

List of Publications

Francesco Volpe

15 invited talks at international conferences + **4 invited talks** by group members
74 journal articles published **20 IAEA conference papers**
113 non-refereed conference papers, reports and other publications

h-index = 16 and >900 citations according to ISI Web of Science
(<http://www.researcherid.com/rid/D-2994-2009>)

h-index = 22 and >1,400 citations according to Google Scholar.

Invited Talks at International Conferences

- I15) **Curved, Flowing, Meter-sized Liquid Metal Walls and Ceilings Controlled by Electromagnetic and Centrifugal Forces**
invited to Technology of Fusion Energy (TOFE), Chicago, IL (USA), 15-19 Nov. 2020
- I14) **Liquid metal flow adhering to planar and curved meter-sized walls and ceilings by electromagnetic and centrifugal forces**
invited to 6th International Symp. on Liquid Metals Applications for Fusion (ISLA-6), Urbana-Champaign, IL (USA), 30 Sept. - 3 Oct. 2019
- I13) **Review of locked mode control techniques using 3D fields and ECCD**
invited to 22nd Workshop on MHD Stability Control, Madison, WI (USA), 30 October - 1 Nov. 2017
- I12) **Overdense heating and high β stability of the CNT stellarator**
invited to International Stellarator-Heliotron Workshop (ISHW2017), Kyoto (Japan), 2-6 October 2017
- I11) **Prediction, Avoidance and Control of Disruptive Locked Modes in DIII-D and ITER**
invited to the Theory and Simulation of Disruptions Workshop, Princeton, NJ (USA), 20-22 July 2016
- I10) **New directions in simplified stellarators, stabilization of plasmas and of liquid walls**
invited to the International Colloquium on "New Trends in High Temperature Plasma Physics", Greifswald (Germany), 14-15 October 2015
- I9) **Cross-fertilization of magnetic confinement fusion research, nuclear and sub-nuclear physics and accelerator science**
plenary at Int. Conf. on Dark Matter, Hadron Phys. and Fusion Phys., Messina (Italy), 24-26 Sept. 2014
- I8) **Stellarator Experiments at Columbia University**
invited to the Workshop on Exploratory Topics in Plasma and Fusion Research (EPR) and US-Japan Compact Torus (CT) Workshop, Madison, WI (USA), 5-8 August 2014
- I7) **Using 3D Fields to control Islands, aid ECCD-Stabilization and measure Error-Fields at DIII-D**
invited to the 41st European Physical Society (EPS) Conference on Plasma Physics, Berlin (Germany), 23-27 June 2014
- I6) **Research Trends in the Use of Millimeter Waves to heat, diagnose and stabilize Fusion Plasmas**
invited to the 3rd International Symposium of Advanced Energy Science, Kyoto (Japan), 2-4 Sept. 2012

- I5) **Control of disruptive Locked Modes by Magnetic Perturbations and ECCD**
invited to the 15th Workshop on MHD Stability Control: “US-Japan Workshop on 3D Magnetic Field Effects in MHD Control”, Madison, WI (USA), 15-17 November 2010
- I4) **Advanced Techniques for Neoclassical Tearing Mode Control in DIII-D**
invited to the 50th Annual Meeting of the Division of Plasma Physics of the American Physical Society (APS), Dallas, TX (USA), 17-21 November 2008
- I3) **ART: a Ray-Tracing Code for mode-converted Electron Bernstein Waves in Tokamaks and Stellarators**
invited to the meeting of the IMP5 Project (Fast Particles and Heating) of the EFDA Integrated Tokamak Modelling Task Force (ITM-TF), Cadarache (France), 10-11 January 2006
- I2) **BXO mode-converted electron Bernstein emission diagnostic of electron temperature profiles at W7-AS Stellarator**
invited to the 14th Topical Conference on High Temperature Plasma Diagnostics (HTPD 2002) Madison, Wisconsin (USA), 8-11 July 2002
- I1) **Electron Bernstein emission diagnostic of electron temperature profiles at W7-AS Stellarator**
invited to the International Conference on Advanced Diagnostics for Magnetic and Inertial Fusion Villa Monastero, Varenna (Italy), 3-7 September 2001

