

: 우수논문발표상 응모

## 포스터발표(I)\_10월 1일(화)

(09:00 ~ 10:30)

좌장: 김 민, 박성준

## 우수논문발표상

## | 에너지 부문위원회 |

- 1PS-1** Integrated Solid Electrolyte-binder System with Semi-interpenetrating Polymer Network for Silicon Anode in Lithium-ion Battery  
하진희, 김덕준, 성균관대학교
- 1PS-2** The Influence of Side Chain Structure of Acrylic Binders for Si Anodes  
최현빈, 이동윤, 경북대학교
- 1PS-3** Plastic Crystal-Based Composite Elastomer Electrolytes: Achieving High Lithium-Ion Conducting and Stable Lithium-Metal Batteries  
조아현, 제지향, 최우혁, 인하대학교
- 1PS-4** Electrolyte Engineering to Improve Performance of a Phenoxazine-based Organic Electrode Material in Li-Organic Batteries  
조동현, 권민상\*, 권지연, 한국과학기술연구원; \*서울대학교
- 1PS-5** 아이오딘 흡착 수계 PAA 바인더를 활용한 아연-아이오딘 배터리의 서클링 현상 억제  
정주원, 송우진, 충남대학교
- 1PS-6** Consecutive Deposition of Passivated Zinc Oxide Nanoparticles for Stable Charge Transport in Inverted Organic Photo-Electronics  
정재현, 임지현, 김민수, 박형욱, 강웅식, 왕동환, 중앙대학교
- 1PS-7** 실리콘 음극의 안정성 향상을 위한 3차원 가교 폴리아크릴산-붕산 바인더 설계  
이혜영, 송우진, 충남대학교
- 1PS-8** 고성능 리튬 이온 배터리를 위한 높은 이온전도성을 가진 3차원 가교 폴리머 바인더 설계  
우상현, 송우진, 충남대학교
- 1PS-9** 고속 리튬 이온 배터리를 위한 비용매 유도 상 분리(NIPS) 기반 폴리도파민 개질 PVDF-HFP 분리막  
김진철, 송우진, 충남대학교
- 1PS-10** Triggered Lithium-conductive and Flexible Solid Electrolyte Membrane Based on PAES-g-2POSSPEG for Wide Temperature Lithium-sulfur Batteries  
강지수, 김덕준, 성균관대학교
- 1PS-11** Development of Gel Polymer Electrolyte for Stable Lithium Metal Anodes in Lithium-ion Batteries  
전혜린, 엄태식, 홍익대학교
- 1PS-12** Tunable 6FDA-Based PI Graft Copolymer for Enhanced CO<sub>2</sub> Separation with Microphase Separation  
이지은, 지원석, 전남대학교
- 1PS-13** Toughened Poly(Acrylic Acid)-based Interconnected Network Binder for High-Performance Silicon Anodes  
이승재, 안석균, Anjali, 부산대학교
- 1PS-14** Tailor-Made Polynorbornene Binders for Silicon Anodes in Lithium-Ion Batteries  
이승우, 안석균, 부산대학교
- 1PS-15** Functionalized Carbon Nanotube Composite in Catalyst Layer for Increased Water Splitting Performance  
이수현, 김대우, 연세대학교
- 1PS-16** Poly(aryl piperidinium)-Based AEMs Utilizing Spirobifluorene as a Branching Agent  
유근웅, 권민상, 서울대학교
- 1PS-17** Poly(acrylic acid)-based Blended Membranes with Highly-Loading Poly(ethylene glycol) for CO<sub>2</sub> Separation  
안은지, 지원석, 전남대학교
- 1PS-18** 분리막 미세구조에 따른 리튬이온전지 전기화학적 성능과 안정성 상관관계 분석  
서준표, 최승엽, 이용민, 연세대학교
- 1PS-19** Development of Glycol Gel Electrolytes for Supercapacitors Operable in Extreme Environments  
전나경, 박소연, 정태훈, 한지훈, 강우석, 김세현, 조창신, 김연수, 포항공과대학교
- 1PS-20** Development of Carbonized Conductive Polymer/Lignin Composites Anode for Lithium-ion Batteries  
김한미르, 엄태식, 홍익대학교

## | 에코소재 부문위원회 |

- 1PS-21** Enhancing Flame Retardancy and Mechanical Properties of Polymer Composites *via* Mechanochemistry  
한아영, 방준하\*, 박종혁, 한국과학기술연구원; \*고려대학교
- 1PS-22** Biodegradable Nanocomposites Based on Surface-Modified Cellulose Nanofibers with Enhanced Compatibility and Mechanical Properties  
조고은, 권하늬, 최기원\*, 장한결\*\*, 홍평화, 김재우\*\*, 정현욱\*\*\*, 김용주\*\*\*, 방준하\*\*\*, 홍성우, 한국생산기술연구원; \*한양대학교; \*\*한국과학기술연구원; \*\*\*고려대학교
- 1PS-23** Microencapsulation of Biodegradable Polymers to Control Degradation  
임소진, 강동구, 인천대학교
- 1PS-24** Improved Foam Stability on Vertical Surfaces Using Lignin-based Biodegradable Materials for the Removal of Toxic Agents  
이유진, 홍진기, 연세대학교
- 1PS-25** Efficient and Economical Glycolysis Depolymerization of Poly(ethylene Terephthalate) Using a Recoverable Polyelectrolyte Catalyst  
김용수, 이영원\*, 나종길\*, 김형준, 서강대학교; \*이화여자대학교
- 1PS-26** Synthesis of Novel Crystalline Diblock Copolymers of Poly( $\gamma$ -Phenyl)- $\epsilon$ -caprolactone and Poly(L-Lactide) Using Ring Opening Polymerization  
김무현, 권용구, 인하대학교
- 1PS-27** Carbohydrate Chemistry Approach for Lead Ion Capture and Sustainable Display in Perovskite Devices  
Anh Khoa Le, Hobeom Kim\*, Gwangju Institute of Science and Technology; \*School of Materials Science & Engineering

## | 콜로이드 및 분자조립 부문위원회 |

- 1PS-28** Utilisation of an Eco-friendly Water-in-water Emulsion Formulation for UV Protection  
최수빈, 이은석, 박지은, 김예린, 최서영, 황준필\*, 김규한, 서울과학기술대학교; \*코스메카코리아
- 1PS-29** Formulation of Water-in-Oil High Internal Phase Emulsions with Hydrophobic Coated TiO<sub>2</sub> particles  
최서영, 김예린, 김규한, 서울과학기술대학교
- 1PS-30** Direct Grafting of Organic Ligands onto Inorganic Nanocrystals for Enhanced Electrical Interactions with Conjugated Polymers  
진우석, 김서연, 정재한, 서울과학기술대학교
- 1PS-31** Ultra-tough and High-resilient Mechanochromic Fibers Towards Real-world Stress Detection  
정유진, 김대석, 부경대학교
- 1PS-32** Controlling the Interconnectivity of Macroporous Polymeric Films *via* Emulsion Templating Method  
정아린, 이은기, 오동근, 김규한, 서울과학기술대학교
- 1PS-33** Room-Temperature Nickel Doped Cesium Lead Bromide Quantum Dots for Enhanced Luminescence Properties and Phase Stability  
임태용, 김진영, 장웅식, 왕동환, 중앙대학교
- 1PS-34** Elastic Photonic Crystals with Mechanochromism in Full Visible Range  
이환영, 김신현, 한국과학기술원
- 1PS-35** Stress-Induced Mechanochromism in Cholesteric Liquid Crystal Elastomers Embedded in PDMS  
이혜준, 김대석, 부경대학교
- 1PS-36** Enhanced Surface Decontamination of Radioactive Cs, Sr by Strippable Catechol Terminated Polyurethane Coating  
이재승, 김동현, 백명진, 정예원\*, 양희만\*, 이동욱, 울산과학기술원; \*한국원자력연구원
- 1PS-37** Organic Phase Change Material Composite with Segregated Thermally Conductive Filler Structure for Efficient Heat Dissipation  
이동훈, 김재빈, 부산대학교
- 1PS-38** Superior Strain Recovery of Acrylic Pressure-Sensitive Adhesives Using a Polyurethane Diacrylate  
이건우, 이진훈, 이진호, 서지현, 백명진, 이동욱, 울산과학기술원
- 1PS-39** Cationic Nanocellulose Membrane Interfaces for Advanced Colloidal Systems in Oil Purification  
신재현, 서복기, 김진웅, 성균관대학교
- 1PS-40** POx-b-PCL Amphiphilic Copolymers for Nanoemulsion Stabilization and Enhanced Transdermal Drug Delivery  
서용인, 양종렬, 김진웅, 성균관대학교
- 1PS-41** Achieving High Stability in Water-in-Water Emulsions Using Surface-Modified Colloidal Particles  
김예린, 이은석, 김규한, 서울과학기술대학교
- 1PS-42** Studying the Adhesion Mechanism of XDI-PU and H<sub>6</sub>XDI-PU Using a Surface Forces Apparatus  
권하은, 신상빈\*, 박현욱, 유영창\*, 안도원\*, 백명진, 이동욱, 울산과학기술원; \*한국화학연구원
- 1PS-43** Inorganic UV Filters Coating Strategy Based on Polyphenol Chemistry for UV to High-energy Visible Light Protection  
최새한, 라피아, 김정아, 남윤성, 한국과학기술원
- 1PS-44** Largely Enhanced Electromagnetic Absorption In Gradient-structured MXene/ZIF-8@ZIF-67/CNT Composite Films for Efficient EMI Shielding  
장정민, 김선준, 김대우\*, 한국과학기술연구원; \*연세대학교
- 1PS-45** The Effect of Solvents Dielectric Constant in the Phase Behavior of Complex Coacervation in Polymerized Ionic Liquids (PILs)  
신조원, 신하운, 김형준, 서강대학교
- 1PS-46** Electrochemically Deposited Nanoarchitected Grating Nanoporous Metal Film Using Block Copolymer Micelle for Ultra-sensitive SERS Platform  
박지수, 문영균, 김가현, 전희지, 김재은, 김정훈, 연세대학교
- 1PS-47** Highly Robust Multilayered Collagen-lipid Nanovesicles for All-trans-retinol stabilization and Efficient Skin Delivery  
라피아, 장지희\*, 이준배\*, 남윤성, 카이스트; \*코스맥스
- 1PS-48** Advanced Full-Color Perovskite Nanocrystal Patterning for Next-Generation Ultrathin Skin-Attachable Displays  
김지원, 권종익, 박규리\*, 이광현, 장재홍, 성낙준\*, 김서영\*, 유지수, 이경훈\*, 마현종\*, 갈민지, 신태주, 송명훈, 양지웅\*, 최문기, 울산과학기술원; \*대구경북과학기술원
- 1PS-49** Self-powered Finger Motion-sensing Structural Color Display Enabled by Block Copolymer Photonic Crystal  
김지원, 박철민, 김태빈, 장지혜, 정종건, 연세대학교
- 1PS-50** The Performance Differences between the Hydrophilic Segments of PIPOX and PEG  
김신철, 김세영, 단국대학교
- 1PS-51** Morphological Variations of Colloidal Chains from Diblock Copolymer Micelles by Altering Cross-linked Cores  
김수빈, 강동희, 손병혁, 서울대학교
- 1PS-52** Pinning Control of Droplet Contact Line on Phase-Change Lubricant-Impregnated Surface  
김민재, 심원미, 우상혁\*, 중앙대학교; \*중앙대학교 화학공학과
- 1PS-53** Optimizing Shear-induced Alignment of 2D Colloids depending on Interparticle Interactions  
김건웅, 김소연, 서울대학교
- 1PS-54** Colloidal Clusters of Hollow Silica Nanospheres for Enhanced UV Scattering  
김가민, 이기라, 포항공과대학교
- 1PS-55** Switching the Surface of MXene to enable Surface Modification Based on General Carbon Chemistry

1PS-56	고수진, 김대우*, 김선준, 한국과학기술연구원; *연세대학교
	Nb <sub>2</sub> CT <sub>x</sub> MXene for Fast Charging Lithium Metal Batteries
	구종민, Shakir Zaman*, School of Advanced Materials Science and Engineering/ School of Chemical Engineering, Sungkyunkwan University; *Sungkyunkwan University
1PS-57	Preparation of Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene Epoxy Composite for Multifunctional Applications Shabbir Madad, 구종민, Sungkyunkwan University

| 의료용 고분자 부문위원회 |

1PS-58	Development of Injectable Gelatin/Oxidized Hyaluronic Acid Hydrogels with Improved Mechanical and Biocompatible Properties 조민희, 팜황민, 김다홍*, 박수아*, 허강무, 충남대학교; *한국기계연구원
1PS-59	Double Emulsion Capsule-Embedded 3D Printed Spatiotemporal Drug Delivery System 이효준, 한대훈, 전남대학교
1PS-60	Thermally Triggerable and Electrically Conductive Bioadhesives for Detachable Skin-interfaced Electronics 이준학, 최연식, 연세대학교 신소재공학과
1PS-61	Adiponectin-Based Peptide-Conjugated Heparin Hydrogel for Keloid Scar Treatment 이승찬, 김혜민, 건국대학교
1PS-62	An Electro-Ferropotonic Nanocomplex for Spatiotemporally Controlled Cancer Ferroptosis <i>via</i> Irreversible Electroporation 이석희, 김세나*, 박우람, 성균관대학교; *메디아크
1PS-63	Glucosamine-mediated NK Cell Surface Engineering for Targeting Glioblastoma 유민선, 김교범, 동국대학교 서울캠퍼스
1PS-64	Polyvinylpyrrolidone-Functionalized High-Z Inorganic Nanoparticles for Enhanced Cancer Radiotherapy 신승용, 김세나*, 박우람, 성균관대학교; *메디아크
1PS-65	Long-term Stable Antibacterial and Biocompatible Polymer Coating on Contact Lenses for the Prevention of Keratitis 선상윤, 박나현, 임성갑, 한국과학기술원
1PS-66	Poly(lactic Acid)-based Multifunctional Porous Microspheres Loaded with Oncolytic Spores for Imaging-guided Cancer Therapy 백기현, 김세나*, 최성욱**, 박우람***, 성균관대학교; *메디아크; **가톨릭대학교; ***융합생명공학과
1PS-67	Octopus-Inspired Microneedle Patch with High Tissue Adhesion and Minimal Tissue Damage 남기영, 한대훈, 전남대학교
1PS-68	Synthesis and Characterization of Chitosan-TPP Nanoparticles for Oral Administration of DNA Vaccines 박윤서, 정예진, 김남두, 박용해, 국립공중대학교
1PS-69	Interlocking 3D-Printed Tetrapod-Structured Bone Fillers for Enhanced Bone Regeneration 마 크, 이규의, 경북대학교
1PS-70	Innovative Multimeric Genomic Hydrogel for Efficient and Reusable Cell-free Protein Synthesis <i>via</i> Dual Plasmid Multi-primed Chain Reaction 김태현, 이종범, 지윤빈, 문성현, 서울시립대학교
1PS-71	PEG-PLGA Nanoparticles as a Dual ETAR and ETBR Antagonist Delivery Platform to Promote Tumor Microenvironment Remodeling 김정윤, 손소영, 신정민*, 박재형, 성균관대학교; *국립한국교통대학교
1PS-72	Advanced Glioblastoma-Targeted Aptamer Discovery by 3D Cell-SELEX with Hyaluronic Acid Hydrogel 김정연, 백지음, 이화여자대학교
1PS-73	Injectable Composite Hydrogel with Sequential Therapy for Chronic Wound Healing 김은형, 신홍수, 한양대학교
1PS-74	Tissue-Adhesive Drug Delivery System for Drug-Induced Skin Regeneration 김유진, 이규의, 경북대학교
1PS-75	Injectable and Dual-crosslinkable Biohybrid Thermogel for Tissue Engineering Applications 김성은, 이은진*, 이영주, 신홍수*, 허강무, 충남대학교; *한양대학교
1PS-76	Cell Surface Engineering-Mediated Secretion Sensing System in Dynamic Hydrogels to Unveil Mechanobalancing Therapeutic Targets for Pulmonary Fibrosis 공원희, 백지음, 이화여자대학교

| 분자전자 부문위원회 |

1PS-77	A Study of Unusual Super-Large Red-Shifted Absorption in Quinoid Molecules Based Supramolecular Chiral Assemblies for NIR-range Chiral Optoelectronic Device Application 홍정진, 최연수*, 김윤슬**, 백정우, 김영호, 송건창, 노민주, 김동우, 광주과학기술원; *한국화학연구원; **University of Oxford
1PS-78	Physical Unclonable Function and Random Number Generation Based on DNTT/ZnGa <sub>2</sub> O <sub>4</sub> NPs/n-Si Heterojunction Structure 최왕명, 강승미, 유호천, 가천대학교
1PS-79	Stretchable Liquid Metal Joule Heating Electrode with Block Copolymer Dispersant 천재희, 정범진, 부산대학교
1PS-80	Study on Doping Mechanism of Conjugated Polymer <i>via</i> Molecular Simulation 조유빈, 이태경, 경상국립대학교
1PS-81	Planar Heterojunction Organic Photodetectors with Enhanced Air Stability 조소현, 박상신*, 손성윤*, 이병훈, 이화여자대학교; *광운대학교

1PS-82	Carbazole-based Interfacial Engineering on NiO <sub>x</sub> Inorganic Hole Transport Layer for Highly Bright and Efficient Perovskite Light-emitting Diode 이형도, 조희찬, 한국과학기술원
1PS-83	Highly Bright, Efficient Deep-Blue Perovskite Light-Emitting Diodes with Solid-State Halide Exchange 이준서, 조희찬, 한국과학기술원
1PS-84	High-Performance Insulating EMI Shielding Film Blending 2D Oxide Perovskite and MXene Nanosheets 이은경, 박종혁, 조경준, 한국과학기술연구원 전자과솔루션융합연구단
1PS-85	Two-in-One Molecule for Single-Component Exciplex Host in Solution- Processed TADF-OLEDs 이예서, 곽하은, 박재영, 권수빈, 김신영, 조민주, 최동훈, 고려대학교
1PS-86	One-step Synthesis of Ultrathin, Solvent-resistant, Intrinsically Stretchable Polymer Dielectrics for Electronic Skin Systems 강주연, 윤지용*, 이보현, 김주찬, 최준환**, 손동희*, 임성갑, 한국과학기술원; *성균관 대학교; **단국대학교
1PS-87	Implementation of Long-term plasticity in OECT Memory Using Ferroelectric Polymers and Ionic Liquids 이민섭, 정범진, 부산대학교
1PS-88	Computational Study on Impact of Multifaceted Anchoring Ligands on CsPbI <sub>3</sub> Perovskite Quantum Dots 이동규, 이태경, 경상국립대학교
1PS-89	Refined Vertical Phase Separation in Layer-by-Layer Organic Solar Cells through Independent Processing Additive Control 이다민, 박창우, 함가영, 차효정, 경북대학교
1PS-90	Highly Efficient Printed Quantum Dot Light-emitting Diodes through Ultrahigh-definition Double-layer Transfer Printing 윤지수, 최문기, 양지용*, 현택훈**, 이경훈*, 울산과학기술원; *대구경북과학기술원; **서울대학교
1PS-91	Synthesis of Fluorinated Hole Transporting Materials to Enhance Quantum Dot Light-Emitting Diodes Performance 윤성주, 엄두현, 김봉수, UNIST
1PS-92	Multi-threshold Transistors Based on Self-Stratified Heterojunctions 오한별, 김진현, 손민균, 김현우, 안희찬, 수 닐, 김민성, 권현민, 조새벽, 성균관대학교
1PS-93	Chemosensory Synaptic Device Based on Amine-Functionalized Semiconductor Polymer Network for Gas Recognition 엘비스, 권현민, 오하영, 임하영, 김도환, 한양대학교
1PS-94	Introduction of Size-Controlled Bulk-Heterojunction Nanoparticles for Organic Photodetectors 송건창, 김영호, 홍정진, 백정우, 김동우, 광주과학기술원
1PS-95	Synthesis and Photophysical Analysis of Chiroptical Quasi-Epitaxial Heterostructure 손민균, 김진현, 수 닐, 권현민, 오한별, 김민성, 김현우, 안희찬, 조새벽, 성균관대학교
1PS-96	Heterojunction N-shape Switching Transistors with Metal Oxide and Small Molecules for Random Number Generation and Spiking Neural Networks 서주형, 강승미, 유호천, 가천대학교
1PS-97	Inducing Chirality to Conjugated Polymer for CISS Effect-based Spin Transistors 백정우, 문이나, 송건창, 김영호, 홍정진, 김동우, 광주과학기술원
1PS-98	Structure Design of Solid Additive Assisted Photoactive Layer with Multi Step Deposition for Charge Injection Mitigated Organic Photodetectors 박형욱, 임지현, 김민수, 장웅식, 왕동환, 중앙대학교
1PS-99	Effect of Host Molecular Weight on Device Performance in Solution- Processed TADF-OLEDs Using Sterically Shielded MR Emitters 박재영, 김신영, Nagaraju Peethani, 곽하은, 권수빈, 이예서, 조민주, 최동훈, 고려대학교
1PS-100	Physically Driven Curve Modulation of Gaussian Transistor Based on DNTT/IGZO Heterostructure Anti-ambipolar Operation 박지수, 유호천, 가천대학교
1PS-101	High Conduction Band Polymer Acceptor as a Ternary Component for Indoor Power Generation and Photodiode: Enhanced Photovoltage and Suppressed Dark Current 박종빈, 정상영, 이치형*, 고두현*, 우한영, 고려대학교; *성균관대학교
1PS-102	Exploring the Photophysical Origins of Bichromophoric Organic Single Crystals 권현민, 조새벽, 김진현, 손민균, 김현우, 안희찬, 수 닐, 오한별, 김민성, 성균관대학교
1PS-103	Highly Parallel and Ultra-Low-Power Probabilistic Reasoning with Programmable Gaussian-like Memory Transistors 박정익, 이창현, 최준환*, 이종열, 유호천**, 임성갑, 한국과학기술원; *단국대학교; **가천 대학교
1PS-104	Suppressing Halide Segregation for Spectral-Stable Blue Quasi-2D Perovskite Light-Emitting Diodes 박은하, 조희찬, 산승민, 한국과학기술원
1PS-105	Theoretical Study of Influence of Doping on Efficiency of Perovskite Solar Cells 박상욱, 이태경, 경상국립대학교
1PS-106	Highly Stable Conjugated Polymers with Thermocleavable Side Chains 박상신, 조소현*, 이병훈*, 손성윤, 광운대학교; *이화여자대학교
1PS-107	Design a Strategy to Develop Conjugated Polymers for Soft Electronic Applications 문성모, 손성윤, 광운대학교
1PS-108	Photo-crosslinking and Layer-by-layer Processed OPD with Remarkably Suppressed Dark Current 리우명경, 지민훈, 고서진*, 박병욱*, 우한영, 고려대학교 화학과; *한국화학연구원
1PS-109	Stretchable and Transparent Dry Adhesives for Low-Noise Wearable Biosignal Sensors 노은서, 엄현경, 박희정*, 이향운**, 이정록, 이병훈, 이화여자대학교; *한국기초과학지 원연구원; **이화여자대학교의료원

