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Ju Sung Kim and Eun Ha Choi

Kwangwoon Univ., Korea

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Pradeep Bhartiya[1], Neha Kaushik[2], Linh Nguyen[1], Nagendra Kumar Kaushik[1], and Eun Ha Choi[1]

[1]Kwangwoon Univ., Korea, [2]Univ. of Suwon, Korea

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Se Hoon Ki and Eun Ha Choi

Kwangwoon Univ., Korea

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Geunyoung Nam[1], Muhwan Kim[2], Yeonsook Jang[2], and Sungbo Cho[1]

[1]Gachon Univ., Korea, [2]Femto Sci. Inc., Korea

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Chang Young Kim[1], Chang-Min Lee[1], Min-Suk Kook[2], Byung Hoon Kim[1], and Young-IL Jeong[1]

[1]Chosun Univ., Korea, [2]Chonnam Univ., Korea

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Chang-Min Lee[1], Young-IL Jeong[1], Eunbyul Kook[1], Gwang-Min Heo[2], Min-Suk Kook[2], and Byung Hoon Kim[1]

[1]Chosun Univ., Korea, [2]Chonnam Nat'l Univ., Korea

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Han-Cheol Choe

Chosun Univ., Korea

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Nat'l Taiwan Univ. of Sci. and Tech., Taiwan

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Sungkyunkwan Univ., Korea

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Junho Jeong, Jiyoung Oh, Yunseok Lee, Eunchong Kang, and Kyoungnam Kim

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[1]ULVAC KOREA, Ltd., Korea, [2]Hanyang Univ., Korea

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[1]Sungkyunkwan Univ., Korea, [2]Ajou Univ., Korea

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[1]Ajou Univ., Korea, [2]Sungkyunkwan Univ., Korea

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[1]KRISS, Korea, [2]Chungnam Nat'l Univ., Korea

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[1]Chungnam Nat'l Univ., Korea, [2]Nanotech Optoelectronics Research Center, Korea

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[1]Korea Aerospace Univ., Korea, [2]KFE, Korea

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[1]Seoul Nat'l Univ., Korea, [2]KAERI, Korea

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[1]Korea Aerospace Univ., Korea, [2]KFE, Korea

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[1]KRISS, Korea, [2]Chungnam Nat'l Univ., Korea

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Chan-Won Park[1,2], Jung-Hyung Kim[1], and Hyo-Chang Lee[1]
[1]KRISS, Korea, [2]Chungnam Nat'l Univ., Korea

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Hajun Dang[1], Sunggyu Park[2], and Jaebum Choo[1]
[1]Chung-Ang Univ., Korea, [2]KIMS, Korea

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[1]Sungkyunkwan Univ., Korea, [2]Palogen Inc., Korea

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Atanu Bag, Mohit Kumar, Dong-Bin Moon, Adeela Hanif, Dae-Ho Yoon, and Nae Eung Lee
Sungkyunkwan Univ., Korea

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Sungkyunkwan Univ., Korea

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Sungkyunkwan Univ., Korea

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Byung Joon Moon[1], Sukang Bae[2], and Byung Hee Hong[1]

[1]Seoul Nat'l Univ., Korea, [2]KIST, Korea

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Kunsan Nat'l Univ., Korea

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Impact of V-Shaped Ga Grading on Flexible Cu(In, Ga)Se_2 Solar Cell via Na Diffusion: An Observation of Active Defects Using Thermal Admittance Spectroscopy

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Cell/Module Integration Technology with Wire Embedded Eva Sheet

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Optimization of Flexible CIGS Solar Cell Process with Shingled Structure Using Epoxy-Based ECA

Won Seok Choi, Jeong Eun Park, Jae Joon Jang, Eun Ji Bae, Minkyu Ju, and Donggun Lim
Korea Nat'l Univ. of Transportation, Korea

[P09-14]

Simple and Scalable Synthesis of Sulfurized Polyacrylonitrile Cathode for RT Na/S Batteries

Huihun Kim, Milan Sadan, Changhyeon Kim, Eunji Song, Jimin Yun, Kwon-Koo Cho, Ki-Won Kim, Jou-Hyeon Ahn, and Hyo-Jun Ahn
Gyeongsang Nat'l Univ., Korea

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High Rate Nickel Monosulfide Anode for Sodium-Ion Batteries

