22 (5)
 - **The complex ion structure of warm dense carbon measured by spectrally resolved x-ray scattering** *PHYSICS OF PLASMAS*
Kraus, D., Vorberger, J., Helfrich, J., Gericke, D. O., Bachmann, B., Bagnoud, V., Barbrel, B., Blazevic, A., Carroll, D. C., Cayzac, W., Doepfner, T., Fletcher, L. B., Frank, et al
2015; 22 (5)
 - **Ultrabright X-ray laser scattering for dynamic warm dense matter physics** *NATURE PHOTONICS*
Fletcher, L. B., Lee, H. J., Doepfner, T., Galtier, E., Nagler, B., Heimann, P., FORTMANN, C., Lepape, S., Ma, T., Millot, M., Pak, A., Turnbull, D., Chapman, et al
2015; 9 (4): 274-279
 - **Observation of finite-wavelength screening in high-energy-density matter** *NATURE COMMUNICATIONS*
Chapman, D. A., Vorberger, J., Fletcher, L. B., Baggott, R. A., Divol, L., Doepfner, T., Falcone, R. W., Glenzer, S. H., Gregori, G., Guymer, T. M., Kritcher, A. L., Landen, O. L., Ma, et al
2015; 6
 - **Beyond the gain exponent: Effect of damping, scale length, and speckle length on stimulated scatter** *PHYSICAL REVIEW E*
Berger, R. L., Suter, L. J., Divol, L., London, R. A., Chapman, T., Froula, D. H., Meezan, N. B., Neumayer, P., Glenzer, S. H.
2015; 91 (3)
 - **Electron-ion temperature equilibration in warm dense tantalum** *HIGH ENERGY DENSITY PHYSICS*
Hartley, N. J., Belancourt, P., Chapman, D. A., Doepfner, T., Drake, R. P., Gericke, D. O., Glenzer, S. H., Khaghani, D., Lepape, S., Ma, T., Neumayer, P., Pak, A., Peters, et al
2015; 14: 1-5
 - **Betatron radiation from laser plasma accelerators** *LASER ACCELERATION OF ELECTRONS, PROTONS, AND IONS III; AND MEDICAL APPLICATIONS OF LASER-GENERATED BEAMS OF PARTICLES III*
Albert, F., Pollock, B. B., Shaw, J., Marsh, K. A., Ralph, J. E., Pak, A., Clayton, C. E., Glenzer, S. H., Joshi, C.
2015; 9514
 - **Review of the National Ignition Campaign 2009-2012 (vol 21, 020501, 2014)** *PHYSICS OF PLASMAS*
Lindl, J. D., Landen, O. L., Edwards, J., Moses, E. I., Adams, J., Amendt, P. A., Antipa, N., Arnold, P. A., Atherton, L. J., Azevedo, S., Barker, D., Barrios, M. A., Bass, et al
2014; 21 (12)
 - **Investigation of ion kinetic effects in direct-drive exploding-pusher implosions at the NIF** *PHYSICS OF PLASMAS*
Rosenberg, M. J., Zylstra, A. B., Seguin, F. H., Rinderknecht, H. G., Frenje, J. A., Johnson, M. G., SIO, H., WAUGH, C. J., Sinenian, N., Li, C. K., Petrasso, R. D., McKenty, P. W., Hohenberger, et al
2014; 21 (12)
 - **New experimental platform to study high density laser-compressed matter** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Gauthier, M., Fletcher, L. B., Ravasio, A., Galtier, E., Gamboa, E. J., Granados, E., Hastings, J. B., Heimann, P., Lee, H. J., Nagler, B., Schropp, A., Gleason, A., Doepfner, et al
2014; 85 (11)
 - **The effect of shock dynamics on compressibility of ignition-scale National Ignition Facility implosions** *PHYSICS OF PLASMAS*
Zylstra, A. B., Frenje, J. A., Seguin, F. H., Hicks, D. G., Dewald, E. L., Robey, H. F., Rygg, J. R., Meezan, N. B., Rosenberg, M. J., Rinderknecht, H. G., Friedrich, S., Bionta, R., Olson, et al
2014; 21 (11)

- **New experimental platform to study high density laser-compressed matter.** *Review of scientific instruments*
Gauthier, M., Fletcher, L. B., Ravasio, A., Galtier, E., Gamboa, E. J., Granados, E., Hastings, J. B., Heimann, P., Lee, H. J., Nagler, B., Schropp, A., Gleason, A., Döppner, et al
2014; 85 (11): 11E616-?
- **Bent crystal spectrometer for both frequency and wavenumber resolved x-ray scattering at a seeded free-electron laser.** *Review of scientific instruments*
Zastrau, U., Fletcher, L. B., Förster, E., Galtier, E. C., Gamboa, E., Glenzer, S. H., Heimann, P., Marschner, H., Nagler, B., Schropp, A., Wehrhan, O., Lee, H. J.
2014; 85 (9): 093106-?
- **Bent crystal spectrometer for both frequency and wavenumber resolved x-ray scattering at a seeded free-electron laser** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Zastrau, U., Fletcher, L. B., Foerster, E., Galtier, E. C., Gamboa, E., Glenzer, S. H., Heimann, P., Marschner, H., Nagler, B., Schropp, A., Wehrhan, O., Lee, H. J.
2014; 85 (9)
- **Measuring the angular dependence of betatron x-ray spectra in a laser-wakefield accelerator** *PLASMA PHYSICS AND CONTROLLED FUSION*
Albert, F., Pollock, B. B., Shaw, J. L., Marsh, K. A., Ralph, J. E., Chen, Y., Alessi, D., Pak, A., Clayton, C. E., Glenzer, S. H., Joshi, C.
2014; 56 (8)
- **Progress in hohlraum physics for the National Ignition Facility** *PHYSICS OF PLASMAS*
Moody, J. D., Callahan, D. A., Hinkel, D. E., Amendt, P. A., Baker, K. L., Bradley, D., Celliers, P. M., Dewald, E. L., Divol, L., Doeppner, T., Eder, D. C., Edwards, M. J., Jones, et al
2014; 21 (5)
- **Angular Dependence of Betatron X-Ray Spectra from a Laser-Wakefield Accelerator** *PHYSICAL REVIEW LETTERS*
Albert, F., Pollock, B. B., Shaw, J. L., Marsh, K. A., Ralph, J. E., Chen, Y., Alessi, D., Pak, A., Clayton, C. E., Glenzer, S. H., Joshi, C.
2013; 111 (23)
- **Plasmon measurements with a seeded x-ray laser** *16th International Symposium on Laser-Aided Plasma Diagnostics*
Fletcher, L. B., Galtier, E., Heimann, P., Lee, H. J., Nagler, B., Welch, J., Zastrau, U., Hastings, J. B., Glenzer, S. H.
IOP PUBLISHING LTD.2013
- **Raman Backscatter as a Remote Laser Power Sensor in High-Energy-Density Plasmas** *PHYSICAL REVIEW LETTERS*
Moody, J. D., Strozzi, D. J., Divol, L., Michel, P., Robey, H. F., Lepape, S., Ralph, J., Ross, J. S., Glenzer, S. H., Kirkwood, R. K., Landen, O. L., MacGowan, B. J., Nikroo, et al
2013; 111 (2)
- **NIF IGNITION CAMPAIGN TARGET PERFORMANCE AND REQUIREMENTS: STATUS MAY 2012** *FUSION SCIENCE AND TECHNOLOGY*
Haan, S. W., Atherton, J., Clark, D. S., Hammel, B. A., Callahan, D. A., Cerjan, C. J., Dewald, E. L., Dixit, S., Edwards, M. J., Glenzer, S., Hatchett, S. P., Hicks, D., Jones, et al
2013; 63 (2): 67-75
- **Observation of strong electromagnetic fields around laser-entrance holes of ignition-scale hohlraums in inertial-confinement fusion experiments at the National Ignition Facility** *NEW JOURNAL OF PHYSICS*
Li, C. K., Zylstra, A. B., Frenje, J. A., Seguin, F. H., Sinenian, N., Petrasso, R. D., Amendt, P. A., Bionta, R., Friedrich, S., Collins, G. W., Dewald, E., Doeppner, T., Glenzer, et al
2013; 15
- **X-Ray Scattering Measurements of Strong Ion-Ion Correlations in Shock-Compressed Aluminum** *PHYSICAL REVIEW LETTERS*
Ma, T., Doeppner, T., Falcone, R. W., Fletcher, L., FORTMANN, C., Gericke, D. O., Landen, O. L., Lee, H. J., Pak, A., Vorberger, J., Wuensch, K., Glenzer, S. H.
2013; 110 (6)
- **Dynamics of exploding plasmas in a large magnetized plasma** *PHYSICS OF PLASMAS*
Niemann, C., Gekelman, W., Constantin, C. G., Everson, E. T., Schaeffer, D. B., Clark, S. E., Winske, D., Zylstra, A. B., Pribyl, P., Tripathi, S. K., Larson, D., Glenzer, S. H., Bondarenko, et al
2013; 20 (1)

- **Probe Lasers for Characterizing High-temperature, High-density Plasmas** *2013 CONFERENCE ON LASERS AND ELECTRO-OPTICS (CLEO)*
Glenzer, S.
2013
- **Towards an integrated model of the NIC layered implosions** *IFSA 2011 - SEVENTH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS*
Jones, O., Callahan, D., Cerjan, C., Clark, D., Edwards, M. J., Glenzer, S., Marinak, M., Meezan, N., Milovich, J., Olson, R., Patel, M., Robey, H., Sepke, et al
2013; 59
- **Hohlraum designs for high velocity implosions on NIF** *IFSA 2011 - SEVENTH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS*
Meezan, N. B., Hicks, D. G., Callahan, D. A., Olson, R. E., Schneider, M. S., Thomas, C. A., Robey, H. F., Celliers, P. M., Kline, J. L., Dixit, S. N., Michel, P. A., Jones, O. S., Clark, et al
2013; 59
- **Shock timing on the National Ignition Facility: The first precision tuning series** *IFSA 2011 - SEVENTH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS*
Robey, H. F., Celliers, P. M., Kline, J. L., MacKinnon, A. J., Boehly, T. R., Landen, O. L., Eggert, J. H., Hicks, D., Le Pape, S., Farley, D. R., Bowers, M. W., Krauter, K. G., Munro, et al
2013; 59
- **Integrated thermodynamic model for ignition target performance** *IFSA 2011 - SEVENTH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS*
Springer, P. T., Cerjan, C., Betti, R., Caggiano, J. A., Edwards, M. J., Frenje, J. A., Glebov, V. Y., Glenzer, S. H., Glenn, S. M., Izumi, N., Jones, O., Kyrala, G., Ma, et al
2013; 59
- **Reproducibility of hohlraum-driven implosion symmetry on the National Ignition Facility** *IFSA 2011 - SEVENTH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS*
Kyrala, G. A., Bradley, D. K., Callahan, D. A., Dixit, S. N., Edwards, M. J., Glenn, S. M., Glenzer, S. H., Izumi, N., Jones, O. S., Kline, J. L., Landen, O. L., Ma, T., Milovich, et al
2013; 59
- **Ignition tuning for the National Ignition Campaign** *IFSA 2011 - SEVENTH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS*
Landen, O., Edwards, J., Haan, S. W., Lindl, J. D., Boehly, T. R., Bradley, D. K., Callahan, D. A., Celliers, P. M., Dewald, E. L., Dixit, S., Doeppner, T., Eggert, J., Farley, et al
2013; 59
- **Symmetry tuning with megajoule laser pulses at the National Ignition Facility** *IFSA 2011 - SEVENTH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS*
Kline, J. L., Meezan, N. B., Callahan, D. A., Glenzer, S. H., Kyrala, G. A., Dixit, S. N., Town, R. P., Benedetti, R., Bradley, D. K., Bond, E., Di Nicola, P., Dewald, E. L., Doeppner, et al
2013; 59
- **Betatron x-ray production in mixed gases** *LASER ACCELERATION OF ELECTRONS, PROTONS, AND IONS II; AND MEDICAL APPLICATIONS OF LASER-GENERATED BEAMS OF PARTICLES II; AND HARNESSING RELATIVISTIC PLASMA WAVES III*
Albert, F., Pollock, B. B., Shaw, J., Marsh, K. A., Chen, Y., Alessi, D., Ralph, J. E., Michel, P. A., Pak, A., Clayton, C. E., Glenzer, S. H., Joshi, C.
2013; 8779
- **Inelastic X-Ray Scattering from Shocked Liquid Deuterium** *PHYSICAL REVIEW LETTERS*
Regan, S. P., Falk, K., Gregori, G., Radha, P. B., Hu, S. X., Boehly, T. R., Crowley, B. J., Glenzer, S. H., Landen, O. L., Gericke, D. O., Doeppner, T., Meyerhofer, D. D., Murphy, et al
2012; 109 (26)
- **Progress in the indirect-drive National Ignition Campaign** *PLASMA PHYSICS AND CONTROLLED FUSION*
Landen, O. L., Benedetti, R., Bleuel, D., Boehly, T. R., Bradley, D. K., Caggiano, J. A., Callahan, D. A., Celliers, P. M., Cerjan, C. J., Clark, D., Collins, G. W., Dewald, E. L., Dixit, et al
2012; 54 (12)

- **Implosion dynamics measurements at the National Ignition Facility** *PHYSICS OF PLASMAS*
Hicks, D. G., Meezan, N. B., Dewald, E. L., MacKinnon, A. J., Olson, R. E., Callahan, D. A., Doepfner, T., Benedetti, L. R., Bradley, D. K., Celliers, P. M., Clark, D. S., Di Nicola, P., Dixit, et al
2012; 19 (12)
- **Theory of x-ray scattering in high-pressure electrifieds** *PHYSICAL REVIEW B*
Fortmann, C., Niemann, C., Glenzer, S. H.
2012; 86 (17)
- **Observation of inhibited electron-ion coupling in strongly heated graphite** *SCIENTIFIC REPORTS*
White, T. G., Vorberger, J., Brown, C. R., Crowley, B. J., Davis, P., Glenzer, S. H., Harris, J. W., Hochhaus, D. C., Le Pape, S., Ma, T., Murphy, C. D., Neumayer, P., Pattison, et al
2012; 2
- **Stochastic Ion Heating from Many Overlapping Laser Beams in Fusion Plasmas** *PHYSICAL REVIEW LETTERS*
Michel, P., Rozmus, W., Williams, E. A., Divol, L., Berger, R. L., Town, R. P., Glenzer, S. H., Callahan, D. A.
2012; 109 (19)
- **Self-organized electromagnetic field structures in laser-produced counter-streaming plasmas** *NATURE PHYSICS*
Kugland, N. L., Ryutov, D. D., Chang, P., Drake, R. P., Fiksel, G., Froula, D. H., Glenzer, S. H., Gregori, G., Grosskopf, M., Koenig, M., Kuramitsu, Y., Kuranz, C., Levy, et al
2012; 8 (11): 809-812
- **Imaging of high-energy x-ray emission from cryogenic thermonuclear fuel implosions on the NIF** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Ma, T., Izumi, N., Tommasini, R., Bradley, D. K., Bell, P., Cerjan, C. J., Dixit, S., Doepfner, T., Jones, O., Kline, J. L., Kyrala, G., Landen, O. L., Lepape, et al
2012; 83 (10)
- **Diagnosing radiative shocks from deuterium and tritium implosions on NIF** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Pak, A., Divol, L., Weber, S., Doepfner, T., Kyrala, G. A., Kilne, J., Izumi, N., Glenn, S., Ma, T., Town, R. P., Bradley, D. K., Glenzer, S. H.
2012; 83 (10)
- **Neutron spectrometry-An essential tool for diagnosing implosions at the National Ignition Facility (invited)** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Johnson, M. G., Frenje, J. A., Casey, D. T., Li, C. K., Seguin, F. H., Petrasso, R., Ashabranner, R., Bionta, R. M., Bleuel, D. L., Bond, E. J., Caggiano, J. A., Carpenter, A., Cerjan, et al
2012; 83 (10)
- **Simultaneous imaging electron- and ion-feature Thomson scattering measurements of radiatively heated Xe** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Pollock, B. B., Meinecke, J., Kuschel, S., Ross, J. S., Shaw, J. L., Stofer, C., Divol, L., Tynan, G. R., Glenzer, S. H.
2012; 83 (10)
- **Thomson scattering diagnostic for the measurement of ion species fraction** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Ross, J. S., Park, H., Amendt, P., Divol, L., Kugland, N. L., Rozmus, W., Glenzer, S. H.
2012; 83 (10)
- **Measurement of electron temperature of imploded capsules at the National Ignition Facility** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Izumi, N., Ma, T., Barrios, M., Benedetti, L. R., Callahan, D., Cerjan, C., Edwards, J., Glenn, S., Glenzer, S., Kilkeny, J., Kline, J., Kyrala, G., Landen, et al
2012; 83 (10)
- **Measuring the absolute deuterium-tritium neutron yield using the magnetic recoil spectrometer at OMEGA and the NIF** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Casey, D. T., Frenje, J. A., Johnson, M. G., Seguin, F. H., Li, C. K., Petrasso, R. D., Glebov, V. Y., Katz, J., Knauer, J. P., Meyerhofer, D. D., Sangster, T. C., Bionta, R. M., Bleuel, et al
2012; 83 (10)
- **Charged-particle spectroscopy for diagnosing shock rho R and strength in NIF implosions** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Zylstra, A. B., Frenje, J. A., Seguin, F. H., Rosenberg, M. J., Rinderknecht, H. G., Johnson, M. G., Casey, D. T., Sinenian, N., Manuel, M. E., WAUGH, C. J., Sio, H. W., Li, C. K., Petrasso, et al