IPS-110	Achieving Human Brain-level Low Power Consumption in Organic Synaptic Transistors by Employing Water-processable Polymeric All-solid-state Memory Layers 김태훈, 이웅기, 김화정, 김영규, 경북대학교
IPS-111	Toward Human-like Adaptability in Robotics through a Retention-engineered Synaptic Control System 김 찬, 조정호, 노동규, 임동연*, 연세대학교; *Korea Research Institute of Chemical Technology (KRICT)
IPS-112	Mechanistic Study of Multiple Internal Reflections in $Ti_3C_2/Sr_2Nb_2O_{10}$ Heterostructured EMI Shielding Films 김종성, 조경준, 한국과학기술연구원 전자과솔루션융합연구단
IPS-113	Dimensional Control of CsPbI <sub>3</sub> Perovskite Colloidal Nanocrystals by Surface Ligand Adjustment for Optoelectronic Devices 김재현, 김지건, 김영훈, 국민대학교
IPS-114	Enhanced Flexibility, Performance and Oxidation Stability of Micro-Supercapacitors Fabricated by Direct-Ink-Writing of MXene and PEDOT 김유진, 이승구, 김다예, 이나경, 울산대학교
IPS-115	Effect of Fluorine Substitution and Structural Asymmetry on Supramolecular Chirality in Quinoid Molecules 김영호, 백정우, 김동우, 광주과학기술원
IPS-116	Effects of Plasmonic and Semiconductor Nanocrystals on the Exciton Dynamics of the Conjugated Polymer Aggregate 김연규, 한세교*, 조길원*, 이동기, 세종대학교; *포항공과대학교
IPS-117	Polyelectrolyte Composite with Tailoring of Ion Transport for Improved Mechanical Actuation 김민정, 김도환, 김소영, 최한빈, 한양대학교
IPS-118	High LUMO level Non-fused Ring Electron Acceptor with Compositional Modulation Ternary Strategy for Balanced Organic Photovoltaics and Photodetectors 김민수, 김병기, 장웅식, 왕동환, 중앙대학교
IPS-119	Highly Flexible, Conductive, and Mechanically Robust Electromagnetic Interference Shielding Nanocomposite Films Based on Doped Carbon Nanotube/Conjugated Polymer with Outstanding Folding Reliability 김민선, 안예진*, 권하늬, 홍성우, 김봉기*, 한국생산기술연구원; *건국대학교
IPS-120	Near IR Organic Photodetectors with Plasmonic Nanogap Coplanar Electrodes for Integrated Photonic Circuit 김단비, 임정아, 조정호*, 한국과학기술연구원 (KIST); *연세대학교
IPS-121	Synthesis of Cyclopentadienylphenylene-Based Conjugated Polyelectrolytes with Zwitterionic Side Chains for Organic Electrochemical Transistors 권하임, 우한영, 고려대학교
IPS-122	Quantum Dot-Based Three-Stack Tandem Near-Infrared-to-Visible Optoelectronic Upconversion Devices 권태현, 강문성, 서강대학교
IPS-123	Side-Chain Polymers for Exciplex Hosts in Solution-Processed TADF-OLEDs 권수빈, 곽하은, 박채영, 이에서, 김신영, 조민주, 최동훈, 고려대학교
IPS-124	Photoactive Organic Semiconductor Floating-gate Synaptic Transistor 강승미, 유호천, 가천대학교
IPS-125	Vertically Phase Separated Photomultiplication Organic Photodetectors with p-n Heterojunction Type Ultrafast Dynamic Characteristics 김명인, 강민규*, 이순용*, 정인환, 우한영*, 한양대학교; *고려대학교
IPS-126	Highly Sensitive, Oxidation-Resistant, and Biodegradable Capacitive Pressure Sensor with Origami/Kirigami Design for Wearable Electronics Deristisya Zahra, 이승구, 울산대학교

## | 고분자구조 및 물성 |

IPS-127	Photochemical Patterning of Mechanical Stiffness for Versatile Photomechanical Jumps in Liquid Crystal Polymers 함민정, 조웅비, 전지수*, 위정재, 한양대학교; *Georgia Institute of Technology
IPS-128	A highly Flexible and Transparent Non-fluorinated Polyimide Films with Outstanding Folding Reliability and Light Resistance 한경임, 안찬재*, 임상혁**, 홍성우, 한국생산기술연구원; *삼성전자 종합기술원; **고려대학교 화공생명공학과
IPS-129	Realistic Beef-textured Cultured Meat with Anisotropic Structure Scaffolds Mimicking Muscle Tissue 최범규, 홍진기, 연세대학교
IPS-130	Design of Photoreactive Polymers for Transferable Humidity-Responsive Structural Color Films 진혜인, 윤종선, 이효민, 포항공과대학교
IPS-131	Long-term Aging Effect of MXene Suspension with PVA Additives: Rheological and Structural Properties 조은호, 김소연, 서울대학교
IPS-132	Phase Separation of Complex Colloids by Blending Homopolymers 조규형, 구강희, 울산과학기술원
IPS-133	Application of Chitosan Microbead for Reverse Osmosis Membrane Cleaning 전희정, 황동수, Osman Asila, 강석태*, 김시은*, 최승주*, 포항공과대학교; *한국과학기술원
IPS-134	The Effect of Incorporation of Cellulose Nanocrystal on Polymer Dynamics and Rheological Properties of Polylactic-acid Nanocomposites 정효진, 김소연, 서울대학교
IPS-135	Optimizing the Design of 3D Printed Tracheal Scaffolds: Integrating FEA Simulations and Bioprinting for Enhanced Functionality with Biological Cues 정수빈, 김영*, 신현호**, 이정훈*, 손영주, 류지현**, 권성근, 정지홍, 서울대학교병원; *서울대학교; **원광대학교
IPS-136	Investigating Ionomer Oxidation in Anion Exchange Membrane Water Electrolysis with Different Ionomer Structures

장정민, 이성수, 한국과학기술연구원

IPS-137	Crystallization-Driven Self-Assembly of Stereoblock Copolymers to Form 3D Crystals by Controlling the Stereochemical Sequence of Discrete Poly(D-lactic acid-b-L-lactic acid) 이재환, 김경택*, 서울대학교 자연과학대학; *서울대학교
IPS-138	Surfactant-Like Crosslinker Design Enables Tough and Highly Stable Conducting Polymer Interface 이승연, 강지형, 서울대학교
IPS-139	Simulation Studies of Morphological Diversity in Graft-Linear Block Copolymers (BCPs) 이상엽, 정래현, 최여진, 박재민*, 유용현*, 이은지**, Sheng Li*, 허수미, 전남대학교; *KAIST; **GIST
IPS-140	Photoswitchable Dynamicity in Azobenzene-Based Elastomers While Maintaining Mechanical Robustness 이민우, 강지형, 서울대학교 화학부
IPS-141	Molecular Simulation of Structural and Dynamic Properties of Bioepoxy-based Materials Combined with Machine Learning Analysis 이동욱, 이승우, 정소담, 동의대학교
IPS-142	Enhanced Electrical Conductivity of Carbon Nanotubes Wrapped with Conjugated Polymers via Sequential Cascade Doping 이다영, 안예진, 계효진, 김민선, 김봉기, 건국대학교
IPS-143	Effect of Prepolymer Viscosity and Acrylic Acid Content on the Rheological and Adhesive Behavior of Acrylic PSAs 윤지원, 이동윤, 권미경*, 경북대학교; *대구경북과학기술원 바이오메디컬연구부
IPS-144	Characterization of Phthalate-free Plasticizer-based Polyvinyl Chloride Gels for Electrically Tunable Microfluidic Applications 윤재욱, 오승주*, 한동한*, 우인선*, 허 웅*, 최승은*, 배진우*, 한국기술교육대학교 다기능 섬유기 고분자실험실; *한국기술교육대학교
IPS-145	Molecular Additives-incorporated IDT-BT Thin-film Transistors (TFTs) 윤소영, 정성준, 포항공과대학교
IPS-146	Revealing the Morphological Influence of Doping Ionic Liquid to Cyclic Carbonate-based Block Copolymers 문찬혁, Sheng Li, 한국과학기술원
IPS-147	Synthesis and Characterization of Polyamide Vitriimer from Commercial Nylon 6 and Its Application for High-Temperature Triple Shape Memory Polymer 노국윤, 김동균, 김용석*, 박성민, 한국화학연구원; *세종대학교
IPS-148	Solid-state Crosslinking of Cellulose with Biodegradable Conjugation 김지혜, 이종휘, 중앙대학교
IPS-149	Synthesis and Self-assembly of Glycopolymer-containing Block Copolymers 김지영, Sheng Li, 한국과학기술원
IPS-150	Controlling Twist Rigidity and Molecular Orientation of Polyimides for Realizing Low Dielectric Constant and Dissipation Factor at High Frequency 김지영, 박재희, 하재석, 남기호, 경북대학교
IPS-151	Thermoset Polyurethane Coatings for Automotive Interiors: Optimization of Thermal Curing and Analysis of Thermal Aging Effects 김민지, 김효정, 김현정, 엄영호, 한양대학교
IPS-152	Molecular Simulation of Structural Changes in Sphere Forming Block Copolymer Thin Films under Solvent Vapor Annealing Gabriella Pasya Irianti, Vikram Thapar, 김성운*, 김소연*, 허수미, Chonnam National University; *Seoul National University

## | 고분자가공/복합재료/재활용 |

IPS-153	Viscous Fluid Threads in Microfluidic Focusing Channels 후세인 아사르, 이현상, 동아대학교
IPS-154	Poly-Butylene Adipate Terephthalate (PBAT)/Polybutylene Succinate (PBS) 블렌드 생분해성 분리막 제조 황정선, 김 정, 인천대학교
IPS-155	Enhanced Flame-Retardant Polyurethane Composite by Integrating Isocyanate-Grafted Graphene Oxide for Improved Mechanical and Thermal Properties 황인형, 전윤석, 국립부경대학교
IPS-156	Preparation of Reinforced Composite Membranes Based on Hydrophilic Porous PTFE Modified by Ar/O <sub>2</sub> Plasma Treatment 허 웅, 배진우, 한동현, 윤재욱, 우인선, 최승은, Gajula Prasad, 한국기술교육대학교 다기능 섬유기 고분자실험실
IPS-157	Study on the Thermal Behavior of Polyamide 6 Composites Containing Recycled Phenolic Composite 최인규, 이태민, 양세준, 남병욱, 한국기술교육대학교
IPS-158	High-Performance Stretchable Supercapacitors Based on Liquid Metal-Textile Current Collector 최민영, 구형준, 김지혜, 소주희*, 김성곤**, 서울과학기술대학교; *한국생산기술연구원; **전북대학교
IPS-159	Experimental and Theoretical Study on Wet Spinning Process of Cellulose Nanofiber 최경민, 이현상, 동아대학교
IPS-160	Lignin as a Bio-Adhesive Filler Reinforcing of Photo-curable Resin for Digital Light Processing (DLP) 3D Printing 주윤성, 고종완, 권경민, 남호근, 한국생산기술연구원
IPS-161	Simple Gas-Phase Synthesis of 2D Nanohybrids with Metallic Nanocatalysts for Enhanced Water Splitting 주민성, 윤현석, 전남대학교
IPS-162	Effects of Ligand Structure in Zr-MOFs@Nafion Composite Membrane on Membrane Performances 조용휘, 김대우, 연세대학교



- IPS-163** Innovative Approaches for Developing Stable Emulsified Nickel Pastes for Electronic Applications  
장지훈, 권태균, 청주대학교
- IPS-164** Development of Accelerated Durability Testing Method for Suede Applied to Automotive Seats by Field Simulation  
이혜민, 현대자동차
- IPS-165** Flexible and Lightweight Non-oxidized Graphene Foam-Based Polymer Composite for Effective Electromagnetic Interference Shielding  
이재윤, 전윤석, 국립부경대학교
- IPS-166** Study on Improved Properties of Polypropylene Composite with Recycled Phenol Resin  
양새준, 이태민, 최인규, 남병욱, 한국기술교육대학교
- IPS-167** Thermotropic Liquid Crystalline Polyester/Hollow Glass Microsphere Composites for Low Dielectric PCB Material Applications  
이준협, 정영규, 충남대학교 유기응용재료공학과
- IPS-168** Fully Recyclable and Strong Epoxy Vitrimer with Dual Dynamic Networks for Flexible Electronic Substrates  
이재현, 노지훈\*, 윤여명, 최경환, 강보석\*, 김채빈, 부산대학교; \*성균관대학교
- IPS-169** Biodegradable Carboxymethyl Cellulose (CMC)-grafted Polycaprolactone (PCL) Nanofibrous Membrane for Oil-in-Water Emulsion Separation  
이재욱, 이효민, 포항공과대학교
- IPS-170** Fabrication and Characterization of Composites Based on Glycidyl Methacrylate-grafted Butyl Rubber and Amine-functionalized Carbon Nanotubes  
이신우, 정영규, 충남대학교 유기응용재료공학과
- IPS-171** Investigation of Physical Properties of Polycarbonate/Poly(methyl methacrylate) Blends with Transesterification Reaction under Controlled Reactive Extrusion Conditions  
이시형, 최재학\*, 박성민\*\*, 한국화학연구원/충남대학교; \*충남대학교; \*\*한국화학연구원
- IPS-172** Multifunctional Cathode for Structural Batteries Incorporating a Redox-Active Polymer Matrix Reinforced with Carbon Fiber  
여주환, 권민상\*, 권지연, 한국과학기술연구원; \*서울대학교 재료공학부
- IPS-173** Task Execution *via* Swarm Intelligence of Programmable Magnetic Microrobots  
양기준, 위정재\*, 원수경, 박정은, 전지수\*\*, 한양대학교; \*한양대학교 유기나노공학과; \*\*인하대학교
- IPS-174** Thermal Curing Behavior and Property Characterization of Urushiol/Lignin Blend Coatings  
신예린, 정영규, 충남대학교 유기응용재료공학과
- IPS-175** Pickering Emulsion-Mediated Two-Step Interfacial Assembly of Carbon Film with Catalysts  
서승환, 허지은, 구강희, 울산과학기술원
- IPS-176** Artificial Octopus-Limb-Like Adhesive Patches for Cupping-Driven Transdermal Delivery with Nanoscale Control of Stratum Corneum  
송민우, 황귀원, 이지현, 강균로, 김용대, 김민진, 방창현, 성균관대학교
- IPS-177** Optimization of Mechanical Properties in VMQ/EPDM Rubber Blends  
배소현, 이동윤, 경북대학교
- IPS-178** Fabrication, Microstructure, and Electrochemical Analysis of Poly(azomethine ether)-derived Carbon Nanofibers Coated with Nickel-Cobalt Oxide for Hybrid Electrode Material Applications  
문종호, 정영규, 충남대학교 유기응용재료공학과
- IPS-179** Super-adaptive Metastructured Adhesive Bioelectronics with Conductively Soften Suction Cups for Extremely Deformable Biosurfaces  
강균로, 황귀원, 김진형, 이연수, 방창현, 성균관대학교
- IPS-180** Synthesis of Superhydrophobic Silica Using TEOS and HDTMS *via* Sol-Gel Method: Enhancing Coating Adhesion and Transparency for Solar Panel Applications  
진정훈, 이현상, 동아대학교
- IPS-181** Discontinuous Shear Thickening in high-solid Content of Lithium-ion Battery Anode Slurry  
정유진, 이현상, 동아대학교
- IPS-182** Investigating the Effective Adsorption of Dyes Using ZIF-8/Silk Aerogels for Sustainable Water Treatment  
박영원, 최재원, 경북대학교
- IPS-183** A Polymer Nanocomposite with Ideal Dispersion of Nanomaterials  
박선호, 최연식\*, 연세대학교; \*연세대학교 신소재공학과
- IPS-185** Using Non-toxic and Stable Aramid Nanofiber Suspensions to Make Flame-resistant and Anti-dripping Coatings for Ordinary Plastics  
김현정, 엄영호, 김효정, 김민지, 한양대학교
- IPS-186** Analysis of Graphene Oxide Microstructure and Behavior Using Microchannels  
김현수, 이현상, 동아대학교
- IPS-187** Improving the Performance of Polymer Electrolyte-Based Lithium Metal Batteries with Organic Lithium Additives  
김유진, 장민철, 전남대학교
- IPS-188** 피브로인 과당 가교 필름의 다기능성 향상을 통한 기계적 성능 및 식품 포장재 응용  
김유림, 진형준, 인하대학교
- IPS-189** Stretchable High-Resolution Displays for User-Interactive Synesthesia Encryption through Transfer Printing  
김예원, 유지수, 하수빈, 이광현, 최문기, 울산과학기술원
- IPS-190** Crystalline Thermosetting Polyimides Based on Mesogen-co-Polymerized Phenylethynyl End-Capped Imide Oligomer  
김기영, 남기호, 경북대학교
- IPS-191** Superior Dye Adsorption Performance of Hierarchical Porous SPZ Composite Microgels Fabricated *via* Microfluidic Techniques  
Nann Aye Mya Mya Phu, 장민철, 전남대학교

- IPS-192** Janus Polyurethane Composite Films with Aligned Graphene Fluoride and Liquid Metal for Improved Thermal Conductivity and Electromagnetic Interference Shielding  
Mani Dineshkumar, Sebastian Anand, 김성룡, Korea National University of Transportation

## [가능성 고분자]

- IPS-193** Eco-friendly Water Based Organic Field-Effect Transistor Using Micro-emulsion and Simple Elimination of Surfactant  
황태훈, 이화성, 한양대학교
- IPS-194** Scalable Production of Flexible Phase Change Fibers for Wearable Thermoregulatory Garment  
홍지원, 박성준, 한국과학기술원
- IPS-195** Influence of a Fluorocarbon- and Hydrocarbon-based Hybrid Surfactant on the Preparation of ePTEF based-Reinforced Composite Membranes for Polymer Electrolyte Membrane Fuel Cell  
한동현, 오승주, 윤재욱, 우인선, 허 웅, 최승은, Gajula Prasad, 배진우, 한국기술교육대학교
- IPS-196** Photo-Crosslinked Polymer Networks Based on Triethylene Glycol Methyl Ether Methacrylate for Effective Gel Polymer Electrolytes  
최유주, 이동현, 단국대학교
- IPS-197** Superabsorbent Ion Gel Patch Promoting Ion Dissociation for Accelerating Wound Healing  
최원혁, 김지홍, 신성규\*, 정재현\*, 김도환, 한양대학교; \*승실대학교
- IPS-198** Highly Performance Stretchable All-in-one Electrochromic Devices Based on Non-volatile Plasticized Ionogel  
오승주, 최승은, 한동현, 윤재욱, 우인선, 허 웅, 배진우, 한국기술교육대학교
- IPS-199** Value Addition of Elemental Sulfur into Sulfur-Rich Polymer Composite-based High-Performance Yet Sustainable Triboelectric Nanogenerator  
조웅빈, 김성수, 이현후, 한나라\*, 김현기\*\*, 이민백\*\*, 한태희, 위정재, 한양대학교; \*State University of New York College of Environmental Science and Forestry; \*\*인하대학교
- IPS-200** Effect of Neutralizing Agent on the Coating Thickness and Electrical Properties of Electrophoretically Deposited Polyimide Films  
조경현, 조문정\*, 한진아\*, 한세원\*, 이진홍\*\*, 이태호\*, 부산대학교/한국전기연구원; \*한국전기연구원; \*\*부산대학교
- IPS-201** Formation of Poly(SBMA-co-EGDCPEA) Brushes for Marine Antifouling Applications  
정진혁, 강성민, 충북대학교
- IPS-202** Development of Bioluminescent Transdermal Delivery System for Wound Healing  
정승오, 김혜민, 권우성\*, 조현다\*, 조경주, 건국대학교 화장품공학과; \*숙명여자대학교 화공생명공학과
- IPS-203** Ion-containing Polymers for Simultaneous use as Electrolytes and Binders in Lithium Metal Batteries  
전윤하, 최우혁\*, 인하대학교 고분자공학과
- IPS-204** Tree-mode Human-interactive Display Wirelessly Operated *via* Direct Capacitive Coupling Power Transfer  
장지혜, 김태빈, 정종건, 김지원, 박철민, 연세대학교
- IPS-205** Performance Tunable Multi-sensitive Strain-sensing Fibers for Universal Range of Signal Detection and Sophisticated Motion Decoding  
이윤율, 박성준, 한국과학기술원
- IPS-206** Formation of Amphiphilic Zwitterionic Poly(SBMA-co-IBMA) Brushes for Marine Antifouling Applications  
도지환, 강성민, 충북대학교
- IPS-207** Enhancing the Interfacial between Zinc Anode and Polymer Electrolyte by Single-ion Cosolvent-based Hydrogel Electrolyte  
김기현, 최우혁, 인하대학교
- IPS-208** Fabrication of Food Packaging Films Using a Composite of Ethylene-Vinyl Acetate and Quaternized Chitosan for Improved Food Safety  
장다연, 양형모, 오동진, 오준균, 단국대학교
- IPS-209** 고분자 바인더/도전재 in-situ 혼합과 건식공정을 통한 리튬이온전지 후막전극의 제조  
윤주희, 진형준, 인하대학교
- IPS-213** 3D Chiral Plasmonic Multipatterns for Circularly Polarized Light Detection and Emission  
원유상, 이윤호\*, 문정호\*\*, 이상혁, 김예슬\*\*, 염봉준\*\*\*, Letian Dou\*\*\*\*, 노준석\*\*, 오준학, 서울대학교; \*서울대학교, 성신여자대학교; \*\*포항공과대학교; \*\*\*한양대학교; \*\*\*\*Purdue University
- IPS-214** Bioactive Hybrid Protein Coated Artificial Nerve Conduit for Peripheral Nerve Regeneration  
안세윤, 김별하나, 이주원, 백창훈\*, 정지홍\*, 서울대학교; \*서울대학교병원
- IPS-215** Development of Injectable Sutureless Wound Closure Hydrogel with Hemostatic and Antibacterial Properties  
손가영, 연세대학교
- IPS-216** Elastic Creasing-Induced Multi-Modal Structural Color Shifting in Breath-Responsive Microarchitectures Fabricated via Dithering Mask Lithography  
백태해, 이유빈, 박서경, 김동혁, 이지석, 울산과학기술원
- IPS-217** PFAS-Free Superhydrophobic Xerogel Coatings for Enhanced Antibacterial and Antifouling Performance in Food Safety and Hygiene Applications  
박유진, 김한수, 강병준, 오준균, 단국대학교
- IPS-218** Bio-Compatible Fat-soluble Vitamin K2 as an Electrode Material for Aqueous Zinc-Ion Batteries  
박성진, 김세훈, 유영민\*, 권지연, KIST; \*연세대학교
- IPS-219** Dual Dynamically Crosslinked Chitosan-gallol Conjugate Hydrogel for Strain Sensor  
박규리, 김민희\*, 박원호, 충남대학교; \*경북대학교

