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PUBLICATIONS

High Density Neon-plasma Created by Intense Gold Beams

U. Neuner, R. Bock, C. Constantin, E. Dewald, U.N. Funk, S. Hakuli, D.H.H. Hoffmann, J. Jacoby, A. Kozyreva, M. Roth, P. Spiller, N.A. Tahir, A. Tauschwitz, S. Udrea, D. Varentsov, and J. Wieser
Contrib. to Plasma Phys. 41, 119 (2001)

Heavy Ion Induced Intermixing of Metal/SiC Interfaces

R. Nagel, K. Weyrich, D.H.H. Hoffmann, A.G. Balogh
Nucl. Instr. Meth. B178, 315 (2001)

Verfahren zur Energieerzeugung mittels Trägheitsfusion unter Verwendung von Pellets

J. Jacoby, N. Tahir und D.H.H. Hoffmann
Patentschrift: 19508858, Deutsches Patent und Markenamt

Advanced X-ray Diagnostics Based on Observation of High-energy Rydberg Transitions from Autoionizing Levels in Dense Laser-produced Plasmas

F.B. Rosmej, D.H.H. Hoffmann, M. Geißel, M. Roth, P. Pirzadeh, A. Ya. Faenov, T. A. Pikuz, I. Yu. Skobolev and A.I. Magunov
Phys. Rev. A, 63, 0634091 (2001)

Experimental Investigation of the Effective Charge State of Ions in Beam-plasma Interaction

A. Golubev, A. Fertman, I. Roudskoy, V. Turtikov, B. Sharkov, M. Geissel, U. Neuner, M. Roth, A. Tauschwitz, H. Wahl, D.H.H. Hoffmann, U. Funk, W. Süss, J. Jacoby
Nucl. Instr. and Meth A, 464, 247 (2001)

Intense Ion Beams Accelerated by Petawatt-class Lasers

M. Roth, T.E. Cowan, C. Brown, M. Christl, W. Fountain, S. Hatchett, J. Johnson, M.H. Key, D.M. Pennington, M.D. Perry, T.W. Philips, T.C. Sangster, M. Singh, R. Snavely, M. Stoyer, Y. Takahashi, S.C. Wilks, K. Yasuike
Nucl. Instr. and Meth A, 464, 201 (2001)

Experiments after the High Current Upgrade of the GSI Accelerators: Response of Converters to Heating by intense Heavy Ions Beams

U. Neuner, R. Bock, A. Kozyreva, A. Tauschwitz, H. Wahl, C. Constantin, U.N. Funk, M. Geissel, D.H.H. Hoffmann, D. Penache, P. Pirzadeh, F.B. Rosmej, O. Rosmej, M. Roth, W. Süss, N.A. Tahir, S. Udrea, D. Varentsov, J. Jacoby
Nucl. Instr. and Meth A, 464, 326 (2001)

Target Design for Laser Accelerated Proton Beams

M. Roth
Europhysics Conference Abstracts Vol. 25A, p. 29 (2001)

X-Ray Spectroscopy of Laser Heated CF₂-Foil

M. Roth
SPIE Vol. 4424, p. 426 (2001)

Energetic Proton Generation in Ultra-Intense Laser-Solid Interactions
S.C. Wilks, A.B. Langdon, T.E. Cowan, M. Roth, M. Singh, S. Hatchett, M.H. Key, D. Pennington, A. MacKinnon and R.A. Snavely
Phys. Plasmas. 8, 542 (2001)

Aluminum Lyman α Group Formation at High-intensity High-energy Laser-matter Interaction
O. Renner, F.B. Rosmej, E. Krousky, P. Sondhaus, M.P. Kalachnikov, P.V. Nickles, I. Uschmann, E. Förster
J. Quantitative. Spectrosc. & Radiative. Transfer 71, 623 (2001)

