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RESUME

I was born and educated in Paris, France. I maintained my Ph. D in 1969. I moved to Israel in 1971, where I eventually became Full Professor at the Hebrew University. I came to the United States in 1988 for a sabbatical at Lawrence Livermore National Laboratory, and settled in Washington, DC as a contractor at the Naval Research Laboratory. I presently reside in Zurich, Switzerland for family reasons, but continue to work for ARTEP, as a contractor for the Naval Research Laboratory.

EDUCATION

1969	*Doctorat d'Etat* (Ph.D.)University of Paris, Orsay Campus, France *Title:* The Parametric Potential, a New Method for the Computation of Atomic Wavefunctions. *Advisors:* Alfred Kastler (Nobel Laureate), Bryan R. Judd, Pierre Jacquinot.
1961	*Licence de Physique* (B.S.). University of Paris, Orsay Campus, France.

WORK EXPERIENCE

1991 - Present	Senior Scientist, ARTEP, Inc. Under contract with Naval Research Laboratory, Washington, DC.
1989 - 1991	Full Professor (tenure) The Hebrew University, Jerusalem, Israel.
1984 - 1989	Associate Professor of Physics (tenure) The Hebrew University, Jerusalem, Israel.
1985 - 1987	Head, Theoretical Physics Section of the Racah Institute of Physics

	The Hebrew University, Jerusalem, Israel.
1980 - 1984	Senior Lecturer (with tenure) The Hebrew University, Jerusalem, Israel.
1973 - 1980	Senior Lecturer The Hebrew University, Jerusalem, Israel.
1969 - 1973	"Chargé de Recherches "(equivalent to Assistant Professor) Laboratoire Aimé Cotton, Orsay, France. (Centre National de la Recherche Scientifique)
1963 - 1969	"Attaché de Recherches" (equivalent to Senior Lecturer) Laboratoire Aimé Cotton, Orsay, France (CNRS).
1961 - 1963	"Assistant" (equivalent to Teaching Assistant) University of Paris (Orsay Campus), France.

TEMPORARY AND VISITING POSITIONS

1990 - 1991	Staff Scientist III. Lawrence Berkeley Laboratory, Berkeley, CA .
1/1989	Senior Visiting Scientist Ecole Polytechnique, Palaiseau, France.
1989	Senior Scientist (Contractor) Lawrence Livermore National Laboratory, Livermore, CA.
1985 - 1989	Consultant Lawrence Livermore National Laboratory, Livermore, CA.
8-10 /1988	Contractor (Supply of Atomic Physics Code) National Institute for Standards and Technology, Gaithersburg, MD.
1985	Consultant Laboratory for Laser Energetics, Univ. of Rochester, N.Y.
8/1983	Visiting Full Professor University of Paris, Orsay Campus, France.
8/1981	Visiting Full Professor University of Paris, Orsay Campus, France.
6 - 7/1978	Senior Visiting Scientist Laboratoire Aimé Cotton, Orsay, France.
8 - 9/1978	Senior Visiting Scientist Theoretical Chemistry Institute, Oxford, England.
1971 - 1973	Post-doctoral Fellowship from CNRS at the Hebrew University, Jerusalem, Israel.

COMMITTEES

1992-present	Member, Scientific Committee for the conference "Atomic Processes in Plasmas"
1985 - 1988	Member, Supervision Committee for Research Students of the Faculty of Sciences, The Hebrew University, Jerusalem, Israel.
1987 - 1988	Member, The University Computing Center Committee The Hebrew University, Jerusalem, Israel.

1986 Chairman, Faculty of Sciences Computer Committee
The Hebrew University, Jerusalem, Israel

REFEREEING RESPONSABILITIES

I currently referee manuscripts for Physical Review A, Physical Review E, Physical Review Letters, Journal of Physics B, Physics of Plasmas, and Physica Scripta, on average one manuscript a month.

CURRENT RESEARCH INTERESTS

At present, I am in charge of the atomic physics part of the simulation of targets for inertal confinement fusion (ICF): Generation, transfer and absorption of radiation due to ionized atoms in the plasma, as well as computation of data for equation of state (EOS).

