

# List of Publications

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## Reviewed Journal Articles

57. D. Kraus, J. Vorberger, A. Pak, N.J. Hartley, L.B. Fletcher, S. Frydrych, E. Galtier, E.J. Gamboa, D.O. Gericke, S.H. Glenzer, E. Granados, M.J. MacDonald, A.J. MacKinnon, E.E. McBride, I. Nam, P. Neumayer, M. Roth, A.M. Saunders, A.K. Schuster, P. Sun, T. van Driel, T. Döppner, R.W. Falcone  
*Formation of diamonds in laser-compressed hydrocarbons at planetary interior conditions*  
Nature Astronomy, doi:10.1038/s41550-017-0219-9, (2017).
56. W. Cayzac, A. Frank, A. Ortner, V. Bagnoud, M.M. Basko, S. Bedacht, C. Bläser, A. Blaze-  
vic, S. Busold, O. Deppert, J. Ding, M. Ehret, P. Fiala, S. Frydrych, D.O. Gericke, L. Hallo,  
J. Helfrich, D. Jahn, E. Kjartansson, A. Knetsch, D. Kraus, G. Malka, N. Neumann, K.  
Pepitone, D. Pepler, S. Sander, G. Schaumann, T. Schlegel, N. Schroeter, D. Schumacher,  
M. Seibert, An. Tauschwitz, J. Vorberger, F. Wagner, S. Weih, Y. Zobus, and M. Roth  
*Experimental discrimination of ion stopping models near the Bragg peak in highly ionized  
matter*  
Nature Communications **8**, 15693 (2017).
55. P. Mabey, S. Richardson, T.G. White, L.B. Fletcher, S.H. Glenzer, N.J. Hartley, J. Vorberger,  
D.O. Gericke, G. Gregori  
*A strong diffusive mode in dense ionized matter predicted by Langevin dynamics*  
Nature Communications **8**, 14125 (2017).
54. M.J. MacDonald, J. Vorberger, R.P. Drake, S.H. Glenzer, L.B. Fletcher  
*Calculation of Debye-Scherrer diffraction patterns from arbitrarily stressed polycrystalline  
materials*  
J. Appl. Phys. **119**, 215902 (2016).
53. S.H. Glenzer, L.B. Fletcher, E. Galtier, B. Nagler, R. Alonso-Mori, B. Barbrel, S.B. Brown,  
D.A. Chapman, Z. Chen, C.B. Curry, F. Fiuza, E. Gamboa, M. Gauthier, D.O. Gericke, A.  
Gleason, S. Goede, E. Granados, P. Heimann, J. Kim, D. Kraus, M.J. MacDonald, A.J.  
MacKinnon, R. Mishra, A. Ravasio, C. Roedel, P. Sperling, W. Schumaker, Y.Y. Tsui, J.  
Vorberger, U. Zastra, A. Fry, W.E. White, J.B. Hasting, and H.J. Lee  
*Matter under extreme conditions experiments at the Linac Coherent Light Source*  
J. Phys. B: At. Mol. Opt. Phys. **49** 092001 (2016).