1PS-220	Dynamically Crosslinked Poly(vinyl alcohol)-based Strain Sensors for Organ Motion Monitoring 남지우, 김민희*, 박원호, 충남대학교; *경북대학교
1PS-221	Development of Ethylene-vinyl Acetate Copolymer (EVA)-based Nano-silica/Natural Rosin Composite Hot-melt Adhesives with Antibacterial Properties 김채연, 오준균, 단국대학교
1PS-222	Preparation of Porous Carbon Materials from Carboxymethyl Cellulose <i>via</i> Simultaneous Molten Salt-assisted Carbonization and Self-template Activation for Supercapacitors 장준오, 김형진, 강규현, 강상운, 최재학, 충남대학교
1PS-223	Multi-Responsive Smart Ionic Skins and Actuators with Ionic Azobenzene-Based LCEs: Heat, Light, and Mechanical Stimuli-Induced Ionic Conductivity Switching and Shape Actuations 오민택, 정광운, 전북대학교
1PS-224	A New Method to Fabricate High-performance Anion Exchange Membranes for Water Electrolysis 남유진, 최주영, 이경현, 고려대학교
1PS-225	Bayesian Optimization for Tailoring Filler Formulations in Polymer Composite for Efficient Heat Dissipation 나채성, 신상수, 안효성*, 이재근, 김재빈, 부산대학교; *전남대학교
1PS-226	Hierarchically Porous Carbon Materials Prepared from Tannic Acid with Potassium Citrate <i>via</i> Ice-templating Followed by Carbonization for Supercapacitors 김형진, 강규현, 강상운, 장준오, 최재학, 충남대학교
1PS-227	Synthesis and Photolithographic Evaluation of Poly(vinyl alcohol)-based Water-processable Photoresists with Stilbene Groups 김현진, 엄준호*, 최재학, 충남대학교; *충남대학
1PS-228	A Wearable and Durable Organohydrogel Fiber Sensor Based on PVA/Borax/Laponite for Health Monitor 김태인, 박연우, 김민희*, 박원호, 충남대학교; *경북대학교
1PS-229	Membrane-immobilized Bifunctional Peptides on Placenta-derived Mesenchymal Stem Cells (PDMSCs) for the Treatment of Liver Cirrhosis 김은하, 김교범, 동국대학교 서울캠퍼스
1PS-230	Reprogrammable Liquid Crystal Elastomers: Integrating Dynamic Covalent Chemistry 김기웅, 김 현, 한국화학연구원
1PS-231	Suppressing Hydrogen Evolution in N <sub>2</sub> Reduction by Heteroatom Doped Graphene 권준혁, 김성태, 권태혁, UNIST
1PS-232	$\beta$ -cyclodextrin@curcumin Complex-loaded Poly(vinyl alcohol)/quercetin pH-sensitive Nanofibers for Intelligent and Active Food Packaging 구세린, 남지우, 박원호, 충남대학교
1PS-233	Purification of Biomass-based Organic Acid Solution Using Polymeric-Membrane Process 강지은, 김승환*, 김 정, 인천대학교; *경희대학교
1PS-234	Enhanced Viologen-Based Liquid Crystal Networks for Polarization-Dependent and Color-Tunable Electrochromic Smart Windows Pham Huu Huan, 정광운, Jeonbuk National University
1PS-235	Carbon Nanotube-Modified PMMA/PAN Copolymer Blends to Creating High-Surface-Area Electrode for Water Splitting Le Van Cuong, 김상민*, 윤현석*, 전남대학교; *전남대학교 고분자융합소재공학부

## | 고분자 합성 |

1PS-236	Detection of a Nerve Agent Mimic Based on Turbidity 하지현, 임지우, 경희대학교
1PS-237	Double Metal Cyanide Catalysts Bearing Organosilicon Complexing Agents for the Copolymerization of CO <sub>2</sub> and Epoxides to Produce Polycarbonate Polyols 허주영, 김 일, 부산대학교
1PS-238	Enhanced Properties of FDCA-Based Copolyesters: The Role of 1,4-Cyclohexanediolmethanol and 1,3-Propanediol in Creating Superior Biodegradable Plastics 최세훈, 구준모, 충남대학교
1PS-239	Mitigating the Environmental Impact of Thermosetting Plastics through Biomass-Based Citric Acid 조은정, 구준모, 충남대학교
1PS-240	Bactericidal and Anti-adhesive Polymers Containing Cationic and Plant-based Tocopherol Moieties for Coating Applications 조연수, 강 효, 동아대학교
1PS-241	Effect of Hydrothermal Synthesis on the Structure and Activity of Double Metal Cyanide Catalysts for Ring-Opening Polymerization of Epoxides 제원석, 김 일, 부산대학교
1PS-242	Molecular Weight Control and Reaction Kinetics Analysis of Polyurethane Acrylate in Photopolymerization 장민기, 임지우, 경희대학교
1PS-243	Spatial Reptation Movement of 2,5-Furandicarboxylic Acid 이용재, 구준모, 충남대학교
1PS-244	Rapid and Enantioselective Synthesis of Stereoblock Polylactides Enabled by Chiral Cyclopropanimine-Thiourea Catalysts 이수민, 김병수*, 연세대학교; *연세대학교 화학과
1PS-245	Low-temperature Fast-curing Cationic Latent Curing Agent for One-component Epoxy Adhesives for Electronic Materials 안소현, 장한결, 김선주*, 김재우, 한국과학기술연구원; *중앙대학교

1PS-246	Self-healing and Chemically Recyclable Poly(disulfide)s for Enhanced High-strain Stress Wave Dissipation 신지윤, 이주호, 박경민*, 이재준*, 김태안, 한국과학기술연구원; *부산대학교
1PS-247	Catenated Topology from Disulfide Contained Cyclic Polymer 수라즈, 조홍열, 백현중, Pusan National University
1PS-248	Hydrothermal Synthesis of Double Metal Cyanide Catalysts for CO <sub>2</sub> Fixation into Propylene Oxide 김소영, 김 일, 부산대학교
1PS-249	Synthesis and Copper Adhesion Properties of Semifluorinated Polynorbornenes 김민지, 임지우, 경희대학교
1PS-250	Terphenyl-based Anion Exchange Membranes Based on Diallyldialkylammonium Cyclopolymerization for Anion Exchange Membrane Water Electrolysis 김단아, 이성수, 한국과학기술연구원

## 고분자가공/복합재료/재활용(I)

1PS-251	Hydrophobic Coating Based on PDA Modified MoS <sub>2</sub> for Lubricants 황기섭, 임세라, 정병규*, 한국생산기술연구원; *(주)도아
1PS-252	Preparation of PGA Particles for Solid Lubricants 황기섭, 임세라, 한국생산기술연구원
1PS-253	Fabrication and Physicochemical Properties of Hollow Fiber Membranes Based on Poly(m-phenylene isophthalamide) and Titanium Dioxide Nanoparticles 황경의, 정영규, 충남대학교 유기용융재료공학과
1PS-254	A Highly Self-healable and Recyclable Electromagnetic Interference Shielding Nanocomposite Film Based on Carbon Materials and a Functional Heterocyclic Matrix 홍평화, 김종연, 조재웅*, 홍성우, 한국생산기술연구원; *동국대학교
1PS-255	비결정성 고분자의 내후성 및 가공 안정성 개선에 관한 연구 홍준의, 이승윤, 정환주, 박찬문, 에이치디씨현대이피
1PS-256	Porous Polymeric Microbeads for Stabilization of Phase Change Materials 홍여진, 이종휘, 중앙대학교
1PS-257	Cellulose Nanofiber-based Biodegradable Composites Films for Enhanced Gas Barrier Properties 한동준, 권영제, 김세훈, 조계용, 국립부경대학교
1PS-258	Femtosecond Laser Nanowelding of Silver Nanowire Networks on Polyethylene Terephthalate Substrates 하정훈, 한국생산기술연구원
1PS-259	Structural Modification and Coalescence of Single-walled Carbon Nanotubes by Femtosecond Laser Irradiation 하정훈, 한국생산기술연구원
1PS-260	Physical Graphitization and Compaction of Carbon Nanotube Fibers by Laser Shock Compression 하정훈, 한국생산기술연구원
1PS-261	Enhanced Thermal Conductivity of Nanoparticle Aqueous Suspensions by Femtosecond Laser Irradiation 하정훈, 한국생산기술연구원
1PS-262	Structure, Thermal, Mechanical, and Electrical Properties of Graphene-reinforced Poly(acrylamide)/Bisphenol A Diglycidyl Ether Nanocomposites 최혜서, 정영규, 충남대학교 유기재료공학과
1PS-263	Structures, Thermo-mechanical, and Electromagnetic Shielding Properties of Carbon Materials-Reinforced Thermotropic Liquid Crystalline Polyester Composites 최형호, 정영규, 충남대학교 유기재료공학과
1PS-264	A Simple Synthesis of Supramolecular PA12 <i>via</i> Solid-state Melt Reaction and its Interlaminar Properties in CFRTP Composites 최준석, 최용석, 홍경민, 이재훈, 한국과학기술연구원
1PS-265	Preparation of Polyimide Composite Film with High Thermal Conductivity, Electromagnetic Interference Shielding and Self-Healing Properties For Semiconductor Packages 최윤제, 정찬문, 박찬호, 장윤정, 손예빈, 백민석, 연세대학교
1PS-266	Glycolytic Depolymerization of Unsaturated Polyester Resin under Pressure 최유미, 김기용, 박형남, 신철, 애경케미칼
1PS-267	분해활성화에너지를 활용한 재활용 플라스틱 사용수명 예측 방안 확립 최성웅, 장성은, 도기림*, 최두영**, 한국생산기술연구원/국가과학기술연구회, 전북대학교; *한국생산기술연구원/전북대학교; **한국생산기술연구원/국가과학기술연구회
1PS-268	페인트 프리피아노 블랙 고충격 자동차 외장 부품 연구 최민진, 현대자동차
1PS-269	Effect of Hectorite on Physical Properties of Colorless And Transparent Poly(amide imide) Hybrid 최문영, 임애란*, 장진해**, 전주대학교 탄소융합공학과; *전주대학교 과학교육과; **전주대학교
1PS-270	인조대리석 폐 분진을 활용한 강화 PP의 물성 연구 최광현, 김홍경, 한국교통대학교
1PS-271	Fabrication of Battery Pouch Film through Growth of Crystalline Phase <i>via</i> Mono-axial Stretching method 최경민, 조계용*, 부경대학교; *부경대학교 공업학과
1PS-272	Fabrication and Characterization of Low Dielectric Polyimide/Silica Aerogel Nanocomposite Films for Flexible Printed Circuit Board Applications 채승훈, 정영규, 충남대학교 유기재료공학과
1PS-273	A Study on the Mechanical Characteristics of DLP Process Photocurable Resin with Temperature Variation 주윤성, 고종완, 권경민, 한국생산기술연구원
1PS-274	Block Copolymer Soft-Template Synthesis of Mesoporous Nb <sub>2</sub> O <sub>5</sub> and MXene Nanocomposites for Li-Ion Energy Storage Devices 조항준, 김진근, 포항공과대학교

1PS-275 Preparation of Polyethylene-graphitic Nanoplatelets for High-density Polyethylene Reinforcement  
조성원, 전인엽, 원광대학교

1PS-276 자동차 카울크로스캡버용 내충격성 우수 고강성 폴리프로필렌 복합소재 제조 및 특성 연구  
정훈섭, 김수영, 고경민, 이동기, 덕양산업

1PS-277 금속 메인바 및 복합소재 브라켓 이중접합 적층 하이브리드 카울크로스캡 경량화 연구  
정훈섭, 조현빈, 이동주, 이재용, 광성복, 덕양산업

1PS-278 열폭주 방지를 위한 난연 소재 적용 배터리 팩 시스템 열안전성 향상 연구  
정훈섭, 조현빈, 정승재, 이재용, 광성복, 덕양산업

기능성 고분자(I)

1PS-279 Self-healable and Reprocessable Crosslinked Polyurethane Elastomer Based on Dynamic Boronic Ester Bonds  
황주희, 강이슬, 고정우, 이동진, 장영욱, 한양대학교

1PS-280 Poly(ethylene glycol) and Succinonitrile Based Solid Polymer Electrolyte for the Reduction of Interfacial Resistance  
황주원, 송교준, 조남주, 부산대학교

1PS-281 Heat Storage Materials with High Thermal Conductivity for Effective Thermal Energy Management  
형재식, 정광운, 전북대학교

1PS-282 Physicochemically Tunable Hyperbranched Glycerol Copolymerized with Functional Aziridine as a Versatile, Multivalent Crosslinker for Waterborne Acrylic Adhesives  
한지식, 차재범, 홍지수, 최초롱, 울산과학기술원

1PS-283 A Novel Approach to the Synthesis of Multifunctional Alginate Hollow Beads  
한승희, 최원산, 한밭대학교

1PS-284 Dark Current Suppression *via* Multi-Bind Self-Assembled Monolayers as a Hole Transport Layer for Improved Electrical Properties in Perovskite Photodetectors  
하두현, 김병기, 왕동환, 중앙대학교

1PS-285 Synthesis of Sulfonated-doped-polyaniline Sphere-shaped Nanoparticles for Inkjet-printed Chemical Sensor Applications  
표기현, 강효경, 김진열, 국민대학교

1PS-286 Advanced Flexible Physical Sensors with Independent Detection Mechanisms of Pressure and Strain Stimuli for Overcoming Signal Interference  
츠에베아르, 이화성, 한양대학교

1PS-287 Soluble Aromatic Polyamide Binders for Li-ion Batteries  
최호원, 손장호, 육지호, 인하대학교

1PS-288 Urease-Powered Nanomotor Containing STING Agonist for Bladder Cancer Immunotherapy  
최현식, 한세광, 포항공과대학교

1PS-289 Melamine-based Fire-resistance and Thermostable Coating for Cellulose  
최정윤, 홍진기, 연세대학교

1PS-290 Rapid Synthesis of Isoreticular Expansion Series MOFs *via* Microwave-Assisted Methods  
최재호, 최은영, KSA of KAIST

1PS-291 Electrochemical Performance of Oligo(EDOT)/Crosslinked PVA/SiO<sub>2</sub> Composite Based Solid Polymer Electrolyte  
최재민, 김민수, 조남주, 부산대학교

1PS-292 MOF-in-COF Structures as Composite Quasi-Solid Electrolytes Achieving Ultra High Ionic Conductivity and Lithium Transference Number  
최은지, 유필진, 성균관대학교

1PS-293 UV Curable Polymeric Coating with Surface Hydrophobicity and Self-healing Effects  
최은주, 허성민, 장영욱, 한양대학교

1PS-294 Harnessing Extreme Dynamic Soft Elasticity in Polyrotaxane-Incorporated Liquid Crystal Elastomers for Pressure-Sensitive Adhesives  
최수빈, 서지훈\*, 안석균, 부산대학교; \*고려대학교

1PS-295 Synthesis of Low Dielectric Photosensitive Polyimide for Semiconductor Redistribution Layer (RDL) Using Spiro Structure  
최민기, 최성훈\*, 김윤호\*\*, 김진수\*\*, 고민재\*\*\*, 원종찬\*, 한국화학연구원/한양대학교; \*한국화학연구원/UST; \*\*한국화학연구원; \*\*\*한양대학교

1PS-296 주변 환경에서 일관된 작동성을 갖춘 자가 치유 및 신축성 고분자 이온 젤을 위한 결사율 최적화  
최건업, 박태호, 포항공과대학교

1PS-297 Liquid Crystal Elastomers with Controllable Mechanical Properties with Dynamic Chemistry  
천세나, 김현, 한국화학연구원

1PS-298 Flexible Supercapacitors Enabled by Highly Conductive Epoxy-Silica Ionogel Polymer Electrolytes  
채진아, 최우혁, 인하대학교

1PS-299 Enhanced Extrusion Processability of PLA Blends through Rheology Control Using Biodegradable Bottlebrush Polymers  
주진혁, 최기홍, 방준하, 고려대학교

1PS-300 Study of Sulfur-based Gel Polymer Electrolyte Using Lithium bis (fluorosulfonyl)Imide (LiFSI) for Lithium Ion Batteries  
주기종, 배원수, 송수빈, 나혜원, 이지애, 강동훈, 이도윤, 김주섭, 김환기, 장호현, 건국대학교

1PS-301 Color Intensity Modulation in Electrochromic Device Based on Cholesteric Color Reflectors for Use in Reflective Display  
조현목, 황현성, 황윤진, 오효식, 김세음, 서울과학기술대학교

1PS-302 Self-oscillating Helical Gels with Amplified Winding and Unwinding Motions  
정태훈, 최재원, 김해인, 김영기, Ryo Yoshida\*, 김연수, 포항공과대학교; \*The University of Tokyo

1PS-303 Enhancing Optoelectronic Performance Including 3D p-n Junction Nanostructured Doping of WSe<sub>2</sub> *Via* Block Copolymer Patterns

정재원, 오혜진, 방준하, 고려대학교

1PS-304 Highly Deformable Triboelectric Nanogenerator Achieved by Double-network Ionic Hydrogels  
정은지, 윤진환, Nabilah Anindita Febriola\*, 서울시립대학교; \*부산대학교

1PS-305 Porous Starch-alizarin pH Indicator for Acidic and Basic Vapor Sensing  
정유진, 박원호, 충남대학교

1PS-306 Development of High Thermal Conductivity Epoxy Resin with Star-Shaped Crystalline Amine Curing Agents  
정수정, 임호선\*, 씨엔에이텍; \*숙명여자대학교

1PS-307 Crosslinkable Polyrotaxane-based Photocurable 3D Printable Dental Resin  
정수빈, Rudru gangaratnamma, 이재준, 정일두, 부산대학교

1PS-308 Synthesis and Characterization of Highly Stretchable Polyurethane Elastomer Incorporating Slidable Polytrioxanes Crosslinker  
정수빈, Rudru Gangaratnamma, 이재준, 정일두, 부산대학교

포스터발표(II)\_10월 1일(화)

(17:00 ~ 18:30) 좌장: 임종철, 하민정

에너지 부문위원회(I)

2PS-1 Boosting Performance of Perovskite Solar Module with Novel Interconnection Line P0  
황동환, 정경호, 서지연, 부산대학교

2PS-2 Enhancing the Interfacial Properties of Wide-bandgap Perovskite Solar Cells with Organic Hole Transport Materials Approaching an Efficiency of 20%  
허지현, 이석우\*, 용지혜, 이유경\*, 박한솔, 황동렬\*\*, 강재원\*, 박희준, 한양대학교; \*부경대학교; \*\*한남대학교

2PS-3 Photovoltaic Properties of Hybrid solar cells with Poly(3-hexylthiophene)/ionic Liquid/Nb<sub>2</sub>CTx MXene-based Electrolyte  
최윤재, 류경호, 구주희, 한윤수, 대구가톨릭대학교

2PS-4 Control of Sulfur Allotropes in Sulfur-rich Polymers for Their uses in Lithium-sulfur Batteries  
최웅식, 박문정, 포항공과대학교

2PS-5 Highly Efficient Nitrogen-Doped Porous Carbon Supported Single Atom Catalysts for CO<sub>2</sub> Electroreduction  
최예정, 김건우, 한정우\*, 김진곤, 포항공과대학교; \*서울대학교

2PS-6 Improving PEC Efficiency by Enhancing Light Capture from Laser Patterning of Cu<sub>2</sub>O Film  
최경천, 서지연, 부산대학교

2PS-7 Emphasizing the Potential of Hybrid Transition-metal selenide@transition Metal Oxide Based Core-shell Electrode for Supercapacitor Applications  
지원아차야, Bishweshwar Pant\*, 김지연, 박미라, 우석대학교; \*Woosuk University

2PS-8 Investigating Electrostatic-Induced Stabilization and Ion Dynamics in Charged Block Copolymers with Molecular Dynamics Simulation  
정승원, 손창윤\*, POSTECH; \*서울대학교

2PS-9 Enhancing Performance of Perovskite Solar Cells Using Naphthalene Di-imide Derivative  
정경호, Ramesh Chitumalla, 권동건, 조인화, 장준경, 김윤희\*, 권오필\*\*, 서지연, 부산대학교; \*경상국립대학교; \*\*아주대학교

2PS-10 Effects of Surfactants on Photoelectrochemical Performance and Surface morphology  
이한별, 최경천, 서지연, 부산대학교

2PS-11 Non-conjugated Cathode Interlayering Material with Amine Oxide for Organic Photovoltaics  
이지현, 김태혁\*, 심재원\*, 조제웅, 동국대학교; \*고려대학교

2PS-12 Computational Analysis of G-quadruplex in Structural Transition Process Driven by Cation Types  
이주화, 손창윤\*, POSTECH; \*서울대학교

2PS-13 The Photovoltaic Performance of Conjugated Polymer Electrolytes with Diverse Acid Derivatives as a Cathode Buffer Layer  
이영석, 손동환, Qurrotun Ayuni Khoirun Nisa, Indah Salma Sausan, Waheed Muhammad, 김주현, 부경대학교

2PS-14 Enhancing Performance of SN Electrolytes with PDMS and PVDF-Based ASEI  
이민희, 이원호, 금오공과대학교

에코소재 부문위원회

2PS-15 Porcine Skin-Based Biodegradable Nanofibers Compositd with Cellulose Acetates  
정윤지, 박혜빈\*, 두현영\*\*, 강다연, 임진형, 최종섭, 공주대학교 천안공과대학; \*구미전 자정보기술원; \*\*고려대학교 구로병원

2PS-16 Maleic Anhydride Grafted Biodegradable Poly(butylene adipate-co-terephthalate) Hot Melt Adhesive  
전광우, 이동윤, 경북대학교

2PS-17 UV-blocking External Light Extraction Film for OLEDs Fabricated with Eco-friendly Process  
장현준, 성백상, 한소라, 이주호, 김용현\*, 이재현, 이종희, 한밭대학교; \*부경대학교

2PS-18 Multifunctional TPU Composite with High Mechanical Properties *via* Whole Dry Process by Reactive Extrusion (REX) and Dry Coating  
이소정, 박종혁, 방준하\*, 한국과학기술연구원; \*고려대학교

2PS-19 Dry Processing of MXene and MAX for Expanded Applications  
이상운, 박종혁, 한국과학기술연구원 전자과솔루션융합연구단

2PS-20 Melt Rheology and Mechanical Characteristics of Poly(L-Lactic Acid) Nanocomposites with Mesoporous Hollow Silica Nanospheres  
왕시조, 권용구\*, 인하대학교; \*고분자공학과



2PS-21	Chemical Modification and Improved Hydrophilicity of Lignin Using Phenolation and Amino Alkylation 신성규, Jakkree Intranuwong, 김수익, 권용구, 인하대학교
2PS-22	Biodegradable and Biocompatible Polyhydroxyalkanoate Nanoparticles 송건호, 이기라, 포항공과대학교
2PS-23	Reactive Chain Extender for Enhanced PLA/PBAT Compatibilization 김효윤, 이동윤, 경북대학교
2PS-24	지속가능한 전자장치 개발을 위한 전 공정 인쇄기반 유연 전극/히터 김한중, 김윤갑, 김준희, 박정민, 구미전자정보기술원 나노전자소재부품연구센터
2PS-25	Synthesis and Characterization of Biowaste-Derived Carbon Quantum Dots 김지희, 성상근*, 김토은, 김홍기, 임진형, 최종섭, 공주대학교; *구미전자정보기술원
2PS-26	Ring Opening Reaction-based Super-Strong and Rapidly Biodegradable Cellulose-based Bioplastic 김지윤, 홍진기, 연세대학교
2PS-27	Competitive Reaction of Thioester-terminated PMMA During Depolymerization 김지운, 광영제, 숭실대학교
2PS-28	Synthesis of Amphiphilic Diblock Copolymers of Poly( $\gamma$ -Phenyl- $\epsilon$ -caprolactone) and Poly(ethylene Oxide) Using Ring Opening Polymerization Nutch Nongyai, 권용구, Inha University
2PS-29	Effect of Polyethyleneimine on CO <sub>2</sub> Foaming of Poly(L-Lactic Acid) Using a Twin-screw Extruder Jakkree Intranuwong, 신성규*, 권용구, Inha University
2PS-30	Efficiency Enhancement in Lead-Free AgBiS <sub>2</sub> Colloidal Nanocrystal/Organic Hybrid Solar Cells Irem Kozakci, Jung-Yong Lee, KAIST

