On/Offline Poster Session 2

[Tuesday, October 5, 2021]

[Offline] 02_1079

Synthesis and Characterization of Polyacetylene Polyelectrolyte with Pyrene Moieties via the Catalyst-Free Polymerization of 2-Ethynylpyridine using 1-(Bromoacetyl)Pyrene

Yeong Soon Gal (Kyungil Univ., Korea), Taehyoung Kim (KAIST, Korea), Sung-Ho Jin (Pusan Nat’l Univ., Korea), Jongwook Park (Kyung Hee Univ., Korea), Kwon Taek Lim (Pukyong Nat’l Univ., Korea), and Sang Youl Kim (KAIST, Korea)

[P-02-002]

Low-Temperature Processable Polyimide Gate Dielectrics for Flexible Pentacene Thin Film Transistors

Jae Kyung Lee and Taek Ahn (Kyungsung Univ., Korea)

[P-02-003]

Engineering Color-Tunable Blue Electroluminescence of Mixed-Halide Perovskite Nanocrystals Light Emitting Diodes

Young Ran Park (Korea Univ., Korea) and Youngjong Kang (Hanyang Univ., Korea)

[P-02-004]

Exceptionally High External Quantum Efficiencies Observed from Deep-UV LEDs with p-Al_{0.64}Ga_{0.36}N (x=0.64) Contact Layers

Tae Hoon Park, Kyung Rock Son (Korea Univ., Korea), Hideki Hirayama (RIKEN, Japan), and Tae Geun Kim (Korea Univ., Korea)

[P-02-005]

Mg-F Codoped ZnO Thin Films Deposited by RF Magnetron Sputtering: Influence of Rapid Thermal Annealing Time

Fang-Hsing Wang, Mao-Shan Chen, Han-Wen Liu, Feng-Jan Chang (Nat’l Chung-Hsing Univ., Taiwan), and Tsung-Kuei Kang (Feng-Chia Univ., Taiwan)
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**[P-02-006]**

Stability Enhanced SrAl$_2$O$_4$:Eu, Dy Phosphor with Organic Coating via Efficient Plasma Process  
Jung Hyeon Yoo, Seok Bin Kwon, Seong Guk Jeong, Hyung Wook Choi, Dong In Jeong, Ji Won Kim, and Dae Ho Yoon *(Sungkyunkwan Univ., Korea)*

**[P-02-007]**

Cs$_3$MnX$_5$(X=Br,I): A Simplest Way to Synthesize High-Efficiency Green Light Emitting Materials  
Seok Bin Kwon, Jung Hyun Yoo, Seong Guk Jeong, Dong In Jeong, Hyung Wook Choi, Jiwon Kim, and Dae Ho Yoon *(Sungkyunkwan Univ., Korea)*

**[P-02-008]**

Penta-Layer Reflective RGB Primary Structural Color Filters with High Efficiency and High Purity in Dual Cavities  

**[P-02-009]**  
Study on Chemical Resistance and Adhesion Property of UV-Curable Resins for Applications to Glass Slimming Process of Display Panel  
Baekseo Choi, Yu-Seong Jeon *(Daegu Catholic Univ., Korea)*, Younghwan Kwon *(Daegu Univ., Korea)*, and Yoon Soo Han *(Daegu Catholic Univ., Korea)*

**[P-02-010]**

Transmissive RGB Primary Colors Featuring High Brightness and High Purity in Quad-Layer Thin-Films  
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Lead-Free Inorganic Perovskite-Based Light-Emitting Diodes
Min-Gi Jeon, Artavazd Kirakosyan, MD Rezaul Kabir, and Jihoon Choi (Chungnam Nat'l Univ., Korea)

[P-02-012] 02_1415
Characteristics of Spray Deposited TiO₂ Thin Films for Photovoltaic Application
Yong Seob Park (Chosun College of Sci. and Tech., Korea)

[P-02-013] [Offline] 02_1425
Near-Infrared Photodetector based on Highly Stable Lead-Free Perovskite with UV Curable Polymer Network
Hyun-Jae Na, Sung-Eun Lee, Jae Hak Lee, Yong Jun Gong, and Youn Sang Kim (Seoul Nat'l Univ., Korea)