My project of many years was to set up an integrated set of programs for the complete modeling of populations of excited states of any atom in plasmas, and the corresponding radiative properties. Such a code would enable precise simulation of radiation in hot plasmas, give reliable opacities, and would give accurate diagnostics of laboratory and astrophysical plasmas. This is still a challenge– although a lot of progress has been recently achieved– because heavy atoms in hot plasmas may exist in millions of excited states, belonging to many ionization stages. To this end I developed concepts, models and codes for dealing with highly ionized atoms, their structure, radiative transition probabilities, cross sections for excitations, recombination, autoionization, ionization, etc. Examples of these concepts which proved to be useful, and are widely recognized, are the Parametric Potential method*[2–6,10] for atomic wavefunctions, the Factorization-Interpolation method for collision cross sections[63,72,78], and the Unresolved Transition Array concept.

These ideas, and original numerical methods - like the NJGRAF code[53] for arbitrary recoupling coefficients, and phase amplitude algorithms for continuum wavefunctions and integrals[87]- are the basis of the efficiency of the HULLAC code. At this point this code allows to generate easily, accurately and quickly (a matter of minutes on a workstation) a complete detailed, Collisional Radiative model for any ion stage of any atom, with a sizeable number of levels (≈1000 per ion).

The concept of Unresolved Transition Arrays (UTA) [see 54 for a review] was introduced in 1978 with my French collaborators J. Bauche and C. Bauche-Arnoult . It is now widely used to describe UV and X-ray spectra of highly ionized heavy atoms, where thousands of lines coalesce in broad quasi continuum spectra. Fifteen of my papers are devoted to the development of this concept. The UTA concept and the Parametric Potential method are both incorporated into the highly successful Super Transition Array (STA) model for opacities of my former student A. Bar-Shalom.

In the past few years, I implemented successfully in the NRL Hydro-code a model developed by M. Busquet, which is a first order correction to LTE [96]. This simple model proved to be very successful[[95].

Recently, I participated in the development of SCROLL (Super Configuration Radiative cOLLisional model), a collisional radiative model based on super configurations, with my long time collaborators A. Bar-Shalom and J. Oreg [93,94]

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* *For references, see the joined publication list.*

Finally, I apply all of the above to the spectroscopy[13,15,28,40] and the diagnostics of laboratory [50,56,68] and astrophysical plasmas[80–82], the modeling of X-ray lasers[64,66,73] and computation of opacities for plasma simulations and target design[103,104].

INTERNATIONAL CONFERENCE ORGANIZATION

Atomic Processes in Hot Plasmas, Jerusalem, Israel, March 1986.
85 Participants. Supported By the Israeli Ministry of Science and the Hebrew University.

CURRENT COLLABORATORS

I presently maintain close collaboration with the following scientists, in addition to the team at NRL:

A. Bar-Shalom and J. Oreg, Nuclear Research Center Negev, Beer Sheba, Israel.
J. Bauche and C. Bauche-Arnoult, Laboratoire Aimé Cotton, Orsay, France.
M. Busquet, CEA, Bruyeres-le-Chatel, France.
U. Feldman and G. Doscheck, Space Science Center, Naval Research Laboratory.
J.C. Gauthier, École Polytechnique, Palaiseau, France.
W. H. Goldstein, Lawrence Livermore National Laboratory.
R. Mancini, Physics Dept. University of Nevada, Reno..

TEACHING EXPERIENCE

Hebrew University, Jerusalem, Israel

1986 - 1988	Introduction to Computer physics (undergraduate, first time taught)
1984 - 1988	Computer physics (graduate, first time taught)
1978 - 1988	First year undergraduate Physics Lab (2 Semesters each year)
1975 - 1988	Research advisor of M.S. and Ph.D. students
1983 - 1984	Research seminar: Atoms and plasmas (graduate)
1981- 1982	Plasma spectroscopy (graduate)
1980 - 1982	General Physics for medicine students (2 Semesters each year)
1978	General Physics for first year chemistry and biology students: Waves
1976 - 1977	Plasma spectroscopy (graduate)

University of Paris-Sud (Orsay), France

1969	Atomic Physics (undergraduate)
1963 - 1966	Optics Lab (undergraduate)

Marcel Klapisch, List Of Publications
(December 2004)

The following list includes only articles which have been submitted to peer review, and actually published in scientific journals or in published conference proceedings . Please note that in many cases the list of authors conforms to the European convention of alphabetical order.