Observation of Unusually High Intensities of Forbidden Satellite Transitions in Dense Laser-produced Plasmas
F.B. Rosmej, A. Calisti, B. Talin, R. Stamm, W. Süß, M. Geissel, D.H.H. Hoffmann, A. Ya. Faenov, T.A. Pikuz
J. Quantitative. Spectrosc. & Radiative. Transfer 71, 639 (2001)

Advanced X-ray Diagnostics Based on an Observation of High-energy Rydberg Transitions from Autoionizing Levels in Dense Laser-produced Plasmas
F.B. Rosmej, D.H.H. Hoffmann, M. Geissel, M. Roth, P. Pirzadeh, A. Ya. Faenov, T.A. Pikuz, I. Yu. Skobelev, and A.I. Magunov
Phys. Rev. A63, 063409, 1 (2001)

High Resolution X-Ray Imaging Spectroscopy Diagnostic of Hollow Ions in Dense Plasmas
F.B. Rosmej, D.H.H. Hoffmann, W. Süß, M. Geißel, O.N. Rosmej, A.Ya. Faenov, T.A. Pikuz, T. Auguste, P.D'Oliveira, S. Hulin, P. Monot, J.E. Hansen, G. Verbookhaven
Nucl. Instrum. & Methods A464, 257 (2001)

Direct Observation of Forbidden X-Ray Transitions from Autoionizing Levels in Dense Laser Produced Plasmas
F.B. Rosmej, D.H.H. Hoffmann, W. Süß, M. Geißel, A.Ya. Faenov, T.A. Pikuz
Phys. Rev. A63, 032716 1 (2001)

Necessity of Bunch Compression for Heavy-ion Induced Hydrodynamics and Studies of Beam Fragmentation in Solid Targets at a Proposed Synchrotron Facility
N.A. Tahir, A. Kozyreva, P. Spiller, D.H.H. Hoffmann, A. Shutov
Phys. Rev. E63, 036407 1 (2001)

Time-resolved Energy Loss Spectroscopy of Energetic Heavy Ion Beams Generating a Dense Plasma
D. Varentsov, P. Spiller, U.N. Funk, D.H.H. Hoffmann, A. Kozyreva, N. Tahir, C. Contantini, E. Dewald, J. Jacoby, U. Neuner, S. Udrea, R. Bock
Nucl. Instr. Meth B174, 215 (2001)

Funneling Experiments

A. Schempp

Nucl. Instr. Meth. A264, 395 (2001)

Commissioning of the New GSI High Current Linac and HIF Related RF Linac Aspects

U. Ratzinger

Nucl. Instr. Meth, A 264, 636 (2001)

Investigation of Beam Stability in a High Intensity DTL for Heavy Ion Inertial Fusion

H. Deitinghoff, G. Parisi, A. Sauer, K. Bongardt, M. Pabst

Nucl. Instr. Meth. A 264, 539 (2001)

Low Energy Beam Transport for HIDIF

O. Meusel, J. Pozimski, A. Jakob, A. Lakatos

Nucl. Instr. Meth. A 264, 512 (2001)

Influence of Hydrodynamic Expansion on Specific Power Deposition by a Heavy Ion Beam in Matter

N.A. Tahir, A. Kozyreva, P. Spiller, D.H.H. Hoffmann, A. Shutov

Phys. of Plasmas 8, 611 (2001)

Metallization of Hydrogen Using Heavy Ion Implosion of Multilayered Cylindrical Targets

N.A. Tahir, D.H.H. Hoffmann, A. Kozyreva, A. Tauschwitz, A. Shutov, J.A. Maruhn, P. Spiller, U. Neuner, J. Jacoby, M. Roth, R. Bock, H. Juranek, and R. Redmer

Phys. Rev. E63, 016402 (2001)

Metallization of Hydrogen Using Ion Imploded Multi-layered Cylindrical Targets

N.A. Tahir, A. Kozyreva, D.H.H. Hoffmann, A. Shutov, P. Spiller, U. Neuner, A. Tauschwitz, J. Jacoby, M. Roth, J.A. Maruhn, R. Bock, H. Juranek, R. Redmer