[P-02-014] [Offline] 02_1437
Demonstration on the Role of Dual-Stacked Oxide Semiconductor in High Performance Thin Film Transistors via Equivalent Circuit Modeling
Changik Im, Hyun-Jae Na, Jae Hak Lee, Haeyoun Lee, Jiyeon Kim, and Youn Sang Kim (Seoul Nat'l Univ., Korea)

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Investigation of the Structural and Photoelectric Features of Bi₁₋ₓGdₓFeO₃ Ceramics Prepared by Microwave-Assisted Heat Treatments
So-Young Shin, Han-Sol Yun, Dae-Yong Jeong, and Nam-Hee Cho (Inha Univ., Korea)

[P-02-016] 02_1461
The Effect of SiO₂ Content on Structural and Luminescence Properties of Mg₂Al₄Si₅O₁₈:Eu²⁺ Phosphors
Woo Cheol Lee and Hyun Kyoung Yang (Pukyong Nat’l Univ., Korea)

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Characterization of Yellow Carbon Dot with using Facile Solvothermal Method
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Woo Tae Hong, Hyun Kyoung Yang, and Byung Kee Moon (*Pukyong Nat’l Univ., Korea*)

**P-02-019** 02_1470

Mn(IV) Activated Aluminate Phosphor for Blue Light-Emitting Diodes Tuning into Warm White Light
Jin Young Park, Woo Tae Hong, Jong Won Chung, and Hyun Kyoung Yang (*Pukyong Nat’l Univ., Korea*)

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Hybrid Electrode based on Graphene and Silver Nanowire for UV-LEDs
Eun Mi Kim, Su Jin Kim, and Tae Hoon Seo (*KITECH, Korea*)

**P-02-021** 02_1482

Graphene Electrode Based Smart Window with Improved Performance through Interface Cleaning Method

**P-02-022** 02_1485

Carbon Nanotube Network on Graphene as a Transparent and Current Spreading Electrode in InGaN/GaN LEDs
Eun Mi Kim, Su Jin Kim, and Tae Hoon Seo (*KITECH, Korea*)

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Jong-Ryul Jeong, Phuoc Cao Van, Ji-Hwan Seol, and Gun-Woo Park (*Chungnam Nat’l Univ., Korea*)
Surface Roughness-Dependent Spin Seebeck Signal in YIG/Si Thin Films Prepared by Metal-Organic Decomposition Method
Jong-Ryul Jeong, Thi Trinh Nguyen, Phuoc Cao Van, and Viet Duc Duong (*Chungnam Nat’l Univ., Korea*)

Optoelectrical Properties of Methylammonium Lead Iodide Perovskites Synthesized by a Two-Step Dry Process
Thi Kim Oanh Vu (*Hanyang Univ., Korea*), Young-Hwan Kim (*KIST, Korea*), Chang Wan Ahn (*Hanyang Univ., Korea*), Min Ha Kim (*KIST, Korea*), and Eun Kyu Kim (*Hanyang Univ., Korea*)

Abnormal Positive Bias Temperature Stress Behavior of Al$_2$O$_3$ Buffer Layer on PI and Glass Substrate for a-IGZO Thin Film Transistors
Jungmin Park, Hyojung Kim, Pyungho Choi (*Sungkyunkwan Univ., Korea*), Bosung Kim (*Korea Univ., Korea*), and Byoungdeog Choi (*Sungkyunkwan Univ., Korea*)

Threshold Voltage Instability of Flexible TFTs Fabricated on a Polyimide Substrate with Different Curing Temperatures
Hyojung Kim, Byoungdeog Choi, Jungmin Park, and Jangkun Song (*Sungkyunkwan Univ., Korea*)

Transparent, Water-Repellent and Antistatic Cu–Plasma-Polymerized Fluorocarbon Nanocomposite Thin Films on Flexible Large-Area Substrate
Mac Kim, Eunmi Cho, and Sang-Jin Lee (*KRICT, Korea*)

Co-Absorbing Polymer for Ternary Polymer Solar Cells to Enhance Performance via Molecular Structure and Effective Backbone Modulation
Danbi Kim, Insoo Shin, Seongbeom Lee, Byung Chun Choi, and Sung Heum Park (*Pukyong Nat’l Univ., Korea*)
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Enhancement of Moisture Stability for Perovskite Solar Cell by Surface Treatment of Electron Transfer Layer

Hyun-Seock Yang, Sung Heum Park (Pukyung Nat’l Univ., Korea), Yun Kyung Jung (Inje Univ., Korea), Keun Nyeong Oh, and Yoomi Ahn (Pukyung Nat’l Univ., Korea)

