Journal of Physics: Conference Series 2016 vol.669 N1

Highly non-linear resonance fluctuations of gas in a closed pipe

Zaripov R., Kashapov N., Tkachenko L., Shaydullin L. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Highly non-linear oscillations of gas in a closed pipe were researched experimentally. Dependencies of the pressure oscillation amplitude were obtained for various frequencies and amplitudes of the gas excitation near the first eigenfrequencies when transiting to the shock-wave oscillation mode.

http://dx.doi.org/10.1088/1742-6596/669/1/012053