FLEXURAL GRAVITATIONAL CAPILLARY WAVES IN FLOATING PLATE CAUSED BY RANDOM LOAD

Abstract

In the paper the formula describing the propagation of plane nonstationary flexural gravity capillary waves in plate caused by normal random load is obtained. In the bend equation the presence of pressure jump is taken into account by both sides of contact between viscoelastic plate and noncompressible fluid stipulated by forces of surface tension. Analysis of flexure of elastic plate under the action of random load moving with constant velocity, is carried out.