Antireflective and Self-Cleaning Effects of Plasma-Polymerized Fluorocarbon Thin Film on Nanostructured Polymer Substrate

Eunmi Cho, Mac Kim (KRICT, Korea), Jin-Seong Park (Hanyang Univ., Korea), and Sang-Jin Lee (KRICT, Korea)

Vinyl Modified Silica Microparticles for Silicone Release Coating of Optically Clear Adhesive

SangSoo Kim, JuEun Jang, Hyebeom Shin, YoungMin Kim, and KeumHwan Park (KETI, Korea)

Cadmium-Passivated Perovskite Nanocrystals for Efficient Blue Light Emitting Diodes

Woo Hyeon Jeong (Hanyang Univ., Korea), Zhongkai Yu (Pukyong Nat’l Univ., Korea), Ji Won Jang (Hanyang Univ., Korea), Xiangyang Fan, Sung Heum Park (Pukyong Nat’l Univ., Korea), Hyosung Choi (Hanyang Univ., Korea), and Bo Ram Lee (Pukyung Nat’l Univ., Korea)

Blended Hole Transport Layer for Blue Perovskite Light Emitting Diodes

Zhongkai Yu (Pukyong Nat’l Univ., Korea), Woo Hyeon Jeong, Ji Won Jang (Hanyang Univ., Korea), Xiangyang Fan, Sung Heum Park (Pukyong Nat’l Univ., Korea), Hyosung Choi (Hanyang Univ., Korea), and Bo Ram Lee (Pukyung Nat’l Univ., Korea)

Enhance Perovskite Quantum Dots Light-Emitting Diodes Performance via Different Bulky Organic Cations through Facile Spin-Coating Approach

Siwei He and Jae-Wook Kang (Jeonbuk Nat’l Univ., Korea)
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[P-02-043] 02_1971
Synthesis of High Quality Perovskite Nanowires for Ultrasensitive Photodetector Application
Mi Kyoung Kim, Haedam Jin, Jeongbeom Cha, Donghwa Lee, Hoseok Lee, Min Sun Park, and Min Kim (Jeonbuk Nat'l Univ., Korea)

[P-02-044] [Offline] 02_2005
Unraveling the Origin of Sub-Bandgap Emission from Zero-Dimensional Perovskite Cs$_4$PbBr$_6$
Mingue Shin (KAIST, Korea), Sung-Wook Nam (Kyungpook Nat'l Univ., Korea), Aditya Sadhanala, Ravichandran Shivanna, Miguel Anaya (Univ. of Cambridge, UK), Alberto Jiménez-Solano (Max Planck Inst. for Solid State Research, Germany), Hyewon Yoon, Seokwoo Jeon (KAIST, Korea), Samuel D. Stranks (Univ. of Cambridge, UK), Robert L. Z. Hoye (Imperial College London, UK), and Byungha Shin (KAIST, Korea)

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Electrical Properties of Te Films Fabricated with Various RF Sputtering Conditions
Kyu Ri Lee, Hyun-Suk Kim, and Hyoung Do Kim (Chungnam Nat'l Univ., Korea)

[P-02-046] 02_2024
Long-Term Stability of Wide-Band Gap Perovskite Solar Cells for Tandem Photovoltaics
Tea Youl Yang and Mi Seon Bae (Chungnam Nat'l Univ., Korea)

[P-02-047] 02_2030
Achromatic Meta-Lens with Polarization Filtering by Arranging Plasmonic Antenna
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[P-02-048] 02_2033
The Systematic Study on the Degradation Mechanism of Conductive Polymers
Changhun Yun, Inwoo Lee, Jaewon Lee, and Hyejin Sim (Chonnam Nat'l Univ., Korea)
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Semi-Transparent Organic Light-Emitting Diodes using the Vacuum-Free Lamina-
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Changhun Yun, Yejin Kim, Songchae Kim, and Sejeong Kim (Chonnam Nat’l Univ., Korea)

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Nakyung Kim, Byungha Shin, Mingue Shin, Joonyun Kim, Jinu Park, Seongmoon Jun, and Yong-Hoon Cho (KAIST, Korea)

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Versatile Colloidal Synthesis of Zn-Based Chalcogenide Alloy Nanocrystals from Elemental Chalcogen Precursors
Sooyeon Yeon, Seongchan Kim, and Nuri Oh (Hanyang Univ., Korea)

