Abstract

Recent development in strong field interactions with atoms and molecules will be reviewed, and the generation of attosecond (ten to the power minus 18 second) will be described. The classical 3-step model which is very useful in the understanding of these strong field phenomena will be introduced. We will present some of our results for the calculation of the direct ionization rates of simple atoms and molecules. Our recent studies of the nonlinear phenomenon of nonsequential double ionization of atoms will also be discussed.