1. Hyperfine Structure of Europium I, Y. Bordarier, B.R. Judd, M. Klapisch Proc. Roy. Soc. 289, 81-96 (1965).
2. Une Nouvelle Methode pour le Calcul des Fonctions d'Onde et la Classification des Spectres Atomique, M. Klapisch, Comptes Rendus de l'Academie 265, 914-917 (1967).
3. Results of Parametric Potential Applied to Rare Gases: M. Aymar, M. Crance, M. Klapisch, Journal de Physique 31, C4, 141-148 (1970).
4. Determination Theorique, des Probabilitès de Transitions dans le Spectre du Neon I, S. Feneuille, M. Klapisch, E. Koenig, S. Liberman, Physica 48, 571-588 (1970).
5. Theoretical Transition Probabilities and Lifetimes in Noble Gas Spectra, M. Aymar, S. Feneuille, M. Klapisch, Nucl. Instr. and Meth. 90, 137-143 (1970).
6. A Program for Computation of Atomic Wavefunctions, M. Klapisch , Computer Phys. Comm. 2, 239-260 (1971).
7. Synthese d'empilements de couches minces, E. Pelletier, M. Klapisch, P. Giacomo, Nouv. Rev. Optique Appl. 2, 247-254 (1971).
8. Remarks on Brillouin's theorem in the atomic variational approach, J. Bauche, M. Klapisch, J. Phys. B5, 29-36 (1972).
9. Thermodynamic Stability of Relativistic Stellar Clusters, J. Katz, G. Horwitz, M. Klapisch, Astrophys. Jour. 199, 307-321 (1975).
10. The 1s-3p K_β -like X-ray Spectrum of Highly Ionized Iron, M. Klapisch, J.L. Schwob, B.S. Fraenkel, J. Oreg, J. Opt. Soc. Am. 67, 148-155 (1977).
11. Identification of Mo XV to Mo XXXIII in the soft X-ray Spectrum of the TFR Tokamak, J.L. Schwob, M. Klapisch, M. Finkenthal, N. Schweitzer and C. Breton, C. De Michelis, M. Mattioli, Phys. Lett. 62A, 85-89 (1977).
12. Electron Configuration Mixing and Parity Non-conservation in Atomic Bismuth, E.M. Henley, M. Klapisch and L. Wilets, Phys. Rev. Lett. 39, 994-997 (1977).
13. Identification of Forbidden Lines in the Soft X-ray Spectrum of the TFR Tokamak, M. Klapisch, J.L. Schwob, M. Finkenthal, B.S. Fraenkel, S. Egert, A. Bar-Shalom, C. Breton, C. de Michelis and M. Mattioli, Phys. Rev. Lett. 41, 403-406 (1978).

l4. Mean Wavelength and Spectral Width of Transition Arrays in X-UV Atomic Spectra, C. Bauche-Arnoult, J. Bauche and M. Klapisch, J. Opt. Soc. Am. 68, 1136-1139 (1978).

l5. Identification of Magnetic Quadrupole Lines of Highly Ionized Ni, Cr, Fe in the TFR 600-Tokamak Plasma, M. Klapisch, A. Bar-Shalom, J.L. Schwob, B.S. Fraenkel, C. Breton, C. de Michelis, M. Finkenthal and M. Mattioli, Phys. Lett. 69A, 34-36 (1978).

l6. Variance of the Distributions of Energy Levels and of the Transition Arrays in Atomic Spectra, C. Bauche-Arnoult, J. Bauche and M. Klapisch, Phys. Rev. A20, 2424-2439 (1979).

17. Identification of the Spectra of Hf XLV, Ta XLVI, W XLVII, and Re XLVIII isoelectronic to Ni I in Laser produced plasmas, A. Zigler, H. Zmora, N. Spector, M. Klapisch, J.L. Schwob and A. Bar-Shalom, J.Opt. Soc. Am. 70, 129-132 (1980).

18. Nickel-like spectrum of Platinum emitted from a laser produced plasma, A. Zigler, H. Zmora, N. Spector, M. Klapisch, J.L. Schwob and A. Bar-Shalom, Phys. Lett. 75A, 343-344 (1980).

19. The Spectroscopy of Tokamaks, M. Klapisch, J. Physique 41, C3 , 187-190 (1980).

20. Theoretical Studies of Oscillator Strengths for the Spectroscopy of Hot Plasmas, M. Klapisch, in *Atomic and Molecular Physics in Controlled Thermonuclear Fusion*, Edited by M.R.C. McDowell and A.M. Ferendeci, NATO series, Plenum, 1980. pp423-448.

21. Nickel-like Spectra of Tm XLII and Yb XLIII from laser produced plasma, M. Klapisch, A. Bar-Shalom, P. Mandelbaum , J.L. Schwob A. Zigler, H. Zmora, and S. Jackel, Phys. Lett. 79A, 67-70 (1980).

