

Poster Sessions

MOD

Chairperson: Ryo Teranishi (Kyushu University)

WBP1-1 16:00–18:00

Fabrication of (Y,Gd)Ba₂Cu₃O_{6+y} Coated Conductor Containing Refined BaZrO₃ Particles by TFA-MOD Method Using Reel-to-Reel System

*Koichi Nakaoka, Akira Ibi, Takato Machi, Yukie Usui, Keisuke Wada, Teruo Izumi

National Institute of Advanced Industrial Science and Technology

WBP1-2 16:00–18:00

The influence of the grain-boundary angle on flux pinning properties in TFA-MOD (Y,Gd)BCO CCs

*Michio Sato¹, Tomonori Murakami¹, Masashi Miura¹, Akira Ibi², Koichi Nakaoka², Teruo Izumi²

1. Seikei University; 2. AIST

WBP1-3 16:00–18:00

The effect of intermediate heating treatment on in-field J_c in TFA-MOD BZO doped (Y,Gd)BCO wires

*Tomonori Murakami¹, Michio Sato¹, Masashi Miura¹, Akira Ibi², Koichi Nakaoka², Teruo Izumi²

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WBP1-4 16:00–18:00

Effect of BaZrO₃ nanoparticle on critical current density in the longitudinal magnetic field for REBa₂Cu₃O_y wires by TFA-MOD

*TASUKU KUSAMA¹, MICHIO SATO¹, MASASHI MIURA¹, AKINORI IBI², KOICHI NAKAOKA², TERUO IZUMI²

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WBP1-5 16:00–18:00

The effect of oxygen annealing temperature on in-field J_c of TFA-MOD (Y,Gd)BCO CCs

*Koki Agatsuma¹, Michio Sato¹, Masashi Miura¹, Akinori Ibi², Koichi Nakaoka², Teruo Izumi²

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WBP1-6 16:00–18:00

Effects of La addition on the fabrication of fluorine-free MOD-REBCO films

*Seiya Kato¹, Ryusuke Kita¹, Natsuki Kobayashi², Osuke Miura²

1. Shizuoka University; 2. Tokyo Metropolitan University

WBP1-7 16:00–18:00

Flux pinning properties of hafnium doped Gd123 films fabricated by fluorine-free MOD method

*Natsuki Kobayashi¹, Ryusuke Kita², Osuke Miura³

1. Tokyo Metropolitan University; 2. Shizuoka University; 3. Tokyo Metropolitan University

Coated conductor 1

Chairperson: Masayoshi Inoue (Kyushu University)

WBP2-1 16:00–18:00

Influence of chemical etching and partial melting heat treatment on the structure and superconducting properties of YGdBCO coated conductors

*Ming Jiang Wang¹, Wen Tao Wang¹, Lian Liu¹, Bao Lei Huo¹, Bing Cai Wu¹, Zhi Bin Liu¹, Yong Zhang¹, Cui Hua Cheng³, Yong Zhao^{1,2}

1. Key lab of Magnetic Levitation Technologies and Maglev Trains (Ministry of Education of China), Superconductivity and New Energy R&D Center, Southwest Jiaotong University, China; 2. School of Physical Science and Technology, Southwest Jiaotong University; 3. School of Materials Science and Engineering, University of New South Wales, Australia.

WBP2-2 16:00–18:00

Stability diagram of GdBa₂Cu₃O_{7-δ} for an off-set composition in low oxygen pressures with oxide refinement process

*Insung Park¹, Won-Jae Oh¹, Jae-Hun Lee², Seung-Hyun Moon², Sang-Im Yoo¹

1. Department of Material Science and Engineering, Research Institute of Advanced Materials (RIAM), Seoul National University; 2. Superconductor, Nano & Advanced Materials Corporation (SuNAM Co.) Ltd

WBP2-3 16:00–18:00

The thermal and mechanical Stresses during Al alloy coating on 2nd generation superconducting coated conductor

