Ibn work was called "optics”. he had

Ibn al-Haytham, also known as Alhazen (965-1040) had studied the works of Aristotle, Euclid, Archimedes, and Ptolemy in Iraq. He had devoted his life to the study of physics. In the time of Fatimid Caliph al-Hakim, Alhazen lived in Cairo, Egypt.

He even made a hydraulics project to help moisten the Nile. He had devoted himself completely to work, which is a total of above 100 titles. About half of them were from mathematics, 14 from optics, 23 in astronomy, 3 in (hydro)static, and 4 in diverse themes. Even though Ibn al-Haytham studied mathematics and physics, his best work was called " Optics". He had taken on the improvements of optics as a builder who made a masterpiece for future generations. He had clear reasoning, and suggested a new paradigm, or example of optics. He explained about light in detail. His theory was very modern and has a very scientific approach, compared to others.

What was optics during the Greek time? The purpose of Euclid's and Ptolemy's optics had all been about the vision, and not the light. Light is necessary for vision. What now becomes of the optics with Ibn al- Haytham? Optics had now become the science of light. He had now developed a new theory of light, along with its propagation and its effects as an agent. He had now clarified the difference between the propagation of light and vision.

For him, optics had two sides to it. The first side was the theory of vision and the physiology of the eye, along with the related psychological awareness. The other side is the theory of light with the geometrical (physical) optics. For Ibn al-Haytham, the eye is an optical instrument, and light is an independent physical life form of visual sensation. Ibn al-Haytham could also

may be considered to have introduced the " scientific method" which contains many similarities in today's scientific method and had included the following procedures: ObservationDefinition of the Problem Formulation of a HypothesisHypothesis testing through experimentationAnalysis of the results of experimentsData interpretation and formulation of conclusionsPublication of result