

## 14. PUBLICATIONS

### 14.1. MAGNETIC FUSION

#### 14.1.1. Ph.D thesis

- “*Sistema de temporização e gestão de eventos para dispositivos experimentais de fusão nuclear*”  
Jorge de Sousa, June 2002  
Universidade Técnica de Lisboa
- “*Automatic time-frequency analysis for plasma density profile evaluation from microwave reflectometry*”  
Paulo Varela, July 2002  
Universidade Técnica de Lisboa
- “*O diagnóstico de espalhamento Thomson do tokamak ISTTOK*”  
Manuel Peres Alonso, October 2002  
Universidade Técnica de Lisboa
- “*Transition-probability formulation of the electron kinetics during rf current drive of fusion plasmas*”  
Jorge Belo, November 2002  
Universidade Técnica de Lisboa

#### 14.1.2. Master thesis

- “*Discretização de operadores de Fokker-Planck unidimensionais em grelhas não-uniformes*”  
Paulo Rodrigues, June 2002  
Universidade Técnica de Lisboa
- “*Sistemas de visão laser para inspecção de grandes máquinas de fusão*”  
Rita Pereira, July 2002  
Universidade de Coimbra
- “*Dois diagnósticos de raios-X de análise de amplitude de impulsos para o tokamak TCV*”  
Teresa Madeira, July 2002  
Universidade Técnica de Lisboa

#### 14.1.3. Books

- “*Proceedings of the 29<sup>th</sup> EPS Conference on Plasma Physics and Controlled Fusion*”  
R. Behn, C.A.F. Varandas  
ECA 26B, European Physical Society, Geneva,  
2002

#### 14.1.4. Articles in scientific journals

- “*Neutral beam stabilization of sawtooth oscillations in JET*”  
Angioni, C., A. Pochebon, N.N. Gorelenkov, K.G. McClements, O. Sauter, R.V. Budny, P.C. de Vries, D.F. Howell, M. Mantsinen, M.F.F. Nave, S.E. Sharapov and contributers to the EFDA-JET Workprogramme  
Plasma Phys. Control. Fusion, 44, 2, 205-222, 2002
- “*Confinement and stability on the TJ-II stellarator*”  
Ascasibar, E., C. Alejaldre, J. Alonso, L. Almoguera, A. Baciero, R. Balbin, E. Blanco, M. Blaumoser, J. Botija, B. Brañas, A. Cappa, R. Carrasco, F. Castejón, J.R. Cepero, A.A. Chmyga, J. Doncel, N.B. Dreval, S. Eguilior, L. Eliseev, T. Estrada, O. Fedyanin, A. Fernández, J.M. Fondecaba, C. Fuentes, A. Garcia, I. García-Cortés, B. Gonçalves, J. Guasp, J. Herranz, A. Hidalgo, J.A. Jiménez, I. Kirpitchev, S.M. Khrebtov, A.D. Komarov, A.S. Kozachok, L. Krupnik, F. Lapayese, K. Likin, M. Limiers, D. López-Bruna, A. López-Fraguas, J. López-Rázola, E. de la Luna, A. Malaquias, R. Martin, M. Medrano, A.V. Melnikov, P. Méndez, K.J. McCarthy, F. Medina, B. van Milligen, I.S. Nedzelskiy, M. Ochando, L. Pacios, I. Pastor, M.A. Pedrosa, A. de la Peña, A. Petrov, S. Petrov, A. Portas, J. Romero, L. Rodriguez-Rodrigo, A. Salas, E. Sanchez, J. Sanchez, K. Sarksian, S. Schepetov, N. Skvortsova, F. Tabarés, D. Tafalla, V. Tribaldos, C.A.F. Varandas, J. Vega and B. Zurro.  
Plasma Phys. Control. Fusion, 44, (12B) B307, 2002
- “*Real-time determination of internal inductance and magnetic axis radial position in JET*”  
Barana, O., A. Murari, E. Joffrin, F. Sartori and contributers to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, (10) 2271, 2002

- “A distributed, hardware reconfigurable and packet switched real-time control and data acquisition system”  
Batista, A.J.N., A. Combo, J. Sousa and C. Varandas  
Fusion Engineering and Design, 60, (3), 443, 2002
- “ELMs behaviour and edge plasma stability in JET”  
Becoulet, M., V. Parail, G. Huysmans, S. Sharapov, P.J. Lomas, G. Saibene, R. Sartori, A. Loarte, G.F. Matthews, W. Suttrop, J. Stober, A. Kallenbach, E. Joffrin, Y. Sarazin, X. Litaudon, A. Becoulet, Ph. Ghendrih and Contributors to the EFDA-JET Work Programme  
Plas. Phys. Control. Fusion, 44, A103-A112, 2002
- “Images of electron kinetics during electron-cyclotron current drive in tokamak plasmas using Gaussian short-time propagators”  
Belo, J.H., and J.P.S. Bizarro  
IEEE Transactions on Plasma Science, 30, 70, 2002
- “Modelling of Alfvén waves in JET plasmas with the CASTOR-K code”  
Borba, D., H.L. Berk, B.N. Breizman, A. Fasoli, F. Nabais, S.D. Pinches, S.E. Sharapov, D. Testa and contributors to the EFDA-JET Workprogramme  
Nuclear Fusion, 42, (8), 1029-1038, 2002
- “Natural density formation as an H-mode operational limit”  
Borrass, K., ASDEX Upgrade Team and EFDA-JET Workprogramme collaborators  
Nuclear Fusion, 42, (10), 1251, 2002
- “Microturbulence and flow shear in high-performance JET ITB plasma”  
Budny, R.V., R. Andre, A. Bécoulet, C.D. Challis, G.D. Conway, W. Dorland, D.R. Ernst, T.S. Hahm, T.C. Hender, D. McCune, G. Rewoldt, S.E. Sharapov and contributors to the EFDA-JET Workprogramme  
Plas. Phys. Control. Fusion, 44, (7) , 1215, 2002
- “Effect of low magnetic shear induced by lower hybrid current drive on high performance internal transport barriers in the Joint European Torus (JET)”  
Castaldo, C., R. Cesario, A. Cardinali, X. Litaudon, J. Mailloux, V. Rarail, T. Tala, F. Crisanti, C. Gormenzano, L. Panaccione, F. Santini, P. Smeulders, A.A. Tucillo and Contributors to the EFDA-JET Workprogramme  
Physics of Plasma, 9, (8), 3205, 2002.
- “Influence of the q-profile shape on plasma performance in JET”  
Challis, C.D., X. Litaudon, G. Tresset, Yu F. Baranov, A. Bécoulet, C. Giroud, N.C. Hawkes, D.F. Howell, E. Joffrin, P.L. Lomas, J. Mailloux, M.J. Mantinen, B.C. Stratton, D.J. Ward, K-D Zastrow and contributers to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, (7) , 1031, 2002
- “Turbulence behaviour during electron heated reversed shear discharge in JET”  
Conway, G.D., G.M.D. Hogeweij, M.R. de Baar, Yu Baranov, R. barnsley, N.C. Hawkes, X. Litaudon, J. Mailloux, E. Righi, F.G. Rimini, K-D Zastrow and contributers to the EFDA-JET Workprogramme  
Plas. Phys. Control. Fusion, 44, (7) , 1167, 2002
- “Energy confinement in steady-state ELMy H-modes in JET”  
Cordey, J.G., D.C. McDonald, K. Borrass, M. Charlet, I. Coffey, A. Kallenbach, K. Lawson, P. Lomas, J. Ongena, J. Rapp, F. Ryter, G. Saibene, R. Sartori, M. Stamp, J. Strachan, W. Suttrop, M. Valovic and contributors to the EFDA-JET Workpro-gramme.  
Plas. Phys. Control. Fusion, 44, 1929, 2002
- “A large memory, high transfer rate VME data acquisition system for the JET correlation reflectometer”  
Cruz, N., R. Pereira, M. Correia, L. Cupido, C. Correia and C. Varandas  
Fusion Engineering and Design, 60, (3) , 273, 2002
- “Modelling of mixed-phasing antenna-plasma interactions on JET A2 antennas”  
D’Ippolito, D.A., J.R. Myra, P.M. Ryan, E. Righi, J. Heikkinen, P.U. Lamalle, J.-M. Noterdaeme and Contributors to the EFDA-JET Workprogramme  
Nuclear Fusion, 42, (12), 1357, 2002
- “Confinement properties of high density impurity seeded ELMy H-mode discharges at low and high triangularity on JET”  
Dumortier, P., P. Andrew, G. Bonheure, R.V. Budny, R. Butterly, M. Charlet, I. Coffey, M. de Baar, P.C. de Vries, T. Eich, D. Hillis, C. Ingesson, S. Jachmich, G. Jackson, A. Kallenbach, H.R. Koslowski, K.D. Lawson, C. Liu, G. Maddison, A.M. Messiaen, P. Monier-Garbet, M. Murakami, M.F.F. Nave, J. Ongena, V. Parail, M.E. Puiatti, J. Rapp, F. Sartori, M. Stamp, J.D. Strachan, W. Suttrop, G. Telesca, M. Tokar, B. Unterberg, M. Valisa, M. von Heller-

