

일반논문

신경세포 재생을 위한 고배열성 Poly(ϵ -caprolactone) 마이크로/나노섬유 제조 공정에 관한 연구윤 현 · 이행남 · 박길문 · 김근형[†]

185

에폭시 레진의 경화방법에 따른 이방성 전도필름의 접합신뢰성 및 열적기계적 특성 변화

길만석 · 서경원 · 김재한 · 이종원 · 장은희 · 정도연 · 김수자 · 김정수[†]

191

다중벽 탄소나노튜브/폴리(에틸렌 옥사이드) 복합체 합성

홍채환 · 한도석 · 남병욱[†]

198

Sulfonated Ether Sulfone을 포함한 Crosslinkable *m*-Aramid계 Ionomer의 합성과 연료전지 막으로의 이용정현진 · 김정민 · 조창기[†]

202

트리아세틸 셀룰로오스 필름의 용액가공에 의한 구조변화

김효갑 · 김홍석 · 김한성 · 조진식 · 김용원 · 강호종[†]

210

NBR/Clay 나노복합체의 제조와 특성에 관한 연구

이 돈 · 박세형 · 서길수[†]

215

주사슬 배향이 폴리에테르설휘네이트 필름의 광학 특성 및 치수안정성에 미치는 영향

김재현 · 김인선 · 김양국 · 강호종[†]

220

다관능성 단량체를 함유한 아크릴계 접착제의 화학적 구조에 따른 접착물성의 변화

조인목 · 김호겸 · 한동희 · 임정철 · 민경은[†]

226

폴리카보네이트/폴리(부틸렌 테레프탈레이트) 블렌드의 내화학성

류민영 · 최대환 · 김영희 · 나창운[†]

237

콜레스테릭 액정의 Planar 배열과 선택 반사 특성에 관한 연구

정갑하 · 서인선 · 이몽룡 · 최석원 · 송기국[†]

242

MMA계 라텍스를 혼입한 폴리머 시멘트 모르타르의 인장강도 및 부착강도

형원길[†] · 이찬태 · 박성무

247

조직 확장기용 생분해성 하이드로겔의 제조 및 특성분석

육군영 · 김예태 · 임수진 · John Garner · Yourong Fu · 박기남 · 박정숙[†] · 허강무[†]

253

형태안정성 PCM: 잠열저장을 위한 Polypropylene과 n-Eicosane으로 구성된 고화젤의 제조 및 특성

손태원 · 임학상 · 김태훈 · 고재왕[†]

261

HPMC의 점도에 따른 염산 알루미늄 과립정제의 용출률 조절

김 원 · 송병주 · 김대성 · 김수진 · 이선경 · 김혜린 · 이동원[†] · 강길선[†]

269

Rosiglitazone 가용화를 위한 PEG-PLA(PLGA) 고분자 미셀의 제조 및 특성분석

김연환 · 임정혁 · 민현수 · 김준기 · 이용규[†] · 박고은 · 조광재 · 허강무[†]

274

히알루론산이 함유된 SIS 스폰지와 섬유륜세포를 이용한 디스크재생

홍희경 · 이선경 · 송이슬 · 김대성 · 엄 신 · 김형은 · 이동원[†] · 강길선[†]

282

Communications

Facile One Step Fabrication of a Polyaniline–Gold Complex for Sugar Sensing

Pil Ho Huh, Tae Hwan Oh, and Seong-Cheol Kim*

409

Articles

Effect of Plasma–Treated Polymer Substrates on Fabricating Surface Microsystems Through LbL Coating

Xuyan Liu, Shen Tang, Hong-Ki Choi, and Ho-Suk Choi*

413

Novel Thermally Stable Poly(amide–imide)s Containing Dibenzalacetone Moiety in the Main Chain:

Synthesis and Characterization

Khalil Faghihi*, Mohsen Hajibeygi, and Meisam Shabanian

421

Fabrication of Poly(methyl methacrylate) Micro–Droplets Using a Complex Electric Field on a Rolling Collector

Seung Hyun Ahn, Haengnam Lee, Gil-Moon Park, and GeunHyung Kim*

429

Surface Modification of Carbon Black by Oleic Acid for Miniemulsion Polymerization of Styrene

Hyekyung Han, Jeongwoo Lee, Dong Wha Park, and Sang Eun Shim*

435

Effect of RGDS and KRSR Peptides Immobilized on Silk Fibroin Nanofibrous Mats for Cell Adhesion and Proliferation

Jong Wook Kim, Chang Seok Ki, Young Hwan Park*, Hyun Jeong Kim, and In Chul Um

442

Branched Polyethylenes Fractionated in Supercritical Propane

Frždžric Pelascini, Simoni Plentz-Meneghetti, Pierre J. Lutz*, Val Krukonis, and Kara Williams

449

Synthesis of Water–soluble Poly(vinyl alcohol)–grafted Multi–walled Carbon Nanotubes

Hyun Jeong Jeon, Ji Ho Youk*, and Woong-Ryeol Yu

458

Plasticizer Effect of Novel PBS Ionomer in PLA/PBS Ionomer Blends

Sung Bae Park, Sung Yeon Hwang, Cheol Whan Moon, Seung Soon Im*, and Eui Sang Yoo

463

Surface Modification of Electrospun Poly(L-lactide–co–ε-caprolactone) Fibrous Meshes with a RGD Peptide
for the Control of Adhesion, Proliferation and Differentiation of the Preosteoblastic Cells**Young Min Shin, Heungssoo Shin*, and Youn Mook Lim**

