

Title (en)

METHOD OF FORMING STABLE STATES OF DENSE HIGH-TEMPERATURE PLASMA

Title (de)

VERFAHREN ZUR BILDUNG STABILER ZUSTÄNDE VON DICHTEM HOCHTEMPERATUR-PLASMA

Title (fr)

PROCEDE PERMETTANT D'OBTENIR DES ETATS STABLES POUR UN PLASMA DENSE A HAUTE TEMPERATURE

Publication

EP 1673966 A4 20090812 (EN)

Application

EP 05749491 A 20050524

Priority

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Abstract (en)

[origin: WO2005109970A1] A method is proposed for forming stable states of a dense high-temperature plasma, including plasmas for controlled fusion, the method comprising: generating a dense high temperature plasma in pulsed heavy-current discharges, followed by injecting the plasma from the area of a magnetic field with parameters corresponding to the conditions of gravitational emission of electrons with a banded energy spectrum and subsequent energy transfer along the spectrum (cascade transition) into the long wavelength region (of eV-energy), this leading to the state of locking and amplification of the gravitational emission in the plasma with simultaneous compression thereof to the states of hydrostatic equilibrium, with using multielectron atoms as a prerequisite element in the composition of a working gas, for quenching the spontaneous gravitational emission from the ground energy levels (the keV-region) of the electron in the proper gravitational field.

IPC 8 full level

H05H 1/02 (2006.01); **G21B 1/05** (2006.01); **H05H 1/16** (2006.01); **H05H 1/22** (2006.01)

CPC (source: EP KR)

G21B 1/05 (2013.01 - EP); **H05H 1/02** (2013.01 - KR); **H05H 1/16** (2013.01 - KR); **H05H 1/22** (2013.01 - KR); **Y02E 30/10** (2013.01 - EP)

Citation (search report)

- [X] FISENKO , S. I.: "Anomalies In the beta decay Process And the Pulse Strong-Current Discharges As consequence Of Electron Gravitational Emission.", 24 May 2001 (2001-05-24), pages 1 - 20, XP002533748, Retrieved from the Internet <URL:http://arxiv.org/PS_cache/gr-qc/pdf/0105/0105035v2.pdf> [retrieved on 20090624]
- See references of WO 2005109970A1

Citation (examination)

- HAINES M G ET AL: "ION VISCOUS HEATING IN A MAGNETOHYDRODYNAMICALLY UNSTABLE Z PINCH AT OVER 2 X 109 KELVIN", PHYSICAL REVIEW LETTERS, AMERICAN PHYSICAL SOCIETY, NEW YORK, US, vol. 96, no. 7, 24 February 2006 (2006-02-24), pages 75003 - 01, XP007900423, ISSN: 0031-9007, DOI: 10.1103/PHYSREVLETT.96.075003
- FISENKO S I ET AL: "Some notes on the concept of "strong" gravitation and possibilities of its experimental investigation", PHYSICS LETTERS A, NORTH-HOLLAND PUBLISHING CO., AMSTERDAM, NL, vol. 148, no. 8-9, 3 September 1990 (1990-09-03), pages 405 - 407, XP024596783, ISSN: 0375-9601, [retrieved on 19900903], DOI: 10.1016/0375-9601(90)90489-B
- FISENKO ET AL: "Gravitational Interaction of Quantum Level and Consequences Thereof", THE OLD AND NEW CONCEPTS OF PHYSICS,, vol. 6, no. 4, 1 January 2009 (2009-01-01), pages 495 - 521, XP009165372
- FISENKO ET AL: "The Conception of Thermonuclear Reactor on the Principle of Gravitational Confinement of Dense High-temperature Plasma", APPLIED PHYSICS RESEARCH,, vol. 2, no. 2, 1 January 2010 (2010-01-01), pages 71 - 79, XP009165378
- FISENKO S I: "THE DISCRETE ENERGY SPECTRUM OF THE GRAVITATIONAL RADIATION IN THE RELATIVISTIC THEORY OF GRAVITATION", INTERNATIONAL JOURNAL OF THEORETICAL AND APPLIED PHYSICS (IJTAP), ASCENT PUBLICATION, INDIA, vol. 2, no. 2, 1 December 2012 (2012-12-01), pages 31 - 39, XP009173821, ISSN: 2250-0634
- STANISLAV I. FISENKO ET AL: "Method of Forming Stable States of Dense High-Temperature Plasma", JOURNAL OF MODERN PHYSICS, vol. 04, no. 04, 1 January 2013 (2013-01-01), pages 481 - 485, XP055084767, ISSN: 2153-1196, DOI: 10.4236/jmp.2013.44068
- "Proceedings of the "2013 International Sherwood Fusion Theory Conference""", April 2013 (2013-04-01), SANTA FE, NM, USA, pages 1 - 121, Retrieved from the Internet <URL:<https://custom.cvent.com/F6288ADDEF3C4A6CBA5358DAE922C966/files/ea464f8d378a4b5499541cb5034a77f2.pdf>> [retrieved on 20131021]
- S.I. FISENKO: "in "7th Gulf Coast Gravity Meeting - Conference Program"", 10 April 2013 (2013-04-10), XP055084769, Retrieved from the Internet <URL:<http://www.phy.olemiss.edu/GCGM7/wp-content/uploads/2012/06/program.pdf>> [retrieved on 20131021]
- S. I. FISENKO: "Presentation slides of S.I. FISENKO", April 2013 (2013-04-01), Retrieved from the Internet <URL:www.phy.olemiss.edu/GR/GCGM7Talks/Fisenko.ppt> [retrieved on 20131021]
- BESUELLE E ET AL: "A novel method for detection of strong magnetic fields in femtosecond laser-matter interaction", PHYSICS OF PLASMAS, AMERICAN INSTITUTE OF PHYSICS, WOODBURY, NY, US, vol. 7, no. 7, 1 July 2000 (2000-07-01), pages 3112 - 3115, XP009111876, ISSN: 1070-664X
- MOKHOV V N ET AL: "Fusion in the magnetically compressed targets", FUSION ENGINEERING AND DESIGN, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 70, no. 1, 1 January 2004 (2004-01-01), pages 35 - 43, XP004486655, ISSN: 0920-3796, DOI: 10.1016/J.FUSENGDES.2003.08.003
- GARANIN: "The MAGO system (magnetic compression)", IEEE TRANSACTIONS ON PLASMA SCIENCE, vol. 26, no. 4, 1 January 1998 (1998-01-01), pages 1230 - 1238, XP055088120, ISSN: 0093-3813, DOI: 10.1109/27.725155

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