- mann, B. Weyssow and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, 1845, 2002
- “*MHD spectroscopy*”  
Fasoli, A., D. Testa, S. Sharapov, H.L. Berk, B. Breizman, A. Gondhalekar, R.F. Heeter, M. Mantsinen and contributors to the EFDA-JET Workprogramme  
Plasma Phys. Control. Fusion, 44, (12B) B159, 2002
  - “*A CORBA sharing and messaging server-client information system*”  
Fernandes, H., J.P.A. Pereira and C. Varandas  
Fusion Engineering and Design, 60, (3) , 279, 2002
  - “*Time-frequency images of magnetohydrodynamic phenomena in tokamak plasmas using a discrete-time Wigner distribution*”  
Figueiredo, A.C.A., and J.P.S. Bizarro  
IEEE Transactions on Plasma Science, 30, (1), 54, 2002
  - “*On a variational approach to the extraction of quadratures from broadband reflectometry signals*”  
Figueiredo, A.C.A., and J.P.S. Bizarro  
Rev. Sci. Instrum., 73, (2) 289, 2002
  - “*Interpretation of recent power width measurements in JET MkIIIGB ELM My H-modes*”  
Fundamenski, W., S. Sipilä, G.F. Matthews, V. Riccardo, P. Andrew, T. Eich, L.C. Ingesson, T. Kiviniemi, T. Kurki-Suonio, V. Philipps and contributors to the EFDA-JET WorkProgramme  
Plas. Phys. Control. Fusion, 44, (6) , 761, 2002
  - “*Determination of the Tungsten divertor retention at ASDEX Upgrade using a sublimation probe*”  
Geier, A., H. Maier, R. Neu, K. Krieger and ASDEX Upgrade Team  
Plas. Phys. Control. Fusion, 44, 2091-2100, 2002
  - “*Behaviour of disruption generated runaways in JET*”  
Gill, R.D., B. Alper, M. de Baar, T.C. Hender, M.F. Johnson, V. Riccardo and contributors to the EFDA.JET Workprogramme  
Nuclear Fusion, 42, (8), 1039-1044, 2002
  - “*Experimental investigation of dynamical coupling between density gradients, radial electric fields and turbulent transport in the JET plasma boundary region*”  
Gonçalves, B., C. Hidalgo, M.A. Pedrosa, K. Erents, G. Matthews, B. Van Milligen, E. Sánchez, C. Silva  
Nuclear Fusion, 42, (10), 1205, 2002
  - “*Temporal evolution of neoclassical tearing modes and its effect on confinement reduction in ASDEX Upgrade*”  
Gude, A., S. Gunter, M. Maraschek, H. Zoh, and the ASDEX Upgrade Team  
Nuclear Fusion, 42, (7), 833-840, 2002
  - “*Small-angle scattering and spatial resolution of fluctuation reflectometry: comparison of 2D analytical theory with numerical calculations*”  
Gusakov, E.Z., G. Leclert, I. Boucher, S. Heraux, S. Hacquin, M. Colin, V.V. Bulanin, A.V. Petrov, B.O. Yakovlev, F. Clairet and X.L. Zou.  
Plas. Phys. Control. Fusion, 44, (8), 1565, 2002
  - “*The formation and evolution of extreme shear reversals in JET and its influence on local thermal transport*”  
Hawkes, N.C., Y. Andrew, C.D. Challis, R. De Angelis, V. Drozdov, J. Hobirk, E. Joffrin P. Lotte, D. Mazon, E. Rachlew, S. Reyes-Cortes, F. Sattin, E. Solano, B.C. Stratton, T. Tala, M. Valisa and contributers to the EFDA-JET Workprogramme  
Plas. Phys. Control. Fusion, 44, (7) , 1105, 2002
  - “*MHD stability with strongly reversed magnetic shear in JET*”  
Hender, T.C., P. Hennequin, B. Alper, T. Hellsten, D.F. Howell, G.T.A. Huysmans, E. Joffrin, P. Maget, J. Manickam, M.F.F. Nave, A. Pochebon, S.E. Sharapov and contributers to the EFDA-JET Workprogramme  
Plas. Phys. Control. Fusion, 44, (7) , 1143, 2002
  - “*Neutron emission from JET DT plasmas with RF heating on minority hydrogen*”  
Henriksson, H., S. Conroy, G. Ericsson, G. Gorini, A. Hjalmarsson, J. Källne, M. Tardocchi and contributers to the EFDA-JET Workprogramme  
Plas. Phys. Control. Fusion, 44, (7) , 1253, 2002

- “Empirical similarity in the probability density function of turbulent transport in the edge plasma region in fusion plasmas”  
Hidalgo, C., B. Gonçalves, M.A. Pedrosa, J. Castellano, K. Erents, A.L. Fraguas, M. Hron, J.A. Jiménez, G.F. Matthews, B van Milligen and C. Silva  
Plas. Phys. Control. Fusion, 44, (8), 1557, 2002
- “Fluctuations, sheared radial electric fields and transport interplay in fusion plasmas”  
Hidalgo, C., M.A. Pedrosa and B. Gonçalves  
New Journal of Physics, 4, 51.1-51.12, 2002
- “Effect of ELMs on the measurement of vertical plasma position in TCV and JET”  
Hofmann, F., I. Furno, S. Gerasimov, Y. Martin, F. Milani, M.F.F. Nave, H. Reimerdes, F. Sartori, O. Sauter  
Nuclear Fusion, 42, 59-65, 2002
- “Electron heated internal transport barriers in JET”  
Hogeweij, G.M.D., Y. Baranov, G.D. Conway, S.R. Cortes, M.R. De Baar, N. Hawkes, F. Imbeaux, X. Litaudon, J. Mailloux, F.G. Rimini, S.E. Sharapov, B.C. Stratton, K-D Zastrow and contributors to the EFDA-JET Workprogramme  
Plas. Phys. Control. Fusion, 44, (7) , 1155, 2002
- “Seeding of impurities in JET H-mode discharges to mitigate the impact of ELMs”  
Jachmich, S., G. Maddison, M.N.A. Beurskens, P. Dumortier, T. Eich, A. Messiaen, M.F.F. Nave, J. Ongena, J. Rapp, J. Strachan, M. Stamp, G. Telesca, B. Unterberg and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, 1879, 2002
- “Comparison of L-mode regimes with enhanced confinement by impurity seeding in JET and DIII-D”  
Jackson, G.L., M. Murakami, D.R. Baker, R. Budny, M. Charlet, M.R. de Baar, P. Dumortier, T.E. Evans, R.J. Groebner, N.C. Hawkes, D.L. Hillis, L.C. Ingesson, E. Joffrin, H.R. Koslowski, K.D. Lawson, G. Maddison, G.R. McKee, A.M. Messiaen, P. Monier-Garbé, M.F.F. Nave, J. Ongena, J. Rapp, S. Sartori, G.M. Staebler, M. Stamp, J.D. Strachan, M. Tokar, B. Unterberg, M. von Hellerman, M.R. Wade and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, 1893, 2002
- “ $q=1$  advanced tokamak experiments in JET and comparison with ASDEX Upgrade”  
Joffrin, E., R. Wolf, B. Alper, Yu Baranov, C.D. Challis, M. de Baar, C. Giroud, C.W. Gowers, N.C. Hawkes, T.C. Hender, M. Maracheck, D. Mazon, V. Parail, A. Peeters, K-D Zastrow and contributers to the EFDA-JET Workprogramme  
Plas. Phys. Control. Fusion, 44, (7), 1203, 2002
- “Triggering of internal transport barrier in JET”  
Joffrin, E., G. Gorin, C.D. Challis, N.C. Hawkes, T.C. Hender, D.F. Howell, P. Maget, P. Mantica, D. Mazon, S.E.  
Sharapov, G. Tresset and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, (8), 1739, 2002
- “Scaling of the pedestal density in type-I ELM My H-mode discharges and the impact of upper and lower triangularity in JET and ASDEX Upgrade”  
Kallenbach, A., M.N.A Beurskens, A. Korotkov, P. Lomas, W. Suttrop, M. Charlet, D.C. McDonald, F. Milani, J. Rapp, M. Stamp, EFDA-JET Workprogramme contributors and ASDEX Upgrade Team  
Nuclear Fusion, 42, (10), 1184, 2002
- “ECRH power deposition studies in ASDEX Upgrade”  
Kirov, K., F. Leuterer, G. Pereverzev, F. Ryter, W. Suttrop and ASDEX Upgrade Team  
Plas. Phys. Control. Fusion, 44, 2583-2602, 2002
- “Monte Carlo simulations of central ion temperature measurements using neutral particle analysers”  
Kurki-Suonio, T., S. Sipila, J.A. Heikkinen, H.-U. Fahrbach, A. Khudoleev and ASDEX Upgrade Team  
Plas. Phys. Control. Fusion, 44, 475-491, 2002
- “High density operation at JET by pellet refuelling”  
Lang, P.T., B. Alper, L.R. Baylor, M. Beurskens, J.G. Cordey, R. Dux, R. Felton, L. Garzotti, G. Haas, L.D. Horton, S. Jachmich, T.T.C. Jones, A. Lorenz, P.J. Lomas, M. Maraschek, H.W. Müller, J. Ongena, J. Rapp, K.F. Renk, M. Reich, R. Sartori, G. Schmidt, M. Stamp, W. Suttrop, E. Villedieu, D. Wilson and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, 1919, 2002
- “Optimization of pellet scenarios for long pulse fuelling to high densities at JET”  
Lang, P.T., B. Alper, L.R. Baylor, M. Beurskens, J.G. Cordey, R. Dux, R. Felton, L. Garzotti, G. Haas, L.D. Horton, S. Jachmich, T.T.C. Jones, P.J. Lomas, A. Lorenz, M. Maraschek, H.W. Müller, J. Ongena, J. Rapp, M. Reich, K.F. Renk, R. Sartori, G. Schmidt, M. Stamp, W. Suttrop, E. Villedieu  
Nuclear Fusion, 42, 388-402, 2002