22. Nickel-like Spectra of Elements Y XII to Ag XX from a Vacuum Spark, N. Schweitzer, M. Klapisch, J.L. Schwob, M. Finkenthal, A. Bar-Shalom, P. Mandelbaum and B.S. Fraenkel, J. Opt. Soc. Am. 71, 219-226 (1981).

23. Interpretation and Relativistic Extension of Bely's Approximation for Exchange in Electron-ion Collisions, M. Klapisch, J. Oreg and A. Bar-Shalom, J. Phys. B14, L327-328 (1981).

24. 3d-4p Transitions in the Soft X-rays Spectra of Mo XIV and of Isoelectronic Y to Ag Ions from a Low Inductance Vacuum Spark, M. Klapisch, P. Mandelbaum, J.L. Schwob, A. Bar-Shalom and N. Schweitzer, Phys. Lett. 85A, 177-l81 (1981).

25. Identification of 3d-4p transitions in Co-like W XLVIII and Tm XLII and in Cu-like W XLVI and Tm XLI from Laser produced plasma, M. Klapisch, P. Mandelbaum, A. Bar-Shalom, J.L. Schwob, A. Zigler and S. Jackel, J. Opt. Soc. Am., 71,1276-1281 (1981).

26. Variance of the transition arrays in atomic Spectra II. Configurations with more than two open subshells, C. Bauche-Arnoult, J. Bauche and M. Klapisch, Phys. Rev. A25, 2641-2646 (1982).
27. Non-relativistic energies from relativistic radial integrals in atoms and ions, J. Bauche, C. Bauche-Arnoult, E. Luc-Koenig and M. Klapisch, J. Phys. B. 15, 2325-2333 (1982).
28. Interpretation of Unresolved Transition Arrays in the soft x-ray spectra of highly ionized Molybdenum and Palladium. M. Klapisch, E. Meroz, P. Mandelbaum, A. Zigler, C. Bauche-Arnoult and J. Bauche, Phys. Rev. A25, 2391-2394 (1982).
29. The $3d^9$-$3d^8 4p$ Transitions in the Spectra of Highly-Ionized Elements Yttrium to Silver (Y XIII-AgXXI), J.F. Wyart, M. Klapisch, J.L. Schwob and N. Schweitzer, Physica Scripta 26, 141-154 (1982).
30. Emissive Zones of Complex Atomic Configuration in Highly Ionized Atoms, J. Bauche , C. Bauche-Arnoult , E. Luc-Koenig , J.F. Wyart and M. Klapisch, Phys. Rev, A28, 829-835 (1983)
31. The Spectroscopy of Unresolved Transition Arrays in Highly Ionized Atoms, M. Klapisch, J. Bauche and C. Bauche-Arnoult. Physica Scripta T3, 222-225 (1983).
32. Classification of X-ray Spectra from Laser produced plasmas of atoms from Tm to Pt in the range 6-9Å. P. Mandelbaum, M. Klapisch, J.L. Schwob, A. Bar-Shalom and A. Zigler, Physica Scripta, 27 ,39-53 (1983).
33. Electric Dipole Oscillator Strength, Length and Velocity, D.V.I. Roginsky, M. Klapisch, and M. Cohen, Chem. Phys. Letters 95, 568-572 (1983).
34. Spectra of the Iron-like Ions from Y XIV to Ag XXII, J.F. Wyart, M. Klapisch, J.L. Schwob, N. Schweitzer and P. Mandelbaum, Physica Scripta 27, 275-290 (1983).
35. Classification of Cu-like 3p-4s and 3p-4d transitions in X-ray spectra of laser produced plasmas for atoms Tm to Re, P. Mandelbaum, M. Klapisch, A. Bar-Shalom, J.L. Schwob and A. Zigler, Phys. Lett. 99A, 84-88 (1983).
36. Spectra of Manganese-like Ions from Y XV to Ag XXIII, J.F. Wyart, M. Klapisch, J.L. Schwob, and P. Mandelbaum, Physica Scripta 28, 331- (1984)
37. Asymmetry of l^{N+1} -l^N l' transition-array patterns in ionic spectra, C. Bauche-Arnoult, J. Bauche and M. Klapisch, Phys. Rev. A30, 3026- 3032(1984).
38. Cu-, Ni-, Co-like Spectra of Cd and In in Laser produced plasmas. N. Spector, Y. Gazit, M. Finkenthal, P.Mandelbaum, M. Klapisch and J.L. Schwob, J. Phys. B17, L275-278 (1984).
39. Variance of the distributions of energy levels and of the transition arrays in atomic spectra, III. Case of the Spin-Orbit-Split Arrays. C. Bauche-Arnoult, J. Bauche, and M. Klapisch, Phys. Rev.,A31, 2248-2259 (1985).

