

일반논문

PMMA가 그래프트된 실리카 나노입자를 포함한 불소계 폴리이미드 복합 분리막의 기체 투과 특성 권유미 · 임현구 · 김주현 [†]	1
Organic/Organic Core–Shell 아크릴 접착바인더의 플라즈마 처리영향 (II) 설수덕 [†]	89
6FDA를 포함한 불소계 폴리이미드와 PMMA가 그래프트된 카본나노튜브 나노복합필름의 전기 전도성 연구 윤성진 · 임현구 · 김주현 [†]	97
폴리우레탄 평판 음향 윈도우 제조와 수중에서 기계적 및 음향적 특성 연구 조미숙 · 최재석 · 이수정 · 윤석왕 · 구자춘 · 이영관 [†]	104
SBR에 산 처리된 MWCNT 및 커플링제 적용 시 발현되는 물리 · 화학적 특성 연구 송성호 · 정호균 · 강용구 · 조춘택 [†]	108
트리-O-[4-{4'-(시아노페닐아조)페녹시}]알킬 셀룰로오스들의 열방성 액정 거동 정승용 · 손호민 · 마영대 [†]	116
배터리 분리막을 위한 이온교환형 PVdF 맴브레인의 방사선 그래프트법에 의한 간편한 제조법 김상겸 · 류정호 · 권해두 · 장주환 [†] · 최성호 [†]	126
필름 가공조건이 트리아세틸 셀룰로오스 필름의 치수안정성에 미치는 영향 김효갑 · 김홍석 · 김한성 · 조진식 · 김용원 · 강호종 [†]	133
고분자전해질 연료전지용 부분 불소계 설�onium Poly(biphenylene-co-sulfone)ether 막의 제조와 특성 박재완 · 장봉준 · 김정훈 [†] · 이용택	137
은 카바메이트 복합체를 이용한 라디칼 중합에 의한 은/폴리스티렌 나노복합체의 제조 박현수 · 박형석 · 공명선 [†]	144
방사선 그래프트 중합에 의하여 제조된 폴리(아크릴 산)이 그래프트된 탄소나노튜브에 생체분자 고정화에 관한 연구 정찬희 · 이병민 · 황인태 · 최재학 [†] · 노영창 · 흥성권 [†]	150
Poly(dimethylsiloxane-co-N-phenylsiloxazane) 변성 Acrylate Resin의 제조와 그 특성 강두환 [†] · 금민우 · 윤재선	154
리빙 음이온 중합에 의한 Dipyridine-말단 관능화 폴리스티렌 및 폴리부타디엔의 합성 지상철 · 이종섭 · 김두환 · 강철한 · 박종혁 · 이범재 [†]	159
Nano Clay와 Polydimethylsiloxane을 포함하는 Poly(N-isopropylacrylamide) 공중합체의 합성과 팽윤거동 노휘철 · 이찬우 · 박상윤 · 윤구식 [†]	166
약물방출 스텐트용 생분해성 고분자 필름으로부터 파크리탁셀의 조절 방출 김시은 · 이봉수 · 김진향 · 박귀덕 · 한동근 [†]	172
생분해성 고분자의 전기분사를 이용한 약물방출 스텐트용 금속표면 코팅 및 ALA방출 거동 김동민 · 이봉수 · 박철호 · 박귀덕 · 손태일 · 정명호 · 한동근 [†]	178