Milan K. Sadan, Huihun Kim, Changhyeon Kim, Minjun Seong, Minyeong Jeon, Kwon-Koo Cho, Jou-Hyeon Ahn, and Hyo-Jun Ahn
Gyeongsang Nat'l Univ., Korea

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Miscibility Control of PEDOT:PSS for Solution Processed Hole Transpor Layer in Organic Solar Cells

Souk Yoon Kim, Jahandar Muhammad, Soyeon Kim, and Dong Chan Lim
KIMS, Korea

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Hybrid Electrode Fabricated Using PEDOT:PSS/Metal Mesh for Application to ITO-Free and Flexible Organic Photovoltaics

Eun Joo Seo, Soyeon Kim, and Dong Chan Lim
KIMS, Korea

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Mitigating the Undesirable Chemical Reaction between Organic Molecules for Highly Efficient Flexible Organic Photovoltaics

Adi Prasetio[1], Muhammad Jahandar[1], Soyeon Kim[1], Jinhee Heo[1], Yong Hyun Kim[2], and Dong Chan Lim[1]
[1]KIMS, Korea, [2]Pukyong Nat'l Univ., Korea

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Optical and Water-Repellent Characteristics of an Anti-Reflection Protection Layer for Perovskite Solar Cells Fabricated in Ambient Air

Dong In Kim, Ji Won Lee, Rak Hyun Jeong, Ju Won Yang, Seong Park, and Jin Hyo Boo

Sungkyunkwan Univ., Korea

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On the Performance of Micro-Tubular Solid Oxide Fuel Cells Made by Aqueous Electrophoretic Deposition

Jih-Sheng Chen, Fu-An Yu, and Jyh-Shiarn Cherng

Ming Chi Univ. of Tech., Taiwan

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Highly Active Ni/MnO_2 Catalysts for Plasma-Catalytic CO_2 Methanation

Daiqi Ye and Jingjing Li

South China Univ. of Tech., China

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CO_2 Reduction Pathways in a Packed Bed DBD Reactor: A Combined Analysis of Operando Surface and Gas Phase Reaction

Yuhai Sun[1], Junliang Wu[1], Yaolin Wang[2], Ni Wang[2], Limin Chen[1], Peirong Chen[1], Mingli Fu[1], Xin Tu[2], and Yuhai Sun[1]

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[P10-02]

Effect of Etching Power under Argon Atmosphere on the Morphological and Wetting Characteristics of Nanocrystalline Iron Disilicide Films Formed via Facing-Targets Direct Current Sputtering

Peerasil Charoenyuenyao[1], Nathaporn Promros[1], Nathakorn Borwornpornmatee[1], Rawiwan Chaleawpong[1], Rungrueang Phatthanakun[2], Phongsaphak Sittimart[3], and Tsuyoshi Yoshitake[3]

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[P10-03]

Impedance Profile and Equivalent Circuit Model under Temperature Change of p-Type Si/n-Type ß-$FeSi_2$ Heterojunctions Synthesized by Facing-Targets Direct-Current Sputtering

Rawiwan Chaleawpong[1], Nathaporn Promros[1], Peerasil Charoenyuenyao[1], Nattakorn Borwornpornmetee[1], Pattarapol Sittisart[1], Phongsaphak Sittimart[2], and Tsuyoshi Yoshitake[2]

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[P10-04]

Wetting and Surface Morphology of Fe_3Si Films Created by Facing-Targets Direct-Current Sputtering

Nattakorn Borwornpornmetee[1], Nathaporn Promros[1], Peerasil Charoenyuenyao[1], Rawiwan Chaleawpong[1], Phongsaphak Sittimart[2], and Tsuyoshi Yoshitake[2]

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[P10-05]

Improvement of Performance and Reliability in QDLED after Minimizing the Phenomenon of Exciton Quenching

Eunkyu Shin, Junekyun Park, Sanghyun Lee, and Yonghan Roh

Sungkyunkwan Univ., Korea

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Prediction and Structure Characterization of Sweetness Molecules

Junho Lee, Seon Bin Song, and Joonsuk Huh

Sungkyunkwan Univ., Korea

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Highly Stability of APTES-Coated $CsPbBr_3$ Core-Shell QDs for High LED Performance Devices

Cuc Kim Trinh, Hanleem Lee, and Chang-Lyoul Lee

GIST, Korea

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PWM Controlled Micro LED Display with Low Temperature Poly-Crystalline Oxide Thin-Film Transistors

Taesoo Kim and Jaehong Jeon

Korea Aerospace Univ., Korea

[P10-09]

