

# Download Microwave Spectroscopy A L Schawlow

Arthur L. Schawlow: Arthur L. Schawlow, American physicist and corecipient, with Nicolaas Bloembergen of the United States and Kai Manne Börje Siegbahn of Sweden, of the 1981 Nobel Prize for Physics for his work in developing the laser and in laser spectroscopy. As a child, Schawlow moved with his family to Canada.

HeSpectroscopy - Basic properties of atoms: An isolated atom can be described in terms of certain discrete states called quantum states. Each quantum state has a definite energy associated with it, but several quantum states can have the same energy. These quantum states and their energy levels are calculated from the basic principles of quantum mechanics. A maser (/ ? m e ? z ? r /, an acronym for microwave amplification by stimulated emission of radiation) is a device that produces coherent electromagnetic waves through amplification by stimulated emission. The first maser was built by Charles H. Townes, James P. Gordon, and H. J. Zeiger at Columbia University in 1953. Townes, Nikolay Basov and Alexander Prokhorov were awarded the 1964 Nobel ... Charles Hard Townes (July 28, 1915 – January 27, 2015) was an American physicist and inventor of the maser. Townes worked on the theory and application of the maser, for which he obtained the fundamental patent, and other work in quantum electronics associated with both maser and laser devices. He shared the 1964 Nobel Prize in Physics with Nikolay Basov and Alexander Prokhorov.