

Superconducting and Magnetic Materials and Devices(SM)

Oral Presentation

Nov. 9, 2011 (Wed.)

SM 1 (Superconducting and Magnetic Materials and Devices 1)

Mara

Chair: Prof. Yong Choi (Sunmoon University, Korea)

09:10-10:20

SMIS1 Removal of Iron Oxides Particles in Condenser Water of Thermal Power Station by Superconducting Magnetic Separation

09:10-09:40

Invited Speech

Dong-Woo Ha¹, Jun-Mo Kwon¹, Yu-Jin Lee¹, Kwang-Su Han², Seung-Kyu Baik¹, Rock-Kil Ko¹, Myung-Hwan Sohn¹, Ki-Chul Seong¹

¹Korea Electrotechnology Research Institute, Korea, ²Korea South-East Power Co., Korea

SM214 Pre-treatment Effects of Low Purity Semi-crystalline Boron Powder on the Critical Properties in MgB₂ Superconductors

09:40-10:00

Byung-Hyuk Jun, Chan-Joong Kim

Korea Atomic Energy Research Institute (KAERI), Korea

SM1582 Effect of Zirconium Oxide on the Mechanical Properties of YBCO Superconductors Formed by using Partial Melting Method

10:00-10:20

Ji Young Ahn, Sang Heon Lee, Yong Choi

Sunmoon University, Korea

Nov. 9, 2011 (Wed.)

SM 2 (Superconducting and Magnetic Materials and Devices 2)

Mara

Chair: Prof. Yong Choi (Sunmoon University, Korea)

10:40-11:50

SMIS2 Crystal Growth of REBCO Superconductor by Top-Seeded Solution-Growth (TSSG), Top-Seeded Melt-Growth (TSMG), and Liquid Phase Epitaxy (LPE)

10:40-11:10

Invited Speech

Xin Yao

Shanghai Jiao Tong University, China

SM1584 Structure Analysis and Magnetic Properties of Nano-sized Li-Cu Ferrite Particles Classified by using Ultrasonic Floating-Sedimentation Method

11:10-11:30

Yong Choi, Sang Heon Lee

Sunmoon University, Korea

SM56 Anomalous Magnetic Behavior in RE₆Al₃Si (R = Dy, Gd) System

11:30-11:50

G.V.M. Kiruthika¹, Sudhindra Rayaprol², M. Jayachandran¹, U.V. Varadaraju³

¹CSIR-Central Electro Chemical Research Institute, India, ²UGC-DAE Consortium for Scientific Research, India, ³Indian Institute of Technology-Madras, India

Poster Presentation

Nov. 8, 2011 (Tue.)

SMP (Superconducting and Magnetic Materials and Devices) Poster Presentation Lobby 8F

Chair: Prof. Sang Heon Lee (Sunmoon University, Korea)

14:00-15:30

- SM1587 Electrophysical Properties of Superconducting Composite Materials**
Sang Heon Lee¹, Kyoung Whan Koo²
¹Sunmoon University, Korea, ²Hoseo University, Korea
- SM1345 Effect of Polymeric and Metal Substance Impregnation on the Magnetic Properties of YBCO Bulk Superconductor**
M. S. Lee, G. E. Jang
Chungbuk National University, Korea
- SM1338 Enhancement of Flux Pinning in YBCO Film with BaTiO₃ Nanodot**
Eun-Ah Cho, Gun-Eik Jang
Chungbuk National University, Korea
- SM1309 Study on Graphene Doped MgB₂ Superconductor**
B.B. Sinha¹, K.C. Chung¹, X.L. Wang², S X. Dou²
¹Korea Institute of Materials Science, Korea, ²University of Wollongong, Australia
- SM1248 Trapped Field and Levitation Force of Gd123 Bulk Superconductor with Holes**
Kwang-Mo Kim^{1,2}, Soon-Dong Park¹, Byung-Hyuk Jun¹, Tae-Kuk Ko², Chan-Joong Kim¹
¹Korea Atomic Energy Research Institute (KAERI), Korea, ²Yonsei University, Korea
- SM1246 Fabrication of Large Single Grain Y123 Superconductors**
Soon Dong Park¹, Byung-Hyuk Jun¹, Young-Hee Han², Chan-Joong Kim¹
¹Korea Atomic Energy Research Institute (KAERI), Korea, ²Korea Electric Power Research Institute, Korea
- SM1239 Fault Current Limiting Characteristics of a Flux-Lock Type SFCL with a Peak Fault Current Limiting Function**
Tae-Hee Han¹, Sung-Hun Lim²
¹Jungwon University, Korea, ²Soongsil University, Korea
- SM1238 Analysis on Fault Current Limiting Characteristics of a Flux-Lock Type SFCL with an Isolated Transformer**
Tae-Hee Han¹, Sung-Hun Lim²
¹Jungwon University, Korea, ²Soongsil University, Korea
- SM1235 Preparation of Improved Copper Sulfide Particles by a Reduction Method for High Conductive Films in Aqueous Solutions**
Donghyuk Jung, Byung-Woo Kim, Moon-Sun Kim
Sungkyunkwan University, Korea

Superconducting and Magnetic Materials and Devices

SM1028 Influence of Mn-substitution by Co on the Electrical and Magnetic Properties in $\text{La}_{2/3}\text{Ca}_{1/3}\text{MnO}_3$ System

Vu Van Khai¹, Nguyen Anh Tuan², Do Viet Thang³, Tran Hai Duc⁴, Nguyen Huy Sinh²
¹National University of Civil Engineering, Vietnam, ²Hanoi University of Science, Vietnam, ³Haiphong University, Vietnam, ⁴Chungbuk National University, Korea