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Nuri Oh, Seungki Shin, and Namyoung Gwak (Hanyang Univ., Korea)

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Crosslinkable Ligand Chemistry for Patterning of Nanocrystal Solids
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High-Performance IGZO Transistor with Bilayer Channel and High-K Gate Dielectric Stack via Atomic Layer Deposition
Min Hoe Cho, Cheol Hee Choi, Jae Hoon Cho, and Jae Kyeong Jeong (*Hanyang Univ., Korea*)

Enhanced Pure Blue-Light Emission of CsPbBr\(_3\) Nanoplatelets via Post-Treated Surface Passivation
Jinu Park, Joonyun Kim, and Byungha Shin (*KAIST, Korea*)

The Dark Current Suppression of Organic Near-Infrared Photodetectors using a Non-Fullerene Acceptor

Evaluation of Optical Communication with Code Division Multiple Access
Gyun-Tak Kim and Gyu-Seok Cho (*GERI, Korea*)

Concept of Transmission Power Control Technique in Non-Orthogonal Multiple Access for Optical Communication Devices
Gyu-Seok Choi and Gyun-Tak Kim (*GERI, Korea*)

Characteristics of VO\(_{2-x}\) Thin Films Prepared by Pulsed DC Sputtering for High-Temperature Microbolometer
Donghee Park (*KIST, Korea*) and Jaeyeong Bae (*Korea Univ., Korea*)
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Effect of Microstructure on Gas Sensing Characteristics in Thermally Evaporated \( \text{Co}_3\text{O}_4 \) Nanoparticulate Structures
Myeong Gyu Kim, Yun-Hyuk Choi, and Hyeon Jeong Hong (Daegu Catholic Univ., Korea)

[P-03-003] 03_1063
Pd-Ni Hydrogen Gas Sensors with Various Structures Operating in a Wide Range of Hydrogen Concentrations
Hyungtak Seo, Seung-Ik Han, and Jong Yeon Lee (Ajou Univ., Korea)

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Vacuum Ultraviolet Photoconductive Detector based on Titanium Dioxide Thin Films
Tomoki Kato (Nagoya Inst. of Tech., Japan), Marilou Cadatal-Raduban (Massey Univ., New Zealand), Kohei Yamanoe (Osaka Univ., Japan), Jiří Olejníček, Michal Kohout (Academy of Sciences of the Czech Republic, Czech Republic), Yusuke Horiuchi (Nagoya Inst. of Tech., Japan), Yu Haoze, Nobuhiko Sarukura (Osaka Univ., Japan), and Shingo Ono (Nagoya Inst. of Tech., Japan)

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[P-03-007] 03_1163
Highly Sensitive and Selective Detection of NH\(_3\) by using CuBr Thin Film
Sang-Kwon Kim, Byeong-Hun Yu, and Ji-Wook Yoon (Jeonbuk Nat’l Univ., Korea)
Facile and Rapid Synthesis of Rhombohedral In$_2$O$_3$ Nanoparticles for Highly Sensitive and Selective Detection of Ethanol
Byeong-Hun Yu, Sang-Kwon Kim, and Ji-Wook Yoon (Jeonbuk Nat’l Univ., Korea)

Gas Sensing Mechanism of Pd-Aualloy/SnO$_2$ Nanocomposites Toward Hydrogen Gas
Dong Seog Kim, Mohammad Jamir Ahemad, Thanh Duc Lee, Jeong-Mi Lee, and Yeon-Tae Yu (Jeonbuk Nat’l Univ., Korea)

Multilayer Coatings for Optimized LiDAR Reflection
Young-Seok Kim, Jinyoung Jeong, and Bokyung Cho (KETI, Korea)

Binary Spiky/Spherical Nanoparticle Films with Hierarchical Micro/Nanostructures for High-Performance Flexible Pressure Sensors
Young-Ryul Kim, Minsoo Kim, and Hyunhyub Ko (UNIST, Korea)

Low-Voltage Stretchable Electroluminescent Devices for Sound-in-Display Electronics
Hyejin Lee, Seungse Cho, Dong-Hee Kang, and Hyunhyub Ko (UNIST, Korea)

