Magnetoelectronic properties of a single-layer graphite Y.H. LAI, J.H. HO, M.F. LIN, Department of Physics, NCKU, Taiwan — The magnetoelectronic structure of a single-layer graphite is mainly determined by the strength, the period, and the direction of the modulated magnetic field. Such field could induce the destruction of state degeneracy, the drastic change of energy dispersion, the increment of band-edge states, and the alternation of band width. Most of energy bands become nondegenerate, and the flat bands are replaced by the parabolic bands. Density of states exhibits the linear energy dependence, the square-root divergences, the logarithmic divergences, the discontinuous structures, and the delta-function-like divergences. These special structures directly reflect rich energy spectra.