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""3. CASE STUDY 2 BACTERIAL MODIFICATION OF POLY(ETHYLENE TEREPHTHALATE) POLYMER SURFACES"""""3.1. Experimental Design ""; ""3.2. Elemental Analysis ""; ""3.3. High-Resolution Spectra ""; ""3.4. Bacterial Modifications ""; ""3.5. Carbon Contamination ""; ""3.6. Conclusions ""; ""4. SUMMARY ""; ""5. REFERENCES ""; ""Chapter 6: XPS AS A POWERFUL TOOL TO INVESTIGATE THE SURFACE PROPERTIES OF SIMPLE, DOPED AND MIXED METAL OXIDES ""; ""ABSTRACT ""; ""ABBREVIATIONS AND ACRONYMS ""; ""GENERAL REMARKS ""; ""1. Metal oxides: a general overview ""; ""1.1. General remarks on metal oxides ""
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Sommario/riassunto

X-ray photoelectron spectroscopy (XPS) is a quantitative spectroscopic technique that measures the elemental composition, empirical formula, chemical state and electronic state of the elements that exist within a material. XPS spectra are obtained by irradiating a material with a beam of X-rays while simultaneously measuring the kinetic energy (KE) and number of electrons that escape from the top 1 to 10 nm of the material being analyzed. This book reviews research in the field of X-ray photoelectron spectroscopy including: XPS studies from industrial and bioactive glass to biomaterials and