52. L. Waldecker, R. Bertoni, R. Ernstorfer, J. Vorberger  
*Electron-phonon coupling and energy flow in a simple metal beyond the two-temperature approximation*  
Phys. Rev. X **6**, 021003 (2016).
51. D. Kraus, A. Ravasio, M. Gauthier, D.O. Gericke, J. Vorberger, S. Frydrych, J. Helfrich, L.B. Fletcher, G. Schaumann, B. Nagler, B. Barbreil, B. Bachmann, E.J. Gamboa, S.Göde, E. Granados, G. Gregori, H.J. Lee, P. Neumayer, W. Schumaker, T. Döppner, R.W. Falcone, S.H. Glenzer, and M. Roth  
*Nanosecond formation of diamond and lonsdaleite by shock compression of graphite*  
Nature Communications, **7** 10970 (2016).
50. E.J. Gamboa, L.B. Fletcher, H.J. Lee, U. Zastra, E. Galtier, M.J. MacDonald, M. Gauthier, J. Vorberger, D.O. Gericke, E. Granados, J.B. Hastings, and S.H. Glenzer  
*Single-shot measurements of plasmons in compressed diamond with an x-ray laser*  
Physics of Plasmas **22**, 056319 (2015).
49. W. Cayzac, V. Bagnoud, M. M. Basko, A. Blazevic, A. Frank, D. O. Gericke, L. Hallo, G. Malka, A. Ortner, An. Tauschwitz, J. Vorberger, and M. Roth  
*Predictions for the energy loss of light ions in laser-generated plasmas at low and medium velocities*  
Phys. Rev. E **92**, 053109 (2015).
48. T. Schoof, S. Groth, J. Vorberger, M. Bonitz  
*Ab initio thermodynamic results for the degenerate electron gas at finite temperature*  
Phys. Rev. Lett. **115** 130402 (2015).
47. D.A. Chapman, J. Vorberger, L.B. Fletcher, L. Divol, T.Döppner, R.W. Falcone, S.H. Glenzer, G. Gregori, A.L. Kritcher, O.L. Landen, T. Ma, A.E. Pak, D.O. Gericke  
*Observation of non-Debye Screening in High-Energy-Density Matter*  
Nature Communications **6**, 6839 (2015).
46. J. Vorberger, D.O. Gericke  
*Ab initio approach to model elastic x-ray Thomson scattering*  
Phys. Rev. E **91**, 033112 (2015).
45. L.B. Fletcher, H.J. Lee, T. Döppner, E. Galtier, B. Nagler, P. Heimann, C. Fortmann, S. LePape, T. Ma, M.A. Millot, A. Pak, D. Turnbull, D. O. Gericke, J. Vorberger, T. White, G. Gregori, M. Wei, B. Barbreil, R.W. Falcone, C.-C. Kao, H. Nuhn, J. Welch, U. Zastra, P. Neumayer, J.B. Hastings, S.H. Glenzer  
*Ultra-bright x-ray laser scattering for dynamic warm dense matter physics*  
Nature Photonics (2015), DOI: 10.1038/NPHOTON.2015.41.
44. N.J. Hartley, P. Belancourt, D.A. Chapman, T. Döppner, R.P. Drake, D.O. Gericke, S.H. Glenzer, D. Khaghani, S. LePape, T. Ma, P. Neumayer, A. Pak, L. Peters, S. Richardson, J. Vorberger, T.G. White, G. Gregori  
*Electron-ion temperature equilibration in warm dense tantalum*  
High Energy Density Phys. **14**, 1 (2015).
43. [OA]C.R.D. Brown, D.O. Gericke, M. Cammarata, B.I. Cho, T. Döppner, K. Engelhorn, E. Förster, C. Fortmann, D. Fritz, E. Galtier, S.H. Glenzer, M. Harmand, P. Heimann, N.L.