### 클로이드 및 분자조립 부문위원회(I)

2PS-31	Controlled Disorder in Metal-Infiltrated Block Copolymer Lattices 태성관, 김소연, 서울대학교
2PS-32	Plastic-Free X-ray Scintillation Film Using Eco-Conscious Low-Toxic Halide Perovskite and Wood 최진우, 강영중, 한양대학교
2PS-33	Synthesis of Gel-in-liposome and Hydrogel Nanoparticles Based on Microfluidic Vortex Focusing for Hydrogel-based Drug Delivery System 최유린, 고혜연, 한진영, 가천대학교
2PS-34	Inorganic Inverse Opal Photonic Ball Toward Radiative Cooling Application 차은별, 이원목, 박신근, 세종대학교
2PS-35	Spontaneous Defect-Removal in Uniaxially Aligned Poly(3-hexylthiophene) by Molecular $p$ -Doping 정호경, 강영중, 한양대학교
2PS-36	Microfluidic Strategy for the Controlled Synthesis of sub-50 nm Sized Transfersomes as a Drug Carrier for Transdermal Barrier 정제환, 가천대학교
2PS-37	PEGMEA 기반 in situ 젤 전해질이 도입된 WO <sub>3</sub> /NiO 전기변색 소자의 제작 정영민, 전석진, 국립금오공과대학교
2PS-38	High Conductive MXene/Polyurethane: Advanced EMI Shielding and Joule Heating Properties 정승환, 구종민, 성균관대학교
2PS-39	Molecular Dynamics Study of Lipid-Modified DNA Self-Assembly and Interaction with Bilayer Membranes 전은를, 최열교*, 김해주**, 객민석, 국립부경대학교; *POSCO HOLDINGS; **부산대학교
2PS-40	Study on the LCST Behavior of P(NVCL-co-VIM) Polymer at Different Temperatures Based on Molecular Dynamics Simulations 장신위에, 자오밍거, 조준한, 단국대학교
2PS-41	Amphiphilic Iron Oxide Nanoplatelet Pickering Emulsions for Catalytic Polyester Upcycling 장민경, 서복기, 김진용, 성균관대학교
2PS-42	Study on the Interaction and Phase Separation of PVP/BMIMBF <sub>4</sub> Hybrid System Based on Molecular Dynamics Simulation and Experiment 자오밍거, 장신위에*, 조준한*, 단국대학교 고분자공학과; *단국대학교
2PS-43	Electrophoretic Photonic Display Using High Index Core-shell Spherical Particles in Non-polar Medium 임혜정, 이원목, 세종대학교
2PS-44	Synthesis of Silica-Based Core-Shell Nanoparticles and Their Magneto-Responsive Behaviors 이혜린, 이나연, 이인혜, 이진현, 건국대학교
2PS-45	Solution-Phase Growth and Lyotropic Self-Assembly of Cs <sub>3</sub> Cu <sub>2</sub> I <sub>5</sub> Perovskite Nanowires with Large Optical Anisotropy 이현민, 강영중, 한양대학교 화학과
2PS-46	Exceptional Robustness of <i>Saturnia Japonica</i> Cocoon for Protection 이진훈, 이정준*, 김형빈**, 임찬용, 황동수**, 이동욱, 울산과학기술원; *서울대학교; **포항공과대학교
2PS-47	Full Color Electrophoretic Display Using Core-Shell Microspheres in Polarity-Controlled Medium 이윤상, 이원목, 세종대학교
2PS-48	Magnetically Retrievable Amphiphilic Nanoplatelets as Versatile Supports for Interfacial Enzyme Catalysts 이승환, 서복기, 김진용, 성균관대학교
2PS-49	Skin Temperature-Interactive Block Copolymer Structural Color 이세영, 박태현*, 충남대학교; *충남대학교 유기재료공학과
2PS-50	Colorimetric Sensing Platform Based on Hydrogels Embedded with Colloidal Photonic Crystals 이명주, 김민호, 부경대학교

### 의료용 고분자 부문위원회(I)

2PS-51	Adhesive Hyaluronic Acid/Gelatin Hydrogels as Wound Dressings 황지원, 김현승, 이근용, 한양대학교
2PS-52	Bioresorbable Electrical Stimulator with Allograft for Maximized Functional Recovery 황보정, 최연식, 연세대학교
2PS-53	Electrical Stimulation with Injectable Conductive Hydrogel for the Treatment of Diabetic-Erectile Dysfunction 허성은, 홍진기, 연세대학교
2PS-54	Hyaluronic Acid-based Microneedle for Extended Preservation and Transdermal Delivery of Extracellular Vesicles 하민지, Van Dat Bui, 박재형, 성균관대학교
2PS-55	Synthesis and Characterization of L-tyrosine Polyester (LPE) for Drug Delivery Carrier 최지운, 정일두, Rudru Gangaratnamma, 부산대학교
2PS-56	Fabrication and Characterization of Biocompatible and Biodegradable L-lysine Polyurethane (LPU) Nanoparticles for Drug Delivery System 최지운, 정일두, 최수정, 부산대학교
2PS-57	Mesoporous Silica-coated Upconversion Nanoparticles as a Near-infrared-mediated Theranostic Nanoplatfrom for Combination Cancer Treatment 최종선, 김소연, 충남대학교
2PS-58	Upconversion Nanoparticle-based Multifunctional Nanocomposites for Photodynamic/Chemodynamic/Starvation Synergistic Cancer Therapy 최종선, 김소연, 충남대학교
2PS-59	Enhancing Wound Healing by Tuning the Mechanical Properties of Lignin/zwitterionic Polymer-based Multifunctional Hydrogels 최재원, 호에라, Asila Ahmed Mohammed Osman, 송강일*, 황동수, 김연수, 포항공과대학교; *부경대학교
2PS-60	MXene-polyurethane Composite Scaffold for Rotator Cuff Tendon Repair and Augmentation 최운성, 최진현, 황인성, 박장호, 이태우, 경북대학교
2PS-61	Enhancing mRNA Delivery through the Modification of Lipid Nanoparticles with Cholesterol Derivatives 정원선, 최준식, 충남대학교
2PS-62	Synthesis of Chitosan-CS Based Nanoparticles for plasmid DNA Delivery 정예진, 박운서, 김남두, 박용해, 국립공주대학교
2PS-63	Preparation and Characterization of Radiation Induced Carboxymethyl Cellulose (CMC)/Cartilage Acellular Matrix (CAM) for Tissue Engineering 정성린, 박종석, 임윤목, 한국원자력연구원
2PS-64	Wearable Materials and Devices for Continuous Glucose Monitoring of Diabetes 정선아, 한세광, 포항공과대학교
2PS-65	Development of Lipid Nano Particles Using Bile Acid and Chondroitin Sulfate for Drug Delivery 전소현, 박용해, 김남두, 국립공주대학교
2PS-66	DNA Templated Metalized Nanoparticle Using Rolling Circle Amplification 장익수, 이종범, 서울시립대학교
2PS-67	Polydimethylsiloxane Membrane with Enhanced Adhesion and Detachment for Cell Sheet Fabrication 장영석, 오종현, 전북대학교
2PS-68	Injectable Hydrogels with ROS-sensitive Crosslinked Structure for Targeted Photodynamic Cancer Treatment 이지인, 김소연, 충남대학교
2PS-69	Design of Self-powered Nanofibrous Scaffold for Electric Stimuli to Upregulate Bone Regeneration Based on Natural Protein Polymer 이지연, 박찬희*, 김철생*, 한국과학기술원; *전북대학교
2PS-70	Synthesis and Characterization of Solvent-free UV Curable Pressure-sensitive Polyacrylic Adhesives (PSAs) with Cooling Effect 이정민, 정일두, 권우창*, 최승원*, 부산대학교; *티앤테크
2PS-71	Synthesis and Dental Application of 3D Printable Hybrid Resins Based on Poly(ether ketone ketone) 이정민, 정일두, 김수진, 부산대학교
2PS-72	Commercialization of Multi-Module Precision Molds System Development for Demand Responsive Manufacturing Polydioxanone (PDO) Cog-Sutures 이재근, 김아영, 오성화*, ㈜동원메디칼; *전남바이오전용 나노바이오연구센터
2PS-73	Lipid-polymer Hybrid Nanoparticles for Subcutaneous Fat Reduction 이인영, 이혜원, 이근용, 한양대학교
2PS-74	Carbon Dioxide Gas-Driven Adipocytolysis for Localized Fat Reduction 이윤찬, 김충구, 이근용, 한양대학교
2PS-75	Polymer-based Artificial Microenvironment for Enhancing Cell Adhesion 이소환, 구미전자정보기술원
2PS-76	Development of Photoresponsive Nanogels for Enhanced Cancer Phototherapy 이소빈, 김기수, 부산대학교
2PS-77	Hyaluronate-Black Phosphorus-Upconversion Nanoparticles Complex for Multi-Modal Theranosis of Skin Cancer 이기범, 한세광, 포항공과대학교
2PS-78	PLLA기반 복합재료의 체외 분해특성 연구 오 진, 이현지*, 이선이*, 최은애, 이경호, 유건이, 박찬희*, 전북대학교 산학협력단; *전북대학교
2PS-79	Targeted Nitric Oxide Delivery to M1 Macrophages for Reducing Inflammation in Chronic Obstructive Pulmonary Disease 오유경, 홍진기, 연세대학교
2PS-80	Development of Orally Absorbable RNA Nanoparticles for Cancer Immunotherapy 안정만, 애드윈 제이카 불글라와*, 이용규*, 한양대학교; *한국교통대학교

- 2PS-81** Optimizing Drug Delivery of Phytochemical drug for Biomedical Applications  
안유림, 박흥현, 한국재료연구원
- 2PS-82** Additive Manufacturing of Silicone by Heating at a Patterned Photothermal Interface (HAPPI) for Prosthetic and Orthotic Applications  
Chang-Uk Lee, Kyle C. H. Chin\*, Andrew J. Boydston\*\*, Department of Chemistry, University of Wisconsin, Madison; \*Department of Chemical and Biological Engineering, University of Wisconsin, Madison; \*\*Department of Chemistry, Department of Chemical and Biological Engineering, Department of Materials Science and Engineering, University of Wisconsin, Madison

#### 분자전자 부문위원회(I)

- 2PS-83** Anisotropy-guided Molecular Engineering for Stable Blue Phosphorescent Organic Light-emitting Diodes  
황은혜, 권태혁, 울산과학기술원
- 2PS-84** 그래핀/나노스피어 사이 계면조절을 통한 그래핀의 인장 스트레인 및 전기화학 반응성 제어  
황영욱, 류정인\*, 백승준\*, 이효찬\*, 명지대학교; \*명지대학교 나노하이브리드 전자소재연구실
- 2PS-85** Direct Optical Patterning of Perovskite Color Conversion Layers with In-Situ Crystallization  
황민규, 박선재, 조희찬, KAIST
- 2PS-86** Conducting Polymers Combined with Metal Nanowires for High-Performance Transparent Heaters  
황규선, 유지영, 전유선, 박세룡, 하태준, 광운대학교
- 2PS-87** Stretchable Bioelectronic Systems for Eye-Care with Smart Contact Lenses  
홍상훈, 한세광, 포항공과대학교
- 2PS-88** Synthesis and Photovoltaic Performance of New Bithiophene-Extended IDIC-Based Non-Fullerene Acceptors  
현예지, 김윤희, 경상국립대학교
- 2PS-89** Charge Carrier Dynamics in  $\text{Cs}_{1-x}\text{FA}_x\text{PbI}_3$  Perovskite Quantum Dots : A Nanosecond Transient Absorption Spectroscopy Analysis  
함가영, Hossein Fattachimoghaddam\*, 이동운\*\*, 양한솔\*\*, 장재영\*\*, 안태규\*, 차효정\*\*\*, 경북대학교; \*Department of Polymer Science and Engineering, Korea National University of Transportation; \*\*Department of Energy Engineering, Hanyang University; \*\*\*Department of Hydrogen and Renewable Energy, Kyungpook National University
- 2PS-90** Enhancing Performance of Blue-Emissive QD-LEDs via Integration of Ag/Conjugated Polymer Hybrid Nanoparticles into Hole Transport Layers  
최선기, 최영민, 이수연, 정성록, 이경진\*, 김태수, 한국화학연구원; \*충남대학교
- 2PS-91** Strain-insensitive Capacitive Pressure Sensor  
최건오, 정예환\*, 한양대학교; \*한양대학교 융합전자공학과
- 2PS-92** Development of Donor-Acceptor Polymer for Thermoelectric Performance  
천현진, 이택성\*, 이지은, 김상범\*, 서의현\*, 권순기, 정용진\*\*, 장재영\*\*, 김윤희, 경상국립대학교; \*한양대학교; \*\*한국교통대학교
- 2PS-93** Self-Healing Ionic Thermoelectric Generators Using Zwitterionic Polymer Gel with Pressure-Sensitive Electrodes  
천성준, 조정호, 연세대학교
- 2PS-94** A Heat-controlled Double-band Electrochromic Mirror System for Next-generation Smart Windows  
조희정, 문홍철\*, 서울시립대학교; \*KAIST
- 2PS-95** Ultra Low Power Consumption Optoelectronic Logic Operation Based on Negative Photoresponse of  $\text{CuO/BaTiO}_3$  Heterojunction Photodetector  
조준형, 유호천, 가천대학교
- 2PS-96** Aluminum-Cerium Amorphous Metal Electrode for Organic Optoelectronics and Strain Sensing  
조재상, 강웅식, 박금환\*, 왕동훈, 중앙대학교; \*한국전자기술연구원
- 2PS-97** Surface Modification of  $\text{ZnMgO}$  Nanoparticles with Dithiolate - Based Ligands  
조예진, 황동렬, 한남대학교
- 2PS-98** Development of Organic Field-Effect Transistors Based on Chiral Perylene Diimides for Advanced Optoelectronics  
조예민, 이상혁, 오준학, 서울대학교
- 2PS-99** Influence of Side-alkyl Chain in the Electrical Conductivity and Structural Characteristics of  $\text{AuCl}_3$ -Doped Diketopyrrolopyrrole Polymers  
조수현, 박병욱, 하중운, 강영훈, 한미정, 한국화학연구원
- 2PS-100** Studies on Organic Thermoelectrics Using Donor-Acceptor Terpolymers  
조광일, 윤상은, 윤성준\*, 양창덕\*\*, 김중현, 아주대학교; \*전남대학교; \*\*UNIST
- 2PS-101** Polymer-wrapped Semiconducting Single-Walled Carbon Nanotubes as Additive in Polymer Photovoltaics  
조경호, 이승훈, 공주대학교
- 2PS-102** Efficient Doping of Carbon Nanotube Sheet for Optimization of Dopants  
조강현, 김지현, 김병관\*, 충남대학교; \*충남대학교 응용화학공학과
- 2PS-103** 수전사를 통해 Bi-layer 구조를 갖는 실내용 유기태양전지 연구  
정진욱, 김중복, 황규완, 김도경, 국립금속공과대학교
- 2PS-104** Vertical Stacked Double Organic Photodiodes for Selective Light Sensing  
정재빈, 김재현, 박성준, 아주대학교
- 2PS-105** High-Performance and Flexible Thermoelectric Generator Based on a Robust Carbon Nanotube/ $\text{BiSbTe}$  Foam  
정명훈, 배은진, 박병욱, 하중운, 한미정, 강영훈, 한국화학연구원
- 2PS-106** Benzobisthiazole-Substituted Polymer Donors for Eco-Friendly Solvent-Processed Organic Solar Cells with Enhanced Thermal Stability and Mechanical Robustness  
전해소, 김범준, 서수덕, 한국과학기술원
- 2PS-107** Eco-friendly Organic Solar Cells Processed from Single Monoterpene Solvent  
전혜린, 김범준, 한국과학기술원

- 2PS-108** Improving Sensitivity of Electrolyte-Gated Field-Effect Transistor Biosensors by Modulating Semiconductor Conductance  
전익찬, 하영근, 경기대학교
- 2PS-109** Multifunctional Breathable Wearable Devices for Smart Healthcare Applications  
임현민, 홍상훈, 한세광, 포항공과대학교
- 2PS-110** Multifunctional Third Component for Ternary Organic Solar Cells and Organic Photodetectors  
임민영, Xiaoling Ma\*, Yelim Kang, 심재원, Fujun Zhang\*, 우한영, 고려대학교; \*Beijing Jiaotong University
- 2PS-111** Advanced Conjugated Polymers for Selective Metal Ion Detection in Aqueous Environments  
이효선, 김종호, 경북대학교
- 2PS-112** High-Density Array Vertical Structured OECT Fabricated via Laser Cutting  
이형범, 박성준, 이인호, 원종현, 아주대학교
- 2PS-113** Prediction of Infrared Absorption and Radiative Efficiency of Greenhouse Gases  
이지윤, 박상욱, 이태경, 경상국립대학교
- 2PS-114** Development of Low-Cost Amorphous Oxide Semiconductor-Based FET Biosensors for Biomolecular Detection  
이주혁, 하영근\*, 경기대학교 화학과; \*경기대학교
- 2PS-115** Surface Modification  $\text{ZnSeTe}$  Blue-Emitting Quantum Dots by Using Phosphate Ligand  
이주성, 황동렬\*, 한남대학교; \*한남대학교 신소재공학과
- 2PS-116** High Performance Stretchable PLED Enabled by Free-standing Liquid Metal Cathodes  
이원범, 조희찬, 한국과학기술원
- 2PS-117** Effect of Interfacial Complexation of Two Oppositely Charged Polyelectrolytes for Low-Voltage Reversible Electroadsorption  
이승주, 박세환, 최윤제, 김형준, 서강대학교
- 2PS-118** Fabrication of Flexible Biosensing OECT Using PEDOT:PSS Conductive Fiber  
이승민, 우규원, 이은광, 부경대학교
- 2PS-119** Strategic Structural Modifications in Quinoxaline-based Polymer Donors to Enhance Organic Solar Cell Performance  
이수연, 장재원, 국립부경대학교
- 2PS-120** Analyzing and Developing Substituent Effects in TADF Emitters  
이선경, 김윤희, 경상국립대학교
- 2PS-121** Enhancing the Performance of Printed P-Type  $\text{CuI}$  Transistors to Theoretical Limits through Room Temperature Vacancy Engineering  
이재찬, 권윤현, 조정호, 연세대학교
- 2PS-122** Mixed Transconductance Field-Effect Transistor Based on Tellurium/Indium Gallium Zinc Oxide with Partially Overlapped Heterostructures  
이동현, 유호천, 가천대학교
- 2PS-123** 자기조립단층을 활용한 광전기화학전지 전하선택층 개발  
이동현, 조한희, 울산과학기술원
- 2PS-124** Photoprogrammable OFET Memory Devices Based on IGZO Floating Gate  
이경호, 이동현\*, 유호천\*, 한국세라믹기술원; \*가천대학교
- 2PS-125** New Dinuclear  $\text{Pt(II)}$  Complexes for Blue OLEDs  
이경석, 황교민\*, 김태경\*, 김윤희, 경상국립대학교; \*홍익대학교
- 2PS-126** Nanoimprinted Semiconductor Surfaces for fM Sensitivity in Electrolyte-Gated Field-Effect Transistor Biosensors  
이경민, 하영근, 경기대학교
- 2PS-127** Ionic Additives to Improve the Performance of Lithium-metal Batteries  
이경록, 문홍철\*, 서울시립대학교; \*KAIST
- 2PS-128** Elucidating the Exciton Dynamics in Hybrid Systems of Conjugated Polymers and Semiconductor Nanocrystals  
윤혁구, 한세교, 정민영, 조길원, 이동기\*, 포항공과대학교; \*세종대학교
- 2PS-129** Controlling Fluorination Density of Soluble Polyimide Gate Dielectrics and its Influence on Organic Crystal Growth and Device Operational Stability  
윤태웅, 김희민, 박현진\*, 강보석, 성균관대학교; \*한국화학연구원
- 2PS-130** New Anchoring Group for Surface Engineering of Inorganic Nanoparticles  
윤시은, 황동렬, 한남대학교
- 2PS-131** Enhancement of Thermoelectric Properties in Conjugated Polymers through Nanowire Formation and Molecular Doping  
윤상은, 전경국, 김중현, 아주대학교
- 2PS-132** Efficient Polymer Solar Cells Based on PM6 and Y6 with Dual Additive of Semiconducting Carbon Nanotubes and Solvent  
유창우, 이승훈, 공주대학교
- 2PS-133** Development of Long-cycling and Flexible Porous Polymer Electrolyte via Polymerization-Induced Phase Separation  
유재열, 김현욱, 오준학, 서울대학교
- 2PS-134** Microfiber-based Organic Electrochemical Transistors for Miniaturized Biosensors  
원종현, 이인호, 이형범, 박성준, 아주대학교
- 2PS-135** Flexible and Detachable  $\pi$ -ion gel OECT  
우규원, 이은광, 부경대학교
- 2PS-136** Stretchable Organic-inorganic Hybrid Dry Electrode for Physiological Signal Sensors  
오태연, 김한수, 박성준, 아주대학교
- 2PS-137** Linker Engineering in Core-Linked Dimeric Acceptors Utilizing Non-Aromatic Spacers for High-Efficient Organic Solar Cells  
오신비, 정다현, 배기현, 김범준, 한국과학기술원
- 2PS-138** Development of Enhanced Organic Photodetectors by Investigating the Origin of Dark Current Density and Synthesizing Photoconductive Polymers  
여도영, 정원조, 표승욱, 정인환, 한양대학교



- 2PS-139** 디케토피롤로피를 기반 공중합체의 균형 잡힌 양극성 전하 이동: 유기 전계 효과 트랜지스터 및 고전압 노리 응용  
안태균, 한국교통대학교
- 2PS-140** Engineering Organic-inorganic Hybrid Perovskite Surface with Alkylammonium Halides for Memristors  
심은수, 이지현, 김영은, 조제웅, 동국대학교
- 2PS-141** Single Ion-Conducting, Transparent, and Stretchable Thermoplastic Polyurethane Ionoelastomers  
신하윤, 김형준, 서강대학교
- 2PS-142** Physically Unclonable Function Using Bismuth Sulfide and Doping of Self-assembled Monolayer  
신희빈, 이동현, 유호천, 가천대학교

### 고분자구조 및 물성(I)

- 2PS-143** Temperature Dependent Rheological Properties and Microstructural Analysis of Vitrimers  
현지은, 김소연, 서울대학교
- 2PS-144** W/O 화장료 제조 시 BENTONE® 분산 방식에 따른 Rheological 특성 변화  
한재일, 아모레퍼시픽 기술연구원
- 2PS-145** Characterization of the Mechanical Behavior of Biomedical Granular Hydrogel  
한은혜, 나양호, 이은혜\*, 한영배\*\*, 강민관, 한남대학교; \*넥스트바이오메디칼; \*\*육군사관학교
- 2PS-146** Development of Aliphatic Polyisocyanates (PI) Curing Agent with Flexible Properties for Polyurethane Resin  
최혜린, 유광호, 김경진, 애경케미칼
- 2PS-147** Enhancing Stretchability of PEDOT:PSS Films with Ionic Liquid Pretreatment: A Molecular Dynamics Study  
최창원, Yves LANSAC\*, 장윤희, 대구경북과학기술원; \*GREMAN, CNRS, University of Tours
- 2PS-148** Functional Thermoplastic Polyurethane Elastomers with  $\alpha$ ,  $\omega$ -Hydroxyl End-functionalized Polyacrylates  
최진호, 유창훈, 권민상, 서울대학교
- 2PS-149** Advanced Epoxy Composites: Thermal and Moldability Enhancements through Alkyl Chain-Modified LCP Mesogens  
최지선, 임호선, 숙명여자대학교
- 2PS-150** Controlling Morphological Transition of Metal Infiltrated Cylinder-forming Block Copolymer Thin Films  
최상현, 김소연, 서울대학교
- 2PS-151** 바이오 폴리카보네이트의 분해거동 및 기계적 물성 연구  
조하윤, 김상호, 권유진, 이원기, 부경대학교
- 2PS-152** O/W 화장료 제조 시 헥트라이트 분산 방식에 따른 유변학적 특성 변화 연구  
조영옥, 아모레퍼시픽 R&D center
- 2PS-153** Toward the Equilibrium: Stability of Initial Solvent-Driven Non-Equilibrium Effect on Polymer Nanocomposites  
조성민, 김소연, 서울대학교 화학생물공학부
- 2PS-154** Adhesive-free Hydrogel Bioelectronics Enabled by a Template-directed Assembly of a Nanofibrous Network  
정주은, 강지형\*, 한국과학기술원; \*서울대학교
- 2PS-155** Novel Rigid-Island Fabrication by New Polymer Design  
정재훈, 강지형\*, 한국과학기술원; \*서울대학교
- 2PS-156** 다양한 Polyol을 사용한 PVA 필름의 상온 용해성 향상 연구  
정명운, 윤재문, 최재학\*, 김영훈, 동의대학교; \*충남대학교
- 2PS-157** Colorless Transparent Polyimide for Flexible Display Based on Diamine Structure  
장진해, 최문영\*, 전주대학교; \*전주대학교 탄소융합공학과
- 2PS-158** Improved Impact Strength of PMMA Windows *via* Partial Melt-State Crosslinking  
장대현, 박지웅, 광주과학기술원
- 2PS-159** Comparative Analysis of Rheological Properties of Acrylate and Lipote-Based Polymers in Pressure Sensitive Adhesives  
임수민, 권민상, 서울대학교
- 2PS-160** 기계적 실험과 유한요소 해석을 통한 생분해성 고분자 스텐트의 디자인별 특성 평가  
이현지, 이정호, 최은애, 오 진, 유건이, 박찬희\*, 전북대학교 산학협력단; \*전북대학교
- 2PS-161** Removal Mechanism of Microplastics through Various Advanced Oxidation Processes (AOPs)  
이제승, 나양호, 신동하\*, 손승은\*\*, 한남대학교; \*인하대학교; \*\*서울대학교
- 2PS-162** Water-vapor Sorption of Cross-linked Polyacrylic Acid Using Electron Beam and Gamma Ray under Various Dosages  
이정현, 이상봉, 한국생산기술연구원
- 2PS-163** Locomotions of Light-Responsive Liquid Crystalline Networks *via* Mechanically Induced Topological Defects  
이재경, 함민형, 조웅비, 위경재, 한양대학교
- 2PS-164** Microstructure and Properties of Lignin Based Polymer Nanocomposites  
이인준, 김소연\*, 서울대학교, 한화솔루션/케미칼; \*서울대학교
- 2PS-165** Bifunctional Polymers with Controlled Intramolecular Interactions  
이연지, 박문정, 포항공과대학교
- 2PS-166** Effect of Nanoarray Density on Enhanced Electron Transfer Efficiency and Analytical Sensitivity for Electrochemical Immunosensors  
이수환, 구미전자정보기술원
- 2PS-167** Ultraviolet Light Blocking Optically Clear Adhesives for Foldable Displays *via* Highly Efficient Visible-Light Curing  
이석주, 권민상, 서울대학교
- 2PS-168** Stretchable Color Conversion Layer with Highly Stable Perovskite Quantum Dots  
이동균, 강지형, 서울대학교