- “Error field locked modes thresholds in rotating plasmas, anomalous braking and spin-up”  
Lazzaro, E., R. J. Buttery, T. C. Hender, P. Zanca, R. Fitzpatrick, M. Bigi, T. Bolzonella, R. Coelho M. DeBenedetti, S. Nowak, O. Sauter, M. Stamp Contributors to the EFDA-JET work programme Physics of Plasma, 9, (8), 3906, 2002.
- “Role of the shear flow profile on the stability of magnetic islands”  
Lazzaro, E., R. Coelho, T. Ozeki  
Physics of Plasma, 9, 371, 2002.
- “Generic structure of externally driven tearing modes instabilities”  
Lazzaro, E., and R. Coelho  
Eur. Phys. J. D 19, 97, 2002
- “Towards fully non-inductive current drive operation in JET”  
Litaudon, X., F. Crisanti, B. Alper, J.F. Artaud, Yu. Baranov, E. Barbato, V. Basiuk, A. Becoulet, M. Becoulet, C. Castaldo, C.D. Challis, G.D. Conway, R. Dux, L.G. Eriksson, B. Esposito, C. Fourment, D. Frigione, X. Garbet, C. Giroud, N.C. Hawkes, P. Hennequin, G. Huysmans, F. Imbeaux, E. Joffrin, P.L. Lomas, P. Lotte, P. Maget, M. Mantsinen, J. Mailloux, D. Mazon, F. Milani, D. Moreau, V. Parail, E. Pohn, F.G. Rimini, Y. Sarazin, G. Tresset, K.-D. Zastrow, M. Zerbini and Contributors to the EFDA-JET Work Programme Plas. Phys. Control. Fusion, 44, 1057-1086, 2002
- “Characteristics and scaling of energy and particle losses during Type I ELMs in JET H-modes”  
Loarte, A., M. Becoulet, G. Saibene, R. Sartori, D.J. Campbell, T. Eich, A. Herrmann, M. Laux, W. Suttrop, B. Alper, P.J. Lomas, G. Matthews, S. Jachmich, J. Ongena, P. Innocente and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, 1815, 2002
- “ELM moderation with ICRF heating on JET”  
Maddison, G.P., J.A. Snipes, J-M Chareau, G.D. Conway, I.H. Hutchinson, L.C. Ingesson, H.R. Koslowski, A. Loarte,P.J. Lomas, M.J. Mantsinen, G.F. Matthews, L. Meneses, M.F.F. Nave, E. Righi, G. Saibene, R. Sartori, O. Sauter, K-D Zastrow and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, 1937, 2002
- “Development of tungsten coated first wall and high heat flux components for application in ASDEX Upgrade”  
Maier, H., J. Luthin, M. Balden, S. Lindig, J. Linke, V. Rohde, H. Bolt and ASDEX Upgrade Team  
Journal of Nuclear Materials, 307-311, 116-120, 2002
- “Progress in internal transport barrier plasma with lower hybrid current drive and heating in JET”  
Mailloux, J., B. Alper, Yu. Baranov, A. Becoulet, A. Cardinali, C. Castaldo, R. Cesario, G.D. Conway, C.D. Challis, F. Crisanti, M. De Baar, P. De Vries, A. Ekedahl, K. Erents, C. Gowers, N.C. Hawkes, G.M.D. Hogeweij, F. Imbeaux, E. Joffrin, X. Litaudon, P.J. Lomas, G.F. Mathews, D. Mazon, V. Pericoli, R. Prentice, F.G. Rimini, Y. Sarazin, B.C. Stratton, A.A. Tuccillo, T. Tala, K.-D. Zastrow and Contributors to the EFDA-JET Work Programme  
Physics of Plasmas, 9, 2156-2164, 2002
- “Perturbative transport experiments in JET low or reverse magnetic shear plasmas”  
Mantica, P., G. Gorini, F. Imbeaux, J. Kinsey, Y. Sarazin, R. Budny, I. Coffey, R. Dux, X. Garbet, L. Garzotti, C. Ingesson, M. Kissick, V. Parail, C. Sozzi, A. Walden and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, (10) 2185, 2002
- “Analysis of ion cyclotron heating and current drive at  $\omega \approx 2\omega_{cH}$  for sawtooth control in JET plasmas”  
Mantsinen, M.J., C. Angioni, L-G Eriksson, A. Gondhalekar, T. Hellsten , T. Johnson, M-L Mayoral, K.G. McClements, M.F.F. Nave, F. Nguyen, S. Podda, J. Rapp, O. Sauter, S.E. Sharapov, E. Westerhof and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, (8) , 1521, 2002
- “The effect of CD<sub>4</sub> puffing on the peripherical scrape-off layer in JET”  
Matthews, G.F., S.K. Erents, G. Corrigan, W. Fundamenski, I. Garcia-Cortes, J. Mailloux, C. Hidalgo, M.A. Pedrosa, V. Pericoli, J. Spence, C. Silva, J. Strachan and contributors to the EFDA-JET WorkProgramme  
Plas. Phys. Control. Fusion, 44, (6) , 689, 2002

- “Real-time control of internal transport barriers in JET”  
Mazon, D., X. Litaudon, D. Moreau, M. Riva, G. Tresset, Y. Baranov, A. Bécoulet, J.M. Chareau, F. Crisanti, R. Dux, R. Felton, E. Joffrin and contributers to the EFDA-JET Workprogramme  
Plas. Phys. Control. Fusion, 44, (7) , 1087, 2002
- “ECH physics and new operational regimes on TCV”  
Moret, J-M., S.M. Ahmed, S. Alberti, Y. Andrebe, K. Appert, G. Arnoux, R. Behn, P. Blanchard, P. Bosshard, Y. Camenen, R. Chavan, S. Coda, I. Condrea, A. Degeling, B.P. Duval, D. Fasel, A. Fasoli, J-Y Favez, T. Goodman, M. Henderson, F. Hofmann, J-P Hogge, J. Horacek, P. Isoz, B.Joye, A. Karpushov, I. Klimanov, J.B. Lister, X. Llobet, T. Madeira, J-C Magnin, A. Manini, B. Marlétaz, P. Marmillod, Y. Martin, A. Martynov, J-M Mayor, J. Mlynar, E. Nelson-Melby, P. Nikkola, J.P. Paris, A. Perez, Y. Peysson, R.A. Pitts, A. Pochezon, L. Porte, O. Sauter, A. Scarabosio, E. Scavino, S-H Seo, U. Siravo, A. Sushkov, G. Tonetti, M.Q. Tran, H. Weisen, M. Wischmeier, A. Zabolotsky and G. Zhuang.  
Plasma Phys. Control. Fusion, 44, (12B) B85, 2002
- “High  $\beta$  plasmoid formation, drift and striations during pellet ablation in ASDEX Upgrade”  
Müller, H.W., R. Dux, M. Kaufmann, P.T. Lang, A. Lorentz, M. Maraschek, V. Mertens, J. Neuhauser and ASDEX Upgrade  
Nuclear Fusion, 42, 301-309, 2002
- “Transport in high normalized beta discharges on ASDEX Upgrade”  
Na, Yong-Su., A.C.C. Sips, O. Gruber, J. Hobirk, G. Pereverzev and ASDEX Upgrade team  
Plas. Phys. Control. Fusion, 44, (7) , 1285, 2002
- “Fast particle effects on the sawtooth stability of JET DT discharges”  
Nave, M.F.F., N.N. Gorelenkov, K.G. McClements, S.J. Allfrey, B. Balet, D.N. Borba, P.J. Lomas, J. Manickam, T.T.C. Jones, P.R. Thomas  
Nuclear Fusion, 42, 281–289, 2002
- “Impurity behaviour in the ASDEX Upgrade divertor tokamak with large area tungsten walls”  
Neu, R., R. Dux, A. Geier, A. Kallenbach, R. Pugno, V. Rohde, D. Bolshukhin, J.C. Fuchs, O. Gehre, O. Gruber, J. Hobirk, M. Kaufmann, K. Krieger, M. Laux, C. Maggi, H. Murmann, J. Neuhauser, F. Ryter, A.C.C. Sips, A. Stäbler, J. Stober, W. Suttrop, H. Zohm and the ASDEX Upgrade Team  
Plas. Phys. Control. Fusion, 44, (6) , 811, 2002
- “Properties of the new divertor Iib in ASDEX Upgrade”  
Neu, R., J.C. Fuchs, G. Haas, A. Herrmann, M. Laux, J. Neuhauser, F. Ryter, J. Gafert, O. Gruber, M. Kaufmann, B. Kurzan, V. Mertens, H.W. Müller, V. Rohde, A. Sips, J. Stober, B. Streibl, W. Treuterer and the ASDEX Upgrade Team  
Plas. Phys. Control. Fusion, 44, (6) , 1021, 2002
- “Transport into and across the scrape-off layer in the ASDEX Upgrade divertor tokamak”  
Neuhauser, J., D. Coster, H.U. Fahrbach, J.C. Fuchs, G. Haas, A. Herrmann, L. Horton, M. Jakobi, A. Kallenbach, M. Laux, J.W. Kim, B. Kurzan, H.W. Müller, H. Murmann, R. Neu, V. Rohde, W. Sandmann, W. Suttrop, E. Wolfrum and the ASDEX Upgrade Team  
Plas. Phys. Control. Fusion, 44, (6) , 855, 2002
- “Overview of results and possibilities for fast particle research on JET”  
Pamela, J., D. Stork, E. Solano, Yu.F. Baranov, D. Borba, C.D. Challis, H.P.L. de Esch, R.D. Gill, A. Gondhalekar, V. Kiptily, T. Johnson, M. Mansinen, K.G. McClements, M. F.F. Nave, S.D. Pinches, O. Sauter, S.E. Sharapov, D. Testa and contributors to the EFDA.JET Workprogramme  
Nuclear Fusion, 42, (8), 1014-1028, 2002
- “On-line prediction and mitigation of disruptions in ASDEX Upgrade”  
Pautasso, G., C. Tichmann, S. Egorov, T. Zehetbauer, O. Gruber, M. Maraschek, K.-F. Mast, V. Mertens, I. Perchermeier, G. Raupp, W. Treutterer, C.G. Windsor and ASDEX Upgrade Team  
Nuclear Fusion, 42, 100-108, 2002
- “Confinement physics of the advanced scenario with ELMy H-mode edge in ASDEX Upgrade”  
Peeters, A.G., O. Gruber, S. Günter, M. Kaufmann, H. Meister, G.V. Pereverzev, F. Ryter, A.C.C. Sips, J. Stober, W. Suttrop, G. Tardini, R.C. Wolf, H. Zohm and the ASDEX Upgrade team  
Nuclear Fusion, 42, (12), 1376, 2002
- “A high-data-transfer-rate VME system for TCP-IP remote real-time control of the ITER in-vessel vision system”  
Pereira, R., N. Cruz, C. Neri, C. Correia and C. Varandas  
Fusion Engineering and Design, 60, (3) , 253, 2002

