

Supplementary Materials

E-beam evaporation is a typical vacuum thin-film deposition system of the physical vapor deposition (PVD) method, which is a thin-film fabrication method using physical methods, and its schematic diagram appears in Figure S1 [39].

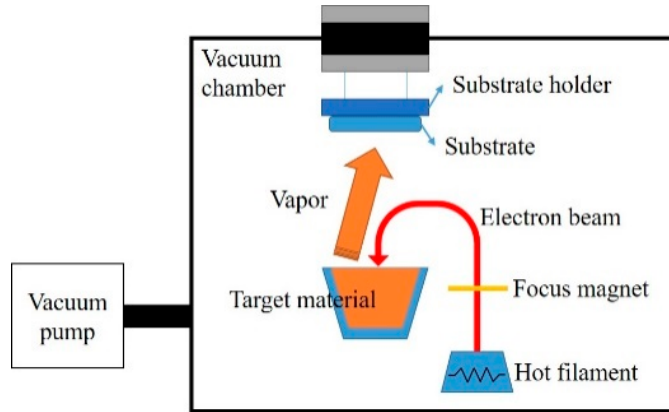


Figure S1. Schematic of the E-beam evaporation system.

The RF magnetron sputtering method was used for the ZnO thin-film deposition, the most fundamental part of the acoustic sensor. A schematic of the RF magnetron sputtering equipment is shown in Figure S2 [40]. In Figure S2, MFC (mass flow controller) is a controller to precisely control the amount of injected gas. The unit is sccm (standard cubic centimeter per minute).

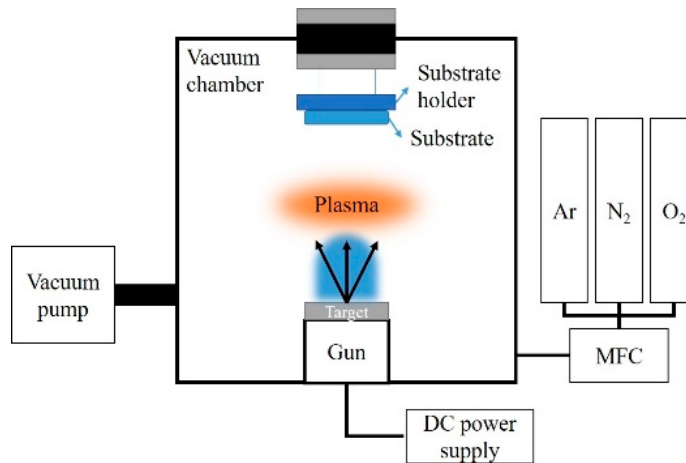


Figure S2. Schematic of the RF magnetron sputtering system.