Record Nr. UNINA9910822899203321 Autore Dyson D. J (David John) Titolo X-ray and electron diffraction studies in materials science // D.J. Dyson Pubbl/distr/stampa London, : Maney for the Institute of Materials, Minerals, and Mining, c2004 **ISBN** 1-907747-89-3 Edizione [1st ed.] 1 online resource (376 p.) Descrizione fisica 548/.83 Disciplina Electrons - Diffraction Soggetti X-rays Crystallography Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Contents; INDEX; Foreword; REAL SPACE; CRYSTAL CHEMISTRY; THE INTENSITY OF DIFFRACTION: THE STEREOGRAPHIC PROJECTION: INSTRUMENT CONSIDERATIONS; LINE PROFILES; dS AND IS - PHASE IDENTIFICATION; QUANTITATIVE ANALYSIS; CRYSTALLITE SIZE ANALYSIS; THIN LAYERS; CRYSTALLOGRAPHIC TEXTURE; ELECTRON DIFFRACTION AND ITS RELATION TO XRD; APPENDIX - IA; APPENDIX -IΒ Sommario/riassunto X-ray diffraction was first applied almost a century ago. The subsequent development of the technique and its application across industry and academia to physical, chemical and biological problems has made it an important tool in the armoury of the analyst. Much of he early work developed the basic theory and much of this is still relevant today. These early years saw the publication of some extremely good texts on the subject. Much of what is presented in these is still

applicable; many of them however are no longer in print. More recent

times have seen the emergence of diffractometry an cont