Contrib. To Plasma Phys. 41, 119 (2001)

Necessity of Bunch Compression for Studies of Heavy Ion Induced Hydrodynamics and Beam Fragmentation in Solid Targets

N.A. Tahir, A. Kozyreva, P. Spiller, D.H.H. Hoffmann, A. Shutov

Phys. Rev. E63, 1 (2001)

Influence of Hydrodynamic Expansion on Specific Power Deposition by Heavy Ion Beams in Matter

N.A. Tahir, A. Kozyreva, P. Spiller, D.H.H. Hoffmann, A. Shutov

Phys. of Plasmas 8, 611 (2001)

Metallization of Hydrogen Using Heavy Ion Imploded Multi-Layered Cylindrical Targets

N.A. Tahir, A. Kozyreva, D.H.H. Hoffmann, A. Shutov, P. Spiller, U. Neuner, A. Tauschwitz, J. Jacoby, M. Roth, J.A. Maruhn, R. Bock, H. Juranek, R. Redmer

Contrib. Plasma Phys. 41, 287 (2001)

Designing Heavy-Ion-Matter Experiments for the Upgraded Accelerator Facility at the GSI Darmstadt Using a Two-Dimensional Hydrodynamic Simulation Model

N.A. Tahir, D.H.H. Hoffmann, A. Kozyreva, A. Shutov, J.A. Maruhn, U. Neuner, A. Tauschwitz, P. Spiller, R. Bock
Nucl. Inst. Meth. A464, 211 (2001)

EOS Investigations by Low Entropy Compression of Matter

Th. Schlegel, J. Meyer-ter-Vehn, D.H.H. Hoffmann, J. Ramirez, R. Ramirez
Contrib. to Plasma Phys. 41, 119 (2001)

3D PIC Simulation of Proton Acceleration from Thin Spherical Targets
H. Ruhl, S. Bulanov, T.E.Cowan, T.V. Liseikina, P. Nickles, F. Pegoraro, M. Roth, W. Sandner

Plasma Physics Reports 27, No. 5, 263 (2001)

Laser Wake Field Acceleration: The Highly Non-Linear Broken-Wave Regime

A. Pukhov, J. Meyer-ter-Vehn
Appl. Phys. B74, 355 (2002)

Laser Acceleration of Electrons and Ions and Intense Secondary Particle Generation

D. Habs, G. Pretzler, A. Pukhov, J. Meyer-ter-Vehn
Progress in Particle and Nuclear Physics 46, 375 (2001)

Fast Ignition of ICF Targets: An Overview

J. Meyer-ter-Vehn
J. Plasma Phys. and Control. Fusion 43, A113 (2001)

Three-Dimensional Simulations of Ion Acceleration from a Thin Foil Irradiated by a Short-Pulse Laser

A. Pukhov
Phys. Rev. Letters 86, 3562 (2001)

Relativistic Laser Plasma Interaction

J. Meyer-ter-Vehn, A. Pukhov, Zh.-M. Sheng
Atoms, Solids and Plasmas in Super-Intense Laser Fields, Ed. D. Batanai et al., Kluwer Academic/Plenum Publishers, 2001

Stagnation Pressure of Imploding Shells and Ignition Energy Scaling of ICF Targets

A. Kemp, J. Meyer-ter-Vehn, S. Atzeni
Phys. Rev. Lett. 86, 3336 (2001)

Comment on the Paper »A generalized scaling law for the ignition energy of inertial confinement fusion capsules« by M.C. Herrmann, M. Tabak, J. Lindl, Nucl.Fus. (2000)

S. Atzeni, J. Meyer-ter-Vehn,
Nucl. Fusion 41, 99 (2001)

Ignition Conditions for Magnetically Insulated, Tamped ICF Targets in Cylindrical Geometry

