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Nota di contenuto	Cover; Contents; Conventions and notations; 1 From the Greeks to Kepler; 1.1 Greek theories of vision; 1.2 Medieval optics; 1.3 Kepler's optics; 1.4 Conclusions; 2 Mechanical medium theories of the seventeenth century; 2.1 Descartes's optics; 2.2 From Hobbes to Hooke; 2.3 Pardies's and Huygens's wave theories; 2.4 Optical imaging; 2.5 Conclusions; 3 Newton's optics; 3.1 Neo-atomist theories; 3.2 Newton's early investigations; 3.3 Early response; 3.4 An hypothesis; 3.5 The Opticks; 3.6 Conclusions; 4 The eighteenth century; 4.1 Ray optics; 4.2 Newtonian optics; 4.3 Neo-Cartesian optics 4.4 Euler's theory of light4.5 Conclusions; 5 Interference, polarization, and waves in the early nineteenth century; 5.1 Thomas Young on sound and light; 5.2 Laplacian optics; 5.3 Fresnel's optics; 5.4 Conclusions; 6 Ether and matter; 6.1 The ether as an elastic body; 6.2 The electromagnetic theory of light; 6.3 The separation of ether and matter; 6.4 Conclusions; 7 Waves and rays; 7.1 Hamiltonian optics; 7.2 Diffraction theory; 7.3 Fourier synthesis; 7.4 Conclusions; Abbreviations; Bibliography; Index; A; B; C; D; E; F; G; H; I; J; K; L; M; N; O; P; R; S; T; U; V; W; Y; Z
Sommario/riassunto	This book is a long-term history of optics, from early Greek theories of vision to the nineteenth-century victory of the wave theory of light. It

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shows how light gradually became the central entity of a domain of physics that no longer referred to the functioning of the eye; it retraces the subsequent competition between medium-based and corpuscular concepts of light; and it details the nineteenth-century flourishing of mechanical ether theories. The author critically exploits and sometimes completes the more specialized histories that have flourished in the past few years. The resulting synth