Milestones in 50 years of laser technology

This year marks the 50th anniversary of the laser, one of the most significant inventions of the 20th century. Lasers can be found in a multitude of modern products, from DVD players to fibre-optic networks. The word laser is an acronym for Light Amplification by Stimulated Emission of Radiation

▶ **May 16, 1960** U.S. physicist *Theodore Maiman* demonstrates first laser at *Hughes Laboratories* in California

▶ **1961:** First medical use of laser – to destroy human patient's retinal tumour

▶ **1962:** Discovery of semiconductor laser – used in communications and everyday appliances such as CD / DVD players

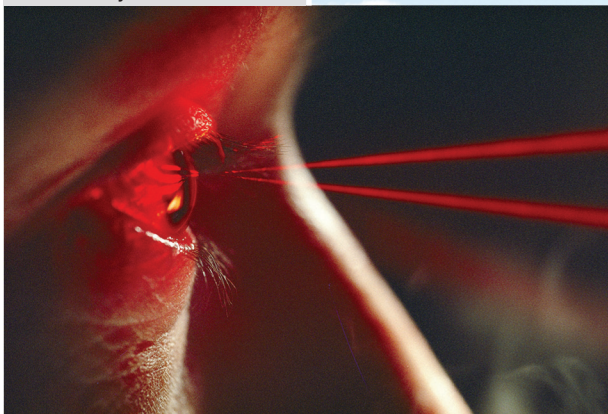▶ **1963:** First experiments with *LIDAR* – system for measuring distance with laser pulses

▶ **1964:** Carbon dioxide laser developed – widely used today in industry for cutting and welding, and in laser surgery

▶ **1965:** Advent of laser engraving – marking of objects for security and identification

▶ **1968:** *NASA* launches first spacecraft equipped with laser

▶ **1969:** Laser printer invented by *Xerox*

▶ **1969:** First public laser light show. Lasers become increasingly common in entertainment, including movies and holograms

▶ **1970:** Creation of optical fibre able to transmit laser light efficiently – foundation of modern communication networks

▶ *Laser swords used in Star Wars movies were created by special effects – not lasers*

▶ **1972:** Vietnam War sees first use of laser designators to provide targeting for laser-guided bombs

▶ **1974:** Chewing gum is first product read by laser barcode scanner in supermarket

▶ **1978:** *LaserDisc* home video format launched – first consumer product to include laser

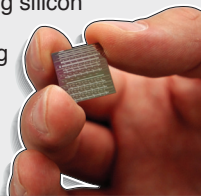▶ **1982:** CD player introduced – laser-equipped devices become common in home

▶ **1985:** Development of methods to cool and trap atoms with laser light – used in atomic physics

▶ **1987:** First laser eye surgery takes place

▶ **1992:** Laser cutting of stents and other devices revolutionises medical industry

▶ **1997:** First atom laser created, emitting beams of matter instead of light

▶ **2005:** *Intel* devises chip containing silicon lasers – promising fast data transfer at low cost

▶ **June 2010:** Scientists in U.S. will use world's largest laser in attempt to achieve nuclear fusion

Sources: LaserFest, OptoIQ   Pictures: Associated Press / Getty Images   © GRAPHIC NEWS