- “*Self-consistent analysis of the power-energy balance and determination of the runaway electron characteristics in the ISTTOK discharges*”  
Plyusnin, V.V., J.A.C. Cabral, H. Figueiredo, I.S. Nedzelskii and C.A.F. Varandas  
Plas. Phys. Control. Fusion, 44, 2021, 2002
- “*Radiation pattern and impurity transport in argon seeded ELMy H-mode discharges in JET*”  
Puiatti, M.E., M. Mattioli, G. Telesca, M. Valisa, I. Coffey, P. Dumortier, C. Giroud, L.C. Ingesson, K.D. Lawson, G. Maddison, A.M. Messiaen, P. Monier-Garbet, A. Murari, M.F.F. Nave, J. Ongena, J. Rapp, J. Strachan, B. Unterberg, M. von Hellermann and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, 1863, 2002
- “*ELM mitigation by nitrogen seeding in the JET gas box divertor*”  
Rapp, J., T. Eich, M. von Hellermann, L.C. Ingesson, S. Jachmich, G.F. Matthews, V. Philipps, G. Saibene and contributors to the EFDA-JET WorkProgramme  
Plas. Phys. Control. Fusion, 44, (6), 639, 2002
- “*Integrating discharge control and data acquisition at ASDEX Upgrade*”  
Raupp, G., K. Behler, G. Neu, R. Merkel, W. Treutterer, D. Zasche, T. Zehetbauer and ASDEX Upgrade Team  
Fusion Engineering and Design, 60, (3), 353, 2002
- “*Survey of H-mode transition and confinement from ASDEX Upgrade H-mode standard shot*”  
Ryter, F., H.-U. Fahrbach, A. Gude, R. Neu, V. Rohde, J. Stober and ASDEX Upgrade Team  
Plas. Phys. Control. Fusion, 44, A407-A413, 2002
- “*Electron heat transport in ASDEX Upgrade: experiment and modelling*”  
Ryter, F., G. Tardini, H.-U. Fahrbach, K. Kirov, F. Leuterer, A.G. Peeters, G. Pereverzev, W. Suttrop and ASDEX Upgrade Team  
Proceedings of the 29<sup>th</sup> EPS Conference on Plasma Physics and Controlled Fusion, Montreux 2002, (Eds.) R. Behn, C. Varandas. ECA 26B, European Physical Society, Geneva 2002, P-1.048.
- “*A high performance real-time plasma control and event detection DSP based VME system*”  
Rodrigues, A.P., C. Correia and C. Varandas  
Fusion Engineering and Design, 60, (3), 435, 2002
- “*Images of electrostatic lower-hybrid-wave beam propagation in tokamak plasmas using a paraxial WKB approach*”  
Rodrigues, P., and J.P.S. Bizarro  
IEEE Transactions on Plasma Science, 30, 68, 2002
- “*Progress towards steady-state advanced scenarios in ASDEX Upgrade*”  
Saarelma, S., S. Günter, T.P. Kiviniemi, T. Kurki-Suonio and ASDEX Upgrade Team  
Plas. Phys. Control. Fusion, 44, A151-A157, 2002
- “*MHD stability analysis of type II ELMs in ASDEX Upgrade*”  
Saarelma, S., S. Günter, T.P. Kiviniemi, T. Kurki-Suonio and ASDEX Upgrade Team  
Plasma Physics, 42, 277-282, 2002
- “*High resolution temperature and density profiles during the energy quench of density limit disruptions in Rijnhuizen tokamak project*”  
Salzedas, F., S. Hokin, F.C. Schüller, A.A.M. Oomens and the RTP Team  
Physics of Plasma, 9, (8), 3402, 2002.
- “*Evolution of electron temperature during the energy quench of a major plasma disruption*”  
Salzedas, F., S. Hokin, F.C. Schüller and A.A.M. Oomens  
IEEE Transactions on Plasma Science, 30, (1), 80, 2002
- “*Exponentially growing tearing modes in Rijnhuizen tokamak project plasmas*”  
Salzedas, F., F.C. Schüller, A.A.M. Oomens, and the RTP Team  
Physical Review Letters, 88, (7), 075002-1, 2002
- “*The effect of ECRH on the stability of the radiation induced m=2 mode and on the current quench of a major disruption*”  
Salzedas, F., A.A.M. Oomens, F.C. Schüller and the RTP Team  
Nuclear Fusion, 42, (7), 881-891, 2002
- “*Edge operational space for high density/high confinement ELMy H-modes in JET*”  
Sartori, R., G. Saibene, M. Becoulet, P.J. Lomas, A. Loarte, D.J. Campbell, Y. Andrew, R. Budny, M.N.A. Beurskens, A. Kallenbach, V. Parail, W. Suttrop, J. Stober, K.D. Zastrow, M. Zerbini, R.D. Monk, and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, 1801, 2002

- “*Marginal  $\beta$ -limit for neoclassical tearing modes in JET H-mode discharges*”  
Sauter, O., R.J. Buttery, R. Felton, T.C. Hender, D.F. Howell and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, 1999, 2002
- “*Control of Neoclassical tearing modes by sawtooth control*”  
Sauter, O., E. Westerhof, M. L. Mayoral, B. Alper, P. A. Belo, R. J. Buttery, A. Gondhalekar, T. Hellsten, T. C. Hender, D. F. Howell, T. Johnson,<sup>6</sup> P. Lamalle, M. J. Mantsinen, F. Milani, M. F. F. Nave, F. Nguyen, A. L. Pecquet, S. D. Pinches, S. Podda, and J. Rapp  
Physical Review Letters, 88, 105001, 2002
- “*Determination of the plasma potential in the edge region of magnetized fusion plasmas by means of electron emissive probes*”  
Schrittwieser, R., J. Adámek, P.C. Balan, J.A. Cabral, H. Fernandes, H.F.C. Figueiredo, C. Hidalgo, M. Hron, C. Ionita, K. Jakubka, L. Kryška, E. Martínez, M.A. Pedrosa, V. Pohoata, J. Stockel, M. Tichy, G. Van Oost, C. Varandas  
Romanian Reports in Physics, 54, 1-5, 39, 2002
- “*Steady state advanced scenarios at ASDEX Upgrade*”  
Sips, A.C.C., R. Arslanbeko, C. Atanasiu, W. Becker, G. Becker, K. Behler, K. Behringer, A. Bergmann, R. Bilato, D. Bolshukhin, K. Borras, B. Braams, M. Brambilla, F. Braun, A. Buhler, G. Conway, D. Coster, R. Drube, R. Dux, S. Egorov, T. Eich, K. Engelhardt, H-U fahrbach, U. Fantz, H. Faugel, M. Foley, K.B. Fournier, P. Franzen, J.C. Fuchs, G. Gantenbein, O. Gehre, A. Geier, J. Gernhardt, O. Gruber, A. Gude, S. Günter, G. Haas, D. Hartmann, B. Heger, B. Heinemann, A. Herrmann, J. Hobirk, F. Hofmeister, H. Hohenöcker, L. Horton, V. Igochine, D. Jacobi, M. Jakobi, F. Jenko, A. Kallenbach, O. Kardaun, M. Kaufmann, A. Keller, A. Kendl, J-W Kim, K. Kirov, R. Kochergov, H. Kollotzek, W. Kraus, K. Krieger, B. Kurzan, P.T. Lang, P. Lauber, M. Laux, F. Leuterer, A. Lohs, A. Lorenz, C. Maggi, H. Maier, K. Mank, M.E. Manso, M. Maraschek, K.F. Mast, P. McCarthy, D. Meisel, H. Meister, F. Meo, R. Merkel, D. Merkl, V. Mertens, F. Monaco, A. Mück, H.W. Müller, M. Münich, H. Murmann, Y-S Na, G. Neu, J. Neuhauser, J-M Noterdaeme, I. Nunes, G. Pautasso, A.G. Peeters, G. Pereverzev, S. Pinches, E. Poli, M. Proscheck, R. Pugno, E. Quigley, G. Raupp, T. Ribeiro, R. Riedl, S. Riondato, V. Rohde, J. Roth, F. Ryter, S. Saarelma, W. Sandmann, S. Schade, H-B Schilling, W. Schneider, G. Schramm, S. Schweizer, B. Scott, U. Seidel, F. Serra, S. Sesnic, C. Sihler, A. Silva, E. Speth, A. Stäbler, K-H Steur, J. Stober, B. Streibl, E. Strumberger, W. Suttrop, A. Tabasso, A. Tanga, G. Tardini, C. Tichmann, W. Treutterer, M. Troppmann, P. Varela, O. Vollmer, D. Wagner, U. Wenzel, F. Wesner, R. Wolf, E. Wolfrum, E. Würsching, Q. Yu, D. Zasche, T. Zehetbauer, H-P Zehrfeld and H. Zohm.  
Plasma Phys. Control. Fusion, 44, (12B) B69, 2002
- “*Progress towards steady-state advanced scenarios in ASDEX Upgrade*”  
Sips, A.C.C., G.D. Conway, R. Dux, A. Herrmann, J. Hobirk, O. Gruber, S. Günter, C. Maggi, M. Manso, M. Maraschek, F. Leuterer, Y.-S. Na, A.G. Peeters, J. Stober and R. Wolf.  
Plas. Phys. Control. Fusion, 44, A151-A157, 2002
- “*The role of axisymmetric reconnection events in JET discharges with extreme shear reversal*”  
Stratton, B.C., J.A. Breslau, R.V. Budny, S.C. Jardin, W. Park, H.R. Strauss, L.E. Zakharov, B. Alper, V. Drozdov, N.C. Hawkes, S. Reyes-Cortes and contributors to the EFDA-JET Workprogramme  
Plas. Phys. Control. Fusion, 44, (7) , 1127, 2002
- “*Behaviour of Density Profiles of H-mode discharges in ASDEX Upgrade*”  
Stober, J., O. Gruber, M. Kaufmann, R. Neu, F. Ryter, W. Sandmann, H. Zohm and ASDEX Upgrade Team  
Plas. Phys. Control. Fusion, 44, A159-A164, 2002
- “*High density performance high-confinement-mode plasmas in JET*”  
Suttrop, W., J. Onghena, M. Becoulet, J.G. Cordey, P. Dumortier, G. Huysmans, P.T. Lang, A. Loarte, P.J. Lomas, G. Saibene, R. Sartori, V. Parail, M. Valovic, P. Andrew, Y. Andrew, M. Beurskens, R.V. Budny, M. Charlet, I. Coffey, T. Eich, L.C. Ingesson, S. Jachmich, A. Kallenbach, H.R. Koslowski, K. Lawson, G. Maddison, M. Maraschek, D.C. McDonald, A. Messiaen, F. Milani, P. Monier-Garbet, M.F.F. Nave, M.E. Puiatti, J. Rapp, E. Righi, O. Sartori, J. Schweinzer, M. Stamp, J. Strachan, J. Stober, G. Telesca, B. Unterberg, M. Valisa, P. de Vries, B. Weyssow and K.-D. Zastrow  
Physics of Plasmas, 9, 2103-2112, 2002
- “*Remote participation at JET Task Force work: users' experience*”  
Suttrop, W., D. Kinna, J. Farthing, O. Hemming, J. How, V. Schmidt, The EFDA-JET Remote

