MERVI MANTSINEN

Date: January 2022

ICREA Research Professor and Fusion Group Leader
Barcelona Supercomputing Center
Department of Computer Applications in Science and Engineering
Plaça Eusebi Güell, 1-3
08034 Barcelona
Spain

mervi.mantsinen@bsc.es
tel. (+34) 634 80 40 92
www.icrea.cat/Web/ScientificStaff/mervi-johanna-mantsinen-569
www.bsc.es/mantsinen-mervi-johanna

Date of birth**:** 14th of May, 1969
Finnish national; married, 1 son

PROFESSIONAL PROFILE

- Accomplished, multilingual nuclear fusion scientist with more than 23 years of international experience in nuclear fusion and plasma physics.
- Recognized expertise in the design, coordination, analysis, and modelling of experiments on several major fusion facilities (JET, AUG, DIII-D and JT-II) around the world. Specialized in wave propagation, wave-particle interactions and fast particle physics in tokamak plasmas.
- Experienced multidisciplinary research team leader with well-developed interpersonal and teamwork skills and capability to motivate and direct others.
- Demonstrated capabilities and success in all areas of research leadership and management, including definition of research lines and strategy, start-up, build-up and leading research groups and projects, identification of funding opportunities, and talent attraction and retention.

CORE COMPETENCIES

Pioneering and innovative thinking • Foresight • Connecting ideas and people to make things happen • Initiating research projects • Highly focused and result-oriented working towards the set goals • Teamwork • Leading international research groups • Scientific writing (300+ publications; H-index 46) • Design and coordination of experiments • Experimental data analysis • Model benchmarking • Numerical simulations

---

PRESENT POSITION

ICREA and BARCELONA SUPERCOMPUTING CENTRE (BSC), BARCELONA, SPAIN
ICREA *(www.icrea.cat) is a foundation promoted by the Catalan Government whose aim is to recruit scientists capable of setting up new research groups and new lines of research in Catalonia.*

***BSC** (www.bsc.es) is the national supercomputing centre in Spain. It manages Marenostrum, one of the most powerful supercomputers in Europe.*

ICREA Research Professor and Fusion Group Leader at BSC, October 2013-present

- Mission: Nuclear fusion research in close collaboration with magnetically confined fusion experiments
    - Special focus in numerical modelling of present experiments in preparation of ITER and beyond.
    - Aiming to enhance modelling capabilities in fusion by code development, validation, integration and optimization including the use of advanced High Performance Computing (HPC) techniques.
    - Working closely towards the objectives of the European Fusion Roadmap of EUROfusion, the European fusion research programme for Horizon H2020 and Horizon Europe.
- **Research leadership with high international impact and recognized expertise**:
    - PI of EUROfusion Advanced Computing Hub CIEMAT-BSC (2021-2025, 2 M€).
    - PI Emerging sector project FusionCAT (2019-2022, 7 Catalan centers, 4 M€, www.fusioncat.es).
    - Scientific Coordinator (SC) for EUROfusion flagship experiments at JET: M15-02 'Hybrid Scenario for DT' (2015-2017), 'ICRF scenario support for D and T plasmas" (2018-2020) and "2nd harmonic heating of T in DT plasmas in preparation for ITER" (2021).
    - SC for EUROfusion Medium Size Tokamak Campaigns experiments "W sputtering in ICRF heated plasmas and development of novel ICRF schemes'' (2018) and "Bulk ion heating with He-3 minority heating" (2014) on ASDEX Upgrade tokamak (AUG), Germany.
    - SC of fast ion modelling (stability and transport) for EUROfusion WPMST1, 2014-2017.
- **Fusion group Leader at BSC (fusion.bsc.es, 15 members by Jan. 2021)**:
    - Started up, and leading, a new research group at Department of Computer Applications in Science and Engineering (CASE), BSC.
    - Focus in numerical modelling and code development, combining BSC's world-class HPC expertise with fusion physics and technology
    - Incorporated the group inside EUROfusion
    - Linked the group with ITER and established MoU on Academic and Scientific Cooperation between BSC & ITER (2017-present).
    - Definition and succesfull development of 5 main research lines, covering computer applications in fusion physics and engineering in both tokamak and stellarator configurations:
        - Ion Cyclotron Resonance Frequency Heating of Fusion Plasmas
        - Fast Ions in Fusion Plasmas
        - Non-Linear MHD in Fusion Plasmas
        - HPC for Multiphysics Modelling of Fusion Reactors
        - Fusion Materials Modelling
    - Supervisor of 4 PhD, 6 Master and 2 BSc theses at Universitat Politècnica de Catalunya - BarcelonaTech (UPC) & Universitat Autònoma de Barcelona (UAB), Spain. Host of further 7 internship students at BSc level.
    - Collaborating with UPC in the organization of fusion lectures.

    - Fostering the group's high level of international mobility, allowing e.g. in 2019 48 weeks at research stays collaborator institutes, including JET (UK), IPP Garching (Germany), CIEMAT (Spain), PSNC (Poland) and ITER (France).
- **Further involvement and contributions to BSC's activities:**
    - Secured more than 6.5 M€ of research funding for BSC (additional to my ICREA professorship).
    - Established and maintaining collaborations with high-profile local and international fusion stakeholders, research institutes and universitites.
    - Participating in the Recognized Research Group (SGR) – CASE, 2014-2021 led by CASE director Dr. J.-M. Cela, funded by Agency for Management of University and Research Grants (AGAUR), Catalonia, Spain.
    - Participated in the BSC Severo Ochoa Center of Excellence, 2016-2019 led by Dr. Josep Casanovas, funded by the Spanish Ministry for Economy and Competitivity.
    - Fostered group's participation in the Mont-blanc project (2011-2015) to design a new type of supercomputer based on energy efficient solutions used in embedded and mobile devices, coordinated by Dr A. Ramirez and Dr F. Mantovani (BSC).
    - Fostered group's participation in the PRACE project (2012-2016) in the third implementation phase, coordinated by BSC Operations Director Dr. S. Girona.
    - Contributor to the PRACE (www.prace-ri.eu) and Severo Ochoa Seminars and collaborator with the International Doctoral Symposiums organized at BSC.
    - Initiated and supporting collaboration with the CASE Alya HPC development team for applications of the in-house Alya system in fusion multiphysics modelling.
    - Initiated and supporting collaboration with the CASE materials modelling group on applications of the BigDFT code based on the Density Functional Theory in fusion materials modelling
    - Established contacts with industry and local fusion stakeholders with CASE Business Developer and BSC Technology Transfer Team to establish a RIS3CAT Emerging Sector fusion community FusionCAT in Catalonia.
    - Elaborated succesfull research project and personal grant proposals with the BSC Project Management office.
    - Collaborator with the BSC Communications Team for scientific dissemination of research activities and results to public.

PAST POSITIONS

CAREER BREAK, 2008-2013

- Caring for my young son based in Barcelona, Spain.
- Spanish and Catalan language and culture studies.
- Volunteering work:
    - Responsible officer for Finnish Saturday School of Barcelona including marketing, recruiting of teachers, organization of study spaces, fundraising and finance (2008-2012).
    - Founding of the Scandinavian School of Barcelona Association initiative (2011).

MAX-PLANCK-INSTITUTE FOR PLASMA PHYSICS (IPP), GARCHING, GERMANY

IPP investigates the physical principles underlying a nuclear fusion power plant, which like the sun will gain energy from the fusion of light atomic nuclei. In Garching, IPP is conducting the tokamak ASDEX Upgrade, Germany's largest fusion device.

Ion Cyclotron Heating Expert, 2006–2007

- Expert analysis and modelling of fast ions heated by waves in the ion cyclotron range of frequencies (ICRF) in the ASDEX Upgrade tokamak, with special emphasis on understanding data from a newly installed diagnostics of lost fast ions.

JET JOINT EUROPEAN TORUS, CULHAM, UNITED KINGDOM

JET, the largest tokamak in the world, investigates the potential of fusion power as a safe, clean, and virtually limitless energy source for future generations. The roadmap towards a fusion reactor builds on three devices: JET, its successor ITER and a demonstration reactor called DEMO.

Deputy leader of Task Force Heating and Current Drive, 2003–2004

- Together with Task Force leader, managed the research programme of this European Task Force with approx. 80 members at several research institutions across Europe and with approx. 50 joint experimental sessions at JET including
  - preparation, coordination and defense of research proposals of Task Force members; identification of opportunities and required resources.
  - prioritization, scientific staffing and execution of experiments and analysis, optimizing the exploitation of the strengths of different research groups while taking into account political sensitivities.
  - maximizing scientific productivity by resource allocation.
  - coordination of reporting and publication of the results, carried over to 2005-2006 when stationed at IPP and Helsinki University of Technology.
  - Actively mentored, guided and developed members of the team including a PhD student.

Scientific coordinator / ICRF physics expert, Data Analysis and Modelling Division, 1995–2003

- successful coordination of about 35 experimental sessions in the field of ICRF heating at JET, including preparation, experimental set-up, follow-up and publication. Main accomplishments: acceleration of He-4 neutral beam injected ions with ICRF waves for alpha particle simulation, ICRF mode conversion with real time control of gas mixture, and experimental demonstration and applications of ICRF induced pinch effect of fast resonant ions.
- ICRF physics expert in charge of preparation, analysis and modelling of ICRF heating in JET experiments for various Task Forces including Task Force Heating, MHD, Diagnostic, and Plasma Scenarios in different machine configurations including deuterium-tritium, trace tritium and He-4 plasmas.
- Development of theoretical models in the field of ICRF heating, their implementation in ICRF simulation packages and validation against experimental data.
- Session Leader in charge of execution of JET experiments.
- Physicist in Charge, in charge of coordinating operation of diagnostics for experiments on JET.
- Responsible Officer at JET for several large modeling codes.

- Actively mentored, guided and developed members of the team including a master student.

GENERAL ATOMICS, DIII-D PROGRAMME, SAN DIEGO, USA
General Atomics develops innovative nuclear and alternative energy solutions to meet global needs. The mission of the DIII-D Research Program is to establish the scientific basis for the optimization of the tokamak approach to fusion energy production.
Visiting ICRF physics expert, April–May 2000

- Expert analysis and modelling of high-harmonic ICRF heating with multiple frequencies and resonances in combination of neutral beam injection in DIII-D plasmas, involving upgrade of ICRF modelling tools to handle the complex experimental situation.

HELSINKI UNIVERSITY OF TECHNOLOGY, NOW AALTO UNIVERSITY, PLASMA PHYSICS AND FUSION GROUP, FINLAND
The Plasma Physics and Fusion group at Aalto University focuses on experimental and computational plasma physics of magnetically confined fusion plasmas. The overall goal is to create a new, clean and virtually unlimited energy source.
Senior Researcher 2003-2007 and **Researcher 1994-2003** with secondments to IPP (2006-2007) and JET (1995-2004) as described above.
2005-2006 continued the analysis and the coordination of the reporting and publication of JET results obtained in 2003-2004 (25 publications).
Research/Teaching assistant, 1992–1994

- Development of a numerical modelling code for fusion burn dynamics of tokamak plasmas.
- Teaching assistant for university study and laboratory courses on plasma physics and fusion research, nuclear engineering and nuclear and neutron physics.

EDUCATION

1999	**Tekniikan Tohtori (Doctor of Science in Technology).** Field of study: Engineering Physics. Helsinki University of Technology, now called Aalto University School of Science, Finland. Thesis: Development and Experimental Evaluation of Theoretical Models for Ion Cyclotron Resonance Frequency Heating of Tokamak Plasmas.
1995-1999	**Scientific research** for degree of Doctor of Science in Technology **at Joint European Torus (JET), Culham, United Kingdom**.
1993-1994	**Tekniikan Lisensiaatti (Licentiate in Technology).** First postgraduate degree. Field of study: Technical Physics, Helsinki University of Technology, Finland.
1988-1992	**Diplomi-insinööri (Master of Science in Technology).** Higher graduate degree (no diploma was issued at the end of the lower Batchelor's degree). Field of study: Technical Physics. Helsinki University of Technology, Finland.

PUBLICATIONS

- 151 refereed original scientific journal publications (14 as lead author) including one paper in Nature Physics and 12 Physical Review Letters (2 as lead author); 158 scientific conference papers (20 as lead author), 7 reports (4 as lead author).
- Since ICREA appointment in 2013: 64 journal articles & 47 papers in leading conference proceedings.
- Number of citations 6400+, H-index = 46 (Google Scholar, January 2021).
- Full list of publications in Appendix.

PRESENTATIONS AT INTERNATIONAL CONFERENCES AND WORKSHOPS

Since my ICREA appointment in 2013:

- Coauthor in 3 plenary talks
    - HPC for solving multi-physics problems, 6th International Workshop on Numerical Modelling of High-Temperature Superconductors (HTS), 26th to 29th June 2018, Costa de Caparica, Portugal.
    - Active control of Alfvén eigenmodes in fusion plasmas, 45th European Physical Society Conference on Plasma Physics, Prague, Czech Republic, 2nd to 6th July 2018.
    - Role of ICRH for heating of fusion devices - Overview of recent developments, the 43rd EPS Conference on Plasma Physics, Leuven, 2016.
- 54 invited talks (6 by myself), 21 oral presentations (4 by myself) & 30 poster presentations (5 by myself).
- More details in https://www.icrea.cat/Web/ScientificStaff/mervi-johanna-mantsinen-569

Selected invited talks prior to my ICREA appointment:

- 17th Topical Conference on Radio Frequency Power in Plasmas, Florida, USA, 2007.
- ASDEX Upgrade Programme Seminar, Kloster Seon, Germany, 2007.
- IPP Colloquium, Max Planck Institute for Plasma Physics, Garching, Germany, 2006.
- 30th EPS Conference on Controlled Fusion and Plasma Physics, St Petersburg, Russia, 2003.
- Annual Program Seminar of Association Euratom-Tekes, Finland, 2003.
- 14th Topical Conference on Radio Frequency Power in Plasmas, Oxnard, CA, USA, 2001.
- 7th IAEA Technical Committee on Energetic Particles in Magnetic Confinement Systems, Gothenburg, Sweden, 2001.
- 8th European Theory Conference, Como, Italy, 1999.

EDITORIAL

Editor in 3 journal special issues:

- Mantsinen M et al. 2021, 'Special Issue on High Performance Supercomputing (HPC) in Fusion Research 2020', Plasma Physics and Controlled Fusion.

- Giruzzi G et al. 2021, 'Special Issue Featuring the Invited Talks from the 47th EPS Conference on Plasma Physics', 21-25 June 2021, Plasma Physics and Controlled Fusion.
- Dendy R et al. 2018, 'Special Issue Featuring the Invited Talks from the 45th EPS Conference on Plasma Physics', Prague, 2-6 July 2018, Plasma Physics and Controlled Fusion.

SELECTED LECTURES AND SEMINARS

- Lecture "Plasma waves and ICRF heating" as part of the Fusion Technology course organized by the Barcelona School of Industrial Engineering (ETSEIB) of the Universitat Politècnica de Catalunya - BarcelonaTech (UPC), 2016-2020.
- Talk “Overview of IC results in Plasmas”, 15th Course of the International School of Fusion Reactor Technology,"Ettore Majorana" Foundation and Centre for Scientific Culture, Erice, Sicily, Italia 2015.
- Talk “Supercomputing for fusion energy applications”, PRACE Advanced Training Centre (PATC) course on HPC-based simulations, Engineering and Environment at BSC, Partnership for Advanced Computing in Europe (PRACE), Barcelona Supercomputing Center, Spain, 2014-2017.
- Opening talk “Modelling of ion cyclotron resonance frequency heating in JET in preparation of the nuclear fusion reactor ITER”, Severo Ochoa Research Seminar, Barcelona Supercomputing Center, Spain, 2014.

SCIENTIFIC CONFERENCE AND WORKSHOP ORGANIZATION

- Chair of Local Organizing Committee for the 47th EPS Conference on Plasma Physics (2017-2021), www.epsplasma2020.eu organized online in 2021 due to Covid-19 pandemic.
- Initiated the Fusion HPC workshop series in 2020 in collaboration with Red Española de Supercomputación (RES) (hpcfusion.bsc.es), with papers published in special issues of Plasma Physics and Controlled Nuclear Fusion journal by IOP Publishing.
- Organizer of two FusionCAT webinars “Faster Fusion through innovations” and “DEMO Oriented Neutron Source (DONES) project”, 2020.
- Organization of the Code Camp of the EUROfusion Work Package Code Development at BSC, 2019.
- Chair of Magnetic Confinement Fusion Plasma Panel of the Program Committee for the 45th EPS Conference on Plasma Physics, Prague, Czech Republic, 2018.
- Member of Programme Committee of the 43th EPS Plasma Physics Conference, Leuven, Belgium, 2016.

POSITIONS OF TRUST

- Member of the EPS Plasma Physics Division Board, 2021 - present.
- Member of EUROfusion HPC Allocation Committee for supercomputer Marconi-Fusion, 2016 - present.

- Expert of the Spanish National Agency of Evaluation (ANEP), 2015 - present.
- Liaison Officer of the OECD Nuclear Agency (NEA) Computer Programme Service, 2016 - present.
- Member of M Hoppe's PhD committee, Chalmers University of Technology, Jan. 2022.
- Board member acting on the provision of a tenured academic position (Professor Agregat) for the Department of Physics at Universitat Politècnica de Catalunya, 2021.
- President of A Dvornova's PhD committee, Technical University of Eindhoven (the Netherlands) and the University Aix-Marseille (France), 2021
- Jury member of Dr David Zarzoso's "Habilitation à Diriger des Rercherches", Aix-Marseilles University, France, 2020.
- Member of I Abramovic's PhD committee, Eindhoven University of Technology, The Netherlands, 2019
- Jury member of Dr R Dumont's "Habilitation à diriger des recherches", Aix-Marseille Université and CEA, France, 2018.
- Examiner of PhD Thesis 'Fast ion simulations in toroidally axisymmetric tokamaks' by Simppa Äkäslompolo, Aalto University, Finland (2016).
- Member of EUROfusion IT group, 2016-2017.
- Member of Evaluation Panel NT-3 (subatomic physics, space physics and astronomy), Swedish Research Council, 2015-2017.
- Reviewer of EUROfusion, Netherlands Organisation for Scientific Research, Foundation of Polish Science, AQU Catalunya, ICREA, and journal publications including Nuclear Fusion, Plasma Physics and Controlled Fusion, SpringerPlus, Physics of Plasmas, Plasma, Fluids and Atoms among others.
- Invited member of the Editorial Board of journal "Plasma", MDPI, Switzerland, 2017-present.
- Invited member of Editorial Board of journal "Plasma Physics and Controlled Fusion", Institute of Physics Publishing, United Kingdom, 2006–2008.
- 2018-present: Board member and second-generation owner of MANTSINEN Group Ltd Oy (www.mantsinen.com), a family-owned private company headquartered in Finland with over 550 employees in Finland, Russia and Sweden. MANTSINEN builds the largest hydraulic material handling machines and cranes in the world and provides large-scale logistic services.

AWARDS AND DISTINCTIONS

- Outstanding Presentation Award for "Homogenization of Winding Pack Properties for the Structural Analysis of Fusion Magnets" by J. Lorenzo and M. Mantsinen at 27th International Conference on Magnet Technology (MT27), Fukuoka International Congress Center, Fukuoka, Japan and online, 15-19 November, 2021.
- BSC Annual Distinction 2017 and 2020.
- PRACE award for the best poster presentation entitled "Nonlinear electromagnetic stabilization of ITG micro-turbulence by ICRF-driven fast ions in ASDEX Upgrade" by F. de Oliveira, H Doerk, M. Mantsinen et al., PRACEdays17, 15-18 May 2017.
- Nominated Member of AcademiaNet www.academia-net.org, Germany, 2014-present.
- Study awards:

- PhD Award, Helsinki University of Technology, Finland, 1999.
- Award for doctoral research by Cultural Fund of Finland, Finland, 1995.
- Award for doctoral research by Imatran Voima Foundation, Finland, 1995.
- Award for doctoral research by Foundation of Helsinki University of Technology, Finland, 1995.
- 2 Awards for Licentiate in Technology research, Helsinki University of Technology, 1993 and 1994.
- Award for Licentiate in Technology research, Emil Aaltonen Foundation, Finland, 1993.
- MSc degree Award, Helsinki University of Technology, Finland, 1992.

MEMBERSHIPS

- International Tokamak Physics Activity (ITPA) Energetic Particle Topical Group, invited Expert, 2014 - present.
- Real Sociedad Española de Física, Spain, member, 2017 - present.
- Finnish Association of Graduate Engineers, member, 1992 - present.
- European Physical Society, member since 1996 - present.
- Finnish Physical Society, member since 1992 - present.

SELECTED SCIENTIFIC OUTREACH

- Research dissemination through online media, i.e. the web pages of BSC Fusion group fusion.bsc.es (since Feb. 2016) and associated social media channels. Up to the end of 2021, 285 blog articles, attracting more than 121000 visitors and more than 225000 visits. Twitter: 816 tweets via account @Fusion_BSC; LinkedIn: 22 posts via Fusion Group BSC account since January 2021; and Facebook: approx. 25 posts via account BSCCNS.
- FusionCAT project dissemination through web pages www.fusioncat.es and related posts in social medial with hashtag #FusionCAT (2020 – present)
- Organization of the Catalan branch of the FuseNet Teacher Day event in collaboration with Fusion for Energy, UPC and b_TEC, 2020.
- Hosting and giving presentation "Computer applications and fusion research at BSC" for a group of about 60 Fusion for Energy staff members on their visit to MareNostrum4 at BSC, 2018.
- Interview in the article entitled “Dan Brown, MareNostrum and Postdocs in Barcelona” for the magazine “Fusion in Europe”, 2018.
- Interview on the Spanish LAB24 TV program, 2018.
- Interview on fusion energy for the TV3/Canal33 documental series "El dia de demà", 2017.
- Online journal articles on Memorandum of Understanding on Cooperation between ITER and BSC, 2017.
- Article "How to tame plasma turbulence" in EUROfusion Newsletter, 2016.
- Article 'Fusion Research on the Rise' by Academia Net, 2016.

