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Autore	Cullity B. D (Bernard Dennis)
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ISBN	1-292-05255-4
Edizione	[Third, Pearson new international edition.]
Descrizione fisica	1 online resource (654 pages) : illustrations
Collana	Always learning
Disciplina	548.83
Soggetti	X-rays - Diffraction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Cover -- Table of Contents -- 1. Properties of X-Rays -- 2. Geometry of Crystals -- 3. Diffraction I: Geometry -- 4. Diffraction II: Intensities -- 5. Diffraction III: Real Samples -- 6. Diffraction Measurements -- 7. Powder Photographs -- 8. Laue Photographs -- 9. Phase Identification By X-Ray Diffraction -- 10. Determination of Crystal Structure -- 11. Phase-Diagram Determination -- 12. Quantitative Phase Analysis -- 13. Precise Parameter Measurements -- 14. Structure of Polycrystalline Aggregates -- 15. Stress Measurement -- 16. Orientation of Single Crystals -- 17. Crystal Quality -- 18. Polymers -- 19. Small Angle Scattering -- 20. Transmission Electron Microscopy -- Appendix: Electron and Neutron Diffraction -- Appendix: Lattice Geometry -- Appendix: The Rhombohedral-Hexagonal Transformation -- Appendix: X-Ray Wavelengths -- Appendix: Quadratic Forms of Miller Indices -- Appendix: Atomic Scattering Factors -- Appendix: Multiplicity Factors for the Powder Method -- Appendix: Lorentz-Polarization Factor -- Appendix: Data for Calculation of the Temperature Factor -- Index.
Sommario/riassunto	Designed for Junior/Senior undergraduate courses. This revision of a classical text is intended to acquaint the reader, who has no prior knowledge of the subject, with the theory of x-ray diffraction, the experimental methods involved, and the main applications. The text is a collection of principles and methods designed directly for the student and not a reference tool for the advanced reader.