A.J. Kemp, M.M. Basko, J. Meyer-ter-Vehn
Nucl. Fusion 41, 235 (2001)

High-density ($>10^{23}/\text{cm}^3$) Relativistic Electron Plasma Confined between Two Laser Pulses in a Thin Foil

B. Shen, J. Meyer-ter-Vehn
Phys. Plasmas 8, 1003 (2001)

Dynamical Symmetries and Harmonic Generation

F. Ceccherini, D. Bauer, F. Cornolti
J. Phys. B: At. Mol. Opt. Phys. 34, 5017 (2001)

C_{60} in Intense Femtosecond Laser Pulses: Nonlinear Dipole Response and Ionization

D. Bauer, F. Ceccherini, A. Macchi, F. Cornolti
Phys. Rev. A 64, 063203 (2001)

Harmonic Generation in Ring-shaped Molecules

F. Ceccherini, D. Bauer
Phys. Rev. A 64, 033423 (2001)

Connection between the Dielectric and the Ballistic Treatment of Collisional Absorption

R. Schneider
Contrib. Plasma Phys. 41, 315 (2001)

Routes to Irreversibility in Collective Laser-matter Interaction

P. Mulser, H. Ruhl, J. Steinmetz
Laser & Particle Beams 19, 23 (2001)

A Numerical ab initio Study of Harmonic Generation from a Ring-shaped Model Molecule in Laser Fields

D. Bauer, F. Ceccherini
Laser & Particle Beams 19, 85 (2001)

Fast Ignition without Hole Boring

S. Hain, P. Mulser
Phys. Rev. Lett. 86, 1015 (2001)

Standard Models of Collisional Absorption and their Equivalence

P. Mulser
Contrib. Plasma Phys. 41, 243 (2001)

Time-dependent Density Functional Theory Applied to Nonsequential Multiple Ionization of Ne at 800 nm

D. Bauer, F. Ceccherini
Optics Express 8, 377 (2001)

Isentropes and Hugoniot Curves for Dense Hydrogen and Deuterium
T. Beule, W. Ebeling, A. Förster, H. Juranek, R. Redmer, G. Röpke
Physical Review E 63, 060202, 1 (2001)

Conductivities in Hot Aluminum Plasma
S. Kuhlbrodt, R. Redmer, A. Kemp, J. Meyer-ter-Vehn
Contrib. Plasma Phys. 41, 3 (2001)

Equation of State for Dense Hydrogen
H. Juranek, R. Redmer, W. Stolzmann
Contrib. Plasma Phys. 41 (2+3), 131 (2001)

Metal-nonmetal Transition in Dense Hydrogen
R. Redmer, G. Röpke, S. Kuhlbrodt, H. Reinholz
Contrib. Plasm. Phys. 41 (2+3), 163 (2001)

Optical Properties and Dynamical Conductivity of Hot and Dense Plasmas
N. Wierling, T. Millat, R. Redmer, H. Reinholz, G. Röpke
Contrib. Plasm Phys. 41 (2+3), 263 (2001)

Conductivity of Nonideal Zinc and Carbon Plasma - Experiments and Theoretical Results
J. Haun, S. Kosse, H.-J. Kunze, M. Schlanges, R. Redmer
Contrib. Plasma Phys. 41, 2+3, 275 (2001)

Inverse Bremsstrahlung of Hot, Weakly Coupled Plasmas
N. Wierling, T. Millat, G. Röpke, R. Redmer, H. Reinholz
Phys. Plasmas 8, 3810 (2001)

Hopping Conductivity in Dense Hydrogen Fluid
R. Redmer, G. Röpke, S. Kuhlbrodt, H. Reinholz
Phys. Rev. B 63, 233104, 1 (2001)

Dielectric Properties of Strongly Correlated Quantum Plasmas
M. Bonitz, V. Golubnichiy, N.H. Kwong, D. Semkat, D. Kremp, V.S. Filinov, M. Schlanges
Contrib. Plasma Phys. 41, 155 (2001)

