During a quarter of century the total area of mirrors of all astronomical telescopes working in the optical range of wavelengths has increased by almost ten times. The modern instruments allow getting more detailed images of objects than their predecessors; in particular, the “atmospheric barrier” of the image quality has been overcome. Why the so fast progress became possible? How are the new telescopes made? What projects will be realized in the coming years? Just these questions are discussed in the book. The historical continuity is traced of ideas determining development of the telescope making.

The book is intended for students and graduates specializing in astronomy, specialists in adjacent fields and a wide circle of the people interested in natural sciences.

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Appendix. Fifty largest telescopes of the world

References
Spelling of the foreign surnames which have been not specified in the list of the literature
Modern astronomers have a wide array of telescopes to make use of. There are optical observation decks all around the world. In addition to those there are radio telescopes, space telescopes, and on and on. Each has a specific purpose within astronomy. Everything you need to know about telescopes is contained in the links below, including how to build your own simple telescope. Where did the Modern Telescope come from? Optical telescopes have been made with lenses, and mirrors for centuries now. It’s what works for photons in the visual range. Most telescopes with 5-inch mirrors or refractors can see a decent size of planets through it. Mirrors and lenses are essential components in making an optical telescope. Mirrors are used to redirect light by reflection. Depending on the shape of the mirror it can either diverge light or converge light by reflection. A telescope is an instrument designed for the observation of remote objects by the collection of electromagnetic radiation. The first known practically functioning telescopes were invented in the Netherlands at the beginning of the 17th century. "Telescopes" can refer to a whole range of instruments operating in most regions of the electromagnetic spectrum.