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Edizione	[Second edition.]
Descrizione fisica	1 online resource (541 p.)
Collana	Wiley Series in Pure and Applied Optics
Disciplina	535.01/5195
Soggetti	Optics - Statistical methods Mathematical statistics
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Note generali	"Published simultaneously in Canada"--Title page verso.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Random variables -- Random processes -- Some first-order statistical properties of light -- Temporal and spatial coherence of optical waves -- Some problems involving higher-order coherence -- Effects of partial coherence in imaging systems -- Imaging through randomly inhomogeneous media -- Fundamental limits in photoelectric detection of light.
Sommario/riassunto	This book discusses statistical methods that are useful for treating problems in modern optics, and the application of these methods to solving a variety of such problems This book covers a variety of statistical problems in optics, including both theory and applications. The text covers the necessary background in statistics, statistical properties of light waves of various types, the theory of partial coherence and its applications, imaging with partially coherent light, atmospheric degradations of images, and noise limitations in the detection of light. New topics have been introduced i