Nonlinear Collisional Absorption in Dense Laser Plasmas
Th. Bornath, M. Schlanges, P. Hilse, D. Kremp
Phys. Rev. E 64, 026414 (2001)

Energy Loss of Charged Particles in Dense Nonideal Plasmas
D. O. Gericke, M. Schlanges, Th. Bornath, W.D. Kraeft
Contrib. Plasma Phys. 41, 147 (2001)

Dynamical Properties and Plasmon Dispersion of a Weakly Degenerate Correlated One-component Plasma

M. Golubnichiy, M. Bonitz, D. Kremp, M. Schlanges

Phys. Rev. E64, 016409 (2001)

Quantum Kinetic Theory of Laser plasmas

D. Kremp, Th. Bornath, P. Hilse, H. Haberland, M. Schlanges, M. Bonitz

Contrib. Plasma Phys. 41, 259 (2001)

CONFERENCE CONTRIBUTIONS

Milano, Italy: Workshop on Particle Sources from High Intensity Lasers, March 1-3, 2001

M. Roth
Experimental Results on Ion Acceleration

Erlangen, Germany: DFG-Workshop on Wechselwirkung intensiver Laserfelder mit Materie, May 25, 2001

D.H.H. Hoffmann
Intensive Teilchen- und Laserstrahlung als neue Instrumente zur Untersuchung von Materie unter extremen Bedingungen

Stony Brook, Brookhaven, USA: Advanced Accelerator Conference, June 15-18, 2001

M. Roth
Intense Ion Beams from Relativistic Laser Plasmas

Las Vegas, Nevada., USA: 13th IEEE International Pulsed Power Conference (PPC), June 17-22, 2001

E. Dewald, C. Constantin, C. Niemann, S. Udrea, D. Varentsov, J. Jacoby, J. Wieser, N. Tahir, A. Kozyreva, A. Shutov, A. Tauschwitz, D. H.H. Hoffmann, U. Neuner, M. Roth, R. Bock
Optical Diagnostics of Plasmas Created by Relativistic Heavy Ion Beam Interaction with Solid Targets

A. Tauschwitz, E. Dewald, B. Becker-de Mos, I. Reinhard, M. Roth, S. Borneis, T. Kühl,
Pulsed Power System for the PHELIX Kilojoule/Petawatt-Laser at GSI Darmstadt

C. Niemann, D. Penache, S. Neff, M. Geißel, D.H.H. Hoffmann, U. Neuner, F. Rosmej, J. Wieser, E. Dewald, J. Jacoby, R. Knobloch, M. Roth, H. Wahl
Space Charge and Current Neutralized Ion Beam Transport in Laser Initiated Transport Channels

E. Dewald, K. Frank, D.H.H. Hoffmann, A. Tauschwitz
Pulsed Intense Electron Beams Produced in High Voltage Hollow Cathode Discharges: a Comparative

D. Penache, C. Niemann, A. Tauschwitz, R. Presura, R. Knobloch, S. Neff, M. Geißel, D.H.H. Hoffmann, C. Penache, M. Roth, H. Wahl

Transport Experiments of a 2.2 GeV Gold Ion Beam In A Plasma Channel at the GSI-UNILAC Facility

Funchal, Madeira, Portugal: 28th EPS Conference on Controlled Fusion and Plasma Physics, June 18-22, 2001

M. Roth

Tailoring of Laser Accelerated Ion Beams

M. Geißel, M. Allen, P. Audebert, A. Blazevic, T.E. Cowan, J. Fuchs, J.-C. Gauthier, M. Hegelich, S. Karsch, J. Meyer-ter-Vehn, A. Pukhov, T. Schlegel, M. Roth:
Target Design for Laser Accelerated Proton Beams