- Kugland, D.Q. Lamb, H.J. Lee, R.W. Lee, H. Lemke, M. Makita, A. Moinard, C.D. Murphy, B. Nagler, P. Neumayer, K.-U. Plagemann, R. Redmer, D. Riley, F.B. Rosmej, P. Sperling, S. Toleikis, S.M. Vinko, J. Vorberger, S. White, T.G. White, K. Wünsch, U. Zastrau, D. Zhu, T. Tschentscher, G. Gregori  
*Evidence of a Glassy State in Laboratory Analogue of White Dwarf Envelopes*  
 Scientific Reports **4**, 5214 (2014).
42. T. Ma, L. Fletcher, A. Pak, D.A. Chapman, R.W. Falcone, C. Fortmann, E. Galtier, D.O. Gericke, G. Gregori, J. Hastings, O.L. Landen, S. Le Pape, H.J. Lee, B. Nagler, P. Neumayer, D. Turnbull, J. Vorberger, T.G. White, K. Wünsch, U. Zastrau, S.H. Glenzer, T. Döppner  
*Observations of strong ion-ion correlations in dense plasmas*  
 Phys. Plasma **21**, 056302 (2014).
41. L.B. Fletcher, A.L. Kritcher, A. Pak, T. Ma, T. Döppner, C. Fortmann, L. Divol, O.S. Jones, O.L. Landen, H.A. Scott, J. Vorberger, D.A. Chapman, D.O. Gericke, B.A. Mattern, G.T. Seidler, G. Gregori, R.W. Falcone, S.H. Glenzer  
*Observations of continuum depression in warm dense matter with X-ray Thomson scattering*  
 Phys. Rev. Lett. **112**, 145004 (2014).
40. [OA]J. Vorberger, D.O. Gericke  
*Comparison of electron-ion energy transfer in dense plasmas obtained from numerical simulations and quantum kinetic theory*  
 High Energy Density Phys. **10**, 1 (2014).
39. D. Kraus, J. Vorberger, D.O. Gericke, V. Bagnoud, A. Blazevic, W. Cayzac, A. Frank, G. Gregori, A. Ortner, A. Otten, F. Roth, G. Schaumann, D. Schumacher, K. Siegenthaler, F. Wagner, K. Wünsch, M. Roth  
*Probing the Complex Ion Structure in Liquid Carbon at 100GPa*  
 Phys. Rev. Lett. **111**, 255501 (2013).
38. D.A. Chapman, J. Vorberger, D.O. Gericke  
*Reduced coupled mode approach to electron-ion energy relaxation*  
 Phys. Rev. E **88**, 013102 (2013).
37. K. Falk, S.P. Regan, J. Vorberger, B.J.B. Crowley, S.H. Glenzer, S.X. Hu, C.D. Murphy, P.B. Radha, A.P. Jephcoat, J.S. Wark, D.O. Gericke, G. Gregori  
*Comparison between X-ray Scattering and Velocity-Interferometry Measurements from Shocked Liquid Deuterium*  
 Phys. Rev. E **87**, 043112 (2013).
36. S. White, G. Nersisyan, B. Kettle, T.W.J. Dzelzainis, K. McKeever, C.L.S. Lewis, A. Otten, K. Siegenthaler, D. Kraus, M. Roth, T. White, G. Gregori, D.O. Gericke, R. Baggott, D.A. Chapman, K. Wünsch, J. Vorberger, D. Riley  
*X-ray Scattering from Warm Dense Iron*  
 High Energy Density Phys. **9**, 573 (2013).
35. [OA]J. Vorberger, D.O. Gericke, W.-D. Kraeft  
*The Equation of State for Hydrogen at High Densities*  
 High Energy Density Phys. **9**, 448 (2013).
34. T. Ma, T. Döppner, R.W. Falcone, L. Fletcher, C. Fortmann, D.O. Gericke, O.L. Landen, H.J. Lee, A. Pak, J. Vorberger, K. Wünsch, S. H. Glenzer

- X-ray Scattering Measurements of Strong Ion-Ion Correlations in Shock-Compressed Aluminum*  
Phys. Rev. Lett. **110**, 065001 (2013).
33. J. Vorberger, D.O. Gericke  
*Effective Ion-Ion Potentials in Warm Dense Matter*  
High Energy Density Phys. **9**, 178 (2013).
32. L. B. Fletcher, A. Kritcher, A. Pak, T. Ma, T. Döppner, C. Fortmann, L. Divol, O.L. Landen, J. Vorberger, D.A. Chapman, D.O. Gericke, R.W. Falcone, S.H. Glenzer  
*X-ray Thomson scattering measurements of temperature and density from multi-shocked CH capsules*  
Phys. Plasma **20**, 056316 (2013).
31. S. P. Regan, K. Falk, G. Gregori, P.B. Radha, S.X. Hu, T.R. Boehly, B.J.B. Crowley, S.H. Glenzer, O.L. Landen, D.O. Gericke, T. Döppner, D.D. Meyerhofer, C.D. Murphy, T.C. Sangster, J. Vorberger  
*Inelastic X-Ray Scattering from Shocked Liquid Deuterium*  
Phys. Rev. Lett. **109**, 265003 (2012).
30. J. Vorberger, Z. Donko, I.M. Tkachenko, D.O. Gericke  
*Dynamic Ion Structure Factor of Warm Dense Matter*  
Phys. Rev. Lett. **109**, 225001 (2012).
29. [OA] T.G. White, J. Vorberger, C.R.D. Brown, B.J.B. Crowley, P. Davis, S.H. Glenzer, J.W.O. Harris, D.C. Hochhaus, S. Le Pape, T. Ma, C.D. Murphy, P. Neumayer, L.K. Pattison, S. Richardson, D.O. Gericke, G. Gregori  
*Observation of Inhibited Electron-Ion Coupling in Strongly Heated Graphite*  
Scientific Reports **2**, 889 (2012).
28. D.A. Chapman, J. Vorberger, K. Wünsch, D.O. Gericke  
*Analysis of Thomson scattering data from strongly driven hydrogen*  
High Energy Density Phys. **8**, 175 (2012).
27. D. Kraus, A. Otten, A. Frank, V. Bagnou, A. Blazevic, D. O. Gericke, G. Gregori, A. Ortner, G. Schaumann, D. Schumacher, J. Vorberger, F. Wagner, K. Wünsch, M. Roth  
*X-ray Thomson scattering on shocked graphite*  
High Energy Density Phys. **8**, 46 (2012).
26. K. Falk, S. P. Regan, J. Vorberger, M.A. Barrios, T.R. Boehly, D.E. Fratanduono, S.H. Glenzer, D.G. Hicks, S.X. Hu, C.D. Murphy, P.B. Radha, S. Rothman, A.P. Jephcoat, J.S. Wark, D.O. Gericke, G. Gregori  
*Self-consistent measurement of the equation of state of liquid deuterium*  
High Energy Density Phys. **8**, 76 (2012).
25. [OA] K. Wünsch, J. Vorberger, G. Gregori, D.O. Gericke  
*X-ray Scattering as a Probe for Warm Dense Mixtures and High-Pressure Miscibility*  
Europhys. Lett. **94**, 25001 (2011).
24. A. Pelka, G. Gregori, D.O. Gericke, J. Vorberger, S.H. Glenzer, M. Günther, K. Harres, R. Heatcote, A.L. Kritcher, N.L. Klugland, B. Li, M. Makita, J. Mithen, D. Neely, C. Niemann, A. Otten, D. Riley, G. Schaumann, M. Schollmeier, A. Tauschwitz, M. Roth

