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DIFFUSION MODELS"; "4.1. Overview of Fluid Uptake Models"; "5.2. Diffusion Models"; "5. RESULTS FROM DIFFERENTIAL SCANNING CALORIMETRY AND THERMOGRAVIMETRIC ANALYSIS"; "CONCLUSION"; "ACKNOWLEDGMENTS"; "REFERENCES"; "PULSED HIGH- AND LOW-ENERGETIC FILM GROWTH ON THERMOPLASTIC POLYURETHANE BY PULSED LASER DEPOSITION AT ROOM TEMPERATURE"; "ABSTRACT"; "

"1. INTRODUCTION"; "2. MECHANISMS OF DEBONDING OF COATINGS ON POLYMERS"; "2.1. Wrinkling of Coatings"; "2.2. Buckling of Coatings"; "2.3. Wrinkling and Buckling on the Nanometer Scale"; "3. EXPERIMENTAL DETAILS"; "3.1. Film Deposition"; "3.2. Film Characterization"; "4. STRUCTURE AND CHEMICAL BINDING OF PLD COATINGS ON POLYMERS"; "5. WRINKLING AND BUCKLING IN GROWING PLD COATINGS ON POLYMERS"; "CONCLUSION"; "ACKNOWLEDGMENTS"; "REFERENCES"; "ADHESIVE BONDING OF HYDRO-THERMALLY MODIFIED WOOD"; "ABSTRACT"; "1. INTRODUCTION"; "

"2. HYDRO-THERMALLY MODIFIED WOOD"; "3. ADHESIVE BONDING OF DENSIFIED WOOD"; "3.1. Adhesive Bonding of the VTC Wood"; "4. APPLICATION OF DENSIFIED WOOD IN WOOD COMPOSITES"; "CONCLUSIONS"; "REFERENCES"; "THE USE OF ADHESIVE FILMS IN TRANSDERMAL AND MUCOADHESIVE DOSAGE FORMS"; "ABSTRACT"; "1. INTRODUCTION"; "2. PRESSURE SENSITIVE ADHESIVES FOR TRANSDERMAL PATCHES"; "2.1. Mechanism of Adhesion and Adhesive Performance Monitoring"; "2.2. Comparison of the Adhesive Performance of Silicone and Acrylic PSAs"; "2.3. Hydrophilic PSAs for Transdermal Application"; "3. HYDROPHILIC ADHESIVE FILMS AS MUCOADHESIVE DOSAGE FORMS"; "

Sommario/riassunto

This book examines the adhesive properties in nanomaterials, composites and films. Topics discussed include the properties and applications of composite materials made of Norland Optical Adhesive and liquid crystal materials; adhesive bonding of hydro-thermally modified wood; the use of adhesive films in transdermal and mucoadhesive dosage forms; the durability of adhesives and matrices for polymer composites used in the restoration and rehabilitation of building structures under natural and accelerated weathering conditions.