U. Neuner, B. Becker-de Mos, A. Blazevic, R. Bock, E. Brambrink, C. Constantin, E. Dewald, M. Geißel, U. Geißler, S. Hakuli, D.H.H. Hoffmann, J. Jacoby, A. Kozyreva, S. Neff, C. Niemann, D. Penache, P. Pirzadeh, F.B. Rosmej, O.N. Rosmej, M. Roth, T. Schlegel, M. Schollmeier, N.A. Tahir, A. Tauschwitz, S. Udrea, D. Varentsov, H. Wahl, K. Weyrich, J. Wieser
Plasma Physics with Intense Heavy Ion Beams

S. Atzeni, T.E. Cowan, J.J. Honrubia, J. Meyer-ter-Vehn, A. Pukhov, J. Ramirez, R. Ramis, M. Roth, H. Ruhl, M. Tempora
Targets for Fast Ignition by Laser Generated Fast Protons

T.E. Cowan, M. Roth, J.C. Gauthier, M. Allen, P. Audebert, A. Blazevic, J. Fuchs, M. Geissel, M. Hegelich, S. Karsch, J. Meyer-ter-Vehn, A. Pukhov, T. Schlegel, R. Stephens
Laser Accelerated Proton Beam Characteristics and Prospects for Fast Ignition

M. Hegelich, G. Pretzler, S. Karsch, D. Habs, A. Pukhov, J. Meyer-ter-Vehn, K. Witte, A. Blazevic, M. Geissel, M. Roth, T. Schlegel, P. Audebert, J. Fuchs, J.C. Gauthier, M. Allen, T.E. Cowan, W. Guenther, W. Heinrich
Spectroscopy of Laser Driven MeV-ion Jets from Thin Foil Targets

S. Hain, P. Mulser, D. Bauer
Fast Coronal Ignition

Chicago, Illinois, USA, 2001 Particle Accelerator Conference, June 18-22, 2001

H. Zimmermann, A. Bechtold, A. Schempp, J. Thibus
Funneling with the Two-Beam RFQ

Atlanta, USA: International Conference on Shock Compressed Matter, July, 2001

D.H.H. Hoffmann
Probing and Generating Shock Compressed Matter with Heavy Ion Beams

San Diego, CA, USA: SPIE Conference (4510A) on: Neutron and Charged Particles Diagnostics in Inertial Confinement Fusion, July 29 – August 3, 2001

J. C. Gauthier, M. Roth, T.E. Cowan, M. Geissel, A. Blazevic, T. Schlegel, M. Allen, P. Audebert, J. Fuchs, M. Hegelich, S. Karsch, J. Meyer-ter-Vehn, A. Pukhov
Intense Ion Beams Accelerated by Relativistic Laser Plasmas

San Diego, USA: Workshop on Non-Neutral Plasmas, 30 July - 2 August 2001

N. Uhlmann and G. Zwicknagel
Intrabeam Scattering and Halo Formation in Intense Ion Beams

G. Zwicknagel and C. Toepffer
Energy Loss of Ions by Collisions with Magnetized Electrons

Varena, Italy, 2nd International Conference on Superstrong Fields in Plasmas, August 27 - September 1, 2001

M. Roth
Low-emittance, Intense Ion Beams Driven by Relativistic Laser Plasmas

P. Mulser, H. Ruhl, S. Hain, and D. Bauer
Fast Coronal Ignition and the Problem of Energy Transport

D. Bauer, F. Cornolti, F. Ceccherini, and A. Macchi
Fullerenes and Molecules in Strong Laser Pulses: Collective Dynamics, Field Ionization and Harmonic Generation

Kyoto, Japan: Second International Conference on Inertial Fusion Sciences and Application , September 4 –10, 2001

F. Rosmej
Space Resolved Registration of Projectile X-Rays Inside Matter

O. N. Renner, F. B. Rosmej, D. M. Chambers, S. H. Glenzer, J. Hawreliak, E. Krouský, R. S. Marjoribanks, P. K. Patel, E. Wolfrum, J. A. Wark
Line Reversal between Components of the Al Ly α Doublet

