

Feature Article

Structural Changes in Isothermal Crystallization Processes of Synthetic Polymers Studied by Time-Resolved Measurements of Synchrotron-Sourced X-Ray Scatterings and Vibrational Spectra

Kohji Tashiro* and Hisakatsu Hama

1

Review

Rubber Toughened Epoxy

D. Ratna and Ajit K. Banthia*

11

Articles

UV-Vis Spectra of *N, N'*-Bis(4'-Amino-phenyl)-1,4-quinonenediimine Doped with $H_4SiW_{12}O_{40}$

Jian Gong, Xiu-Jun Cui, Ya-Guang Chen, Zhong-Wei Xie, and Lun-Yu Qu*

22

Diffusion of Water in Sulfonated Polystyrene Ionomers

N. R. Manoj*, D. Ratna, and R. A. Weiss

26

Atom Transfer Radical Polymerization of Hexadecyl Acrylate Using CuSCN as the Catalyst

Wenjian Xu, Xiulin Zhu*, Zhenping Cheng, Jianying Chen, and Jianmei Lu

32

Preparation and Properties of Polyimides Having Highly Flexible Linkages and Their Nanocomposites with Organoclays

Young Ho Cho, Jong Min Park, and Yun Heum Park*

38

Anti-complement Effects of Anion-Substituted Poly(vinyl alcohol) Membranes

Kyu Eun Ryu, Hyangshuk Rhim, Chong Won Park,

Heung Jae Chun*, Seung Hwa Hong, Young Chai Kim, and Young Moo Lee

46

PTC Behavior of Polymer Composites Containing Ionomers upon Electron Beam Irradiation

Jong Hawk Kim, Hyun-Nam Cho, Seong Hun Kim*, and Jun Young Kim

53

Synthesis of Various Polymeric Prodrugs of Ibuprofen with PEG and Its Derivative as Polymeric

Carriers

Chan Woo Lee*

63

Drug-Release Behavior of Polymeric Prodrugs of Ibuprofen with PEG and Its Derivatives as Polymeric Carriers

Chan Woo Lee*

71

A Low-Viscosity, Highly Thermally Conductive Epoxy Molding Compound (EMC)

Jong-Woo Bae, Wonho Kim*, Seungchul Hwang, Young-Sun Choe, and Sang-Hyun Lee

78

Preparation and Properties of *in situ* Polymerized Poly(ethylene terephthalate)/Fumed Silica

Nanocomposites

Wan-Gyu Hahm, Hee-Soo Myung, and Seung Soon Im*

85

Miscibility in Binary Blends of Poly(vinyl phenol) and Poly(*n*-alkylene 2,6-naphthalates)

Joon Youl Lee* and Ji Young Han

94

Preparation of Dinuclear, Constrained Geometry Zirconium Complexes with Polymethylene Bridges

and an Investigation of Their Polymerization Behavior

Seok Kyun Noh*, Wen Long Jiang, and Dong-ho Lee

100

Kinetics of Acrylamide Solution Polymerization Using Potassium Persulfate as an Initiator by *in situ* IR

Shin Choon Kang*, Yoo Jeong Choi, Hyung Zip Kim, Jin Burm Kyong, and Dong Kook Kim*

107

Mechanical Properties of Ultra-High Molecular Weight Polyethylene Irradiated with Gamma Rays

Choon Soo Lee, Seung Hoo Yoo, Jae Young Jho*, Kuiwon Choi, and Tae-Won Hwang

112

Influence of Silane Coupling Agents on the Interlaminar and Thermal Properties of Woven Glass Fabric/Nylon 6 Composites

Donghwan Cho*, Suk Hyang Yun, Junkyung Kim, Soonho Lim,

Min Park, Sang-Soo Lee, and Geon-Woong Lee

119

Surface Micelle Formation of Polystyrene-*b*-Poly(2-vinyl pyridine) Diblock Copolymer at Air-Water Interface

Myunghoon Choi, Bonghoon Chung, Byungok Chun, and Taihyun Chang*

127

AFM and Specular Reflectance IR Studies on the Surface Structure of Poly(ethylene terephthalate)

Films upon Treatment with Argon and Oxygen Plasmas

Eun-Deock Seo*

134

Notes

Dynamic Mechanical Behavior of Ultra-High Molecular Weight Polyethylene Irradiated with Gamma Rays

Choon Soo Lee, Jae Young Jho*, Kuiwon Choi, and Tae-Won Hwang

141