SELECTED FURTHER EDUCATION AND TRAINING

- Certified Board Member program (5 days), Tampere Chamber of Commerce, Finland, 2021.
- How to manage and accompany your team members when they just came back from maternity-paternity leave (2 hours), BSC, 2021.
- Excel medium level (12 hours), BSC, 2020.
- Coaching Fundamentals for Managers (6 hours), BSC, 2019.
- Impact and Innovation in Horizon 2020 (3.5 hours), BSC, 2019.
- Conflict Management (6 Hours), BSC, 2019.
- Impact Public Speaking (4 hours), BSC, 2018.
- Neurolinguistics programming and Emotional Intelligence in Conflict Solving (4 hours), BSC, 2017.
- People and Team Direction (8 hrs), BSC, 2016.
- How to Write a Competitive Proposal for Horizon 2020 (4 hrs), BSC, 2013.
- JET Session Leader Training, 2000–2001.
- Introduction to Project Management (2 days), Helsinki University of Technology (HUT), 2000.
- Intensive courses on plasma physics during graduate and postgraduate studies: First Carolus Magnus Summer School on Plasma Physics, 1993, and Culham Plasma Physics Summer School, 1992.

LANGUAGES

- Finnish (native proficiency)
- English (full professional proficiency)
- Spanish (good working proficiency)
- Swedish, German, Catalan (limited working proficiency)

APPENDIX: LIST OF PUBLICATIONS

Publications divided in those since my ICREA appointment and those prior to it.

REFEREED JOURNAL PUBLICATIONS SINCE MY ICREA APPOINTMENT

In reverse chronological order according to number of citations (shown if ≥ 5, Google Scholar; Dec. 2021).

1. Kazakov Ye O et al. 2021, 'Physics and applications of three-ion ICRF scenarios for fusion research', Physics of Plasmas, 28, 020501. Citations: 18.

2. Soba A et al. 2021, 'Validations against SINBAD benchmark of the radiation transport module, a deterministic solver for the neutron transport equation', Fusion Engineering and Design, 169, 112497.

3. Gutierrez-Milla A, Zok T, Owsiak M, Plociennik M, **Mantsinen M** 2021, 'Progress in the transferability of fusion workflows across HPC systems', Plasma Physics and Controlled Fusion, 63, 8, 084004.

4. Kalha C et al. 2021, 'Lifetime effects and satellites in the photoelectron spectrum of tungsten metal', accepted for publication in Phys. Rev B.

5. Casson F et al. 2020, 'Predictive multi-channel flux-drive modelling to optimise ICRH tungsten control and fusion performance in JET', Nucl. Fusion 60, 6, 066029. Citations: 28.

6. Nocente M et al. 2020, 'Generation and observation of fast deuterium ions and fusion-born alpha particles in JET with the 3-ion radio-frequency heating scenario', Nucl. Fusion, 60, 12, 124006. Citations: 16.

7. Kazakov Ye O, Nocente M, **Mantsinen MJ** et al. 2020, 'Plasma heating and generation of energetic D ions with the 3-ion ICRF + NBI scenario in mixed H-D plasmas at JET-ILW', Nucl. Fusion 60, 11, 112013. Citations: 10.

8. Ochoukov R et al. 2020, 'High frequency Alfvén eigenmodes detected with ion-cyclotron-emission diagnostics during NBI and ICRF heated plasmas on the ASDEX Upgrade tokamak', Nucl. Fusion, 60, 12, 126043. Citations: 6.

9. Kirov KK et al. 2020, 'Synergistic ICRH and NBI Heating for Fast Ion Generation and Maximising Fusion Rate in Mixed Plasmas at JET', AIP Conference Proceedings 2254**,** 030011. Citations: 5.

10. Di Siena A et al. 2020, "Electromagnetic turbulence suppression by energetic particle driven modes", Nucl. Fusion 59, 124001 and Nucl. Fusion 60, 089501.

11. Chomiczewska A. et al. 2020, 'Analysis of metallic impurities during the application of three-ion ICRH scenario at JET-ILW', AIP Conference Proceedings 2254, 050005.

12. Gallart D, **Mantsinen MJ** et al. 2020, 'Modelling of ICRF heating for JET T and D-T plasmas', AIP Conference Proceedings 2254, 060001.

13. Ochoukov R et al. 2020, 'Overview of recent ICRF experiments and ICRF field measurements on ASDEX Upgrade', AIP Conference Proceedings 2254, 030005.

14. Hole M, Qu Z, Pinches S, Schneider M, Arbina IL, **Mantsinen MJ** and Sauter O. 2020, 'The impact of anisotropy on ITER scenarios', Nucl. Fusion 60, 11, 112010.

15. Lerche E et al. 2020, 'ICRH options for JET-ILW DTE2 operation', AIP Conference Proceedings 2254, 030007.

16. Kiptily V et al. 2020,'Excitation of elliptical and toroidal Alfvén Eigenmodes by 3-He-ions of the MeV-energy range in hydrogen-rich JET plasmas', Nucl. Fusion 60, 11, 112003.

17. Bobkov V et al. 2020, 'Improved operating space of the ICRF system in ASDEX upgrade', AIP Conference Proceedings 2254, 040005.

18. Lerche E et al. 2020, 'Sawtooth control with modulated ICRH in JET-ILW H-mode plasmas', Nucl. Fusion, 60, 12, 126037.

19. Moradi S et al. 2020, 'Global scaling of the heat transport in fusion plasmas' Phys. Rev. Research **2**, 013027.

20. Joffrin E et al. 2019, 'Overview of the JET preparation for deuterium–tritium operation with the ITER like-wall', Nucl. Fusion, 59, 112021. Citations: 80.

21. Garzotti L et al. 2019, 'Scenario development for D-T operation at JET', Nucl. Fusion, 59, 7, 076037. Citations: 39.

22. H. Meyer et al. 2019,'Overview of physics studies on ASDEX Upgrade', Nucl. Fusion, 59, 112014. Citations: 38.

23. B. Labit et al. 2019 'Dependence on plasma shape and plasma fueling for small edge-localized mode regimes in TCV and ASDEX Upgrade', Nucl. Fusion, 59, 086020. Citations: 35.

24. Garcia-Munoz M et al. 2019 'Active Control of Alfvén Eigenmodes in Magnetically Confined Toroidal Plasmas', Plasma Phys. Control. Fusion, 61, 5, 054007. Citations: 28.

25. Garcia J et al. 2019, 'First principles and integrated modelling achievements towards trustful fusion power predictions for JET and ITER', Nucl. Fusion, 59, 8, 086047. Citations: 25.

26. Eriksson J et al. 2019, 'Measuring fas ions in fusion plasmas with neutron diagnostics at JET', Plasma Phys. Control. Fusion, 61, 014027. Citations: 15.

27. Nocente M et al. 2019, 'MeV range particle physics studies in tokamak plasmas using gamma-ray spectroscopy', Plasma Phys. Control. Fusion, 62, 1, 014015. Citations: 14.

28. Kirov K et al. 2019, 'Fast ion synergistic effects in JET high performance pulses', Nucl. Fusion, 59, 5, 056005. Citations: 12.

29. Rakha A, Lauber Ph, **Mantsinen MJ** and Spong DA 2019, 'Shear Alfven wave continuum spectrum with bifurcated helical core equilibria', Nucl. Fusion, 59, 10, 106042.

30. Rakha A, **Mantsinen MJ** et al. 2019, 'Modelling of beam-driven Alfven modes in TJ-II plasmas', Nucl. Fusion, 59, 5, 056002.

31. Czarnecka A et al. 2019, 'Analysis of metallic impurity content by means of VUV and SXR diagnostics in hybrid discharges with hot-spots on the JET-ILW poloidal limiter', Plasma Phys. Control. Fusion, 61, 085004.

32. Nabais F et al. 2019, 'Energetic ion losses 'channeling' mechanism and strategy for mitigation', Plasma Phys. Control. Fusion, 61, 8, 084008.

33. Dumont R et al. 2018, 'Scenario development for the observation of alpha-driven instabilities', Nucl. Fusion, 58, 082005. Citations: 33.

34. Mohr S et al. 2018, 'Linear scaling DFT calculations for large Tungsten systems', Nucl. Mat. Energy, 15, 64. Citations: 27.

35. Sharapov SE et al. 2018 'The effects of electron cyclotron heating and current drive on toroidal Alfvén eigenmodes in tokamak plasmas', Plasma Phys. Control. Fusion, vol. 60, p. 014026. Citations: 24.

36. Gallart D, **Mantsinen MJ** et al. 2018, 'Modelling of JET hybrid plasmas with emphasis on combined ICRF and NBI', Nucl. Fusion 58, 106037. Citations: 21.

37. Galdon-Quiroga J et al. 2018, 'Velocity space resolved absolute measurement of fast ion losses induced by a tearing mode in the ASDEX Upgrade tokamak', Nucl. Fusion, 58, 036005. Citations: 17.

38. Kiptily VG et al. 2018, 'Fusion product losses due to fishbone instabilities in deuterium JET plasmas', Nucl. Fusion 58 014003. Citations: 16.

39. Hellesen C, **Mantsinen M** et al. 2018, 'Analysis of resonant fast ion distributions during combined ICRF and NBI heating', Nucl. Fusion, 58, 056021. Citations: 11.

40. Nabais F et al. 2018, 'TAE stability calculations compared to TAE antenna results in JET', Nucl. Fusion, 58, 082007. Citations: 10.

41. McClements KG et al. 2018, 'Observations and modelling of ion cyclotron emission observed in JET plasmas', Nucl. Fusion, 58, 9, 096020. Citations: 8.

42. Gutierrez-Milla A, **Mantsinen MJ** et al. 2018, 'New High Performance Computing Software for Multiphysics Simulations of Fusion Reactors', Nucl. Eng. Design, 136A, 639.

43. Krawczyk N et al. 2018, 'Application of the VUV and the soft x-ray systems on JET for the study of intrinsic impurity behavior in neon seeded hybrid discharges', Review Of Scientific Instruments, 89, 10, 10D131.

44. X. Litaudon et al. 2017, 'Overview of the JET results in support to ITER' Nucl. Fusion 57 102001. Citations: 164.

45. Kazakov Ye O et al. 2017, 'Efficient generation of energetic ions in multi-ion plasmas by radio-frequency heating', Nature Physics, vol. 13, p. 973. Citations: 81.

46. Meyer H et al. 2017, 'Overview of progress in European medium sized tokamaks towards an integrated plasma-edge/wall solution', Nucl. Fusion, vol. 57, p. 102014. Citations: 80.

47. J. Garcia, C. Challis, D. Gallart, L. Garzotti, T. Goerler, D. King, **M. Mantsinen** 2017, 'Challenges in the extrapolation from DD to DT plasmas: experimental analysis and theory based predictions for JET-DT', Plasma Physics and Controlled Fusion 59 014023. Citations: 27.

48. Ongena J et al, 2017, 'Synergetic heating of D-NBI ions in the vicinity of the mode conversion layer in H-D plasmas in JET-IL W', EPJ Web of Conferences, vol. 157, 02006. Citations: 26.

49. **Mantsinen MJ** et al. 2017, 'The Role of Combined ICRF and NBI Heating in JET Hybrid Plasmas in Quest for High D-T Fusion Yield', EPJ Web of Conferences, vol. 157, p. 03032. Citations: 18.

50. Silburn S et al. 2017, 'Mitigation of Divertor Heat Loads by Strike Point Sweeping in High Power JET Discharges', Physica Scripta, no T170, p. 014040. Citations: 13.

51. Gallart D, **Mantsinen MJ** et al. 2017, 'Modelling of combined ICRF and NBI heating in JET hybrid plasmas', EPJ Web of Conferences, vol. 157, 03015. Citations: 11.

52. Jacquet P et al. 2017, ICRH Physics and technology achievements in JET, EPJ Web Conf, vol. 157, p.02004. Citations: 10.

53. Kallenbach A et al. 2017, 'Overview of ASDEX Upgrade results' Nucl. Fusion, vol. 57, p. 102015.

54. M. Schneider, T. Johnson, R. Dumont, J. Eriksson, L.-G. Eriksson, L. Giacomelli, J.-B. Girardo, T. Hellsten, E. Khilkevitch, V.G. Kiptily, T. Koskela, **M. Mantsinen**, M. Nocente, M. Salewski, S.E. Sharapov, A.E. Shevelev and JET Contributors 2016, 'Modelling third

harmonic ion cyclotron acceleration of deuterium beams for JET fusion product studies experiments', Nuclear Fusion 56 112022. Citations: 36.

55. S.E. Sharapov, T. Hellsten, V.G. Kiptily, T. Craciunescu, J. Eriksson, M. Fitzgerald, J.-B. Girardo, V. Goloborod'ko, C. Hellesen, A. Hjalmarsson, T. Johnson, Y. Kazakov, T. Koskela, **M. Mantsinen,** I. Monakhov, F. Nabais, M. Nocente, C. Perez von Thun, F. Rimini, M. Santala, M. Schneider, M. Tardocchi, M. Tsalas, V. Yavorskij, V. Zoita and JET Contributors 2016, 'Fusion product studies via fast ion D–D and D–^{3}He fusion on JET', Nucl. Fusion 56 112021. Citations: 18.

56. J.-B. Girardo, S. Sharapov, J. Boom, R. Dumont, J. Eriksson, M. Fitzgerald, X. Garbet, N. Hawkes, V. Kiptily, I. Lupelli, **M. Mantsinen**, Y. Sarazin, M. Schneider and JET Contributors 2016, 'Stabilization of sawteeth with third harmonic deuterium ICRF-accelerated beam in JET plasmas' Physics of Plasmas 23 012505:1-11. Citations: 7.

57. J. Eriksson, M. Nocente, F. Binda, C. Cazzaniga, S. Conroy, G. Ericsson, L. Giacomelli, G. Gorini, C. Hellesen, T. Hellsten, A. Hjalmarsson, A.S. Jacobsen, T. Johnson, V. Kiptily, T. Koskela, **M. Mantsinen**, M. Salewski, M. Schneider, S. Sharapov, M. Skiba, M. Tardocchi, M. Weiszflog and JET Contributors 2015, 'Dual sightline measurements of MeV range deuterons with neutron and gamma-ray spectroscopy at JET'. Nuclear Fusion 55 123026:1-15. Citations: 66.

58. H. Zohm for the ASDEX Upgrade Team and the EUROfusion MST1 Team (including **M. Mantsinen**) 2015, 'Recent ASDEX Upgrade research in support of ITER and DEMO' Nuclear Fusion 55 104010:1-12. Citations: 30.

59. Y.O. Kazakov, J. Ongena, D.D. Van Eester, R.R. Bilato, R. Dumont, E. Lerche, **M. Mantsinen** and A. Messiaen 2015, 'A new ion cyclotron range of frequency scenario for bulk ion heating in deuterium-tritium plasmas: How to utilize intrinsic impurities in our favour' Physics of Plasmas 22 082511:1-8. Citations: 22.

60. X. Sáez X, A. Soba, E. Sánchez, **M Mantsinen**, S Mateo, JM Cela and F. Castejón 2015, 'First experience with particle-in-cell plasma physics code on ARM-based HPC systems', Journal of Physics: Conference Series 640 012064.

61. Lorenzo J and **Mantsinen MJ** 2021, 'Homogenization of Winding Pack Properties for the Structural Analysis of Fusion Magnets', submitted to EEE Transactions on Applied Superconductivity.

62. Taylor D, **Mantsinen MJ** et al. 2021, 'Effect of inclusion of pitch-angle dependence on a simplified model of RF deposition in tokamak plasma', submitted to Plasma Physics and Controlled Fusion.

63. Gallart G, **Mantsinen MJ** et al. 2021, 'Prediction of ICRF minority heating schemes for JET D-T experiments', submitted to Plasma Physics and Controlled Fusion.

64. Solano E et al. 2021, 'L-H transition studies at JET: Tritium, Helium and Deuterium', submitted to Nuclear Fusion.

PUBLICATIONS IN CONFERENCE PROCEEDINGS SINCE MY ICREA APPOINTMENT

Number of citations shown if ≥ 5 (Google Scholar; Dec. 2021).

1. **Mantsinen M**J et al. 2021, 'Recent key contributions of ICRF heating in support of plasma scenario development and fast ion studies on JET and ASDEX Upgrade', IAEA FEC 2021.
2. Sauter O et al. 2021, 'ITER baseline scenario investigations on TCV and comparison with AUG', IAEA FEC2021.
3. Solano E et al. 2021, 'L-H transition studies at JET: H, D, He-4 and T', IAEA FEC2021.
4. Mulas S et al. 2021, 'Experimental validation of neutral beam current drive simulations in TJ-II plasmas', IAEA FEC2021.
5. Rodrigues P et al. 2021, 'High-order coupling of shear-Alfvén and acoustic continua in JET plasmas', IAEA FEC2021.
6. Manyer J, **Mantsinen MJ** et al. 2021, 'Modelling of dual-frequency ICRF heating in ASDEX Upgrade discharges relevant to the ITER baseline scenario', 47th European Physical Society Conference on Plasma Physics, P5.1055.
7. Gallart D, **Mantsinen MJ** et al. 2021, 'ICRH physics for relevant schemes in T and D-T experiments at JET', 47th European Physical Society Conference on Plasma Physics, P1.1049.
8. López de Arbina I, **Mantsinen MJ** et al. 2019, 'First applications of the ICRF modelling code PION in the ITER Integrated Modelling and Analysis Suite', 46th European Physical Society Conference on Plasma Physics (EPS), Milan, Italy, 8th -12th July, *Europhysics Conference Abstracts,* vol. 43C, P4.1079.
9. Lorenzo J et al. 2019, 'Development of HPC Multiphysics Framework for HTS Magnets in Fusion', 6th BSC Severo Ochoa Doctoral Symposium, Book of Abtracts, pp 89-90 Barcelona Supercomputing Center, Spain
10. **Mantsinen MJ** et al. 2019, 'Modelling of three-ion ICRF schemes with PION', 46th European Physical Society Conference on Plasma Physics (EPS), Milan, Italy, 8th -12th July, *Europhysics Conference Abstracts,* vol. 43C, O5.102.
11. **Mantsinen MJ** et al. 2018 'Modelling of ICRF heating in ASDEX Upgrade discharges with pure wave heating relevant to the ITER baseline scenario', Europhysics conference abstracts Vol. 42A, P1.1072.
12. Noterdaeme JM et al. 2018, 'Ion Cyclotron Range of Frequency Power: Progress in Operation and Understanding for Experiments with Metallic Walls', 27th IAEA Fusion Energy Conference (FEC2018), EX/P8-23.
13. Garzotti L et al. 2018, 'Scenario Development for DT Operation at JET', 27th IAEA Fusion Energy Conference (FEC2018), 0684.
14. Hillesheim JC et al. 'Implications of JET-ILW L-H Transition Studies for ITER ' 27th IAEA Fusion Energy Conference (FEC2018), EX/4-1. *Citations: 6.*

15. Goniche M et al. 2018 'Role of MHD activity triggered by fast ions in tungsten transport in JET hybrid discharges',Europhysics conference abstracts Vol. 42A, P4.1057.

16. Pütterich T et al. 2018, 'The ITER Baseline Scenario Investigated at ASDEX-Upgrade', 27th IAEA Fusion Energy Conference (FEC2018), EX/P8-4. *Citations: 5.*

17. Casson FJ et al. 2018, 'Predictive Multichannel Flux-Driven Modelling to Optimize ICRH Tungsten Control in JET ', 27th IAEA Fusion Energy Conference (FEC2018), TH/3-1.

18. Sharapov S et al. 2018, 'Plasma and Diagnostics Preparation for α-Particle Studies in JET DT', 27th IAEA Fusion Energy Conference (FEC2018), EX/P1-28.

19. Kazakov Ye.O. et al. 2018, 'Recent advances in ICRF heating of mixture plasmas: survey of JET and AUG experiments and extrapolation to JET-DT and ITER', 27th IAEA Fusion Energy Conference (FEC2018), EX/8-1. *Citations: 7.*

20. Rakha A, **Mantsinen MJ** et al. 2018 'Modelling of Alfvén cascades in NBI heated stellarator plasmas', Europhysics conference abstracts Vol. 42A, P4.1004

21. Garcia J et al. 2018, 'First Principles and Integrated Modelling Achievements Towards Trustful Fusion Power Predictions for JET and ITER', 27th IAEA Fusion Energy Conference (FEC2018), TH/3-1.

22. Frigione D et al. 2018, 'Impact of Neon Injection on Electron Density Peaking in JET Hybrid Plasmas', 27th IAEA Fusion Energy Conference (FEC2018), 0233.

23. Nocente M et al. 2018, 'A quantitative comparison between confined fast ion data and models from radio frequency heating experiments with the three ion scenarios at JET', Europhysics Conference Abstracts Vol 42A, O5.103.

24. Hillesheim J et al. 2017, 'LH transition studies in hydrogen and mixed ion species plasmas in JET',Europhysics Conference Abstracts, vol. 41F, p. P5.162. *Citations: 6.*

25. de Oliveira F, Doerk H, **Mantsinen MJ** et al. 2017, Nonlinear electromagnetic stabilization of ITG microturbulence by ICRF-driven fast ions in ASDEX Upgrade', Europhysics Conference Abstracts, vol. 41F, p. P4.127.

26. Mailloux J et al. 2017, ' Plasma preparation for alpha-particle excitation of TAEs in JET DT plasmas', Europhysics Conference Abstracts, vol. 41F, p. O3.109.

27. **Mantsinen MJ** et al. 2017,'Optimising the use of ICRF waves in JET hybrid plasmas for high fusion yield', Europhysics Conference Abstracts, vol. 41F, p. O3.110.

28. Futatani S et al. 2017, 'Non-linear MHD Simulations of Pellet Triggered ELM for ITER Plasma Scenarios', Europhysics Conference Abstracts, vol. 41F, p. P4.127.

29. Rakha A, **Mantsinen MJ** et al. 2017, 'Simulations of Alfvénic Modes in TJ-II Stellarator', 4th BSC Severo Ochoa Doctoral Symposium, Barcelona, Spain, 2nd May, pp. 103-105.