- 2PS-169** Fabrication of Nanoporous Polypropylene Membranes by Crystallization-Based Methods  
이다연, 이종휘, 중앙대학교
- 2PS-170** Structure-in-structure Self-assembly of Triblock Polymers with Amphiphilic Random Mid-block  
유지민, 서영은, 한국과학기술원
- 2PS-171** 화장료 제형 내 고분자 원료에 따른 시원함 평가 연구  
어성찬, 아모레퍼시픽
- 2PS-172** 천연 다당류 기반 나노입자 물성 제어 기술  
안효석, 아모레퍼시픽

### 고분자가공/복합재료/재활용(II)

- 2PS-173** Development of Carbon Fiber Reinforced Polymer Materials with Enhanced Thermal Insulation Properties  
정재훈, 김태영, 이정언, 김한도, 염정현, 경북대학교
- 2PS-174** Investigation of Property Changes in Biodegradable Films through Post-Treatment  
정재훈, 김영권, 송석현\*, 염정현, 경북대학교; \*(주)그린패키지솔루션
- 2PS-175** Morphological and Thermal Characteristics of PLA/PHA/PBAT Ternary Blends  
정예원, 이동윤, 경북대학교
- 2PS-176** 방사선 이용 폴리우루시을 함유 항균성 발포보드 제조 및 특성 평가  
정성린, 박종석, 임윤목, 전준표, 한국원자력연구원
- 2PS-177** 폐차기반 Polyamide 66 소재를 이용한 유리섬유 복합소재 개발  
정도연, BGFcomaterials
- 2PS-178** UHMWPP 소재를 이용한 도어 이너 패널 적용  
정도연, BGFcomaterials
- 2PS-179** 3D-Continuous Nanoporous Covalent Framework Membrane Nanoreactors with Quantitatively Loaded Ultrafine Pd Nanocatalysts  
정다운, 박지웅, 광주과학기술원
- 2PS-180** Nanofibrillation of Technora and Production of Nanofiber Nonwoven Fabric  
정가연, 구자승, 충남대학교
- 2PS-181** Development of Eco-friendly Thermoset Resin with Recycled PET Used for Construction Materials  
전하빈, 김해란, 박희수, 김영용, 애경케미칼
- 2PS-182** Properties of Polyimide Nanocomposite Films Using Organo Clay/Functionalized-graphene Complex  
장진해, 나창엽\*, 전주대학교; \*전주대학교 탄소융합공학과
- 2PS-183** Strategically Designed Metal-Organic Framework and Agarose Polymer Hybrid Porous Carbon Aerogel Composite for Efficient Solar-Steam generation: Solar-Driven Photothermal Desalination  
장지은, 김동균, 박진현, 정성현, 정민석, 김정훈, 연세대학교
- 2PS-184** 탄소섬유-흑연 필러 적용에 따른 예폭시 기반 방열 접착제 성능 및 전기전도 특성 평가  
장성은, 최성웅, 도가람\*, 최두영\*\*, 한국생산기술연구원/RAMP융합연구단/전북대학교; \*한국생산기술연구원/전북대학교; \*\*한국생산기술연구원/RAMP 융합연구단
- 2PS-185** Plasma Induced Membrane Microstructural Modification and its Impact on Polymer Electrolyte Membrane Fuel Cell Performance  
이창호, 김대우, 연세대학교
- 2PS-186** Active Nanoporous Particles with Control of Ethylene Gas Absorption, Hydrophobicity, and Surface Charge for Bio-degradable and Antibacterial Film  
이지우, 이서현, 박종진, 전남대학교
- 2PS-187** 초고속 용융 원심방사 시스템 개발 및 평가  
이정언, 김태현, 김기영\*, 염정현, 경북대학교; \*(주)아이제이에스
- 2PS-188** Manufacture and Evaluation of Pouch Films for Large-Sized Lithium-Ion Battery Cells  
이정언, 김태영, 임춘삼\*, 염정현, 경북대학교; \*(주)경성화인켈
- 2PS-189** Autonomous Self-healing 3D Micro-suction Adhesives for Multi-layered Amphibious Soft Skin Electronics  
임도현, 정민우\*, 천현서, 민형호, 이연수, 황귀관, 전승환, 김다원\*\*, 오진영\*, 방창현, 성균관대학교; \*경희대학교; \*\*한국교통대학교
- 2PS-190** Enhanced Thermomechanical Properties of TPU Composites Utilizing Waste Lignin *via* Hydrogen Bonds  
이세민, 위경재\*, 이서구\*, 한영태대학교; \*유기나노공학
- 2PS-191** Impact-Resistant Polyurethane Sealing Film Containing BHET for Secondary Batteries  
이강국, 백정주, 장기철, 백승환, 박혜린, 송효진, 신교직, 한국생산기술연구원
- 2PS-192** Advanced Pt/Activated Nitrogen-functionalized Graphitic Nanoplatelets Electrocatalyst for Hydrogen Evolution Reaction  
윤서정, 전인엽, 원광대학교
- 2PS-193** Facile Fabrication of Shape-controllable and Reusable Nanoporous Catalytic Aerogels Based on Co-MOF and Agarose for Efficient Decomposition of Organic Pollutants in Water  
윤민수, 전현욱, 박지수, 장지은, 최호준, 김정훈, 연세대학교
- 2PS-194** Effect of Charge Carrier Dynamics and Photovoltaic Performance in Organic Solar Cells with the Incorporation of a Third Component  
박창우, 이다민, 함가영, 차효정\*, 경북대학교
- 2PS-195** 열경화성 예폭시 수지의 복합 나노섬유 제조 및 특성 분석  
오 진, 이정호, 최은애, 이현지, 김준희, 이도희, 김학용\*, 전북대학교 산학협력단; \*전북대학교
- 2PS-196** Impact of Neutral Kneading Blocks in Twin-Screw Extrusion on Polymer Blends and Composites: A Ludovic Simulation Study  
오윤진, 구자승, 충남대학교 유기재료공학과
- 2PS-197** Surface Modification of Cellulose by Silane Coupling Agent for Thermoplastic Polyurethane Composites  
엘라나 나빌라 누르 아베리나 안자르, 유성일, Pukyong National University

- 2PS-198** Alkylated-Chitosan Nanowhisker for the Mechanical Reinforcement of Isosorbide-based Polycarbonate Composites  
엘라나 나빌라 누르 아베리나 안자르, 유성일, Pukyong National University
- 2PS-199** Improved Properties of High-density Polyethylene Using Heptene-functionalized Graphitic Nanoplatelets  
양지민, 전인엽, 원광대학교
- 2PS-200** 라이다 투과를 위한 자가 복원 우레탄 및 블랙 폴리카보네이트 연구  
안선용, 손완호\*, 김지원\*\*, 현대자동차; \*에코플라스틱; \*\*에경특수도료
- 2PS-201** 커피 찌꺼기와 스티로폼을 활용한 친환경 복합재료 연구  
심동준, 윤재문, 김영훈, 최재학\*, 동의대학교; \*충남대학교
- 2PS-202** Study on the Chemical Recycling of Rigid Polyurethane Foam Insulation Board for Construction  
신세라, 박원배, 고진석, 손정락, 정우화인(주)  
이종소재접합용 접착제 조성에 따른 접합강도/ 파단면 관찰  
송수빈, 백지원, 박인경\*, 원계미결; \*성균관대학교
- 2PS-204** Biodegradable Vascular Stent with Enhanced Multilayer Surface Coating for Improved Anti-inflammation, Anti-restenosis, and Re-endothelialization  
송덕현, 한동근, 백승운, 차의과학대학교
- 2PS-205** Synthesis of Oxime Urethane-Based Covalent Adaptable Networks *Via* Photo-initiated Polymerization of Methyl Methacrylate  
송대연, 박영재, 숭실대학교
- 2PS-206** Fabrication of Microparticle Polyethylene Wax *via* Phase Separation Technique  
송건택, 김 정, 인천대학교
- 2PS-207** Validation of Compatibility with Non-etching Type Oxide Chemicals Depending on PCB Raw Materials  
손한솔, 여행운, 임현수, 장웅식\*, 김진영\*, 왕동환\*, 이수페타시스; \*Department of Intelligent Semiconductor Engineering, Chung-Ang University
- 2PS-208** PPTA-based N-doped Hard Carbon Microspheres as Anode Materials for Li-ion Batteries  
손강호, 최호원, 김중욱, 육지호, 인하대학교
- 2PS-209** Robust and Flexible Fiber-like Multifunctional Sensor for Use as Smart Textiles  
서정윤, 이화성, 한양대학교
- 2PS-210** Filler Role of Polyethylene in Ultra-High Molecular Weight Polypropylene-*b*-Polyethylene Copolymers  
서보길, 정민기, Vishal Gavande, 이원기, 부경대학교
- 2PS-211** 전고체 배터리 적용 물당소재 조성에 따른 내열특성변화 관찰  
백지원, (주)원계미결
- 2PS-212** Fabrication of MOF-PLA Composite for Optical Sensing Formaldehyde  
백서진, 한석운, 정성훈, 최은영, KSA of KAIST
- 2PS-213** Controlled Pore Size and Formed Crosslinking Network in UF Grade Membranes *via* Hydrophilic Modification  
배지운, 권영재, 조계용, 부경대학교
- 2PS-214** Enhancing Electrical Conductivity of Steel/Polymer Composites *via* Mechano-chemistry  
박현재, 안철희, 김형준, 서울대학교

### 기능성 고분자(II)

- 2PS-215** Utilizing Melamine Foams with Bimodal Pores and a Hierarchical Graphite/SnSe Structure for Spontaneous Salt Rejection in Solar Desalination  
정성운, 유필진, 성균관대학교
- 2PS-216** Advanced Green Electronics: Highly Conductive Micropatterned PEDOT: PSS/Regenerated Cellulose Composites  
전영호, 유정목, 이수지, 경희대학교
- 2PS-217** Surface Modification of Poly(ethylene terephthalate) by Photo-initiated Grafting of Sulfonamide-derived Monomer for Antimicrobial Activity  
전민욱, 안철희, 서울대학교
- 2PS-218** Crosslinked Anion Exchange Membrane Based on Poly(styrene-*b*-6-bromohexyl acrylate-*b*-styrene) for Water Electrolysis  
장현지, 강범구, 숭실대학교
- 2PS-219** Acid-Responsive Fluorescent Films with 2D Nanostructures for Advanced Chemosensors  
장준화, 정광운, 전북대학교
- 2PS-220** "Double Multi-cation" Composite Membrane with Surface-functionalized Zirconia Nanoparticle of Highly Improved Ionic Conductivity and Chemical Stability for Anion Exchange Membrane Water Electrolysis  
장준호, 유필진, 성균관대학교
- 2PS-221** Ethylene-vinyl Acetate Copolymer (EVA) Vitrimer Based on Dynamic Boronic Ester Bonds  
장유진, 장영욱, 강이슬, 한양대학교
- 2PS-222** Polymer Coating for Li Metal Batteries  
장연경, 유필진, 성균관대학교
- 2PS-223** Crosslinked Bottlebrush Polymer Binders Exhibiting Adhesion and Elasticity for Silicon-based Anodes  
장순호, 허윤, 조성재, 방준하, 고려대학교
- 2PS-224** Pyrrole and Pyrrole Derivatives-Based Molecularly Imprinted Polymeric Films for Phenytol Detection  
임석진, 이유진, 김민재, 김재혁, 배정연, 박진영, 경북대학교
- 2PS-225** Optically Anisotropic Smart Windows with Electrochromism  
임민우, 정광운, 전북대학교
- 2PS-226** Electric Vehicle Motor Core Adhesive Breakthrough: Exceptional Adhesion and Oil Resistance in Laminated Electrical Steels  
임가현, (주)삼양사

- 2PS-227** Prevention of Lithium Dendrite Growth in Single-ion Conducting Gel Polymer Electrolytes by Incorporating Graphene Oxide Cross-linkers  
이희원, 이종찬, 서울대학교
- 2PS-228** Inorganic-Organic Hybrid Materials for Transparent and Self-Healing Coatings *via* Diels-Alder Chemistry  
이혜미, 김해진, 이재준, 부산대학교
- 2PS-229** Multivalent Supramolecular Polymerization Toughens Photocurable Polymer Networks  
강지형, 이혜승, 서울대학교
- 2PS-230** Evaluating the Low Molecular Weight  $\beta$ -Glucan as an Immunomodulatory Adjuvant in Dendritic Cells  
이하늘, 김태수, 성수희, 김보람, 김진호, 서 찬, 이 화, 임수아, 김정은, 정지민, 정도윤, 원종순, 최경민, 김영민\*, 정진우, 국립호남권생물자원관; \*전남대학교
- 2PS-231** Photo Crosslinking System Using Methacrylated Hyaluronic Acid with  $\beta$ -CD:Cur Complex for Wound Healing and Monitoring  
이초록, 김민희\*, 박원호, 충남대학교; \*경북대학교
- 2PS-232** Synergistic Effect of Multilayered Alginate/Poly(SBMA) Coatings on Marine Antifouling Property  
이진우, 강성민, 충북대학교
- 2PS-233** Disappearance of the Photonic Stop Band in 1D Photonic Crystal Films through Humidity-Induced Refractive Index Matching for Anti-Counterfeiting Applications  
김예진, 김지현, 이종훈\*, 정유진, 나현아, 황도훈\*\*, 이형일\*\*\*, 정서현, 한국화학연구원; \*한국화학연구원/부산대학교; \*\*부산대학교; \*\*\*울산대학교
- 2PS-234** Scalable Fabrication of Electrochromic Hydrogel Microarchitecture Using Maskless Lithography System  
이유민, 이지석, 울산과학기술원
- 2PS-235** High Performance Carbazole Derivatives-based Cathode Material for Organic Battery  
이유경, Dian Sukmawati Latifah, 장재원, 부경대학교
- 2PS-236** Improving Plant Growth and Yield by Energy Transfer through Soil Using Loss Energy  
이용호, 홍진기, 연세대학교
- 2PS-237** The Effect of Thermal Insulating Property of Polysilsesquioxane on the Size of Intramolecular Void Spaces  
이예지, 임정혁, 김경민, 한국교통대학교
- 2PS-238** Synthesis and Characterization of Ion-Conductive and Cross-linkable Polyphosphazene for Solid Polymer Electrolyte in Lithium Secondary Batteries  
이승윤, 이종찬, 서울대학교
- 2PS-239** Preparation of Porous Expanded Graphite for High-Performance Hydrogen Storage *via* Peroxide Treatment  
이슬이, 안영진, 박수진, 인하대학교
- 2PS-240** Electrochemical Monitoring of NADH Redox with NPQD-modified Electrodes Based on Electropolymerization  
이수한, 구미전자정보기술원
- 2PS-241** Effect of Amine-treated Alumina on Thermal Conductivity and Fracture Toughness of Epoxy Nanocomposites  
이세열, 박수진\*, 인하대학교 산학협력단; \*인하대학교
- 2PS-242** Optimizing Studies on PVDF-coated PP Separators for Highly Stable Lithium-ion Batteries  
이민정, 조계용, 권영재, Kaiyun Zhang, 박소휘, 김민주, 박장우, 부경대학교 공업화학과
- 2PS-243** Air-Filtering Mask Made of Biodegradable Polymers for Respiratory Protection from PM and Pathogens  
이동건, 최원산, 국립한밭대학교
- 2PS-244** Effect of Types And Compositions of Acrylate Oligomers and Monomers on Mechanical Properties of UV-cured Polymers  
이나원, 이승훈, 박준석, 권영환, 대구대학교
- 2PS-245** An Ether-free Organic/inorganic Composite Membrane Containing Inorganic Nanofillers for Anion Exchange Membranes with Excellent Chemical Stability and Ionic Conductivity  
이규하, 주지영\*, 전북대학교, 에너폴리텍; \*전북대학교
- 2PS-246** Sustainable Conductive Composite Film Based on Lignocellulose Nanofibers and Conductive Polymer for Soft Electronics  
이강윤, 서유리, 박서현, 유정목, 경희대학교
- 2PS-247** On-Demand and Non-Contact Shape-Fixation Strategy for Microstructures in UV-Responsive Covalent Adaptable Networks  
윤여명, 문호준\*, 조웅비\*, 이동욱\*\*, 정소담\*\*, 위정재\*, 김재빈, 부산대학교; \*한양대학교; \*\*동의대학교
- 2PS-248** Enhanced CO<sub>2</sub> Reduction Reaction Efficiency Using HKUST-1 (Cu)@rGO  
윤승민, 정경화\*, 최은영, KSA of KAIST; \*한국에너지공과대학교
- 2PS-249** Regulating Dynamic Dielectricity of Single-Ion Polymer Electrolytes *via* Polymerizable Deep Eutectic Monomer for Lithium Metal Batteries  
윤수성, 김선호, Puji Lestari, 최우혁, 인하대학교
- 2PS-250** Photocatalytic and Magnetic Janus Particles for Oil Separation and Organic Pollutant Photodegradation  
윤희진, 김다인, 박나경, 현동춘, 경북대학교
- 2PS-251** Rewritable Electro-Optic Devices Based on Hierarchical Structures of Benzene-1,3,5-Tricarboxamide Macroelators  
윤동민, 정광운, 전북대학교
- 2PS-252** The Relationship between Thermal Conductivity and The Metallomesogens  
위영재, 정광운, 전북대학교
- 2PS-253** Enhancing Triboelectric Performance of Poly(vinylidene fluoride) by Aliphatic Hyperbranched Polyester  
우인선, 한동현, 오승주, 윤재욱, 허 웅, 최승은, Gajula Prasad, 배진우, 한국기술교육대학교  
다기능성유기고분자실험실

- 2PS-254** Synthesis of Bottlebrush Block Copolymers and Inducing Perpendicular Orientation *via* Thermal Annealing  
오혜진, 정재원, 방준하\*, 고려대학교 서울캠퍼스; \*고려대학교
- 2PS-255** Self-assembled Monolayer of Cysteine on Gold Nanoparticles for Simultaneous Detection  
엄하연, 김승현, 심재원, 인하대학교
- 2PS-256** Preparation of Tris(2-aminoethyl)amine Cross Linked Waterborne Polyurethane Aerogel and Their Application as Pressure Sensor  
엄태욱, 김재욱, 김승현, 인하대학교
- 2PS-257** Synthesis and Characterization of Eco-friendly Water-processable Photoresists Containing Photo-reversible Coumarin Groups  
엄준호, 김현진\*, 최재학\*\*, 충남대학교; \*충남대학교 신소재공학과; \*\*충남대학교 고분자공학과
- 2PS-258** Stress-Responsive Sol-Gel Transition of Phase Change Material Emulsions for Exceptional Thermal Insulation Performance  
양종철, 김진웅, 성균관대학교
- 2PS-259** Fabrication of Self-cleaning & Antireflective Surface *via* the Self-assembly Approach  
심재원, 엄하연, 김승현, 인하대학교
- 2PS-260** Enhanced Mechanical Strength and Oxidation Stability of Organic Solvents Dispersible MXene by Functionalization with Natural Cross-linkable Thermosetting Polymer  
신채민, 배진주, 박영호, Modigunta Jeevan Kumar Reddy, 이승준, 인인식, 한국교통대학교
- 2PS-261** Structural Isomers of Pyrrolopyrroledione Incorporated into Dihydroindenofluorene-Based Polymeric Donors for Non-Fullerene Organic Solar Cells  
신찬기, Puspita sari\*, 이가람\*, 신유진\*, 진영음, 부경대학교/BB21+ Project; \*부경대학교
- 2PS-262** Molecular Martensite Actuator Films for Micromachine Applications  
수랍 자그데일, 라수연, 장진혁, 황경태, 박상규, 한국과학기술연구원(KIST)
- 2PS-263** High Efficiency with Epoxy-group-containing Gel Polymer Electrolyte *via* In-situ Polymerization Using Lithium Bis(fluorosulfonyl) Imide (LiFSI)  
송수빈, 배완수, 주기중, 나혜원, 이지예, 강동훈, 이도율, 김주섭, 김환기, 장호현, 건국대학교
- 2PS-264** Investigation of Network Structures of Polymers for Passive Daytime Radiative Cooling Technologies  
성소현, 김 현, 한국화학연구원
- 2PS-265** Solid Polymer Electrolyte Based on EDOT Oligomer and Poly(vinylidene fluoride)  
서하늬, 권현주, 조남주, 부산대학교
- 2PS-266** Shear-Aligned Cholesteric Liquid Crystal Elastomers: Effect of Molecular Weight on the Helical Structure  
서채원, 최지혜, 안석균, 부산대학교
- 2PS-267** Surface Properties of UV-curable Polysilsesquioxane Hard Coating Film Containing Different Organic Functional Group  
백정준, 백승환, 이강국, 박해린, 송효진, 김영훈, 장기철, 신교직, 한국생산기술연구원
- 2PS-268** Polysilsesquioxane Hard Coating Using Dynamic Covalent Bonds with Self-Healing Properties  
백승환, 백정준, 장기철, 박해린, 이강국, 송효진, 신교직, 한국생산기술연구원
- 2PS-269** Study on Polymer Electrolyte with Micelle Structure Using Terpolymer for Lithium Ion Batteries  
배완수, 송수빈, 주기중, 나혜원, 이지예, 강동훈, 이도율, 김주섭, 김환기, 장호현, 건국대학교
- 2PS-270** Fabrication of Fresnel Lens by Thermal-Imprinting of Sulfur-Rich Polymer Films  
배경연, 조웅비, 위경재, 한양대학교
- 2PS-271** Optoelectronic Logic-in-memory Operation through Wavelength-dependent Multistate Programmability Based on Narrow Bandgap Polymer Floating Gate and Wide Bandgap Organic Transistor Channel  
박태현, 한영민, 김윤희\*, 유호천, 가천대학교; \*경상국립대학교
- 2PS-272** Tannic Acid-assisted Aramid Nanofiber/Graphene Nanoplatelet Composite Aerogel Films with Excellent EMI Shielding, Heat Management, and Flame Retardancy Performance  
박진혁, 정영규, 충남대학교 유기응용소재공학과
- 2PS-273** Effect of Polyester-based Oligomer/acrylate Monomers on Mechanical Properties of UV-cured Polymers  
박준석, 권영환, 대구대학교
- 2PS-274** Biomass-derived Optically Clear Adhesives for Foldable Displays  
박영주, 권민상, 서울대학교

