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Sommario/riassunto	When bombarded with X-rays, solid materials produce distinct scattering patterns similar to fingerprints. X-ray powder diffraction is a technique used to fingerprint solid samples, which are then identified and cataloged for future use-much the way the FBI keeps fingerprints on file. The current database of some 70,000 material prints has been put to a broad range of uses, from the analysis of moon rocks to testing drugs for purity.Introduction to X-ray Powder Diffractometry fully updates the achievements in the field over the past fifteen years and provides a much-needed explanation o