30. de Oliveira F, Doerk H, **Mantsinen MJ** et al. 2017, 'Stabilization of microturbulence by fast ions in ASDEX upgrade', 4th BSC Severo Ochoa Doctoral Symposium, Barcelona, Spain, 2nd May, pp. 96-97.

31. Challis C et al 2017,'Impact of neon seeding on fusion performance in JET ILW hybrid plasmas', Europhysics Conference Abstracts, vol. 41F, p. P2.153. *Citations: 10.*

32. **M.J. Mantsinen**, C. Challis, J. Eriksson, D. Frigione, J. Garcia, C. Giroud, T. Hellsten, A. Hjalmarsson, D.B. King, E. Lerche, M. Schneider, S. Sharapov and JET contributors, 'Analysis of ICRF heating and ICRF-driven fast ion in recent JET experiments', Proc. 14th IAEA Technical Committee Meeting on Energetic Particles in Magnetic Confinement Systems, 1-4 September 2015, the IAEA Headquarters, Vienna, Austria.

33. **M.J. Mantsinen**, R. Bilato, V.V. Bobkov, A. Kappatou, RM McDermott, M. Nocente, T. Odstrčil, G. Tardini, M. Bernert, R. Dux, T. Hellsten,P. Mantica, M. Maraschek, S.K. Nielsen, J.-M. Noterdaeme, J. Rasmussen, F. Ryter, M. Stejner, J. Stober, M. Tardocchi, the ASDEX Upgrade Team and the EUROfusion MST1 Team 2015, 'Bulk Ion Heating with ICRF Waves in Tokamaks'**,** RADIO FREQUENCY POWER IN PLASMAS: Proceedings of the 21st Topical Conference, AIP Conference Proceedings, vol. 1689, pp 030005:1-8. *Citations: 10.*

34. **M. Mantsinen**, V. Bobkov, D. Gallart, B. Geiger, T. Johnson, H. Meyer, M. Nocente, R. Ochoukov, T. Odstrčil, E. Perelli, J. Rasmussen, P.A. Schneider, S. Sharapov, G. Tardini, M. Tardocchi, P. Vallejós, the ASDEX Upgrade and MST EUROfusion Teams, 'Third harmonic ICRF heating of deuterium beam ions on ASDEX Upgrade', 43rd European Physical Society Conference on Plasma Physics (EPS), Leuven, Belgium, 4th -8th July 2016, Europhysics Conference Abstracts, Vol. 40A, P1.035.

35. **Mantsinen MJ**, Eriksson J, Challis C, Frigione D, Garcia J, Giroud C, Hjalmarsson A, King DB and JET Contributors 2015, 'ICRH analysis of high-performance JET hybrid discharges using PION modelling and neutron spectrometry measurements', 42nd EPS Conference on Plasma Physics, 22 - 26 June 2015 Lisbon, Portugal, Europhysics Conference Abstracts 2015, vol. 39E, pp. P2.171: 1-4.

36. **M.J. Mantsinen**, F.N. de Oliveira, C. Angioni, R. Bilato, H. Doerk, D. Gallart, A. Gutiérrez-Milla, P. Mantica, T. Odstrčil, X. Sáez, G. Tardini, the ASDEX Upgrade Team and the EUROfusion MST1 Team,'Modelling of He-3 minority heating and transport levels in AUG discharges with large core ion temperature gradients', the 21st Joint EU-US Transport Task Force Meeting (TTF 2016), Leysin, Switzerland.

37. D. Gallart, **M. Mantsinen**, L. Garzotti, R. Bilato, C. Challis, J. Garcia, A. Gutierrez-Milla, T. Johnson, E. Lerche, X. Sáez, D. van Eester and JET contributors, 'Simulations of combined ICRF and NBI heating for high fusion performance in JET', 43rd European Physical Society Conference on Plasma Physics (EPS), Leuven, Belgium, 4th -8th July 2016, Europhysics Conference Abstracts, Vol. 40A, P2.003.

38. D. Gallart, **M. Mantsinen**, Ye Kazakov 'Modelling of ICRF heating in DEMO with special emphasis on bulk ion heating', RADIO FREQUENCY POWER IN PLASMAS: Proceedings of the 21st Topical Conference, AIP Conference Proceedings, 2015, vol. 1689, 060004:1-4.

39. D. Gallart, **M.J. Mantsinen**, Y. Kazakov, 'Analysis of the potential of ICRF waves to heat bulk ions in DEMO', 42nd EPS Conference on Plasma Physics, 22 - 26 June 2015 Lisbon, Portugal, Europhysics Conference Abstracts 2015, vol. 39E, pp. P4.109: 1-4.

40. D. Gallart, **M.J. Mantsinen**, L. Garzotti, C. Challis, J. Garcia, A. Gutiérrez and X. Sáez, 'Extrapolations of the fusion performance in JET', 3rd International BSC Doctoral Symposium 2016, Barcelona Spain 4-6 May, 2016.

41. D. Gallart, **M.J. Mantsinen** and Ye.O. Kazakov, 'Heating bulk ions in DEMO with ICRF waves', 2nd International BSC Doctoral Symposium, Barcelona, Spain, 2015.

42. X. Sáez, A. Soba and **M. Mantsinen**, Plasma physics code contribution to the Mont-Blanc project 2015, Book of abstracts of the 2nd BSC International Doctoral Symposium, pp. 83–84, Barcelona, Spain (2015).

43. X. Sáez, A. Soba, E. Sánchez, **M. Mantsinen**, and J.-M. Cela, 'Performance analysis of a particle-in-cell plasma physics code on homogeneous and heterogeneous HPC systems', in Proceedings of Congress on Numerical Methods in Engineering (CNM), 2015, pp. 1–18, APMTAC, Lisbon, Portugal.

44. S. Futatani, S. Pamela, G.T.A. Huijsmans, L. Garzotti, D. Frigione, A. Loarte, M. Hoelzl, P.T. Lang, G. Kocsis, F. Orain, M. Dunne, A. Lessig, **M. Mantsinen**, EUROfusion MST Team, ASDEX Upgrade Team, JET Contributors, 'Non-linear MHD Simulations of Pellet Triggered ELMS in JET and ASDEX Upgrade tokamaks', 43rd European Physical Society Conference on Plasma Physics (EPS), Leuven, Belgium, 4th-8th July 2016, Europhysics Conference Abstracts, Vol. 40A, O5.125.

45. S. Futatani, G.T.A. Huijsmans, A. Loarte, S. Pamela, M. Hoelzl, P.T. Lang, L. Garzotti, G. Kocsis, F. Orain, D. Frigione, M. Dunne, A. Lessig, **M. Mantsinen,** EUROfusion MST1 Team, ASDEX Upgrade Team, JET Contributors, "Non-linear MHD Simulations of Pellet triggered ELMs", TH/P1-25, Proceeding of 26th IAEA Fusion Energy Conference, Kyoto, Japan, October 17-22, 2016.

46. T. Hellsten, T. Johnson, S.E. Sharapov, V. Kiptily, J. Eriksson, **M. Mantsinen**, M. Schneider, F. Rimini, M. Tsalas and JET Contributors,'RF heating for fusion product studies', RADIO FREQUENCY POWER IN PLASMAS: Proceedings of the 21st Topical Conference, AIP Conference Proceedings, vol. 1689 (2015) 060007:1-4.

47. G.L. Falchetto, M.I. Airila, A. Alberto Morillas, E. Andersson Sundén, T. Aniel, J.-F. Artaud, O. Asunta, C.V. Atanasiu, M. Baelmans, V. Basiuk, R. Bilato, M. Blommaert, D. Borodin, C. Boulbe, S. Briguglio, J. Citrin, R. Coelho, S. Conroy, D. Coster, V. Doriæ, R. Dumont, E. Fable, B. Faugeras, J. Ferreira, L. Figini, A. Figueiredo, G. Fogaccia, C. Fuchs, E. Giovannozzi, V. Goloborod'ko, O. Hoenen, Ph. Huynh, F. Imbeaux, I. Ivanova-Stanik, T. Johnson, D. Kalupin, L. Kos, E. Lerche, J. Madsen, O. Maj, G. Manduchi, **M. Mantsinen**, Y. Marandet, S. Matejcik, R. Mayo-Garcia, P.J. McCarthy, A. Merle, E. Nardon, A.H. Nielsen, S. Nowak, M. O'Mullane, M. Owsiak, V. Pais, B. Palak, G. Pelka, M. Plociennik, G.I. Pokol, D. Poljak, H. Radhakrishnan, H. Reimerdes, D. Reiser, J. Romazanov, P. Rodrigues, X. Saez, D. Samaddar, O. Sauter, K. Schmid, B.D. Scott, S. Šesnić, J. Signoret, S.K. Sipilä, R. Stankiewicz, P. Strand, E. Suchkov, A. Šušnjara, G. Szepesi, D. Tegnered, K. Tőkési, D. Tskhakaya, J. Urban, P. Vallejos, D. Van Eester, L. Villard, F. Villone, B. Viola, G. Vlad, E. Westerhof, D. Yadykin, R. Zagorski, F. Zaitsev, T. Zok, W. Zwingmann, S. Äkäslompolo, the ASDEX Upgrade Team and the EUROfusion-IM Team,' EUROfusion Integrated Modelling

(EU-IM) Capabilities and Selected Physics Applications', Proc. 26th IAEA Fusion Energy Conference, Kyoto, Japan, 17-22 October 2016.

REFEREED JOURNAL PUBLICATIONS PRIOR TO MY ICREA APPOINTMENT

1. **M.J. Mantsinen**, M.-L. Mayoral, V.G. Kiptily, S.E. Sharapov, B. Alper, A. Bickley, M. de Baar, L.-G. Eriksson, A. Gondhalekar, T. Hellsten, K. Lawson, F. Nguyen, J.-M. Noterdaeme, E. Righi, A.A. Tuccillo, M. Zerbini and contributors to the EFDA-JET workprogramme, "Alpha Tail Production with Ion Cyclotron Resonance Heating of ^{4}He Beam Ions in JET Plasmas," Physical Review Letters 88 (2002) 105002:1-4.

2. **M.J. Mantsinen**, L.C. Ingesson, T. Johnson, V.G. Kiptily, M.-L. Mayoral, S.E. Sharapov, B. Alper, L. Bertalot, S. Conroy, L.-G. Eriksson, T. Hellsten, J.-M. Noterdaeme, S. Popovichev, E. Righi, and A.A. Tuccillo, "Controlling the Profile of Ion-Cyclotron-Resonant Ions in JET with the Wave-Induced Pinch Effect", Physical Review Letters 89 (2002) 115004:1-4.

3. L.-G. Eriksson, **M. Mantsinen**, D. Borba, A. Fasoli, R. Heeter, S. Sharapov, D.F.H. Start, J. Carlsson, A. Gondhalekar, T. Hellsten, and A. Korotkov, "Evidence for Wave Induced Particle Pinch in the Presence of Toroidally Asymmetric ICRF-waves," Physical Review Letters 81 (1998) 1231–1235.

4. O. Sauter, 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, P. Lamalle, **M.J. Mantsinen**, F. Milani, M.F.F. Nave, F. Nguyen, A.L. Pecquet, S.D. Pinches, S. Podda, J. Rapp, Task Force M, Task Force H and contributions to the EFDA-JET Workprogramme, "Control of Neoclassical Tearing Modes by Sawtooth Control," Physical Review Letters 88 (2002) 105001:1-4.

5. D.F.H. Start, J. Jacquinot, V. Bergeaud, V.P. Bhatnagar, S. Clement, L.-G. Eriksson, A. Fasoli, A. Gondhalekar, K. Guenther, C. Gormezano, P.J. Harbour, L.D. Horton, A Howman, H.J.F. Jackel, O.N. Jarvis, K.D. Lawson, C. Lowry**, M. Mantsinen**, F.B. Marcus, R. Monk, E. Righi, F.G. Rimini, G.J. Sadler, G.R. Saibene, R. Sartori, B. Schunke, S. Sharapov, A.C.C. Sips, M. Stamp, and P. Van Belle, "D-T Fusion with Ion Cyclotron Resonance Heating in JET Divertor Plasmas," Physical Review Letters 80 (1998) 4681–4684.

6. F. Crisanti, X. Litaudon, J. Mailloux,, D. Mazon, E. Barbato, Y. Baranov, A. Bécoulet, M. Bécoulet, C.D. Challis, G.D. Conway, R. Dux, L.-G. Eriksson, B. Esposito, D. Frigione, P. Hennequin, C. Giroud, N. Hawkes, G. Huysmans, F. Imbeaux, E. Joffrin, P. Lomas, Ph. Lotte, P. Maget, **M. Mantsinen**, D. Moreau, F. Rimini, M. Riva, Y. Sarazin, G. Tresset, A.A. Tuccillo, K.D. Zastrow and contributors to the EFDA-JET workprogramme, "JET Quasi-Stationary Internal Transport Barrier Operation with Active Control of the Pressure Profile," Physical Review Letters 88 (2002) 145004:1-4.

7. M. García-Muñoz, H.-U. Fahrbach, S. Günter, V. Igochine**, M. J. Mantsinen**, M. Maraschek, P. Martin, P. Piovesan, K. Sassenberg, and H. Zohm, "Fast-Ion Losses due to High-Frequency MHD Perturbations in the ASDEX Upgrade Tokamak," Physical Review Letters 100 (2008) 055005.

8. L.-G. Eriksson, T. Johnson, T. Hellsten, C. Giroud, V.G. Kiptily, K. Kirov, J. Brzozowski, M. DeBaar, J. DeGrassie, **M. Mantsinen**, A. Meigs, J.-M. Noterdaeme, A. Staebler, A. Tuccillo, H. Weisen, K.-D. Zastrow and JET-EFDA contributors, "Plasma Rotation induced by directed waves in the ion cyclotron range of frequencies," Physical Review Letters 92 No 23 (2004) 235001-1.

9. L.-G. Eriksson, A. Mueck, O. Sauter, S. Coda, **M.J. Mantsinen**, M.L. Mayoral, E. Westerhof, R.J. Buttery, D. McDonald, T. Johnson, J.-M. Noterdaeme, P. de Vries and JET-EFDA contributors, "Destabilisation of Fast Ion Induced Long Sawteeth by Localised Current Drive in the JET Tokamak," Physical Review Letters 92 (2004) 235004-1.

10. P. Mantica, D. Van Eester, X. Garbet, F. Imbeaux, L. Laborde, **M. Mantsinen**, A. Marinoni, D. Mazon, D. Moreau, A. Thyagaraja, N. Hawkes, E. Joffrin, V. Kiptily, P.J. Knight, S. Pinches, A. Salmi, S. Sharapov, I. Voitsekhovitch, P. de Vries, K.-D. Zastrow, "Probing Internal Transport Barriers with Heat Pulses in JET," Physical Review Letters 96 (2006) 095002.

11. J.P. Graves, K.I. Hopcraft, R.O. Dendy, R.J. Hastie, K.G. McClements, **M. Mantsinen**, "Sawtooth Evolution during JET Ion-Cyclotron-Resonance-Heated Pulses," Physical Review Letters 84 (2000) 1204-1207.

12. **M.J. Mantsinen**, M.-L. Mayoral, D. Van Eester, B. Alper, R. Barnsley, P. Beaumont, J. Bucalossi, I. Coffey, S. Conroy, M. de Baar, P. de Vries, K. Erents, A. Figueiredo, A. Gondhalekar, C. Gowers, T. Hellsten , E. Joffrin, V. Kiptily, P.U. Lamalle , K. Lawson, A. Lyssoivan, J. Mailloux, P. Mantica, F. Meo, F. Milani, I. Monakhov, A. Murari, F. Nguyen, J.-M. Noterdaeme, J. Ongena, Yu. Petrov, E. Rachlew, V. Riccardo, E. Righi, F. Rimini, M. Stamp, A.A. Tuccillo, K.-D. Zastrow, M. Zerbini and JET EFDA contributors, "Localised Bulk Electron Heating with ICRF Mode Conversion in the JET Tokamak," Nucl. Fusion 44 (2004) 33-46.

13. **M.J. Mantsinen**, 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, "Analysis of ion cyclotron heating and current drive at $\omega \approx 2\omega_{cH}$ for sawtooth control in JET plasmas," Plasma Phys. Control. Fusion 44 (2002) 1521-1542.

14. **M.J. Mantsinen**, L.-G. Eriksson, V. Bhatnagar, G. Cottrell, A. Gondhalekar, C. Gormezano, R. König, P. Lomas, E. Righi, F. Rimini, G. Sips, D. Start, F.X. Söldner, D. Testa, B. Tubbing and K.-D. Zastrow, "Analysis of Bulk Ion Heating with ICRH in JET High Performance Plasmas," Plasma Physics and Controlled Fusion 41 (1999) 843-865.

15. **M.J. Mantsinen**, L.-G. Eriksson, A. Gondhalekar and T. Hellsten, "Evidence for regions of nearly suppressed velocity space diffusion caused by finite Larmor radius effects during ICRF heating," Nuclear Fusion 39 (1999) 459-466.

16. **M.J. Mantsinen**, L.-G. Eriksson, E. Gauthier, G.T. Hoang, E. Joffrin, R. Koch, X. Litaudon, A. Lyssoivan, P. Mantica, M.F.F. Nave, J.-M. Noterdaeme, C.C. Petty, O. Sauter and

S.E. Sharapov, “Application of ICRF waves in tokamaks beyond heating,” Plasma Physics and Controlled Fusion 45 (2003) A445 -A456.

17. **M.J. Mantsinen**, S. Sharapov, B. Alper, A. Gondhalekar and D.C. McDonald, “A new type of MHD activity in JET ICRF-only discharges with high fast-ion energy contents,” Plasma Phys. Control. Fusion 42 (2000) 1291-1308.

18. **M.J. Mantsinen**, O.N. Jarvis, V.Kiptily, S. Sharapov, B. Alper, L-G. Eriksson, A. Gondhalekar, R.F. Heeter, D. McDonald, “First Observation of p-T Fusion in JET Tritium Plasmas with ICRF heating of protons,” Nuclear Fusion 41 (2001) 1815-1822.

19. L.-G. Eriksson, **M.J. Mantsinen**, F.G. Rimini, F. Nguyen, C. Gormezano, D.F.H. Start and A. Gondhalekar, “ICRF Heating of JET Plasmas with the Third-Harmonic Deuterium Resonance,” Nuclear Fusion 38 (1998) 265–278.

20. L.-G. Eriksson, **M.J. Mantsinen**, V.P. Bhatnagar, A. Gondhalekar, C. Gormezano, P.J. Harbour, T. Hellsten, J. Jacquinot, H.J. Jäckel, K. Lawson, C.G. Lowry, E. Righi, G.J. Sadler, B. Schunke, A.C.C. Sips, M.F. Stamp, D.F.H. Start, “Theoretical analysis of ICRF heating in JET DT plasmas,” Nuclear Fusion 39 (1999) 337-352.

21. L.-G. Eriksson, **M.J. Mantsinen**, T. Hellsten and J. Carlsson, “On the Orbit Averaged Monte Carlo Operator Describing ICRF Wave Particle Interaction in a Tokamak,” Physics of Plasmas 6 (1999) 513-518.

22. P.U. Lamalle, **M.J. Mantsinen**, J.-M. Noterdaeme, B. Alper, P. Beaumont, L. Bertalot, T. Blackman, V.V. Bobkov, G. Bonheure, J. Brzozowski, C. Castaldo, S. Conroy, M. de Baar, E. de la Luna, P. de Vries, F. Durodié, G. Ericsson, L.-G. Eriksson, C. Gowers, R. Felton, J. Heikkinen, T. Hellsten, V. Kiptily, K. Lawson, M. Laxåback, E. Lerche, P. Lomas, A. Lyssoivan, M.-L. Mayoral, F. Meo, M. Mironov, I. Monakhov, I. Nunes, G. Piazza, S. Popovichev, A. Salmi, M.I.K. Santala, S. Sharapov, T. Tala, M. Tardocchi, D. Van Eester, B. Weyssow and JET EFDA contributors, “Expanding the Operating Space of ICRF on JET with a view to ITER,” Nuclear Fusion 46 (2006) 391.

23. V.G. Kiptily, F. E. Cecil, O.N. Jarvis, **M.J. Mantsinen**, S.E. Sharapov, L. Bertalot, S. Conroy, L.C. Ingesson, T. Johnson, K.D. Lawson, S. Popovichev and contributors to the EFDA-JET workprogramme, “Gamma-ray diagnostics of energetic ions in JET,” Nucl. Fusion 42 (2002) 999-1007.

24. S.E. Sharapov, D. Testa, B. Alper, D.N. Borba, A. Fasoli, N.C. Hawkes, R.F. Heeter, **M.J. Mantsinen**, M.G. von Hellermann and contributors to the EFDA-JET workprogramme, “MHD spectroscopy through detecting Toroidal Alfvén eigenmodes and Alfvén wave cascades,” Physics Letters A, Vol. 289 (2001) 127-134.

25. C.D. Challis, X. Litaudon, G. Tresset, Yu. F. Baranov, A. Bécoulet, C. Giroud, N.C. Hawkes, D.F. Howell, E. Joffrin, P.J. Lomas, J. Mailloux, **M.J. Mantsinen**, B.C. Stratton, D.J. Ward, K.-D. Zastrow and contributors to the EFDA-JET Workprogramme, “Influence of the q-profile shape on plasma performance in JET,” Plasma Phys. Control. Fusion 44 (2002) 1031-1055 (erratum Plasma Phys. Control. Fusion 44 (2002) 2063.

26. A Fasoli, D Testa, S Sharapov, H L Berk, B Breizman, A Gondhalekar, R F Heeter, **M Mantsinen** and contributors to the EFDA-JET Workprogramme, "MHD spectroscopy," Plasma Phys. Control. Fusion 44 (2002) B159-B172.