Efficient Blue Luminescent Materials for Organic Light Emitting Diodes (OLEDs) based on Dimethylindenoarene Substituted Phenylanthracene Derivatives

Beomsu Jang[1], Giwoong Han[1], Kiju Kim[2], Kyomin Hwang[2], Youngkwan Kim[2], and Seungsoo Yoon[1]

[1]Sungkyunkwan Univ., Korea, [2]Hongik Univ., Korea

[P10-10]

Electrical Characteristics of $Cu(In,Ga)Se_2$ Solar Cells with Photo-Sintered Buffer Layer

Jaehyeong Lee, Vu Minh Han Cao, Jae Sung Bae, Hong Sub Jee, Byungyou Hong, and Junsin Yi

Sungkyunkwan Univ., Korea

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Recombination Rate and Internal Field Efficiency of Staggered InGaN/GaN Light Emitting Diodes with Left and Right Steps

Bong-Hwan Kim, Woo-Pyo Hong, Jong-Jae Kim, and Seoung-Hwan Park

Daegu Catholic Univ., Korea

[P10-13]

Effect of Y Addition on Microstructures and Tensile Properties of Al-Mg Based Alloys

Young-Ok Yoon, Seong-Ho Ha, Shah Abdul Wahid, Bong-Hwan Kim, Hyun-Kyu Lim, and Shae K. Kim

KITECH, Korea

[P10-14]

Characterization of Surface Oxidation in Al-Zn Alloys at Elevated Temperatures

Young-Ok Yoon, Seong-Ho Ha, Shah Abdul Wahid, Bong-Hwan Kim, Hyun-Kyu Lim, and Shae K. Kim

KITECH, Korea

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Effect of Binder on Additive Manufacturing of Titanium (Ti)-Alloy: A Preliminary Investigation

Tridib Kumar Sinha, Jin Hwan Lim, Tae-Hyun Nam, and Jeong Seok Oh

Gyeongsang Nat'l Univ., Korea

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Selective Surface Wettability Control Using Atmospheric Pressure Ar/HMDS Plasma Tuned by N_2 or O_2 Gas Addition

Dong-Hyun Kim, Jonggu Han, Rodolphe Mauchauffé, Jongwoon Kim, and Se Youn Moon

Jeonbuk Nat'l Univ., Korea

[P10-17]

The Relationship between Thermoelastic Effect and Yield Strength in 3D Printing

Sanglok Park[1,2], Kyo-Dong Song[2], and Joo-Hyung Kim[1]

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[P10-18]

Segregation and Morphological Change of Si Phase during Directional Solidification of Al-Si Alloys

Young-Kyun Kim[1], Geon-Hong Kim[1], Seong-Ho Ha[2], Shah Abdul Wahid[2], and Jin-Kyu Lee[3]

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Precipitation and Growth Behaviors of Al-Fe Intermetallics during Directional Solidification of Al-Fe Alloys

Young-Kyun Kim[1], Jin-Kyu Lee[2], Seong-Ho Ha[3], and Shah Abdul Wahid[3]

[1]Inst. for Advanced Engineering, Korea, [2]NICE LMS Co., Ltd., Korea, [3]Korea Inst. of Industrial Tech., Korea

[P10-20]

Effect on Reaction Time on Reduction of Silica in Al-Mg Alloy Melts

Jin-Kyu Lee[1], Sun-Ki Kim[1], Young-Kyun Kim[2], Seong-Ho Ha[3], and Shah Abdul Wahid[3]

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[P10-21]

Effect of Al-Fe Based Phase Fraction on Iron Removal for Refining of Aluminum Melts

Jin-Kyu Lee[1], Young-Kyun Kim[2], Seong-Ho Ha[3], and Shah Abdul Wahid[3]

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[P10-22]

Synaptic Organic Electrochemical Transistors with Ionic Liquids

Dong Hyun Lee, Hamna Haq Chouhdry, and Nae Eung Lee

Sungkyunkwan Univ., Korea

[P10-23]

Thiourea-Incorporated Membrane Separators for Li-Ion Batteries with Enhanced Ion Transport

Changsik Song, Hye Jun Kim, Seonggyun Ha, and Chaeyeon Ha

Sungkyunkwan Univ., Korea

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Self-Healable and Recyclable Biomass-Derived Polyurethane Networks through Carbon Dioxide Immobilization

Changsik Song, Seohyun Baek, and Juhyen Lee

Sungkyunkwan Univ., Korea

[P10-25]