2012; 83 (10)

- **Hard x-ray (> 100 keV) imager to measure hot electron preheat for indirectly driven capsule implosions on the NIF** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Doepfner, T., Dewald, E. L., Divol, L., Thomas, C. A., Burns, S., Celliers, P. M., Izumi, N., Kline, J. L., LaCaille, G., McNaney, J. M., Prasad, R. R., Robey, H. F., Glenzer, et al
2012; 83 (10)
- **Focal aberrations of large-aperture HOPG von-Hamos x-ray spectrometers** *JOURNAL OF INSTRUMENTATION*
Zastrau, U., Brown, C. R., Doepfner, T., Glenzer, S. H., Gregori, G., Lee, H. J., MARSCHNER, H., Toleikis, S., Wehrhan, O., Foerster, E.
2012; 7
- **Plasma switch as a temporal overlap tool for pump-probe experiments at FEL facilities** *JOURNAL OF INSTRUMENTATION*
Harmand, M., Murphy, C. D., Brown, C. R., Cammarata, M., Doepfner, T., Duesterer, S., Fritz, D., Foerster, E., Galtier, E., Gaudin, J., Glenzer, S. H., Goede, S., Gregori, et al
2012; 7
- **Demonstration of a low electromagnetic pulse laser-driven argon gas jet x-ray source** *APPLIED PHYSICS LETTERS*
Kugland, N. L., Aurand, B., Brown, C. G., Constantin, C. G., Everson, E. T., Glenzer, S. H., Schaeffer, D. B., TAUSCHWITZ, A., Niemann, C.
2012; 101 (2)
- **Assembly of High-Areal-Density Deuterium-Tritium Fuel from Indirectly Driven Cryogenic Implosions** *PHYSICAL REVIEW LETTERS*
MacKinnon, A. J., Kline, J. L., Dixit, S. N., Glenzer, S. H., Edwards, M. J., Callahan, D. A., Meezan, N. B., Haan, S. W., Kilkenny, J. D., Doepfner, T., Farley, D. R., Moody, J. D., Ralph, et al
2012; 108 (21)
- **Precision Shock Tuning on the National Ignition Facility** *PHYSICAL REVIEW LETTERS*
Robey, H. F., Celliers, P. M., Kline, J. L., MacKinnon, A. J., Boehly, T. R., Landen, O. L., Eggert, J. H., Hicks, D., Le Pape, S., Farley, D. R., Bowers, M. W., Krauter, K. G., Munro, et al
2012; 108 (21)
- **Ultrafast Transitions from Solid to Liquid and Plasma States of Graphite Induced by X-Ray Free-Electron Laser Pulses** *PHYSICAL REVIEW LETTERS*
Hau-Riege, S. P., Graf, A., Doepfner, T., London, R. A., Krzywinski, J., FORTMANN, C., Glenzer, S. H., Frank, M., Sokolowski-Tinten, K., Messerschmidt, M., Bostedt, C., Schorb, S., Bradley, et al
2012; 108 (21)
- **Dynamic structure factor in warm dense beryllium** *NEW JOURNAL OF PHYSICS*
Plagemann, K., Sperling, P., Thiele, R., Desjarlais, M. P., FORTMANN, C., Doepfner, T., Lee, H. J., Glenzer, S. H., Redmer, R.
2012; 14
- **Cryogenic thermonuclear fuel implosions on the National Ignition Facility** *PHYSICS OF PLASMAS*
Glenzer, S. H., Callahan, D. A., MacKinnon, A. J., Kline, J. L., Grim, G., Alger, E. T., Berger, R. L., Bernstein, L. A., Betti, R., Bleuel, D. L., Boehly, T. R., Bradley, D. K., Burkhart, et al
2012; 19 (5)
- **Performance metrics for inertial confinement fusion implosions: Aspects of the technical framework for measuring progress in the National Ignition Campaign** *PHYSICS OF PLASMAS*
Spears, B. K., Glenzer, S., Edwards, M. J., Brandon, S., Clark, D., Town, R., Cerjan, C., Dylla-Spears, R., Mapoles, E., Munro, D., Salmonson, J., Sepke, S., Weber, et al
2012; 19 (5)
- **Characterizing counter-streaming interpenetrating plasmas relevant to astrophysical collisionless shocks** *PHYSICS OF PLASMAS*
Ross, J. S., Glenzer, S. H., Amendt, P., Berger, R., Divol, L., Kugland, N. L., Landen, O. L., Plechaty, C., Remington, B., Ryutov, D., Rozmus, W., Froula, D. H., Fiksel, et al
2012; 19 (5)
- **Hot-spot mix in ignition-scale implosions on the NIF** *PHYSICS OF PLASMAS*
Regan, S. P., Epstein, R., Hammel, B. A., Suter, L. J., Ralph, J., Scott, H., Barrios, M. A., Bradley, D. K., Callahan, D. A., Cerjan, C., Collins, G. W., Dixit, S. N., Doepfner, et al
2012; 19 (5)

- **X-ray conversion efficiency in vacuum hohlraum experiments at the National Ignition Facility** *PHYSICS OF PLASMAS*
Olson, R. E., Suter, L. J., Kline, J. L., Callahan, D. A., Rosen, M. D., Dixit, S. N., Landen, O. L., Meezan, N. B., Moody, J. D., Thomas, C. A., Warrick, A., Widmann, K., Williams, et al
2012; 19 (5)
- **The velocity campaign for ignition on NIF** *PHYSICS OF PLASMAS*
Callahan, D. A., Meezan, N. B., Glenzer, S. H., MacKinnon, A. J., Benedetti, L. R., Bradley, D. K., Celeste, J. R., Celliers, P. M., Dixit, S. N., Doepfner, T., Dzentitis, E. G., Glenn, S., Haan, et al
2012; 19 (5)
- **A high-resolution integrated model of the National Ignition Campaign cryogenic layered experiments** *PHYSICS OF PLASMAS*
Jones, O. S., Cerjan, C. J., Marinak, M. M., Milovich, J. L., Robey, H. F., Springer, P. T., Benedetti, L. R., Bleuel, D. L., Bond, E. J., Bradley, D. K., Callahan, D. A., Caggiano, J. A., Celliers, et al
2012; 19 (5)
- **Measurement of the Adiabatic Index in Be Compressed by Counterpropagating Shocks** *PHYSICAL REVIEW LETTERS*
FORTMANN, C., Lee, H. J., Doepfner, T., Falcone, R. W., Kritcher, A. L., Landen, O. L., Glenzer, S. H.
2012; 108 (17)
- **Measurement of Radiative Shock Properties by X-Ray Thomson Scattering** *PHYSICAL REVIEW LETTERS*
Visco, A. J., Drake, R. P., Glenzer, S. H., Doepfner, T., Gregori, G., Froula, D. H., Grosskopf, M. J.
2012; 108 (14)
- **Multistep redirection by cross-beam power transfer of ultrahigh-power lasers in a plasma** *NATURE PHYSICS*
Moody, J. D., Michel, P., Divol, L., Berger, R. L., Bond, E., Bradley, D. K., Callahan, D. A., Dewald, E. L., Dixit, S., Edwards, M. J., Glenn, S., Hamza, A., Haynam, et al
2012; 8 (4): 344-349
- **First implosion experiments with cryogenic thermonuclear fuel on the National Ignition Facility** *PLASMA PHYSICS AND CONTROLLED FUSION*
Glenzer, S. H., Spears, B. K., Edwards, M. J., Alger, E. T., Berger, R. L., Bleuel, D. L., Bradley, D. K., Caggiano, J. A., Callahan, D. A., Castro, C., Casey, D. T., Choate, C., Clark, et al
2012; 54 (4)
- **Adiabatic Index in Shock-Compressed Beryllium** *CONTRIBUTIONS TO PLASMA PHYSICS*
Fortmann, C., Lee, H. J., Doepfner, T., Falcone, R. W., Kritcher, A. L., Landen, O. L., Niemann, C., Glenzer, S. H.
2012; 52 (3): 186-193
- **Direct Measurement of Energetic Electrons Coupling to an Imploding Low-Adiabatic Inertial Confinement Fusion Capsule** *PHYSICAL REVIEW LETTERS*
Doepfner, T., Thomas, C. A., Divol, L., Dewald, E. L., Celliers, P. M., Bradley, D. K., Callahan, D. A., Dixit, S. N., Harte, J. A., Glenn, S. M., Haan, S. W., Izumi, N., Kyrala, et al
2012; 108 (13)
- **Studying astrophysical collisionless shocks with counterstreaming plasmas from high power lasers** *HIGH ENERGY DENSITY PHYSICS*
Park, H., Ryutov, D. D., Ross, J. S., Kugland, N. L., Glenzer, S. H., Plechaty, C., Pollaine, S. M., Remington, B. A., Spitkovsky, A., Gargate, L., Gregori, G., Bell, A., Murphy, et al
2012; 8 (1): 38-45
- **XUV spectroscopic characterization of warm dense aluminum plasmas generated by the free-electron-laser FLASH** *LASER AND PARTICLE BEAMS*
Zastrau, U., Burian, T., Chalupsky, J., Doepfner, T., Dzelzainis, T. W., Faeustlin, R. R., FORTMANN, C., Galtier, E., Glenzer, S. H., Gregori, G., Juha, L., Lee, H. J., Lee, et al
2012; 30 (1): 45-56
- **Self-consistent measurement of the equation of state of liquid deuterium** *HIGH ENERGY DENSITY PHYSICS*
Falk, K., Regan, S. P., Vorberger, J., Barrios, M. A., Boehly, T. R., Fratanduono, D. E., Glenzer, S. H., Hicks, D. G., Hu, S. X., Murphy, C. D., Radha, P. B., Rothman, S., Jephcoat, et al
2012; 8 (1): 76-80
- **Thomson Scattering Measurements of Temperature and Density in a Low-Density, Laser-Driven Magnetized Plasma** *JOURNAL OF INSTRUMENTATION*

Schaeffer, D. B., Montgomery, D. S., Bondarenko, A. S., Morton, L. A., Johnson, R. P., Shimada, T., Constantin, C. G., Everson, E. T., Letzring, S. A., Gaillard, S. A., Flippo, K. A., Glenzer, S. H., Niemann, et al
2012; 7

- **An apparatus for the characterization of warm, dense deuterium with inelastic x-ray scattering** *JOURNAL OF INSTRUMENTATION*
Davis, P., Doepfner, T., Glenzer, S. H., Falcone, R. W., Unites, W.
2012; 7
- **GIGABAR MATERIAL PROPERTIES EXPERIMENTS ON NIF AND OMEGA SHOCK COMPRESSION OF CONDENSED MATTER - 2011, PTS 1 AND 2**
Swift, D. C., Hawreliak, J. A., Braun, D., Kritcher, A., Glenzer, S., Collins, G., Rothman, S. D., Chapman, D., Rose, S.
2012; 1426
- **X-ray Thomson Scattering Measurements from Shock-Compressed Deuterium** *17TH INTERNATIONAL CONFERENCE ON ATOMIC PROCESSES IN PLASMAS (ICAPIP)*
Davis, P., Doepfner, T., Rygg, J. R., FORTMANN, C., Unites, W., Salmonson, J., Collins, G. W., Landen, O. L., Falcone, R. W., Glenzer, S. H.
2012; 1438: 55-60
- **Diagnosing Implosions at the National Ignition Facility with X-Ray Spectroscopy** *17TH INTERNATIONAL CONFERENCE ON ATOMIC PROCESSES IN PLASMAS (ICAPIP)*
Regan, S. P., Epstein, R., Hammel, B. A., Suter, L. J., Ralph, J., Scott, H., Barrios, M. A., Bradley, D. K., Callahan, D. A., Collins, G. W., Dixit, S. N., Edwards, M. J., Farley, et al
2012; 1438: 49-54
- **Measurements of the properties of highly compressed degenerate matter using x ray Thomson scattering** *17TH INTERNATIONAL CONFERENCE ON ATOMIC PROCESSES IN PLASMAS (ICAPIP)*
Kritcher, A. L., Doepfner, T., FORTMANN, C., Ma, T., Landen, O. L., Wallace, R., Glenzer, S. H.
2012; 1438: 43-48
- **Warm Dense Aluminum Plasma generated by the Free-Electron-Laser FLASH** *17TH INTERNATIONAL CONFERENCE ON ATOMIC PROCESSES IN PLASMAS (ICAPIP)*
Zastrau, U., Vinko, S. M., Wark, J. S., Toleikis, S., Tschentscher, T., Glenzer, S. H., Lee, R. W., Nelson, A. J., Dzelzainis, T. W., Riley, D., Nagler, B., Galtier, E., Rosmej, et al
2012; 1438: 61-64
- **Development of X-ray Thomson scattering for implosion target characterization** *HIGH ENERGY DENSITY PHYSICS*
Kritcher, A. L., Doepfner, T., FORTMANN, C., Landen, O. L., Wallace, R., Glenzer, S. H.
2011; 7 (4): 271-276
- **A study of the contribution of doubly excited ionic states to the properties of hot dense high-Z plasmas** *HIGH ENERGY DENSITY PHYSICS*
Scott, H. A., Whelan, C. T., Glenzer, S. H.
2011; 7 (4): 371-376
- **Stimulated forward Raman scattering in large scale-length laser-produced plasmas** *JOURNAL OF INSTRUMENTATION*
Niemann, C., Berger, R. L., Divol, L., Kirkwood, R. K., Moody, J. D., Sorce, C. M., Glenzer, S. H.
2011; 6
- **In-situ determination of dispersion and resolving power in simultaneous multiple-angle XUV spectroscopy** *JOURNAL OF INSTRUMENTATION*
Zastrau, U., Hilbert, V., Brown, C., Doepfner, T., Dziarzhytski, S., Foerster, E., Glenzer, S. H., Goede, S., Gregori, G., Harmand, M., Hochhaus, D., Laarmann, T., Lee, et al
2011; 6
- **Two-color Thomson scattering at FLASH** *HIGH ENERGY DENSITY PHYSICS*
Sperling, P., Thiele, R., Holst, B., FORTMANN, C., Glenzer, S. H., Toleikis, S., Tschentscher, T., Redmer, R.
2011; 7 (3): 145-149
- **Progress towards ignition on the National Ignition Facility** *NUCLEAR FUSION*
Lindl, J. D., Atherton, L. J., Amedt, P. A., Batha, S., Bell, P., Berger, R. L., Betti, R., Bleuel, D. L., Boehly, T. R., Bradley, D. K., Braun, D. G., Callahan, D. A., Celliers, et al
2011; 51 (9)