27. X. Litaudon, F. Crisanti, B. Alper, J.F. Artaud, Yu. F. Baranov, E. barbato, V. Basiuk, A. Bécoulet, M. Bécoulet, 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.T.A. Huysmans, F. imbeaux, E. Joffrin, P. Lomas, PH. Lotte, P. Maget, **M.J. 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 workprogramme, "Towards fully non-inductive current drive operation in JET," Plasma Phys. Control. Fusion 44 (2002) 1057-1086.

28. V.G. Kiptily, J.M. Adams, L. Bertalot, A. Murari, S.E. Sharapov, V. Yavorskij, B. Alper, R. Barnsley, P. de Vries, C. Gowers, L.-G. Eriksson, P.J. Lomas, **M.J. Mantsinen**, A. Meigs, J.-M. Noterdaeme, F.P. Orsitto and JET EFDA contributors, "Gamma-ray imaging of D and ^{4}He ions accelerated by ion-cyclotron-resonance heating in JET plasmas," Nucl. Fusion 45 (2005) L21-L25.

29. S.E. Sharapov, D. Borba, A. Fasoli, W. Kerner, L.-G. Eriksson, R.F. Heeter, G.T.A. Huysmans, **M.J. Mantsinen**, "Stability of alpha particle driven Alfvén eigenmodes in high performance JET DT plasmas," Nuclear Fusion 39 (1999) 373-388.

30. X. Litaudon, A. Bécoulet, F. Crisanti, R.C. Wolf, Yu.F. Baranov, E. Barbato, M. Bécoulet, R. Budny, C. Castaldo, R. Cesario, C.D. Challis, G.D. Conway, M.R. De Baar, P. De Vries, R. Dux, L.G. Eriksson, B. Esposito, R. Felton, C. Fourment, D. Frigione, X. Garbet, R. Giannella, C. Giroud, G. Gorini, N.C. Hawkes, T. Hellsten, T.C. Hender, P. Hennequin, G.M.D. Hogeweij, G.T.A. Huysmans, F. Imbeaux, E. Joffrin, P.J. Lomas, Ph Lotte, P. Maget, J. Mailloux, P. Mantica, **M.J. Mantsinen**, D. Mazon, D. Moreau, V. Parail, V. Pericoli, E. Rachlew, M. Riva, F. Rimini, Y. Sarazin, B.C. Stratton, T.J.J. Tala, G. Tresset, O. Tudisco, L. Zabeo, K.-D. Zastrow and JET-EFDA contributors, "Progress towards steady-state operation and real-time control of internal transport barriers in JET," Nucl. Fusion 43 (2003) 565-572.

31. C. Angioni, A. Pochelon, N.N. Gorelenkov, K.G. McClements, O.Sauter, R.V. Budny, P.C. de Vries, D.F. Howell **M.J. Mantsinen**, M.F.F. Nave, S.E. Sharapov, and contributors to the EFDA-JET Workprogramme, "Neutral beam stabilization of sawtooth oscillations in JET," Plasma Phys. Control. Fusion 44 (2002) 205-222.

32. D.F.H. Start, J. Jacquinot, V. Bergeaud, V.P. Bhatnagar, S.W. Conroy, G.A. Cottrell, S. Clement, G. Ericsson, L.-G. Eriksson, A. Fasoli, V. Fuchs, A. Gondhalekar, C. Gormezano, G. Gorini, G. Grosshoeg, K. Guenther, P.J. Harbour, R.F. Heeter, L.D. Horton, A.C. Howman, H.J. Jäckel, O.N. Jarvis, J. Källne, C.N. Lashmore Davies, K.D. Lawson, C.G. Lowry, **M.J. Mantsinen**, F.B. Marcus, R.D. Monk, E. Righi, F.G. Rimini, G.J. Sadler, G. Saibene, R. Sartori, B. Schunke, S.E. Sharapov, A.C.C. Sips, M.F. Stamp, M. Tardocchi, P. van Belle, "Bulk ion heating with ICRH in JET DT plasmas," Nuclear Fusion 39 (1999) 321-336.

33. S.D. Pinches, H.L. Berk, D.N. Borba, B.N. Breizman, S. Briguglio, A. Fasoli, G. Fogaccia, M.P. Gryaznevich, V. Kiptily, **M.J. Mantsinen**, S.E. Sharapov, D. Testa, R.G.L. Vann, G. Vlad, F. Zonca and JET-EFDA Contributors, "The Role of Energetic Particles in Fusion Plasmas," Plasma Phys. Control. Fusion 46 (2004) B187-B200.

34. J P Graves, C Angioni, R V Budny, R J Buttery, S Coda, L-G Eriksson, C G Gimblett, T P Goodman, R J Hastie, M A Henderson, H R Koslowski, **M J Mantsinen**, An Martynov, M-L Mayoral, A Mück, M F F Nave, O Sauter, E Westerhof and JET–EFDA Contributors, "Sawtooth control in fusion plasmas," Plasma Phys. Control. Fusion 47 (2005) B121.

35. J. Paméla, E. Solano and JET EFDA Contributors (including **M.J. Mantsinen**), *Nucl. Fusion* **43** (2013) 1540.

36. M.F.F. Nave, J. Rapp, T. Bolzonella, R. Dux, **M.J. Mantsinen**, R. Budny, P. Dumortier, M. von Hellermann, S. Jachmich, H.R. Koslowski, G. Maddison, A. Messiaen, P. Monier-Garbet, J. Ongena, M.E. Puiatti, J. Strachan, G. Telesca, B. Unterberg, M. Valisa, P. de Vries and contributors to the JET-EFDA Workprogramme, "Role of sawtooth in avoiding impurity accumulation and maintaining good confinement in JET radiative mantle discharges," Nuclear Fusion 43 (2003) 1204-1213.

37. L.C. Ingesson, H. Chen, P. Helander and **M.J. Mantsinen**, "Comparison of basis functions in soft x-ray tomography and observation of poloidal asymmetries in impurity density," Plasma Physics and Controlled Fusion 42 (2000) 161-180.

38. E. Joffrin, F. Crisanti, R. Felton, X. Litaudon, D. Mazon, D. Moreau, L. Zabeo, R. Albanese, M. Ariola, D. Alves, O. Barana, V. Basiuk, M. Becoulet, J. Blum, T. Bolzonella, K. Bosak, J.M. Chareau, M. de Baar, P. de Vries, P. Dumortier, D. Elbeze, J. Farthing, H. Fernandes, C. Fenzi, R. Giannella, K. Guenther, J. Hardling, N. Hawkes, T.C. Hender, D.F. Howell, P. Heesterman, F. Imbeaux, P. Innocente, L. Laborde, G. Lloyd, P.J. Lomas, D. MacDonald, J. Mailloux, **M. Mantsinen**, A. Messiaen, A. Murari, J. Ongena, F. Orsitto, V. Pericoli-Ridolfini, M. Riva, J. Sanchez, F. Sartori, O. Sauter, A.C.C. Sips, T. Tala, A. Tuccillo, D. Van Ester, K.-D. Zastrow, M. Zerbini and contributors to the JET EFDA programme, "Integrated scenarios in JET using real time profile control", Plasma Physics and Controlled Fusion 45 (2003) A367-A385.

39. A. Fasoli, D. Borba, B. Breizman, C. Gormezano, R.F. Heeter, A. Jaun, **M. Mantsinen**, S. Sharapov and D. Testa, "Fast particles-wave interaction in the Alfvén frequency range on the JET tokamak," Physics of Plasmas 7 (2000) 1816.

40. A. Ekedahl, G. Granucci, J. Mailloux, Y. Baranov, K. Erents, E. Joffrin, X. Litaudon, P. Lomas, **M. Mantsinen**, D. McDonald, J.-M. Noterdaeme, V. Petrzilka, K. Rantamäki, C. Silva, A.A. Tuccillo and EFDA-JET Contributors, "Long Distance Coupling of Lower Hybrid Waves in JET Plasmas with Edge and Core Transport Barriers," Nuclear Fusion 45 (2005) 351-359.

41. J. Ongena, W. Suttrop, M. Bécoulet, G. Cordey, P. Dumortier, Th. Eich, L.C. Ingesson, S. Jachmich, P. Lang, A. Loarte, P. Lomas, G.P. Maddison, A.Messiaen, M.F.F. Nave, J. Rapp, G. Saibene, R. Sartori, O. Sauter, J.D. Strachan, B. Unterberg, M. Valovic, B. Alper, Ph. Andrew, Y. Baranov, J. Brzozowski, J. Bucalossi, M. Brix, R. Budny, M. Charlet, I. Coffey, M.

De Baar, P. De Vries, C. Gowers, N. Hawkes, M. von Hellermann, D.L. Hillis, J. Hogan, G.L. Jackson, E. Joffrin, C. Jupen, A. Kallenbach, H.R. Koslowski, K.D. Lawson, **M. Mantsinen**, G. Matthews, P. Monier-Garbet, D. McDonald, F. Milani, M. Murakami, A. Murari, R. Neu, V. Parail, S. Podda, M.E. Puiatti, E. Righi, F. Sartori, Y. Sarazin, A. Staebler, M. Stamp, G. Telesca, M. Valisa, B. Weyssow, K.-D. Zastrow and EFDA-JET workprogramme contributors, "Recent progress on JET towards the ITER reference mode of operation at high density," Plasma Phys. Control. Fusion 43 (2001) 11-30.

42. E. Westerhof, 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. Gondhalekar, 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. Sharapov, M. Zabiego and contributors to the EFDA-JET work programme, "Control of neoclassical tearing modes by sawtooth control with ion cyclotron resonance frequency waves in JET," Nucl. Fusion 42 (2002) 1324-1334.

43. J.-M. Noterdaeme, E. Righi, V. Chan, J. deGrassie, K. Kirov, **M.J. Mantsinen**, M.F.F.Nave, D. Testa, K-D. Zastrow, R. Budny, R. Cesario, A. Gondhalekar, N. Hawkes, T. Hellsten, Ph. Lamalle, F. Meo, F. Nguyen and contributors to the EFDA-JET workprogramme, "Spatially Resolved Toroidal Plasma Rotation with ICRF on JET," Nuclear Fusion 43 (2003) 274-289.

44. The JET Team (presented by M Keilhacker, including **M.J. Mantsinen**), "JET results with the new pumped divertor and implications for ITER", Plasma Phys. Control. Fusion **37** (1995) A3.

45. S.E. Sharapov, B. Alper, F. Andersson, Yu.F. Baranov, H.L. Berk, L. Bertalot, D. Borba, C. Boswell, B.N. Breizman, R. Buttery, C.D. Challis, M. de Baar, P. de Vries, L.-G. Eriksson, A. Fasoli, R. Galvao, V. Goloborod'ko, M.P. Gryaznevich, R.J. Hastie, N.C. Hawkes, P. Helander, V.G. Kiptily, G.J. Kramer, P.J. Lomas, J. Mailloux, **M.J. Mantsinen**, R. Martin, F. Nabais, M.F. Nave, R. Nazikian, J.-M. Noterdaeme, M.S. Pekker, S.D. Pinches, T. Pinfold, S.V. Popovichev, P. Sandquist, D. Stork, D. Testa, A. Tuccillo, I. Voitsekhovich, V. Yavorskij, N.P. Young, F. Zonca, JET-EFDA Contributors and the MAST Team, "Experimental studies of instabilities and confinement of energetic particles on JET and MAST," Nucl. Fusion 45 (2005) 1168-1177.

46. T. Hellsten, T. Johnson, J. Carlsson, L.-G. Eriksson, J. Hedin, M. Laxåback and **M. Mantsinen**, "Effects of finite drift orbit width and RF-induced spatial transport on plasma heated by ICRH," Nucl. Fusion 44 (2004) 892-908.

47. J. Ongena, P. Monier-Garbet, W. Suttrop, Ph. Andrew, M. Bécoulet, R. Budny, Y. Corre, G. Cordey, P. Dumortier, Th. Eich, L. Garzotti, D.L. Hillis, J. Hogan, L.C. Ingesson, S. Jachmich, E. Joffrin, P. Lang, A. Loarte, P. Lomas, G.P. Maddison, D. McDonald, A. Messiaen, M.F.F. Nave, G. Saibene, R. Sartori, O. Sauter, J.D. Strachan, B. Unterberg, M. Valovic, I. Voitsekhovitch, M. von Hellermann, B. Alper, Y. Baranov, M. Beurskens, G. Bonheure, J. Brzozowski, J. Bucalossi, M. Brix, M. Charlet, I. Coffey, M. De Baar, P. De Vries, C. Giroud, C. Gowers, N. Hawkes, G.L. Jackson, C. Jupen, A. Kallenbach, H.R. Koslowski, K.D. Lawson, **M. Mantsinen**, G. Matthews, F. Milani, M. Murakami, A. Murari, R. Neu, V. Parail, S. Podda, M.E. Puiatti, J. Rapp, E. Righi, F. Sartori, Y. Sarazin, A. Staebler, M. Stamp, G. Telesca, M. Valisa, B. Weyssow, K.D. Zastrow and EFDA-JET Workprogramme

contributors, “Towards the realization on JET of an integrated H-mode scenario for ITER,” Nucl. Fusion 44 (2004) 124-133.

48. W.O.K. Kerner, D. Borba, S.E. Sharapov, B.N. Breizman, J. Candy, A. Fasoli, L.C. Appel, R. Heeter, L.-G. Eriksson, **M. Mantsinen**, “Theory of Alfvén Eigenmode Instabilities and Related Anomalous Alpha Particle Transport in D-T Plasmas,” Nuclear Fusion 38 (1998) 1315–1332.

49. L.D. Horton, R. Sartori, B. Balet, R. Budny, J.P. Christiansen, S. Clement, G.D. Conway, J.G. Cordey, G.M. Fishpool, J. Lingertat, C.G. Lowry, C.F. Maggi, **M.J. Mantsinen**, V. Riccardo, G. Saibene, P. Smeulders, R.J. Smith, K. Thomsen, M.G. von Hellermann, “High-Fusion Power Steady-State Operation in JET DT Plasmas,” Nuclear Fusion 39 (1999) 993-1008.

50. D. Stork, Yu. Baranov, P. Belo, L. Bertalot, D. Borba, J.H. Brzozowski, C.D. Challis, D. Ciric, S. Conroy, M. de Baar, P. de Vries, P. Dumortier, L. Garzotti, N.C. Hawkes, T.C. Hender, E. Joffrin, T.T.C. Jones, V. Kiptily, P. Lamalle, J. Mailloux, **M. Mantsinen**, D.C. McDonald, M.F.F. Nave, R. Neu, M. O'Mullane, J. Ongena, R.J. Pearce, S. Popovichev, S.E. Sharapov, M. Stamp, J. Stober, E. Surrey, M. Valovic, I. Voitsekhovitch, H. Weisen, A.D. Whiteford, L. Worth, V. Yavorskij, K.-D. Zastrow and JET EFDA contributors, “Overview of transport, fast particle and heating and current drive physics using tritium in JET plasmas,” Nucl. Fusion 45 No 10 (2005) S181-S194.

51. M.-L. Mayoral, P.U. Lamalle, D. Van Eester, E. A. Lerche, P. Beaumont, E. De La Luna, P. De Vries, C. Gowers, R. Felton, J. Harling, V. Kiptily, K. Lawson, M. Laxåback, P. Lomas, **M.J. Mantsinen**, F. Meo, J.-M. Noterdaeme, I. Nunes, G. Piazza, M. Santala and JET EFDA contributors, “Hydrogen Plasmas with ICRF Inverted Minority and Mode Conversion Heating Regimes in the JET Tokamak,” Nucl. Fusion 46 (2006) S550.

52. J. Lingertat, V. Bhatnagar, G.D. Conway, L.-G. Eriksson, K. Günther, M. von Hellermann, **M. Mantsinen**, V. Parail, R. Prentice, G. Saibene, R. Smith and K.-D. Zastrow, “The Edge Operational Space in JET,” Journal Nucl. Mat. 266-269 (1999) 124-130.

53. X. Litaudon, T. Aniel, Y. Baranov, D. Bartlett, A Bécoulet, C. Challis, G.D. Conway, G.A. Cottrell, A. Ekedahl, M. Erba, L. Eriksson, C. Gormezano, G.T. Hoang, G. Huysmans, F. Imbeaux, E. Joffrin, **M. Mantsinen**, V. Parail, Y. Peysson, F. Rochard, P. Schild, A. Sips, F.X. Söldner, B. Tubbing, I. Voitsekhovitch, D. Ward, W. Zwingmann, “Electron and Ion Internal Transport Barriers in Tore Supra and JET,” Plasma Physics and Controlled Fusion 41 (1999) A733-A746.

54. L.-G. Eriksson, T. Johnsson, M.-L. Mayoral, S. Coda, O. Sauter, R.J. Buttery, D. McDonald, T. Hellsten, **M.J. Mantsinen**, A. Mueck, J.-M. Noterdaeme, M. Santala, E. Westerhof, P. de Vries and JET-EFDA contributors, “On ion cyclotron current drive for sawtooth control,” Nucl. Fusion 46 (2006) S951.

55. Yu.F.Baranov, X.Garbet, N.C.Hawkes, B.Alper, R.Barnsley, C.D.Challis, C.Giroud, E.Joffrin, **M. Mantsinen**, F.Orsitto, V.Parail, S.E.Sharapov and the JET EFDA Contributors, “On the link between q-profile and Internal Transport Barriers,” Plasma Phys. Control. Fusion 46 (2004) 1181-1196.

56. R.C. Wolf, Y. Baranov, X. Garbet, N. Hawkes, A. G. Peeters, C. Challis, M. de Baar, C. Giroud, E. Joffrin, **M. Mantsinen**, D. Mazon, H. Meister, K.-D. Zastrow, and the ASDEX Upgrade team and contributors to the EFDA-JET workprogramme, "Characterisation of ion heat conduction in JET and ASDEX Upgrade plasmas with and without internal transport barriers", Plasma Physics and Controlled Fusion 45 (2003) 1757-1778.

57. M. García-Muñoz , H.-U. Fahrbach , S.D. Pinches , V. Bobkov , M. Brüdgam , M. Gobbin , S. Günter , V. Igochine , Ph. Lauber , **M.J. Mantsinen** , M. Maraschek , L. Marrelli , P. Martin P. Piovesan , E. Poli , K. Sassenberg , G. Tardini , H. Zohm and the ASDEX Upgrade Team, "MHD induced fast-ion losses on ASDEX Upgrade," Nucl. Fusion 49 (2009) 085014.

58. T.J.J. Tala, V.V. Parail, A. Bécoulet, G. Corrigan, D.J. Heading, **M.J. Mantsinen**, P.I. Strand and contributors to the EFDA-JET Workprogramme "Comparison of theory-based and semi-empirical transport modelling in JET plasmas with ITBs," Plasma Phys. Control. Fusion 44 (2002) A495-A500.

59. F.G. Rimini, P. Andrews, B. Balet, J. Bull, N. Deliyanakis, H. de Esch, L.-G. Eriksson, C. Gormezano, C. Gowers, H.Y. Guo, T.T.C. Jones, R. König, M. Lennholm, P.J. Lomas, A. Maas, **M. Mantsinen**, F.B. Marcus, M.F. Nave, V. Parail, D.F.H. Start, A. Taroni, D. Testa and P.R. Thomas, "Combined Heating Experiments in ELM-free H-modes in JET," Nuclear Fusion 39 (1999) 1591-1603.

60. M-L Mayoral, R. Buttery, T.T.C. Jones, V. Kiptily, S. Sharapov, **M.J. Mantsinen**, S. Coda, O. Sauter, L.-G. Eriksson, F. Nguyen, D.N. Borba, A. Mück, S.D. Pinches, J.-M. Noterdaeme and JET-EFDA Contributors, "Studies of burning plasma physics in the Joint European Torus," Phys. Plasmas 11 (2004) 2607.

61. H. Zohm , J. Adamek , C. Angioni, G. Antar , C.V. Atanasiu , M. Balden , W. Becker , K. Behler , K. Behringer , A. Bergmann , T. Bertoncelli , R. Bilato , V. Bobkov , J. Boom , A. Bottino , M. Brambilla , F. Braun , M. Brüdgam , A. Buhler , A. Chankin , I. Classen , G.D. Conway , D.P. Coster , P. de Marné , R. D'Inca , R. Drube , R. Dux , T. Eich , K. Engelhardt , B. Esposito , H.-U. Fahrbach , L. Fattorini , J. Fink , R. Fischer , A. Flaws , M. Foley , C. Forest, J.C. Fuchs , K. Gál , M. García Muñoz , M. Gemisic Adamov , L. Giannone , T. Görler , S. Gori, S. da Graça , G. Granucci , H. Greuner , O. Gruber , A. Gude , S. Günter , G. Haas , D. Hahn , J. Harhausen , T. Hauff , B. Heinemann , A. Herrmann , N. Hicks , J. Hobirk , M. Hölzl , D. Holtum , C. Hopf , L. Horton , M. Huart , V. Igochine , M. Janzer , F. Jenko , A. Kallenbach, S. Kálvin , O. Kardaun , M. Kaufmann , M. Kick , A. Kirk , H.-J. Klingshirn , G. Koscis , H. Kollotzek , C. Konz , K. Krieger , T. Kurki-Suonio , B. Kurzan , K. Lackner , P.T. Lang , B. Langer , P. Lauber , M. Laux , F. Leuterer , J. Likonen , L. Liu , A. Lohs , T. Lunt , A. Lyssoivan , C.F. Maggi , A. Manini , K. Mank , M.-E. Manso, **M. Mantsinen**, M. Maraschek , P. Martin , M. Mayer , P. McCarthy , K. McCormick , H. Meister , F. Meo , P. Merkel , R. Merkel , V. Mertens , F. Merz , H. Meyer , A. Mlynek , F. Monaco , H.-W. Müller , M. Münich, H. Murmann , G. Neu , R. Neu , J. Neuhauser , B. Nold , J.-M. Noterdaeme , G. Pautasso , G. Pereverzev , E. Poli , S. Potzel , M. Püschel , T. Pütterich , R. Pugno , G. Raupp , M. Reich , B. Reiter , T. Ribeiro , R. Riedl , V. Rohde , J. Roth , M. Rott , F. Ryter , W. Sandmann , J. Santos, K. Sassenberg , P. Sauter , A. Scarabosio , G. Schall , H.-B. Schilling , J. Schirmer , A. Schmid , K. Schmid , W. Schneider , G. Schramm , R. Schrittwieser , W.