High-Performance Room Temperature SnS$_2$ Gas Sensor Enhanced by Proton Conduction
Gwang Su Kim, Jung Joon Pyeon, Young Geun Song, Seong Keun Kim, and Chong Yun Kang (KIST, Korea)
Enhanced Ferroelectricity in Porous MXene Composites for Highly-Sensitive Dynamic Tactile Sensors

Jinyoung Kim (UNIST, Korea), Yeoheung Yoon (KRICT, Korea), Geonyoung Jeong, Seungyeon Yu, Jonghwa Park, Youngoh Lee, Soowon Cho, Jeonghee Yeom, Youngsu Lee, Ayoung Choe, Young-Ryul Kim, Chunggi Baig (UNIST, Korea), Ki-Seok An (KRICT, Korea), and Hyunhyub Ko (UNIST, Korea)

Highly Transparent, Flexible, and Self-Healable Thermoacoustic Loudspeakers

Hyunhyub Ko, Dong-Hee Kang, Seungse Cho (UNIST, Korea), Sujin Sung (KRICT, Korea), Young-Ryul Kim, Hyejin Lee, Ayoung Choe, Jeonghee Yeom, Minsoo Kim (UNIST, Korea), Seung Man Noh, and Jin Chul Kim (KRICT, Korea)

Amphibian-Inspired Transparent, Skin-Attachable Pressure Sensor with Micro-pillars for Skin Electronics

Da Wan Kim, Yeon Su Lee, Seung Hwan Jeon, and Changhyun Pang (Sungkyunkwan Univ., Korea)

Self-Powered UVC Photodetector Driven by n-type Eu-MOF/p-type Spiro-OMeTAD Heterojunction

Thi My Huyen Nguyen and Chung Wung Bark (Gachon Univ., Korea)

Diving Beetle-Inspired, Highly Skin-Conformal Patch with Sweat-Drainable and Stretchable Nanocomposite-Based Electrode for Multiplexed Wearable Devices

Hyeong Ho Min, Jihyun Lee, Gui Won Hwang, Jinhyung Kim, and Changhyun Pang (Sungkyunkwan Univ., Korea)

A Full-Range, Low-Power Flexible Humidity Sensor based on a Solution-Processed P(VDF-TrFE)/Graphene Flower Composite

Shenawar Ali Khan and Woo Young Kim (Jeju Nat’l Univ., Korea)
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**[P-03-020]** 03_1448

Ion Gel-Based Deformable Shear Sensor Array for Monitoring the Shear Distribution and Shear Force
Wonjeong Suh, Salma Faiz, Yebin Park, and Unyong Jeong (*POSTECH, Korea*)

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**[P-03-021]** 03_1458

Luminescence Characteristics of a Double Perovskite $\text{Ca}_2\text{LaNbO}_6: \text{Mn}^{4+}$ Phosphors for $\text{Mn}^{4+}$ Ion Concentrations
Jong Won Chung, Hyun Kyoung Yang, and Byung Kee Moon (*Pukyong Nat’l Univ., Korea*)

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**[P-03-022]** [Offline] 03_1476

Perovskite UVC Detector with Added Methylammonium Halide
Gain Choi and Hyung Wook Choi (*Gachon Univ., Korea*)

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**[P-03-023]** 03_1533

Nitric Oxide Detection of Quantum Dot Nanostructured Materials via Fluorescence Energy Transfer
Chang-Yeoul Kim and Eunhoe Koo (*KICET, Korea*)

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**[P-03-024]** 03_1561

Ultra-High Response H2 Gas Sensor based on Schottky Junction of Pt and SnO$_2$ Thin Film for Flexible Application at Room Temperature
Vo Thanh Duoc (*Hanoi Univ. of Sci. and Tech., Viet Nam*), Hugo Nguyen (*Uppsala Univ., Sweden*), Chu Manh Hung, Nguyen Van Duy, and Nguyen Duc Hoa (*Hanoi Univ. of Sci. and Tech., Viet Nam*)

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**[P-03-025]** 03_1658

Enhancing the Sensing Performance of a Fully Inkjet-Printed BaTiO$_3$ Capacitive Humidity Sensor by Utilizing Bimodal Inks
Frances Danielle Fernandez and Jihoon Kim (*Kongju Nat’l Univ., Korea*)
Highly Selective and Sensitive Surface Acoustic Wave NO\textsubscript{2} Gas Sensor based on Hybrid GO-PEDOT:PSS Nanocomposite Deposited on Langasite Substrate