- **Ultraviolet Thomson scattering measurements of the electron and ion features with an energetic 263 nm probe** *JOURNAL OF INSTRUMENTATION*
Ross, J. S., Divol, L., Sorce, C., Froula, D. H., Glenzer, S. H.
2011; 6
- **Demonstration of a Narrow Energy Spread, similar to 0.5 GeV Electron Beam from a Two-Stage Laser Wakefield Accelerator** *PHYSICAL REVIEW LETTERS*
Pollock, B. B., Clayton, C. E., Ralph, J. E., ALBERT, F., Davidson, A., Divol, L., Filip, C., Glenzer, S. H., Herpoldt, K., Lu, W., Marsh, K. A., Meinecke, J., Mori, et al
2011; 107 (4)
- **In-Flight Measurements of Capsule Shell Adiabats in Laser-Driven Implosions** *PHYSICAL REVIEW LETTERS*
Kritcher, A. L., Doeppner, T., FORTMANN, C., Ma, T., Landen, O. L., Wallace, R., Glenzer, S. H.
2011; 107 (1)
- **Fully relativistic form factor for Thomson scattering (vol 81, 036411, 2010)** *PHYSICAL REVIEW E*
Palastro, J. P., Ross, J. S., Pollock, B., Divol, L., Froula, D. H., Glenzer, S. H.
2011; 83 (5)
- **Point design targets, specifications, and requirements for the 2010 ignition campaign on the National Ignition Facility** *PHYSICS OF PLASMAS*
Haan, S. W., Lindl, J. D., Callahan, D. A., Clark, D. S., Salmonson, J. D., Hammel, B. A., Atherton, L. J., Cook, R. C., Edwards, M. J., Glenzer, S., Hamza, A. V., Hatchett, S. P., Herrmann, et al
2011; 18 (5)
- **Diagnosing and controlling mix in National Ignition Facility implosion experiments** *PHYSICS OF PLASMAS*
Hammel, B. A., Scott, H. A., Regan, S. P., Cerjan, C., Clark, D. S., Edwards, M. J., Epstein, R., Glenzer, S. H., Haan, S. W., Izumi, N., Koch, J. A., Kyrala, G. A., Landen, et al
2011; 18 (5)
- **Capsule implosion optimization during the indirect-drive National Ignition Campaign** *PHYSICS OF PLASMAS*
Landen, O. L., Edwards, J., Haan, S. W., Robey, H. F., Milovich, J., Spears, B. K., Weber, S. V., Clark, D. S., Lindl, J. D., MacGowan, B. J., Moses, E. I., Atherton, J., Amendt, et al
2011; 18 (5)
- **Multi-beam effects on backscatter and its saturation in experiments with conditions relevant to ignition** *PHYSICS OF PLASMAS*
Kirkwood, R. K., Michel, P., London, R., Moody, J. D., Dewald, E., Yin, L., Kline, J., Hinkel, D., Callahan, D., Meezan, N., Williams, E., Divol, L., ALBRIGHT, et al
2011; 18 (5)
- **The experimental plan for cryogenic layered target implosions on the National Ignition Facility-The inertial confinement approach to fusion** *PHYSICS OF PLASMAS*
Edwards, M. J., Lindl, J. D., Spears, B. K., Weber, S. V., Atherton, L. J., Bleuel, D. L., Bradley, D. K., Callahan, D. A., Cerjan, C. J., Clark, D., Collins, G. W., FAIR, J. E., FORTNER, et al
2011; 18 (5)
- **Symmetry tuning for ignition capsules via the symcap technique** *PHYSICS OF PLASMAS*
Kyrala, G. A., Kline, J. L., Dixit, S., Glenzer, S., Kalantar, D., Bradley, D., Izumi, N., Meezan, N., Landen, O., Callahan, D., Weber, S. V., Holder, J. P., Glenn, et al
2011; 18 (5)
- **Analysis of the National Ignition Facility ignition hohlraum energetics experiments** *PHYSICS OF PLASMAS*
Town, R. P., Rosen, M. D., Michel, P. A., Divol, L., Moody, J. D., Kyrala, G. A., Schneider, M. B., Kline, J. L., Thomas, C. A., Milovich, J. L., Callahan, D. A., Meezan, N. B., Hinkel, et al
2011; 18 (5)
- **Three-wavelength scheme to optimize hohlraum coupling on the National Ignition Facility** *PHYSICAL REVIEW E*
Michel, P., Divol, L., Town, R. P., Rosen, M. D., Callahan, D. A., Meezan, N. B., Schneider, M. B., Kyrala, G. A., Moody, J. D., Dewald, E. L., Widmann, K., Bond, E., Kline, et al
2011; 83 (4)

- **Demonstration of Ignition Radiation Temperatures in Indirect-Drive Inertial Confinement Fusion Hohlräume (vol 106, 085004, 2011) *PHYSICAL REVIEW LETTERS***
Glenzer, S. H., MacGowan, B. J., Meezan, N. B., Adams, P. A., Alfonso, J. B., Alger, E. T., Alherz, Z., Alvarez, L. F., Alvarez, S. S., Amick, P. V., Andersson, K. S., Andrews, S. D., Antonini, et al
2011; 106 (10)
- **Characterization of a spherically bent quartz crystal for K alpha x-ray imaging of laser plasmas using a focusing monochromator geometry *JOURNAL OF INSTRUMENTATION***
Kugland, N. L., Constantin, C. G., Doeppner, T., Neumayer, P., Glenzer, S. H., Niemann, C.
2011; 6
- **Demonstration of Ignition Radiation Temperatures in Indirect-Drive Inertial Confinement Fusion Hohlräume *PHYSICAL REVIEW LETTERS***
Glenzer, S. H., MacGowan, B. J., Meezan, N. B., Adams, P. A., Alfonso, J. B., Alger, E. T., Alherz, Z., Alvarez, L. F., Alvarez, S. S., Amick, P. V., Andersson, K. S., Andrews, S. D., Antonini, et al
2011; 106 (8)
- **Observation of High Soft X-Ray Drive in Large-Scale Hohlräume at the National Ignition Facility *PHYSICAL REVIEW LETTERS***
Kline, J. L., Glenzer, S. H., Olson, R. E., Suter, L. J., Widmann, K., Callahan, D. A., Dixit, S. N., Thomas, C. A., Hinkel, D. E., Williams, E. A., Moore, A. S., Celeste, J., Dewald, et al
2011; 106 (8)
- **A diamond detector for X-ray bang-time measurement at the National Ignition Facility *JOURNAL OF INSTRUMENTATION***
MacPhee, A. G., Edgell, D. H., Bond, E. J., Bradley, D. K., Brown, C. G., Burns, S. R., Celeste, J. R., Cerjan, C. J., Eckart, M. J., Glebov, V. Y., Glenzer, S. H., Hey, D. S., Jones, et al
2011; 6
- **Ultrafast Melting of Carbon Induced by Intense Proton Beams *PHYSICAL REVIEW LETTERS***
PELKA, A., Gregori, G., Gericke, D. O., Vorberger, J., Glenzer, S. H., Guenther, M. M., Harres, K., Heathcote, R., Kritcher, A. L., Kugland, N. L., Li, B., Makita, M., Mithen, et al
2010; 105 (26)
- **Thomson scattering on inhomogeneous targets *PHYSICAL REVIEW E***
Thiele, R., Sperling, P., Chen, M., Bornath, T., Faeustlin, R. R., FORTMANN, C., Glenzer, S. H., Kraeft, W., Pukhov, A., Toleikis, S., Tschentscher, T., Redmer, R.
2010; 82 (5)
- **Probing near-solid density plasmas using soft x-ray scattering *JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS***
Toleikis, S., Bornath, T., Doeppner, T., Duesterer, S., Faeustlin, R. R., Foerster, E., FORTMANN, C., Glenzer, S. H., Goede, S., Gregori, G., Irsig, R., Laarmann, T., Lee, et al
2010; 43 (19)
- **The first measurements of soft x-ray flux from ignition scale Hohlräume at the National Ignition Facility using DANTE (invited) *18th Topical Conference on High-Temperature Plasma Diagnostics***
Kline, J. L., Widmann, K., Warrick, A., Olson, R. E., Thomas, C. A., Moore, A. S., Suter, L. J., Landen, O., Callahan, D., Azevedo, S., Liebman, J., Glenzer, S. H., CONDER, et al
AMER INST PHYSICS.2010
- **Mapping the ionization state of laser-irradiated Ar gas jets with multiwavelength monochromatic x-ray imaging *REVIEW OF SCIENTIFIC INSTRUMENTS***
Kugland, N. L., Doeppner, T., Kemp, A., Schaeffer, D., Glenzer, S. H., Niemann, C.
2010; 81 (10)
- **Hot electron measurements in ignition relevant Hohlräume on the National Ignition Facility *REVIEW OF SCIENTIFIC INSTRUMENTS***
Dewald, E. L., Thomas, C., Hunter, S., Divol, L., Meezan, N., Glenzer, S. H., Suter, L. J., Bond, E., Kline, J. L., Celeste, J., Bradley, D., Bell, P., Kauffman, et al
2010; 81 (10)
- **Characterizing high energy spectra of NIF ignition Hohlräume using a differentially filtered high energy multipinhole x-ray imager *REVIEW OF SCIENTIFIC INSTRUMENTS***
Park, H., Dewald, E. D., Glenzer, S., Kalantar, D. H., Kilkenny, J. D., MacGowan, B. J., Maddox, B. R., Milovich, J. L., Prasad, R. R., Remington, B. A., Robey, H. F., Thomas, C. A.

2010; 81 (10)

- **A scalable multipass laser cavity based on injection by frequency conversion for noncollective Thomson scattering** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Schaeffer, D. B., Kugland, N. L., Constantin, C. G., Everson, E. T., Van Compernelle, B., Ebberts, C. A., Glenzer, S. H., Niemann, C.
2010; 81 (10)
- **Backscatter measurements for NIF ignition targets (invited)** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Moody, J. D., Datte, P., Krauter, K., Bond, E., Michel, P. A., Glenzer, S. H., Divol, L., Niemann, C., Suter, L., Meezan, N., MacGowan, B. J., Hibbard, R., London, et al
2010; 81 (10)
- **Thomson-scattering measurements in the collective and noncollective regimes in laser produced plasmas (invited)** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Ross, J. S., Glenzer, S. H., Palastro, J. P., Pollock, B. B., Price, D., Tynan, G. R., Froula, D. H.
2010; 81 (10)
- **Measuring symmetry of implosions in cryogenic Hohlräume at the NIF using gated x-ray detectors (invited)** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Kyrala, G. A., Dixit, S., Glenzer, S., Kalantar, D., Bradley, D., Izumi, N., Meezan, N., Landen, O. L., Callahan, D., Weber, S. V., Holder, J. P., Glenn, S., Edwards, et al
2010; 81 (10)
- **4 omega Thomson scattering probe for high-density plasma characterization at Titan** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Ross, J. S., Kline, J. L., Yang, S., Hennesian, M., Weiland, T., Price, D., Pollock, B. B., Glenzer, S. H.
2010; 81 (10)
- **National Ignition Campaign Hohlräume energetics (vol 17, 056304, 2010)** *PHYSICS OF PLASMAS*
Meezan, N. B., Atherton, L. J., Bond, E. J., Callahan, D. A., Dewald, E. L., Dixit, S., Dzenitis, E. G., Edwards, M. J., Haynam, C. A., Hinkel, D. E., Jones, O. S., Landen, O., London, et al
2010; 17 (10)
- **Static ion structure factor for dense plasmas: Semi-classical and ab initio calculations** *HIGH ENERGY DENSITY PHYSICS*
Schwarz, V., Holst, B., Bornath, T., Fortmann, C., Kraeft, W., Thiele, R., Redmer, R., Gregori, G., Lee, H. J., Doepfner, T., Glenzer, S. H.
2010; 6 (3): 305-310
- **Self-Guided Laser Wakefield Acceleration beyond 1 GeV Using Ionization-Induced Injection** *PHYSICAL REVIEW LETTERS*
Clayton, C. E., Ralph, J. E., ALBERT, F., Fonseca, R. A., Glenzer, S. H., Joshi, C., Lu, W., Marsh, K. A., Martins, S. F., Mori, W. B., Pak, A., Tsung, F. S., Pollock, et al
2010; 105 (10)
- **Plasmons in Strongly Coupled Shock-Compressed Matter** *PHYSICAL REVIEW LETTERS*
Neumayer, P., FORTMANN, C., Doepfner, T., Davis, P., Falcone, R. W., Kritcher, A. L., Landen, O. L., Lee, H. J., Lee, R. W., Niemann, C., Le Pape, S., Glenzer, S. H.
2010; 105 (7)
- **Imaging scattered x-ray radiation for measurement of local electron density in high-energy-density experiments** *HIGH ENERGY DENSITY PHYSICS*
Huntington, C. M., Krauland, C. M., Kuranz, C. C., Glenzer, S. H., Drake, R. P.
2010; 6 (2): 194-199
- **Electronic Structure of an XUV Photogenerated Solid-Density Aluminum Plasma** *PHYSICAL REVIEW LETTERS*
Vinko, S. M., Zastra, U., Mazevet, S., Andreasson, J., Bajt, S., Burian, T., Chalupsky, J., Chapman, H. N., Cihelka, J., Doria, D., Doepfner, T., Duesterer, S., Dzelzainis, et al
2010; 104 (22)
- **Symmetry tuning via controlled crossed-beam energy transfer on the National Ignition Facility** *PHYSICS OF PLASMAS*
Michel, P., Glenzer, S. H., Divol, L., Bradley, D. K., Callahan, D., Dixit, S., Glenn, S., Hinkel, D., Kirkwood, R. K., Kline, J. L., Kruer, W. L., Kyrala, G. A., Le Pape, et al
2010; 17 (5)