- Ultra-fast Melting of Carbon induced by Intense Proton Beams*  
Phys. Rev. Lett. **105**, 265701 (2010).
23. D.O. Gericke, J. Vorberger, K. Wünsch, G. Gregori  
*Screening of Ionic Cores in Partially Ionized Plasmas within Linear Response*  
Phys. Rev. E **81**, 065401 (2010).
  22. J. Vorberger, D.O. Gericke, Th. Bornath, M. Schlanges  
*Energy Relaxation in Dense Strongly Coupled Two-Temperature Plasmas*  
Phys. Rev. E **81**, 046404 (2010).
  21. M. Schlanges, Th. Bornath, J. Vorberger, D.O. Gericke  
*Energy Relaxation Study for Warm Dense Matter Experiments*  
Contrib. Plasma Physics **50**, 64 (2010).
  20. A.L. Kritcher, P. Neumayer, C.R.D. Brown, P. Davis, T. Döppner, R.W. Falcone, D.O. Gericke, G. Gregori, B. Holst, O.L. Landen, H.J. Lee, E.C. Morse, A. Pelka, R. Redmer, M. Roth, J. Vorberger, K. Wünsch, S.H. Glenzer  
*Measurements of Ionic Structure in Shock Compressed Lithium Hydride from Ultrafast X-Ray Thomson Scattering*  
Phys. Rev. Lett. **103**, 245004 (2009).
  19. [OA]J. Vorberger, D.O. Gericke  
*Coupled Mode Effects on Energy Transfer in Weakly Coupled, Two Temperature Plasmas*  
Physics of Plasmas, **16**, 082702 (2009).
  18. B. Barbrel, M. Koenig, A. Benuzzi-Mounaix, E. Brambrink, C.R. Brown, D.O. Gericke, B. Nagler, M. Rabec le Gloahec, D. Riley, C. Spindloe, S.M. Vinko, J. Vorberger, J. Wark, K. Wünsch, and G. Gregori  
*Measurement of Short-Range Correlations in Shock-Compressed Plastic by Short-Pulse X-Ray Scattering*  
Phys. Rev. Lett. **102**, 165004 (2009).
  17. K. Wünsch, J. Vorberger, D.O. Gericke  
*Ion Structure in Warm Dense Matter: Benchmarking HNC by First Principle Simulations*  
Phys. Rev. E **79** 010201(R) (2009).
  16. J. Vorberger  
*Hydrogen Equation of State for Ion Beam Driven Compression Experiments*  
J. Phys. A **42**, 214062 (2009).
  15. D.O. Gericke, K. Wünsch and J. Vorberger  
*Modelling the Scattering of X-Rays in Warm Dense Matter*  
Nucl. Instr. and Meth. A **606**, 142 (2009).
  14. K. Wünsch, J. Vorberger, G. Gregori and D.O. Gericke  
*Ion Structure in dense Plasmas: MSA versus HNC*  
J. Phys. A **42**, 214053 (2009).
  13. A. Grinenko, D.O. Gericke, S.H. Glenzer and J. Vorberger  
*Probing the hydrogen melting line at high pressures by dynamic compression,*  
Phys. Rev. Lett. **101**, 194801 (2008).