#### 고분자 합성(I)

- 2PS-275** Preparation and Characterization of PEDOT:PSS-PH/CNT Composites for Optoelectronic Applications  
황현지, 김태동, 김 윤, 한남대학교
- 2PS-276** Recyclable Polycarbonate Vitrimers Derived from CO<sub>2</sub>  
황진현, 송영한, 허승재, 황희선, 불기원\*, 서진영\*\*, 나종범, 한국과학기술연구원; \*고려대학교; \*\*한국화학연구원
- 2PS-277** 고내열 특성을 갖는 보리막 제조를 위한 가용성 폴리이미드 소재 연구  
황정재, 이규원, 경규원, 유한태, Ptech단소재
- 2PS-278** A Multi-Component Visible-Light Initiating System for Rapid and Deep Photocuring through UV-opaque Polyimide Films  
황태현, 권민상\*, 서울대학교 재료공학부; \*서울대학교
- 2PS-279** Self-Assembly of Amphiphilic Copolymers: Exploring Block Copolymer Structures  
주현선, 김경택, 서울대학교

- 2PS-280** 3D-Printable, High-Temperature Resistant PMMA Materials *via* Photopolymerization-Induced Microphase Separation  
조수찬, 이영수\*, 최수비\*\*, 채윤미\*\*, 박성민\*\*, 안석균\*\*, 서명은, KAIST; \*LX MMA; \*\*부산대학교; \*\*\*KRICT
- 2PS-281**  $\alpha$ -Bromoisobutryl Bromide-Induced Quaternization Polymerization of Ethynylpyridines  
제갈영순, 진성호\*, 박종욱\*\*, 심상연\*\*\*, 임권택\*\*\*\*, 경일대학교; \*부산대학교; \*\*경희대학교; \*\*\*강릉원주대학교; \*\*\*\*부경대학교
- 2PS-282** Synthesis of Poly(3-Hexythiophene) & Poly(Dimethylsiloxane) Based Block Copolymers and Its Thermoelectric Properties  
정우열, 김경택, 서울대학교
- 2PS-283** Highly Efficient Dual Photoredox/Copper Catalyzed Atom Transfer Radical Polymerization Achieved through Mechanism-driven Photocatalyst Design  
전우진, 권민상, 서울대학교
- 2PS-284** Low Voltage-driven Reverse Mode Liquid Crystal Smart Window Stabilized with Polymer Composite of Mesogenic Monomer and Thiol-terminated Crosslinker  
장희준, 이영인, 김세움, Seoul National University of Science and Technology
- 2PS-285** Synthesis of Novel Duplex-forming Oligomers with Complementary H-bonding Base-pairs  
장희정, 노효주, 김경택, 서울대학교
- 2PS-286** 3D Printing of Polyimide Parts Using Water-Processable Photosensitive Precursor Resins  
장윤경, 박찬호, 백민석, 손예빈, 최윤제, 정찬문, 연세대학교
- 2PS-287** Effect of Curing Time on the Properties of Non-Isocyanate Polyurethane Adhesives Derived from Waste Soybean Oil  
이한수, 김 일, 부산대학교
- 2PS-289** Rapid and High-Density Antibody Immobilization Using Electropolymerization of Pyrrole for Highly Sensitive Immunoassay  
이주경, 구미전자정보기술원
- 2PS-290** Visible-Light-Induced Chain Reshuffling of Poly(methyl acrylates) with Thiocarbonylthio End Groups  
이정호, 권민상, 유창훈, 서울대학교
- 2PS-291** Curing Behavior Study of Tetrafunctional Acrylate Monomer Using Di(trimethylolpropane)  
이재현, 김주원, 정경설, 한국화학융합시험연구원
- 2PS-292** Cyanoarene-based Water-soluble Purely Organic Photocatalysts for Photocatalysis in an Aqueous System  
이윤경, 권민상, 서울대학교
- 2PS-293** Chiral Polymer Brush Growth on Magnetic Nanoparticles under Ambient Conditions  
이예림, 강효진, 이승연, 이재범, 조우경, 손경선, 충남대학교
- 2PS-294** Degradable Acetal-Backboned Polymers Linked with Inorganic and Organic Materials  
이승훈, 김철재, 충북대학교
- 2PS-295** *Ab Initio* RAFT Emulsion Polymerization of SBR Mediated by Poly(acrylic acid-*b*-styrene) Trithiocarbonate  
이동준, 김성윤, 백현중, 부산대학교
- 2PS-296** Screening Monomeric Structure for Water-borne Photo-sensitive Poly(amic acid) Salts  
윤수빈, 김윤호, 박종민, 윤호규\*, 원종찬, 한국화학연구원; \*고려대학교
- 2PS-297** Urethane Based Elastomeric Networks with Exceptional Shape Memory Recovery under Physiological Temperature Stimuli  
윤동엽, 이성수, 한국과학기술연구원
- 2PS-298** Synthesis and Characterization of Imidazolium-Based Network Ionic Polymer Composites  
윤기선, 이민재, 국립군산대학교
- 2PS-299** Synthesis of Biodegradable Superabsorbent Polymers *via* Cyclic Ketene Acetal Copolymerization  
오진영, 서명은, 한국과학기술원
- 2PS-300** Enhanced Heat Resistance of Fluorosilicone by Introduction of Phenyl Group  
오수민, 김장현, 심상은, 인하대학교
- 2PS-301** Block Polymer Monolith with Kinetically Induced 3D Ordered Morphology *via* Polymerization-induced Microphase Separation Entropically Driven  
여원준, 서명은, 한국과학기술원
- 2PS-302** Balancing Between Modulus and Conductivity of Ion Gels with Surface-Modified Aramid Nanofiber (S-ANF)  
양선우, 서명은, 한국과학기술원
- 2PS-303** Prussian Blue Analogs as Efficient Catalysts for the Synthesis of  $\alpha,\omega$ -Primary Hydroxyl-Terminated Polyols  
Chinh Hoang Tran, 김 일, 부산대학교
- 2PS-304** Effect of Photoinitiator Content in Polymaleimide Copolymers Grafted Chalcone and Methacrylate  
송효진, 장기철, 백정준, 백승환, 이강국, 박해린, 신교직, 한국생산기술연구원
- 2PS-305** Organic Field-Effect Transistors and High-Voltage Logic Applications: Well-Balanced Ambipolar Charge Transport of Diketopyrrole-Based Copolymers  
송욱오, 김윤희, 경상국립대학교
- 2PS-306** Synthesis and Characterization of Random Copolymers with Thermoelectric Properties  
송승훈, 김상범\*, 장재영\*, 김윤희, 경상국립대학교; \*한양대학교
- 2PS-307** Recyclable Chiral Acetal-Backboned Polymer  
송다용, 김철재, 충북대학교
- 2PS-308** Eco-Friendly Preparation of Poly(imide-siloxane)/Silver Nanowire Sandwich-like Composite Films for Strain Sensing  
손예빈, 최윤제, 박찬호, 장윤경, 백민석, 정찬문, 연세대학교



포스터발표(III)\_10월 2일(수)

(08:30 ~ 10:00)

좌장: 김대석, 김용주

에너지 부문위원회(II)

- 3PS-1 Syntheses and Photovoltaic Performances of Pyrazine-Based Organic Photosensitizers for Dye-Sensitized Solar Cells  
오승현, 김미라\*, 동의대학교 고분자나노공학과; \*동의대학교
- 3PS-2 Printable Solid Polymer Electrolyte for Direct Ink Writing of Solid-state Batteries  
오수민, 임종우, 정승준\*, 서울대학교; \*고려대학교
- 3PS-3 나이트릴계 용매를 기반으로 한 준고체 고분자 전해질 및 이를 응용한 리튬 고분자 전지  
안익경, 박명수\*, 송승원\*\*, 강영구, 한국화학연구원; \*SK온; \*\*충남대학교
- 3PS-4 Addition Effect of  $Ti_2NTxMXene$  to PEDOT:PSS Catalyst Layer on Photovoltaic Performance of Hybrid Solar Cells  
신석훈, 김미란, 한운수, 대구가톨릭대학교
- 3PS-5 The Importance of the Modulus of the Soft Phase in Composite Electrolytes Containing a 3D LAGP Framework  
송이슬, 이원호, 금오공과대학교
- 3PS-6 이차전지용 건식 음극 공정 연구 개발 동향  
송민주, 송우진, 충남대학교
- 3PS-7 Anionic Polymer Electrolytes Based on Polyfluorene, Soluble in Water and Serving as a Universal Interlayer in Organic Solar Cell Applications  
손동환, Qurrotun Ayuni Khoirun Nisa, Indah Salma Sausan, 이영석, Waheed Muhammad, 김주현, 부경대학교
- 3PS-8 Photovoltaic Performance of Hybrid Solar Cells with PEDOT:PSS/ $Nb_2CTx$ -mixed Catalyst Layer  
류경호, 구주희, 김미란, 한운수, 대구가톨릭대학교
- 3PS-9 Optimization of Electrolyte Membranes and Electrodes for High-Temperature PEMFCs  
김주형, Muhammad Farjad Ali, 이혜진, 신동원, 배병찬, 한국에너지기술연구원
- 3PS-10 Controlled Growth of Hybrid Halide Perovskites by Crown Ether Complexation for Perovskite Solar Cells  
김종민, 서지연\*, 부산대학교; \*부산대학교 나노에너지공학과
- 3PS-11 전기장 수직 정렬된 Rochelle Salt 기반 고분자 압전소자의 성능 평가 및 최적화 연구  
김진우, 김민재, 김영훈, 최재혁\*, 윤재문, 동의대학교; \*충남대학교
- 3PS-12 Long-Term Stability of Perovskite Solar Cells: Reduce Efficiency Loss with EVA Film Lamination Optimization  
권동건, 황동환, 서지연, 부산대학교 나노에너지공학과
- 3PS-13 Synthesis of Porous Cellulose Acetate Separators for Lithium-Ion Batteries Using N-TIPS Technique with Various Solvents  
Khansa Mumpuni, Christin Rina Ratri, Annisaa Hayya Arundati\*, Adream Bais Junior, Adam Febriyanto Nugraha, Green Polymer Technology Laboratory, Department of Metallurgical and Materials Engineering, Faculty of Engineering, Universitas Indonesia; \*Pohang University of Science and Technology
- 3PS-14 Electrostatically Self-assembled Dual-functional  $MXene/CoNiMn-LDH$  Composites for Electrochemical Energy Storage and Glucose Sensor Applications  
Kasinathan Kasirajan, 최홍균, Kongju National University

콜로이드 및 분자조립 부문위원회(II)

- 3PS-15 Fabrication of 3D Nanostructures Using Block Copolymer and Colloid Lithography  
윤현수, 최홍균, 공주대학교
- 3PS-16 Continuous Flow Synthesis of Furfural from Biomass Carbohydrates  
신희주, 박세라\*, 오수완\*, 배세원\*, 제주대학교 화학과; \*제주대학교
- 3PS-17 Surface Bromination of  $CsPbI_3$  Perovskite Nanocrystals for Highly Efficient Pure Red Light-emitting Diodes in Skin-attachable Displays  
손희용, 이경훈\*, 김윤호, 양지웅\*, 최문기, 울산과학기술원; \*대구경북과학기술원
- 3PS-18 Long Chain Ligands of Quantum Dots to Enhance Patterning Yield of 100%  
서종덕, 최문기, 양지웅\*, 권종익, 울산과학기술원; \*대구경북과학기술원
- 3PS-19 The Synthesis Process of New 2D Material  $MXene$ : Manganese Carbide  $Mn_2AlC$   
백상은, 강영중\*, 한양대학교; \*한양대학교 화학과
- 3PS-20 Bimetallic PEG-Au@Pt Nanocatalysts for p-type  $NiO$   $NO_2$  Sensors  
배한서, 한세광, 포항공과대학교
- 3PS-21 Ultralong Silver Nanowires Patterning Using Intaglio Printing for High-Resolution Wearable Electrophysiological Sensors  
백이경, 김혜현, 김기욱\*, 양지웅\*, 최문기, 울산과학기술원; \*대구경북과학기술원
- 3PS-22 Janus Particles Based on Pickering Emulsions for Colloidal Surfactants  
방용빈, 김주희, 유주은, 조영주, 이성재, 수원대학교
- 3PS-23 DNA Aptamer Incorporated PEG Hydrogels for DDS Applications  
박윤슬, 박민규, Matsumoto Ayana, 배세원, 제주대학교
- 3PS-24 Layer-by-Layer Assembled Polymeric Thin Films for Triboelectric Energy Harvesting  
박용태, 명지대학교
- 3PS-25 High  $\beta$ -phase Formation in Poly(vinylidene fluoride) *via* Thermal Splint Decomposition  
박승주, 강영중, 최진우, 한양대학교
- 3PS-26 Stable Hydrogel Electrolytes for Wearable Ionic Thermoelectric Supercapacitors  
박민지, 정유나, 박태현, 충남대학교 유기재료공학과 첨단유기재료연구실
- 3PS-27 Effect of Polycation Layer Crosslinking Density on Electrochemical  $CO_2$  Reduction Product Selectivity  
박상준, 김형준, 서강대학교

- 3PS-28 Cellulose/ $GO/Pd-Pt$  Nanocomposite Monolith for Continuous-Flow Catalytic Remediation of  $Cr(VI)$   
김현정, Astrini Pradyasti, 김문호, 부경대학교
- 3PS-29 Self-Powered Sweat-Responsive Structural Color Display  
김태빈, 박철민, 김지원, 정종건, 장지혜, 연세대학교
- 3PS-30 Compatible Crystallization Protocol of Mono-Dentate Ligands Cesium-Based Red Emitting Perovskite Quantum Dots  
김진영, 장웅식, 임태용, 왕동환, 중앙대학교
- 3PS-31 고민감도 응력변형 광결정 필름의 색변환 특성 연구  
이상훈, 전종윤, 김영석, 한국전자기술연구원
- 3PS-32 Accelerated Lattice Transition of Sphere-forming Block Copolymer in Thin Films under Solvent Vapor  
김성은, 김소연, 서울대학교
- 3PS-33 Piezoionic Characterization of Poly(acrylic acid-co-acrylamide) Hydrogels Assisted by 3D-printed Molds  
김선도, 김세영, 단국대학교
- 3PS-34 Enhancement of Mechanical Strength and Osteoconductivity of Acrylic Bone Cement by Leveraging Hypo-crystalline PMMA Powder and Bioactive Glass 45S5  
김상호, 강영중\*, 한양대학교; \*한양대학교 화학과
- 3PS-35 Surface Active Poly(ethylene glycol)-based Biocompatible Block Copolymer Micelles  
김상윤, 김세영, 단국대학교
- 3PS-36 Exploring the Correlation Between Aerogel Nanostructures and Their Catalytic Performances in CO Oxidation  
김병석, 심상은, 인하대학교
- 3PS-37 PEG Molecular Weight Effect on Stabilization of Quantum Dots in Aqueous Dispersions  
김민소, 정병국\*, 김세영\*\*, 단국대학교; \*부산대학교; \*\*단국대학교 고분자공학과
- 3PS-38 Defect Elimination Strategy for Aligned Block Copolymer Nanopatterns: Sequential Solvent Immersion Annealing  
김민성, 김소연, 서울대학교
- 3PS-39 Specific Scission of Covalent Bonds Using Mechanical Force in DNA Diblock Architectures  
김규민, Banyu Firdaus Soerawidjaja, 이소운, 객민석, 국립부경대학교
- 3PS-40 Indium Tin Oxide 광결정 패턴을 이용한 다기능성 창호  
황영지, 편승범, 최민주, 권혜린, 김경한, 홍용표, 박정연, 객진우, 조은철, 한양대학교
- 3PS-41 Metal-Phenolic Network-Based Cellulose Sun Boosters with ROS Scavenging and Photon Quenching Capabilities  
권하은, 김진웅, 성균관대학교
- 3PS-42 Photostable Polymeric Nanoparticle Containing Hydrophobic Lumogen® Dye as Cellular Biomarkers  
강지오, 강민경, 객민석, 부경대학교
- 3PS-43 Individual Control of  $H^+$  and  $Cl^-$  ions in Seed-Mediated Growth of Silver Nanocubes  
강신원, 전석진\*, 금오공과대학교; \*금오공과대학교 고분자공학과
- 3PS-44 Fabrication of All-polymer Piezoelectric Elastomer  
강동수, 전석진, 국립금오공과대학교
- 3PS-45 Backbone Conformation of Hypo-crystal Poly(methyl methacrylate) Crystallized by Rapid Thermal Quenching Method with Entropy Diluents  
Van Thanh Vu, 강영중, Hanyang University
- 3PS-46 DNAOD: A DNA Absorption Spectrum Prediction Tool Based on Three-Base Nearest-Neighbor Model  
Banyu Firdaus Soerawidjaja, 객민석, Pukyong National University
- 3PS-47 Development of Polymeric Hyaluronic Acid-Montmorillonite/ $ZnO$  Nanoflower Composites for Enhanced Antimicrobial Applications  
Alemtsehay Tesfay Reda, 박용태, 명지대학교

의료용 고분자 부문위원회(II)

- 3PS-48 Poly(acrylic acid)-based Tissue Adhesives with Enhanced Adhesive Properties  
심동훈, 김유정, 권오형, 국립금오공과대학교
- 3PS-49 Stimuli-responsive Polyurethanes for Bioresorbable Electronic Medicine  
심규현, 최연식, 연세대학교
- 3PS-50 Adhesion-assisted Laser Ablation  
서형호, 최연식, 연세대학교
- 3PS-51 Hyaluronated Lipid Nano Particles for mRNA Vaccines  
서유진, 김문구, 한세광, 포항공과대학교
- 3PS-52 Bioinspired Urease-powered Micromotor as an Active Oral Drug Delivery Carrier in Stomach  
서예원, 최현식, 한세광, 포항공과대학교
- 3PS-53 Grafting of Zwitterionic *N*-oxide Polymer Brushes *via* Surface-Initiated ARGET ATRP for Anti-Biofouling Applications  
변종현, 조우경, 강성민\*, 충남대학교; \*충북대학교
- 3PS-54 Enhanced Transdermal Delivery of Aconite Root with HA-PLGA Nanoparticles for Pain Relief  
박태연, 김기수, 부산대학교
- 3PS-55 Biofunctional Composite Scaffolds Containing Intermediate Mesoderm Cells and Differentiation-inducing Extracellular Vesicles for Kidney Regeneration  
박경민, 한동근, 차의과학대학교
- 3PS-56 Fabrication of Biodegradable and Radiopaque Hollow PLGA Microparticles for Chemo-embolization by Microfluidic Devices  
박수빈, 안철희, 서울대학교
- 3PS-57 Drug Delivery System for Regenerating Permanently Damaged Skin Tissue  
박솔비, 이규의, 경북대학교 화학과

- 3PS-58** Barley  $\beta$ -Glucan Decorated Nanocomplexes for Macrophage Targeting and M1 Polarization  
박서연, 최서진, 김태일, 서울대학교
- 3PS-59** Electrospun Methacrylated Poly(vinyl alcohol) Nanofiber Dispersion to Mimic Hierarchical Cellular Structure  
박민하, 한솔, 김민희, 경북대학교
- 3PS-60** Stem Cell Spheroid Preparation and their Preservation Strategy Using Biocompatible Polymers  
모두미타 파텔, 정서우, 정병문, 이화여자대학교
- 3PS-61** Loading and Releasing Local Anesthesia from GelMA Beads for Embolization Therapy  
띠루모르간 카비타, 이원목\*, Sejong university; \*세종대학교
- 3PS-62** A Study on the in Vitro Properties of Polydioxanone (PDO) and Poly(lactic acid-co- $\epsilon$ -caprolactone) (PLCL) Cog-Sutures Using Divided Precision Molds  
김희선, 방승욱, 이재근\*, 오성화, 전남바이오팀원 나노바이오연구센터; \*㈜동원메디칼
- 3PS-63** Rapid Formation of Cell Sheet Using Thin Leaf-Stacked Structured Film  
김호용, 임예원, 김민지, 오세행, 단국대학교
- 3PS-64** A Novel Approach to Modeled Microgravity Cell Culture Using Neutral Buoyancy  
김호용, 강성욱\*, 오세행, 단국대학교; \*국립장원대학교
- 3PS-65** 표적 항암제의 효과적 전달을 위한 담즙산 코팅된 지질 나노 구조체 개발  
김하연, 박용해, 김남두, 공주대학교
- 3PS-66** 3D Modeling of Mechanically Stimulated Abnormal Scars to Identify Therapeutic Targets  
김채윤, 백지웅\*, 이화여자대학교; \*이화여자대학교 휴먼기계바이오공학부
- 3PS-67** Self-immolative Polymer Based Nanosensitizers Enhance Antitumor Efficacy of Sonodynamic Therapy  
김지연, 김찬호, 유동길, 박재형, 성균관대학교
- 3PS-68** Gelatin-releasable Alginate Bioink for Improving Osteogenic Differentiation  
김주은, 윤희숙, 박홍현, 한국재료연구원
- 3PS-69** Fabrication and Evaluation of a Powder-type Anti-adhesion Agent with Improved Tissue Adhesiveness Using Modified Starch  
김정민, 김병주, 김유진, 권오형, 금오공과대학교
- 3PS-70** Surface Engineering of Placenta-Derived Mesenchymal Stem Cells with ASGPR Ligands for Alleviating Liver Damage  
김성준, 이대현\*, 박희원, 노경무, Ashok Kumar Jangid, 김기진\*, 김교범, 동국대학교; \*차의과학대학교
- 3PS-71** Drug Mounting of Microneedle to Improve Skin Diseases  
김서윤, 나양호, 김지혜, 한남대학교
- 3PS-72** Systemic Delivery of Protein Nanoparticles to Cells Effectively Prevents Acetaminophen-induced Liver Toxicity and Hepatotoxicity  
김병덕, 정지훈, 임수연, 성균관대학교
- 3PS-73** Cryo-3D Printing for Hydrogel-based Porous Scaffold  
김민아, 손은지\*, 김준범, 심태섭\*, 최낙원, 한국과학기술연구원; \*아주대학교
- 3PS-74** Fabrication and Evaluation of PLGA Nanofibrous Sheets with Improved Tissue-Adhesive Property to Prevent Lung Air Leakage  
김도경, 김은영, 권오형, 금오공과대학교
- 3PS-75** Theranostic Polymeric Prodrug nanoparticles for Renal Ischemia/Reperfusion Injury  
김누리, 송나희, 조하니, 김수진, 이수연, 이승아, 전나영, 조상민, 홍지은, 정태빈, 이동원, 전북대학교
- 3PS-76** Improving In Vitro Plasmid DNA Transfection with Oligopeptide-Conjugated Second-Generation Polyamidoamine Dendrimers  
권나희, 김성연, 최준식, 충남대학교
- 3PS-77** Magnetically Controllable Hydrogel Beads with Drug Eluting Ability  
고지원, 이원목, 세종대학교
- 3PS-78** Cytocompatibility of Human Dermal Fibroblasts within 3D Bioprinted Constructs Containing Carbon Nanofiber Nanoparticles  
강문성, Iruthayapandi Selestina Raja\*, 장희정, 한동욱, 부산대학교; \*나노바이오융합 연구소/부산대학교