- **Laser wakefield acceleration at reduced density in the self-guided regime** *PHYSICS OF PLASMAS*
Ralph, J. E., Clayton, C. E., ALBERT, F., Pollock, B. B., Martins, S. F., Pak, A. E., Marsh, K. A., Shaw, J. L., Till, A., Palastro, J. P., Lu, W., Glenzer, S. H., Silva, et al
2010; 17 (5)
- **National Ignition Campaign Hohlraum energetics** *PHYSICS OF PLASMAS*
Meezan, N. B., Atherton, L. J., Callahan, D. A., Dewald, E. L., Dixit, S., Dzenitis, E. G., Edwards, M. J., Haynam, C. A., Hinkel, D. E., Jones, O. S., Landen, O., London, R. A., Michel, et al
2010; 17 (5)
- **Capsule performance optimization in the National Ignition Campaign** *PHYSICS OF PLASMAS*
Landen, O. L., Boehly, T. R., Bradley, D. K., Braun, D. G., Callahan, D. A., Celliers, P. M., Collins, G. W., Dewald, E. L., Divol, L., Glenzer, S. H., Hamza, A., Hicks, D. G., Hoffman, et al
2010; 17 (5)
- **X-ray radiography and scattering diagnosis of dense shock-compressed matter** *PHYSICS OF PLASMAS*
Le Pape, S., Neumayer, P., Fortmann, C., Doepfner, T., Davis, P., Kritcher, A., Landen, O., Glenzer, S.
2010; 17 (5)
- **Experimental basis for laser-plasma interactions in ignition hohlraums at the National Ignition Facility** *PHYSICS OF PLASMAS*
Froula, D. H., Divol, L., London, R. A., Berger, R. L., Doepfner, T., Meezan, N. B., Ralph, J., Ross, J. S., Suter, L. J., Glenzer, S. H.
2010; 17 (5)
- **Observation of Ultrafast Nonequilibrium Collective Dynamics in Warm Dense Hydrogen** *PHYSICAL REVIEW LETTERS*
Faeustlin, R. R., Bornath, T., Doepfner, T., Duesterer, S., Foerster, E., FORTMANN, C., Glenzer, S. H., Goede, S., Gregori, G., Irsig, R., Laarmann, T., Lee, H. J., Li, et al
2010; 104 (12)
- **Observation of Relativistic Effects in Collective Thomson Scattering** *PHYSICAL REVIEW LETTERS*
Ross, J. S., Glenzer, S. H., Palastro, J. P., Pollock, B. B., Price, D., Divol, L., Tynan, G. R., Froula, D. H.
2010; 104 (10)
- **Symmetric Inertial Confinement Fusion Implosions at Ultra-High Laser Energies** *SCIENCE*
Glenzer, S. H., MacGowan, B. J., Michel, P., Meezan, N. B., Suter, L. J., Dixit, S. N., Kline, J. L., Kyrala, G. A., Bradley, D. K., Callahan, D. A., Dewald, E. L., Divol, L., Dzenitis, et al
2010; 327 (5970): 1228-1231
- **Fully relativistic form factor for Thomson scattering** *PHYSICAL REVIEW E*
Palastro, J. P., Ross, J. S., Pollock, B., Divol, L., Froula, D. H., Glenzer, S. H.
2010; 81 (3)
- **Suprathermal electrons generated by the two-plasmon-decay instability in gas-filled Hohlraums** *PHYSICS OF PLASMAS*
Regan, S. P., Meezan, N. B., Suter, L. J., Strozzi, D. J., Kruer, W. L., Meeker, D., Glenzer, S. H., Seka, W., Stoeckl, C., Glebov, V. Y., Sangster, T. C., Meyerhofer, D. D., McCrory, et al
2010; 17 (2)
- **X-ray Thomson Scattering Measurement in shock-compressed Beryllium** *6th International Conference on Inertial Fusion Sciences and Applications*
Lee, H. J., Doepfner, T., Neumayer, P., Castor, J., Falcone, R. W., FORTMANN, C., Hammel, B. A., Kritcher, A. L., Landen, O. L., Lee, R. W., Meyerhofer, D. D., Munro, D. H., Redmer, et al
IOP PUBLISHING LTD.2010
- **Soft X-ray scattering using FEL radiation for probing near-solid density plasmas at few electron volt temperatures** *HIGH ENERGY DENSITY PHYSICS*
Toleikis, S., Faeustlin, R. R., Cao, L., Doepfner, T., Duesterer, S., Foerster, E., FORTMANN, C., Glenzer, S. H., Goede, S., Gregori, G., Irsig, R., Laarmann, T., Lee, et al
2010; 6 (1): 15-20
- **Lasnex simulations of NIF vacuum hohlraum commissioning experiments** *SIXTH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS, PARTS 1-4*

- Olson, R. E., Suter, L. J., Kline, J. L., Callahan, D. A., Rosen, M. D., Widmann, K., Williams, E. A., Hinkel, D. E., Meezan, N. B., Rochau, G. A., Warrick, A. L., Langer, S. H., Thomas, et al
2010; 244
- **X-ray Thomson Scattering for measuring Dense Beryllium Plasma Collisionality** *SIXTH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS, PARTS 1-4*
Doepfner, T., FORTMANN, C., DAVIS, P. F., Kritcher, A. L., Landen, O. L., Lee, H. J., Redmer, R., Regan, S. P., Glenzer, S. H.
2010; 244
 - **First hot electron measurements in near-ignition scale hohlraums on the National Ignition Facility** *SIXTH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS, PARTS 1-4*
Dewald, E. L., Suter, L. J., Thomas, C., Hunter, S., Meeker, D., Meezan, N., Glenzer, S. H., Bond, E., Kline, J., Dixit, S., Kauffman, R. L., Kilkenny, J., Landen, et al
2010; 244
 - **Transport of laser accelerated proton beams and isochoric heating of matter** *SIXTH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS, PARTS 1-4*
Roth, M., ALBER, I., Bagnoud, V., Brown, C., Clarke, R., Daido, H., Fernandez, J., Flippo, K., Gaillard, S., Gauthier, C., Glenzer, S., Gregori, G., Guenther, et al
2010; 244
 - **Dense plasma X-ray scattering: Methods and applications** *HIGH ENERGY DENSITY PHYSICS*
Glenzer, S. H., Lee, H. J., Davis, P., Doepfner, T., Falcone, R. W., FORTMANN, C., Hammel, B. A., Kritcher, A. L., Landen, O. L., Lee, R. W., Munro, D. H., Redmer, R., Weber, et al
2010; 6 (1): 1-8
 - **Soft X-ray scattering using FEL radiation for probing near-solid density plasmas at few electron volt temperatures** *HIGH ENERGY DENSITY PHYSICS*
Toleikis, S., Faeustlin, R. R., Cao, L., Doepfner, T., Duesterer, S., Foerster, E., FORTMANN, C., Glenzer, S. H., Goede, S., Gregori, G., Irsig, R., Laarmann, T., Lee, et al
2010; 6 (1): 15-20
 - **Measurements of Ionic Structure in Shock Compressed Lithium Hydride from Ultrafast X-Ray Thomson Scattering** *PHYSICAL REVIEW LETTERS*
Kritcher, A. L., Neumayer, P., Brown, C. R., Davis, P., Doepfner, T., Falcone, R. W., Gericke, D. O., Gregori, G., Holst, B., Landen, O. L., Lee, H. J., Morse, E. C., PELKA, et al
2009; 103 (24)
 - **Proton acceleration experiments and warm dense matter research using high power lasers** *PLASMA PHYSICS AND CONTROLLED FUSION*
Roth, M., ALBER, I., Bagnoud, V., Brown, C. R., Clarke, R., Daido, H., Fernandez, J., Flippo, K., Gaillard, S., Gauthier, C., Geissel, M., Glenzer, S., Gregori, et al
2009; 51 (12)
 - **Evolution of elastic x-ray scattering in laser-shocked warm dense lithium** *PHYSICAL REVIEW E*
Kugland, N. L., Gregori, G., Bandyopadhyay, S., BRENNER, C. M., Brown, C. R., Constantin, C., Glenzer, S. H., Khattak, F. Y., Kritcher, A. L., Niemann, C., Otten, A., Pasley, J., PELKA, et al
2009; 80 (6)
 - **Isochoric heating of reduced mass targets by ultra-intense laser produced relativistic electrons** *HIGH ENERGY DENSITY PHYSICS*
Neumayer, P., Lee, H. J., OFFERMAN, D., Shipton, E., Kemp, A., Kritcher, A. L., Doepfner, T., Back, C. A., Glenzer, S. H.
2009; 5 (4): 244-248
 - **Measurements of the Critical Power for Self-Injection of Electrons in a Laser Wakefield Accelerator** *PHYSICAL REVIEW LETTERS*
Froula, D. H., Clayton, C. E., Doepfner, T., Marsh, K. A., Barty, C. P., Divol, L., Fonseca, R. A., Glenzer, S. H., Joshi, C., Lu, W., Martins, S. F., Michel, P., Mori, et al
2009; 103 (21)
 - **X-ray Thomson scattering in high energy density plasmas** *REVIEWS OF MODERN PHYSICS*
Glenzer, S. H., Redmer, R.
2009; 81 (4): 1625-1663
 - **Turning solid aluminium transparent by intense soft X-ray photoionization** *NATURE PHYSICS*

- Nagler, B., Zastra, U., Faeustlin, R. R., Vinko, S. M., Whitcher, T., Nelson, A. J., Sobierajski, R., Krzywinski, J., Chalupsky, J., Abreu, E., Bajt, S., Bornath, T., Burian, et al
2009; 5 (9): 693-696
- **Temperature measurement through detailed balance in x-ray Thomson scattering** *HIGH ENERGY DENSITY PHYSICS*
Doepfner, T., Landen, O. L., Lee, H. J., Neumayer, P., Regan, S. P., Glenzer, S. H.
2009; 5 (3): 182-186
 - **Modelling, design and diagnostics for a photoionised plasma experiment** *ASTROPHYSICS AND SPACE SCIENCE*
Hall, I. M., Durmaz, T., Mancini, R. C., Bailey, J. E., Rochau, G. A., Rosenberg, M. J., Cohen, D. H., Golovkin, I. E., MacFarlane, J. J., Sherril, M. E., Abdallah, J., Heeter, R. F., Foord, et al
2009; 322 (1-4): 117-121
 - **Observation of the Density Threshold Behavior for the Onset of Stimulated Raman Scattering in High-Temperature Hohraum Plasmas** *PHYSICAL REVIEW LETTERS*
Froula, D. H., Divol, L., London, R. A., Berger, R. L., Doepfner, T., Meezan, N. B., Ross, J. S., Suter, L. J., Sorce, C., Glenzer, S. H.
2009; 103 (4)
 - **Control of 2 omega (527 nm) stimulated Raman scattering in a steep density gradient plasma** *PHYSICS OF PLASMAS*
Moody, J. D., Divol, L., Froula, D. H., Glenzer, S. H., Gregori, G., Kirkwood, R. K., Mackinnon, A., Meezan, N., Niemann, C., Suter, L. J., Bahr, R., Seka, W.
2009; 16 (6)
 - **Ultrafast K alpha x-ray Thomson scattering from shock compressed lithium hydride** *50th Annual Meeting of the Division of Plasma Physics of the American-Physical-Society*
Kritcher, A. L., Neumayer, P., Castor, J., Doepfner, T., Falcone, R. W., Landen, O. L., Lee, H. J., Lee, R. W., Holst, B., Redmer, R., Morse, E. C., Ng, A., Pollaine, et al
AMER INST PHYSICS.2009
 - **Frontiers of the physics of dense plasmas and planetary interiors: Experiments, theory, and applications** *PHYSICS OF PLASMAS*
Fortney, J. J., Glenzer, S. H., Koenig, M., Militzer, B., Saumon, D., Valencia, D.
2009; 16 (4)
 - **Energy transfer between laser beams crossing in ignition hohlraums** *PHYSICS OF PLASMAS*
Michel, P., Divol, L., Williams, E. A., Thomas, C. A., Callahan, D. A., Weber, S., Haan, S. W., Salmonson, J. D., Meezan, N. B., Landen, O. L., Dixit, S., Hinkel, D. E., Edwards, et al
2009; 16 (4)
 - **X-Ray Thomson-Scattering Measurements of Density and Temperature in Shock-Compressed Beryllium** *PHYSICAL REVIEW LETTERS*
Lee, H. J., Neumayer, P., Castor, J., Doepfner, T., Falcone, R. W., FORTMANN, C., Hammel, B. A., Kritcher, A. L., Landen, O. L., Lee, R. W., Meyerhofer, D. D., Munro, D. H., Redmer, et al
2009; 102 (11)
 - **Magnetically controlled plasma waveguide for laser wakefield acceleration** *PLASMA PHYSICS AND CONTROLLED FUSION*
Froula, D. H., Divol, L., Davis, P., Palastro, J. P., Michel, P., Laurent, V., Glenzer, S. H., Pollock, B. B., Tynan, G.
2009; 51 (2)
 - **Tuning the Implosion Symmetry of ICF Targets via Controlled Crossed-Beam Energy Transfer** *PHYSICAL REVIEW LETTERS*
Michel, P., Divol, L., Williams, E. A., Weber, S., Thomas, C. A., Callahan, D. A., Haan, S. W., Salmonson, J. D., Dixit, S., Hinkel, D. E., Edwards, M. J., MacGowan, B. J., Lindl, et al
2009; 102 (2)
 - **Magnetically Controlled Optical Plasma Waveguide for Electron Acceleration** *ADVANCED ACCELERATOR CONCEPTS*
Pollock, B. B., Davis, P., Divol, L., Glenzer, S. H., Palastro, J. P., Price, D., Tynan, G. R., Froula, D. H.
2009; 1086: 165-?
 - **K-alpha X-ray Thomson Scattering From Dense Plasmas** *16th International Conference on Atomic Processes in Plasmas*
Kritcher, A. L., Neumayer, P., Castor, J., Doepfner, T., Falcone, R. W., Landen, O. L., Lee, H. J., Lee, R. W., Morse, E. C., Ng, A., Pollaine, S., Price, D., Glenzer, et al
AMER INST PHYSICS.2009: 286-292

- **Soft X-Ray Thomson Scattering in Warm Dense Matter at FLASH** *ULTRAFAST PHENOMENA XVI*
Faeustlin, R. R., Toleikis, S., Bomath, T., Cao, L., Doepfner, T., Duesterer, S., Foerster, E., FORTMANN, C., Glenzer, S. H., Goede, S., Gregori, G., Hoell, A., Irsig, et al
2009; 92: 241-?
- **Study of x-ray radiation from a laser wakefield accelerator** *ADVANCED ACCELERATOR CONCEPTS*
Leurent, V., Michel, P., Clayton, C. E., Divol, L., Doppner, T., Glenzer, S. H., Joshi, C., Marsh, K. A., Pak, A., Palastro, J. P., Pollock, B. B., Ralph, J., Tynan, et al
2009; 1086: 235-?
- **Probing warm dense lithium by inelastic X-ray scattering** *NATURE PHYSICS*
Saiz, E. G., Gregori, G., Gericke, D. O., Vorberger, J., Barbrel, B., Clarke, R. J., Freeman, R. R., Glenzer, S. H., Khattak, F. Y., Koenig, M., Landen, O. L., Neely, D., Neumayer, et al
2008; 4 (12): 940-944
- **Bremsstrahlung and line spectroscopy of warm dense aluminum plasma heated by xuv free-electron-laser radiation** *PHYSICAL REVIEW E*
Zastrau, U., FORTMANN, C., Faeustlin, R. R., Cao, L. F., Doepfner, T., Duesterer, S., Glenzer, S. H., Gregori, G., Laarmann, T., Lee, H. J., Przystawik, A., Radcliffe, P., Reinholz, et al
2008; 78 (6)
- **Probing the Hydrogen Melting Line at High Pressures by Dynamic Compression** *PHYSICAL REVIEW LETTERS*
Grinenko, A., Gericke, D. O., Glenzer, S. H., Vorberger, J.
2008; 101 (19)
- **Ultrafast x-ray Thomson scattering of shock-compressed matter** *SCIENCE*
Kritcher, A. L., Neumayer, P., Castor, J., Doppner, T., Falcone, R. W., Landen, O. L., Lee, H. J., Lee, R. W., Morse, E. C., Ng, A., Pollaine, S., Price, D., Glenzer, et al
2008; 322 (5898): 69-71
- **Demonstration of x-ray Thomson scattering using picosecond K-alpha x-ray sources in the characterization of dense heated matter** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Kritcher, A. L., Neumayer, P., Lee, H. J., Doepfner, T., Falcone, R. W., Glenzer, S. H., Morse, E. C.
2008; 79 (10)
- **Multicentimeter long high density magnetic plasmas for optical guiding** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Pollock, B. B., Froula, D. H., Tynan, G. R., Divol, L., Price, D., Costa, R., Yepiz, F., Fulkerson, S., Mangini, F., Glenzer, S. H.
2008; 79 (10)
- **High order reflectivity of highly oriented pyrolytic graphite crystals for x-ray energies up to 22 keV** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Doepfner, T., Neumayer, P., Girard, F., Kugland, N. L., Landen, O. L., Niemann, C., Glenzer, S. H.
2008; 79 (10)
- **A pulsed-laser calibration system for the laser backscatter diagnostics at the Omega laser** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Neumayer, P., Sorce, C., Froula, D. H., Divol, L., Rekow, V., Loughman, K., Knight, R., Glenzer, S. H., Bahr, R., Seka, W.
2008; 79 (10)
- **Temporal dispersion of a spectrometer** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Visco, A., Drake, R. P., Froula, D. H., Glenzer, S. H., Pollock, B. B.
2008; 79 (10)
- **Optical transmission of glass for the National Ignition Facility near backscatter imagers under x-ray exposure** *REVIEW OF SCIENTIFIC INSTRUMENTS*
London, R. A., Froula, D. H., Sorce, C. M., Moody, J. D., Suter, L. J., Glenzer, S. H., Jones, O. S., Meezan, N. B., Rosen, M. D.
2008; 79 (10)
- **High contrast Kr gas jet K alpha x-ray source for high energy density physics experiments** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Kugland, N. L., Neumayer, P., Doepfner, T., Chung, H., Constantin, C. G., Girard, F., Glenzer, S. H., Kemp, A., Niemann, C.
2008; 79 (10)
- **Direct measurements of an increased threshold for stimulated Brillouin scattering with polarization smoothing in ignition hohlraum plasmas** *PHYSICAL REVIEW LETTERS*

