

Table of Content

Chapter 1 Preparation and Characterization of Thermoplastic Natural Rubber (TPNR) Nanocomposites	1
<i>Noor Azlina Hassan, Sahrim Hj. Ahmad, Rozaidi Rasid and Norita Hassan</i>	
Chapter 2 Polymer Clay Nanocomposites: Part I	6
<i>Noor Azlina Hassan and Norita Hassan</i>	
Chapter 3 Effect of Processing Parameters on the Tensile Properties of TPNR Reinforced Short Carbon Fibre Composite	11
<i>Hazleen Anuar, Sahrim Hj. Ahmad and Rozaidi Rasid</i>	
Chapter 4 Effect of Maleic Anhydride Polyethylene on Damping Properties of HDPE/EPDM Nanocomposite	15
<i>Nur Ayuni Jamal, Hazleen Anuar and Shamsul Bahri Abdul Razak</i>	
Chapter 5 Comparative Study of Plasticizer on Thermal Properties of Polylactic Acid	21
<i>Hazleen Anuar and Muhammad Rejaul Kaiser</i>	
Chapter 6 Quality of Copper Film Electroplated on Silicon Wafer Using Different Current Densities	27
<i>Shahjahan Mridha</i>	
Chapter 7 Laser Nitriding of Titanium	38
<i>Shahjahan Mridha</i>	
Chapter 8 Composite Coating on Titanium Alloy Using High Power Laser	43
<i>Shahjahan Mridha</i>	

Chapter 9 Measurement of Moisture Absorption in Borophosphosilicate Glass (BPGS) Films	48
<i>Shahjahan Mridha and Shiao Khee Tang</i>	
Chapter 10 The Effect of Processing Parameter on Tensile Properties of Thermoplastic Natural Rubber Nanocomposites	56
<i>Noor Azlina Hassan, Sahrim Hj. Ahmad, Rozaidi Rasid and Norita Hassan</i>	
Chapter 11 Comparison of Mechanical Properties Between Untreated and Sulphuric Acid Treated Short Carbon Fiber Reinforced Thermoplastic Natural Rubber (TPNR) Composite	62
<i>Noor Azlina Hassan, Norita Hassan, Sahrim Hj. Ahmad and Rozaidi Rasid</i>	
Chapter 12 Water Absorption of TPNR Reinforced Short Carbon Fibre Composite	67
<i>Hazleen Anuar, Sahrim Hj. Ahmad and Rozaidi Rasid</i>	
Chapter 13 Enhanced Tensile Strength with Sulphuric Treated Short Carbon Fibre	72
<i>Hazleen Anuar, Sahrim Hj. Ahmad and Rozaidi Rasid</i>	
Chapter 14 Effect of Fibre Length on Tensile Properties of TPNR-Kenaf Fibre Composite	77
<i>Hazleen Anuar, Sahrim Hj. Ahmad and Rozaidi Rasid</i>	
Chapter 15 Effect of Nanoclay on Mechanical Properties of PLA-Clay Nanocomposite	82
<i>Hazleen Anuar and Muhammad Rejaul Kaiser</i>	
Chapter 16 Extraction of Glucose From Kenaf Core by Using Chemical Pre – Treatment Process	88
<i>Nurhafizah Seenii Mohamed, Hazleen Anuar, Maizirwan Mel, Rashidi Othman, Nur Aisyah Mohd Norddin, Nur Aimi Mohd Nasir, Mohd Adlan Mustafa Kamalbhrin</i>	
Chapter 17 Wear of Nitride Coating Produced by Ti-Al Melt Synthesis in Nitrogen Environment	94
<i>Shahjahan Mridha</i>	
Chapter 18 Effect of Dispersant on Protein Foaming-Consolidation Porous Alumina Containing Hydrothermal Derived Hydroxyapatite Nanopowder	101



Iis Sopyan and Ahmad Fadli

Chapter 19

107

Effect of Yolk Addition on Protein Foaming-Consolidation Porous Alumina-Calcium Phosphate Composites

Iis Sopyan and Ahmad Fadli

Chapter 20

113

Investigation of the Effect of Starch Addition on Protein Foaming-Consolidation Porous Alumina Containing Hydroxyapatite Nanopowder

Ahmad Fadli', Iis Sopyan, Nur Syahidah and Nur Nadia

Chapter 21

118

The Influence of Hydroxyapatite Loading on Protein Foaming-Consolidation Porous Alumina Sintered at 1300°C

Ahmad Fadli' and Iis Sopyan

Chapter 22

124

High Density Polyethylene (HDPE) as an Alternative Material in Fuel Tank Production

Md Abdul Maleque

Chapter 23

130

Porous Alumina-Hydroxyapatite Composites via Protein Foaming-Consolidation Method: Effect of HA Loading on Physical Properties

Iis Sopyan, Ahmad Fadli and Nur Izzati Zulkifli

Chapter 24

135

Preparation and Characterisation of Low Density Polyethylene/Layered Silicate Nanocomposites

Salina Sharifuddin, Iskandar Idris Yaacob

Chapter 25

142

Effects of Sodium Dodecyl Benzene Sulphonate (NaDbs) on Li Imide-PMMA Based Solid Polymer Electrolyte

Fauziah Mohd Yusof and Iskandar Idris Yaacob

Chapter 26

147

Effect of Milling Time on Mechanochemically Synthesized Nanohydroxyapatite Bioceramics

Iis Sopyan, S. Adzila and M. Hamdi

Chapter 27

153

Morphological Analysis of Mechanochemically Synthesized Nanohydroxyapatite Bioceramics

Iis Sopyan, S. Adzila and M. Hamdi

Chapter 28

158

Sodium Doped Nanohydroxyapatite Bioceramics through Mechanochemical Synthesis



S. Adzila, Iis Sopyan and M. Hamdi

Chapter 29

Thermal Profile Analysis of Composite Brake Rotor

164

Md Abdul Maleque and Adebisi Adetayo Abdul Mu'min

Chapter 30

The Effect of Fibre Content on Thermal Property of Coir Fibre Reinforced Cement-Albumen Composite

171

Faridatul Faezah Razali, Nur Humairah Abdul Razak and Zuraida Ahmad

Chapter 31

Pulsed Electrodeposition

177

Suryanto

Chapter 32

Electroless Nickel Based Coatings From Solution Containing Sodium Hypophosphite

183

Suryanto

Chapter 33

Characterization and Utilization of Fly Ash

188

Suryanto

Chapter 34

Workability of Coir Fibre- Reinforced Cement-Albumen Composite

194

Nur Humairah Abdul Razak and Zuraida Ahmad

Chapter 35

Preparation of Rice Husk for Raw Material of Silicon

200

Hadi Purwanto and Nor Fazilah Mohd Selamat