Participation Users Group and EFDA-JET Work Programme contributers  
Fusion Engineering and Design, 60, (3) , 459, 2002

- “*Impact of different heating and current drive methods on the early q-profile evolution in JET*”  
Tala, T.J.J., V.V. Parail, A. Becoulet, C.D. Challis, G. Corrigan, N.C. Hawkes, D.J. Heading, M.J.

Mantsinen, S. Nowak and contributers to the EFDA-JET Workprogramme  
Plas. Phys. Control. Fusion, 44, (7) , 1181, 2002

- “*Theory-based modeling of ASDEX Upgrade discharge with ECH modulation*”  
Tardini, G., A.G. Peeters, G. Pereverzev, F. Ryter and ASDEX Upgrade Team  
Nuclear Fusion, 42, L11-L14, 2002

- “*Comparison of theory based transport models with ASDEX Upgrade data*”  
Tardini, G., A.G. Peeters, G. Pereverzev, F. Ryter J. Stober and ASDEX Upgrade Team  
Nuclear Fusion, 42, 258-264, 2002

- “*Parallel correlation measurements in the scrape-off layer of the Joint European Torus (JET)*”  
Thomsen, H., M. Endler, J. Bleuel, A.V. Chankin, K. Erents, G.F. Matthews and Contributers to the EFDA-JET Work Programme  
Physics of Plasma, 9, 1233-1240, 2002

- “*Predictive modelling of impurity seeded plasmas in JET*”  
Tokar, M.Z., H. Nordman, J. Weiland, J. Ongena, V. Parail, B. Unterberg and contributors to the EFDA-JET Workpro-gramme.  
Plas. Phys. Control. Fusion, 44, 1903, 2002

- “*A dimensionless criterion for characterizing internal transport barriers in JET*”  
Tresset, G., X. Litaudon, D. Moreau, X. Garbet and contributors to the EFDA-JET WorkProgramme  
Nuclear Fusion, 42, (5) , 520, 2002

- “*Particle recirculation studies in JET*”  
Tsitrone, E., J. Bucalossi, T. Loarer, Ph. Ghendrih, A. Loarte, P. Andrew, P. Coad, W. Fundamenski, M. Stamp, D. Coster and contributors to the EFDA-JET WorkProgramme  
Plas. Phys. Control. Fusion, 44, (6) , 701, 2002

- “*Long timescale density peaking in JET*”  
Valovic, M., J. Rapp, J.G. Cordey, R. Budny, D.C. McDonald, L. Garzotti, A. Kallenbach, M.A. Mahdavi, J. Ongena, V. Parail, G. Saibene, R. Sartori, M. Stamp, O. Sauter, J. Strachan, W.

Suttrop and contributors to the EFDA-JET Workprogramme.  
Plas. Phys. Control. Fusion, 44, 1911, 2002

- “*Control of sawteeth and triggering of NTMs with ion cyclotron resonance frequency waves in JET*”  
Westerhof, E., O. Sauter, M.L. Mayoral, D.F. Howell, M.J. Mantsinen, M.F.F. Nave, B. Alper, C. Angioni, P. Belo, R.J. Buttery, A. Gondhaleker, T. Hellsten, T.C. Hender, T. Johnson, P. Lamalle, M.E. Maraschek, K.G. McClements, F. Nguyen, A.L. Péquet, S. Podda, J. Rapp, S.E. Sharapov, M. Zabiego and contributers to the EFDA JET Workprogramme  
Nuclear Fusion, 42, (11), 1324, 2002

#### 14.1.5. Papers in international conferences

- *2<sup>nd</sup> Meeting of the ITPA Topical Group on ITER Diagnostics San Diego, USA, 4-8 March 2002*
  - “*Progress in charge exchange recombination spectroscopy (CXRS) and beam emission spectroscopy (BES) for ITER*”  
Hellermann, von M., R. Jaspers, P. Lotte, A. Malaquias, S. Tugarinov
  - “*Study of mirror and Be coating effect on light polarization state – the ITER MSE case*”  
Malaquias, A., P. Lotte, R. Giannella, P. Nielsen, C. Walker
- *57<sup>th</sup> Annual Meeting of Physical Society of Japan, Kusatsu, Japan, 24-27 March 2002*
  - “*Research needs for ITER diagnostics*”  
Costley, A.E., A. Malaquias, S. Tatsuo, G. Vayakis and C. Walker
  - “*Spectroscopic diagnostics for the International Thermonuclear Experimental Reactor (ITER)*”  
Sugie, T., A. Costley, K. Ebisawa, A. Malaquias, C. Walker
- *15<sup>th</sup> International Conference on Plasma Surface Interactions in Controlled Fusion Devices, Gifu, Japan 27 April - 3 May, 2002*
  - “*Experimental Evidence of Fluctuations and Flows near Marginal Stability and Dynamical Interplay Between Gradients and Transport in the JET Plasma Boundary Region*”  
Hidalgo, C., B. Gonçalves, M. A. Pedrosa, C. Silva, R. Balbín, M. Hron, A. Loarte, K. Erents, G. F. Matthews e R. Pitts