- Froula, D. H., Divol, L., Berger, R. L., London, R. A., Meezan, N. B., Strozzi, D. J., Neumayer, P., Ross, J. S., Stagnitto, S., Suter, L. J., Glenzer, S. H. 2008; 101 (11)
- **Efficient multi-keV X-ray sources from laser-exploded metallic thin foils** *PHYSICS OF PLASMAS*
Babonneau, D., Primout, M., Girard, F., Jadaud, J., Naudy, M., Villette, B., Depierreux, S., Blancard, C., Faussurier, G., Fournier, K. B., Suter, L., Kauffman, R., Glenzer, et al
2008; 15 (9)
 - **Plasmon resonance in warm dense matter** *PHYSICAL REVIEW E*
Thiele, R., Bornath, T., FORTMANN, C., Hoell, A., Redmer, R., Reinholz, H., Roepke, G., Wierling, A., Glenzer, S. H., Gregori, G.
2008; 78 (2)
 - **X-ray scattering measurements of radiative heating and cooling dynamics** *PHYSICAL REVIEW LETTERS*
Gregori, G., Glenzer, S. H., Fournier, K. B., Campbell, K. M., Dewald, E. L., Jones, O. S., Hammer, J. H., Hansen, S. B., Wallace, R. J., Landen, O. L.
2008; 101 (4)
 - **X-ray conversion efficiency of high-Z hohlraum wall materials for indirect drive ignition** *PHYSICS OF PLASMAS*
Dewald, E. L., Rosen, M., Glenzer, S. H., Suter, L. J., Girard, F., Jadaud, J. P., Schein, J., Constantin, C., Wagon, F., Huser, G., Neumayer, P., Landen, O. L.
2008; 15 (7)
 - **Three-dimensional modeling of stimulated Brillouin scattering in ignition-scale experiments** *PHYSICAL REVIEW LETTERS*
Divol, L., Berger, R. L., Meezan, N. B., Froula, D. H., Dixit, S., Suter, L. J., Glenzer, S. H.
2008; 100 (25)
 - **High K alpha x-ray conversion efficiency from extended source gas jet targets irradiated by ultra short laser pulses** *APPLIED PHYSICS LETTERS*
Kugland, N. L., Constantin, C. G., Neumayer, P., Chung, H., Collette, A., Dewald, E. L., Froula, D. H., Glenzer, S. H., Kemp, A., Kritcher, A. L., Ross, J. S., Niemann, C.
2008; 92 (24)
 - **Energetics of multiple-ion species hohlraum plasmas** *PHYSICS OF PLASMAS*
Neumayer, P., Berger, R. L., Callahan, D., Divol, L., Froula, D. H., London, R. A., MacGowan, B. J., Meezan, N. B., Michel, P. A., Ross, J. S., Sorce, C., Widmann, K., Suter, et al
2008; 15 (5)
 - **Three-dimensional modeling of laser-plasma interaction: Benchmarking our predictive modeling tools versus experiments** *PHYSICS OF PLASMAS*
Divol, L., Berger, R. L., Meezan, N. B., Froula, D. H., Dixit, S., Michel, P., London, R., Strozzi, D., Ross, J., Williams, E. A., Still, B., Suter, L. J., Glenzer, et al
2008; 15 (5)
 - **Suppression of stimulated Brillouin scattering by increased Landau damping in multiple-ion-species hohlraum plasmas** *PHYSICAL REVIEW LETTERS*
Neumayer, P., Berger, R. L., Divol, L., Froula, D. H., London, R. A., MacGowan, B. J., Meezan, N. B., Ross, J. S., Sorce, C., Suter, L. J., Glenzer, S. H.
2008; 100 (10)
 - **Green frequency-doubled laser-beam propagation in high-temperature hohlraum plasmas** *PHYSICAL REVIEW LETTERS*
Niemann, C., Berger, R. L., Divol, L., Froula, D. H., Jones, O., Kirkwood, R. K., Meezan, N., Moody, J. D., Ross, J., Sorce, C., Suter, L. J., Glenzer, S. H.
2008; 100 (4)
 - **Pushing the limits of plasma length in inertial-fusion laser-plasma interaction experiments** *PHYSICAL REVIEW LETTERS*
Froula, D. H., Divol, L., London, R. A., Michel, P., Berger, R. L., Meezan, N. B., Neumayer, P., Ross, J. S., Wallace, R., Glenzer, S. H.
2008; 100 (1)
 - **Laser-plasma Interaction in Ignition Relevant Plasmas: benchmarking our 3D modelling capabilities versus recent experiments** *5TH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS (IFSA2007)*
Divol, L., Froula, D., Meezan, N., Berger, R., London, R., Michel, P., Glenzer, S. H.
2008; 112

- **Hohlraum energetics and implosion symmetry with elliptical phase plates using a multi-cone beam geometry on OMEGA 5TH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS (IFSA2007)**
Regan, S. P., Sangster, T. C., Meyerhofer, D. D., Seka, W., Epstein, R., Loucks, S. J., McCrory, R. L., Stoeckl, C., Glebov, V. Y., Jones, O. S., Callahan, D. A., Amendt, P. A., Meezan, et al
2008; 112
- **Compton scattering measurements from dense plasmas 5TH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS (IFSA2007)**
Glenzer, S. H., Neumayer, P., Doeppner, T., Landen, O. L., Lee, R. W., Wallace, R. J., Weber, S., Lee, H. J., Kritcher, A. L., Falcone, R., Regan, S. P., Sawada, H., Meyerhofer, et al
2008; 112
- **Target designs for energetics experiments on the National Ignition Facility 5TH INTERNATIONAL CONFERENCE ON INERTIAL FUSION SCIENCES AND APPLICATIONS (IFSA2007)**
Meezan, N. B., Glenzer, S. H., Suter, L. J.
2008; 112
- **Diagnosing direct-drive, shock-heated, and compressed plastic planar foils with noncollective spectrally resolved x-ray scattering PHYSICS OF PLASMAS**
Sawada, H., Regan, S. P., Meyerhofer, D. D., Igumenshchev, I. V., Goncharov, V. N., Boehly, T. R., Epstein, R., Sangster, T. C., Smalyuk, V. A., Yaakobi, B., Gregori, G., Glenzer, S. H., Landen, et al
2007; 14 (12)
- **Experiments and multiscale simulations of laser propagation through ignition-scale plasmas NATURE PHYSICS**
Glenzer, S. H., Froula, D. H., Divol, L., DORR, M., Berger, R. L., Dixit, S., Hammel, B. A., Haynam, C., Hittinger, J. A., Holder, J. P., Jones, O. S., Kalantar, D. H., Landen, et al
2007; 3 (10): 716-719
- **Creation of hot dense matter in short-pulse laser-plasma interaction with tamped titanium foils PHYSICS OF PLASMAS**
Chen, S. N., Gregori, G., Patel, P. K., Chung, H., Evans, R. G., Freeman, R. R., Saiz, E. G., Glenzer, S. H., Hansen, S. B., Khattak, F. Y., King, J. A., MacKinnon, A. J., Notley, et al
2007; 14 (10)
- **The first target experiments on the national ignition facility EUROPEAN PHYSICAL JOURNAL D**
Landen, O. L., Glenzer, S. H., Froula, D. H., Dewald, E. L., Suter, L. J., Schneider, M. B., Hinkel, D. E., Fernandez, J. C., Kline, J. L., Goldman, S. R., Braun, D. G., Celliers, P. M., Moon, et al
2007; 44 (2): 273-281
- **Space-time characterization of laser plasma interactions in the warm dense matter regime LASER AND PARTICLE BEAMS**
Cao, L. F., Uschmann, I., Zamponi, F., Kaempfer, T., Fuhrmann, A., Foerster, E., Hoell, A., Redmer, R., Toleikis, S., Tschentscher, T., Glenzer, S. H.
2007; 25 (2): 239-244
- **Role of hydrodynamics simulations in laser-plasma interaction predictive capability PHYSICS OF PLASMAS**
Meezan, N. B., Berger, R. L., Divol, L., Froula, D. H., Hinkel, D. E., Jones, O. S., London, R. A., Moody, J. D., Marinak, M. M., Niemann, C., Neumayer, P. B., Prisbrey, S. T., Ross, et al
2007; 14 (5)
- **K-alpha conversion efficiency measurements for X-ray scattering in inertial confinement fusion plasmas HIGH ENERGY DENSITY PHYSICS**
Kritcher, A. L., Neumayer, P., Urry, M. K., Robey, H., Niemann, C., Landen, O. L., Morse, E., Glenzer, S. H.
2007; 3 (1-2): 156-162
- **Derivation of the static structure factor in strongly coupled non-equilibrium plasmas for X-ray scattering studies HIGH ENERGY DENSITY PHYSICS**
Gregori, G., Ravasio, A., Hoell, A., Glenzer, S. H., Rose, J.
2007; 3 (1-2): 99-108
- **Thomson scattering from near-solid density plasmas using soft X-ray free electron lasers HIGH ENERGY DENSITY PHYSICS**
Hoell, A., Bornath, T., Cao, L., Doeppner, T., Duesterer, S., Foerster, E., FORTMANN, C., Glenzer, S. H., Gregori, G., Laarmann, T., Meiwes-Broer, K., Przystawik, A., Radcliffe, et al
2007; 3 (1-2): 120-130

- **Proof of principle experiments that demonstrate utility of cocktail hohlraums for indirect drive ignition** *PHYSICS OF PLASMAS*
Jones, O. S., Schein, J., Rosen, M. D., Suter, L. J., Wallace, R. J., Dewald, E. L., Glenzer, S. H., Campbell, K. M., Gunther, J., Hammel, B. A., Landen, O. L., Sorce, C. M., Olson, et al
2007; 14 (5)
- **Laser beam propagation through inertial confinement fusion hohlraum plasmas** *PHYSICS OF PLASMAS*
Froula, D. H., Divol, L., Meezan, N. B., Dixit, S., Neumayer, P., Moody, J. D., Pollock, B. B., Ross, J. S., Suter, L., Glenzer, S. H.
2007; 14 (5)
- **Demonstration of enhanced radiation drive in hohlraums made from a mixture of high-Z wall materials** *PHYSICAL REVIEW LETTERS*
Schein, J., Jones, O., Rosen, M., Dewald, E., Glenzer, S., Gunther, J., Hammel, B., Landen, O., Suter, L., Wallace, R.
2007; 98 (17)
- **Quenching of the nonlocal electron heat transport by large external magnetic fields in a laser-produced plasma measured with imaging thomson scattering** *PHYSICAL REVIEW LETTERS*
Froula, D. H., Ross, J. S., Pollock, B. B., Davis, P., James, A. N., Divol, L., Edwards, M. J., Offenberger, A. A., Price, D., Town, R. P., Tynan, G. R., Glenzer, S. H.
2007; 98 (13)
- **Ideal laser-beam propagation through high-temperature ignition hohlraum plasmas** *PHYSICAL REVIEW LETTERS*
Froula, D. H., Divol, L., Meezan, N. B., Dixit, S., Moody, J. D., Neumayer, P., Pollock, B. B., Ross, J. S., Glenzer, S. H.
2007; 98 (8)
- **Observations of plasmons in warm dense matter** *PHYSICAL REVIEW LETTERS*
Glenzer, S. H., Landen, O. L., Neumayer, P., Lee, R. W., Widmann, K., Pollaine, S. W., Wallace, R. J., Gregori, G., Hoell, A., Bornath, T., Thiele, R., Schwarz, V., Kraeft, et al
2007; 98 (6)
- **Hypernetted chain calculations for two-component plasmas** *CONTRIBUTIONS TO PLASMA PHYSICS*
Schwarz, V., Bornath, T., Kraeft, W., Glenzer, S. H., Hoell, A., Redmer, R.
2007; 47 (4-5): 324-330
- **X-ray Thomson scattering from dense Plasmas** *ATOMIC PROCESSES IN PLASMAS*
Glenzer, S. H.
2007; 926: 8-17
- **Shift of CIK alpha and K-beta lines in laser produced dense plasmas** *CONTRIBUTIONS TO PLASMA PHYSICS*
Sengebusch, A., Glenzer, S. H., Kritcher, A. L., Reinholz, H., Roepke, G.
2007; 47 (4-5): 309-314
- **High magnetic field generation for laser-plasma experiments** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Pollock, B. B., Froula, D. H., DAVIS, P. F., Ross, J. S., Fulkerson, S., Bower, J., Satariano, J., Price, D., Krushelnick, K., Glenzer, S. H.
2006; 77 (11)
- **Thomson scattering from a shock front** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Reighard, A. B., Drake, R. P., Donajkowski, T., Grosskopf, M., Dannenberg, K. K., Froula, D., Glenzer, S., Ross, J. S., Edwards, J.
2006; 77 (10)
- **Qualification of a near backscattering imaging system on the National Ignition Facility** *REVIEW OF SCIENTIFIC INSTRUMENTS*
MacKinnon, A. J., Niemann, C., Piston, K., Holtmeier, G., McCarville, T., Jones, G., Reinbachs, I., Costa, R., Celeste, J., Griffith, R., Kirkwood, R. K., MacGowan, B. J., Glenzer, et al
2006; 77 (10)
- **Implementation of imaging Thomson scattering on the Omega Laser** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Ross, J. S., Froula, D. H., MacKinnon, A. J., Sorce, C., Meezan, N., Glenzer, S. H., Armstrong, W., Bahr, R., Huff, R., Thorp, K.
2006; 77 (10)
- **Solid-density plasma characterization with x-ray scattering on the 200 J Janus laser** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Neumayer, P., Gregori, G., Ravasio, A., Koenig, M., Price, D., Widmann, K., Bastea, M., Landen, O. L., Glenzer, S. H.
2006; 77 (10)