Schustereder , J. Schweinzer , S. Schweizer , B. Scott , U. Seidel , M. Sempf , F. Serra , M. Sertoli , M. Siccinio , A. Sigalov , A. Silva , A.C.C. Sips , E. Speth , A. Stäbler , R. Stadler , K.-H. Steuer , J. Stober , B. Streibl , E. Strumberger , W. Suttrop , G. Tardini , C. Tichmann , W. Treutterer , C. Tröster , L. Urso , E. Vainonen-Ahlgren , P. Varela , L. Vermare , F. Volpe , D. Wagner , C. Wigger , M. Wischmeier, E. Wolfrum , E. Würsching , D. Yadikin , Q. Yu , D. Zasche , T. Zehetbauer and M. Zilker, "Overview of ASDEX Upgrade results," Nucl. Fusion 49 (2009) 104009.

62. A. Salmi, **M.J. Mantsinen**, P. Beaumont, P. de Vries, L.-G. Eriksson, C. Gowers, P. Helander, M. Laxåback, J.-M. Noterdaeme, D. Testa and EFDA JET contributors, "JET Experiments to Assess the Clamping of the Fast Ion Energy Distribution during ICRF heating due to Finite Larmor Radius Effects," Plasma Phys. Control. Fusion 48 (2006) 717.

63. A.A. Tuccillo, F. Crisanti, X. Litaudon, Yu.F. Baranov, A. Becoulet, M. Becoulet, L. Bertalot, C. Castaldo, C.D. Challis, R. Cesario, M.R. De Baar, P.C. de Vries, B. Esposito, D. Frigione, L. Garzotti, E. Giovannozzi, C. Giroud, G. Gorini, C. Gormezano, N.C. Hawkes, J. Hobirk, F. Imbeaux, E. Joffrin, P.J. Lomas, J. Mailloux, P. Mantica, **M.J. Mantsinen**, D. Mazon, D. Moreau, A. Murari, V. Pericoli-Ridolfini, F. Rimini, A.C.C. Sips, C. Sozzi, O. Tudisco, D. Van Eester, K-D. Zastrow and JET-EFDA work-programme contributors, "Development on JET of advanced tokamak operations for ITER," Nuclear Fusion 46 (2006) 214.

64. **M.J. Mantsinen**, L.-G. Eriksson, C. Gormezano, N.C. Hawkes, T. Hellsten, X. Litaudon, F. Rimini, S. Sharapov and B.C. Stratton, "On the role of different phasings of the ICRF antennas in the optimised shear discharges in JET," Nuclear Fusion 40 (2000) 1773-1789.

65. A. Lyssoivan, D.A. Hartmann, J.-M. Noterdaeme, R. Koch, V. Bobkov, T. Blackman, F. Braun, M. Cox, P. de Vries, H.G. Esser, H.-U. Fahrbach, J. Gafert, E. Gauthier, O. Gehre, M. Graham, G. Haas, A. Huber, K. Lawson, P.J. Lomas, **M. Mantsinen**, G. Matthews, M.-L. Mayoral, A. Meigs, Ph. Mertens, V. Mertens, I. Monakhov, J. Neuhauser, V. Philipps, V. Rohde, M. Santala, W. Suttrop, A. Walden, D. Van Eester, F. Wesner, ASDEX Upgrade Team and JET EFDA Contributors, "Development of ICRF wall conditioning technique on divertor-type tokamaks ASDEX Upgrade and JET," Journal of Nuclear Materials 337-339 (2005) 456-460.

66. V.G. Kiptily, S. Popovichev, S.E. Sharapov, L. Bertalot, F. E. Cecil, S. Conroy, **M.J. Mantsinen**, and contributors to the EFDA-JET workprogramme, "Gamma-diagnostics of alpha particles in ^{4}He and D-T plasmas," Review of Scientific Instruments 43 (2003) 1753-1756.

67. T.J.J. Tala, V.V. Parail, A. Becoulet, C.D. Challis, G. Corrigan, N.C. Hawkes, D.J. Heading, **M.J. Mantsinen**, S. Nowak, and contributors to the EFDA-JET workprogramme, "Impact of different heating and current drive methods on the early q-profile evolution in JET," Plasma Phys. Control. Fusion 44 (2002) 1181-1202.

68. T. Hellsten, M. Laxåback, T. Bergkvist, T. Johnson, F. Meo, F. Nguyen, C.C. Petty, **M. Mantsinen**, G. Matthews, J.-M. Noterdaeme, T. Tala, D. Van Eester, P. Andrew, P. Beaumont, V. Bobkov, M. Brix, J. Brzozowski, L.-G. Eriksson, C. Giroud, E. Joffrin, V. Kiptily, J. Mailloux, M.-L. Mayoral, I. Monakhov, R. Sartori, A. Staebler, E. Rachlew, E. Tennfors, A.

Tuccillo, A. Walden, K.-D. Zastrow and JET-EFDA Contributors, “On the parasitic absorption in FWCD experiments in JET ITB plasmas,” Nucl. Fusion 45 (2005) 706-720.

69. K M Rantamäki, V Petrzílka, P Andrew, I Coffey, A Ekedahl, K Erents, V Fuchs, M Goniche, G Granucci, E Joffrin, S J Karttunen, P Lomas, J Mailloux, **M. Mantsinen**, M-L Mayoral, D C McDonald, J-M Noterdaeme, V Parail, A A Tuccillo, F Zácek and Contributors to the EFDA-JET Workprogramme, “Bright spots generated by lower hybrid waves on JET,” Plasma Phys. Control. Fusion 47 (2005) 1101-1108.

70. J. Pamela, 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. Mantsinen**, K.G. McClements, S.D. Pinches, O. Sauter, S.E. Sharapov, D. Testa and contributors to the EFDA-JET Workprogramme, “Overview of Results and Possibilities for Fast Particle Research on JET,” Nucl. Fusion 42 (2002) 1014-1028.

71. **M.J. Mantsinen**, V. Kiptily, M. Laxåback, A. Salmi, Yu. Baranov, R. Barnsley, P. Beaumont, S. Conroy, P. de Vries, C. Giroud, C. Gowers, T. Hellsten, L. C. Ingesson, T. Johnson, H. Leggate, M.-L. Mayoral, I. Monakhov, J.-M. Noterdaeme, S. Podda, S. Sharapov, A.A. Tuccillo, D. Van Eester and EFDA JET Contributors, “Fast ion distributions driven by polychromatic ICRF waves on JET,” Plasma Phys. Control. Fusion 47(2005) 1439-1457.

72. **M.J. Mantsinen**, C.C. Petty, L.-G. Eriksson, T.K. Mau, R.I. Pinsker and M. Porkolab, “Analysis of Combined FWCD and NBI in the DIII-D Tokamak,” Physics Plasmas 9 (2002) 1318-1325.

73. **M.J. Mantsinen** and R.R.E. Salomaa, “Transients in DT and D^3He Tokamak Fusion Reactors,” Fusion Technology 33 (1998) 237–251.

74. M I K Santala, **M J Mantsinen**, L Bertalot, S Conroy, V Kiptily, S Popovichev, A Salmi, D Testa, Yu Baranov, P Beaumont, P Belo, J Brzozowski, M Cecconello, M deBaar, P deVries, C Gowers, J-M Noterdaeme, C Schlatter, S Sharapov, and JET-EFDA contributors, “Proton-triton nuclear reaction in ICRF heated plasmas in JET,” Plasma Phys. Control. Fusion 48 (2006) 1233.

75. K Sassenberg , M Maraschek , P J Mc Carthy , H Zohm , R Bilato , W Bobkov , S Da Graça , A Flaws , M García-Muñoz , S Günter , V Igochine , P Lauber , **M J Mantsinen** , P Piovesan and the ASDEX Upgrade Team, “Stability of toroidicity induced shear Alfvén eigenmodes in ASDEX Upgrade,” Plasma Phys. Control. Fusion 51 (2009) 065003.

76. J.-M. Noterdaeme, L.-G. Eriksson, **M. Mantsinen**, M.-L. Mayoral, D. Van Eester, J. Mailloux, C. Gormezano, and T.T.C. Jones, “Physics studies with the additional heating systems at JET”, Fusion Science and Tecnology 53 (2009) 1103-1151.

77. A. Marinoni, P. Mantica, D. Van Eester, F. Imbeaux, **M. Mantsinen**, N. Hawkes, E. Joffrin, V.Kiptily, S. Pinches, A. Salmi, S. Sharapov, I. Voitsekhovitch, P. de Vries, K.D. Zastrow and JET-EFDA contributors, “Analysis and modelling of power modulation experiments in JET plasmas with Internal Transport Barriers,” Plasma Phys. Control. Fusion 48 (2006) 1469.

78. F. Nabais, D. Borba, **M. Mantsinen**, M. F. F. Nave, S. E. Sharapov, and Joint European Torus-European Fusion Development Agreement (JET-EFDA) contributors, "Fishbones in Joint European Torus plasmas with high ion-cyclotron-resonance-heated fast ions energy content," Phys. Plasmas 12 (2005)102509.

79. J.-M. Noterdaeme, R. Budny, A. Cardinali, C. Castaldo, R. Cesario, F. Crisanti, J. deGrassie, D.A. D'Ippolito, F. Durodié, A. Ekedahl, A. Figueiredo, C. Ingesson, E. Joffrin, D. Hartmann, J. Heikkinen, T. Hellsten, T. Jones, V. Kiptily, Ph. Lamalle, X. Litaudon, F. Nguyen, J. Mailloux, **M. Mantsinen**, M. Mayoral, D. Mazon, F. Meo, I. Monakhov, J.R. Myra, J. Paméla, V. Pericoli, Yu. Petrov, O. Sauter, Y. Sarazin, S.E. Sharapov, A.A. Tuccillo, D. Van Eester and JET EFDA Contributors, "Heating, current drive and energetic particle studies on JET in preparation of ITER operation," Nuclear Fusion 43 (2003) 202-209.

80. G.P. Maddison, 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, "ELM moderation with ICRF heating on JET," Plasma Phys. Control. Fusion 44 (2002) 1937-1952.

81. S.E. Sharapov, B. Alper, D. Borba, L.-G. Eriksson, A. Fasoli, R.D. Gill, A. Gondhalekar, C. Gormezano, R.F. Heeter, G.T.A. Huysmans, J. Jacquinot, A.A. Korotkov, P. Lamalle, **M.J. Mantsinen**, D.C. McDonald, F. Rimini, D. Start, D. Testa, P. Thomas and the JET Team, "Energetic Particle Physics in JET," Nuclear Fusion 40 (2000) 1363-1381.

82. J.A. Heikkinen, K.M. Rantamäki, S.J. Karttunen, A. Lampela, **M. Mantsinen** and T.J.H. Pättikangas, "Parasitic Particle Acceleration and RF Power Absorption in Edge Plasmas," Contributions to Plasma Physics 40 (2000) 276-287.

83. G.A. Cottrell, Yu.F. Baranov, D.V. Bartlett, C.D. Challis, A. Ekedahl, L.-G. Eriksson, C. Gormezano, G.T.A. Huysmans, X. Litaudon, **M.J. Mantsinen**, D.P. O'Brien, V.V. Parail, F. Rochard, G.J. Sadler, P. Schild, A.C.C. Sips, F.X. Söldner, D.F.H. Start, B.J.D. Tubbing, D.J. Ward, M.G. von Hellermann, W.P. Zwingmann, "Ion cyclotron heating of JET DD and DT optimized shear plasmas," Nuclear Fusion 39 (1999) 389-405.

84. D. Testa, C.N. Lashmore-Davies, A. Gondhalekar, L.-G. Eriksson, **M.J. Mantsinen** and T.J. Martin, "Measurement and Interpretation of Interaction of MeV Energy Protons with Lower Hybrid Waves in JET Plasmas," Plasma Physics and Controlled Fusion 41 (1999) 507-524.

85. G.A. Cottrell, Y. Baranov, D.O' Brien, C.D. Challis, J.G. Cordey, J.C.M. de Haas, L.-G. Eriksson, C. Gormezano, A.C. Howman, T.C. Luce, **M. Mantsinen**, G.J. Sadler, A.C.C. Sips, F.X. Söldner, D.F.H. Start, P.M. Stubberfield, B.J.T. Tubbing, D.J. Ward, M. von Hellermann, W.P. Zwingmann, "Transport in JET Deuterium Plasmas with Optimized Shear," Plasma Physics and Controlled Fusion 40 (1998) 1251–1268.

86. R. Sartori, B. Balet, S. Clement, G. Conway, B. de Esch, J.C.M. de Haas, G. Fishpool, L.D. Horton, J. Lingertat, A. Loarte, C.G. Lowry, C. Maggi, **M.J. Mantsinen**, R.D. Monk, V. Riccaro, E. Righi, G. Saibene, D. Stork, K. Thomsen, M.G. von Hellermann, "Confinement of

high-current steady-state ELMy H-modes with the JET Mark II divertor," Plasma Physics and Controlled Fusion 40 (1998) 757–763.

87. J.A. Heikkinen, T.P. Kiviniemi, **M.J. Mantsinen**, A. Saveliev, L.-G. Eriksson, T.J.H. Pättikangas and S.K. Sipilä, "Analysis of Fast Minority Ion Distribution and Current Generation for ICRF and LH Heating," Plasma Physics and Controlled Fusion 38 (1996) 2063–2078.

PEER-REVIEWED PUBLICATIONS IN CONFERENCE PROCEEDINGS PRIOR TO ICREA APPOINTMENT

1. **M.J.Mantsinen**, B. Alper, C. Angioni, R. Buttery, S. Coda, L.-G. Eriksson, J.P. Graves, T. Hellsten, D. Howell, L.C. Ingesson, T. Johnson, V. Kiptily, M. Lennholm, M.-L. Mayoral, A. Mueck, F. Nabais, F. Nave, J.-M. Noterdaeme, J. Ongena, O. Sauter, S.E. Sharapov, E. Westerhof, JET-EFDA Task Force H, JET-EFDA Task Force M, and JET-EFDA Contributors, "Modification of Sawtooth Oscillations with ICRF Waves in the JET Tokamak," in Radio-Frequency Power in Plasmas Plasmas (Proc. 17th Topical Conference on Radio Frequency Power in Plasmas May 7-9, 2007, Clearwater, Florida, USA), AIP, New York, p. 35-42.

2. **M.J.Mantsinen**, L.-G. Eriksson, M. García-Muñoz, R. Bilato, Vl. Bobkov, H.-U. Fahrbach, J.-M Noterdaeme, W. Schneider, and the ASDEX Upgrade Team, "Analysis of ICRF-Accelerated Ions in ASDEX Upgrade," in Radio-Frequency Power in Plasmas Plasmas (Proc. 17th Topical Conference on Radio Frequency Power in Plasmas May 7-9, 2007, Clearwater, Florida, USA), AIP, New York, p. 99-102.

3. **M.J. Mantsinen**, M. Laxåback, A. Salmi, V. Kiptily, D. Testa, Yu. Baranov, R. Barnsley, P. Beaumont, S. Conroy, P. de Vries, C. Giroud, C. Gowers, T. Hellsten, L.C. Ingesson, T. Johnson, H. Leggate, M.-L. Mayoral, I. Monakhov, J.-M. Noterdaeme, S. Podda, S. Sharapov, A.A. Tuccillo, D. Van Eester and EFDA JET contributors, "Comparison of monochromatic and polychromatic ICRH on JET," in Radio-Frequency Power in Plasmas (Proc. 15th Topical Conference on Radio Frequency Power in Plasmas 19-21 May, 2003, Moran, Wyoming, USA), AIP, New York, p. 138-141.

4. **M.J. Mantsinen**, M.D. Kihlman and L.-G. Eriksson, "Extrapolating the Performance of ICRF Heating Scenarios for JET Deuterium-Tritium Plasmas to High Coupled Powers," 29th European Physical Society Conference on Plasma Physics and Controlled Fusion, 17-21 June 2002, Montreux, Switzerland, Europhysics Conference Abstracts Vol. 26 B, P-1.033 (2002).

5. **M.J. Mantsinen**, M.-L. Mayoral, V. Kiptily, S. Sharapov, A. Bickley, M. de Baar, L.-G. Eriksson, T. Hellsten, K. Lawson, F. Nguyen, J.-M. Noterdaeme, E. Righi, A.A. Tuccillo, M. Zerbini and contributors to the EFDA-JET Workprogramme, "Alpha Particle Physics Studies on JET with ICRH-Accelerated ^{4}He Beam Ions," Proc. 7th IAEA Technical Committee on Energetic Particles in Magnetic Confinement Systems (Gothenburg Sweden, 8 - 11 October 2001) (Chalmers University of Technology, Gothenburg, Sweden, 2001) paper ot1.

6. **M.J. Mantsinen**, M.-L. Mayoral, E. Righi, J.-M. Noterdaeme, A.A. Tuccillo, M. de Baar, A. Figueiredo, A. Gondhalekar, T. Hellsten, V. Kiptily, K. Lawson, F. Meo, F. Milani, I. Monakhov, Yu. Petrov, V. Riccardo, F. Rimini, S. Sharapov, D. Van Eester, K.-D. Zastrow, R. Barnsley, L. Bertalot, A. Bickley, J. Bucalossi, R. Cesario, J.M. Chareau, M. Charlet, I. Coffey, S. Conroy, P. de Vries, K. Erents, L.-G. Eriksson, C. Gowers, L.C. Ingesson, N. Jarvis, T. Johnson, R. Koch, Ph. Lamalle, G. Maddison, J. Mailloux, A. Murari, F. Nguyen, J. Ongena, V. Parail, S. Popovichev, G. Saibene, F. Sartori, J. Strachan, M. Zerbini and Task Force H and EFDA-JET contributors, "ICRF heating scenarios in JET with emphasis on ^{4}He plasmas for the non-activated phase of ITER," in Radio-Frequency Power in Plasmas (Proc. 14th Topical Conference on Radio Frequency Power in Plasmas 7-9th May, 2001, Oxnard, Ca, USA), AIP, New York, p. 59-66.

7. **M.J. Mantsinen**, M.-L. Mayoral, J. Bucalossi, M. de Baar, P. de Vries, A. Figueiredo, T. Hellsten, V. Kiptily, Ph. Lamalle, F. Meo, F. Milani, I. Monakhov, F. Nguyen, J.-M. Noterdaeme, Yu. Petrov, V. Riccardo, E. Righi, F. Rimini, A.A. Tuccillo, D. Van Eester, K.-D. Zastrow and contributors to the EFDA-JET workprogramme, "ICRF Mode Conversion Experiments on JET," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) 1745-1748.

8. **M.J. Mantsinen**, M.-L. Mayoral, O. Sauter, E. Westerhof, C. Angioni, L.-G. Eriksson, A. Gondhalekar, T. Hellsten, T. Johnson, K.G. McClements, F. Nguyen, S. Sharapov, and EFDA-JET workprogramme collaborators, "Analysis of Ion Cyclotron current drive at $\omega \approx 2\omega_{cH}$ for sawtooth control in JET plasmas," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) 789-792.

9. **M.J. Mantsinen**, L.-G. Eriksson, C. Gormezano, F.G. Rimini and A.C.C. Sips, "ICRH Heating in JET high-performance discharges: analysis of the effects on the plasma performance," 13th Topical Conference on Applications of Radio Frequency Power to Plasmas, Annapolis, Maryland, USA, April 12-14, 1999, AIP Conference Proceedings 485 (AIP, Melville, New York, 1999) p. 120.

10. **M. Mantsinen**, L.-G. Eriksson, D. Borba, A. Fasoli, R. Heeter, S. Sharapov, D.F.H. Start, J. Carlsson, A. Gondhalekar, T. Hellsten, and A. Korotkov, "ICRF-induced Spatial Transport of Resonating Ions in the Presence of an Asymmetrical Toroidal Wave Number Spectrum," 2nd Europhysics Topical Conference on Radio Frequency Heating and Current Drive of Fusion Devices, Brussels, Belgium, 20–23 January 1998, Europhysics Conference Abstracts Vol 22A pp 113–116, Eds. J. Jacquinot, G. Van Oost, R.R. Weynants.

11. **M.J. Mantsinen** and R. Salomaa, "Simulations of reactor dynamics of advanced tokamak fusion reactors," the 9th International Conference on Emerging Nuclear Energy Systems, Tel-Aviv, Isreal, June 28–July 2, 1998, Ramat-Gan 1998, The Israel Nuclear Energy Society, p. 340–347.

12. **M.J. Mantsinen**, V. Bhatnagar, J. Carlsson, G. Cottrell, L.-G. Eriksson, G. Gondhalekar, C. Gormezano, T. Hellsten, R. König, P. Lomas, E. Righi, F. Rimini, G. Sips, D. Start, F.X.

Söldner, B. Tubbing and K.-D. Zastrow, “Analysis of ICRF Heating in JET at Harmonics of the Ion Cyclotron Frequency,” 24th EPS Conference on Controlled Fusion and Plasma Physics, 9–13 June 1997, Berchtesgaden, Germany, Europhys. Conf. Abstr. Vol. 21A, Part I, 137–140, Ed. M. Schittenhelm, R. Bartiromo and F. Wagner.

13. **M.J. Mantsinen** and R.R.E. Salomaa, “Influence of Alpha Particle Diffusion on Burn Dynamics in Tokamaks,” 22nd EPS Conference on Controlled Fusion and Plasma Physics, Ed. B.E. Keen, P.E. Stott and J. Winter, Bournemouth, United Kingdom, 3–7 July 1995, Europhys. Conf. Abstr. Vol. 19C, Part II, pp. 249–252 (1995).

14. **M.J. Mantsinen** and R.R.E. Salomaa, “Transients and Burn Dynamics in Advanced Tokamak Fusion Reactors,” Seventh International Conference On Emerging Nuclear Energy Systems, ICENES'93, 20–24 September 1993, Makuhari, Chiba, Japan, pp. 41–46, Ed. H. Yasuda, World Scientific, Singapore 1994.

