Electroacoustics

Issues for the test No. 2 (Andrzej Dobrucki)

1. Acoustic waveguide.
2. Acoustic compliance, mass and resistance.
3. Helmholtz resonator.
4. Acoustic resonator with plane wave. Influence of boundary conditions
5. Cuboidal resonator. Frequency space and its application in room acoustics.
6. Acoustic horn.
7. Electro-mechanical and electro-acoustical analogies.
8. Types of electro-mechanical transducers.
9. Principle of operation and construction of the dynamic transducer.
10. Electromagnetic transducer.
11. Electrostatic (condenser) and electret transducer.
12. Piezoelectric transducer
13. Irreversible transducers: piezoresistive and carbon.