Kedhareswara Sairam Pasupuleti, Maddaka Reddeppa, Na-Hyun Bak, Dong-Jin Nam, Yun-Hee Shin (Chungnam Nat’l Univ., Korea), Song-Gang Kim (Joongbu Univ., Korea), and Moon-Deock Kim (Chungnam Nat’l Univ., Korea)


g-C\textsubscript{3}N\textsubscript{4} Quantum Dots Coated AlN Film Based Surface Acoustic Wave Devices: A Promising Platform for Effective NO\textsubscript{2} Gas Detection

Na-Hyun Bak, Kedhareswara Sairam Pasupuleti, Dong-Jin Nam, Maddaka Reddeppa, Yun-Hee Shin (Chungnam Nat’l Univ., Korea), Song-Gang Kim (Joongbu Univ., Korea), and Moon-Deock Kim (Chungnam Nat’l Univ., Korea)

Development of Molecular Imprinted Polymer for Homocysteine Measurement: Biosensors Indicate Cardiovascular Disease

Chiravoot Pechyen, Benya Cherdhirunkorn, Yardnapar Parcharoen, and Suparerk Oonchit (Thammasat Univ., Thailand)

Synthesis and Growth Mechanism of ZnO for Gas Sensor

Se-Hee Shin, Jae-Chul Ro, and Su-Jeong Suh (Sungkyunkwan Univ., Korea)

Charge Transfer Characteristics in CMOS Image Sensors with Vertical Transfer Gates

Jae Hyeon Park and Tae Whan Kim (Hanyang Univ., Korea)

Preparation of CuInO\textsubscript{2} Quantum Dots as a Neurotransmitter Sensor Media

Ho Kyung Lee, Ji Hyeon Kim, and Sang Joon Park (Gachon Univ., Korea)
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[P-03-032]  [Offline] 03_1862
Withdrawn

[P-03-033]  03_2032
Optimization of In$_2$O$_3$ Nanowires Grown by On-Chip for Enhanced Gas Sensing Performance
Nguyen Hoa, Son Dang-Ngoc, and Nguyen Duy (Hanoi Univ. of Sci. and Tech., Vietnam)

[P-03-034]  03_2085
Wireless Temperature and Humidity Sensors using Reduced Graphene Oxide for Continuous and Real-Time Monitoring
Young Won Kim, Sang Jun Kim, and Jung Woo Lee (Pusan Nat’l Univ., Korea)

[P-03-035]  [Offline] 03_2132
Highly Sensitive and Label-Free Detection of Circulating Cancer Biomarker based on Metal-Enhanced
Chaima Amri and Jin-Ho Lee (Pusan Nat’l Univ., Korea)

[P-03-036]  03_2162
An Unconventional Route to Hierarchical Structuring of Nanodots via Organic-Inorganic Transition
Myunghwan Byun (Keimyung Univ., Korea)

[P-03-037]  03_2184
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Hyoun Woo Kim, Jae Hoon Bang, Ha Young Lee, Ka Yoon Shin, Dong Jae Yu, Suk Woo Kang, and Sachin Tatyasaheb Navale (Hanyang Univ., Korea)
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Synthesis of ZrO₂ Shell Nanowires for the Detection of Chemical Resistance of NO₂ Gas
Hyoun Woo Kim, Jae Hoon Bang, Ha Young Lee, Ka Yoon Shin, Dong Jae Yu, Suk Woo Kang, and Sachin Tatyasaheb Navale (Hanyang Univ., Korea)

[P-03-039] 03_2200

C₂H₅OH Gas Sensing Properties of Spinal NiCo₂O₄ Nanostructures
Sachin Navale (Hanyang Univ., Korea), Peijiang Cao, Florian Stadler (Shenzhen Univ., China), Hyoun Woo Kim (Hanyang Univ., Korea), and Sang Sub Kim (Inha Univ., Korea)

[P-03-040] 03_2201

Sulfate-Functionalized Hafnium-Organic Frameworks as NH₃ Gas Sensors
Dong Hoon Yang, Jin-Young Kim (Inha Univ., Korea), Sachin Navale (Hanyang Univ., Korea), Myung Sung Nam (Inha Univ., Korea), Doan Le Hoang Tan, Phan Bach Thang (Vietnam Nat'l Univ., Vietnam), Hyoun Woo Kim (Hanyang Univ., Korea), and Sang Sub Kim (Inha Univ., Korea)