15. **M.J. Mantsinen** and R.R.E. Salomaa, “Simulations of Reactivity Transients in Tokamak Fusion Reactors,” 21st EPS Conference on Controlled Fusion and Plasma Physics, Ed. E. Joffrin, P. Platz, and P.E. Stott, Montpellier, 27 June 27 – 1 July 1994, Europhys. Conf. Abstr. Vol. 18B, Part II, 684–687 (1994).

16. A. Cardinali, B. Esposito, F. Rimini, M. Brambilla, F. Crisanti, M. de Baar, E. de la Luna, P. de Vries, X. Garbet, C. Giroud, E. Joffrin, P. Mantica, **M. Mantsinen**, A. Salmi, C. Sozzi, D. Van Eester and JET EFDA Contributors, “Modeling and analysis of the ICRH heating experiments in JET ITB Regimes,” 33rd EPS Conference on Plasma Phys. Rome, 19 - 23 June 2006 ECA Vol.30I, P-1.065 (2006).

17. T. Hellsten, M. Laxåback, T. Bergkvist, T. Johnson, F. Meo, F. Nguyen, C. C. Petty, **M. Mantsinen**, G. Matthews, J.-M. Noterdaeme, , T. Tala, D. Van Eester, P. Andrew, P. Beaumont, V. Bobkov, M. Brix, J. Brzozowski, L.-G. Eriksson, C. Giroud, E. Joffrin, V. Kiptily, J. Mailloux, M.-L. Mayoral, I. Monakhov, J. Ongena, R. Sartori, A. Staebler, E. Rachlew, E. Tennfors, A. Tuccillo, A. Walden, K.-D. Zastrow and JET-EFDA contributors, “Fast Wave Current Drive and Direct Electron Heating in JET ITB Plasmas,” 21st IAEA Fusion Energy Conference, 16 - 22 October 2006 Chengdu, China, paper EX/P6-21.

18. J.Ongena, L.-G.Eriksson, J.P.Graves, M.-L.Mayoral, J.Mailloux, V.Petrzilka, S.D.Pinches, Yu.Baranov, L.Bertalot, C.D.Challis, G.Corrigan, A.Ekedahl, K.Erents, M.Goniche, T.Hellsten, J.Hobirk, I.Jenkins, T.Johnson, D.L.Keeling, V.Kiptily, P.U.Lamalle, M.Laxåback, E.Lerche, **M.J.Mantsinen**, J.-M.Noterdaeme, V.Parail, S.Popovichev, A.Salmi, M.Santala, J.Spence, S.Sharapov, A.A.Tuccillo, D.Van Eester, and JET EFDA contributors, “Recent progress in JET on Heating and Current Drive studies in view of ITER,” 21st IAEA Fusion Energy Conference, 16 - 22 October 2006 Chengdu, China, paper EX/P6-9.

19. T. Hellsten, M. Laxåback, T. Bergkvist, T. Johnson, **M. Mantsinen**, G. Matthews, F. Meo, F. Nguyen, J.-M. Noterdaeme, C. C. Petty, T. Tala, D. Van Eester, P. Andrew, P. Beaumont, V. Bobkov, M. Brix, J. Brzozowski, L.-G. Eriksson, C. Giroud, E. Joffrin, V. Kiptily, J. Mailloux, M.-L. Mayoral, I. Monakhov, R. Sartori, A. Staebler, E. Rachlew, E. Tennfors, A. Tuccillo, A. Walden, K.-D. Zastrow and JET-EFDA contributors, “Fast Wave Current Drive in JET ITB-

Plasma," in Radio-Frequency Power in Plasmas (Proc. 16th Topical Conference on Radio Frequency Power in Plasmas 11-13 April, 2005, Park City, Utah, USA), AIP, New York, 273.

20. T. Hellsten, M. Laxåback, T. Bergkvist, T. Johnson, F. Meo, F. Nguyen, C.C. Petty, **M. Mantsinen**, G. Matthews, J.-M. Noterdaeme, T. Tala, D. Van Eester, P. Andrew, P. Beaumont, V. Bobkov, M. Brix, J. Brzozowski, L.-G. Eriksson, C. Giroud, E. Joffrin, V. Kiptily, J. Mailloux, M.-L. Mayoral, I. Monakhov, R. Sartori, A. Staebler, E. Rachlew, E. Tennfors, A. Tuccillo, A. Walden, K.-D. Zastrow and JET EFDA contributors, "On the Parasitic Absorption in FWCD Experiments in JET ITB Plasmas," 32nd EPS Conference on Plasma Phys. Tarragona, 27 June - 1 July 2005 ECA Vol.29C, P-5.095 (2005).

21. M.-L. Mayoral, P.U. Lamalle, D. Van Eester, P. Beaumont, E. De La Luna, P. De Vries, C. Gowers, R. Felton, J. Harling, V. Kiptily, K. Lawson, M. Laxåback, E. Lerche, P. Lomas, **M.J. Mantsinen**, F. Meo, J.-M. Noterdaeme, I. Nunes, G. Piazza, M. Santala and JET-EFDA Contributors, "ICRF Heating For The Non-Activated Phase Of ITER: From Inverted Minority To Mode Conversion Regime," in Radio-Frequency Power in Plasmas (Proc. 16th Topical Conference on Radio Frequency Power in Plasmas 11-13 April, 2005, Park City, Utah, USA), AIP, New York, 122.

22. J.-M. Noterdaeme, **M. Mantsinen**, V. Bobkov, A. Ekedahl, L.-G. Eriksson, P.U. Lamalle, A. Lyssoivan, J. Mailloux, M.-L. Mayoral, F. Meo, I. Monakhov, K. Rantamaki, A. Salmi, M. Santala, S. Sharapov, D. Van Eester, JET-EFDA Task Force H and JET-EFDA Contributors, "Development of RF Tools and Scenarios for ITER on JET," in Radio-Frequency Power in Plasmas (Proc. 16th Topical Conference on Radio Frequency Power in Plasmas 11-13 April, 2005, Park City, Utah, USA), AIP, New York, 90.

23. F. Crisanti, A. Becoulet, B. Esposito, C. Gormezano, F. Rimini, M. Brambilla, P. Buratti, A. Cardinali, M. de Baar, E. de la Luna, P. de Vries, X. Garbet, E. Giovannozzi, C. Giroud, R. Guirlet, E. Joffrin, X. Litaudon, P. Mantica, **M. Mantsinen**, A. Salmi, C. Sozzi, D. Van Eester, EFDA-JET Workprogramme, "JET RF dominated scenarios and Ion ITB experiments with no external momentum input," 20th IAEA Fusion Energy Conference, 1-6 November 2004, Vilamoura, Portugal, paper EX/P2-1.

24. N.N. Gorelenkov, C.Z. Cheng, V.G. Kiptily**, M.J. Mantsinen**, S.E. Sharapov, "Fast ion effects on fishbones and n=1 kinks in JET simulated by a non- perturbative NOVA-KN code," 20th IAEA Fusion Energy Conference, 1-6 November 2004, Vilamoura, Portugal, paper TH/5-2Rb.

25. J.A. Heikkinen, Vl. V. Bobkov, D.A. D'Ippolito, D.A. Hartmann, J. Myra, K.M. Rantamäki, A. Salmi, T. Hellsten, Ph. U. Lamalle, **M. Mantsinen**, and J.-M. Noterdaeme, and JET EFDA Contributors, "Experiments on ICRF Coupling with Different Phasings," 31st EPS Conference on Plasma Phys. London, 28 June - 2 July 2004 ECA Vol.28G, P-5.162 (2004).

26. P. U. Lamalle, **M. J. Mantsinen**, B. Alper, P. Beaumont, L. Bertalot, Vl. V. Bobkov, G. Bonheure, J. Brzozowski, S. Conroy, M. de Baar, P. de Vries, G. Ericsson, V. Kiptily, M. Laxåback, K. Lawson, E. A. Lerche, M. Mironov, J.-M. Noterdaeme, S. Popovichev, M. Santala, M. Tardocchi, D. Van Eester and JET EFDA contributors, "Investigation of low

concentration tritium ICRF heating on JET," 31st EPS Conference on Plasma Phys. London, 28 June – 2 July 2004 ECA Vol.28G, P-5.165 (2004).

27. P.U. Lamalle, **M.J. Mantsinen**, J.-M. Noterdaeme, B. Alper, P. Beaumont, L. Bertalot, T. Blackman, Vl.V. Bobkov, G. Bonheure, J. Brzozowski, C. Castaldo, S. Conroy, M. de Baar, E. De la Luna, P. de Vries, F. Durodié, G. Ericsson, L.-G. Eriksson, C. Gowers, R. Felton, J. Heikkinen, T. Hellsten, V. Kiptily, K. Lawson, M. Laxåback, E. Lerche, P. Lomas, A. Lyssoivan, M.-L. Mayoral, F. Meo, M. Mironov, I. Monakhov, I. Nunes, S. Popovichev, A. Salmi, M.I.K. Santala, S. Sharapov, T. Tala, M. Tardocchi, D. Van Eester, B. Weyssow, JET EFDA Contributors, "Expanding the operating space of ICRF on JET with a view to ITER," 20th IAEA Fusion Energy Conference, 1-6 November 2004, Vilamoura, Portugal, paper EX/P4-26.

28. P. Mantica, F. Imbeaux, **M. Mantsinen**, D. Van Eester, A. Marinoni, N. Hawkes, E. Joffrin, V.Kiptily, S. Pinches, A.Salmi, S. Sharapov, I. Voitsekhovitc, P. de Vries, K.-D. Zastrow and the JET EFDA contributors, "Power modulation experiments in JET ITB plasmas," 31st EPS Conference on Plasma Phys. London, 28 June - 2 July 2004 ECA Vol.28G, P-1.154 (2004).

29. P. Mantica, X. Garbet, C. Angioni, E. Asp, M. de Baar, Y. Baranov, R. Budny, G. Cordey, F. Crisanti, N. Hawkes, G.M.D. Hogeweij, F. Imbeaux, E. Joffrin, N. Kirneva, E. Lazzaro, X. Litaudon, **M. Mantsinen**, A. Marinoni, D. McDonald, M. Nora, H. Nordman, V. Parail, F. Ryter, C. Sozzi, T. Tala, A. Thyagaraja, D. Van Eester, I. Voitsekhovitch, P. de Vries, J. Weiland, K.-D. Zastrow and the JET EFDA contributors, "Progress in understanding heat transport at JET," 20th IAEA Fusion Energy Conference, 1-6 November 2004, Vilamoura, Portugal, paper EX/P6-18.

30. F.J.R. Nabais, D. Borba, **M. Mantsinen**, M.F.F. Nave, S. Sharapov and JET-EFDA contributors, "Internal kink mode stability in the presence of ICRH driven fast ions populations," 20th IAEA Fusion Energy Conference, 1-6 November 2004, Vilamoura, Portugal, paper TH/5-3.

31. M. F. F. Nave, S. Coda, R. Galvão, J. Graves, R. Koslowski, **M. Mantsinen**, F. Nabais, S. Sharapov, P. de Vries, R. Buttery, M. de Baar, C. Challis, J. Ferreira, C. Giroud, M. Mayoral, S. D. Pinches, M. Stamp, and JET-EFDA contributors, "Small sawtooth regimes in JET plasmas," 31st EPS Conference on Plasma Phys. London, 28 June - 2 July 2004 ECA Vol.28G, P-1.162 (2004).

32. A. Salmi, P. Beaumont, P. de Vries, L.-G. Eriksson, C. Gowers, P. Helander, M. Laxåback, **M.J. Mantsinen**, J.-M. Noterdaeme, D. Testa and EFDA JET contributors, "JET Experiments to Assess Finite Larmor Radius Effects on Resonant Ion Energy Distribution during ICRF Heating," 31st EPS Conference on Plasma Phys. London, 28 June - 2 July 2004 ECA Vol.28G, P-5.167 (2004).

33. M. I. K. Santala, **M. J. Mantsinen**, Yu. Baranov, P. Beaumont, P. Belo, L. Bertalot, J. Brzozowski, M. Cecconello, S. Conroy, M. deBaar, P. deVries, C. Gowers, V. Kiptily, J.-M. Noterdaeme, S. Popovichev, A. Salmi, C. Schlatter, S. Sharapov, and JET-EFDA contributors, "pT fusion by RF-heated protons in JET trace tritium discharges," 31st EPS Conference on Plasma Phys. London, 28 June - 2 July 2004 ECA Vol.28G, P-5.163 (2004).

34. S.E. Sharapov, B. Alper, F. Andersson, Yu.F. Baranov, H.L. Berk, L. Bertalot, D. Borba, C. Boswell, B.N. Breizman, R.J. Buttery, C.D. Challis, M. de Baar, P. de Vries, L.-G. Eriksson, A. Fasoli, R. Galvao, V. Goloborod'ko, M.P. Gryaznevich, R.J. Hastie, N.C. Hawkes, P. Helander, V.G. Kiptily, G.J. Kramer, P.J. Lomas, J. Mailloux, **M. Mantsinen**, R. Martin, F. Nabais, M.F.F. Nave, R. Nazikian, J-M. Noterdaeme, M.S. Pekker, S.D. Pinches, T. Pinfold, S.V. Popovichev, P. Sandquist, D. Stork, D. Testa, A. Tuccillo, I. Voitsekhovich, V. Yavorskij, N.P. Young, F. Zonca, "Experimental studies of instabilities and confinement of energetic particles on JET and on MAST," 20th IAEA Fusion Energy Conference, 1-6 November 2004, Vilamoura, Portugal, paper EX/5-2Ra.

35. D. Stork, Y. Baranov, P. Belo, L. Bertalot, D. Borba, J.H. Brzozowski, C.D. Challis, D. Ciric, S. Conroy, M. de Baar, P. de Vries, P. Dumortier, L. Garzotti, N.C. Hawkes, T.C. Hender, E. Joffrin, T.T.C. Jones, V. Kiptily, P.U. Lamalle, J. Mailloux, **M. Mantsinen**, D.C. McDonald, M.F.F. Nave, R. Neu, M. O'Mullane, J. Ongena, R.J. Pearce, S. Popovichev, S.E. Sharapov, M. Stamp, J. Stober, E. Surrey, M. Valovic, I. Voitsekhovitch, H. Weisen, A.D. Whiteford, L. Worth, V. Yavorskij, K-D. Zastrow, JET EFDA Workprogramme, "Overview of Transport, Fast Particle and Heating and Current Drive Physics using Tritium in JET plasmas," 20th IAEA Fusion Energy Conference, 1-6 November 2004, Vilamoura, Portugal, paper OV/4-1.

36. A.A. Tuccillo, F. Crisanti, X. Litaudon, Yu.F. Baranov, A. Becoulet, M. Becoulet, L. Bertalot, C.D. Challis, R. Cesario, M.R. De Baar, B. Esposito, D. Frigione, L. Garzotti, E. Giovannozzi, C. Giroud, G. Gorini, C. Gormezano, N.C. Hawkes, J. Hobirk, F. Imbeaux, E. Joffrin, P.J. Lomas, J. Mailloux, P. Mantica, **M.J. Mantsinen**, D. Mazon, A. Murari, V. Pericoli-Ridolfini, F. Rimini, A.C.C. Sips, O. Tudisco, D. Van Eester, K.D. Zastrow, "Development on JET of Advanced Tokamak operations for ITER," 20th IAEA Fusion Energy Conference, 1-6 November 2004, Vilamoura, Portugal, paper EX/1-1.

37. B. Weyssow, D. Pilipenko, I. Pavlenko, P. Dumortier, D. Van Eester, M. F. F. Nave, J. Brzozowski, R. Felton, L. Zabeo, G. Maddison, S. Hacquin, **M. Mantsinen**, J.-M. Noterdaeme and contributors to the EFDA-JET Workprogramme, "RF Induced Impurity Transport in the Mode Conversion Regime in a H-D plasma at JET," 31st EPS Conference on Plasma Phys. London, 28 June - 2 July 2004 ECA Vol.28G, P-5.146 (2004).

38. Yu.F. Baranov, X. Garbet, N.C. Hawkes, B. Alper, R. Barnsley, C.D. Challis, C. Giroud, E. Joffrin, **M.Mantsinen**, F. Orsitto, V. Parail, S.E. Sharapov and the JET EFDA contributors, "On the link between q-profile and ITBs," 30th EPS Conference on Controlled Fusion and Plasma Physics, St Petersburg, 7-11 July, 2003, Europhysics Conference Abstracts, Vol. 27A, P-1.104.

39. A. Ekedahl, G. Granucci, J. Mailloux, V. Petrzilka, K. Rantamäki, Y. Baranov, K. Erents, M. Goniche, E. Joffrin, P.J. Lomas, **M.J. Mantsinen**, D. McDonald, J.-M. Noterdaeme, V. Pericoli, R. Sartori, C. Silva, M. Stamp, A.A. Tuccillo, F. Zacek and EFDA-JET Contributors, "Long Distance Coupling of Lower Hybrid Waves in ITER Relevant Edge Conditions in JET Reversed Shear Plasmas," in Radio-Frequency Power in Plasmas (Proc. 15th Topical Conference on Radio Frequency Power in Plasmas 19-21 May, 2003, Moran, Wyoming, USA), AIP, New York, p. 227-234.

40. L.-G. Eriksson, J.-M. Noterdaeme, S. Assas, C. Giroud, J. DeGrassie, T. Hellsten, T. Johnson, V.G.Kiptlily, K.Kirov, **M. Mantsinen**, K.-D. Zastrow, M. DeBaar, J. Brzozowski, R. Budney, R. Cesario, V. Chan, A. Gondhalekar, N. Hawkes, G.T. Hoang, Ph. Lamalle, A. Meigs, F. Meo, F. Nguyen, E. Righi, A. Staebler, D. Testa, A. Tuccillo, H. Weisen, and JET-EFDA contributors, "Bulk Plasma Rotation in the presence of Waves in the Ion Cyclotron Range of Frequencies," in Radio-Frequency Power in Plasmas (Proc. 15th Topical Conference on Radio Frequency Power in Plasmas 19-21 May, 2003, Moran, Wyoming, USA), AIP, New York, p. 41-49.

41. N.N. Gorelenkov, **M.J. Mantsinen**, S.E. Sharapov, C.Z. Cheng, and the JET-EFDA contributors, "Modeling of ICRH H-minority driven n = 1 resonant modes in JET," 30th EPS Conference on Controlled Fusion and Plasma Physics, St Petersburg, 7-11 July, 2003, Europhysics Conference Abstracts, Vol. 27A, P-2.100.

42. G. Granucci, A. Ekedahl, J. Mailloux, K. Erents, M. Hron, E. Joffrin, P.J. Lomas, **M. Mantsinen**, J.-M. Noterdaeme, V. Pericoli-Ridolfini, V. Petrzilka, K. Rantamäki, R. Sartori, C. Silva, A.A. Tuccillo, D. McDonald, and JET EFDA contributors, "Recent Results of LHCD Coupling Experiments with Near Gas Injection in JET," 30th EPS Conference on Controlled Fusion and Plasma Physics, St Petersburg, 7-11 July, 2003, Europhysics Conference Abstracts, Vol. 27A, P-1.191.

43. T. Hellsten, M. Laxåback,T. Johnson, **M. Mantsinen**, G. Matthews, P. Beaumont, C. Challis, D. van Eester, E. Rachlew, T. Bergkvist, C. Giround, E. Joffrin, F. Nguyen, J.-M. Noterdaeme, J. Mailloux, M-L. Mayoral, F. Meo, I.Monakhov, F. Sartori, A. Staebler, E. Tennfors, A. Tuccillo, A. Walden, B. Volodymyr and JET- EFDA contributors, "Fast Wave Current Drive in JET ITB-Plasmas," in Radio-Frequency Power in Plasmas (Proc. 15th Topical Conference on Radio Frequency Power in Plasmas 19-21 May, 2003, Moran, Wyoming, USA), AIP, New York, p. 197-200.

44. M. Laxåback, T. Johnson, T. Hellsten and **M. Mantsinen**, "Self-consistent modelling of polychromatic ICRH in tokamaks," in Radio-Frequency Power in Plasmas (Proc. 15th Topical Conference on Radio Frequency Power in Plasmas 19-21 May, 2003, Moran, Wyoming, USA), AIP, New York, p. 126-129.

45. A. Lyssoivan, **M.J. Mantsinen**, D. Van Eester, R. Koch, A. Salmi, J.-M. Noterdaeme, I. Monakhov, and JET EFDA Contributors, "Effect of ICRF Mode Conversion at the Ion-Ion Hybrid Resonance on Plasma Confinement in JET," in Radio-Frequency Power in Plasmas (Proc. 15th Topical Conference on Radio Frequency Power in Plasmas 19-21 May, 2003, Moran, Wyoming, USA), AIP, New York, p. 130-133.

46. P. Mantica, X. Garbet, F. Imbeaux, **M. Mantsinen**, D. Van Eester, M. de Baar, P. Knight, V. Parail, F. Ryter, G. Saibene, R. Sartori, C. Sozzi, A. Thyagaraja, JET EFDA Contributors, "Heat wave propagation experiments and modelling at JET: L-mode, H-mode and ITBs," 30th EPS Conference on Controlled Fusion and Plasma Physics, St Petersburg, 7-11 July, 2003, Europhysics Conference Abstracts, Vol. 27A, O-3.1A.

47. M.-L. Mayoral, O. Sauter, F. Nguyen, E. Westerhof, **M. Mantsinen**, T. Hellsten, T. Johnson and EFDA-JET Work-Programme Contributors, "Sawtooth and neoclassical tearing mode

seed island control by ICRF Current drive on JET," in Radio-Frequency Power in Plasmas (Proc. 14th Topical Conference on Radio Frequency Power in Plasmas 7-9th May, 2001, Oxnard, Ca, USA), AIP, New York, p. 106-109.

48. D. Testa, A. Fasoli, A. Jaun, **M. Mantsinen**, P. Beaumont, and JET-EFDA contributors, "Alfven wave stability and fast ion distributions in ITER relevant scenarios," 30th EPS Conference on Controlled Fusion and Plasma Physics, St Petersburg, 7-11 July, 2003, Europhysics Conference Abstracts, Vol. 27A, P-3.141.