- "Runaway Effects at the Plasma Boundary in ISTTOK"  
Plyusnin, V. V., J. A. C. Cabral, H. Figueiredo, C.A.F. Varandas
- "Influence of Electrode and Limiter Biasing on the ISTTOK Boundary Plasma"  
Silva, C., H. Figueiredo, J. A. C. Cabral, B. Gonçalves, I. Nedzelsky, C. A. F. Varandas
- **29<sup>th</sup> EPS Conference on Controlled Fusion and Plasma Physics, Montreux, Suisse 17-21 June, 2002**
- "Confinement and stability on the TJ-II stellarator"  
Ascasíbar, E., C. Alejaldre, J. Alonso, L. Almoguera, A. Baciero, R. Balbín, M. Blaumoser, J. Botija, B. Brañas, A. Cappa, J. Castellano, R. Carrasco, F. Castejón, J.R. Cepero, A.A. Chmyga, J. Doncel, N.B. Dreval, S. Eguilior, T. Estrada, A. Fernández, C. Fuentes, A. García, I. García-Cortés, B. Gonçalves, J. Guasp, J. Herranz, C. Hidalgo, J.A. Jiménez, I. Kirpitchev, S.M. Kherebtov, A.D. Komarov, A.S. Kozachok, F. Lapayese, K. Likin, M. Liniers, D. López-Bruna, A. López-Fraguas, J. López-Rázola, A. López-Sánchez, E. de la Luna, A. Malaquias, R. Martín, M. Medrano, A.V. Melnikov, P. Méndez, K.J. McCarthy, F. Medina, B. Van Milligen, I.S. Nedzelskiy, M. Ochando, L. Pacios, I. Pastor, M.A. Pedrosa, A. de la Peña, A. Portas, J. Romero, L. Rodríguez-Rodrigo, A. Salas, e. Sánchez, J. Sánchez, F. Tabarés, D. Tafalla, V. Tribaldos, C.A.F. Varandas, J. Vega and B. Zurro
- "Measurements of plasma potential fluctuations in the edge region of the ISTTOK plasma, using electron emissive probes"  
Balan, P., J.A.C. Cabral, H. Fernandes, H.F.C. Figueiredo, C. Ionita, R. Schrittwieser and C.A.F. Varandas
- "Plasma potential measurements by heavy ion beam probing in the TJ-II stellarator"  
Chmyga, A.A., N.B. Dreval, S.M. Kherebtov, A.D. Komarov, A.S. Kozachok, L.I. Krupnik, A.V. Melnikov, B. Gonçalves, A. Malaquias, I.S. Nedzelskiy, C.A.F. Varandas, T. Estrada, C. Hidalgo, J. López, E. de la Luna, M.A. Pedrosa
- "Location rational surfaces from reflectometer fluctuations"  
Conway, G.D., P.J. McCarthy, I. Nunes, A.C.C. Sips, F. Serra, S. Sesnic, M. Maraschek, A. Mück, W. Suttrop, M. Manso, ASDEX Upgrade and CFN Teams.
- "Current profile redistribution due to internal relaxation events in extreme reversed shear JET plasmas"  
Cortes, S.R., N.C. Hawkes, B.C. Stratton, M.F.F. Nave, D. Testa, P.A. Belo, E. Solano, V. Drozdov and C.A.F. Varandas
- "Experimental evidence of turbulent transport near marginal stability in the plasma boundary region in the TJ-II stellarator"  
Gonçalves, B., C. Hidalgo, M.A. Pedrosa, E. Sánchez, B. Van Milligen
- "Effect of the k-spectrum and the poloidal rotation of turbulence in reflectometry measurements"  
Hacquin, S., S. Heuraux, F. Silva, G. Leclert, M. Manso and F. Serra
- "Progress in charge exchange recombination spectroscopy (CXRS) and beam emission spectroscopy (BES) for ITER"  
Hellermann, M. von, R. Jaspers, P. Lotte, A. Malaquias, S. Tugarinov
- "Radial wave-number spectrum deduced from phase fluctuation spectrum given by a reflectometer"  
Heuraux, S., S. Hacquin, F. Silva, F. Clairet, R. Sabot, G. Leclert and M. Colin
- "Edge Localized Modes and fluctuations in the JET SOL region"  
Hidalgo, C., M.A. Pedrosa, B. Gonçalves, C. Silva, R. Balbin, M. Hron, K. Erents, G. Matthews, A. Loarte
- "On the motional stark effect diagnostic for ITER"  
Lotte, P., A. Malaquias, R. Giannella, M. von Hellermann, P. Nielsen, C. Walker
- "Pulse height analysis X-ray spectroscopy in the TCV tokamak"  
Madeira, T.I., P. Amorim, B.P. Duval and C.A.F. Varandas
- "Real time signal analysis with TCV PHA diagnostic"  
Madeira, T.I., A.P. Rodrigues, P. Amorim, B.P. Duval and C.A.F. Varandas
- "Neoclassical Tearing mode control through sawtooth destabilization in JET"  
Mayoral, M.L., D.F. Howell1, O. Sauter, E. Westerhof, B. Alper, R.J. Buttery, T.C. Hender, M.J. Mantisen, M.F.F. Nave and contributors to the EFDA JET workprogramme

- "Simulation of the time behaviour of impurities in JET Ar-seeded discharges and its relation with sawteething"  
Mattioli, M., M.E.Puiatti, M.Valisa, I.Coffey, R.Dux, P.Monier-Garbet, M.F.F.Nave, J.Ongena, M.von Hellermann and contributors to the EFDA-JET workprogramme
- "Study of ELMs on ASDEX Upgrade using reflectometry measurements with high temporal and spatial resolution"  
Nunes, I., G.D. Conway, M.Manso, M.Maraschek, F.Serra, W.Suttrop, the CFN and ASDEX Upgrade teams
- "Fluctuation-induced turbulent transport and sheared flows close to instability threshold in the TJ-II stellarator"  
Pedrosa, M.A., C. Hidalgo, T. Estrada, B. Gonçalves, E. Ascasíbar, I. Pastor, J.A. Jiménez, A. López-Fragas and the TJ-II team
- "Effect of micro-instabilities on runaway generation in tokamak disruptions"  
Plyusnin,V.V.
- "Observations of the onset of the energy quench in ASDEX Upgrade Density Limit Disruptions"  
Salzedas, F., G. Pautasso, I. Nunes, W. Suttrop, M. Maraschek, M.E. Manso and the ASDEX Upgrade Team
- "Numerical study of spatial and temporal localization of magnetic modes using O-mode reflectometry"  
Silva, F. da, S. Heuraux, M. Manso and S. Hacquin
- **IAE Workshop on ELMs, JET, 24-26 June 2002**
  - "ELM control by enhanced radiation"  
Nave, M. F. F., C. Ingesson, S.Jachmich, Z. Klaus-Dieter, T.C. Jones, K. Lawson, P. Lomas, G. Mathews, J. Ongena and contributors to the EFDA-JET workpro-gramme
- **14<sup>th</sup> APS Topical Conference on High Temperature Plasma Diagnostics, Madison, USA 08-11 July, 2002**
  - "Emissive probe measurements of the plasma potential fluctuations in the edge plasma region of the ISTTOK and CASTOR tokamaks"  
Balan, P., J.A.C. Cabral, R. Schrittwieser, H.F.C. Figueiredo H. Fernandes, C. Ionita, C.A.F. Varandas, J. Adamek, M. Hron, J. Stockel, E. Martines, M. Tichy and G. van Oost.
  - "A low cost, fully integrated, event-driven, real-time control and data acquisition system for fusion experiments"  
Batista, A. J. N., A. Combo, J. Sousa and C. A. F. Varandas
  - "Improved 20 keV injection system for the heavy ion beam diagnostic of the tokamak ISTTOK"  
Cabral, J.A.C., I.S. Nedzelskiy, A.J. Malaquias, B. Gonçalves, C.A.F. Varandas, I.S. Bondarenko, S.M. Khrebtov, A.D. Komarov, A.L. Kozachok, L.I. Krupnik.
  - "A low cost, real-time DSP-based diagnostic for the control of operation of a fusion experiment"  
Carvalho, B.B., H. Fernandes, C.A.F. Varandas.
  - "An Event-driven Reconfigurable Real-Time Processing System for the Next Generation Fusion Experiments"  
Combo, A., A. J. N. Batista, J. Sousa and C. A. F. Varandas
  - "Measurment of the Plasma Radial Electric Field by the Motional Stark Effect Diagnostic on JET Plasma"  
Cortes, S. Reyes, N. C. Hawkes, P. Lotte, C. Fenzi, B. C. Stratton, J. Hobirk, R. De Angelis, F. Orsitto e C. A. F. Varandas
  - "On the use of the analytic signal to retrieve the phase from broadband reflectometry signals"  
Figueiredo, A. C.A., and J.P.S. Bizarro
  - "High dispersion spectrometer for time resolved Doppler measurements of impurity lines emitted during ISTTOK discharges"  
Gomes, R.B., C.A.F. Varandas, J.A.C. Cabral, E. Sokolova and S.R. Cortes
  - "Velocity fluctuations and time dependent ExB flows in the JET boundary region"  
Gonçalves, B., C. Hidalgo, M.A. Pedrosa, C. Silva, K. Erents, G. Mathews
  - "Radial kf-spectrum of fluctuations obtained from reflectometry phase data and validations with 1D and 2D simulations"  
Heuraux, S., S. Hacquin, F. da Silva, F. Clairet, R. Sabot and G. Leclert.
  - "Real time signal analysis with TCV PHA diagnostic"  
Madeira, T.I., A.P. Rodrigues, P. Amorim, B.P. Duval and C.A.F. Varandas

- “Comparative study design of a heavy ion and neutral beam diagnostic for ITER”  
Malaquias, A., I. Nedzelsky, B. Gonçalves, C. A. F. Varandas, A. Melnikov, L. Eliseev, S. Perfilov, O. Yudina and L. Krupnik
- “Evaluation of the incident angle of the beam into 30-degree electrostatic energy analyzer directly during HIBP operation in plasma experiments”  
Nedzelskiy, I.S., A.J. Malaquias, B. Gonçalves, C.A.F. Varandas, J.A.C. Cabral, N.B. Dreval, S.M. Kherebtoc, A.D. Komarov, A.L. Kozachok, L.I. Krupnik.
- “Electron temperature determination and subsequent analysis of short time-scale variation of plasma parameters in ISTTOK discharges”  
Plyusnin, V.V., J.A.C. Cabral, H. Figueiredo, C.A.F. Varandas
- “Plasma position measurements from ordinary FM-CW reflectometry on ASDEX Upgrade”  
Santos, J., J. Neuhauser, M. Manso, P. Varela and ASDEX Upgrade Team
- “Simulation of amplitude and phase variations induced by magnetic islands with turbulence on reflectometry signals”  
Silva, F. da, S. Heuraux, S. Hacquin and M. Manso.
- “Conceptual design of the CXRS diagnostic for ITER”  
Tugarinov, S., A. Krasilnikov, V. Dokouka, R. Khayrutdinov, I. Beigman, I. Tolstikhina, L. Vainshtein, M. von Hellermann, A. Malaquias.
- “High resolution edge density measurements in ASDEX Upgrade H-mode discharges with broadband reflectometry”  
Varela, P., M.E. Manso, G.D. Conway, W. Suttrop, H. Zohm and ASDEX Upgrade Team.
- **Theory of Fusion Plasmas Joint Varenna-Lausanne International Workshop, Varenna, Italy, August, 2002**
- “Numerical analysis of the loss of sawtooth stabilisation by ICRH driven fast particles in low density discharges”  
Nabais, F., D. Borba, M. Mantsinen, F. Nave and S. Sharapov
- **9th EU-US Transport Task Force Workshop, Córdoba, Spain 09-12 September, 2002**
- “Plasma potential measurements by heavy ion beam probe in the TJ-II stellarator”  
Chmyga, A.A., N.B. Dreval, S.M. Kherebtov, A.D. Komarov, A.S. Kozachok, L.I. Krupnik, V.I. Tereshin, L.G. Eliseev, A.V. Melnikov, B. Gonçalves, A. Malaquias, I.S. Nedzelskiy, C.A.F. Varandas
- “On the radial propagation of edge localized modes and edge fluctuations in JET”  
Gonçalves, B., C. Hidalgo, M.A. Pedrosa, C. Silva, M. Hron, R. Balbín, B. Van Milligen, A. Loarte, K. Erents, G. Matthews
- “Impact of ELMs on particle losses measured with microwave reflectometry on ASDEX Upgrade”  
Nunes, I., G.D. Conway, W. Suttrop, M.E. Manso, F. Serra, A. Loarte, G. Saibene, the CFN and ASDEX Upgrade teams.
- “Parallel and poloidal sheared flows close to instability threshold in the TJ-II stellarator”  
Pedrosa, M.A., C. Hidalgo, B. Gonçalves, E. Ascasíbar, T. Estrada, J.A. Jiménez, A. López-Fraguas, I. Pastor and TJ-II Team
- “Impurity transport in high density plasmas in JET and FTU”  
Valisa, M., L. Carraro, M. Mattioli, M.E. Puiatti, P. Scarin, M.F.F. Nave, L. Gabellieri
- **II Congresso Ibérico de Espectroscopia, Coimbra, Portugal 16-21 September, 2002**
- “Os diagnósticos de espectroscopia do tokamak ISTTOK”  
Alonso, M.P., R. Gomes, E. Sokolova, S.R. Cortes, P. Amorim, C.A.F. Varandas and J.A.C. Cabral
- “X-ray spectroscopy diagnostics in the tokamak TCV, in the frame of a collaboration between CFN and CRPP”  
Madeira, T.I., P. Amorim, B.P. Duval and C.A.F. Varandas