*Ho-Sup Kim, Byung-Geol Kim, Jeong-Hyeon Jo, Chang-Hwan Lee

Korea Electrotechnology Research Institute

WBP2-4 16:00–18:00

The post-annealing effect of GdBa₂Cu₃O_{7-δ} coated conductors by RCE-DR process

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WBP2-5 16:00–18:00

Particles in $\text{GdBa}_2\text{Cu}_3\text{O}_{7-x}$ Film Prepared by Pulsed Laser Deposition

*Tatsuya Murakami, Ryo Teranishi, Yukio Sato, Kenji Kaneko

Department of Materials Physics and Chemistry, Kyushu University

WBP2-6 16:00–18:00

Grain growth and surface modification of epitaxial CeGdZrO film on NiW substrate

*Jia Jialin, Jin Lihua, Feng Jianqing, Wang Yao, Li Chengshan, Zhang Pingxiang

Northwest Institute for Nonferrous Metal Research

WBP2-7 16:00–18:00

Phase stability and superconducting property of Cu excess SmBCO coated conductors

*Hongsoo HA¹, Younghoon Oh^{1,2}, Younguk Han¹, Sanghyun Lee¹, Seunghyun Moon³, Sangsoo Oh¹

1. Korea Electrotechnology Research Institute; 2. Sungkyunkwan University; 3. SuNAM Co Ltd

WBP2-8 16:00–18:00

Electro-mechanical properties of GdBCO coated conductor laminated with Al alloy tape

*Hongsoo HA¹, Sangsoo Oh¹, Younguk Han¹, Jeonwook Cho¹, Heonjoo Lee², Alking Gorospe³, Hyungseop Shin³

1. Korea Electrotechnology Research Institute; 2. SuNAM Co. Ltd.; 3. Andong National University

WBP2-9 16:00–18:00

Fabrication of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Thin Films with BaHfO_3 by Inkjet Printer

*Sei Katagi, Ryo Teranishi, Yukio Sato, Kenji Kaneko

Kyushu University

Coated conductor 2

Chairperson: Takato Machi (AIST)

WBP3-1 16:00–18:00

Development of long BMO doped REBCO coated conductors with high in-field properties by PLD method

*Akira Ibi, Koichi Nakaoka, Takato Machi, Teruo Izumi

National Institute of Advanced Industrial Science and Technology (AIST)

WBP3-2 16:00–18:00

TENSILE STRAIN CHARACTERISTICS OF BMO DOPED REBCO COATED CONDUCTORS

*Shinji Fujita, Shogo Muto, Tomo Yoshida, Hiroki Sato, Mitsunori Igarashi, Kazuomi Kakimoto, Yasuhiro Iijima, Kunihiro Naoe

Fujikura Ltd.

WBP3-3 16:00–18:00

Critical Current Density of YBCO Films with Different Configurations of Columnar Defects in Longitudinal Magnetic Field

*Tetsuro Sueyoshi, Yasuya Iwanaga, Takafumi Kai, Takanori Fujiyoshi

Kumamoto University

WBP3-4 16:00–18:00

Introduction of pinning centers into SmBCO Coated Conductor by Reactive Co-evaporation Method

*Gwan tae Kim¹, Ho-Sup Kim¹, Dong-Woo Ha¹, Kook-Chae Chung², Shinde Kiran²

1. Korea Superconductivity Research Center, Korea Electrotechnology Research Institute;
2. Functional Nano-materials Research Department, Korea Institute of Materials Science

WBP3-5 16:00–18:00

Deployment of a high-temperature superconductivity application research project of Leading Initiative for Excellent Young Researchers (LEADER) in Muroran Institute of Technology

*Xinzhe Jin^{1,2}

1. Muroran Institute of Technology; 2. RIKEN Center for Life Science Technologies

WBP3-6 16:00–18:00

Joint of REBa₂Cu₃O_y Coated Conductors Using Metal Organic Deposition Method

*kazuya hiramatsu, Ryo Teranishi, Yukio Sato, Kenji Kaneko

Kyushu University

WBP3-7 16:00–18:00

Nanostructural Characterization of Low Resistance Joints Using Ag Pastes for GdBa₂Cu₃O_y Coated Conductor