Invited Talks given by Students and Post-docs at International Conferences

- Ig4) W. Choi, **Dynamics, stability and stabilization of magnetic islands by feedback phase-control and synchronized ECCD**
invited to 22nd Workshop on MHD Stability Control, Madison, WI (USA), 30 October - 1 Nov. 2017
- Ig3) K. Hammond, **CNT stellarator: overview of recent and ongoing research**
invited to the Exploratory Plasma and Fusion Research Workshop (EPR), Auburn, AL (USA), 22-26 Feb., 2016
- Ig2) W. Choi, **Analysis of locked mode disruption database in the DIII-D tokamaks**
invited to the 20th Workshop on MHD Stability Control, Princeton, NJ (USA), 22-24 November 2015
- Ig1) D. Shiraki, **Error Field Detection and Mode Locking Avoidance by the Interaction of Applied Rotating 3D Fields With Otherwise Locked Modes**
invited to the 18th Workshop on MHD Stability Control, Santa Fe, NM (USA), 18-20 November 2013

In the remainder, a wavy underline denotes advised students and post-docs.

Journal Articles

- J74) W. Choi, F.A. Volpe
Simultaneous iterative learning control of mode entrainment and error field
Nucl. Fusion **59**, 056011 (2019)
Preprint: arxiv:1812.05028

- J73) J.L. Li, J. Austin, K.C. Hammond, B.Y. Israeli, F.A. Volpe
Large vacuum flux surfaces generated by tilted planar coils
Plasma Phys. Controll. Fusion **61**, 075005 (2019)
 Preprint: arxiv:1809.10798
- J72) V. Queral, F.A. Volpe, D. Spong, S. Cabrera, F. Tabarés
Initial exploration of high-field pulsed stellarator approach to ignition experiments
J. Fusion Energy **37**, 275 (2018)
- J71) R. Sweeney, W. Choi, M. Austin, M. Brookman, V. Izzo, M. Knolker, R.J. La Haye, A. Leonard,
E.J. Strait, F.A. Volpe and the DIII-D Team
Relationship between locked modes and thermal quenches in DIII-D
Nucl. Fusion **58**, 056022 (2018)
- J70) D.A. Gates, D. Anderson, S. Anderson, M. Zarnstorff, D.A. Spong, H. Weitzner, G.H. Neilson, D. Ruzic,
D. Andruczyk, J.H. Harris, H. Mynick and 38 coauthors including F. Volpe
Stellarator Research Opportunities, A report of the National Stellarator Coordinating Committee
J. Fusion Energy **37**, 51 (2018)
- J69) W. Choi, R.J. La Haye, M. Lanctot, K.E.J. Olofsson, E.J. Strait, R. Sweeney, F.A. Volpe
Feedforward and feedback control of locked mode phase and rotation in DIII-D with application to modulated ECCD experiments
Nucl. Fusion **58**, 036022 (2018)
 Preprint: arxiv:1801.05012
- J68) E. Poli, A. Bock, M. Lochbrunner, O. Maj, M. Reich, A. Snicker, A. Stegmeir, F. Volpe, N. Bertelli,
R. Bilato and 16 coauthors
TORBEAM 2.0, a paraxial beam tracing code for electron-cyclotron beams in fusion plasmas for extended physics applications
Comp. Phys. Comm. **225**, 36 (2018)
- J67) K.C. Hammond, R.R. Diaz-Pacheco, A. Köhn, F.A. Volpe, Y. Wei
Overdense microwave plasma heating in the CNT stellarator
Plasma Phys. Controll. Fusion **60**, in press (2018)
 Preprint: arXiv:1708.02684
- J66) K.C. Hammond, R. Raman, F.A. Volpe
Application of Townsend avalanche theory to tokamak startup by coaxial helicity injection
Nucl. Fusion, **58**, 016013 (2018)

2017

- J65) S.M.H. Mirhoseini, R.R. Diaz-Pacheco, F.A. Volpe
Passive and active electromagnetic stabilization of free-surface liquid metal flows
Magnetohydrodyn. **53**, 45 (2017)
 Preprint: arXiv:1702.01040
- J64) K.C. Hammond, S.A. Lazerson, F.A. Volpe
High β equilibrium and ballooning stability of low aspect ratio CNT stellarator
Phys. Plasmas **24**, 042510 (2017)
 Preprint: arXiv:1612.09350
- J63) F.A. Volpe
Prospects for a dominantly microwave-diagnosed magnetically confined fusion reactor
J. Instrum. **12**, C01094 (2017)
 Preprint: arXiv:1701.03132

