1. Record Nr. UNINA9911004812903321

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Titolo	Ray geometrical optics / / Virendra N. Mahajan
Pubbl/distr/stampa	Bellingham, Wash., : SPIE Optical Engineering Press, 1998
ISBN	1-61583-706-X 0-8194-7879-2
Descrizione fisica	1 online resource (500 p.)
Collana	Optical imaging and aberrations ; ; pt. 1
Disciplina	621.36
Soggetti	Aberration Imaging systems Geometrical optics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
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-- System matrix in terms of Gaussian parameters -- Gaussian imaging equations -- References -- Problems.
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Sommario/riassunto

This book discusses the characteristics of a diffraction image of an incoherent or a coherent object formed by an aberrated imaging system. Numerical results in aberrated imaging have been emphasized to maximize the practical use of the material. This new, second printing includes a number of updates and corrections to the first printing. Beginning with a description of the diffraction theory of image formation, the book describes both aberration-free and aberrated imaging by optical systems with circular, annular, or Gaussian pupils. As in part I, the primary aberrations are emphasized. Their effects on Strehl, Hopkins, and Struve ratios are discussed in detail. The balanced aberrations are identified with Zernike polynomials appropriate for each type of system. Imaging in the presence of random aberrations is also discussed that includes the effects of image motion and propagation through atmospheric turbulence. Each chapter ends with a set of practical problems.