12. [OA]B. Militzer, W.B. Hubbard, J. Vorberger, I. Tamblyn and S.A. Bonev  
*A Massive Core in Jupiter Predicted from First-Principle Simulations*,  
Astrophys. J. Lett. **L688**, 45 (2008).
11. E. Garçia Saiz, G. Gregori, D.O. Gericke, J. Vorberger, B. Barbrel, R.J. Clarke, R.R. Freeman, S.H. Glenzer, F.Y. Khattak, M. Koenig, O.L. Landen, D. Neely, P. Neumayer, M.M. Notley, A. Pelka, D. Price, M. Roth, M. Schollmeier, C. Spindloe, R.L. Weber, L. van Woerkom, K. Wünsch and D. Riley  
*Probing Warm Dense Lithium by Inelastic X-Ray Scattering*,  
Nature Phys. **4**, 940 (2008).
10. J. Vorberger and D.O. Gericke  
*Temperature Equilibration in Rapidly Heated Plasmas at Solid State Densities*,  
Journal of Physics (Conference Series) **112**, 032077 (2008).
9. K.Wünsch, J. Vorberger and D.O. Gericke  
*Ion Structure for X-Ray Thomson Scattering in Dense Fusion Plasmas*,  
Journal of Physics (Conference Series) **112**, 022084 (2008).
8. [OA]J. Vorberger, I. Tamblyn, S.A. Bonev and B.Militzer  
*Properties of Dense Fluid Hydrogen and Helium in Giant Gas Planets*  
Contrib. Plasma Phys. **47**, 267 (2007).
7. W.-D. Kraeft, J.Vorberger, D.O.Gericke and M. Schlanges  
*Thermodynamic Functions for Plasmas beyond Montroll Ward*  
Contrib. Plasma Phys. **47**, 253 (2007).
6. [OA]J. Vorberger, I. Tamblyn, S.A. Bonev and B. Militzer  
*Hydrogen-Helium Mixtures in the Interiors of Giant Planets*  
Phys. Rev. B **75**, 024206 (2007).
5. J. Vorberger, M. Schlanges, D.O. Gericke and W.-D. Kraeft  
*Equation of State of High Density Plasmas*  
J. Phys. A: Math. Gen. **39**, 4707 (2006).
4. M. Schlanges, V. Bezkrovniy, J. Vorberger, D. Kremp and W.-D. Kraeft  
*Thermodynamic Properties of Dense Hydrogen*  
Contrib. Plasma Phys. **45**, 405 (2005).
3. J. Vorberger, M. Schlanges and W.-D. Kraeft  
*Equation of State for Weakly Coupled Quantum Plasmas*  
Phys. Rev. E **69**, 046407 (2004).
2. M. Schlanges, J. Vorberger, H.E. DeWitt and W.-D. Kraeft  
*Equation of State and Correlation Energy of Dense Plasmas*  
J. Phys. A: Math. Gen. **36** (22), 5949 (2003).
1. W.-D. Kraeft, M. Schlanges, J. Vorberger and H.E. DeWitt  
*Kinetic and Correlation Energies and Distribution Functions of Dense Plasmas*  
Phys. Rev. E **66**, 046405 (2002).

