Hello, my fellow workers. Today I am going to talk about my favorite book. The title of the book is Handbook of medical imaging. The authors of the article are Jacob Beutel , J. Michael Fitzpatrick (Vanderbilt University), Steven C. Horii (University of Pennsylvania Health Systems), Yongmin Kim (University of Washington), Harold L. Kundel (University of Pennsylvania Health Systems), Milan Sonka (University of Iowa), Richard L. Van Metter (Eastman Kodak Company). The book is published by Spie Psess in 2000.

The book consists of two parts and twenty chapters. I want to abstract one section from the first chapter.  
The title of this section X-ray production. The main idea of the section is to show that there are a number of methods, but there are only two mechanisms of X-ray production.

The authors explain us that X rays can be produced by several different methods, such as by synchrotrons, by channeling sources, by free electron lasers, etc. The most common x-ray production technology used in the vast majority of the radiology departments around the world, however, is the standard x-ray tube, which emits bremsstrahlung as well as characteristic x rays.

In the first subsection, it is spoken in details about Bremsstrahlung radiation. It is specially noted that According to classical theory, if a charged particle is accelerated it will radiate electromagnetic energy.

In the second part mention was made of Characteristic x rays. Special attention is paid to the case when If the kinetic energy of the bombarding electron is less than the binding energy of an orbital electron, ejection of the orbital electron is energetically unfeasible and will not occur

The information of the article is useful for my work.