- J62) F.A. Volpe, P.-D. Létourneau, A. Zhao
Huygens-Fresnel wavefront tracing
Comput. Phys. Commun. **212**, 123 (2017)
 Preprint: arXiv:1509.02966
- J61) M. Okabayashi, P. Zanca, E.J. Strait, A.M. Garofalo, J.M. Hanson, Y. In, R.J. La Haye, L. Marrelli, P. Martin, R. Paccagnella, P. Piovesan, C. Piron, L. Piron, D. Shiraki, F.A. Volpe, DIII-D and RFX-mod Teams
Avoidance of Tearing Mode Locking and Disruption with Electro-Magnetic Torque Introduced by Feedback-Based Mode Rotation Control in DIII-D and RFX-mod
Nucl. Fusion **57**, 016035 (2017)
- J60) R. Sweeney, W. Choi, R.J. La Haye, S. Mao, K.E.J. Olofsson, F.A. Volpe
Statistical analysis of $m/n=2/1$ locked and quasi-stationary modes with rotating precursors at DIII-D
Nucl. Fusion **57** 016019 (2017)
 Preprint: arXiv:1606.04183

2016

- J59) S.M.H. Mirhoseini, F.A. Volpe
Resistive sensor and electromagnetic actuator for feedback control of liquid metal walls in fusion reactors
Plasma Phys. Controll. Fusion **58**, 124005 (2016)
 Preprint: arXiv:1604.07473
- J58) R. Sweeney, L. Frassinetti, P. Brunsell, R. Fridström, F.A. Volpe
Local measurement of error field using naturally rotating tearing mode dynamics in EX-TRAP T2R
Plasma Phys. Controll. Fusion **58**, 124001 (2016)
 Preprint: arXiv:1604.00294
- J57) S.M.H. Mirhoseini, F.A. Volpe
Space- and time-resolved resistive measurements of liquid metal wall thickness
Rev. Sci. Instrum. **87**, 11D427 (2016)
 Preprint: arXiv:1606.04008
- J56) O. Meneghini, F.A. Volpe
Full-wave feasibility study of anti-Radar diagnostic of magnetic field based on O-X mode conversion and oblique reflectometry imaging
Rev. Sci. Instrum. **87**, 11E120 (2016)
 Preprint: arXiv:1606.04181
- J55) K.C. Hammond, R.R. Diaz-Pacheco, Y. Kornbluth, F.A. Volpe, Y. Wei
Onion-peeling inversion of stellarator images
Rev. Sci. Instrum. **87**, 11E119 (2016)
 Preprint: arXiv:1606.03151
- J54) K. Nagasaki, Y. Nakamura, S. Kamioka, H. Igami, F. Volpe, T. Stange, K. Sakamoto, H. Okada, T. Minami, S. Kado, and 10 coauthors
Development of Electron Bernstein Emission Diagnostic for Heliotron J
Plasma Fusion Research **11**, 2402095 (2016)
- J53) K.C. Hammond, A. Anichowski, P.W. Brenner, T.S. Pedersen, S. Raftopoulos, P. Traverso, F.A. Volpe
Experimental and numerical study of error fields in the CNT stellarator
Plasma Phys. Controll. Fusion, **58**, 074002 (2016)
 Preprint: arXiv:1602.04867

- J52) K.E.J. Olofsson, W. Choi, D.A. Humphreys, R.J. La Haye, D. Shiraki, R. Sweeney, F.A. Volpe, A.S. Welander
Electromechanical modelling and design for phase control of locked modes in the DIII-D tokamak
Plasma Phys. Controll. Fusion, **58**, 045008 (2016)

