THE DISSOCIATION OF MOLECULES IN PLASMA AND GAS: THE ENERGY

B.M. Smirnov, A.V. Eletskii

Institute of Thermophysics, Novosibirsk, U.S.S.R.

ABSTRACT

Various physical mechanisms of dissociation of molecules in plasma and gas are observed. Experimental data on energy cost of atoms for molecular dissociation at diverse conditions are analyzed. Maximal attainable values of this parameter for molecular dissociation in gas discharge, at electron beam irradiation of gas, in result of photodissociation of molecules, at a thermal heating.