F. B. Rosmej, A. Sasaki, D.H.H. Hoffmann, M. Geißel, A. Ya. Faenov, T.A. Pikuz
Space resolved high density probe based on 1s₃3y-satellite emission in hollow ions

F. B. Rosmej, D.H.H. Hoffmann, W. Süß, M. Geißel, A. Ya. Faenov, T.A. Pikuz
Advanced X-ray Diagnostics for Large Scale Dense Plasmas for Heavy Ion Beam Interaction Experiments at GSI

O. Rosmej, F. Rosmej, J. Wieser, M. Geißel, E. Brambrink, A. Blazevic, M. Roth et. al.
Space Resolved Charge State Distributions of Fast Ions inside Matter

N.A. Tahir

Creation of High-Energy-Density in Matter Using Intense Heavy Ion Beams

N.A. Tahir, A. Kozyreva, A. Shutov, P. Spiller, D.H.H. Hoffmann

Creation of High-Energy-Density Matter Using Intense Beams of Energetic Heavy Ions

N.A. Tahir, A. Kozyreva, A. Shutov, P. Spiller, D.H.H. Hoffmann

Low Entropy Compression of Frozen Deuterium Using Intense Beams of Energetic Heavy Ions

A. Kozyreva, N.A. Tahir, D. Varentsov, P. Spiller, A. Shutov, D.H.H. Hoffmann

Simulations of Recent and Future Experiments on Heating of Rare Gas Solids by Heavy Ions

P. Spiller, K. Blasche, O. Boine-Frankenheim, I. Hofmann, N.A. Tahir

Perspectives of the GSI Accelerator Complex for Fusion Drivers

Greifswald, Germany: Summer School of Plasma Physics, September, 2001

D.H.H. Hoffmann

Interaction of Intense Heavy Ion Beams and Laser Beams with Matter

R. Redmer

Physics of Dense Plasmas - Dense Hydrogen

Garching, IPP, Germany: Summer University of Plasma Physics, September 2001

D.H.H. Hoffmann

Interaction of Intense Heavy Ion Beams and Laser Beams with Matter

Palm Springs, CA, USA: Optical Society of America, Topical Conference on Applications of High Field and Short Wavelength Sources, October 21-24, 2001

M. Roth

Laser Driven Ion Acceleration

M. H. Key, C. Andersen, T. Cowan, N. Fisch, R. Freeman, S. Hatchett, E.A. Henry, J. Hill, J. Koch, B. Langdon, B. Lasinski, A. MacKinnon, P. Parks, D.M. Pennington, M.D. Perry, T.W. Phillips, M. Rosenbluth, M. Roth, T.C. Sangster, M. Singh, R. Snavely, R. Stephens, N. Stoyer, S.C. Wilks, K. Yasuike

Laser Generated Relativistic Electrons – the Key to Fast Ignition and Hard X-ray Sources

DIPLOMA- AND PHD-THESIS

E. Brambrink

Aufbau und Erprobung eines Röntgen-Backlighters zur Untersuchung dichter Plasmen

Diploma-Thesis, TU Darmstadt, July 2001

A. Tauschwitz

Space charge and Current Neutralized Transport and Focusing of Heavy Ion Beams with Discharge Plasmas

Habilitation, TU Darmstadt, June 2001

O. Meusel

Untersuchungen zum Transport niederenergetischer und hochperveanter Strahlen schwerer Ionen in einer Doppel-Gabor-Plasmalinse

Diploma-Thesis, Universität Frankfurt a. M., 2001

F. Ceccherini,

Dynamische Symmetrien und Harmonischerzeugung in intensiven Laserfeldern

PhD-Thesis, TU Darmstadt, December 2001

P. Pyrka

Plasma Physics With the TESLA X-Ray Free Electron Laser

Diploma-Thesis, TU München, February 2001

J. Vorberger

Thermodynamik dichter Plasmen

Diploma-Thesis, Universität Greifswald, 2001