2015

- J51) F.A. Volpe, A. Hyatt, R.J. La Haye, M.J. Lanctot, J. Lohr, R. Prater, E.J. Strait, A. Welander
Avoiding Tokamak disruptions by applying static magnetic fields that align locked modes with stabilizing wave-driven currents
Phys. Rev. Lett., **115**, 175002 (2015)
Preprint: arXiv:1510.08932
- J50) M. Reich, R. Bilato, U. Mszanowski, E. Poli, C. Rapson, J. Stober, F. Volpe, R. Zille, ASDEX Upgrade team
Real-time beam tracing for control of the deposition location of electron cyclotron waves
Fusion Eng. Design, **100**, 73 (2015)
- J49) C. Caliri, D. Mascali, F.A. Volpe
Modeling of ion extraction from a toroidal Electron Cyclotron Resonance Ion Source
Nucl. Instr. Meth. Phys. Res. A, **790**, 57 (2015)
Preprint: arXiv:1502.00672
- J48) D. Shiraki, C. Paz-Soldan, R.J. La Haye, N.C. Logan, K.E.J. Olofsson, E.J. Strait, R.M. Sweeney, F.A. Volpe
Measurements of the toroidal torque balance of error-field penetration locked modes
Plasma Phys. Controll. Fusion, **57**, 025016 (2015)

2014

- J47) A.W. Clark, M. Doumet, K.C. Hammond, Y. Kornbluth, D.A. Spong, R. Sweeney, F.A. Volpe
Proto-CIRCUS Tilted-Coil Tokamak-Torsatron Hybrid: Design and Construction
Fusion Eng. Design **89**, 2732 (2014)
Preprint: arXiv:1410.2309
- J46) K.E.J. Olofsson, J. Hanson, D. Shiraki, F.A. Volpe, D. Humphreys, R.J. La Haye, M. Lanctot, E.J. Strait, A. Welander, E. Kolemen, M. Okabayashi
Array magnetics modal analysis for the DIII-D tokamak based on localised time-series modelling
Plasma Phys. Controll. Fusion **56**, 095012 (2014)
- J45) E.J. Strait, R.J. Buttery, T.A. Casper, M.S. Chu, J.M. Hanson, A.M. Garofalo, Y. Gribov, R.J. La Haye, H. Reimerdes, M.J. Schaffer, F.A. Volpe
Measurement of tokamak error fields using plasma response and its applicability to ITER
Nucl. Fusion, **54**, 073004 (2014)
- J44) D. Shiraki, R.J. La Haye, N. Logan, E.J. Strait and F.A. Volpe
Error Field Detection in DIII-D by Magnetic Steering of Locked Modes
Nucl. Fusion, **54**, 033006 (2014)

2013

- J43) K. Nagasaki, S. Yamamoto, S. Kobayashi, K. Sakamoto, Y. Nagae, Y. Sugimoto, Y.I. Nakamura, G. Weir, N. Marushchenko, T. Mizuuchi and 20 coauthors including F. Volpe
Stabilization of energetic-ion-driven MHD modes by ECCD in Heliotron J
Nucl. Fusion, **53**, 113041 (2013)

- J42) K. Hammond, W.J. Capecchi, S.Massidda, F.A. Volpe
Metamaterial Lens of Specifiable Frequency-Dependent Focus and Adjustable Aperture for Electron Cyclotron Emission in the DIII-D Tokamak
J. Infrared Millim. THz Waves, **34**, 437 (2013)
 Preprint: arXiv:1410.3529
- J41) L. Frassinetti, K.E.J. Olofsson, R. Fridström, A.C. Setiadi, P.R. Brunzell, F.A. Volpe, J.R. Drake
A method for the estimate of the wall diffusion for non-axisymmetric fields using rotating external fields
Plasma Phys. Controll. Fusion, **55**, 084001 (2013)
- J40) F.A. Volpe, L. Frassinetti, P.R. Brunzell, J.R. Drake, K.E.J. Olofsson
Error Field Assessment from Driven Rotation of Stable External Kinks at Extrap-T2R Reverse Field Pinch
Nucl. Fusion, **53**, 043018 (2013)
 Preprint: arXiv:1302.7052
- J39) M.A. Bitar, A. Gallo and F.A. Volpe
Multi-pole Multi-zero Frequency-independent Phase-shifter
Rev. Sci. Instrum., **83**,114703 (2013)
 Preprint: arXiv:1302.7059