[P-03-041] [Offline] 03_2255

Chromogenic Detection of Hydrogen Sulfide using Squarylium-Based Chemosensors
Hye W. Chun, Ha Lim Noh, Byeong M. Oh (Ajou Univ., Korea), Young Ki Park (DYETEC, Korea), Junyeop Lee, Jae Keon Kim (KITECH, Korea), Jian Zheng (Lingnan Normal Univ., China), Daewoong Jung, Woosung Lee (KITECH, Korea), and Jong H. Kim (Ajou Univ., Korea)

[P-04-001] [Offline] 04_1071

Printable Carbon-Based Nanocomposites for Flexible/Wearable Electronic Applications
Jun-Young Jeon, Byeong-Cheol Kang, Sang-Joon Park, and Tae-Jun Ha (Kwangwoon Univ., Korea)

[P-04-002] 04_1258

The Effect of V Addition on Mechanical and Physical Properties of the 3xxx Aluminum Alloy Sheets
Cheol Woo Kim, Jun Ko, Hyo Sang Yoo, Young Chan Kim (KITECH, Korea), Jong Kook Lee (Chosun Univ., Korea), and Jae Yeol Jeon (KITECH, Korea)
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Flexible, Bioresorbable PLGA Multi-Channel Waveguide for Optogenetics
Myeongki Cho, Mingyu Sang, Jungmin Suh, and Ki Jun Yu (Yonsei Univ., Korea)

Origami-Based Flexible 3-Dimensional Neural Electrode Array for Brain Mapping and Single Spike Correlation of Both Surface and Intracortical Multi-Layer
Juyoung Lee, Sanghoon Park, Younguk Cho (Yonsei Univ., Korea), Uijin Jeong, Il Joo Cho (KIST and Korea Univ., Korea), and Ki Jun Yu (Yonsei Univ., Korea)

Silicon Nanomembrane-based Flexible Gas Sensing System Integrated with Bluetooth System
Ki Jun Yu, Jongwoon Shin, Kyubeen Kim, and Selin Lim (Yonsei Univ., Korea)

Wireless and Stretchable Multi-Point and Multi-Directional Strain Sensor based on Conductive Elastomer
Kyubeen Kim, Junghoon Hong, and Ki Jun Yu (Yonsei Univ., Korea)

Mechanical Properties of Thin Metal Film on the Clear Polyimide Film by Sputtering Process
Hyoujni Lee, Dohyeon Jeong, youngho Ko, and Chan-Jae Lee (KETI, Korea)

Skin-Colored Stretchable Electronics with Heat Radiation and Stress Monitoring
Joo Ho Yun, Gil Ju Lee, Min Hyung Kang, and Young Min Song (GIST, Korea)

Characteristics of the Polyaniline Thin Film Prepared by using Atmospheric Pressure Plasma Polymerization for Flexible Optoelectronic Application
Gyu Tae Bae, Iqbal Shahzad, Eun Young Jung, Hyo Jun Jang (Kyungpook Nat’l Univ., Korea), Choon-Sang Park (Kansas State Univ., USA), Jae Young Kim, and Heung-Sik Tae (Kyungpook Nat’l Univ., Korea)
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[P-04-010] 04_1480

Effects of V and Mg Additions on Recrystallization Behaviors of 3XXX Aluminum Alloy Sheets
Jun Ko, Cheol-Woo Kim, Hyo-Sang Yoo (KITECH, Korea), Jong-Kook Lee (Chosun Univ., Korea), and Jae-Yeol Jeon (KITECH, Korea)

[P-04-011] 04_1643

Characteristics of Highly Sensitive Pressure Sensor based on a Composite Structure Comprising MXene (Ti₃C₂Tx) and Nylon/Polyesters Fibers
Su Bin Choi, Jung-Min Oh, Hanjung Kwon, Jae Won Lim, and Jong-Woong Kim (Jeonbuk Nat’l Univ., Korea)

[P-04-012] 04_1678

Quiltable E-Textiles based on Interfacial Ionic Bonding for Wearable Electronics
Seung Hyun Kim and Heung Cho Ko (GIST, Korea)

[P-04-013] 04_1737

Finite Element Analysis of Flexible Microelectronic System under Bending Stress
Cha-Hee Kim (Sejong Univ., Korea), Seung-Ho Seo (GO Element Co., Ltd., Korea), and Won-Jun Lee (Sejong Univ., Korea)