- **3 omega transmitted beam diagnostic at the Omega Laser Facility** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Froula, D. H., Rekow, V., Sorce, C., Piston, K., Knight, R., Alvarez, S., Griffith, R., Hargrove, D., Ross, J. S., Dixit, S., Pollock, B., Divol, L., Glenzer, et al
2006; 77 (10)
- **Thomson-scattering techniques to diagnose local electron and ion temperatures, density, and plasma wave amplitudes in laser produced plasmas (invited)** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Froula, D. H., Ross, J. S., Divol, L., Glenzer, S. H.
2006; 77 (10)
- **Laser light backscatter from intermediate and high Z plasmas** *PHYSICS OF PLASMAS*
Berger, R. L., Constantin, C., Divol, L., Meezan, N., Froula, D. H., Glenzer, S. H., Suter, L. J., Niemann, C.
2006; 13 (9)
- **Generalized x-ray scattering cross section from nonequilibrium plasmas** *PHYSICAL REVIEW E*
Gregori, G., Glenzer, S. H., Landen, O. L.
2006; 74 (2)
- **X-ray flux and X-ray burnthrough experiments on reduced-scale targets at the NIF and OMEGA lasers** *JOURNAL DE PHYSIQUE IV*
Schneider, M. B., Hinkel, D. E., Young, B. K., Holder, J. P., Langdon, A. B., Baldis, H. A., Bahr, R., Bower, D. E., Bruns, H. C., Campbell, K. M., Celeste, J. R., Compson, S., Constantin, et al
2006; 133: 1205-1208
- **Measurements of gas filled halfraum energetics at the national ignition facility using a single quad** *JOURNAL DE PHYSIQUE IV*
Kline, J. L., Fernandez, J. C., Goldman, S. R., Braun, D., Landen, O., Niemann, C., Gautier, D. C., Hegelich, B. M., Montgomery, D. S., Lanier, N. E., Rose, H. A., Workman, J. B., Campbell, et al
2006; 133: 919-923
- **The first experiments on the national ignition facility** *JOURNAL DE PHYSIQUE IV*
Landen, O. L., Glenzer, S., Froula, D., Dewald, E., Suter, L. J., Schneider, M., Hinkel, D., Fernandez, J., Kline, J., Goldman, S., Braun, D., Celliers, P., Moon, et al
2006; 133: 43-45
- **Laser coupling to reduced-scale targets at NIF early light** *JOURNAL DE PHYSIQUE IV*
Hinkel, D. E., Schneider, M. B., Young, B. K., Holder, J. P., Langdon, A. B., Baldis, H. A., Bonanno, G., Bower, D. E., Bruns, H. C., Campbell, K. M., Celeste, J. R., Compton, S., Costa, et al
2006; 133: 237-241
- **Efficient coupling of 527 nm laser beam power to a long scalelength plasma** *JOURNAL DE PHYSIQUE IV*
Moody, J. D., Divol, L., Glenzer, S. H., MacKinnon, A. J., Froula, D. H., Gregori, G., Krueer, W. L., Meezan, N. B., Suter, L. J., Williams, E. A., Bahr, R., Seka, W.
2006; 133: 321-324
- **Limits on collective X-ray scattering imposed by coherence** *EUROPHYSICS LETTERS*
Gregori, G., Tommasini, R., Landen, O. L., Lee, R. W., Glenzer, S. H.
2006; 74 (4): 637-643
- **Measurement of carbon ionization balance in high-temperature plasma mixtures by temporally resolved X-ray scattering** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Gregori, G., Glenzer, S. H., Chung, H. K., Froula, D. H., Lee, R. W., Meezan, N. B., Moody, J. D., Niemann, C., Landen, O. L., Holst, B., Redmer, R., Regan, S. P., Sawada, et al
2006; 99 (1-3): 225-237
- **X-ray probe development for collective scattering measurements in dense plasmas** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Urry, M. K., Gregori, G., Landen, O. L., Pak, A., Glenzer, S. H.
2006; 99 (1-3): 636-648
- **Electron-density scaling of conversion efficiency of laser energy into L-shell X-rays** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*

- Fournier, K. B., Constantin, C., Back, C. A., Suter, L., Chung, H. K., Miller, M. C., Froula, D. H., Gregori, G., Glenzer, S. H., Dewald, E. L., Landen, O. L.
2006; 99 (1-3): 186-198
- **First hohlraum drive studies on the National Ignition Facility** *PHYSICS OF PLASMAS*
Dewald, E. L., Landen, O. L., Suter, L. J., Schein, J., Holder, J., Campbell, K., Glenzer, S. H., McDonald, J. W., Niemann, C., MacKinnon, A. J., Schneider, M. S., Haynam, C., Hinkel, et al
2006; 13 (5)
 - **Thomson-scattering measurements of high electron temperature hohlraum plasmas for laser-plasma interaction studies** *PHYSICS OF PLASMAS*
Froula, D. H., Ross, J. S., Divol, L., Meezan, N., MacKinnon, A. J., Wallace, R., Glenzer, S. H.
2006; 13 (5)
 - **Gas-filled hohlraum experiments at the National Ignition Facility** *PHYSICS OF PLASMAS*
Fernandez, J. C., Goldman, S. R., Kline, J. L., Dodd, E. S., Gautier, C., Grim, G. P., Hegelich, B. M., Montgomery, D. S., Lanier, N. E., Rose, H., Schmidt, D. W., Workman, J. B., Braun, et al
2006; 13 (5)
 - **Hot surface ionic line emission and cold K-inner shell emission from petawatt-laser-irradiated Cu foil targets** *PHYSICS OF PLASMAS*
Theobald, W., Akli, K., Clarke, R., Delettrez, J. A., Freeman, R. R., Glenzer, S., Green, J., Gregori, G., Heathcote, R., Izumi, N., King, J. A., Koch, J. A., Kuba, et al
2006; 13 (4)
 - **High energy density science with FELs, intense short pulse tunable x-ray sources** *HIGH-POWER LASER ABLATION VI, PTS 1 AND 2*
Lee, R. W., Moon, S. J., Chung, H. K., Cauble, R. C., Glenzer, S., Landen, O. L., Rose, S. J., Scott, H. A., Gregori, G., Riley, D.
2006; 6261
 - **First laser-plasma interaction and hohlraum experiments on the National Ignition Facility** *PLASMA PHYSICS AND CONTROLLED FUSION*
Dewald, E. L., Glenzer, S. H., Landen, O. L., Suter, L. J., Jones, O. S., Schein, J., Froula, D., Divol, L., Campbell, K., Schneider, M. S., Holder, J., McDonald, P. W., Niemann, et al
2005; 47: B405-B417
 - **Integrated laser-target interaction experiments on the RAL petawatt laser** *PLASMA PHYSICS AND CONTROLLED FUSION*
Patel, P. K., Key, M. H., MacKinnon, A. J., Berry, R., Borghesi, M., Chambers, D. M., Chen, H., Clarke, R., Damian, C., Eagleton, R., Freeman, R., Glenzer, S., Gregori, et al
2005; 47: B833-B840
 - **Radiation-driven hydrodynamics of high-Z hohlraums on the National Ignition Facility** *PHYSICAL REVIEW LETTERS*
Dewald, E. L., Suter, L. J., Landen, O. L., Holder, J. P., Schein, J., Lee, F. D., Campbell, K. M., Weber, F. A., Pellinen, D. G., Schneider, M. B., Celeste, J. R., McDonald, J. W., Foster, et al
2005; 95 (21)
 - **Measurement of the dispersion of thermal ion-acoustic fluctuations in high-temperature laser plasmas using multiple-wavelength Thomson scattering** *PHYSICAL REVIEW LETTERS*
Froula, D. H., Davis, P., Divol, L., Ross, J. S., Meezan, N., Price, D., Glenzer, S. H., Rousseaux, C.
2005; 95 (19)
 - **Supersonic propagation of ionization waves in an underdense, laser-produced plasma** *PHYSICS OF PLASMAS*
Constantin, C., Back, C. A., Fournier, K. B., Gregori, G., Landen, O. L., Glenzer, S. H., Dewald, E. L., Miller, M. C.
2005; 12 (6)
 - **Laser coupling to reduced-scale hohlraum targets at the early light program of the National Ignition Facility** *PHYSICS OF PLASMAS*
Hinkel, D. E., Schneider, M. B., Baldis, H. A., Bonanno, G., Bower, D. E., Campbell, K. M., Celeste, J. R., Compton, S., Costa, R., Dewald, E. L., Dixit, S. N., Eckart, M. J., Eder, et al
2005; 12 (5)
 - **Intensity limits for propagation of 0.527 μm laser beams through large-scale-length plasmas for inertial confinement fusion** *PHYSICAL REVIEW LETTERS*
Niemann, C., Divol, L., Froula, D. H., Gregori, G., Jones, O., Kirkwood, R. K., MacKinnon, A. J., Meezan, N. B., Moody, J. D., Sorce, C., Suter, L. J., Bahr, R., Seka, et al

2005; 94 (8)

- **Experimental characterization of a strongly coupled solid density plasma generated in a short-pulse laser target interaction** *CONTRIBUTIONS TO PLASMA PHYSICS*
Gregori, G., Hansen, S. B., Clarke, R., Heathcote, R., Key, M. H., KING, J., Klein, R. I., Izumi, N., MacKinnon, A. J., Moon, S. J., Park, H. S., Pasley, J., Patel, et al
2005; 45 (3-4): 284-292
- **Progress in long scale length laser-plasma interactions** *NUCLEAR FUSION*
Glenzer, S. H., Arnold, P., Bardsley, G., Berger, R. L., Bonanno, G., Borger, T., Bower, D. E., Bowers, M., Bryant, R., Buckman, S., Burkhart, S. C., Campbell, K., Chrisp, et al
2004; 44 (12): S185-S190
- **A summary of explorations into the use of green light for high-gain, high-yield experiments on the National Ignition Facility** *NUCLEAR FUSION*
Suter, L. J., Glenzer, S., Haan, S., Hammel, B., Manes, K., Meezan, N., Moody, J., Spaeth, M., Oades, K., Stevenson, M.
2004; 44 (12): S140-S148
- **Dante soft x-ray power diagnostic for National Ignition Facility** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Dewald, E. L., Campbell, K. M., Turner, R. E., Holder, J. P., Landen, O. L., Glenzer, S. H., Kauffman, R. L., Suter, L. J., LANDON, M., Rhodes, M., Lee, D.
2004; 75 (10): 3759-3761
- **Full aperture backscatter station measurement system on the National Ignition Facility** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Bower, D. E., MCCARVILLE, T. J., Alvarez, S. S., Ault, L. E., Brown, M. D., Chrisp, M. P., Damian, C. M., DeHope, W. J., Froula, D. H., Glenzer, S. H., Grace, S. E., Gu, K., Holdener, et al
2004; 75 (10): 4177-4179
- **Implementation of a near backscattering imaging system on the National Ignition Facility** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Mackinnon, A. J., McCarville, T., Piston, K., Niemann, C., Jones, G., Reinbachs, I., Costa, R., Celeste, J., Holtmeier, G., Griffith, R., Kirkwood, R., MacGowan, B., Glenzer, et al
2004; 75 (10): 4183-4186
- **Full-aperture backscatter measurements on the National Ignition Facility** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Froula, D. H., Bower, D., Chrisp, M., Grace, S., Kamperschroer, J. H., Kelleher, T. M., Kirkwood, R. K., MacGowan, B., McCarville, T., Sewall, N., Shimamoto, F. Y., Shiromizu, S. J., Young, et al
2004; 75 (10): 4168-4170
- **Calibration of initial measurements from the full aperture backscatter system on the National Ignition Facility** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Kirkwood, R. K., McCarville, T., Froula, D. H., Young, B., Bower, D., Sewall, N., Niemann, C., Schneider, M., Moody, J., Gregori, G., Holdener, F., Chrisp, M., MacGowan, et al
2004; 75 (10): 4174-4176
- **Omega dante soft x-ray power diagnostic component calibration at the National Synchrotron Light Source** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Campbell, K. M., Weber, F. A., Dewald, E. L., Glenzer, S. H., Landen, O. L., Turner, R. E., Waide, P. A.
2004; 75 (10): 3768-3771
- **Transmitted laser beam diagnostic at the Omega laser facility** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Niemann, C., Antonini, G., Compton, S., Glenzer, S. H., Hargrove, D., Moody, J. D., Kirkwood, R. K., Rekow, V., Satariano, J., Sorce, C., Armstrong, W., Bahr, R., Keck, et al
2004; 75 (10): 4171-4173
- **Implementation of a high energy 4 omega probe beam on the Omega laser** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Mackinnon, A. J., Shiromizu, S., Antonini, G., Auerbach, J., Haney, K., Froula, D. H., Moody, J., Gregori, G., Constantin, C., Sorce, C., Divol, L., GRIFFITH, R. L., Glenzer, et al
2004; 75 (10): 3906-3908
- **X-ray line measurements with high efficiency Bragg crystals** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Pak, A., Gregori, G., Knight, J., Campbell, K., Price, D., Hammel, B., Landen, O. L., Glenzer, S. H.
2004; 75 (10): 3747-3749

- **Measurement of the absolute hohlraum-wall albedo under ignition foot drive conditions** *PHYSICAL REVIEW LETTERS*
Jones, O. S., Glenzer, S. H., Suter, L. J., Turner, R. E., Campbell, K. M., Dewald, E. L., Hammel, B. A., Hammer, J. H., Kauffman, R. L., Landen, O. L., Rosen, M. D., Wallace, R. J., Weber, et al
2004; 93 (6)
- **Observation of the parametric two-ion decay instability with Thomson scattering** *PHYSICAL REVIEW LETTERS*
Niemann, C., Glenzer, S. H., Knight, J., Divol, L., Williams, E. A., Gregori, G., Cohen, B. I., Constantin, C., Froula, D. H., Montgomery, D. S., Johnson, R. P.
2004; 93 (4)
- **Direct observation of the saturation of stimulated Brillouin scattering by ion-trapping-induced frequency shifts** *PHYSICAL REVIEW LETTERS*
Froula, D. H., Divol, L., Offenberger, A. A., Meezan, N., Ao, T., Gregori, G., Niemann, C., Price, D., Smith, C. A., Glenzer, S. H.
2004; 93 (3)
- **Effect of nonlocal transport on heat-wave propagation** *PHYSICAL REVIEW LETTERS*
Gregori, G., Glenzer, S. H., Knight, J., Niemann, C., Price, D., Froula, D. H., Edwards, M. J., Town, R. P., Brantov, A., Rozmus, W., Bychenkov, V. Y.
2004; 92 (20)
- **Electronic structure measurements of dense plasmas** *PHYSICS OF PLASMAS*
Gregori, G., Glenzer, S. H., Rogers, F. J., Pollaine, S. M., Landen, O. L., Blancard, C., Faussurier, G., Renaudin, P., Kuhlbrodt, S., Redmer, R.
2004; 11 (5): 2754-2762
- **Prospects for high-gain, high yield National Ignition Facility targets driven by 2 omega (green) light** *PHYSICS OF PLASMAS*
Suter, L. J., Glenzer, S., Haan, S., Hammel, B., Manes, K., Meezan, N., Moody, J., Spaeth, M., Divol, L., Oades, K., Stevenson, M.
2004; 11 (5): 2738-2745
- **First measurement of backscatter dependence on ion acoustic damping in a high density helium/hydrogen laser-plasma** *PHYSICS OF PLASMAS*
Moody, J. D., Williams, E. A., Lours, L., Sanchez, J. J., Berger, R. L., Collins, G. A., Decker, C. B., Divol, L., Glenzer, S. H., Hammel, B. A., Jones, R., Kirkwood, R. K., Kruer, et al
2004; 11 (5): 2060-2067
- **Effects of plasma composition on backscatter, hot electron production, and propagation in underdense plasmas** *PHYSICS OF PLASMAS*
Stevenson, R. M., Suter, L. J., Oades, K., Kruer, W., Slark, G. E., Fournier, K. B., Meezan, N., Kauffman, R., Miller, M., Glenzer, S., Niemann, C., Grun, J., Davis, et al
2004; 11 (5): 2709-2715
- **Thomson scattering measurements of heat flow in a laser-produced plasma** *JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS*
Hawreliak, J., Chambers, D. M., Glenzer, S. H., GOUVEIA, A., Kingham, R. J., Marjoribanks, R. S., Pinto, P. A., Renner, O., Soundhauss, P., Topping, S., Wolfrum, E., Young, P. E., Wark, et al
2004; 37 (7): 1541-1551
- **The physics basis for ignition using indirect-drive targets on the National Ignition Facility** *PHYSICS OF PLASMAS*
Lindl, J. D., Amendt, P., Berger, R. L., Glendinning, S. G., Glenzer, S. H., Haan, S. W., Kauffman, R. L., Landen, O. L., Suter, L. J.
2004; 11 (2): 339-491
- **Effects of ion trapping on crossed-laser-beam stimulated Brillouin scattering** *PHYSICS OF PLASMAS*
Williams, E. A., Cohen, B. I., Divol, L., Dorr, M. R., Hittinger, J. A., Hinkel, D. E., Langdon, A. B., Kirkwood, R. K., Froula, D. H., Glenzer, S. H.
2004; 11 (1): 231-244
- **Observation of ion wave decay products of Langmuir waves generated by stimulated Raman scattering in ignition scale plasmas** *PHYSICS OF PLASMAS*
Geddes, C. G., Kirkwood, R. K., Glenzer, S. H., Estabrook, K., Cohen, B. I., Young, P. E., Joshi, C., Wharton, K. B.
2003; 10 (8): 3422-3425
- **Scaling of saturated stimulated Raman scattering with temperature and intensity in ignition scale plasmas** *PHYSICS OF PLASMAS*
Kirkwood, R. K., Berger, R. L., Geddes, C. G., Moody, J. D., MacGowan, B. J., Glenzer, S. H., Estabrook, K. G., Decker, C., Landen, O. L.
2003; 10 (7): 2948-2955