2012

- J38) F.A. Volpe, M.E. Austin, G. Campbell, and T. Detterly
Oblique electron-cyclotron-emission radial and phase detector of rotating magnetic islands applied to alignment and modulation of electron-cyclotron-current-drive for neoclassical tearing mode stabilization
Rev. Sci. Instrum., **83**, 103507 (2012)
 Preprint: arXiv:1302.7054
- J37) F.A. Volpe, J. Kessler, H. Ali, T.E. Evans and A. Punjabi
Magnetic Barriers and their q_{95} dependence at DIII-D
Nucl. Fusion **52**, 054017 (2012)
 Preprint: arXiv:1111.2072
- J36) W.J. Capecchi, N. Behdad and F.A. Volpe
Reverse Chromatic Aberration and its Numerical Optimization in Planar Metamaterial Lenses
Optics Express **20**, 8761 (2012)
 Preprint: arXiv:1302.7058
- J35) J.D. King, R.J. La Haye, C.C. Petty, T.H. Osborne, C.J. Lasnier, R.J. Groebner, F.A.G. Volpe, M.J. Lanctot, M.A. Makowski, C.T. Holcomb and 6 coauthors
Hybrid-Like 2/1 Flux-Pumping and Magnetic Island Evolution due to Edge Localized Mode-Tearing Mode Coupling in DIII-D
Phys. Plasmas **19**, 022503 (2012)

2011

- J34) L. Delgado-Aparicio, D. Stutman, K. Tritz, F. Volpe, K.L. Wong, S. Gerhardt, E. Fredrickson, R. Bell, B. Leblanc, S. Kaye, J. Menard, M. Finkenthal, S. Paul and L. Roquemore
Impurity transport experiments and effects on MHD in the National Spherical Torus Experiment (NSTX)
Nucl. Fusion, **51**, 083047 (2011)

- J33) A. Köhn, J. Jacquot, M.W. Bongard, S. Gallian, E.T. Hinson, and F.A. Volpe
Full-wave modeling of the O-X mode conversion in the Pegasus Toroidal Experiment
Phys. Plasmas, **18**, 082501 (2011)
 Preprint: arXiv:1104.0743
- J32) A. Köhn, R. Bilato, F. Volpe, R. Paccagnella
Full-wave simulations of the O-X-B mode conversion in a realistic experimental geometry in the RFX-mod device
IEEE Trans. Plasma Sci. **39**, 3016 (2011)
- J31) H. Reimerdes, R.J. Buttery, A.M. Garofalo, Y. In, R.J. La Haye, M.J. Lanctot, M. Okabayashi, J.-K. Park, M.J. Schaffer, E.J. Strait, F.A. Volpe
Error Field Tolerance and Error Field Correction Strategies for ITER
Fusion Science & Technology, **59**, 572 (2011)

2010

- J30) F. Volpe
A Spinning Mirror for Fast Angular Scans of EBW Emission for Magnetic Pitch Profile Measurements
Rev. Sci. Instrum. **81**, 10D905 (2010)
 Preprint: arXiv:1007.2382
- J29) F. Volpe
Analytical Solution of the O-X Mode Conversion Problem
Phys. Lett. A, **374**, 1737 (2010)
 Preprint: arXiv:0907.3981
- J28) N.K. Hicks, W. Suttrop, K. Behler, M. García-Munoz, L. Giannone, M. Maraschek, G. Raupp, A.C.C. Sips, J. Stober, W. Treutterer, F. Volpe and the ASDEX UPGRADE TEAM
Fast sampling upgrade and real time NTM control application of the ECE radiometer on Asdex Upgrade
Fusion Science & Technology, **57**, 1 (2010)

2009

- J27) H. Meyer, R.J. Akers, F. Alladio, L.C. Appel, K.B. Axon, N. Ben Ayed, P. Boerner, R.J. Buttery, P.G. Carolan, D. Ciric and 100 coauthors including F. Volpe
Overview of Physics Results from MAST
Nucl. Fusion **49**, 104017 (2009)
- J26) H. Zohm, J. Adamek, C. Angioni, G.Y. Antar, C.V. Atanasiu, M. Balden, W. Becker, K. Behler, K. Behringer, A. Bergmann and 173 coauthors including F. Volpe
Overview of ASDEX Upgrade results
Nucl. Fusion **49**, 104009 (2009)
- J25) R. Bilato, F. Volpe, A. Köhn, R. Paccagnella, D. Farina, E. Poli, M. Brambilla
Feasibility of electron Bernstein wave coupling via O-X-B mode conversion in the RFX-mod reversed field pinch device
Nucl. Fusion **49**, 075020 (2009)
- J24) L. Giannone, W. Schneider, P.J. McCarthy, A.C.C. Sips, W. Treutterer, K. Behler, T. Eich, J.C. Fuchs, N. Hicks, A. Kallenbach and 16 coauthors including F. Volpe
Real time magnetic field and flux measurements for tokamak control using a multi-core PCI Express system
Fus. Eng. Design **84**, 825 (2009)