49. D. Van Eester, F. Imbeaux, P. Mantica, **M. Mantsinen**, M. de Baar, P. de Vries, L.-G. Eriksson, R. Felton, A. Figueiredo, J. Harling, E. Joffrin, K. Lawson, H. Leggate, X. Litaudon, V. Kiptily, J.-M. Noterdaeme, V. Pericoli, E. Rachlew, A.Tuccillo, K.-D. Zastrow & JET-EFDA contributors, "Recent ^{3}He Radio Frequency Heating Experiments On JET," in Radio-Frequency Power in Plasmas (Proc. 15th Topical Conference on Radio Frequency Power in Plasmas 19-21 May, 2003, Moran, Wyoming, USA), AIP, New York, p. 66-73.

50. C. Angioni, T.P. Goodman, M.A. Henderson, **M.J. Mantsinen**, O. Sauter, and contributors to the EFDA-JET work programme, "Understanding sawtooth period behaviour with electron and ion cyclotron resonance heating and current drive," 29th European Physical Society Conference on Plasma Physics and Controlled Fusion, 17-21 June 2002, Montreux, Switzerland, Europhysics Conference Abstracts Vol. 26 B, P-1.118 (2002).

51. C. Castaldo, R. Cesario, Y. Andrew, A. Cardinali, V. Kiptly, **M. Mantsinen**, F. Meo, A. Murari, A. A. Tuccillo, M. Valisa, D. Van Eester, L. Bertalot, D. Bettella, C. Giroud, C. Ingesson, E. Joffrin, M.-L. Mayoral, L. Meneses and JET EFDA Contributors, "Improved Plasma Confinement by Ion Bernstein Waves (IBWs) Interacting with Ions in JET (Joint European Torus)," 19th IAEA Fusion Energy Conference, 14- 19 October 2002, Lyon, France , paper PD/P-01.

52. T.C. Hender, O. Sauter, B. Alper, C. Angioni, M. de Baar, M. De Benedetti, P. Belo, M. Bigi, D.N. Borba, T. Bolzonella, R. Budny, R.J. Buttery, A. Gondhalekar, N.N. Gorelenkov, A. Gude, S. Guenter, T. Hellsten, D.F. Howell, R. Koslowki, R.J. La Haye, A.W. Hyatt, P. Lamalle, E. Lazzaro, **M.J. Mantsinen**, M. Maraschek, M.L. Mayoral, K.G. McClements, F. Milani, F. Nabais, M.F.F. Nave, F. Nguyen, S. Nowak, A.-L. Pecquet, C. Perez von Thun, C.C. Petty, S.D. Pinches, A. Pochelon, S. Podda, J. Rapp, F. Salzedas, F. Sartori, S.E. Sharapov, M. Stamp, D. Testa, E. Westerhof, P. de Vries, P. Zanca and contributors to the EFDA-JET workprogramme, "Sawtooth, Neo-Classical Tearing Mode and Error Field Studies in JET," 19th IAEA Fusion Energy Conference, 14-19 October 2002, Lyon, France, paper IAEA-CN-94/EX/S1-2.

53. V. Kiptily, O. N. Jarvis, L. Bertalot, S.W. Conroy, S. Popovichev, and **M.J. Mantsinen** and contributors to the EFDA-JET workprogramme, "Gamma-ray measurements at JET and diagnostics development," Proc. 6th International Conference on Advanced Diagnostics for Magnetic and Inertial Fusion, Villa Monastero, Varenna, Italy, 2001, pp.141-144, Kluwer Academic/Plenum Publishers (2002), Ed. D. Batani.

54. X. Litaudon, A. Bécoulet, F. Crisanti, R.C. Wolf, Yu.F. Baranov, E. Barbato, M. Bécoulet, R. Budny, C. Castaldo, R. Cesario, C.D. Challis, G.D. Conway, M.R. De Baar, P. De Vries,

R. Dux, L.G. Eriksson, B. Esposito, R. Felton, C. Fourment, D. Frigione, X. Garbet, R. Giannella, C. Giroud, G. Gorini, N.C. Hawkes, T. Hellsten, T.C. Hender, P. Hennequin, G.M.D. Hogeweij, G.T.A. Huysmans, F. Imbeaux, E. Joffrin, P.J. Lomas, Ph Lotte, P. Maget, J. Mailloux, P. Mantica, **M.J. Mantsinen**, D. Mazon, D. Moreau, V. Parail, V. Pericoli, E. Rachlew, M. Riva, F. Rimini, Y. Sarazin, B.C. Stratton, T.J.J. Tala, G. Tresset, O. Tudisco, L. Zabeo, K-D. Zastrow and contributors to the EFDA-JET workprogramme, "Progress Towards Steady-State Operation and Real Time Control of Internal Transport Barriers in JET," 19th IAEA Fusion Energy Conference, 14- 19 October 2002, Lyon, France, paper EX/C3-4.

55. P. Mantica, I. Coffey, R. Dux, X. Garbet, L. Garzotti, G. Gorini, F. Imbeaux, E. Joffrin, J. Kinsey, **M. Mantsinen**, R. Mooney, V. Parail, Y. Sarazin, C. Sozzi, W. Suttrop, G. Tardini, D. Van Eester and JET EFDA contributors, "Transient Heat Transport Studies in JET Conventional and Advanced Tokamak Plasmas," 19th IAEA Fusion Energy Conference, 14-19 October 2002, Lyon, France, paper EX/P1-04.

56. M.L. Mayoral, E. Westerhof, O. Sauter, B. Alper, R.J. Buttery, T.C. Hender, D.F. Howell, **M.J. Mantsinen**, A. Mück, M.F.F. Nave and contributors to EFDA JET workprogramme, "Neo-Classical Tearing Mode Control through Sawtooth Destabilisation in JET," 29th European Physical Society Conference on Plasma Physics and Controlled Fusion, 17-21 June 2002, Montreux, Switzerland, Europhysics Conference Abstracts Vol. 26 B, P-1.028 (2002).

57. D. Mazon, X. Litaudon, D. Moreau, G. Tresset, R. Felton, E. Joffrin, M. Riva, L. Zabeo, A. Bécoulet, J.M.Chareau, F.Crisanti, **M. Mantsinen**, A. Murari, V.Pericoli-Ridolfini, K.D. Zastrow and contributors to the EFDA-JET workprogramme, "Real-time control of the current profile in JET," 29th European Physical Society Conference on Plasma Physics and Controlled Fusion, 17-21 June 2002, Montreux, Switzerland, Europhysics Conference Abstracts Vol. 26 B, P-2.044 (2002).

58. J.-M. Noterdaeme, R. Budny, A. Cardinali, C. Castaldo, R. Cesario, F. Crisanti, J. de Grassie, D.A. D'Ippolito, F. Durodié, A. Ekedahl, E. Joffrin, D. Hartmann, J. Heikkinen, T. Hellsten, T. Jones, V. Kiptily, Ph. Lamalle, X. Litaudon, F. Nguyen, J. Mailloux, **M. Mantsinen**, M. Mayoral, D. Mazon,F. Meo, I. Monakhov, J.R. Myra, J. Paméla, V. Pericoli, O. Sauter, Y. Sarazin, S.E. Sharapov, A.A. Tuccillo, D. Van Eester and contributors to the EFDA-JET Workprogramme, "Heating, Current Drive and Energetic Particles Studies on JET in Preparation of ITER Operation," 19th IAEA Fusion Energy Conference, 14- 19 October 2002, Lyon, France, paper EX/W-1.

59. J. Ongena, W. Suttrop, M. Bécoulet, G. Cordey, P. Dumortier, Th. Eich, L.C. Ingesson, S. Jachmich, P. Lang, A. Loarte, P. Lomas, G.P. Maddison, A. Messiaen, M.F.F. Nave, J. Rapp, G. Saibene, R. Sartori, O. Sauter, J.D. Strachan, B. Unterberg, M. Valovic, B. Alper, Ph. Andrew, Y. Baranov, J. Brzozowski, J. Bucalossi, M. Brix, R. Budny, M. Charlet, I. Coffey, M. De Baar, P. De Vries, C. Gowers, N. Hawkes, M. von Hellermann, D.L. Hillis, J. Hogan, G.L. Jackson, E. Joffrin, C. Jupen, A. Kallenbach, H.R. Koslowski, K.D. Lawson, **M.Mantsinen**, G. Matthews, P. Monier-Garbet, D. McDonald, F. Milani, M. Murakami, A. Murari, R. Neu, V. Parail, S. Podda, M.E. Puiatti, E. Righi, F. Sartori, Y. Sarazin, A. Staebler, M. Stamp, G. Telesca, M. Valisa, B. Weyssow, K-D. Zastrow and contributors

to the EFDA-JET workprogramme, “Towards the realization on JET of an integrated H-Mode scenario for ITER,” 19th IAEA Fusion Energy Conference, 14- 19 October 2002, Lyon, France, paper EX/C2-4.

60. D. Testa, A. Fasoli, D.N. Borba, G.Y. Fu, A. Jaun, **M. Mantsinen**, P. de Vries, and contributors to the EFDA-JET work programme, “Measurement of Alfvén Waves on the JET Tokamak,” 29th European Physical Society Conference on Plasma Physics and Controlled Fusion, 17-21 June 2002, Montreux, Switzerland, Europhysics Conference Abstracts Vol. 26 B, P-1.121 (2002).

61. G. Tresset, C.D. Challis, X. Garbet, X. Litaudon, **M. Mantsinen**, D. Mazon, D. Moreau, and contributors to the EFDA-JET work programme, “Transport Identification by neural network in JET ITB regimes,” 29th European Physical Society Conference on Plasma Physics and Controlled Fusion, 17-21 June 2002, Montreux, Switzerland, Europhysics Conference Abstracts Vol. 26 B, P-2.039 (2002).

62. R.C. Wolf, A. Becoulet, Y. Baranov, M. Becoulet, R. Budny, C. Castaldo, C.D. Challis, G.D. Conway, F. Crisanti, M.R. de Baar, R. Dux, B. Esposito, X. Garbet, C. Giroud, G. Gorini, N.C. Hawkes, T.A.K. Hellsten, T.C. Hender, P. Hennequin, G.M.D. Hogeweij, G. Huysmans, E. Joffrin, X. Litaudon, P. Lomas, J. Mailloux, P. Mantica, **M.J. Mantsinen**, D. Mazon, D. Moreau, V. Parail, A.G. Peeters, M. Riva, Y. Sarazin, B.C. Stratton, T.J.J. Tala, G. Tresset, K.-D. Zastrow, and contributors to the EFDA-JET workprogramme, “Internal transport barrier experiments in JET: Transport studies and their application for advanced tokamak scenarios,” 19th IAEA Fusion Energy Conference, October 2002, Lyon, France 14- 19.

63. T. Hellsten, B. Alper, P. Hennequin, T. Johnson, Yu. F. Baranov, A. Becoulet, C. Challis, E. Joffrin, T.C. Hender, P. J. Lomas, D. Mazon, **M. Mantsinen**, F. Orsitto, E. Rachlew, K.-D. Zastrow and contributors to the EFDA-JET Workprogramme, “Sawtoothing in Reversed Shear Plasmas,” Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) 573-576.

64. T.C. Hender, R.J. Buttery, D.F. Howell, G.T.A. Huysmans, R.J. La Haye, P.J. Lomas, A.A. Martynov, **M.J. Mantsinen**, S.I. Pinches, O. Sauter, M. Zabiego and personnel involved in JET workprogramme, “Neo-Classical Tearing Mode Studies in JET,” 18th IAEA Fusion Energy Conference, Sorrento, Italy, October 4-10, 2000, IAEA Vienna 2001, Paper IAEA-CN-77/EXP3/02, 8 pp.

65. T. Johnson, T. Hellsten, **M. Mantsinen**, L.C. Ingesson, V. Kiptily, T. Bergkvist, S. Conroy, J. Hedin, M.-L. Mayoral, F. Nguyen, J.-M. Noterdaeme, S. Sharapov and contributors to the EFDA-JET Workprogramme, “Experimental Evidence for RF-Induced Transport of Resonant ^{3}He Ions in JET,” Proc. 7th IAEA Technical Committee on Energetic Particles in Magnetic Confinement Systems (Gothenburg Sweden, 8 - 11 October 2001) (Chalmers University of Technology, Gothenburg, Sweden, 2001) paper ot28.

66. T. Johnson, T. Hellsten, **M. Mantsinen**, V. Kiptily, S. Sharapov, M.-L. Mayoral, F. Nguyen, J.-M. Noterdaeme, J. Hedin and contributors to the EFDA-JET workprogramme, “RF-induced Pinch of Resonant ^{3}He Minority Ions in JET,” in Radio-Frequency Power in

Plasmas (Proc. 14th Topical Conference on Radio Frequency Power in Plasmas 7-9th May, 2001, Oxnard, Ca, USA), AIP, New York, p. 102-105.

67. T.T.C. Jones, A.J. Bickley, R. Felton, P. Lamalle, K.D. Lawson, G.P. Maddison, **M. Mantsinen**, J.-M. Noterdaeme, S. Podda, E. Righi, Y. Sarazin, A. Staebler, A.A. Tuccillo and the contributors to the EFDA-JET Work Programme, "Simulation of alpha particle plasma self-heating using ICRH under real-time control," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) p. 1197-1200.

68. X. Litaudon, F. Crisanti, J. Mailloux, Yu. Baranov, E. Barbato, V. Basiuk, A. Bécoulet, M. Bécoulet, C.D. Challis, G.D. Conway, R. Dux, R. De Angelis, L.G. Eriksson, B. Esposito, D. Frigione, C. Giroud, N. Hawkes, P. Hennequin, G. Huysmans, F. Imbeaux, E. Joffrin, Ph. Lotte, P. Maget, **M. Mantsinen**, D. Mazon, D. Moreau, F. Rimini, Y. Sarazin, G. Tresset, K.D. Zastrow, M. Zerbini and contributors to the EFDA-JET workprogramme, "Towards full current drive operation in JET," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) p 1313-1316 (also p. 517-520).

69. G.P. Maddison, J.A. Snipes, J-M. Chareau, I.H. Hutchinson, L.C. Ingesson, H.R. Koslowski, A. Loarte, P.J. Lomas, **M.J. Mantsinen**, G.F. Matthews, M.F.F. Nave, E. Righi, G. Saibene, R. Sartori, O. Sauter, K-D. Zastrow, contributors to the EFDA-JET Work Programme, "ELM Moderation in High Density H-Modes on JET and Alcator C-Mod," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) p. 997-1000.

70. K.G. McClements, C. Angioni, R.V. Budny, P.C. de Vries, N.N. Gorelenkov, D.F. Howell, **M. Mantsinen**, M.F.F. Nave, A. Pochelon, O. Sauter, S.E. Sharapov, contributors to the EFDA-JET Workprogramme, "Modelling of Sawtooth Stabilisation by Beam-Injected Energetic particles in JET," Proc. 7th IAEA Technical Committee on Energetic Particles in Magnetic Confinement Systems (Gothenburg Sweden, 8 - 11 October 2001) (Chalmers University of Technology, Gothenburg, Sweden, 2001) paper ot26.

71. K. G. McClements, R. J. Akers, L. C. Appel, R. O. Dendy, A. Gondhalekar, A. A. Korotkov, M. R. O'Brien, S. Sharapov, R. J. Hastie, J. P. Graves, K. I. Hopcraft, D. N. Borba, M. F. F. Nave, **M. Mantsinen**, N. N. Gorelenkov, M. V. Gorelenkova, F. S. Zaitsev, "Energetic Particle Physics and MHD Stability in JET and START," 18th IAEA Fusion Energy Conference, Sorrento, Italy, October 4-10, 2000, IAEA Vienna 2001, Paper IAEA-CN-77/EXP2/08.

72. F. Nabais, D. Borba, **M. Mantsinen**, K. McClements, M.F.F. Nave, S. Sharapov, "Numerical simulation of sawtooth stabilisation by super-thermal particles in the potato regime," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) p. 557-560.

73. M.F.F. Nave, J. Rapp, T. Bolzonella, R. Dux, N. Hawkes, S. Jachmich, H.R. Koslowski, Ph. Lotte, **M.J. Mantsinen**, V. Parail, J. Strachan, "Sawtooth and Impurity Accumulation

Control in JET Radiative Mantle Discharges," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) p. 961-964.

74. F. Nguyen, J.-M. Noterdaeme, M.-L. Mayoral, T. Hellsten, **M. Mantsinen**, D.A. Hartmann, R. de Angelis, V. Basiuk, M.R. de Baar, L.-G. Eriksson, D. Van Eester, A. Gondhalekar, N. Hawkes, T. Johnsson, Ph. Lamalle, Ph. Lotte, F. Meo, L. Panaccione, A.-L. Pecquet, S. Podda, E. Righi, Y. Sarazin, O. Sauter, T. Tala, A. Tuccillo, M. Zabiégo and JET-EFDA Work-Programme collaborators, "ICRF Current Drive Experiments on JET," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) p. 781-784.

75. A. Pochelon, C. Angioni, **M. Mantsinen**, N. Gorelenkov, K.G. McClements, R. Budny, P.C .de Vries, D.F. Howell, M.F.F. Nave, O. Sauter, S. Sharapov and contributors to the EFDA-JET workprogramme, "Sawtooth stabilisation by neutral beam-injected fast ions in JET" (Proceedings of the 28th EPS Conference on Controlled Fusion and Plasma Physics, 2001), European Physical Society, Geneva (2001) P5.009.

76. O. Sauter, E. Westerhof, M.L. Mayoral, D. F. Howell, **M.J. Mantsinen**, B. Alper, C. Angioni, P. Belo, R. Buttery, K.G. McClements, A. Gondhalekar, T. Hellsten, T.C. Hender, T. Johnson, P. Lamalle, F. Milani, M.F. Nave, F. Nguyen, A.-L. Pecquet, S. Pinches, S. Podda, J. Rapp and contributors to the EFDA-JET workprogramme, "Neoclassical Tearing Mode Seed Island Control with ICRH in JET," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) p. 1773-1776 (and p. 449-452).

77. S.E. Sharapov, D.N.Borba, A. Fasoli, C. Giroud, A. Gondhalekar, N.C. Hawkes, T.C. Hender, V.G. Kiptily, **M.J. Mantsinen**, F. Nabais, D. Testa and contributors to the EFDA-JET workprogramme, "Beam Afterglow Scenario for TAE Excitation in Optimised Shear JET Plasmas," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) p. 525-528.

78. S.E. Sharapov, D. Testa, B. Alper, D.N.Borba, A. Fasoli, N.C. Hawkes, R.F. Heeter, **M. Mantsinen**, M.G. Von Hellermann and contributors to the EFDA-JET Workprogramme, "MHD Spectroscopy through Detecting Alfvén Wave Cascades," Proc. 7th IAEA Technical Committee on Energetic Particles in Magnetic Confinement Systems (Gothenburg Sweden, 8 - 11 October 2001) (Chalmers University of Technology, Gothenburg, Sweden, 2001) paper ot4.

79. W. Suttrop, R. Budny, J. G. Cordey, C. Gowers, **M. Mantsinen**, G. Matthews, H. Nordman, V. Parail, J. Rapp, J. Storrs, J. Strachan, J. Weiland, K. D. Zastrow, EFDA-JET Workprogramme Contributors, "Effect of heat flux and density variation on transport in ELMy H-modes," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) P3.016, p. 989-992.

80. T.J.J. Tala, V.V. Parail, A. Becoulet, C.D. Challis, G. Corrigan, N.C. Hawkes, D.J. Heading, **M.J. Mantsinen**, S. Nowak and contributors to the EFDA-JET workprogramme, "Impact of Different Preheating Methods on q-profile Evolution in JET," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) p. 541-544.

81. A.A. Tuccillo, Y. Baranov, E. Barbato, Ph. Bibet, C. Castaldo, R. Cesario, W. Cocilovo, F. Crisanti, R. De Angelis, A.C. Ekedahl, A. Figueiredo, M. Graham, G. Granucci, D. Hartmann, J. Heikkinen, T. Hellsten, F. Imbeaux, T.H.H. Jones, T. Johnson, K.V. Kirov, P. Lamalle, M. Laxaback, F. Leuterer, X. Litaudon, P. Maget, J. Mailloux, **M.J. Mantsinen**, M.L. Mayoral, F. Meo, I. Monakhov, F. Nguyen, J.-M. Noterdaeme, V. Percoli-Ridolfini, S. Podda, L. Paccione, E. Righi, F. Rimini, Y. Sarazin, A. Sibley, A. Staeber, T. Tala, D. Van Eester and EFDA-JET Work-Programme contributors, "Recent Heating and Current Drive Results on JET," in Radio-Frequency Power in Plasmas (Proc. 14th Topical Conference on Radio Frequency Power in Plasmas 7-9th May, 2001, Oxnard, Ca, USA), AIP, New York, p. 209-216.

82. R.C. Wolf, Y. Baranov, C. Giroud, **M. Mantsinen**, D. Mazon, K.-D. Zastrow, N. Hawkes, T. Hellsten, J. Hobirk, M. Laxaaback, F. Rimini, A. Stäbler, F. Ryter, J. Stober, H. Zohm, the ASDEX Upgrade Team and the Contributors to the EFDA-JET workprogramme, "Influence of electron heating on confinement in JET and ASDEX Upgrade internal transport barrier plasmas," Proc. 28th EPS Conference on Controlled Fusion and Plasma Physics, Funchal, 2001, Europhysics Conference Abstracts Vol. 25 A (European Physical Society, Geneva, 2001) P2.009 p. 513-516.

83. O. Dumbrajs, J.A. Heikkinen, S.J. Karttunen, T. Kiviniemi, T. Kurki-Suonio, **M.J. Mantsinen**, K.M. Rantamäki, S. Saarelma, R.R.E. Salomaa, S.K. Sipilä and T.J.J. Tala, "Triggering Mechanisms for Transport Barriers," 18th IAEA Fusion Energy Conference, Sorrento, Italy, October 4-10, 2000, IAEA Vienna 2001, Paper IAEA-CN-77/THP1/20, 6 pp.

