

Program Book

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ACCM 10

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on Composite Materials

Composites : Creating the Future
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POSTER SESSION

- PP 2-25 **Electrical Conductivity Measurement of Al-Mg₂Si Alloy for Composite Matrix**
Takashi Nishigawa, Kenjiro Sugio, Gen Sasaki(Hiroshima University), Junji Tabata(Hiroshima Aluminum Industry Co., Ltd.), Nobuyuki Fuyama(Western Hiroshima Prefecture Industrial Research Institute)
- PP 2-26 **Development of Manufacturing Process of Porous VGCF and Their Mechanical Property**
Fei Gao, Youqiang Yao, Yongbum Choi, Zhefeng Xu, Kazuhiro Matsugi, Kenjiro Sugio, Gen Sasaki(Hiroshima University)
- PP 2-27 **Fabrication of Lotus Type SiO₂+VGCF Reinforced Al Composites and Their Thermal Property**
Yongbum Choi, Z. F. Zu, K. Matsugi, K. Sugio, G. Sasaki(Hiroshima University), M.H. Lee(Dong-Eui Institute of Technology)
- PP 2-28 **Thermal Simulation of Manufacturing Metallic Material by Utilizing Pulsed Current Activity Sintering Method**
Hyo-Eun Nam, Hyun-Kuk Park, Jun-Ho Jang(Chonnam National University), Ik-Hyun Oh(Korea Institute of Industrial Technology)

Multi-functional Composites

- PP 2-29 **Effect of Fiber Aspect Ratio on the EMI Shielding Effectiveness of Magnetic Hollow Fiber/EPDM Composites**
Jae Ryung Choi, Ka Hyun Park, Byung Mun Jung, Sang-Kwan Lee, Sang Bok Lee(Korea Institute of Materials Science)
- PP 2-30 **Injection Molding of Mechanoluminescent Composite Wheels**
Hyeon Kyeong Kim, Young Seok Song(Dankook University)
- PP 2-31 **Analysis of Sepiolite Embedded PVA Film**
So Yeon Ahn, Young Seok Song(Dankook University)
- PP 2-32 **Luminescent Properties of Functionally Graded Copper-Zinc Sulfide Phosphor**
Jehong Park, Seokgyu Lim(Next Generation Materials Co.,Ltd), Akira Kawasaki(Tohoku University), Marc Leparoux(Empa), Kwangjae Park(Pukyong National University), Hansang Kwon(Next Generation Materials Co.,Ltd, Pukyong National University)

Nano-composites and Nanotechnology

- PP 2-33 **3D Nano-architecture of Highly Efficient OER Catalysts**
Seok-Hu Bae, Ji-Eun Kim, Il-Kwon Oh(Korea Advanced Institute of Science and Technology)
- PP 2-34 **DTA for Amount of ZrO₂-SiO₂ in CMS Glass Ceramics**
Dayoung Lee, Seuhggu Kang(Kyonggi University)
- PP 2-35 **Photoluminescence (PL) of WSe₂/C₆₀-dye Hybrid**
Han Kyu-Hyun, S. G. Jo, J. Joo(Korea University), J. Kim(Sungkyunkwan University)
- PP 2-36 **Morphological Evolution in Natural Rubber Network in Clay Compatibilized Natural Rubber/Polypropylene Blends Crosslinked with Phenolic Resin**
Natinee Lopattananon, Abdulhakim Masa, Azizon Kaesaman(Prince of Songkla University), Hiromu Saito(Tokyo University of Agriculture and Technology), Tadamoto Sakai(Shizuoka University)
- PP 2-37 **Carrageenan/Silver Nanocomposite: Synthesis, Characterization and Antimicrobial Properties**
Jose Paolo O. Bantang, Drexel H. Camacho(De La Salle University)
- PP 2-38 **Internal Structure Analysis Using Non-destructive Analysis for Dispersion of the Filler in the Polymer Nanocomposites**
Hyun Su Kim, Seong Yun Kim(Korea Institute of Science and Technology)

- PP 2-39 **Volume Change of Expanded Graphite Via Inductively Coupled Plasma Treatment and Mutual Relation Between Expansion Volume and Thermal Conductivity of Polymer Composites**
Jong Hyeok Kim, Hyun Su Kim, Wu Young Kim, Hun Su Lee, Seong Yun Kim(Korea Institute of Science and Technology)
- PP 2-40 **Electrical Conductivity of Nano-compounds Filled with Highly Dispersed Multi-walled Carbon Nanotube via *in situ* Polymerization**
Ji-Un Jang, Seong Yun Kim(Korea Institute of Science and Technology)
- PP 2-41 **Electrical and Mechanical Properties of Flexible Multi-walled Carbon Nanotube/Cyclic Butylene Terephthalate Composite Film**
Ji Eun Cha, Seong Yun Kim(Korea Institute of Science and Technology)

NDE Technology

- PP 2-42 **Characterization of Terahertz Penetration on Conducting and Non-conducting FRP Composite Materials**
Kwang-Hee Im(Woosuk University), In-Young Yang(Chosun University), Sun-Kyu Kim(Chonbuk Natl. University), Seung Woo Ra(Seoul Metal Co. Ltd.), Jong-An Jung(Songwon University), Young-Tae Cho(Jeonju University), David Hsu(Iowa State University)
- PP 2-43 **X-ray Residual Stress Measurement of Polyamide Matrix in CFRP Under Cryogenic Temperature**
Dai Hashimoto, Yuya Uesaki, Masayuki Nishida(Kobe City College of Technology)

Processing and Manufacturing

- PP 2-44 **Study on Optimization of High-thermal Resistant Epoxy Resin Compounding for Automobile Using Design of Experiments**
Eunsong Lee(Korea Institute of Materials Science), Pusan National University), Dong Gi Seong, Moon-Kwang Um, Jin-Woo Yi(Korea Institute of Materials Science), Wonho Kim(Pusan National University)
- PP 2-45 **Manufacturing and Characterization of Poly(Lactic Acid)/Halloysite Composite Materials**
Bo Ram Lee(Korea Institute of Industrial Technology, Hanyang University), Si-Hoon Jang, No-Hyung Park(Korea Institute of Industrial Technology)
- PP 2-46 **Assessment of Particle Distribution in Particle-containing Composite Materials**
 Ji Hoon Lee, Seung Mo Kim(Korea University of Technology and Education)

Recycling

- PP 2-47 **Effects of Pre-curing of IGCC Slag Based Geopolymer Crystal Growth**
Soobin Park, Seunggu Kang(Kyonggi University)
- PP 2-48 **A Kinetic Study on the Supercritical Decrosslinking Reaction of Silane-crosslinked Polyethylene Using a Continuous Reactor**
Bum Ki Baek(Korea Institute of Science and Technology, Yonsei University), Yun Ho La(Korea Institute of Science and Technology, Hanyang University), Jun Pyo Hong, Seok Jin Noh, Chong Min Koo, Soon Man Hong(Korea Institute of Science and Technology), Haksoo Han(Yonsei University)
- PP 2-49 **Mechanical Properties of Recycling Materials Based-geopolymer**
Yuna Lee, Seunggu Kang(Kyonggi University)

Sandwich Technologies

- PP 2-50 **Effect of Adhesive Quantity on Failure Behavior and Mechanical Properties of Fiber Metal Laminates Based on the Aluminum-lithium Alloy**
 Huaguan Li, Jie Tao, Xuelong Fu(Nanjing University of Aeronautics and Astronautics)