- **3<sup>rd</sup> Meeting of the ITPA Topical Group on ITER Diagnostics Tajimi, Japan 17-21 September, 2002**
  - “Status of the active spectroscopic systems for ITER”  
Malaquias, A., C. Walker, G. Vayakis, A. Costley, T. Sugie, S. Tugarinov, A. Gorshkov, M. von Hellermann, P. Lotte
  - “Diagnostic integration issues”  
Walker, C.I., A. Costley, A. Malaquias, T. Sugie, G. Vayakis
- **International Conference and School on Plasma Physics and Controlled Fusion, Alushta, Crimea, Ukraine 16-22 September, 2002**
  - “Accuracy of electrostatic energy analyser in HIBP diagnostic”  
Bondarenko, I.S., A.A. Chmuga, N.B. Dreval, S.M. Kherebtov, A.D. Komarov, A.S. Kozachok, L.I. Krupnik, I.S. Nedzelskiy
  - “Ion beam injectors for plasma diagnostic”  
Bondarenko, I.S., A.A. Chmuga, G.N. Deshko, N.B. Dreval, S.M. Kherebtov, A.D. Komarov, A.S. Kozachok, L.I. Krupnik, I.S. Nedzelskiy
  - “TOF method in plasma potential measurements by HIBD”  
Nedzelskiy, I.S., A.J. Malaquias, B. Gonçalves, C.A.F. Varandas, J.A.C. Cabral
- **12<sup>o</sup> Encontro Ibérico para o Ensino da Física, Evora, 6-10 Setember, 2002**
  - “E-escola, evolução para o conhecimento interactivo”  
Fernandes, H., J. Seixas, P. Santos
- **19<sup>th</sup> IAEA Fusion Energy Conference, Lyon, France 14-19 October, 2002**
  - “Magnetic configuration nad transport interplay in the TJ-II flexible heliac experiment”  
Alejaldre, C., J. Alonso, L. Almoguera, E. Ascasíbar, A. Baciero, R. Balbín, M. Blaumoser, J. Botija, B. Brañas, A. Cappa, R. Carrasco, F. Castejón, J.R. Cepero, J. Doncel, S. Eguilior, T. Estrada, A. Fernández, C. Fuentes, A. García, I. García-Cortés, J. Guasp, J. Herranz, C. Hidalgo, J. A. Jiménez, I. Kirpitchev, F. Lapayese, K. Likin, M. Liniers, D. López-Bruna, A. López-Fraguas, J. López-Rázola, A. López-Sánchez, E. de la Luna, R. Martín, M. Medrano, P. Méndez, K.J. McCarthy, F. Medina, B. van Milligen, M. Ochando, L. Pacios, I. Pastor, M.A. Pedrosa, A. de la Peña, A. Portas, J. Romero, L. Rodríguez-Rodrigo, A. Salas, E. Sánchez, J. Sánchez, F. Tabarés, D. Tafalla, V. Tribaldos, J. Vega and B. Zurro, A.A. Chmyga, N.B. Dreval, S.M. Kherebtov, A.D. Komarov, A.S. Kozachok, L.I. Krupnik, A.V. Melnikov, B. Gonçalves, A. Malaquias, I. S. Nedzelskiy, C.A.F. Varandas, A. Petrov, K. Sarksian, N. Skvortsova
  - “ITER diagnostics: design choices and solutions”  
Costley, A.E., A. Malaquias, T. Sugie, G. Vayakis and C. Walker
  - “Predicting the behaviour of magnetic reconnection processes in fusion burning plasma experiments”  
Costley, A.E., A. Malaquias, T. Sugie, G. Vayakis and C. Walker
  - “Physics R&D in support of ITER/BPX diagnostic development”  
Doné, A.J.H., R. Boivin, A.E. Costley, R. Giannella, D. Johnson, E.R. Hodgson, A. Kislyakov, A. Krasilnikov, Y. Kusama, T. Leonard, A. Malaquias, G. McKee, P. Nielsen, T. Nishitani, W. Peebles, F. Orsitto, R.A. Pitts, G. Razdobarin, J. Sanchez, M. Sasao, F. Serra, T. Shikama, V. Strelkov, T. Sugie, G. Vayakis, V. Voitsenya, K. Vukolov, C. Walker, G. Wurden, K. Young and V. Zaveriaev
  - “Experimental evidence of fluctuations and flows near marginal stability in the plasma boundary region in fusion plasmas”  
Hidalgo, C., B. Gonçalves, M.A. Pedrosa, B. Van Milligen, E. Sánchez, C. Silva, K. Erents, G.F. Matthews
  - “Electrode and limiter biasing experiments on the tokamak ISTTOK”  
Silva, C., H. Figueiredo, J.A.C. Cabral, I. Nedzelskiy and C.A.F. Varandas
  - “Experimental study of the stability of Alfvén eigenmodes on JET”  
Testa, D., A. Fasoli, G. Fu, A. Jaun, D. Borba, P. De Vries, and JET-EFDA contributors.
- **44<sup>th</sup> APS Annual Meeting of the Division of Plasma Physics**
  - “Upgrade of the JET multichannel fluctuation and correlation reflectometer diagnostic”  
Meneses, L., L. Cupido, N. Cruz, L. Kokonchev, E. Mazzucato, R. Prentice
  - “ELM control by enhanced radiation in JET Plasmas”  
Nave, M.F.F., S. Jachmich, L.C. Ingesson, J. Strachan, J. Ongena, G. Saibene, TTC Jones, K.

- Lawson, P. Thomas, G. Matthews, P. Andrew and EFDA-JET Contributors
- **Workshop on Active Control of MHD Stability: Extension of Performance, Columbia University, N.Y., 18-20 Nov., 2002**
  - "Control of Edge MHD instabilities in JET" Nave, M.F.F.
- 14.1.6. Papers in national conferences**
- **13ª Conferência Nacional de Física, Évora, 6-10 Setembro, 2002**
  - "E-Lab, laboratórios robotizados interactivos" Fernandes, H., J. Pereira
- 14.2. INERTIAL FUSION ENERGY**
- 14.2.1. Ph.D thesis**
- "Investigação teórica e experimental de plasmas em Ar e em misturas N<sub>2</sub>-Ar produzidos por ondas de superfície" Júlio Vieira Henriques, 2002 Universidade Técnica de Lisboa
  - "Laser-plasma interaction: application to particle acceleration" N.C. Lopes, 2002 Universidade Técnica de Lisboa
  - "Experimental and numerical study of laser-plasma electron accelerators" Ricardo Fonseca, 2002 Universidade Técnica de Lisboa
- 14.2.2. Articles in scientific journals**
- "Dust Agglomeration and Gravitational-Like Instabilities in Laboratory and Astrophysical Plasmas" Bingham, R., D.P. Resendes and V.N. Tsytovich "Dust Plasma Interaction in Space", Ed. P.K. Shukla, Nova Sci. Pub. N.Y., 2002.
  - "Dispositif coaxial d'excitation micro-ondes pour l'ionisation de vapeur pulvérisée par magnétron" Boisse-Laporte, C., O. Leroy, L. De Poucques, L. Teulé-Gay, J. H. A. Hagelaar, N. Kouassi,, D. Pagon, G. Gousset, L. Alves, P. Leprince, J. Bretagne, and M. Touzeau, Vide: Science Technique et Applications 304, 272, 2002.
  - "On the stability of perpendicular particle drifts in cold magnetoplasmas" Brinca, A.L., F.J. Romeiras, and L. Gomberoff J. Geophys. Res.,107 (A7), doi:10.1029/2001JA900169, 2002.
  - "Nonlinear mode coupling in a CW operating Ti:Sapphire laser" Cataluna, M.A., H. Crespo, A. Guerreiro and J.T. Mendonça Physica Scripta, T98, 134, 2002.
  - "L-band x-ray absorption of radiatively heated nickel" Chenais-Popovics, C. et al. Physical Review E 65, 016413, 2002.
  - "High-order self-dispersion compensation in a Ti:sapphire laser oscillator" Crespo, H., M.A. Cataluna, A. Guerreiro and J.T. Mendonça, Ultrafast Phenomena XIII, R.D. Miller et al. Eds., Springer-Verlag, Berlin, 161, 2002.
  - "How wrong is collisional Monte Carlo modelling of fast electron transport in high-intensity laser-solid interactions?" Davies, J. R. Physical Review E 65, 026407, 2002.
  - "Laser propagation in cylindrical waveguides" Davies, J. R., J. T. Mendonça Physical Review E 66, 046604, 2002.
  - "Two-dimensional collision of probe photons with relativistic ionization fronts" Dias, J. M., L. Oliveira e Silva, N. C. Lopes, G. Figueira, J. T. Mendonça Physical Review E, 65, 3, 036404(6), 2002.
  - "Photon acceleration of ultrashort laser pulses by relativistic ionization fronts" Dias, J. M., N. C. Lopes, L. O. Silva, G. Figueira, J. T. Mendonça, C. Stenz, F. Blasco, A. Dos Santos, A. Mysyrowicz, Physical Review E 66, 056406, 2002.
  - "Large-scale plasmas excited by surface waves" Dias, F. M., E. Tatarova, and C. M. Ferreira Czech J. Phys. 52, D481, 2002.
  - "Wave driven molecular discharges as sources of active species" in "Spectroscopy of non-equilibrium plasma at elevated pressures" Ferreira, C. M., E. Tatarova, V. Guerra, F. M. Dias, and J. Henriques Proc. SPIE – Int. Soc. Opt. Eng., V. N. Ochkin (ed.), 4460, 99, Bellingham, Washington, USA, 2002.

