

Organized by Sevilla University



23rd

SOFT
MAGNETIC
MATERIALS

Conference



Programme

Oral presentations

O-01 Monday 10:30 AM

Skyrmion dynamics in patterned ultrathin magnetic films

K.Y. Guslienko (1,2), Z.V. Gareeva (3)

(1) Departamento de Física de Materiales, Universidad del País Vasco, UPV/EHU, 20018 San Sebastian, Spain; (2) IKERBASQUE, the Basque Foundation for Science, 48013 Bilbao, Spain; (3) Institute of Molecule and Crystal Physics, Russian Academy of Sciences, 450075 Ufa, Russia

O-02 Monday 10:45 AM

Computational tools for probing transient magnetic energy landscapes and manufacturing approaches to device level optimization

Orlando Rios (1,2), Ayyoub Mehdizadeh Momen (1,2), Khorgolkhuu Odbadrakh (1), Markus Eisenbach (1), Valentino R. Cooper (1), Amy Elliott (1), Omar Abdelaziz(1)

(1) Oak Ridge National Laboratory, USA; (2) University of Tennessee, USA

O-03 Monday 12:00 PM

Comparison between measured and computed magnetic flux density distribution of simulated transformer core joints assembled from grain-oriented and non-oriented electrical steel

H. Shahrtouzi(1), A. J. Moses(1), P. I. Anderson(1), G. Li (2), Z. Hu (2)

(1) Wolfson Centre for Magnetism, Institute of Energy, Cardiff University, Cardiff, UK; (2) Institute of Silicon Steel, R&D Center of Baosteel Group Corporation, Shanghai, China

O-04 Monday 12:15 PM

Core Loss Reduction of Grain-oriented Electrical Steel Sheet by Hyperfine Processing Magnetic Domain

(1)Masato Enokizono, (2)Daisuke Wakabayashi, (1)Yukio Mamiduka

(1) Vector Magnetic Characteristic Technical Laboratory, Usa, Japan; (2) Department of Mechanical Electrical Engineering, Nihon Bunri University, Oita, Japan

O-05 Monday 12:30 PM

Influence of initial heating during final high temperature annealing on the offset of primary and secondary recrystallisation in Cu-bearing grain oriented electrical steels

P. Rodríguez-Calvillo (1), E. Leunis (1), T. Van De Putte (2), S. Jacobs (3), O. Zacek (4), W. Saikaly (1)

(1) ArcelorMittal Global R&D Gent, J.F. Kennedylaan 3, 9060 Zelzate, Belgium; (2) ArcelorMittal Europe - Flat Products, J.F Kennedylaan 51, ,9042 Gent, Belgium; (3) ArcelorMittal Global R&D, Technologiepark 935, 9052 Zwijnaarde, Belgium; (4) ArcelorMittal Ostrava, Plant 17, Frýdek Místek, Czech Republic

P2-18 Tuesday 5:45 PM

Continuous annealing process of making grain-oriented electrical steel

Hyun-Seok Ko, Kyu-Seok Han, Hyung-Don Joo, Jong-Tae Park

Steel Products Research Group II, Pohang Research Lab at POSCO, Pohang, Korea

P2-19 Tuesday 5:45 PM

Novel, non-grain oriented electrical steel grade with tailored properties for electrical machines

A.Kahveci, S.Sieron, M.Schrauf, V.Kamen, P.Szary

Application Department, thyssenkrupp Steel Europe, Bochum, Germany

P2-20 Tuesday 5:45 PM

Magnetic properties changed of interlocked and thermal inserted silicon steel sheets with annealing

Kyyoul YUN

Department of Electrical, Electronic and Computer Engineering, Gifu University, Gifu City, Japan

P2-21 Tuesday 5:45 PM

Variation of power loss with distance from the cut edge of grain oriented electrical steel

N. Lewis, J. Almarzooq, P. Anderson, J. Hall

Cardiff University

P2-22 Tuesday 5:45 PM

Abnormal grain growth of non-goss grain in fe-3% si steel using micro indenter

T. Kim (1), H. Shim (2), S. Choi (1), K. Gil (3), S. Kwon (1), N. Hwang (1)

(1) Department of Materials Science and Engineering and Research Institute of Advanced Materials (RIAM), Seoul National University, Seoul, Republic of Korea; (2) National Center for Standard Reference Data, Korea Research Institute of Standards and Science, Daejeon, Republic of Korea; (3) Pohang Accelerator Laboratory, Pohang, Republic of Korea

P2-23 Tuesday 5:45 PM

Influence of minor alloying elements on fayalite formation

Kimberley Price (1), Cameron Pleydell-Pierce (1), Dominic Power (2), Fiona Robinson (2), Mark Cichuta (2)

(1) Swansea University, Materials and Manufacturing Academy; (2) Cogent Power, Orb Works, Newport

P2-24 Tuesday 5:45 PM

Vector Magnetic Characteristics and Two-dimensional Magnetostriction of Ultra-Thin Electrical Steel Sheet for High Speed Motor Core

D. Wakabayashi (1), M. Enokizono (2), Y. Mori (3), K. Yamasaki (4)

(1) Faculty of Engineering, Nippon Bunri University, 1727 Ichigi Oita-shi Oita, JAPAN; (2) Vector Magnetic Characteristic Technical Laboratory, 533 Joi Usa-shi Oita, JAPAN; (3) Yoshikawa Kogyo Co. Ltd., 1-2 Ogura 2-chome Yahatahigashi-ku Kitakyushu-shi Fukuoka, JAPAN; (4) Nippon Kinzoku Co. Ltd, 5-30-7 Shiba Minato-ku Tokyo, JAPAN