40. Analysis of the 3d-5f subarrays in the spectrum of highly ionized tantalum.P. Audebert, J.C. Gauthier, J.P.Geindre, C.Chenais-Popovics, C. Bauche-Arnoult, J. Bauche , M. Klapisch, E. Luc-Koenig and J.F. Wyart, Phys. Rev.A32,409-411(1985)
41. Spectra of highly ionised zirconium and molybdenum in the 60-150Å range from PLT tokamak plasmas. M.Finkenthal, B.C.Stratton, H.W.Moos, W.L.Hodge, S.Suckewer, S.Cohen, P.Mandelbaum and M. Klapisch, J. Phys. B18, 4393-4402 (1985)
42. The effect of inner-shell ionization on intensities of lines from Mg I like ions in tokamak plasmas. M.Finkenthal, B.C.Stratton, H.W.Moos, A. Bar-Shalom and M. Klapisch, Phys. Lett., 108A, 71-74 (1985).
43. $2s^22p^53s$-$2s2p^63s$ transitions in the Ne I-like ions of chromium, iron and nickel from TFR-tokamak-produced plasma. M. Finkenthal, P. Mandelbaum, A. Bar-Shalom, M. Klapisch, J.L. Schwob, C. Breton, C. De Michelis, and M. Mattioli, J. Phys. B18, L331-335 (1985).
44. Density-sensitive electric quadrupole decay in Ni-like ions observed in laser-produced plasmas. J.F. Wyart, C. Bauche-Arnoult, J.C. Gauthier, J.P.Geindre, P. Monier, M. Klapisch, A. Bar-Shalom and A.Cohn. Phys. Rev, A34, 701-704 (1986).
45. Interpretation of laser produced Au and W X-ray spectra in the 3 keV range. A.Zigler, M.Klapisch and P.Mandelbaum, Phys. Lett. 117A, 31-35 (1986).
46. The Unresolved 3d-4f Transitions in the X-ray Spectra of Highly Ionized Tm to Re from Laser Produced Plasmas. M.Klapisch, P.Mandelbaum, A.Zigler, C. Bauche-Arnoult and J. Bauche , Physica Scripta, 34, 51-57 (1986).
47. The spectrum of higly ionized praseodymium and dysprosium from the Texas tokamak plasma in the 50-250Å range. M. Finkenthal, A.S. Lippmann, L.K. Huang, T.L. Yu, B.C. Stratton, H.W. Moos, M.Klapisch, P. Mandelbaum, A. Bar-Shalom, W. L. Hodge, P.E. Phillips, T.R. Price, J.C. Porter, B. Richards, and W. L. Rowan, J. Appl. Phys., 59, 3644-3649 (1986).
48. Use of Unresolved Transition Arrays for plasma diagnostics. A. Zigler, M. Givon, E. Yarkoni, M. Kishinevsky, E. Goldberg, B. Arad and M. Klapisch, Phys. Rev. A35, 280 (1987)
49. Quenching of transition arrays through configuration mixing. J. Bauche, C. Bauche-Arnoult, M. Klapisch, P. Mandelbaum and J.L. Schwob, J. Phys. B. 20, 1443 (1987).
50. Independent Determinations of Temperature and Ionization Balance in a Laser-Produced Plasma by Use of L-Shell X-Ray Spectra. W. H. Goldstein, R.S. Walling, J. Bailey, M.H. Chen, R. Fortner, M. Klapisch, T. Phillips, and R.E. Stewart, Phys. Rev. Lett. 58, 2300 (1987).
51. Interpretation of the quasicontinuum band emitted by highly ionized rare-earth elements in the 70-100Å range. P. Mandelbaum, M. Finkenthal, J.L. Schwob, and M. Klapisch, Phys. Rev. A35, 5051 (1987).