Articles

Electrospinning of Polylactide Fibers Containing Silver Nanoparticles Eun Seon Kim, Seong Hun Kim*, and Chang Hwan Lee	215
Biological Templating of Polyaniline and Polypyrrole Using <i>E. coli</i> C. Basavaraja, Na Ri Kim, Eun Ae Jo, and Do Sung Huh*	222
Surface Modification and Characterization of N ⁺ Ion Implantation on Polyimide Film Jin-Wook Shin, Joon-Pyo Jeun, and Phil-Hyun Kang*	227
Photocatalytic Activity of ZnO-TiO ₂ Hierarchical Nanostructure Prepared by Combined Electrospinning and Hydrothermal Techniques Muzafer A. Kanjwal, Nasser A. M. Barakat, Faheem A. Sheikh, Soo Jin Park, and Hak Yong Kim*	233
Effect of Multi-Walled Carbon Nanotube on the Electrical, Morphological and Mechanical Properties of Polypropylene/Nickel-Coated Carbon Fiber Composites Yun Kyun Lee, Seon Ho Jang, Min Soo Kim, Woo Nyon Kim*, Ho Gyu Yoon, Sang Do Park, Seong-Taek Kim, and Jong Doo Lee	241
Encapsulation of Submicron-sized Silica Particles by Stimuli-responsive Copolymer Shell Layer M. Abdur Rahman, M. Rabiul Karim, M. A. Jalil Miah, Hasan Ahmad*, and Tsuyoshi Yamashita	247
Preparation of Bacteria Microarray Using Selective Patterning of Polyelectrolyte Multilayer and Poly(ethylene glycol)-Poly(lactide) Diblock Copolymer Chang-Hyung Choi, Ji-Hye Lee, Taek-Sung Hwang, Chang-Soo Lee*, Yun-Gon Kim, Yung-Hun Yang, and Kang Moo Huh	254
New Efficient Polyelectrolyte Containing Zwitterionic Sulfobetaine Salt for the High Sensitive Resistive Humidity Sensor Dae-Sang Han and Myoung-Seon Gong*	260
Anion Receptor Based on Cyclic Siloxanes Substituted with Trifluoromethane-Sulfonylamide for Solid Polymer Electrolytes Won Sil Lee, Seong Ihl Woo*, Dong Wook Kim, Changjin Lee, and Yongku Kang*	266
Nanocomposite Proton Conducting Membranes Based on Amphiphilic PVDF Graft Copolymer Dong Kyu Roh, Jin Kyu Choi, Jong Kwan Koh, Yong Gun Shul, and Jong Hak Kim*	271
High-Performance Photorefractive Polymer Composites Doped with 2-Piperidino-5-thienylmalononitrile Chromophore Chil-Sung Choi*, Quoc Vuong Nguyen, and Nakjoong Kim*	279
Bioadhesive PAA-PEG-PAA Triblock Copolymer Hydrogels for Drug Delivery in Oral Cavity Minh Khanh Nguyen and Doo Sung Lee*	284
Self-Organization of Amphiphilic Diblock Rod-Coil Molecule into Supramolecular Honeycomb and Cylindrical Aggregates and Its Application as Suzuki Coupling Reaction Ke-li Zhong, Chunchang Yang, Tie Chen, Bingzhu Yin, Long Yi Jin*, Zhegang Huang, and Eunji Lee	289

Notes

Immobilization of Polyelectrolyte Multilayer on Polymer Substrate by Multicomponent Reaction Heekyung Lee and Hongdoo Kim*	297
Photolithography of a Photocrosslinkable Copolymer Prepared from a 2-Styrylpypyridine Group-Containing Maleimide and <i>N</i> -Dodecyl Maleimide Jin Woo Kim, Inn-Kyu Kang, Woo-Sik Kim*, Seung Hun Jeon, and Seok Ho Son	301
Synthesis and Characterization of an Alternating Copolymer Consisting of <i>N</i> -(2-ethylhexyl) carbazole and 2,3-Dimethylthieno[3,4- <i>b</i>]pyrazine Units Ji-Cheng Li, Eun-Ok Seo, Soo-Hyoung Lee, and Youn-Sik Lee*	304

Review

- Modification and Applications of Bacterial Celluloses in Polymer Science Peng Chen, Se Youn Cho, and Hyoung-Joon Jin* 309

Communications

- Synthesis of Highly Monodisperse Silica Particles by Addition of Anionic Surfactants Son Tung Ha, O Ok Park*, and Sang Hyuk Im* 321