#### 분자전자 부문위원회(II)

- 3PS-79** Molecular Engineering of Conjugated Polymers to Analyze the Correlation between Molecular Structure and the Performance of Organic Photodetectors  
신 철, 김명인, 김다빛, 정원조, 정인환, 한양대학교
- 3PS-80** High - Performance Organic Photodetectors *via* Introducing PBB, which BBO-based Novel Conjugated Polymer Donor  
신주연, 정원조, 김혁준, 정인환, 한양대학교
- 3PS-81** Synthesis and Characterization of a Low-Bandgap Polymer Incorporating N-Octyl-2,7-Dithia-5-Azacyclopenta[ $\alpha$ ]pentalene-4,6-Dione as an Electron-withdrawing Unit  
신은주, 김윤희, 경상국립대학교
- 3PS-82** Synthesis of ZnMgO nanoparticles with Zn(acac)<sub>2</sub> and Mg(acac)<sub>2</sub> as precursors  
신유주, 황동렬\*, 한남대학교; \*한남대학교 신소재공학과
- 3PS-83** Post-Treatment of Perovskite Nanocrystals Using Quaternary Ammonium for High-Performance Light Emitting Devices  
신우경, 송명훈, 이동렬, 김종범, UNIST
- 3PS-84** Cascade Complex Doping to Achieve High Doping Efficiency of Conjugated Polymers  
신상훈, 윤상은, 김중현, 아주대학교
- 3PS-85** Well-balanced Hole and Electron Charge Transport in an Organic P-type-Insulator-N-type Layered Sandwich Structure  
송재찬, 한영민, 유호천, 가천대학교

- 3PS-86** Low-voltage Operation of IGZO Transistors with Polymer Electrolyte for Synaptic Behaviors  
송윤석, 최준규, 박성준, 아주대학교
- 3PS-87** Rational Design of Color-Pure Blue Organic Emitters by Poly-Heteroatomic Omni-Delocalization  
송선우, 권민상\*, 서울대학교 신소재공동연구소; \*서울대학교 재료공학부
- 3PS-88** Non-halogenated Solvent Processed Spiro-type Hole Transport Material for Efficient Perovskite Solar Cells  
송동현, 전명진, 진성호, 부산대학교
- 3PS-89** Prediction of Global Warming Potential of Greenhouse Gases *via* Molecular Simulations  
손준수, 이동규, 이태경, 경상국립대학교
- 3PS-90** Small Molecule Passivation Enhances Stability in N-type Organic Electrochemical Transistors  
백지수, 김도연, 이동운, 김상범\*, 장재영, 한양대학교; \*한양대학교 에너지공학과
- 3PS-91** Solvent Effects on Conjugated Polymer Sorting of Semiconducting Carbon Nanotubes with Large Diameter  
백민서, 이승훈, 공주대학교
- 3PS-92** High-Performance Flexible Thermoelectric Generators Achieved through Carbon Nanotube/Ionic Liquid/Elastomer Nanocomposites Optimization  
배은진, 강영훈, 한미경, 한국화학연구원
- 3PS-93** Side Chain Engineering in Small Molecular Acceptor Incorporating Halogenated Group for High Performance Organic Solar Cells  
배기현, 오신비, 김범준, 한국과학기술원
- 3PS-94** Synthesis and Characterization of New Non-Fullerene Acceptor with Extended Conjugation for Organic Solar Cells  
박혜연, 김윤희, 경상국립대학교
- 3PS-95** Surface Modification of ZnSeTe Nanoparticles with Dithiolate-Based Ligands  
박철진, 황동렬, 한남대학교
- 3PS-96** Organic Phototransistors with Gate-sensing Layers of Conjugated Polymer for the Detection of Confined Deep Red Light  
박찬빈, 김태훈, 김영규, 김화경, 경북대학교
- 3PS-97** Effect of Organic Molecule-Induced Charge Transfer on Threshold Voltage Control of Both n-MoS<sub>2</sub> and p-MoTe<sub>2</sub> Transistors  
박지훈, 부경대학교
- 3PS-98** Surface Defect Passivation of Metal Oxide-Based ETL with ZnS Nano-Patches for High Performance QLEDs  
박준영, 황동렬, 한남대학교
- 3PS-99** 1D Dion-Jacobson Chiral Perovskite for Circularly Polarized Light Detection  
박중현, 오준학, 서울대학교
- 3PS-100** Formation of Protective Coatings on Electronic Devices Using Multifunctional Superhydrophobic Nanoparticles  
박이연, 하영근, 경기대학교 화학과
- 3PS-101** Robotic Finger Movement Coordination Mimicking Human Spontaneous Motion *via* Spatial Multi-Input Spike Signal Multiplexing  
박상우, 노동규, 호동해, 최윤영, 최영진, 김성찬, 조새벽\*, 강문성\*\*, 안중현, 조경호, 연세대학교; \*성균관대학교; \*\*서강대학교
- 3PS-102** Aryl carboxylic acid 작용기가 달린 다환방향족 탄화수소를 이용한 그래핀의 CVD 합성  
류정인, 백승준\*, 황영욱, 이효찬, 명지대학교; \*명지대학교 화학공학과
- 3PS-103** Photoluminescence-Enhancement Mechanism in the Conjugated Polymer Aggregate by Semiconductor Nanocrystals  
류정연, 정민영\*, 조길원\*, 이동기, 세종대학교; \*포항공과대학교
- 3PS-104** Multi-Energy-Harvester on Textile Exploiting Simultaneous Thermoelectric and Electrokinetic Energy Conversion  
남양훈, 윤상은, 윤형섭\*, 윤태광, 김중현, 아주대학교; \*중앙대학교
- 3PS-105** Bright and Stable Blue-Emitting CsPbBr<sub>3</sub> Perovskite Nanoplatelets Achieved *via* Surface Manipulation Using Organic Spacers  
김희은, 김지건, 김영훈, 국민대학교
- 3PS-106** Alcohol-oxidizing Photoanodes Based on Immobilized Nitroxyl Radicals  
김 훈, 조한석, 울산과학기술원
- 3PS-107** Introduction of Novel Polymer Coating on the Surface of LiNi<sub>0.8</sub>Co<sub>0.1</sub>Mn<sub>0.1</sub>O<sub>2</sub> to Enhance Battery Cycling Performance under Harsh Conditions  
김호리, 오준학, 정문기, 서울대학교
- 3PS-108** Self-Assembled Multilayer-Based Electrode Passivation for Durable and Consistent Electrolyte-Gated IGO Transistor Biosensors  
김혜선, 하영근, 경기대학교
- 3PS-109** *N*-Heterocyclic Carbene Based Tetradentate Pt(II) Complexes for Blue Phosphorescent Organic Light-Emitting Diodes  
김혜린, 진성호, 라자쿠마레잔, 지제성, 임준섭\*, 이준엽\*, 부산대학교; \*성균관대학교
- 3PS-110** Highly Conductive Tough Fiber for E-textile Applications  
김한수, 오태연, 박성준, 아주대학교
- 3PS-111** Enhanced Performance of 2D Sn Perovskite Transistor by Incorporating Alkyl-size Matched Ammonium Halide Additives  
김학준, 이정범\*, 정범호, 김경학\*, 박희준, 한양대학교 유기나노공학과; \*한양대학교 화학공학과
- 3PS-112** Ultra-Sensitive Alzheimer's Biomarker Detection with EGFET Biosensors Using Surface Roughness  
김하나, 하영근, 경기대학교
- 3PS-113** Suppressed Tribocharge Recombination for Enhanced Output Performance of Triboelectric Nanogenerators by Introducing Polymeric Composites  
김채은, 김명현, 하태준, 광운대학교
- 3PS-114** 페로브스카이트 태양전지의 효율 및 안정성 향상을 위한 가교 계면층의 도입 전략 탐구  
김찬형, 박태호, 포항공과대학교
- 3PS-115** Ionic Diode Based on Phase Transition of the Plastic Crystals  
김찬규, 전찬혁, 신조원, 김형준, 서강대학교

- 3PS-116** Microwave Assisted Synthesis of ZnSeTe Blue Quantum Dots  
김중현, 황동렬, 한남대학교
- 3PS-117** Carbon Nitride Conjugated with Catechol Quinone as an Electron Shuttle for Enhanced Photocatalysis  
김정아, 남윤성, KAIST
- 3PS-118** Highly Bright and Stable Core-Shell Lead Halide Perovskite Quantum Dots with Controlled Crystallographic Dimensions  
김재우, 김지건, 김영훈, 국민대학교
- 3PS-119** Device Simulation for Organic Anti-ambipolar Transistor Modeling  
김여은, 유호천, 가천대학교
- 3PS-120** Fabrication of Nanoparticles to Enhance the Dispersibility of Polymeric Photocatalysts  
김소원, 양희태\*, 유영웅\*, 이지훈\*, 차효정, 경북대학교; \*한국교통대학교
- 3PS-121** Advanced Iontronic Interfaces Through Ionic Laser-Induced Graphene  
김소영, 김지훈, 오하영, 김도환, 한양대학교
- 3PS-122** Helical Polymer p-n Junction for High Performance Circularly Polarized Photodetectors  
김서영, 송인호\*, 안재용, 이상혁, 이상욱, 조예인, 오준학, 서울대학교; \*Department of Chemistry, Purdue University
- 3PS-123** High-Performance Split-Gate Thin-Film Transistor Based on Coplanar Asymmetric Nanogap Electrodes Created Via Adhesion Lithography  
김민서, 이경호\*, 유호천, 가천대학교; \*고려대학교
- 3PS-124** Fabrication of Uniform Nanopore Membranes for Secondary Batteries Using Block Copolymers  
김도환, 최홍균, 공주대학교
- 3PS-125** Characterization of Ultrapure Blue Organic Light Emitting Diodes Using Phosphor-sensitized Thermally Activated Delayed Fluorescence  
김다인, 손희원\*, 서민철\*, 김윤희, 경상국립대학교; \*경희대학교
- 3PS-126** Advanced Molecular Design for High-Efficiency Vacuum-Processed Color-selective Organic Photodiodes  
김규리, 신지영, 박재희, 경인학, 한양대학교
- 3PS-127** Non-vacuum Solution-processable Zr- and Ti-functionalized Colloidal Organic/inorganic Nanohybrid Materials for Low-voltage Driving Printed Electronics  
권현진, 김세현\*, 김주영\*\*, 부경대학교; \*건국대학교; \*\*강원대학교
- 3PS-128** Surface Modification of ZnMgO Nanoparticles with Beta-Diketone Based Ligands  
권해주, 황동렬, 한남대학교
- 3PS-129** Adaptive Synaptic Phototransistor Using MoS<sub>2</sub>/pV3D3 Heterostructure for Effective Image Segmentation  
권종익, 임정아, 최창순, 한국과학기술연구원
- 3PS-130** Gas Sensing Performance Enhancement by Chemical and Physical Modification on Organic Thin Film via Ultraviolet-Ozone Treatment  
구나현, 박영돈, 인천대학교
- 3PS-131** Integration of Bulky Adamantane Units with 9-Phenyl-9H-3,9'-Bicarbazole: An Innovative Host Design for Narrowband TADF-OLEDs  
곽하은, 박재영, 권수빈, 이예서, 김신영, 조민주, 최동훈, 고려대학교
- 3PS-132** Studies on One-Step-Processed Interface Controls and Performance Optimizations of Organic Transistors by Employing Spontaneous Self-Reactive Molecules  
고 은, 이화성, 한양대학교
- 3PS-133** Developing a Physical Undonable Function (PUF) Capable of Generating Multiple Keys Using the Morphological Properties of Small Molecules  
고락산, 유호천, 박태현, 가천대학교 반도체공학과
- 3PS-134** Effect of Organic Semiconductor Morphology on the Performance of Photoelectrochemical Cells  
강성래, 조한희, 울산과학기술원
- 3PS-135** Development of Highly Efficient Meridional Ir(III) Complexes for Solution-Processed Green Phosphorescent Organic Light-Emitting Diodes with Approaching 21% of External Quantum Efficiency  
Manigandan Thippa, 박호열, 진성호, Pusan National University
- 3PS-136** Synthesis of MOF@MXene Nanocomposite for High Performance Portable Supercapacitors  
Ushnah Falak, 이승구, 울산대학교
- 3PS-137** Non-halogenated Solvent Processed Pyrazine-Based D-A-type Polymer Donor Enables High-Efficiency Polymer Solar Cells  
Priyanka Yadav, 유진수, 진성호, Pusan National University
- 3PS-138** Enhancing Wide-bandgap Perovskite Solar Cells Performance via n-type Cathode Interface Materials  
Juan Anthony Prayogo, 허지현\*, 박희준\*, 장재원, 부경대학교; \*한양대학교
- 3PS-139** High-Performance Perovskite Solar Cells Enabled By Pendant Chains Incorporated Donor-Acceptor Type Dopant-Free Hole Transport Material  
Chetan Lakshman, 조보현, 진성호, 부산대학교

## 고분자구조 및 물성(II)

- 3PS-140** Inverted Spherical Microdomains from A(AB<sub>3</sub>)<sub>3</sub> Dendron-Shaped Miktoarm Star Copolymer  
우도경, 윤형건, 김진곤, 포항공과대학교
- 3PS-141** A Novel Transparency Foldable Optical Window Film Based on Polybenzoxazole-amide-imide with High Mechanical Properties by Improving Charge Transfer Complex Using Hydrogen Bonding  
신혜원, 한경임, 안찬재\*, 홍성우, 한국생산기술연구원; \*삼성전자 종합기술원
- 3PS-142** Study on Multi-Lamellar Emulsion (MLE) as an Active Ingredient Delivery System Using the Franz Diffusion Cell Method  
신혜성, 임종미\*, 배지영\*, 박부만\*, 황정현\*, 안현주, 충남대학교 분석과학기술대학원;

- \*주식회사 네오팜
- 3PS-143** Analysis of Epoxy Properties Using Machine Learning Model: Enhancing Predictive Performance through Outlier Detection and Selective Re-experimentation  
송인욱, 김규리, 권민상\*, 이동현\*\*, 최완선\*\*, 정예진\*\*, 서울대학교; \*서울대학교 재료공학부; \*\*고려대학교 수학과
- 3PS-144** Controlling the Physical Properties of DLP 3D Printed Biomass-driven Resin through Formulation Optimization and Post-Curing  
송영한, 나종범, 한국과학기술연구원 물질구조제어연구센터
- 3PS-145** Bottle Brush Polymer Additives for Performance Enhancement in Lithium Metal Batteries  
송여령, 강지형, 서울대학교
- 3PS-146** Analysis and Characterization of Enhanced Thermal Properties by Introducing Amide Groups into the Main Chain  
백지혜, 이승우, 박장환, 영남대학교
- 3PS-147** Comparison of Phase Behavior of Poly(ethylene glycol) and Linear Poly(glycerol) in Aqueous Solutions  
배정아, 최수형, 홍익대학교
- 3PS-148** Modulating Polymer-Substrate Interactions and Structure of Polymer Adsorption Layers via Solvent Vapor Annealing  
배석영, 김소연, 서울대학교
- 3PS-149** Strain Sensor with Auxetic Property Prepared by Using Temperature-responsive Cellulose  
박혜주, 이종휘, 중앙대학교
- 3PS-150** Development of High-water Dispersible Polyisocyanates  
박초연, 김경진, 김학준, 애경케미칼
- 3PS-151** Enhancing Fracture Properties of Flexible Materials through Unidirectional Twisting of Polymer Chains  
박찬범, 강지형\*, 카이스트; \*서울대학교
- 3PS-152** Hyaluronic Acid-based Self-healing Hydrogels with Controlled Mechanical Stiffness and Hydrolytic Stability  
박준서, 이근용, 공민형, 한양대학교
- 3PS-153** PI Synthesis with Strong Rigid Backbone Using Diamine with Benzoxazole Unit  
박장환, 이승우, 박수빈, 영남대학교
- 3PS-154** Experimental Investigation of the Relative Degree of Crystalline and Amorphous Properties of Cellulose Nanofibers Studied by Correlated Graphene-Quenching Raman Spectroscopy with Electrostatic Force Microscopy Technique  
박원화, (주)한솔루션
- 3PS-155** Quantitative Evaluation of the Yellowing and the Resulting Sound Absorption Performance of Polyurethane Foam by Fourier-Transform Infrared Spectroscopy (FT-IR) Spectroscopy  
박원화, (주)한솔루션
- 3PS-156** Synthesis and Characterization of Transparent and Flexible Polyimide Films Using Aromatic Diamine monomers Containing Amide Group  
박수빈, 이승우, 백지혜, 영남대학교
- 3PS-157** Shape Fixation with Magnetomechanical Actuation of Vitrimers Micropillar Arrays for Microfabrication  
문호준, 이재경, 조종비, 전지수\*, 박정은\*\*, 위정재, 한양대학교; \*Georgia Institute of Technology; \*\*University of Michigan
- 3PS-158** 우수한 내식 특성을 가진 아크릴 수지 변성한 폴리에스터 수지의 도료화하여 칼라강판 코팅 후 SEM 측정으로 표면 특성 확인  
남궁도원, 애경케미칼
- 3PS-159** Assembly of the Polymer Rod: Design Strategy Encompassing Stiff and Super-soft Elastomer  
김현준, 강지형, 서울대학교
- 3PS-160** Crack-Resistant Dielectric Elastomer via Supramolecular Polymerization for Durable Soft Robots  
김지윤, 강지형, 서울대학교
- 3PS-161** 3D Printed Complex Tissue Structures Using Self-healable HA-based Hydrogels  
김준서, 김현승, 이근용, 한양대학교
- 3PS-162** Design and Characterization of Acrylic Pressure Sensitive Adhesives Polymer Network  
김준규, 권민상, 서울대학교
- 3PS-163** Regulating the Swelling-Shrinkable Behavior of Hydrogels through Incorporation of Hydrophilic Monomers  
김주빈, 강지형, 서울대학교
- 3PS-164** Thermal Decomposition of PAG oil: Characterization and lifetime prediction  
김종원, 심상은, 인하대학교
- 3PS-166** Synthesis and Properties of Cyclic Olefin Polymers by Ring-opening Metathesis (co)polymerization (ROMP) of Ester-substituted Norbornene and Anthracene-based Norbornene  
김소은, 조상호, 한국과학기술연구원
- 3PS-167** Analysis of Naturally-Cured Resin Curing Behavior Using Dielectric Clear Monitor (DEA) Equipment  
김성영, 김희동, 구자영, 김재영, 박준호, 효성중공업
- 3PS-168** Effects of Curing Kinetics on Thermo-Mechanical Properties of Moisture-Cured Poly(urethane-urea)  
김성수, 문호준, 조종비, 전재철\*, 위정재, 한양대학교; \*현대자동차 표면처리재료개발팀
- 3PS-169** Degradation of Vinylcyclopropane Based Pressure Sensitive Adhesive induced by Ozonolysis  
김태환, 권민상, 서울대학교
- 3PS-170** Fabrication of Aligned Nanopatterns of Block Copolymers Using Convective Self-assembly



	권홍균, 김민재, 최홍균, 공주대학교
3PS-171	Yielding Behavior of Concentrated Li-ion Battery Anode Slurry Using the Squeeze-flow Rheometer 곽은희, 김소연, Gerald Fuller*, Cody Moose*, 서울대학교; *Stanford University
3PS-172	Hydrolytic Degradation of Polyester Based on Camphor and Tartaric Acids: pH Value and Time 강주희, 한국생산기술연구원
3PS-173	Mechanical Properties of Poly(urethane acrylate)-siloxanes Hydride Networks 강주희, 한국생산기술연구원
3PS-174	Thermo-Rheological Properties of Cross-Linked Catechol-Modified Tetra-Arm PEG Hydrogels 강민정, 유정주, 손대원, 한양대학교

고분자가공/복합재료/재활용(III)

3PS-175	온도 변화에 따른 금속인서트 사출물의 접합 내구성 연구 박진호, 임영원, 한국자동차연구원
3PS-176	Development of Efficient Polyurethane Based Heat Dissipation Film through Parylene CVD Coating 박지수, 이화성, 한양대학교
3PS-177	Eco-friendly Enhancement of PET Non-woven Fabric Performance with Lignin Coating 박재현, 이지훈, 장선진, 박재형, 경북대학교
3PS-178	PP/GNP/탄소필러 복합체의 전기적, 열적 및 유변학적 특성에 미치는 GNP 분산 연구 박은배, 김연철*, 공주대학교; *공주대학교 신소재공학부
3PS-179	Utilization of Waste in the Petroleum Refining Process: Sulfur-Rich Polymer as IR Optical Materials and Exploring Improvement through Mixing Crosslinkers 박승빈, 위정재, 한양대학교
3PS-180	Cyclodextrin-mediated Highly amorphous Molybdenum Tungsten Oxide for Ultra-fast, High amount of Synergistic Methylene Blue Dye Removal 박경태, 심상은, 인하대학교
3PS-181	Carbon Foam Supercapacitor Electrode Materials Based on PolyHIPE Containing TiO <sub>2</sub> -PANI-CNT 류인재, 이성재, 이동민, 수원대학교
3PS-182	자동차 내장 부품용 페어망 적용 냄새 저감 재활용 PA6 소재 개발 노은주, insoo han, 권순용*, 한영훈**, 현대자동차; *산양; **에이치엠솔루션
3PS-183	Enhanced Physical Properties of PEEK Composites Through Amphiphilic Copolymer Modified Graphene Nanoplatelets 남재윤, 김영빈, 윤호규, 고려대학교
3PS-184	Colorless and Transparent Polyimide Nanocomposites Using Organoclays 나창엽, 장진해*, 전주대학교 탄소융합공학과; *전주대학교
3PS-185	Colorless and Transparent Copoly(amide imide) Hybrid Film for Electronic Devices 나창엽, 임애란*, 장진해**, 전주대학교 탄소융합공학과; *전주대학교 과학교육과; **전주대학교
3PS-186	Low SM 수지의 작업성을 향상시킨 내식 난연 수지 개발 김해란, 박희수, 전하빈, 김영용, 애경제미칼
3PS-187	Analysis of the Properties of Cast Polypropylene Film under Various Tensile Conditions 김태영, 정재훈, 임춘삼*, 염정현, 경북대학교; *(주)경성화인켐
3PS-188	Photocatalytic Fiber Increased Efficiency Using Photothermal Effects 김채현, 박주현, 민경선, 유영호, 최현석, 중앙대학교
3PS-189	Mesoporous Graphene Derived from Block Copolymer Templates for High-Energy Density Supercapacitor 김 준, 김진곤, 포항공과대학교
3PS-190	상용화제의 구조가 셀룰로스 나노섬유(CNF) 복합소재의분산성과 기계적 물성에 미치는 영향 김주원, 이재현, 이지원, 정정설, 한국화학융합시험연구원
3PS-191	Thermally Cross-Linked Polybenzimidazole Membranes with a Di-Azide Cross-Linker for High-Temperature Proton Exchange Membrane Fuel Cells 김정화, 김혜진, 김정환*, 이종찬, 서울대학교; *KIST
3PS-192	Sustainable Upcycling of PET Waste into Self-Healing Polyurethane Composites for Wearable Sensor Applications 김재욱, 엄태욱, 김승현, 인하대학교
3PS-193	그래핀 나노플레이트(GNP)의 화학적 개질이 PA6/탄소필러 복합체의 물성에 미치는 영향 김재경, 김연철*, 공주대학교; *공주대학교 신소재공학부
3PS-194	Study on the Properties of PEKK According to Exposure Time to Harsh Environments and GNP Content 김영빈, 남재윤, 윤호규, 고려대학교
3PS-195	CNF를 함유한 제형 안정성이 개선된 고강도 친환경 삼푸바 제조 김영권, 윤호기*, 김태영**, 염정현*, 경북대학교; *(주)올마; **경북대학교 바이오섬유 소재학과
3PS-196	에스테르 교환반응에 의한 Cellulose acetate butyrate 개질 김영권, 이정언*, 김미경**, 염정현*, 경북대학교; *경북대학교 바이오섬유소재학과; **DYETEC연구원
3PS-198	The Production of Bacterial Cellulose Sheets Using Extract of Waste Onion as Culture Medium for Vegan Leather 김성민, 원소연, 정월이, 여다은, 한성수, 영남대학교
3PS-200	Effect of Reactive Diluent on Glass Fiber Reinforced Polymer: Resin Viscosity vs. Void 김민규, 조준용, 강한결, 한태희*, 김재우, 한국과학기술연구원; *한양대학교 유기나노공학과