- J23) B. Esposito, G. Granucci, S. Nowak, J.R. Martin-Solis, L. Gabellieri, E. Lazzaro, P. Smeulders, M. Maraschek, G. Pautasso, J. Stober, W. Treutterer, L. Urso, F. Volpe, H. Zohm, FTU, ECRH and ASDEX Upgrade teams
Disruption Control on FTU and ASDEX Upgrade with ECRH
Nucl. Fusion **49**, 065014 (2009)
- J22) D.H. Wagner, J.K. Stober, F. Leuterer, F. Volpe and 24 coauthors
Progress and First Results with the New Multi-Frequency ECRH System for ASDEX Upgrade
IEEE Trans. Plasma Science **37**, 395 (2009)
- J21) F.A.G. Volpe, M.E. Austin, R.J. La Haye, J. Lohr, R. Prater, E.J. Strait and A.S. Welander
Advanced techniques for neoclassical tearing mode control in DIII-D
Phys. Plasmas **16**, 102502 (2009)
- J20) J.P. Qian, L.L. Lao, Q.L. Ren, H. Rinderknecht, F. Volpe, C. Zhang and B.N. Wan
Equilibrium reconstruction of plasma profiles based on soft x-ray imaging in DIII-D
Nucl. Fusion **49**, 025003 (2009)

2004 - 2008 (Post-doc years)

- J19) R. Prater, D. Farina, Yu. Gribov, R.W. Harvey, Y.R. Lin-Liu, E. Poli, A.K. Ram, A.P. Smirnov, F. Volpe, E. Westerhof, A. Zvonkov and ITPA Steady State Operations Topical Group
Benchmarking of codes for electron cyclotron heating and electron cyclotron current drive under ITER conditions
Nucl. Fusion **48**, 035006 (2008)
- J18) A.Pochelon, A.Mueck, L.Curchod, Y.Camenen, S.Coda, B.P.Duval, T.P.Goodman, I.Klimanov, H.P.Laqua, Y.Martin, J.-M.Moret, L.Porte, A.Sushkov, V.S.Udintsev, F.Volpe and the TCV Team
Electron Bernstein wave heating of over-dense H-mode plasmas in the TCV tokamak via O-X-B double mode conversion
Nucl. Fusion **47**, 1552 (2007)
- J17) B. Lloyd, R.J. Akers, F. Alladio, Y. Andrew, L.C. Appel, D. Applegate, K.B. Axon, N. Ben Ayed, C. Bunting, R.J. Buttery and 77 coauthors including F.Volpe
Overview of physics results from MAST
Nucl. Fusion **47**, S658 (2007)
- J16) V.Shevchenko, G.Cunningham, A.Gurchenko, E.Gusakov, B.Lloyd, M.O'Brien, J.Preinhaelter, A.Saveliev, A.Surkov, F.Volpe, M.Walsh
Development of Electron Bernstein Wave Research in MAST
Fusion Science & Technology **52**, 202 (2007)
- J15) A.Mueck, Y.Camenen, S.Coda, L.Curchod, T.P.Goodman, H.P.Laqua, A.Pochelon, L.Porte, V.S.Udintsev, F.Volpe, TCV Team
Electron Bernstein Wave Heating and Emission in the TCV Tokamak
Fusion Science & Technology, **52**, 221 (2007)
- J14) A.Mueck, L.Curchod, Y.Camenen, S.Coda, T.P.Goodman, H.P.Laqua, A.Pochelon, L.Porte, F.Volpe, TCV Team
Demonstration of Electron-Bernstein-Wave Heating in a Tokamak via O-X-B Double-Mode Conversion
Phys. Rev. Lett. **98**, 175004 (2007)
- J13) F.Volpe
Weakly relativistic dielectric tensor for arbitrary wavenumbers
Phys. Plasmas **14**, 122105 (2007)