SM1011 High-temperature Superconducting RF Probe for Low Field Clinical MRI System

Rock-Kil Ko¹, Dong-Hyuk Kim^{1,2}, Boo-Min Kang^{1,3}, Myung-Hwan Sohn¹, Dong-Woo Ha¹, Chi-Woong Moon², Heung-Kyu Lee⁴
¹Korea Electrotechnology Research Institute, Korea, ²InJe University, Korea, ³PuKyong National University, Korea, ⁴Isol Technology Inc, Korea

SM932 Ceramic-based Microfluidic Device for the Continuous Flow Separation of Magnetic Particles

Ji-Yun Seon^{1,2}, Young Joon Yoon¹, Jinhjung Lee¹, Sangil Hyun¹, Jihoon Kim¹, Hyo Tae Kim¹, Hong Koo Baik², Jong-Hee Kim¹
¹Korea Institute of Ceramic Engineering & Technology, Korea, ²Yonsei University, Korea

SM603 Magnetic Properties of Core-shell MnO-Mn₂O₃ Nanoparticles

Hye-Mi Ju, Sung-Ho Choi, Seung Hun Huh
KICET, Korea

SM559 Selective Oxidation and Magnetic Properties of Fe-Al Films

Pyeongwoo Jang, Seung Chan Shin, Chi-Sup Jung, Kyu Seomoon, Kwang-Ho Kim
Cheongju University, Korea

SM444 High Characteristic Sr-Ferrite Powders by New Co-Spray Roasting

Tae-Sik Cho¹, Hyo-Jun Kim²
¹Kyungpook National University, Korea, ²Jahwa Electronics Co., Korea

SM441 Magnetic Force Calculation on a Magnetic Particle within a High Gradient Magnetic Separator via Finite Element Method

Seung-Kyu Baik, Dong-Woo Ha, Jun-Mo Kwon, Yu-Jin Lee, Rock-Kil Ko
Korea Electrotechnology Research Institute, Korea

SM390 Microwave Hydrothermal Synthesis and Magnetic Property of Barium Ferrite

Xuan Shi, Yongping Pu, Dan Liu
Shaanxi University of Science and Technology, China

SM229 The Dielectric Characteristics of Insulating Materials for HTS Bushing

Woo-Jin Kim, Jae-Hyeong Choi, Sang-Hyun Kim
Gyeongsang National University and Engineering Research Institute, Korea

SM226 Study of Magnetic Entropy Change in $\text{La}_{0.65}\text{Sr}_{0.35}\text{Cu}_{0.1}\text{Mn}_{0.9}\text{O}_3$ Complex Perovskite

M. S. Anwar, Shalendra Kumar, Faheem Ahmed, Nishat Arshi, G. W. Kim, Bon Heun Koo
Changwon National University, Korea

- SM162 Soft Magnetic Properties of Ca Addition to Fe-Si-B-Nb-Cu Nanocrystalline Alloy P/M Cores**
 Kyu-Sung Kim¹, Hyeon-Jun Kim¹, Sung-Chun Yoon¹, Sun-I Kim¹, Keun-Yong Sohn¹, Yong-Seol Song², Won-Wook Park¹
¹Inje University, ²Amgreentec, Korea
- SM159 Magnetic Properties of Amorphous Fe-Si-B Powder Cores Mixed with Pure Iron Powder**
 Hyeon-Jun Kim¹, Kyu-Sung Kim¹, Sung-Chun Yoon¹, Keun-Yong Sohn¹, Mi-Rae Kim², Yong-Seol Song², Won-Wook Park¹
¹Inje University, Korea, ²Amgreentec, Korea
- SM126 Design of 154kV Extra High Voltage Prototype SF₆ Bushing for Superconducting Electric Power Applications**
 Sang-Hwa Lee¹, Woo-Ju Shin², Bok-Yeol Kim¹, Bang-Wook Lee², Ja-Yoon Koo²
¹Korea Institute of Nuclear Safety, Korea, ²Hanyang University, Korea
- SM124 Effects of Y₂BaCuO₅ Size on the Growth of YBa₂Cu₃O_{7- γ} Grain in Top-seeded Melt Growth Processed YBCO Superconductors**
 Sun-A Jung, Soon-Dong Park, Byung-Hyuk Jun, Chan-Joong Kim
 Korea Atomic Energy Research Institute (KAERI), Korea
- SM122 Processing Window of a Liquid Infiltration Growth Process for the Fabrication of Single Grain YBa₂Cu₃O_{7- γ} Superconductors**
 Ji-Hyun Lee, Soon-Dong Park, Byung-Hyuk Jun, Chan-Joong Kim
 Korea Atomic Energy Research Institute (KAERI), Korea
- SM1576 Characterization of Nano-composites with Magnesium Oxide Dopants Prepared by using a Modified Injection Molding Method**
 Sang Heon Lee, Yong Choi
 Sunmoon University, Korea
- SM1588 Electriophysical Properties of Dopant Material on the Ceramic Composites**
 Sang Heon Lee¹, Kyoung Whan Koo²
¹Sunmoon University, Korea, ²Hoseo University, Korea
- SM1580 Effect of Ultrasonic Agitation on the Preparation of Nano-sized Ba-Mg Ferrite Particles Formed by using Self-propagating High-temperature Synthesis**
 Ji Young Ahn, Yong Choi, Sang Heon Lee
 Sunmoon University, Korea