## Conference Proceedings and Book Contributions

19. D.A. Chapman, J. Vorberger, K. Wünsch, D.O. Gericke  
*Modelling Thomson Scattering for Systems with Non-equilibrium Electron Distribution Functions*  
EPJ Web of Conferences **59**, 13009 (2013).
18. K. Wünsch, J. Vorberger, D.O. Gericke  
*Testing Ion Structure Models with X-ray Thomson Scattering*  
EPJ Web of Conferences **59**, 16002 (2013).
17. D.J. Edie, J. Vorberger, S. Rose, D.O. Gericke  
 *$\alpha$ -Particle Stopping and Electron-ion Energy Relaxation in Highly Compressed ICF Fuel*  
EPJ Web of Conferences **59**, 05018 (2013).
16. J. Vorberger, D.O. Gericke  
*Theory of Electron-Ion Energy Transfer Applied to Laser Ablation*  
International Symposium on High Power Laser Ablation (HPLA)  
AIP Conf. Proc. **1464**, 572 (2012).
15. D.O. Gericke, K.Wünsch, A. Grinenko, J. Vorberger  
*Structural Properties of Warm Dense Matter*  
Proceedings of the Conference on Progress in Nonequilibrium Green's Functions, Glasgow  
J. Phys. Conf. Ser. **220** 012001 (2010).
14. J. Vorberger, D.O. Gericke, Th. Bornath, M. Schlanges  
*Energy and Temperature Relaxation described by Nonequilibrium Green's Functions*  
Proceedings of the Conference on Progress in Nonequilibrium Green's Functions, Glasgow  
J. Phys. Conf. Ser. **220** 012002 (2010).
13. G. Gregori, J. Vorberger, D.O. Gericke  
*Hybrid Simulations for the Ion Structure and Dynamics in Dense Plasmas*  
Proceedings of the 16th International Conference on Atomic Processes in Plasma  
AIP Conf. Proc. **1161** 280 (2009).
12. J. Vorberger  
*The Hydrogen-Helium Equation of State and its Implications for Jupiter*  
GSI Annual Report 2008  
*High Energy Density Physics with Intense Ion and Laser Beams* (GSI, Darmstadt, 2008, p. 36).
11. A. Grinenko, D.O. Gericke, J. Vorberger, S.H. Glenzer  
*Melting of Dense Hydrogen during Heavy Ion Beam-Driven Compression*  
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*High Energy Density Physics with Intense Ion and Laser Beams* (GSI, Darmstadt, 2008, p. 37)
10. K. Wünsch, J. Vorberger, D.O. Gericke  
*Effect of Core Electrons on the Ionic Structure of Warm Dense Matter*  
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*High Energy Density Physics with Intense Ion and Laser Beams* (GSI, Darmstadt, 2008, p. 38).

9. D.O. Gericke and J. Vorberger  
*Energy Transfer Rates in Dense Two-Temperature Plasmas with Degenerate Electrons*  
High Power Laser Science, Central Laser Facility Annual Report 2006/2007 p. 19, RAL,  
Oxford (2008).
8. J. Vorberger, I. Tamblyn, S.A. Bonev, B.Militzer, B.Hubbard  
*Properties of Dense Fluid Hydrogen and Helium and Implications for Giant Gas Planets*  
EPS Conference on Plasma Physics, (2007).
7. J. Vorberger and D.O. Gericke  
*Collective Modes and Energy Transfer Rates in Two-Temperature-Plasmas*  
in GSI Annual Report 2004  
*High Energy Density Physics with Intense Laser and Ion Beams* (GSI, Darmstadt, 2005, p.  
47).
6. J. Vorberger, M. Schlanges and W.-D. Kraeft  
*Quantum Statistical Approach to Dense, Weakly Coupled Plasmas*  
in *Equation of State and Phase Transition Issues in Models of Ordinary Astrophysical Matter*,  
V. Celebonovic, W. Dppen, D. Gough (Eds.)  
AIP conference proceedings **731**, Melville (2004).
5. J. Vorberger, M. Schlanges, W.-D. Kraeft and H.E. DeWitt  
*Thermodynamic Functions of Dense Quantum Plasmas*  
in *Progress in Nonequilibrium Green's Functions II*, M. Bonitz, D. Semkat (Eds.), World  
Scientific, New Jersey (2003).
4. J. Vorberger, M. Schlanges and W.-D. Kraeft  
*Thermodynamic Properties of Plasmas at High Densities*  
in *ICPIG XXVI International Conference on Phenomena in Ionized Gases*, J. Meichsner, D.  
Loffhagen, H.-E. Wagner (Eds.), Greifswald (2003).
3. J. Vorberger, M. Schlanges and W.-D. Kraeft  
*Equation of State for Weakly Coupled Quantum Plasmas High Energy Density in Matter with*  
*Intense Laser and Ion Beams*, GSI Annual Report (2004).
2. J. Vorberger, M. Schlanges and W.-D. Kraeft  
*Equation of State for Dense Quantum Plasmas*  
*High Energy Density in Matter Produced by Heavy Ion Beams*, GSI Annual Report (2001).
1. J. Vorberger, M. Schlanges, J. Riemann and W.-D. Kraeft  
*Thermodynamics of Degenerate Plasmas, Analytics vs. Numerics*  
*High Energy Density in Matter Produced by Heavy Ion Beams*, GSI Annual Report (2000).

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