52. Identification of n=5 to n=4 Transitions in Zinc-like Ions from Yttrium to Tin (Y X-Sn XXI). J.F.Wyart, P. Mandelbaum, M. Klapisch, J.-L. Schwob, and N. Schweitzer, Phys. Scripta 36, 224 (1987).
53. Transition Arrays in the Spectra of Ionized Atoms. J. Bauche, C. Bauche-Arnoult and M. Klapisch, Advances At. Mol. Phys. 23, 131-195 (1987).
54. NJGRAF- An efficient program for calculation of general recoupling coefficients by graphical analysis, compatible with NJSYM. A. Bar-Shalom and M. Klapisch, Computer Phys. Comm., 50, 375-393 (1988).
55. A Perturbation Theory for the Population of energy levels in non LTE Plasmas, M. Klapisch, J. de Physique Supp. 49, C1-343-347 (1988).
56. Diagnostics of gold laser plasmas J.C. Gauthier, J.P. Geindre, P. Monier, C. Chesnais-Popovics, N. Tragin, M. Klapisch, A. Bar-Shalom, J. de Physique Supp. 49, C1-357-360 (1988).
57. The Cu I and Zn I like Spectra of Pr, Eu, Gd, Dy, and Yb emitted by a Tokamak plasma in the 50 - 200Å range, W.L. Hodge, M. Finkenthal, H.W. Moos, S. Lippman, L.K. Huang, A Bar-Shalom, and M. Klapisch, J. de Physique Supp.49, C1-75-77 (1988).
58. Analysis of quasi-continuum bands and line spectra of highly ionised W and Au, P. Mandelbaum, J.L. Schwob, M. Finkenthal, and M. Klapisch, J. de Physique Supp.49, C1-217-220 (1988).
59. A Perturbation Theory for the Population of Atomic Energy Levels in Non-LTE Plasmas, M. Klapisch, in *Atomic Processes in Plasmas*, Edited by A. Hauer and A. L. Merts, American Institute of Physics, N.Y. 1988.pp 71-77.
60. Soft X-Ray bands of highly ionized tungsten, gold and lead emitted by the TEXT Tokamak plasma, M. Finkenthal, L.K. Huang, S. Lippmann, H.W. Moos, P. Mandelbaum, J.L. Schwob, M. Klapisch and TEXT Group, Phys. Lett. A 127, 255-258 (1988).
61. Unresolved Transition Arrays, J. Bauche, C. Bauche-Arnoult, and M. Klapisch, Phys. Scripta, 37, 659-663 (1988).
62. Configurations and Transition Arrays in Highly Ionized Atoms, J. Bauche, C. Bauche-Arnoult, and M. Klapisch, Nucl. Instr. & Meth., B31, 139-145 (1988).
63. Electron collision excitations in complex spectra of ionized heavy atoms, A. Bar-Shalom, M. Klapisch, and J. Oreg, Phys. Rev. 38, 1773- 1784 (1988).
64. Gain predictions for Nickel-like Gadolinium from a 181 level multi-configurational distorted-wave collisional radiative model, W.H. Goldstein, J. Oreg, A. Zigler, A. Bar-Shalom, and M. Klapisch, Phys. Rev. A38, 1797-1804 (1988).
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66. Model calculations for a 600 Å laser based on photo-pumping of Mo^{6+} by a spectral line of Mo^{11+}, M. Klapisch, M. Cohen, W. H. Goldstein, and U. Feldman, Phys. Scripta , 41, 819-822 (1990).
67. Spectral line intensities for the carbon isoelectronic sequence (Kr XXXI through Xe IL) J. F. Seely, U. Feldman, S. Rozzi, W. H. Goldstein and M. Klapisch, At. Data and Nuc. Data Tables, 45, 321-352 (1990).
68. Time-resolved L-shell absorption spectroscopy: A direct measurement of density and temperature in a germanium Laser-produced plasma, J. Bruneau, C. Chenais-Popovics, D. Desenne, J.-C. Gauthier, J.-P. Geindre, M. Klapisch, J.-P. Le Breton, M. Louis-Jacquet, D. Naccache, and J.-P. Perrine, Phys. Rev. Letters, 65, 1435-1438 (1990).
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71. Breakdown of jj coupling in spin-orbit-split atomic transition arrays, J. Bauche, C. Bauche-Arnoult and M. Klapisch, J. Phys. B: At. Mol. Opt. Phys. 24, 1 (1991).
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74. Monte Carlo simulations of complex spectra for opacity calculations, P. Duffy, M. Klapisch, J. Bauche and C. Bauche-Arnoult, Phys. Rev. A44, 5715 (1991).
75. Simulation of Atomic transition arrays for opacity calculations, J. Bauche, C. Bauche-Arnoult, J.-F. Wyart, P. Duffy and M. Klapisch, Phys. Rev. A44, 5707 (1991).
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