Articles

- Synthesis, Characterization and Electrical Properties of Novel Steric Phthalocyanine Polymers Qiang Liang*, Peng Zhao, Je-Wan Woo, Yong-Sung Park, Lihong Niu, and Fushi Zhang 113
- Improvement of the Thermal Latency for Epoxy–Phenolic Resins by Novel Amphiphatic Imidazole Catalysts Fung Fuh Wong*, Chun Min Lin, Kun-Lung Chen, Yun-Hwei Shen, and Jiann-Jyh Huang 324
- Preparation and Characterization of a Novel Hyperbranched Poly(aryl ether ketone) Terminated with Cobalt Phthalocyanine to be Used for Oxidative Decomposition of 2,4,6–Trichlorophenol Lei Lei, Hui Wang, Yunhe Zhang, Xiujie Li, Jianxin Mu, Guibin Wang, Zhenhua Jiang, and Shuling Zhang* 331
- Influence of Crystallinity on Ion Conductivity of PEO-based Solid Electrolytes for Lithium Batteries Soo-Jin Park*, A-Reum Han, Jae-Sup Shin, and Seok Kim 336
- Organic–Inorganic Hybrid Nanocomposites of Poly(sodium 4-styrenesulfonate) and Octafunctional Polyhedral Oligomeric Silsesquioxane (POSS) Jong-Hwan Jeon, Jung-Hyuk Lim, and Kyung-Min Kim* 341
- Influences of Physical Aging on Enthalpy Relaxation Behavior, Gas Permeability, and Dynamic Mechanical Property of Polylactide Films with Various D-isomer Contents Mirinae Kwon, Sang Cheol Lee, and Young Gyu Jeong* 346
- Synthesis and Characterization of Sulfonated Poly(arylene ether sulfone) Ionomers Incorporating Perfluorohexylene Units for DMFC Membranes Su-Jin Yoon, Jong-Ho Choi, Young Taik Hong*, and Sang-Young Lee* 352
- Influence of Aging Medium on Recovery Behaviors of CR/NR Composite from Circular Deformation Sung-Seen Choi*, Joong Hee Jang, and Song-Hee Im 358
- A Simple Method for Determination of Discrete Relaxation Time Spectrum Kwang Soo Cho* 363
- Effects of Silica Based Fillers, Surface Treatment and Curing Method on Mechanical Properties of Silica/Unsaturated Polyester Composites Nattaporn Sriloy, Ekachai Wimolmala, Narongrit Sombatsompop, Chuntip Kumnuantip*, and Chanchai Thongpin 372
- Effect of Inner and Outer Chain Length in Multi-Cationic Site Organoclays on the Properties of PU/Organoclay Nanocomposites Jeong Jae Wie, Hua Jin, Sang Ki Chung, Sung Chul Kim*, and Woo Jin Choi 380
- Preparation of Thermosensitive Gelatin–Pluronic Copolymer for Cartilage Tissue Engineering Dong Hwa Kim, Su-Jin Heo, Jung-Woog Shin, Chi Woong Mun, Kyung Min Park, Ki Dong Park, and Kyoung Soo Jee* 387
- Toughening of Epoxy Resin System Using a Novel Dendritic Polysiloxane Songqi Ma, Weiqu Liu*, Chaohui Hu, Zhengfang Wang, and Chunyi Tang 392
- Thermosensitive Polymer-based Hydrogel Mixed with the Anti-inflammatory Agent Minocycline Induces Axonal Regeneration in Hemisectioned Spinal Cord Young Mi Kang, Dong Hoon Hwang, Byung Gon Kim*, Dong Hyun Go, and Ki Dong Park 399

Notes

- A Color Display System Based on Thermochromic Conjugated Polydiacetylene Supramolecules Oktay Yarimaga, Maesoon Im, Yang-Kyu Choi*, Tae Won Kim, Yun Kyung Jung, Hyun Gyu Park, Sumi Lee, and Jong-Man Kim* 404