- J12) U.Tartari, G.Grosso, G.Granucci, F.Gandini, S.Garavaglia, G.Grossetti, A.Simonetto, V.Mellera, V.Muzzini, L.Lubyako, A.Shalashov, F.P.Orsitto, G.Ciccione and F.Volpe
Evolution of the millimeter-wave collective Thomson scattering system of the high-field tokamak Frascati Tokamak Upgrade
Rev. Sci. Instrum. **78**, 043506 (2007)
- J11) U.Tartari, G.Grosso, G.Granucci, L.V.Lubyako, A.G.Shalashov, E.V.Suvorov, F.P.Orsitto, A.Simonetto, S.Nowak, F.Volpe, A.Bruschi, F.Gandini, V.Muzzini, S.Garavaglia and G.Grossetti
Critical issues highlighted by Collective Thomson Scattering below electron cyclotron resonance in FTU
Nucl. Fusion **46**, 928 (2006)
- J10) G.F. Counsell, R.J. Akers, L.C. Appel, D. Applegate, K.B. Axon, Y. Baranov, C. Brickley, C. Bunting, R.J. Buttery, P.G. Carolan and 63 coauthors including F. Volpe
Overview of MAST Results
Nucl. Fusion **45**, S157 (2005)
- J9) F.Volpe
Sensitivity of ITER ECRH Upper Launcher to Steering Errors and Changes of Profiles and Integration with Equatorial Launcher
Journal of Phys.: Conf.Series **25**, 283 (2005)
- J8) W.A. Houlberg, C. Gormezano, J.F. Artaud, E. Barbato, V. Basiuk, A. Becoulet, P. Bonoli, R.V. Budny, L.G. Eriksson, D. Farina and 13 coauthors including F. Volpe
Integrated Modeling of the Current Profile in Steady-State and Hybrid ITER Scenarios
Nucl. Fusion **45**, 1309 (2005)
- J7) F. Wagner, S. Bäuml, J. Baldzuhn, N. Basse, R. Brakel, R. Burhenn, A. Dinklage, D. Dorst, H. Ehmler, M. Endler and 43 coauthors including F.Volpe
W7-AS: One step of the Wendelstein stellarator line
Phys. of Plasmas **12**, 072509 (2005)
- J6) B. Lloyd, J-W. Ahn, R.J. Akers, L.C. Appel, D. Applegate, K.B. Axon, Y. Baranov, C. Brickley, C. Bunting, R.J. Buttery and 59 coauthors including F.Volpe
MAST and the impact of low aspect ratio on tokamak physics
Plasma Phys. Control. Fusion **46**, B477 (2004)
- ≤ 2003 (BS and PhD years)
- J5) H.P.Laqua, H.Maassberg, F.Volpe, W7-AS Team and ECRH-Group
Electron Bernstein Wave Heating and Current Drive in Overdense Plasmas at the Wendelstein 7-AS Stellarator
Nucl. Fusion **43**, 1324 (2003)
- J4) H.P.Laqua, H.Maassberg, N.Marushchenko, F.Volpe, A.Weller, W7-AS Team, W.Kasperek and ECRH-Group
Electron-Bernstein-Wave Current Drive in an Overdense Plasma at the Wendelstein 7-AS Stellarator
Phys. Rev. Lett. **90**, 75003 (2003)
- J3) F.Volpe, H.P.Laqua and the W7-AS Team
BXO mode-converted electron Bernstein emission diagnostic (invited)
Rev. Sci. Instrum. **74**, 1409 (2003)
- J2) H.H. Hacker, R. Burhenn, K. Kond, M. Anton, D. Assmus, S. Baeumel, C. Beidler, T. Bindemann, R. Brakel, G. Cattanei and 67 coauthors including F. Volpe
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- B51) W. Choi, K.E.J. Olofsson, R. Sweeney, F.A. Volpe
Feed-back control of 2/1 locked mode phase: experiment on DIII-D and modeling for ITER
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- B50) L. Zeppetello, M. Doumet, K. Hammond, B. Israeli, J. Mann, F. Volpe, A. Clark
Generation of rotational transform in a toroidal confinement device with tilted coils
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Lecture Notes

F.Volpe

Plasma Waves and Heating

IPP Summer University on Plasma Physics and Fusion Research, 22-26 Sept. 2008 Garching (Germany)