

Programm Fusion / Program Fusion Technology

Veröffentlichungen des Jahres 2004 / Publications 2004

Boccaccini, L.V.; Meyder, R.; Hermsmeyer, S.; Reimann, J.; Krüssmann, R.; Norajitra, P.

Blanket und Divertor für den Fusionsreaktor.

Nachrichten - Forschungszentrum Karlsruhe, 36(2004) S.36-41

Bolt, H.; Barabash, V.; Krauss, W.; Linke, J.; Neu, R.; Suzuki, S.; Yoshida, T. ; ASDEX Upgrade Team

Materials for the plasma-facing components of fusion reactors.

11th Internat. Conf. on Fusion Reactor Materials (ICFRM-11), Kyoto, J, December 7- 12, 2003

Journal of Nuclear Materials, 329-33(2004) S.66-73

Cook, I.; Maisonnier, D.; Taylor, N.P.; Ward, D.J.; Sardain, P.; Di Pace, L.; Giancarli, L.;

Hermsmeyer, S.; Norajitra, P.; Forrest, R.; PPCS-Team

European fusion power plant studies.

16th ANS Topical Meeting on the Technology of Fusion Energy (TOFE), Madison, Wis., September 14-16, 2004

Gervash, A.; Giniyatulin, R.; Krauss, W.; Makhankov, A.; Mazul, I.; Norajitra, P.

Study of technological and materials aspects of He-cooled divertor for DEMO reactor.

23rd Symp. on Fusion Technology (SOFT), Venezia, I, September 20-24, 2004

Hausselet, J.

Materialwissenschaften im Rhein-Neckar-Dreieck.

Initiative Zukunft 'Rhein-Neckar-Dreieck', Ludwigshafen, 15.Dezember 2004

Hegeman, J.B.J.; van der Laan, J.G.; Knitter, R.; Reimann, J.; Lulewicz, J.D.; Hayashi, K.; Ying, A.

A high fluence irradiation of ceramic breeder materials in HFR Petten, materials characterisation and test matrix.

23rd Symp. on Fusion Technology (SOFT), Venezia, I, September 20-24, 2004

Hofer, D.; Kamlah, M.

Modelling of ceramic breeder and beryllium pebble beds at FZK.

Knitter, R. [Hrsg.]

CBBI-12: Proc. of the 12th Internat. Workshop on Ceramic Breeder Blanket Interactions, Karlsruhe, September 16-17, 2004

Wissenschaftliche Berichte, FZKA-7078 (Dezember 2004) S.97-108

Ihli, T.; Krüssmann, R.; Ovchinnikov, I.; Norajitra, P.; Kuznetsov, V.; Giniyatulin, R.
An advanced He-cooled divertor: design concept, cooling technology and thermohydraulic study with CFD.
23rd Symp. on Fusion Technology (SOFT), Venezia, I, September 20-24, 2004

Ihli, T.; Norajitra, P.; Janeschitz, G.; Krüssmann, R.; Ruprecht, R.
Development of an advanced helium-jet-cooled divertor concept: cooling method and design.
Jahrestagung Kerntechnik 2004, Düsseldorf, 25.-27.Mai 2004
Berlin : INFORUM GmbH, 2004 S.385-88

Knitter, R.; Piazza, G.; Reimann, J.; Risthaus, P.; Boccaccini, L.V.
Fabrication and characterization of lithium orthosilicate pebbles using LiOH as a new raw material.
Enoeda, M. [Hrsg.]
Proc. of the 11th Internat. Workshop on Ceramic Breeder Blanket Interactions (CBBI-11), Tokyo, J,
December 15-17, 2003
JAERI-Conf 2004-012 (July 2004) S.108-19

Knitter, R.; Risthaus, P.
Fabrication of lithium orthosilicate pebbles by melt-spraying. Reproducibility and yield.
Knitter, R. [Hrsg.]
CBBI-12 : Proc. of the 12th Internat. Workshop on Ceramic Breeder Blanket Interactions, Karlsruhe,
September 16-17, 2004
Wissenschaftliche Berichte, FZKA-7078 (Dezember 2004) S.129-40

Knitter, R.; [Hrsg.]
Proceedings of the 12th international workshop on ceramic breeder blanket interactions, Karlsruhe, Germany, September 16-17, 2004.
Wissenschaftliche Berichte, FZKA-7078 (Dezember 2004)

Konys, J.; Krauss, W.; Voss, Z.; Wedemeyer, O.
Corrosion behavior of EUROFER steel in flowing eutectic Pb-17Li alloy.
11th Internat. Conf. on Fusion Reactor Materials (ICFRM-11), Kyoto, J, December 7-12, 2003
Journal of Nuclear Materials, 329-33(2004) S.1379-1383

Konys, J.; Glasbrenner, H.; Krauss, W.; Voss, Z.; Wedemeyer, O.
Corrosion behavior of ferritic-martensitic steels and Al-based tritium permeation barriers in flowing Pb-17Li.
Internat. Workshop on Tritium Management and Corrosion Activities for Liquid Breeder Blankets,
Brasimone, I, September 27-29, 2004

Konys, J.

Corrosion data of bare and coated FM-steel in flowing 'quasi-eutectic' Pb-17Li alloy from EU experience.

ITER TBM Project Meeting at UCLA, Los Angeles, Calif., February 23-25, 2004

Konys, J.; Möslang, A.; Vladimirov, P.

