Liquid-solid hybrid resonance method: solid container and frequency shift due to clipping force

Akira Yoneda [1]

[1] ISEI, Okayama Univ.

Liquid-solid hybrid resonance method is developed to measure acoustic properties of soft material, such as magma, especially at the lower frequencies. In the method, the property of solid container must be known. Therefore I made single crystalline silicon container as the least inhomogeneous substance. Further I found that the square of resonance frequency is of proportion with cubic root of clipping force.