Tomohiro Kato¹, Takato Machi², Daisaku Yokoe¹, Ryuji Yoshida¹, *Takeharu Kato¹, Teruo Izumi², Tsukasa Hirayama¹, Yuh Shiohara³

1. Nanostructures Research Laboratory, Japan Fine Ceramics Center;
2. Research Institute for Energy Conservation, Department of Energy and Environment, National Institute of Advanced Industrial Science and Technology;
3. Industrial Superconductivity Technology Research Association

WBP3-8 16:00–18:00

A study on Electromechanical Properties of a Novel Twisted Soldered-Stacked-Square (3S) HTS Wire with 1 mm Width

*Zeng Lin Xie, Min Hu, Zhu Yong Li, Yong Kang Zhou, Dao Yu Hu, Li Lin Sun, Zhi Jian Jin, Zhi Yong Hong

Academy of electrical engineering, Shanghai Jiao Tong University

WBP3-9 16:00–18:00

The Property of Hot-Dip Aluminizing for HTS Coated Conductor

*ByungGeol Kim, JeongHyeon Cho, HoSup Kim, ChangHwan Lee

Korea Electrotechnology Research Institute

WBP3-10 16:00–18:00

Numerical Investigation on Detection of Internal Crack in HTS Film by Using Contactless Method for Measuring j_c

*Teruou Takayama, Ayumu Saitoh, Atsushi Kamitani

Yamagata University

Characterization

Chairperson: Kohei Higashikawa (Kyushu University)

WBP4-1 16:00–18:00

Determining Pinning Parameters in Flux Creep-Flow Model for E - J characteristics of High Temperature Superconductors by using Differential Evolution

*Edmund Soji Otabe¹, Takuto Taguchi¹, Yuuki Tsuruda¹, Ryohei Funaki²

1. Kyushu Institute of Technology; 2. Kyushu University

WBP4-2 16:00–18:00

Evaluation of self-magnetic field of oxide superconducting tapes with ferromagnetic shielding

*Kei Kashiwagi¹, Vladimir Vyatlin², Edmund Soji Otabe¹, Yuta Hiramatsu¹, Masaru Kiuchi¹, Satarou Yamaguchi²

1. Kyushu Institute of Technology; 2. Chubu University

WBP4-3 16:00–18:00

Numerical Reproduction of Screening-Current-Induced Fields in HTS Tape Windings Using Finite Element Method

*Yuma OKABE, Tomokazu Honda, Kazuhiro Kajikawa

Kyushu University

WBP4-4 16:00–18:00

Reduction of Screening-Current-Induced Fields Using New Structure of HTS Coil

*Tomokazu HONDA, Yuma Okabe, Kazuhiro Kajikawa

Kyushu University

WBP4-5 16:00–18:00

Ac and dc characterizations of striated and copper-plated coated conductors

*Ryuki Toyomoto¹, Takuma Nishimoto¹, Naoyuki Amemiya¹, Satoshi Yamano², Hisaki Sakamoto²

1. Kyoto University; 2. Furukawa Electric Co., Ltd.

WBP4-6 16:00–18:00

Magnetic Microscopy for the Characterization of Magnetic Relaxation in Multi-filamentary Bi-2223 Tape with DC Transport Current and External Magnetic Field

*Kohei Hisajima, Kohei Higashikawa, Takumi Suzuki, Kazutaka Imamura, Masayoshi Inoue, Takanobu Kiss

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WBP4-7 16:00–18:00

Electromagnetic properties of YBCO ceramic oxides system for magnetic force

*Sang Heon Lee

Department of Electronic Engineering, Sunmoon University, Asan, Korea

WBP4-8 16:00–18:00

Analytical and Experimental Evaluation of DC Insulation Characteristics of PPLP/LN₂ Composite Insulation System according to The Variation of Overlapping Rate

*Jin-Yong Na, Ryul Hwang, Ik-Soo Kwon, Bang-Wook Lee

Hanyang University, Ansan, Korea

WBP4-9 16:00–18:00

Improved Delamination Properties of Coated Conductors

*Kenji Suzuki, Masaru Tomita

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