On the modeling of the XADS window material behavior in aggressive irradiation and corrosion environment.

Internat. Workshop on Partitioning and Transmutation, Mol, B, October 6-8, 2003

Konys, J.

Review of tritium permeation barrier development for fusion application in the EU.

ITER TBM Project Meeting at UCLA, Los Angeles, Calif., February 23-25, 2004

Konys, J.; Aiello, A.; Benamati, G.; Giancarli, L.

Status of tritium permeation barrier development in the EU.

16th ANS Topical Meeting on the Technology of Fusion Energy (TOFE), Madison, Wis., September 14-16, 2004

Krauss, W.; Holstein, N.; Konys, J.

Development and fabrication aspects regarding tungsten components for a He-cooled divertor.

23rd Symp. on Fusion Technology (SOFT), Venezia, I, September 20-24, 2004

Kruessmann, R.; Norajitra, P.; [Hrsg.]; Boccaccini, L.V.; Chehtov, T.; Giniyatulin, R.; Gordeev, S.; Ihli, T.; Janeschitz, G.; Komarov, A.O.; Krauss, W.; Kruessmann, R.; Kuznetsov, V.; Lindau, R.; Norajitra, P.; Ovchinnikov, I.; Piotter, V.; Rieth, M.; Ruprecht, R.; Slobodtchouk, V.; Smirnov, V.A.; Sunyk, R. ; [Autoren]

Conceptual design of a He-cooled divertor with integrated flow and heat transfer promoters. (PPCS subtask TW3-TRP-001-D2), Part I: Summary

Wissenschaftliche Berichte, FZKA-6974 (April 2004)

Kruessmann, R.; Norajitra, P.; [Hrsg.]; Boccaccini, L.V.; Chehtov, T.; Giniyatulin, R.; Gordeev, S.; Ihli, T.; Janeschitz, G.; Komarov, A.O.; Krauss, W.; Kruessmann, R.; Kuznetsov, V.; Lindau, R.; Norajitra, P.; Ovchinnikov, I.; Piotter, V.; Rieth, M.; Ruprecht, R.; Slobodtchouk, V.; Smirnov, V.A.; Sunyk, R. ; [Autoren]

Conceptual design of a He-cooled divertor with integrated flow and heat transfer promoters. (PPCS subtask TW3-TRP-001-D2), Part II: Detailed Version.

Wissenschaftliche Berichte, FZKA-6975 (April 2004)

Lindau, R.; Norajitra, P.; Reimann, G.

Characterisation of diffusion welded dissimilar joints of Eurofer 97 and ODS-Eurofer steels with

various weld and post weld heat treatments.

11th Internat. Conf. on Fusion Reactor Materials (ICFRM-11), Kyoto, J, December 7-12, 2003
Book of Abstracts S.87

Lindau, R.; Möslang, A.; Rieth, M.; Norajitra, P.

ODS-Eurofer - a reduced activation ferritic martensitic ODS-steel for application in advanced blanket concepts.

23rd Symp. on Fusion Technology (SOFT), Venezia, I, September 20-24, 2004

Maisonnier, D.; Cook, I.; Sardain, P.; Boccaccini, L.; Bogusch, E.; Broden, K.; Di Pace, L.; Forrest, R.; Giancarli, L.; Hermsmeyer, S.; Nardi, C.; Norajitra, P.; Pizzuto, A.; Neill, T.; Ward, D.

The European power plant conceptual study.

23rd Symp. on Fusion Technology (SOFT), Venezia, I, September 20-24, 2004

Möslang, A.; Aktaa, J.; Konys, J.; Gross, S.

Strukturwerkstoffe für die Fusionstechnik.

Nachrichten - Forschungszentrum Karlsruhe, 36(2004) S.42-47

Norajitra, P.; Boccaccini, L.; Diegele, E.; Filatov, V.; Gervash, A.; Giniyatulin, R.; Gordeev, S.; Heinzl, V.; Janeschitz, G.; Konys, J.; Krauss, W.; Krüssmann, R.; Malang, S.; Mazul, I.; Moeslang, A.; Petersen, C.; Reimann, G.; Rieth, M.; Rizzi, G.; Rumyantsev, M.; Ruprecht, R.; Slobodtchouk, V.

Development of a helium-cooled divertor concept: design-related requirements on materials and fabrication technology.

11th Internat. Conf. on Fusion Reactor Materials (ICFRM-11), Kyoto, J, December 7- 12, 2003
Journal of Nuclear Materials, 329-33(2004) S.1594-98

Norajitra, P.; Giniyatulin, R.; Ihli, T.; Krauss, W.; Krüssmann, R.; Kuznetsov, V.; Mazul, I.; Ovchinnikov, I.

Status of He-cooled divertor development for DEMO.

23rd Symp. on Fusion Technology (SOFT), Venezia, I, September 20-24, 2004

Norajitra, P.; Boccaccini, L.V.; Giniyatulin, R.; Ihli, T.; Janeschitz, G.; Karditsas, P.; Krauss, W.; Krüssmann, R.; Kuznetsov, V.; Maisonnier, D.; Mazul, I.; Nardi, C.; Ovchinnikov, I.; Papasterigiou, S.; Pizzuto, A.

The European development of helium-cooled divertors for DEMO.

20th IAEA Fusion Energy Conf., Vilamoura, P, November 1-6, 2004