472

Nonisothermal Crystallization Behavior of PP/Rubber/Clay Nanocomposite

Kwang Hoi Ku and Sung Chul Kim*

482

Dynamic Mechanical and Thermal Properties of Red Algae Fiber Reinforced Poly(lactic acid) Biocomposites

Kyoung Ja Sim and Seong Ok Han*, and Yung Bum Seo

489

Synthesis of Polymeric Phthalocyanine Sulfonate Photosensitizer and Its Photodegradation on Rhodamine B in
Aqueous Medium**Peng Zhao*, Je-wan Woo, Yong-sung Park, Yenan Song, and Fushi Zhang**

496

Synthesis of Water–Soluble Chitosan–g–PEO and Its Application for Preparation of Superparamagnetic Iron
Oxide Nanoparticles in Aqueous Media**Jin Hee Choi, Sangmi Lee, Ho-Jung Kang, Jae Yeol Lee, Jungahn Kim*, Hyun-Oh Yoo, T. R. Stratton,
Bruce M. Applegate, Jeffrey P. Youngblood, Hyoung Jung Kim, and Kyung Nam Ryu**

504

Effect of Molecular Weight of Polymer Matrix on the Dispersion of MWNTs in HDPE/MWNT and

PC/MWNT Composites

Heonjoo Ha, Sung Chul Kim*, and KiRyong Ha

512

New Top Coating System of Chemically Anchored Phospholipid Monolayer on the Drug–encapsulated Polymer
Film for Drug–Eluting Stent**Kwangmeyung Kim, Sangjin Park, Youngro Byun, and Hyun Tae Moon***

519

Peptide–Grafted Lactide–Based Poly(ethylene glycol) Porous Scaffolds for Specific Cell Adhesion

Chul Ho Park, Yu Jin Hong, Kwideok Park, and Dong Keun Han*

526

ReviewUltra High *cis* Polybutadiene by Monomeric Neodymium Catalyst and Its Mechanical and Dynamic Properties**Gwanghoon Kwag***

533

Articles

Eco-Friendly Flame Retardant Poly(butylene terephthalate) Copolymers with Thermal Stability and Hydrolytic Resistance

Jong Min Park, Jun Young Lee, and Yun Heum Park*

539

Conjugation of Histidine Derivatives to PEGylated Poly(L-lysine-*co*-L-phenylalanine) Copolymer as a Non-viral Gene Carrier**Mi Jung Yim, Ju Eun Kim, Cheol-Hee Ahn*, Hyun Ah Kim, Minhyung Lee, and Su Young Chae**

545

Boron Nitride Nanofibers by the Electrospinning Technique

Hee Jin Hwang, Nasser A. M. Barakat*, Muzafer A. Kanjwal, Faheem A. Sheikh, Hak Yong Kim*, and M. F. Abadir

551

Water-Borne Graphene-Derived Conductive SBR Prepared by Latex Heterocoagulation

Jin Sil Kim, Sanghyun Hong, Dong Wha Park, and Sang Eun Shim*

558

Preparation and Physical Properties of the Biocomposite, Cellulose Diacetate/Kenaf Fiber Sized with Poly(vinyl alcohol)

Chang-Kyu Lee, Mi Suk Cho, In Hoi Kim, Youngkwan Lee*, and Jae Do Nam

566

Controlled Wall Thickness and Porosity of Polymeric Hollow Nanofibers by Coaxial Electrospinning

Ga Hyoung Lee, Jun-Cheol Song, and Keun-Byoung Yoon*

571

Preparation and Characterization of a Cation Exchange Membrane Using a Styrene-Hydroxyethyl Acrylate-Lauryl Methacrylate Terpolymer

Eun Mi Choi, Kyoung Sub Shin, and Taek Sung Hwang*

577

Effects of Compatibilizers on the Mechanical Properties and Interfacial Tension of Polypropylene and Poly(lactic acid) Blends

Tae Wook Yoo, Ho Gyu Yoon, Seok Jin Choi, Min Soo Kim, Youn Hee Kim, and Woo Nyon Kim*

583

Picolyamine Based pH/Temperature Sensitive Hydrogels

Dai Phu Huynh, Cong Truc Huynh, and Doo Sung Lee*

589

Attachment of Humidity-Sensitive Membranes to Electrodes Surface via Photochemical Reaction of Benzophenone Derivatives

Hyung-Seok Park and Myoung-Seon Gong*

596

Macromolecules Isolated from *Phellinus pini* Fruiting Body: Chemical Characterization and Antiviral Activity**Sae Mi Lee, Sung Min Kim, Yoon Hee Lee, Woo Jung Kim, Jae Kweon Park, Yong Il Park*, Won Jong Jang, Hyeon-Dong Shin, and Andriy Synytsya**

602

Notes

Quantitative Evaluation of Scratch-Induced Damage on Polymer Surfaces Using a Colorimetric Analysis

Jong-Il Weon*, In-Hee Cho, Si-Yong Song, Jong-Bae Lee, Kil-Yeong Choi, Sung-Goo Lee, and Jae Heung Lee

610

Effect of Molecular Weight of Biscinnamated Poly(ethylene glycol) Oligomers on the Photocycloaddition Reaction

Shi-Joon Sung, Dae-Hwan Kim, Mi Ri Kim, and Kuk Young Cho*

614

Molecular Weight and End Group Effects on the Thermo-responsive Property of Oligomeric *N*-Isopropylacrylamide**Zhengzheng Li, Yon-Hwan Kim, Hyun Su Min, Chang-Kwon Han, and Kang Moo Huh***

618