- **Investigation of the onset and development of forward scattering in an underdense plasma** *PHYSICAL REVIEW LETTERS*
Moody, J. D., Williams, E. A., Glenzer, S. H., Young, P. E., Hawreliak, J., GOUVEIA, A., Wark, J. S.
2003; 90 (24)
- **Strong coupling corrections in the analysis of x-ray Thomson scattering measurements** *JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL*
Gregori, G., Glenzer, S. H., Landen, O. L.
2003; 36 (22): 5971-5980
- **X-ray scattering from solid density plasmas** *PHYSICS OF PLASMAS*
Glenzer, S. H., Gregori, G., Rogers, F. J., Froula, D. H., Pollaine, S. W., Wallace, R. S., Landen, O. L.
2003; 10 (6): 2433-2441
- **Demonstration of spectrally resolved x-ray scattering in dense plasmas** *PHYSICAL REVIEW LETTERS*
Glenzer, S. H., Gregori, G., Lee, R. W., Rogers, F. J., Pollaine, S. W., Landen, O. L.
2003; 90 (17)
- **Modeling the nonlinear saturation of stimulated Brillouin backscatter in laser heated plasmas** *PHYSICS OF PLASMAS*
Divol, L., Berger, R. L., Cohen, B. I., Williams, E. A., Langdon, A. B., Lasinski, B. F., Froula, D. H., Glenzer, S. H.
2003; 10 (5): 1822-1828
- **Stimulated Brillouin scattering in the saturated regime** *PHYSICS OF PLASMAS*
Froula, D. H., Divol, L., Braun, D. G., Cohen, B. I., Gregori, G., Mackinnon, A., Williams, E. A., Glenzer, S. H., Baldis, H. A., Montgomery, D. S., Johnson, R. P.
2003; 10 (5): 1846-1853
- **Direct observation of stimulated-Brillouin-scattering detuning by a velocity gradient** *PHYSICAL REVIEW LETTERS*
Froula, D. H., Divol, L., Mackinnon, A., Gregori, G., Glenzer, S. H.
2003; 90 (15)
- **Time and spatially resolved measurements of x-ray burnthrough and re-emission in Au and Au : Dy : Nd foils** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Olson, R. E., Leeper, R. J., Dropinski, S. C., Mix, L. P., Rochau, G. A., Glenzer, S. H., Jones, O. S., Suter, L. J., Kaae, J. L., Shearer, C. H., Smith, J. N.
2003; 74 (3): 2186-2190
- **Theoretical model of x-ray scattering as a dense matter probe** *PHYSICAL REVIEW E*
Gregori, G., Glenzer, S. H., Rozmus, W., Lee, R. W., Landen, O. L.
2003; 67 (2)
- **Observation of saturation of energy transfer between copropagating beams in a flowing plasma** *PHYSICAL REVIEW LETTERS*
Kirkwood, R. K., Moody, J. D., Langdon, A. B., Cohen, B. I., Williams, E. A., Dorr, M. R., Hittinger, J. A., Berger, R., Young, P. E., Suter, L. J., Divol, L., Glenzer, S. H., Landen, et al
2002; 89 (21)
- **Observation of ion heating by stimulated-Brillouin-scattering-driven ion-acoustic waves using Thomson scattering** *PHYSICS OF PLASMAS*
Froula, D. H., Divol, L., Baldis, H. A., Berger, R. L., Braun, D. G., Cohen, B. I., Johnson, R. P., Montgomery, D. S., Williams, E. A., Glenzer, S. H.
2002; 9 (11): 4709-4718
- **K-shell spectroscopy of an independently diagnosed uniaxially expanding laser-produced aluminum plasma** *PHYSICAL REVIEW E*
Chambers, D. M., Pinto, P. A., Hawreliak, J., Al'Miev, I. R., GOUVEIA, A., Sondhauss, P., Wolfrum, E., Wark, J. S., Glenzer, S. H., Lee, R. W., Young, P. E., Renner, O., Marjoribanks, et al
2002; 66 (2)
- **Anomalous absorption of high-energy green laser light in high-Z plasmas** *PHYSICAL REVIEW LETTERS*
Glenzer, S. H., Rozmus, W., Bychenkov, V. Y., Moody, J. D., Albritton, J., Berger, R. L., Brantov, A., Foord, M. E., MacGowan, B. J., Kirkwood, R. K., Baldis, H. A., Williams, E. A.
2002; 88 (23)
- **Measurements of nonlinear growth of ion-acoustic waves in two-ion-species plasmas with Thomson scattering** *PHYSICAL REVIEW LETTERS*

- Froula, D. H., Divol, L., Glenzer, S. H.
2002; 88 (10)
- **Thomson scattering in inertial confinement fusion research** *ADVANCED DIAGNOSTICS FOR MAGNETIC AND INERTIAL FUSION*
Glenzer, S. H.
2002: 303-310
 - **Calculations and measurements of x-ray Thomson scattering spectra in warm dense matter** *SPECTRAL LINE SHAPES*
Gregori, G., Glenzer, S. H., Lee, R. W., Hicks, D. G., Pasley, J., Collins, G. W., Celliers, P., Bastea, M., Eggert, J., Pollaine, S. M., Landen, O. L.
2002; 645: 359-368
 - **Observation of saturated brillouin instability in fusion plasmas with Thomson scattering** *Frontier Science Research Conference on Laser - Matter Interaction*
Glenzer, S. H.
STEFAN UNIV PRESS.2002: 133-137
 - **A Thomson scattering post-processor for the MEDUSA hydrocode** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Hawreliak, J., Chambers, D., Glenzer, S., Marjoribanks, R. S., Notley, M., PINTO, P., Renner, O., Sondhauss, P., Steel, R., Topping, S., Wolfrum, E., Young, P., Wark, et al
2001; 71 (2-6): 383-395
 - **Dense matter characterization by X-ray Thomson scattering** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Landen, O. L., Glenzer, S. H., Edwards, M. J., Lee, R. W., Collins, G. W., Cauble, R. C., Hsing, W. W., Hammel, B. A.
2001; 71 (2-6): 465-478
 - **Detailed hydrodynamic and X-ray spectroscopic analysis of a laser-produced rapidly-expanding aluminium plasma** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Chambers, D. M., Glenzer, S. H., Hawreliak, J., Wolfrum, E., GOUVEIA, A., Lee, R. W., Marjoribanks, R. S., Renner, O., Sondhauss, P., Topping, S., Young, P. E., Pinto, P. A., Wark, et al
2001; 71 (2-6): 237-247
 - **Ionization balance in inertial confinement fusion hohlraum plasmas** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Glenzer, S. H., Fournier, K. B., Wilson, B. G., Lee, R. W., Suter, L. J.
2001; 71 (2-6): 355-363
 - **Ionization balance in inertial confinement fusion hohlraums** *PHYSICAL REVIEW LETTERS*
Glenzer, S. H., Fournier, K. B., Wilson, B. G., Lee, R. W., Suter, L. J.
2001; 87 (4)
 - **Reduction of stimulated scattering losses from hohlraum plasmas with laser beam smoothing** *PHYSICS OF PLASMAS*
Glenzer, S. H., Berger, R. L., Divol, L. M., Kirkwood, R. K., MacGowan, B. J., Moody, J. D., Langdon, A. B., Suter, L. J., Williams, E. A.
2001; 8 (5): 1692-1696
 - **Backscatter reduction using combined spatial, temporal, and polarization beam smoothing in a long-scale-length laser plasma** *PHYSICAL REVIEW LETTERS*
Moody, J. D., MacGowan, B. J., Rothenberg, J. E., Berger, R. L., Divol, L., Glenzer, S. H., Kirkwood, R. K., Williams, E. A., Young, P. E.
2001; 86 (13): 2810-2813
 - **Thomson scattering measurements of saturated ion waves in laser fusion plasmas** *PHYSICAL REVIEW LETTERS*
Glenzer, S. H., Divol, L. M., Berger, R. L., Geddes, C., Kirkwood, R. K., Moody, J. D., Williams, E. A., Young, P. E.
2001; 86 (12): 2565-2568
 - **Electron distribution function in laser heated plasmas** *PHYSICS OF PLASMAS*
Fourkal, E., Bychenkov, V. Y., Rozmus, W., Sydora, R., Kirkby, C., Capjack, C. E., Glenzer, S. H., Baldis, H. A.
2001; 8 (2): 550-556
 - **Status of our understanding and modeling of x-ray coupling efficiency in laser heated hohlraums** *PHYSICS OF PLASMAS*
Dattolo, E., Suter, L., Monteil, M. C., Jadaud, J. P., Dague, N., Glenzer, S., Turner, R., Juraszek, D., Lasinski, B., Decker, C., Landen, O., MacGowan, B.

2001; 8 (1): 260-265

- **Warm, dense plasma characterization by x-ray Thomson scattering** *ECLIM 2000: 26TH EUROPEAN CONFERENCE ON LASER INTERACTION WITH MATTER*
Landen, O. L., Glenzer, S. H., Cauble, R. C., Lee, R. W., Edwards, M. J., DeGroot, J. S.
2001; 4424: 112-119
- **Modeling the backscatter and transmitted light of high power smoothed beams with pF3D, a massively parallel laser plasma interaction code** *ECLIM 2000: 26TH EUROPEAN CONFERENCE ON LASER INTERACTION WITH MATTER*
Berger, R. L., Divol, L. M., Glenzer, S. H., Hinkel, D. E., Kirkwood, R. K., Langdon, A. B., Moody, J. D., Still, C. H., Suter, L. J., Williams, E. A., Young, P. E.
2001; 4424: 206-211
- **Experimental study of laser beam transmission and power accounting in a large scale length laser plasma** *PHYSICS OF PLASMAS*
Moody, J. D., MacGowan, B. J., Berger, R. L., Estabrook, K. G., Glenzer, S. H., Kirkwood, R. K., Kruer, W. L., Stone, G. E., Montgomery, D. S.
2000; 7 (8): 3388-3398
- **Accuracy of K-shell spectra modeling in high-density plasmas** *PHYSICAL REVIEW E*
Glenzer, S. H., Fournier, K. B., Decker, C., Hammel, B. A., Lee, R. W., Lours, L., MacGowan, B. J., Osterheld, A. L.
2000; 62 (2): 2728-2738
- **Ionization processes and charge-state distribution in a highly ionized high-Z laser-produced plasma** *PHYSICAL REVIEW LETTERS*
Foord, M. E., Glenzer, S. H., Thoe, R. S., WONG, K. L., Fournier, K. B., Wilson, B. G., Springer, P. T.
2000; 85 (5): 992-995
- **Hohlraum energetics with smoothed laser beams** *PHYSICS OF PLASMAS*
Glenzer, S. H., Suter, L. J., Berger, R. L., Estabrook, K. G., Hammel, B. A., Kauffman, R. L., Kirkwood, R. K., MacGowan, B. J., Moody, J. D., Rothenberg, J. E., Turner, R. E.
2000; 7 (6): 2585-2593
- **Experimental investigation of short scalelength density fluctuations in laser-produced plasmas** *PHYSICS OF PLASMAS*
Moody, J. D., MacGowan, B. J., Glenzer, S. H., Kirkwood, R. K., Kruer, W. L., Montgomery, D. S., Schmitt, A. J., Williams, E. A., Stone, G. F.
2000; 7 (5): 2114-2125
- **Accurate determination of the charge state distribution in a well characterized highly ionized Au plasma** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Foord, M. E., Glenzer, S. H., Thoe, R. S., WONG, K. L., Fournier, K. B., Albritton, J. R., Wilson, B. G., Springer, P. T.
2000; 65 (1-3): 231-241
- **Towards an experimental benchmark for aluminum X-ray spectra** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Aschke, L., Depierreux, S., Estabrook, K. G., Fournier, K. B., Fuchs, J., Glenzer, S., Lee, R. W., Rozmus, W., Thoe, R. S., Young, P. E.
2000; 65 (1-3): 23-30
- **Detailed characterization of laser plasmas for benchmarking of radiation-hydrodynamic modeling** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Glenzer, S. H., Estabrook, K. G., Lee, R. W., MacGowan, B. J., Rozmus, W.
2000; 65 (1-3): 253-271
- **Analysis of discrepancies between quantal and semiclassical calculations of electron impact broadening in plasmas** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Alexiou, S., Lee, R. W., Glenzer, S. H., Castor, J. I.
2000; 65 (1-3): 15-22
- **Testing astrophysical radiation hydrodynamics codes with hypervelocity jet experiments on the nova laser** *ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES*
Stone, J. M., Turner, N., Estabrook, K., Remington, B., Farley, D., Glendinning, S. G., Glenzer, S.
2000; 127 (2): 497-502
- **Modeling of Thomson scattering spectra in high-Z, laser-produced plasmas** *ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES*
Rozmus, W., Glenzer, S. H., Estabrook, K. G., Baldis, H. A., MacGowan, B. J.
2000; 127 (2): 459-463