84. T.C. Hender, S.J. Allfrey, B. Alper, Y. Baranov, D.N. Borba, D. Howell, G.T.A. Huysmans, O.J. Kwan and **M. Mantsinen**, "MHD Limiting JET Optimised Shear Performance," Theory of Fusion Plasmas, Proceedings of the Joint Varenna-Lausanne International Workshop, Varenna, Italy, August 28 – September 1, 2000, International School of Plasma Physics "Piero Caldirola", Eds. J.W. Connor, O. Sauter and E. Sindoni, Editrice Compositori, Bologna 2000, pp. 213-224.

85. S.E. Sharapov, D. Borba, A. Fasoli, R.F. Heeter, V.V. Drozdov, L.-G. Eriksson, C. Gormezano, J. Jacquinot, **M. Mantsinen**, D. Testa and M.G. von Hellermann, "Energetic ions and MHD diagnostics through Alfvén Eigenmodes detection in JET," Proc. 6th IAEA Technical Committee Meeting on Energetic Particles in Magnetic Confinement Systems, Naka, Japan (1999) Conference Paper JAERI-Conf 2000-004 Department of Fusion Plasma Research Japan Atomic Energy Research Institute, Ibaraki-ken March 2000, p.122-125.

86. D. Borba, S. Allfrey, T. Hender, **M. Mantsinen**, F. Nabais, M.F.F. Nave, S. Sharapov, "The Influence of ICRH-driven Energetic Ions on the Stability of Optimised Shear Discharges in JET," Proceedings of the 26th EPS Conference on Controlled Fusion and Plasma Physics,

14 – 18 June 1999, Maastricht, the Netherlands, Europhysics Conference Abstracts, Volume 23J, 221-224, European Physical Society (1999), Eds. R.M. Pick, C. Bastian, C. Nieswand.

87. R.J. Buttery, T.C. Hender, G.T.A. Huysmans, R.J. La Haye, P.U. Lamalle, **M. Mantsinen**, C. Petty, O. Sauter, H.R. Wilson, "Onset and control of Neo-classical Tearing Modes on JET," Proceedings of the 26th EPS Conference on Controlled Fusion and Plasma Physics, 14 – 18 June 1999, Maastricht, the Netherlands, Europhysics Conference Abstracts, Volume 23J, 121-124, European Physical Society (1999), Eds. R.M. Pick, C. Bastian, C. Nieswand.

88. L.-G. Eriksson, **M.J. Mantsinen**, A. Bécoulet, V. Fuchs, C. Gormezano, T. Hellsten, X. Litaudon and F. Rimini, "Analysis of the Influence of Different ICRF Heating Scenarios on the Performance of Optimised Shear Discharges in JET," Proceedings of the 26th EPS Conference on Controlled Fusion and Plasma Physics, 14 – 18 June 1999, Maastricht, the Netherlands, Europhysics Conference Abstracts, Volume 23J, 1013-1016, European Physical Society (1999), Eds. R.M. Pick, C. Bastian, C. Nieswand.

89. T. Hellsten, J. Carlsson, L.-G. Eriksson, J. Hedin, and **M. Mantsinen**, " Finite orbit width effects on ion cyclotron heating and current drive," Proceedings of Theory of Fusion Plasmas, Joint Varenna-Lausanne International Workshop, Villa Monastero, Varenna, Italy, August 31–September 4, 1998 Proceedings of Theory of Fusion Plasmas, Joint Varenna-Lausanne International Workshop, Villa Monastero, Varenna, Italy, August 31–September 4, 1998, International School of Plasma Physics "Piero Caldirola", J.W. Connor, E. Sindoni and J. Vacklavik (Eds), Societa Italiana di Fisica, Bologna, Italy 1999, pp. 131-144.

90. X. Litaudon, Y. Baranov, A Bécoulet, G.D. Conway, G.A. Cottrell, L.G. Eriksson, V. Fuchs, C. Gormezano, E. Joffrin, **M. Mantsinen**, M.L. Mayoral, D. Moreau, V. Parail, F. Rimini, F. Rochard, Y. Sarazin, A.C.C. Sips, F.X. Söldner, I. Voitsekhovitch, "Improved core electron confinement on JET," Proceedings of the 26th EPS Conference on Controlled Fusion and Plasma Physics, 14 – 18 June 1999, Maastricht, the Netherlands, Europhysics Conference Abstracts, Volume 23J, 965-968, European Physical Society (1999), Eds. R.M. Pick, C. Bastian, C. Nieswand.

91. G. Saibene, R. Budny, A.V. Chankin, G.D. Conway, G.J. Cordey, K Guenter, N. Hawkes. L.D. Horton, J. Lingertat, C.F. Maggi, **M.Mantsinen**, R.D. Monk, V.V. Parail, F.G. Rimini, R. Sartori, J.D. Strachan, M. von Hellermann, "Comparison of core and edge characteristics of NB and ICRH ELMy H-modes in JET," Proceedings of the 26th EPS Conference on Controlled Fusion and Plasma Physics, 14 – 18 June 1999, Maastricht, the Netherlands, Europhysics Conference Abstracts, Volume 23J, 97-100, European Physical Society (1999), Eds. R.M. Pick, C. Bastian, C. Nieswand.

92. S.E. Sharapov, D.N. Borba, A. Fasoli, R.F. Heeter, L.-G. Eriksson, C. Gormezano, G.T.A. Huysmans, W. Kerner, **M. Mantsinen**, A.B. Mikhailovskii, and D.F.H. Start, "Studies of Alfvén Instabilities on JET in the Recent D-T Campaign," Proceedings of Theory of Fusion Plasmas, Joint Varenna-Lausanne International Workshop, Villa Monastero, Varenna, Italy, August 31–September 4, 1998, International School of Plasma Physics "Piero

Caldirola", J.W. Connor, E. Sindoni and J. Vacklavik (Eds), Societa Italiana di Fisica, Bologna, Italy 1999, pp. 215-228.

93. F.X. Söldner, B. Alper, Yu. F. Baranov, A. Bickley, A. Bondeson, D. Borba, C.D. Challis, G. Conway, G.A. Cottrell, M. de Benedetti, N. Deliyanakis, A. Ekedahl, K. Erents, C. Gormezano, C. Gowers, N.C. Hawkes, T.C. Hender, G.T.A. Huysmans, E. Joffrin, T.T.C. Jones, X. Litaudon, D.-H. Liu, P.J. Lomas, A. Maas, J. Mailloux, **M. Mantsinen**, F. Nave, V.V. Parail, F. Rimini, Y. Sarazin, A.C.C. Sips, P. Smeulders, M.F. Stamp, T.J.J. Tala, M. von Hellermann, D.J. Ward, K.-D. Zastrow, "The role of RF in the optimised shear scenario on JET," 13th Topical Conference on Applications of Radio Frequency Power to Plasmas, Annapolis, Maryland, USA, April 12-14, 1999, AIP Conference Proceedings 485 (AIP, Melville, New York, 1999) p. 288-295.

94. F.X. Söldner, B. Alper, Yu. F. Baranov, A. Bickley, D. Borba, C.D. Challis, G. Conway, G.A. Cottrell, M. de Benedetti, N. Deliyanakis, C. Gormezano, C. Gowers, C.M. Greenfield, N.C. Hawkes, T.C. Hender, G.T.A. Huysmans, E. Joffrin, T.T.C. Jones, P.T. Lang, X. Litaudon, P.J. Lomas, A. Maas, J. Mailloux, **M.J. Mantsinen**, F. Nave, V.V. Parail, F. Rimini, B. Schunke, A.C.C. Sips, P. Smeulders, M.F. Stamp, E.J. Strait, T.J.J. Tala, M. von Hellermann, D.J. Ward, K.-D. Zastrow, "Optimised Shear Scenario Development on JET towards Seady-State," Proceedings of the 26th EPS Conference on Controlled Fusion and Plasma Physics, 14 – 18 June 1999, Maastricht, the Netherlands, Europhysics Conference Abstracts, Volume 23J, 185-188, European Physical Society (1999), Eds. R.M. Pick, C. Bastian, C. Nieswand.

95. K.-D. Zastrow, H. Anderson, C. Jupén, M. G. von Hellermann, A.C. Maas, M.G.O'Mullane, B. Alper, Yu. F. Baranov, A.J. Bickley, D. Borba, C.D. Challis, G.D. Conway, N. Deliyanakis, C. Gormezano, C.W. Gowers, N.C. Hawkes, T.C. Hender, L.C. Ingesson, E. Joffrin, T.T.C. Jones, P.J. Lomas, **M.J. Mantsinen**, F.G. Rimini, A.C.C. Sips, F.X. Söldner, M.F. Stamp, "Argon in JET Optimised shear Plasmas," Proceedings of the 26th EPS Conference on Controlled Fusion and Plasma Physics, 14 – 18 June 1999, Maastricht, The Netherlands, Europhysics Conference Abstracts, Volume 23J, 217-220, European Physical Society (1999), Eds. R.M. Pick, C. Bastian, C. Nieswand.

96. V.P. Bhatnagar, C. Gormezano, J. Jacquinot, D.F.H. Start, L.-G. Eriksson, L. Horton, **M. Mantsinen**, E. Righi, F. Rimini, G. Saibene, B. Schunke and A.C.C. Sips, "JET Plasma Performance in Diverse ICRH DT Scenarios," 2nd Europhysics Topical Conference on Radio Frequency Heating and Current Drive of Fusion Devices, Brussels, Belgium, 20–23 January 1998, Europhysics Conference Abstracts Vol 22A pp 29-32, Eds. J. Jacquinot, G. Van Oost, R.R. Weynants.

97. V.P. Bhatnagar, D.F.H. Start, J. Jacquinot, C. Gormezano, L.-G. Eriksson, **M. Mantsinen**, F. Rimini, B. Schunke and the JET Team, "Ion Cyclotron Resonance Heating of D-T Divertor Plasmas in JET," Proceedings of 1998 International Congress on Plasma Physics and the 25th EPS Conference on Controlled Fusion and Plasma Physics, 29 June – 3 July 1998, Prague, Czech Republic, Europhysics Conference Abstracts, Volume 22C, 1178-1181, European Physical Society (1998), Ed. P. Pavlo [also in Report JET-P(98)59, p. 13-16, 142 pp].

98. L.-G. Eriksson, V.P. Bhatnagar, A. Gondhalekar, C. Gormezano, P. Harbour, T. Hellsten, J.G. Jacquinot, H. Jäckel, K.D. Lawson, C. Lowry, **M. Mantsinen**, E. Righi, G. Sadler, B. Schunke, A. Sips, M. Stamp and D.F.H. Start, "Theoretical Analysis of JET ICRF Scenarios with Relevance for a Reactor," Proceedings of 1998 International Congress on Plasma Physics and the 25th EPS Conference on Controlled Fusion and Plasma Physics, 29 June – 3 July 1998, Prague, Czech Republic, Europhysics Conference Abstracts, Volume 22C, 1186-1189, European Physical Society (1998), Ed. P. Pavlo [also in Report JET-P(98)59, p. 53-56, 142 pp].

99. L.-G. Eriksson, **M. Mantsinen**, D.F.H. Start, V.P. Bhatnagar, A. Gondhalekar, C. Gormezano, P. Harbour, T. Hellsten, J.G. Jacquinot, H. Jäckel, K.D. Lawson, C. Lowry, E. Righi, G. Sadler, B. Schunke, A. Sips, and M. Stamp, "Analysis of JET ICRF Heating Scenarios with Relevance for a Reactor," 2nd Europhysics Topical Conference on Radio Frequency Heating and Current Drive of Fusion Devices, Brussels, Belgium, 20–23 January 1998, Europhysics Conference Abstracts Vol 22A pp 109–112 Eds. J. Jacquinot, G. Van Oost, R.R. Weynants.

100. T.T.C. Jones, P. Andrew, B. Alper, B. Balet, A. Cherubini, J.P. Christiansen, F. Cristanti, R. de Angelis, H.P.L. de Esch, N. Deliyanakis, F. de Luca, M. Erba, A. Edwards, L.-G. Eriksson, C. Flewin, P. Galli, C. W. Goweres, G. Gorini, K. Günther, H. Guo, N.C. Hawkes, T.C. Hender, G. Huysmans, R. König, K.D. Lawson, H. Lingertat, **M. Mantsinen**, K. McCormick, A.C. Maas, F.B. Marcus, M.F. Nave, V. Parail, L. Porte, F.G. Rimini, B. Schunke, P. Smeulders, A.Taroni, P.R. Thomas, G. Saibene, K-D Zastrow, "D-T Mixture Control with Neutral Beam Fuelling and Importance of Particle Recycling and Isotope Exchange in the JET ELM-free H-mode," Proceedings of 1998 International Congress on Plasma Physics and the 25th EPS Conference on Controlled Fusion and Plasma Physics, 29 June – 3 July 1998, Prague, Czech Republic, Europhysics Conference Abstracts, Volume 22C, 369-362, European Physical Society (1998), Ed. P. Pavlo.

101. F.G. Rimini, P. Andrews, B. Balet, R. Budny, J. Bull, N. Deliyanakis, H. de Esch, L.-G. Eriksson, R. Giannella, C. Gowers, H. Guo, T. Hender, G. Huysmans, T.T.C. Jones, M. Keilhacker, R. König, M. Lennholm, P.J. Lomas, M. Loughlin, A. Maas, **M. Mantsinen**, F.B. Marcus, F. Nave, V. Parail, J. Strachan, A. Taroni, P.R. Thomas and K.D. Zastrow, "High D-T Fusion Performance in ELM-free H-modes in JET," Proceedings of 1998 International Congress on Plasma Physics and the 25th EPS Conference on Controlled Fusion and Plasma Physics, 29 June – 3 July 1998, Prague, Czech Republic, Europhysics Conference Abstracts, Volume 22C, 329-332, European Physical Society (1998), Ed. P. Pavlo.

102. S.E. Sharapov, D.N. Borba, A. Fasoli, L.-G. Eriksson, R.F. Heeter, G.T.A. Huysmans, W. Kerner and **M. Mantsinen**, "Stability of Alpha Particle Driven Alfvén Eigenmodes in high Performance JET DT Plasmas," Proceedings of 1998 International Congress on Plasma Physics and the 25th EPS Conference on Controlled Fusion and Plasma Physics, 29 June – 3 July 1998, Prague, Czech Republic, Europhysics Conference Abstracts, Volume 22C, 1951-1954, European Physical Society (1998), Ed. P. Pavlo.

103. G.A. Cottrell, Y. Baranov, D. O'Brien, C.D. Challis, J.G. Cordey, J.C.M. de Haas, L.-G. Eriksson, C. Gormezano, A.C. Howman, T.C. Luce, **M. Mantsinen**, G.J. Sadler, A.C.C. Sips. F.X. Söldner, D.F.H. Start, P.M. Stubberfield, B.J.T. Tubbing, D.J. Ward, M. von Hellermann, W.P. Zwingmann, "Modelling of JET Optimised Shear Discharges," 24th EPS Conference

on Controlled Fusion and Plasma Physics, 9–14 June 1997, Berchtesgaden, Germany, Europhys. Conf. Abstr. Vol. 21A, Part I, 81–84, Eds. M. Schittenhelm, R. Bartiromo and F. Wagner.

104. O. Dumbrajs, J.A. Heikkinen, S.J. Karttunen, T. Kiviniemi, T. Kurki-Suonio, **M. Mantsinen**, T.J.H. Pättikangas, K.M. Rantamäki, R.R.E. Salomaa and S.K. Sipilä, "Local Current Profile Modification in Tokamak Reactors in Various Radiofrequency Ranges," Proceedings of 16th International Conference on Plasma Physics and Controlled Nuclear Fusion Research, 7–11 October 1996, Montreal, Canada, IAEA Vienna 1997, Vol. 3, pp. 373-380, paper IAEA-CN-64/EP-9.

105. A. Fasoli, D. Borba, L.-G. Eriksson, C. Gormezano, J. Jacquinot, R. Heeter, A. Jaun, J.B. Lister, **M. Mantsinen**, S. Sharapov, D. Start, "Alfvén Eigenmode Experiments in JET: Damping and Fast Particle Drive," Proceedings of the 5th IAEA Technical Committee Meeting on Alpha Particles in Fusion Research, JET, UK, 8–11 September 1997.

106. C. Gormezano, F.Rimini, V. Bhatnagar, G. Cottrell, L.-G. Eriksson, J. Jacquinot, P.J. Lomas, **M. Mantsinen**, E. Righi, D.F.H. Start, F.X. Söldner, A.C.C. Sips and B. Tubbing, "ICRH on JET High Performance Plasmas," Proceeding of 12th Topical Conference on RF Power in Plasmas, 1-3 April 1997, Savannah, USA, pp. 3–12, AIP Conference Proceeding 403, American Institute of Physics, Woodbury, New York, 1997, Eds P.M. Ryan and T. Intrator.

107. F.G. Rimini, P. Andrews, B. Balet, G. Cottrell, L.-G. Eriksson, C. Gormezano, C. Gowers, T.T.C. Jones, R. König, P.J. Lomas, A. Maas, **M. Mantsinen**, F.B. Marcus, B. Schunke, D.F.H. Start, D. Testa and P.R. Thomas, "High Fusion Performance with Combined Heating in ELM-free H-mode in JET," 24th EPS Conference on Controlled Fusion and Plasma Physics, 9–14 June 1997, Berchtesgaden, Germany, Europhys. Conf. Abstr. Vol. 21A, Part I, 85–88, Ed. M. Schittenhelm, R. Bartiromo and F. Wagner.

108. R. Sartori, B. Balet, S. Clement, G. Conway, B. de Esch, J.C.M. de Haas, G. Fishpool, L.D. Horton, J. Lingertat, A. Loarte, C.G. Lowry, C. Maggi, **M.J. Mantsinen**, R.D. Monk, V. Riccaro, E. Righi, G. Saibene, D. Stork, K. Thomsen, M.G. von Hellermann, "Confinement and performance of high current steady state ELMy H-modes with the JET Mark II divertor," 24th EPS Conference on Controlled Fusion and Plasma Physics, 9–14 June 1997, Berchtesgaden, Germany, Europhys. Conf. Abstr. Vol. 21A, Part I, 73–76, Ed. M. Schittenhelm, R. Bartiromo and F. Wagner.

109. D.F.H. Start, V. Bergeaud, L.-G. Eriksson, B Gayral, C. Gormezano, **M. Mantsinen**, "Bulk Ion Heating with ICRH on the ITER Path to Ignition," 24th EPS Conference on Controlled Fusion and Plasma Physics, 9–14 June 1997, Berchtesgaden, Germany Europhys. Conf. Abstr. Vol. 21A, Part I, 141–144, Ed. M. Schittenhelm, R. Bartiromo and F. Wagner.

110. T. Testa, A. Gondhalekar, L.-G. Eriksson, C.N. Lashmore-Davies, **M.J. Mantsinen** and T.J. Martin, "Measurement of Interaction of MeV Energy Protons with Lower Hybrid Waves in JET Plasma," 24th EPS Conference on Controlled Fusion and Plasma Physics, 9–14 June 1997, Berchtesgaden, Germany, Europhys. Conf. Abstr. Vol. 21A, Part I, 129–132, Ed. M. Schittenhelm, R. Bartiromo and F. Wagner.

111. M.J. Alava, O. Dumbrajs, J.A. Heikkinen, T. Hellsten, S.J. Karttunen, T. Kurki-Suonio, **M. Mantsinen**, T.J.H. Pättikangas, R.R.E. Salomaa and S.K. Sipilä, "Simulations of RF Current Drive and Interaction of Alpha Particles with Waves in Tokamaks," Proceedings of Fifteenth International Conference on Plasma Physics and Controlled Nuclear Fusion Research, Seville, Spain, 26 September – 1 October 1994, IAEA Vienna 1996, Vol. 3, pp. 581–587, paper IAEA-CN-60/D-P-II-5.

REPORTS

1. **Mervi Mantsinen**, "Development and experimental evaluation of theoretical models for ion cyclotron resonance frequency heating of tokamak plasmas," Helsinki University of Technology Publications in Engineering Physics, Report TKK-F-A789, Helsinki University of Technology, Espoo 1999, 53 pp.+ app.

2. **M.J. Mantsinen**, R.R.E. Salomaa, "Simulations of burn dynamics in tokamak fusion reactors," Helsinki University of Technology, Department of Engineering Physics and Mathematics, Report TKK-F-A773, Otaniemi 1997, 59 pp.

3. **M.J. Mantsinen**, "FRESCO: Fusion Reactor Simulation Code for Tokamaks," Report TKK-F-B157, Helsinki University of Technology, Otaniemi (1995).

4. **M.J. Mantsinen**, "Simulation of Burning Tokamak Plasmas," Helsinki University of Technology, Department of Technical Physics, Report TKK-F-B155, Helsinki University of Technology, Otaniemi 1995, 111 pp.

5. R.J. Buttery, N. Hawkes, T.C. Hender, **M. Mantsinen** and P. Lamalle, "Neoclassical Tearing Mode Stabilisation with ICRH," Report JET-R(00)02, EURATOM/UKAEA Fusion Association, Culham Science Centre, Abingdon, Oxfordshire, United Kingdom (2000) p. 73-78.

6. L.-G. Eriksson and **M.J. Mantsinen**, "Applying the ICRF code PION to JET data," Report JET-IR(99)04, JET Joint Undertaking, Abingdon, Oxfordshire, UK (1999).

7. C. Gormezano, V.P. Bhatnagar, M. Bures, G. Cottrell, L.-G. Eriksson, B. Fechner, L. Horton, P. Lamalle, J. Jacquinot, **M.J. Mantsinen**, G. Matthews, E. Righi, F.G. Rimini, M. Simon, A.C.C. Sips, D.F.H. Start and K.D. Zastrow, "Ion Cyclotron Resonance Heating of H-modes in the JET Mark I Divertor Configuration," Report JET-P(96)60, JET Joint Undertaking, Abingdon, Oxfordshire, UK (1996).