3PS-201	Formation of Effective Conducting Pathway by Introducing Graphite and Carbon Black Hybrid Fillers in Epoxy Composites for High Voltage Application 김다영, 정진우, 이수연, 이다영*, 전영준*, 성동기, 부산대학교; *(주)효성
3PS-203	A Green Approach to Enhancing Epoxy Toughness Using a Bis-hydroxy Urethane Additive Derived from CO <sub>2</sub> and Bio-based Diamine 김규리, 권민상, 서울대학교
3PS-204	Study on Mechanical and Thermal Characteristics of Isosorbide-based Bio Polycarbonate/ABS Blends with Chain Extender 김경은, 정정설, 권도현, 한국화학융합시험연구원
3PS-205	Low-Temperature, Universal Synthetic Route for Mesoporous Metal Oxides by Exploiting Synergistic Effect of Thermal Activation and Plasma 김건우, 김진곤, POSTECH
3PS-206	CNT/Epoxy Nanocomposites with Effective Dispersion of CNT 곽연지, 김대우, 연세대학교
3PS-207	Graphitic Carbon Nitride Reinforced Photopolymer Resin for Additive Manufacturing 고종완, 하정훈, 주윤성, 권경민, 남호근, 한국생산기술연구원
3PS-208	A Novel Strategy for Fabricating Superior Cellulose-Based Solar Interfacial Evaporator with Multi-Layer Micro-/Nano-Architecture 고영삼, 이아정, 주상현, 신영은, 전정담, 유경목*, 박태훈, 한국재료연구원; *경희대학교
3PS-209	Thermal Enhancement by Modified Hardeners in Epoxy Composites Containing Hexagonal Boron Nitride for Thermal Insulation 강주희, 한국생산기술연구원
3PS-211	Study on the Thermal Properties and Avrami Analysis of Polyamide 6/Carbon Filler Composites 강 산, 김연철*, 공주대학교; *공주대학교 신소재공학부
3PS-212	Solution-Processible Network Thin-film Composite Membrane Fabrication for Molecular Separation Application Marbert Pinque, 박지웅, Gwangju Institute of Science and Technology
3PS-213	Synthesis and Functionalization of Reduced Graphene Oxide through Graphite to Boost the Tribopositive Nature of Silk Polymer Gajula Prasad, 윤재욱*, 우인선*, 배진우*, 한국기술교육대학교 다기능성유기고분자 연구실; *한국기술교육대학교
3PS-214	Fabrication of Fire-retardant Nanofiber Membranes from Waste Materials Bishweshwar Pant, 지원아차야, 박미라, 우석대학교
3PS-215	Real-time on-site Detection of Pb <sup>2+</sup> , Cd <sup>2+</sup> , Cu <sup>2+</sup> Metal Ions in Wastewater for Environmental Monitoring Akshay Patil, 손대원, Hanyang University
3PS-216	Enhancing Impregnation Properties of Hydrocarbon Polymer Electrolytes for Fabricating Reinforced Composite Membranes Aman Pathania, Juniko Nur Pratama, 이혜진, 신동훈, 배병찬, 한국에너지기술연구원

기능성 고분자(III)

3PS-217	Mechanical Properties and Shape Memory Characteristics of Hybrid Polyurethane Using Modified POSS with DGEBA 박상현, 임정혁, 김경민, 한국교통대학교
3PS-218	Investigating the Impact of Terminal Functional Group (-NH <sub>2</sub> , -CH <sub>3</sub> , and -CF <sub>3</sub> ) in Self-Assembled Trimethoxysilylpropyl on the Performance of Hole Injection Layers in Optoelectronic Devices Ankhybayar Batdelger, 이순규, 위정현, 이승민, 황상현, 박상건, 창원대학교
3PS-219	Solid-State Polymer Electrolytes Based on Ion Conduction through Dynamic Exchange Reactions 박민우, 김형준, 서강대학교
3PS-220	Preparation of Hybrid Epoxy/Silica Microcapsule Composite Containing Flame Retardant as Core Material 문형민, 임정혁, 김경민, 한국교통대학교
3PS-221	이민계 경화제와 탄소계 필러 적용에 따른 Bisphenol-A 에폭시 기반 SMPC 복합재 형상 회복 특성 및 인장강도 개선 분석 도기람, 최성용*, 장성은*, 최두영**, 한국생산기술연구원/전북대학교; *한국생산기술연구원/RAMP 융합연구원/전북대학교; **한국생산기술연구원/RAMP 융합연구원
3PS-222	Synthesis of Poly(acrylonitrile-co-glycidyl methacrylate)s and Their Application as Sizing Agents for Surface-modified Carbon Fibers 노유진, 정영규, 충남대학교 유기재료공학과
3PS-223	Dynamic Liquid Crystal Elastomers with Robust Mechanical Properties 노경민, 김 현, 한국화학연구원
3PS-224	Study on the Vacuum-free Fabrication of Highly Efficient Polymer Light-emitting Diodes Based on Hybrid Lamination Electrodes 남혁진, 이하린*, 윤창훈**, 전남대학교; *전남대학교 고분자융합소재공학부; **전남대학교 고분자공학과
3PS-225	Mechanical Properties and Flame Retardancy of Poly(ethylene-co-methyl acrylate) (EMA)/melamine-modified Ammonium Polyphosphate Composites 남동현, 장유진*, 장영욱, 한양대학교 ERICA; *한양대학교
3PS-226	MOF Based Marine Coating Against Biofouling 남동건, 정익진, 원소윤, 최은영, KSA of KAIST
3PS-227	From Non-doped to Dopeable: The Impact of Methoxy Functionalization on Doping and Thermoelectric Properties of Conjugated Polymer 김희민, 윤태웅, 강보석*, Sungkyunkwan University; *Sungkyunkwan University SAINT
3PS-228	Development of Shockwave-Absorbing Materials Using Polyrotaxane 김혜진, 박경민, 이재준, 부산대학교
3PS-229	One-to-one Coating of Graphene Nanoflakes on Silicon Nanoparticles as Anode for Enhanced-Performance Lithium Ion Batteries 김혜선, 유필진, 성균관대학교
3PS-230	고분자 바인더의 결정성 조절에 의한 높은 양극 활물질 로딩 후막 건식공정 김혜민, 진형준*, 인하대학교; *인하대학교 고분자공학과

- 3PS-231** Synthesis and Characterization of Eco-friendly Polyacrylates Using Lipoic Acid as a Photopolymerizable Crosslinker  
김현석, Rudru Gangaratnamma, 정일두, 부산대학교
- 3PS-232** Synthesis and Characterization of Photocurable Hybrid Dental Composites for 3D Printing Based on Catechol Polymers  
김현석, 전재영, 정일두, 부산대학교
- 3PS-233** 유연 기판에 대한 부착력이 강화된 인쇄 전극 및 이를 이용한 유연투명 사이니지  
김한중, 김윤갑, 김준희, 박정민, 구미전자정보기술원 나노전자소재부품연구센터
- 3PS-234** Simultaneous Photocatalytic Hydrogen Peroxide Production and Pollutant Degradation via Bipyridine-based Polyimide Covalent Organic Framework  
김태형, 김병수\*, 한국과학기술연구원; \*연세대학교
- 3PS-235** Efficient Micropore Sizes for Carbon Dioxide Physisorption of Pine Cone-based Carbonaceous Materials at Different Temperatures  
김충희, 박수진, 인하대학교
- 3PS-236** Enhanced Ionic Transport in Mixed Ionic-Electronic Thermoelectric Conductors Based on Conductive Polymer Matrix  
김지현, 조강현, 김병관, 충남대학교
- 3PS-237** Poly(vinyl alcohol)/tannin Nanofibrous Membrane Coated with Silver Nanoparticles as a Wound Dressing  
김준태, 박원호, 충남대학교
- 3PS-238** Synthesis of Zwitterionic Polymer-grafted Chitosan Having Antifouling and Antibacterial Properties: Coating Materials for Reverse Osmosis Membrane  
김재준, 김문현, 서희란, 이종찬, 서울대학교
- 3PS-239** An Innovative Air Filtration System Using Organic/Inorganic Hybrids for Particulate Matter and VOCs Removal  
김은진, 최원산, 국립한밭대학교
- 3PS-240** Synergistic Effect of Thiol-functionalized Silsesquioxane/Phosphorus Flame Retardant Blends on the Properties of Epoxy Resins  
김영훈, 백정주, 장기철, 백승환, 이강국, 박혜린, 송효진, 신교직, 한국생산기술연구원
- 3PS-241** Precise Synthesis of Random Copolymers Containing Poly(4-Hydroxystyrene) Segment via Living Anionic Polymerization and Selective Deprotection  
김승기, 장우재, 강병구, 김지영\*, 이승세\*, Department of Chemical Engineering, Soongsil University; \*Samsung Electronics Co. Ltd., Semiconductor R&D Center
- 3PS-242** Efficient Photodegradation of Tetracycline Using Flower-like  $\text{g-C}_3\text{N}_4/\text{NiO}$  Heterostructure Catalysts  
김수빈, 박수진, 인하대학교
- 3PS-243** Surface Charge Engineering for Structural Control of Colloidal Silica Rod-decorated Silica Particles and Their Flexible Integration into Magnetic Core-multishell Structures  
김소영, 김연재, 서호준\*, 현동훈, 경북대학교; \*한국생산기술연구원
- 3PS-244** Agarose Hydrogel-based Power Generator Inspired By Electric Eels  
김성현, 구형준, 서울과학기술대학교
- 3PS-245** Acid-base Dual Doped Graphene for Electrochemical Urea Synthesis  
김성태, 권준혁, 권태국, 울산과학기술원
- 3PS-246** Bioinspired Poly(vinyl alcohol)-based Coacervate for Skin Adhesion  
김성민, 박원호, 충남대학교
- 3PS-247** Photopolymerized Single-Layer Coatable Retarder Using Self-Assembled Host-Guest Liquid Crystal Monomers  
김상희, 정광운, 전북대학교
- 3PS-248** Development of Transparent Optical Fourier Surfaces Using N-Benzylideneaniline-Derived Polymer for Augmented Reality Displays  
김문근, 홍승재, 손희주, 임태준\*, 이승우, 방준하, 고려대학교; \*금오공과대학교
- 3PS-249** Accelerated Li-ion Transport through a Zwitterion Anchored Separator for High-performance Li-S Batteries  
김동우, 유필진, 성균관대학교
- 3PS-250** Development of an Effective Microencapsulated Fire Extinguisher Incorporating Sulfone and Vinyl Ether Functional Groups  
김대홍, 김승주, 이규철\*, 동의대학교; \*동의대학교 응용화학과
- 3PS-251** Boosting Performance of Lithium Metal Batteries by Optimizing Multiple Interactions in Single-Ion Conducting Polymer Electrolytes with Salt Additives  
김내훈, 윤수성, Puji Lestari, 최우혁, 인하대학교
- 3PS-252** 3D Printing of Spiropyran-Incorporated Liquid Crystal Elastomers for Programmable Mechanoresponsive Behavior  
김경완, 김태안\*, 안석균, 부산대학교; \*한국과학기술연구원
- 3PS-253** Novel Ether-free Phenylene-based Block Copolymer Anion Exchange Membranes with Dense Quaternary Ammonium Groups for Electrochemical Energy Devices  
권후근, 김지희, 이혜진, 신동원, 배병찬, 한국에너지기술연구원
- 3PS-254** Tailoring Boron-Containing Gel Polymer Electrolyte for High-Performance Lithium Metal Batteries  
권현수, 최우혁, 인하대학교
- 3PS-255** Enhanced Dendrite Resistance and Thermal Stability with Ultra-thin  $\text{SiO}_2$  Separators for Li-Metal Batteries  
권영재, 조계용, 부경대학교
- 3PS-256** Study of the Effect of Water and Free Volume Fraction Enable by Various Methyl Side Chain in Anion Exchange Membrane  
강현호, 김학건, 박현수, 이도훈, 원광대학교
- 3PS-257** Poly(vinyl alcohol)/Curcumin Microneedle for Anti-acne Treatment  
강영민, 박정진, 김민희\*, 박원호, 충남대학교; \*경북대학교
- 3PS-258** Synthesis of Bio-Based Citronellol-Derived Bactericidal Polymers and Effect of Functional Groups on Their Bactericidal Activity  
강여진, 육진술, 이종찬, 서울대학교
- 3PS-259** Fabrication of Activated Carbon Materials from Wood Chips via Molten Salt-assisted Chemical Activation for Supercapacitors  
강상윤, 강규현, 김형진, 장준오, 최재학, 충남대학교

- 3PS-260** Noble-Metal-Free High Entropy Alloys Nanoparticles with Highly Stable ORR/OER Bifunctional Electrocatalysts  
강민기, 유필진, 성균관대학교
- 3PS-261** Natural Polyphenol-derived Hierarchically Porous Carbon Materials as Electrode Materials for Supercapacitors  
강규현, 강상윤, 김형진, 장준오, 최재학, 충남대학교
- 3PS-262** Synthesis and Characterization of UV Responsive LCST Copolymers  
Yuyuan Guo, 김진철, 강원대학교
- 3PS-263** Reactive Polymer Based Near-Infrared Fluorescent Material Platform for Biomedical Applications  
Wenxuan Wang, Sheng Li, Department of Chemical and Biomolecular Engineering, KAIST
- 3PS-264** Preparation and Properties of Phosphonic Acid-Functionalized Ionomeric Binder for High-Temperature Proton Exchange Membrane Fuel Cells  
Trang Nguyen Thi Minh, 권후근\*, 이혜진\*, 신동원\*, 배병찬\*, Korea Institute of Energy Research; \*한국에너지기술연구원
- 3PS-265** Synthesis and Characterization of Polyratane Based  $\alpha$ -cyclodextrin  
Rudru Gangaratnamma, 정수민, 정일두, 부산대학교
- 3PS-266** Synthesis and Characterization of Slide-ring Polyurethane Based on Poly(propylene glycol)-methyl- $\beta$ -cyclodextrin Polyratane  
Rudru Gangaratnamma, 이지현, 정일두, 부산대학교
- 3PS-267** Photovoltaic Performance of Quinoxaline and Diketopyrrolopyrrole-Based Conjugated Polymers Analyzed for Organic Solar Cells  
Puspita Sari, 신찬기\*, 천효정\*, 진영음\*, Pukyong National University; \*Pukyong National University/BB21+ Project Team
- 3PS-268** Synthesis and Characterization of Cellulose Nanocrystal and Polydiallylammonium Chloride (PDADMAC) Complex Coacervates for Hydrogel Preparation  
Panalee Pomseethong, 김진철, Kangwon National University
- 3PS-269** Template-Free Direct Deposition of Graphene Electrode on a Sticker Paper Substrate for Fabricating Paper-Based Micro-Supercapacitors  
Niraj Kumar, 박수진, Inha University
- 3PS-270** Selective Detection of 2-Octyl-3-Isothiazolinone Using Imidazole-Functionalized Graphene Nanohybrids: Design, Synthesis, and Electrochemical Analysis  
Nguyen Thi Thuong Thuong, 이하니, 윤현석, 전남대학교
- 3PS-271** Tailoring the Thermomechanical Properties of Liquid Crystal Elastomers through Process Control  
Kavita Ramesh Rathod, 김 현, 한국화학연구원
- 3PS-272** Addition of Compatibilized Nanoclay/Spandex Fibers to Glass Fiber Reinforced Epoxy Nanocomposites for Enhanced Impact Strength  
Daksh shelly, 박수진, Inha University
- 3PS-273** Hybrid Perovskite-Polymer Transistors by Multicomponent Engineering  
Benjamin Nketia-Yawson, Vivian Nketia-Yawson, Jea Woong Jo, Dongguk University
- 3PS-274** Dual Targeted Polymersomes Impart Effective Delivery of Piperlongumine For Pancreatic Cancer Targeting  
Ashok Kumar Jangid, 김성준, 김교범, Dongguk University

## 고분자 합성(II)

- 3PS-275** Synthesis and Characteristics of Renewable Cardanol-Based Antibacterial Polymer Microspheres and Films  
서동주, 이종찬, 서울대학교
- 3PS-276** Preparation of Conductive Hydrogels Using Polyaniline/Gelatin  
백민석, 최윤제, 박찬호, 장윤정, 손예민, 정찬문, 연세대학교
- 3PS-277** A Refined IEG Strategy Towards the Synthesis and Structural Diversification of Discrete, Sequence-Defined Macromolecules  
발렌, 박수빈\*, 김경택\*, 서울대학교 대학원; \*서울대학교
- 3PS-278** Synthesis of Polyimides Containing Hydroxyl Groups for Enhanced Gas Separation Membrane  
박혜린, 백정주, 장기철, 백승환, 이강국, 송효진, 신교직, 한국생산기술연구원
- 3PS-279** Preparation of Self-Healing Capsules of Liquid Metal/Polyimide  
박찬호, 최윤제, 장윤정, 손예민, 백민석, 정찬문, 연세대학교
- 3PS-280** Covalent-Frameworked 2D Crown Ether Exhibiting Chemical Multifunctionality  
박진욱, 김진석, 이종찬, 서울대학교
- 3PS-281** Chiral Organic Quantum Materials with IR Sensing Capability by Using Circularly-Polarizable Orbital Spins  
박준혁, 김태동, 김 윤, 이도현, 한남대학교
- 3PS-282** Crystallization-Driven Self-Assembly of Block Copolymers Containing Discrete Poly(mandelic acid) and Poly(ethylene glycol)  
박수빈, 김경택, 서울대학교
- 3PS-283** Advanced Conversion of Industrial Emissions with Silica Aerogels in Chimney Systems  
민경훈, 심상은, 인하대학교
- 3PS-284** Synthesis of Isosorbide-based Mesogenic Polyepoxides  
레밍환, 구교선, 여현욱, 경북대학교
- 3PS-285** Sequence-defined Polyester Equipped with Complementary H-bonding Basepair  
노효주, 장희정, 김경택, 서울대학교
- 3PS-286** Synthesis of Sidechain Type Liquid Crystalline Polyether with Phenyl Benzoate  
남은서, 구교선, 여현욱, 경북대학교
- 3PS-287** Synthesis of Cyclic Olefin Polymers Based on Oxanorbornene Derivatives to Enhance Thermal Properties and Optical Transparency  
김희경, 구교선, 여현욱, 경북대학교

- 3PS-288** Study of HDI Isocyanurate Reaction Process for Lower Color of Polyisocyanate Resin  
김학준, 이종민, 고한숙, 애경케미칼㈜
- 3PS-289** Synthesis and Characterization of Chemically Durable Poly(phenylene)-based Block Copolymer for Anion Exchange Membrane  
김지희, 이혜진\*, 김종학\*\*, 배병찬\*, 신동원\*, 한국에너지기술연구원/연세대학교; \*한국에너지기술연구원; \*\*연세대학교
- 3PS-290** Living Anionic Polymerization of Styrene Derivative Containing Triphenylamine Group at Various Temperatures  
김준모, 숭실대학교
- 3PS-291** FeCl<sub>3</sub> 함량과 합성 온도가 은 나노와이어 특성에 미치는 영향  
김순호, 김영훈, 윤제문, 최재학\*, 동의대학교; \*충남대학교
- 3PS-292** Thermally Stable Carbamate-based Photobase Generators  
김민재, 이병훈, 이화여자대학교
- 3PS-293** Controlled Chain Folding of Precise Poly(L-lactic acid) and Their Sequence-Specific Degradation  
김도균, 김경택, 서울대학교 화학부
- 3PS-294** The Use of Carbodicarbene for Bio-based Polyester Synthesis via Ring-opening Copolymerization of Cyclic Anhydrides and Epoxides  
정승연, 김민섭\*, 김건우, 김현석\*, 김윤진\*, 서종철\*, 손경선, 이은성\*\*, 충남대학교; \*포항공과대학교; \*\*서울대학교
- 3PS-295** Quantitative Understanding of One-pot Chemical Recycling of Poly(butylene-terephthalate)  
권제훈, 구준모, 충남대학교
- 3PS-296** Synthesis and Properties of High-Heat-Resistant Liquid Crystalline Vitrimers Based on Bismaleimide  
권우현, 구교선, 여현욱, 경북대학교
- 3PS-297** Effect on Thermal Conductivity of Liquid Crystal Epoxy Resin by Orientation Level  
구교선, 여현욱, 경북대학교
- 3PS-298** Synthesis of High Oxygen Permeable Ionomer Using Suspension Polymerization Process  
고준영, 광영제, 숭실대학교

- 3PS-299** Synthesis of Polymeric [2]-Catenanes Composed of Interlocked Discrete Cyclic Polymers  
강준우, 김경택, 서울대학교
- 3PS-300** High Mobility Furan-substituted Benzo [1,2-b:4,5-b'] Dithiophene-based Polymer Semiconductor for Organic Transistors and Photovoltaics  
Vivian Nketia-Yawson, Hae Jeong Kim\*, Hyungju Ahn\*\*, Benjamin Nketia-Yawson, Jongmin Choi\*, Jea Woong Jo, Dongguk University; \*Daegu Gyeongbuk Institute of Science and Technology; \*\*Pohang Accelerator Laboratory
- 3PS-301** Polymerization of Mesogenic Dienes Based on Thiol-Ene System  
Thu Loan Dang, 구교선, 여현욱, Kyungpook National University
- 3PS-302** An Anti-stress Relaxation, Anti-fatigue, Mildew Proof and Self-healing Poly(thiourethane-urethane)  
Sze Yii Voon, Wu Bin Ying, Jung-Yong Lee, KAIST
- 3PS-303** Conjugated Polymers with Highly Crystalline and Percolated Morphology and their Thermoelectric Application  
Radhiha Ravindran, 김윤희, Gyeongsang National University
- 3PS-304** Synthesis and Characterization of Diketopyrrolopyrrole-based Polymer with Long and Branched Alkyl Side Chains to Improve Polymer Solubility  
Muhamad Kiki Afindia Joenata, 김윤희, Gyeongsang National University
- 3PS-305** The Effects of Methoxy Functionalization of Conjugated Backbones on The Doping and Thermoelectric Properties of Diketopyrrolopyrrole-Based Conjugated Polymers  
Landep Ayuningtias, 김윤희, Gyeongsang National University
- 3PS-306** Polydimethylsiloxane Composites Integrated with Black TiO<sub>2</sub> for Effective solar-powered Water Evaporation and Thermoelectric Power Production  
Keerthnasre Dhandapani, 정용진, 한국교통대학교
- 3PS-307** TiO<sub>2</sub>-based Composite/hybrid Nanomaterial as Photocatalyst for Water Purification  
Kedar Bahadur Thapa, 박수진, Inha University
- 3PS-308** Preparation and Characterization of Nanosized PNIPAM Hydrogel with Zeolite for Water Vapor Adsorption  
Fathi Sakr, 김태동, 김 윤, 홍경오, 김운중, Hannam University