- **Thomson scattering in inertial confinement fusion research** *CONTRIBUTIONS TO PLASMA PHYSICS*
Glenzer, S. H.
2000; 40 (1-2): 36-45
- **On the accuracy of x-ray spectra modeling of inertial confinement fusion plasmas** *12th Topical Conference on Atomic Processes in Plasmas*
Glenzer, S. H., Fournier, K. B., Hammel, B. A., Lee, R. W., MacGowan, B. J., Back, C. A.
AMER INST PHYSICS.2000: 3-14
- **Using high resolution X-ray spectroscopy of laser and EBIT plasma sources to test atomic models** *12th Topical Conference on Atomic Processes in Plasmas*
Fournier, K. B., Foord, M. E., Wilson, B. G., Glenzer, S. H., WONG, K. L., Thoe, R. S., Beiersdorfer, P., Springer, P. T.
AMER INST PHYSICS.2000: 203-216
- **Observation of the nonlinear saturation of Langmuir waves driven by ponderomotive force in a large scale plasma** *PHYSICAL REVIEW LETTERS*
Kirkwood, R. K., Montgomery, D. S., Afeyan, B. B., Moody, J. D., MacGowan, B. J., Joshi, C., Wharton, K. B., Glenzer, S. H., Williams, E. A., Young, P. E., Kruer, W. L., Estabrook, K. G., Berger, et al
1999; 83 (15): 2965-2968
- **Radiative jet experiments of astrophysical interest using intense lasers** *PHYSICAL REVIEW LETTERS*
Farley, D. R., Estabrook, K. G., Glendinning, S. G., Glenzer, S. H., Remington, B. A., Shigemori, K., Stone, J. M., Wallace, R. J., Zimmerman, G. B., Harte, J. A.
1999; 83 (10): 1982-1985
- **First measurement of short length-scale density fluctuations in a large laser plasma** *PHYSICAL REVIEW LETTERS*
Moody, J. D., MacGowan, B. J., Glenzer, S. H., Kirkwood, R. K., Kruer, W. L., Schmitt, A. J., Williams, E. A., Stone, G. F.
1999; 83 (9): 1783-1786
- **Observation of resonant energy transfer between identical-frequency laser beams** *PHYSICS OF PLASMAS*
Wharton, K. B., Kirkwood, R. K., Glenzer, S. H., Estabrook, K. G., Afeyan, B. B., Cohen, B. I., Moody, J. D., MacGowan, B. J., Joshi, C.
1999; 6 (5): 2144-2149
- **Thomson scattering from laser plasmas** *PHYSICS OF PLASMAS*
Glenzer, S. H., Alley, W. E., Estabrook, K. G., De Groot, J. S., Haines, M. G., Hammer, J. H., Jadaud, J. P., MacGowan, B. J., Moody, J. D., Rozmus, W., Suter, L. J., Weiland, T. L., Williams, et al
1999; 6 (5): 2117-2128
- **Thomson scattering from high-Z laser-produced plasmas** *PHYSICAL REVIEW LETTERS*
Glenzer, S. H., Rozmus, W., MacGowan, B. J., Estabrook, K. G., De Groot, J. D., Zimmerman, G. B., Baldis, H. A., Harte, J. A., Lee, R. W., Williams, E. A., Wilson, B. G.
1999; 82 (1): 97-100
- **A spectroscopic coupling study for some carbon-like species** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Musielok, J., Wiese, W. L., Glenzer, S., Kunze, H. J.
1999; 61 (2): 215-218
- **X-ray spectroscopy from fusion plasmas** *SPECTRAL LINE SHAPES, VOL 10*
Glenzer, S. H.
1999; 467: 49-63
- **Measurements of near forward scattered laser light in a large inertial confinement fusion plasma (invited)** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Moody, J. D., MacGowan, B. J., Glenzer, S. H., Kirkwood, R. K., Kruer, W. L., Pollaine, S. M., Williams, E. A., Stone, G. F., Afeyan, B. B., Schmitt, A. J.
1999; 70 (1): 677-681
- **High-energy 4 omega probe laser for laser-plasma experiments at Nova** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Glenzer, S. H., Weiland, T. L., Bower, J., MacKinnon, A. J., MacGowan, B. J.
1999; 70 (1): 1089-1092
- **Observation of energy transfer between identical-frequency laser beams in a flowing plasma** *PHYSICAL REVIEW LETTERS*

- Wharton, K. B., Kirkwood, R. K., Glenzer, S. H., Estabrook, K. G., Afeyan, B. B., Cohen, B. I., Moody, J. D., Joshi, C.
1998; 81 (11): 2248-2251
- **Measurements of suprathermal electrons in Hohlraum plasmas with x-ray spectroscopy** *PHYSICAL REVIEW LETTERS*
Glenzer, S. H., Rosmej, F. B., Lee, R. W., Back, C. A., Estabrook, K. G., MacGowan, B. J., Shepard, T. D., Turner, R. E.
1998; 81 (2): 365-368
 - **Improved gas-filled hohlraum performance on Nova with beam smoothing** *PHYSICS OF PLASMAS*
Kauffman, R. L., Powers, L. V., Dixit, S. N., Glendinning, S. G., Glenzer, S. H., Kirkwood, R. K., Landon, O. L., MacGowan, B. J., Moody, J. D., Orzechowski, T. J., Pennington, D. M., Stone, G. F., Suter, et al
1998; 5 (5): 1927-1934
 - **Evidence of plasma fluctuations and their effect on the growth of stimulated Brillouin and stimulated Raman scattering in laser plasmas** *PHYSICS OF PLASMAS*
Montgomery, D. S., Afeyan, B. B., Cobble, J. A., Fernandez, J. C., Wilke, M. D., Glenzer, S. H., Kirkwood, R. K., MacGowan, B. J., Moody, J. D., Lindman, E. L., Munro, D. H., Wilde, B. H., Rose, et al
1998; 5 (5): 1973-1980
 - **Stark broadening along the berylliumlike sequence** *PHYSICAL REVIEW E*
Wrubel, T., Ahmad, I., Buscher, S., Kunze, H. J., Glenzer, S. H.
1998; 57 (5): 5972-5977
 - **Energetics of inertial confinement fusion Hohlraum plasmas** *PHYSICAL REVIEW LETTERS*
Glenzer, S. H., Suter, L. J., Turner, R. E., MacGowan, B. J., Estabrook, K. G., Blain, M. A., Dixit, S. N., Hammel, B. A., Kauffman, R. L., Kirkwood, R. K., Landen, O. L., Monteil, M. C., Moody, et al
1998; 80 (13): 2845-2848
 - **Thomson scattering from inertial-confinement-fusion Hohlraum plasmas** *PHYSICAL REVIEW LETTERS*
Glenzer, S. H., Back, C. A., Suter, L. J., Blain, M. A., Landen, O. L., Lindl, J. D., MacGowan, B. J., Stone, G. F., Turner, R. E., Wilde, B. H.
1997; 79 (7): 1277-1280
 - **Observation of multiple mechanisms for stimulating ion waves in ignition scale plasmas** *PHYSICS OF PLASMAS*
Kirkwood, R. K., MacGowan, B. J., Montgomery, D. S., Afeyan, B. B., Kruer, W. L., Pennington, D. M., Wilks, S. C., Moody, J. D., Wharton, K., Back, C. A., Estabrook, K. G., Glenzer, S. H., Blain, et al
1997; 4 (5): 1800-1810
 - **Thomson scattering in the corona of laser-produced gold plasmas** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Glenzer, S. H., Back, C. A., Estabrook, K. G., MacGowan, B. J.
1997; 68 (1): 668-671
 - **Laser scattering in large scale length plasmas relevant to National Ignition Facility hohlraums** *16th International Conference on Fusion Energy*
MacGowan, B. J., Berger, R. L., Afeyan, B. B., Back, C. A., Blain, M. A., Canaud, B., Cohen, B. I., Desenne, D. E., Estabrook, K. G., Glenzer, S. H., Hinkel, D. E., Kirkwood, R. K., Kruer, et al
INT ATOMIC ENERGY AGENCY.1997: 181-186
 - **Thomson scattering from inertial confinement fusion plasmas** *13th International Conference on Laser Interaction and Related Plasma Phenomena (LIRPP 97)*
Glenzer, S. H., Back, C. A., Suter, L. J., Pollaine, S. M., MacGowan, B. J., Blain, M. A., De Groot, J. S., Estabrook, K. G., Hammel, B. A., Hammer, J. H., Landen, O. L., Lindl, J. D., Wilde, et al
AIP PRESS.1997: 95-113
 - **Line profile measurements in a gas-liner pinch discharge** *13th International Conference on Spectral Line Shapes (13th ICSLS)*
Wrubel, T., Glenzer, S., Buscher, S., Kunze, H. J.
AMER INST PHYSICS.1997: 71-76
 - **Experiments on hot and dense laser-produced plasmas** *13th International Conference on Spectral Line Shapes (13th ICSLS)*
Back, C. A., Woolsey, N. C., Asfaw, A., Glenzer, S. H., Hammel, B. A., Keane, C. J., Lee, R. W., Liedahl, D., Moreno, J. C., Nash, J. K., Osterheld, A. L., Calisti, A., Stamm, et al
AMER INST PHYSICS.1997: 35-44

- **Thomson scattering from two-species laser-produced plasmas (invited) REVIEW OF SCIENTIFIC INSTRUMENTS**
Glenzer, S. H., Back, C. A., Estabrook, K. G., Kirkwood, R. K., Wallace, R., MacGowan, B. J., Hammel, B. A., Cid, R. E., DeGroot, J. S.
1997; 68 (1): 641-646
- **Electron temperature and density measurements in laser-produced large-scale-length gas-bag plasmas by x-ray spectroscopy PHYSICAL REVIEW E**
Glenzer, S. H., Back, C. A., Estabrook, K. G., MacGowan, B. J., Montgomery, D. S., Kirkwood, R. K., Moody, J. D., Munro, D. H., Stone, G. F.
1997; 55 (1): 927-938
- **Investigation of a short-wavelength laser plasma of a gas-liner pinch discharge PHYSICAL REVIEW E**
Glenzer, S. H., Wrubel, T., Kunze, H. J., GodbertMouret, L.
1997; 55 (1): 939-946
- **Imaging backscattered and near to backscattered light in ignition scale plasmas (invited) REVIEW OF SCIENTIFIC INSTRUMENTS**
Kirkwood, R. K., Back, C. A., Blain, M. A., Desenne, D. E., Dulieu, A. G., Glenzer, S. H., MacGowan, B. J., Montgomery, D. S., Moody, J. D.
1997; 68 (1): 636-640
- **X-ray diagnostics of hohlraum plasma flow REVIEW OF SCIENTIFIC INSTRUMENTS**
Back, C. A., Glenzer, S. H., Landen, O. L., MacGowan, B. J., Shepard, T. D.
1997; 68 (1): 831-833
- **Investigation of the He II P-alpha and He II P-beta transitions at high densities JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS**
Buscher, S., Glenzer, S., Wrubel, T., Kunze, H. J.
1996; 29 (18): 4107-4125
- **Effect of ion-wave damping on stimulated Raman scattering in high-Z laser-produced plasmas PHYSICAL REVIEW LETTERS**
Kirkwood, R. K., MacGowan, B. J., Montgomery, D. S., Afeyan, B. B., Kruer, W. L., Moody, J. D., Estabrook, K. G., Back, C. A., Glenzer, S. H., Blain, M. A., Williams, E. A., Berger, R. L., Lasinski, et al
1996; 77 (13): 2706-2709
- **Observation of two ion-acoustic waves in a two-species laser-produced plasma with Thomson scattering PHYSICAL REVIEW LETTERS**
Glenzer, S. H., Back, C. A., Estabrook, K. G., Wallace, R., Baker, K., MacGowan, B. J., Hammel, B. A., Cid, R. E., DeGroot, J. S.
1996; 77 (8): 1496-1499
- **Investigation of electron-proton drifts with Thomson scattering JOURNAL OF ATMOSPHERIC AND TERRESTRIAL PHYSICS**
Wrubel, T., Glenzer, S., Buscher, S., Kunze, H. J.
1996; 58 (8-9): 1077-?
- **Laser-plasma interactions in ignition-scale hohlraum plasmas 37th Annual Meeting of the Division-of-Plasma-Physics of the American-Physical-Society**
MacGowan, B. J., Afeyan, B. B., Back, C. A., Berger, R. L., Bonnaud, G., Casanova, M., Cohen, B. I., Desenne, D. E., DuBois, D. F., Dulieu, A. G., Estabrook, K. G., Fernandez, J. C., Glenzer, et al
AMER INST PHYSICS.1996: 2029-40
- **Stark broadening of resonance transitions in B III PHYSICAL REVIEW A**
Glenzer, S., Kunze, H. J.
1996; 53 (4): 2225-2229
- **Line profile measurements of the 2s3s-2s3p singlet and triplet transitions in Ne VII ASTRONOMY & ASTROPHYSICS**
Wrubel, T., Glenzer, S., Buscher, S., Kunze, H. J., Alexiou, S.
1996; 307 (3): 1023-1028
- **Spectroscopic temperature measurements of non-equilibrium plasmas 10th American-Physical-Society Topical Conference on Atomic Processes in Plasmas**
Back, C. A., Glenzer, S. H., Lee, R. W., MacGowan, B. J., Moreno, J. C., Nash, J. K., Powers, L. V., Shepard, T. D.
AIP PRESS.1996: 123-30
- **Application of soft X-ray laser interferometry to study large-scale-length, high-density plasmas 5th International Conference on X-ray Lasers**
Wan, A. S., Back, C. A., Barbee, T. W., Cauble, R., Celliers, P., DASILVA, L. B., Decker, C., Glenzer, S., Moreno, J. C., London, R. A., Rambo, P. W., Stone, G. F., Trebes, et al

IOP PUBLISHING LTD.1996: 504–8

- **Critical tests of line broadening theories by precision measurements** *10th American-Physical-Society Topical Conference on Atomic Processes in Plasmas*
Glenzer, S. H.
AIP PRESS.1996: 109–22
- **PROFILES OF THE HE-I 2(3)P-3(3)D LINE AT HIGH-DENSITIES** *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*
Buscher, S., Glenzer, S., Wrubel, T., Kunze, H. J.
1995; 54 (1-2): 73-80
- **ANALYSIS OF LITHIUMLIKE LINE SHAPES IN A GAS-LINER PINCH** *12th International Conference on Spectral Line Shapes (12th ICSLS)*
Stamm, R., Calisti, A., Godbert, L., Meftah, T., Mosse, C., Talin, B., Glenzer, S.
AIP PRESS.1995: 153–54
- **LINE BROADENING OF NONHYDROGENIC IONS IN PLASMAS** *12th International Conference on Spectral Line Shapes (12th ICSLS)*
Glenzer, S.
AIP PRESS.1995: 134–50
- **SPECTRAL-LINE PROFILES OF N=4 TO N=5 TRANSITIONS IN C-IV, N-V AND O-VI** *JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS*
Glenzer, S., Wrubel, T., Buscher, S., Kunze, H. J., Godbert, L., Calisti, A., Stamm, R., Talin, B., NASH, J., Lee, R. W., Klein, L.
1994; 27 (22): 5507-5515
- **STARK-BROADENING OF SPECTRAL-LINES ALONG THE ISOELECTRONIC SEQUENCE OF B** *JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS*
Glenzer, S., Hey, J. D., Kunze, H. J.
1994; 27 (3): 413-422
- **AMPLIFICATION OF EXTREME-ULTRAVIOLET RADIATION IN A GAS-LINER PINCH PLASMA** *PHYSICAL REVIEW E*
Glenzer, S., Kunze, H. J.
1994; 49 (2): 1586-1593
- **Lasing at short wavelength in a capillary discharge and in a dense Z-pinch** *4th International Colloquium on X-Ray Lasers*
Kunze, H. J., Glenzer, S., Steden, C., WIESCHEBRINK, H. T., Koshelev, K. N., Uskov, D.
AIP PRESS.1994: 380–87
- **INVESTIGATION OF LS COUPLING IN BORON-LIKE IONS** *PHYSICAL REVIEW A*
Glenzer, S., Kunze, H. J., Musielok, J., Kim, Y. K., Wiese, W. L.
1994; 49 (1): 221-227
- **PLASMA BROADENING OF NE-II-NE-VI AND F-IV-F-V SPECTRAL-LINES** *PHYSICAL REVIEW E*
Uzelac, N. I., Glenzer, S., Konjevic, N., Hey, J. D., Kunze, H. J.
1993; 47 (5): 3623-3630
- **STARK-BROADENING OF SPECTRAL-LINES ALONG THE ISOELECTRONIC SEQUENCE OF LI** *PHYSICAL REVIEW A*
Glenzer, S., Uzelac, N. I., Kunze, H. J.
1992; 45 (12): 8795-8802
- **INVESTIGATION OF A PAIR OF TRANSITION-PROBABILITIES OF C-III IN HIGH-DENSITY PLASMAS** *PHYSICAL REVIEW A*
Glenzer, S., Musielok, J., Kunze, H. J.
1991; 44 (2): 1266-1269