[P-04-014] 04_1762

Simultaneous Improvement in the Corrosion Resistance and Visible Transparency of ZnO/Cu/ZnO Transparent Heaters with Reactively Sputtered Al₂O₃ Layers
Hyejin Kim and Dooho Choi (Dong-Eui Univ., Korea)

[P-04-015] 04_1773

Thermally Stable Al-Based Amorphous Alloy for Fabrication of EMI Shielding Film for Flexible PCB
Ye-Seul Song, Eunseong Yang, Min-Gi Kwak, Youngmin Kim, and KeumHwan Park (KETI, Korea)
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[P-04-016] 04_1789

3D Printing of Piezoelectric Polymer Composites for Flexible Energy Harvester Applications
Sang-Mi Chang (Korea Univ., Korea), Sunghoon Hur, Hyun-Cheol Song (KIST, Korea), and Chong-Yun Kang (Korea Univ., Korea)

[P-04-017] 04_1854

A Study on the High Efficiency Perovskite Solar Cells using Evaporator
Minji Jeong and HyoSik Chang (Chungnam Nat’l Univ., Korea)

[P-04-018] [Offline] 04_1856

Visibly Transparent, Electrically Conductive and Mechanically Flexible Planar Metallic Film Heaters
Dooho Choi (Dong-Eui Univ., Korea)

[P-04-019] [Offline] 04_1874

Ethylene Gas Removal using Pt-Loaded Zeolite/WO3 Nanocomposites for Fruit Freshness
Byeongmoon Yoo, Seok-Hun Kim, Hyeonsu Jo, and Sunghoon Kim (Dong-Eui Univ., Korea)

[P-04-020] [Offline] 04_1895

Flexible, Transparent Organic and Quantum dot Light Emitting Diodes with Silver Nanowires Embedded Polyimide Substrate
Woojin Kim and Jae-Wook Kang (Jeonbuk Nat’l Univ., Korea)

[P-04-021] 04_1996

Preparation of Low-Oxygen Ti3AlC2 MAX Phase by Contact and Non-Contact Deoxidation
Jae-Won Lim, Suheung Chae, Hanjung Kwon, and Taeheon Kim (Jeonbuk Nat’l Univ., Korea)

[P-04-022] [Offline] 04_2002

Rapid and Highly Accessible Microfabrication Process of Flexible Electronics for Wearable Multi-Functional Physiological Monitoring
Jiman Youn, Chae Hyun Kim, Dong Hyeon Lee, and Joonsoo Jeong (Pusan Nat’l Univ., Korea)
Development of Stretchable Conductive Composite with Internal Structure using Hydrophilic Solution

Sungmook Jung, Jeonghwan Park, Youngmin Choi, Su Yeon Lee, and Taesu Kim (KRICT, Korea)

Withdrawn

Study on the Influence of Magnetic Force on Magnetic Conductive Materials

Ha Dong Yeon, Jonghyun Kang, Su Yeon Lee, Taesu Kim (KRICT, Korea), Jinseong Park (Hanyang Univ., Korea), Youngmin Choi, and Sungmook Jung (KRICT, Korea)

Withdrawn

Facile Fabrication of rGO Multi-Functional Sensor With Laser Ablation

Hae-In Moon, Gil Ryeong Park, Yujin Shin, Yeoul Kang, Minsu Kim, and Jung Woo Lee (Pusan Nat’l Univ., Korea)

Aluminum-Air Battery with Multiple Degree of Deformation

Sangjin Choi, Gwangmook Kim, Jooho Moon, and Wooyoung Shim (Yonsei Univ., Korea)

Graphene Oxide Based Membrane for Salinity Gradient Power Generation

Sungsoon Kim and Wooyoung Shim (Yonsei Univ., Korea)

Layered Reduced Graphene Oxide Sheets for Liquid Sodium Electrode

Dana Jin (Yonsei Univ., Korea), Keeyoung Jung (RIST, Korea), and Wooyoung Shim (Yonsei Univ., Korea)
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[P-04-031] 04_1065

High-Mobility Semi-Dimensional Electron Cloud Thin-Film Transistor using Low-Temperature Atomic Layer Thin-Film Deposition Method

Hyungtak Seo, Heecheol Shin, Jaeseong Lim, Hyo Bin Choi, and Wanggon Lee (Ajou Univ., Korea)