- "Three-dimensional particle-in-cell simulations of the Weibel instability in electron-positron plasmas" Fonseca, R. A., L. O. Silva, J. Tonge, R. G. Hemker, J. M. Dawson, W. B. Mori IEEE Transactions on Plasma Science 30, 28, 2002;
- "Osiris: a three-dimensional fully relativistic particle in cell code for modelling plasma based accelerators" Fonseca, R. A., L. O. Silva, R. G. Hemker, F. S. Tsung, V. K. Decyk, W. Lu, C. Ren, W. B. Mori, S. Deng, T. Katsouleas, and J.C. Adam Lecture Notes in Computer Science, 2331, 342 (Springer-Verlag, Heidelberg, 2002);
- "Ion-acoustic damping effects on parametric decays of Alfvén waves: Right-hand polarization" Gomberoff, L., K. Gomberoff, and A.L. Brinca J. Geophys. Res., 107 (A7), doi: 10.1029/2001JA000265, 2002
- "On the self-consistent modelling of a traveling wave sustained nitrogen discharge" Guerra, V., E. Tatarova, F. M. Dias, and C. M. Ferreira, J. Appl. Phys. 91, 2648, 2002.
- "Wave driven N2-Ar discharge. I. Self-consistent theoretical model" Henriques, J., E. Tatarova, V. Guerra, and C. M. Ferreira J. Appl. Phys. 91, 5622, 2002.
- "Wave driven N2-Ar discharge. II. Experiment and comparison with theory" Henriques, J., E. Tatarova, F. M. Dias, and C. M. Ferreira, J. Appl. Phys. 91, 5632, 2002.
- "Chiral organometallic chromophores for nonlinear optics derived from  $[Fe_2(\eta^5-C_5H_5)_2(CO)_2(m-CO)(m-C-CH_3)] + [BF_4^-]$ " Hudson, R. D. A., A. R. Manning, J.F. Gallagher, M. Helena Garcia, N. Lopes, I. Asselberghs, R. Van Boxel, A. Persoons and A. J. Lough J. Organomet. Chem., 655, 70, 2002.
- "Proposed demonstration of the Einstein-Poldosky-Rosen paradox using trapped electrons" Martins, Ana M. Physical Review A 65, 052114, 2002.
- "Neutrino effective charge in a plasma" Mendonça, J.T., A. Serbeto, P.K. Shukla and L.O. Silva Phys. Lett B, 548, 63, 2002.
- "Gravitational waves in plasmas" Mendonça, J.T. Plasma Physics and Controlled Fusion, 44, B225, 2002
- "Some Exotic Phenomena in Dusty Plasmas" Mendonça, J.T., P.K. Shukla, R. Bingham, D.P. Resendes and A. Guerreiro "Dust Plasma Interaction in Space", Ed. P.K. Shukla, Nova Sci. Pub. N.Y., 2002.
- "Gravitational optics: Self-phase modulation and harmonic cascades" Mendonça, J. T., Vitor Cardoso Physical Review D 66, 104009, 2002.
- "Resonant interaction of photons with gravitational waves" Mendonça, J. T., L. O. Drury Physical Review D 65, 024026, 2002.
- "Plasmon beam instability and plasmon Landau damping of ion acoustic waves" Mendonça, J. T., R. Bingham Physics of Plasmas 9, 2604, 2002.
- "Thomas-Fermi model for a dust particle in a plasma" Mendonça, J. T., N. L. Tsintsadze, A. Guerreiro Europhysics Letters 57, 362, 2002.
- "Time refraction and time reflection: Two basic concepts" Mendonça, J. T., P. K. Shukla Physica Scripta 65, 160, 2002.
- "Effective ionization coefficients and electron drift velocities in gas mixtures of SF<sub>6</sub> with He, Xe, CO<sub>2</sub> and N<sub>2</sub> from Boltzmann analysis" Pinheiro, M. J. and J. Loureiro J. Phys. D: Appl. Phys. 35, 3077, 2002.
- "An information-theoretic formulation of the Newton's second law" Pinheiro, M. J. Europhys. Lett. 57, 305, 2002.
- "On the mutual interaction between laser beams in plasmas" Ren, C., B. J. Duda, R. G. Evans, R. A. Fonseca, R. G. Hemker, W. B. Mori Physics of Plasmas 9, 2354, 2002.

- "Nonlinear dynamics of a grain in a discharge plasma sheath"  
Resendes, D. P., G. Sorasio & P. K. Shukla  
Physica Scripta T98, 87, 2002.
- "Dynamics of dust particles in plasma sheaths"  
Resendes, D. P., G. Sorasio & P. K. Shukla  
Phys. Plasmas 9, 2988, 2002.
- "Comment on dynamic behaviors of dust particles in the plasma-sheath boundary"  
Resendes, D., G. Sorasio, P. K. Shukla  
Physics of Plasmas 9, 1057, 2002.
- "Two-dimensional fluid modelling of charged particle transport in radio-frequency capacitively coupled discharges"  
Salabas, A., G. Gousset, and L. L. Alves,  
Plasma Sources Sci. Technol. 11, 448, 2002.
- "Neutrino driven wakefields in an electron-positron plasma"  
Serbeto, A., J.T. Mendonça, P.K. Shukla and L.O. Silva  
Phys. Lett. A, 305, 190, 2002.
- "Enhanced electromagnetic emission from a dusty plasma"  
Shukla, P. K., L. Stenflo & D. P. Resendes  
Phys. Plasmas 9, 1043, 2002.
- "Acceleration of dust grains by means of electromagnetic cyclotron waves"  
Shukla, P. K., L. Stenflo, A. A. Mamun, D. P. Resendes & G. Sorasio, J. Geophys Res. 107, 10.1029/2002JA009321, 2002.
- "Dynamics of Farley-Buneman fluctuations in the presence of radar beams"  
Shukla, P. K., L. Stenflo, M. Rosenberg and D. P. Resendes  
J. Geophys Res. 107, 10.1029/2002JA009408, 2002.
- "Electrostatic instabilities in current-carrying magnetoplasmas with equilibrium density and ion velocity gradient"  
Shukla, P.K., G. Sorasio and L. Stenflo  
Physical Review E 66, 067401, 2002.
- "Some Cross-Field Instabilities in magnetized dusty Plasmas"  
Shukla, P.K., M. Salimullah, G. Sorasio  
Physics of Plasmas 9, 5121, 2002.
- "On the role of the purely transverse Weibel instability in fast ignitor scenarios"  
Silva, Luís O., Ricardo A. Fonseca, John W. Tonge, Warren B. Mori, John M. Dawson  
Physics of Plasmas 9, 2458, 2002.
- "Dust waves in a periodic medium with spatial dust density distributions"  
Sorasio, G., L. O. Silva, P.K. Shukla, D.P. Resendes  
Physics Letters A 305, 75, 2002.
- "Dust acoustic waves in a periodic medium with spatial dust density distributions"  
Sorasio, G., L. O. Silva, P. K. Shukla & D. P. Resendes  
Phys. Lett. A 305, 75, 2002.
- "Induced oscillations of dust grains in a plasma sheath under low pressures"  
Sorasio, G., D. Resendes, P. K. Shukla  
Physics Letters A 293, 67, 2002.
- "Dust Grain Oscillations in Plasma Sheaths under Low Pressures"  
Sorasio, G., R.A. Fonseca, D.P. Resendes, and P.K. Shukla  
"Dust Plasma Interaction in Space", Ed. P.K. Shukla, Nova Sci. Pub. N.Y., 2002.
- "Optical emission spectroscopy and Langmuir probe characterisation of the sputtering plasma and its influence upon YBCO thin film properties"  
Tsaneva, V. N., T. I. Donchev, Tsv. Popov, F. M. Dias, Z. H. Barber, E. J. Tarte, M. G. Blamire, M. Hogg, F. Kahlmann, and J. E. Evetts,  
Physica C 372-376, 1087, 2002.
- "Generation of ultra intense single-cycle laser pulses using photon deceleration"  
Tsung, F. S., C. Ren, L. O. Silva, W. B. Mori, and T. Katsouleas  
Proceedings of the National Academy of Sciences of the USA 99, 29, 2002.