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Foams"; "2.5. NANOCOMPOSITES OF POLYIMIDES"; "2.5.1. Preparation Methods"; "2.5.2. Low k Nanocomposites"; "2.5.3. Effect of Carbon Nanotubes"; "2.6. SUMMARY"; "REFERENCES"; "POLYMER/CLAY NANOCOMPOSITES THROUGH EMULSION AND SUSPENSION POLYMERIZATION"; "ABSTRACT"; "3.1. INTRODUCTION"; "3.2. POLYMERIZATION IN DISPERSED MEDIA"; "3.2.1. Polymerization Techniques and Commercial Products"; "Emulsion Polymerization"; "Suspension Polymerization"; "3.3. IMPLICATIONS OF THE TYPE OF CLAY IN THE SYNTHESIS OF WPCNS"; "3.4. NANOCOMPOSITE SYNTHESIS USING PRISTINE BORNESTINE CLAY POLYMERIZATION IN WATER"; "3.4.1. Pristine Clay in Aqueous Phase"; "3.4.2. In-situ Modified Clay in Aqueous Phase"; "3.4.3. In-situ Modification of Clay With Non-Cationic Amphiphilic Compounds in Aqueous Phase"; "3.4.4. Blends of Polymeric Dispersions with Clay Dispersions"; "3.5. SYNTHESIS OF WATERBORNE POLYMER/CLAY NANOCOMPOSITES USING ORGANICALLY MODIFIED CLAYS (OMC)"; "3.5.1. OMC Dispersed in the Water Phase and Proceeded as in Emulsion Polymerization"; "3.5.2. OMC Dispersed in the Organic Phase Followed by Emulsion, Suspension or Miniemulsion Polymerization"; "3.5.3. Molar Mass Distribution of WPCN Synthesized Using OMCs"; "3.6. SUMMARY AND FUTURE TRENDS"; "3.7. ACRONYMS"; "REFERENCES"; "STRUCTURE-PROPERTY CORRELATIONS AND INTERACTIONS IN POLYMER/LAYERED-SILICATE NANOCOMPOSITES"; "ABSTRACT"; "4.1. INTRODUCTION"; "4.2. NANOCOMPOSITE STRUCTURE"; "4.2.1. Particle Structure"; "4.2.2. Gallery Structure of the Silicate"; "4.2.3. Exfoliation"; "4.2.4. Silicate Network";