Effect of Annealing on Microstructure and Superelastic Behavior of a Ni-Free Ti-Zr-Based Shape Memory Alloy

Shuanglei Li[1], Izaz Ur Rehman[1], Mi-Seon Choi[2], and Tae-Huyn Nam[1]

[1]Gyeongsang Nat'l Univ., Korea, [2]RIST, Korea

[P10-26]

Characteristics of Ga-Doped ZnO Thin Films Grown on C-Plane Sapphire Substrates by Metalorganic Chemical Vapor Deposition Using Ultrasonic Nebulization

Choon-Ho Lee

Keimyung Univ., Korea

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Effects of Growth Temperature and Rate on the Properties of ZnO Thin Films Grown on C-Plane Sapphire Substrates by Metal-Organic Chemical Vapor Deposition Using Ultrasonic Nebulization

Choon-Ho Lee and Seong-Bok Kim

Keimyung Univ., Korea

[P10-28]

Study of Enhanced Volatile Organic Compounds Gas Sensing Properties with Al Doped ZnO/CdO Heterostructure

Seong Park, Dong In Kim, Ji Won Lee, Rak Hyun Jeong, Ju Won Yang, and Jin Hyo Boo

Sungkyunkwan Univ., Korea

[P10-29]

TiNi-Based Multi-Component High-Temperature Shape Memory Alloys

Izaz Ur Rehman, Shuanglei Li, and Tae-Hyun Nam

Gyeongsang Nat'l Univ, Korea

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Segregation of Mg in Al-Mg Alloys During Directional Solidification and Its Effect on Distribution of Mg Based Phases

Young-Ok Yoon, Seong-Ho Ha, Shah Abdul Wahid, Bong-Hwan Kim, Hyun-Kyu Lim, and Shae K. Kim

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[P10-31]

Effect of Impurity Levels on Surface Oxidation of Al Melts

Seong-Ho Ha, Shah Abdul Wahid, Bong-Hwan Kim, Young-Ok Yoon, Hyun-Kyu Lim, and Shae K. Kim

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[P10-32]

Influence of Mg on Formation and Growth of Eutectic Phases in Al-Cu Alloys During Directional Solidification

Seong-Ho Ha, Shah Abdul Wahid, Bong-Hwan Kim, Young-Ok Yoon, Hyun-Kyu Lim, and Shae K. Kim

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[P10-33]

Surface Segregation of Impurity Elements in Al Alloy Melts and Its Effect on Purification

Seong-Ho Ha, Shah Abdul Wahid, Bong-Hwan Kim, Young-Ok Yoon, Hyun-Kyu Lim, and Shae K. Kim

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[P10-34]

Effect of Sn on Superelasticity of Ti-30Zr-10Nb-XSn Alloys. (x = 0, 2, 3, 4) (at.%)

Won-Tae Lee and Tae-Hyun Nam

Gyeongsang Nat'l Univ., Korea

[P10-35]

Effect of Thermo-Mechanical Treatment on Martensitic Transformation Behavior and Mechanical Properties of (35.5-x)Ti-49.5 Ni-15Hf-xNb (x = 1.5, 3, 4.5 at. %) Alloys

Jin Hwan Lim and Tae-Hyun Nam

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[P10-36]

Impact of Surface Morphologies of 3D Island Layers on the Single Crystal Growth of Magnetron Sputtered ZnO Films

Yuta Nakamura, Masayuki Kikuchi, Daisuke Yamashita, Kunihiro Kamataki, Takamasa Okumura, Kazunori Koga, Masaharu Shiratani, and Naho Itagaki

Kyushu Univ., Japan

[P10-37]

Sputter Deposition of ZnAlO Films with Tunable Bandgaps From 3.4 to 6.1 Ev

Seiichi Urakawa, Kentaro Kaneshima, Ryota Narishige, Daisuke Yamashita, Kunihiro Kamataki, Takamasa Okumura, Kazunori Koga, Masaharu Shiratani, and Naho Itagaki

Kyushu Univ., Japan

[P10-38]

Growth of High-Quality $(ZnO)_x(InN)_{1-x}$ Films by RF Magnetron Sputtering Using a Two-Step Growth Process

Kentaro Kaneshima, Seiichi Urakawa, Ryota Narishige, Daisuke Yamashita, Takamasa Okumura, Kunihiro Kamataki, Kazunori Koga, Masaharu Shiratani, and Naho Itagaki

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