

Supplementary Materials

Fabrication of Capacitive Acoustic Resonators Combining 3D Printing and 2D Inkjet Printing Techniques. *Sensors* **2015**, *15*, 26018-26038

Rubaiyet Iftekharul Haque ^{1,*}, **Erick Ogam** ², **Christophe Loussert** ³, **Patrick Benaben** ¹ and **Xavier Boddaert** ^{1,*}

¹ Centre Microélectronique de Provence (CMP), École Nationale Supérieure des Mines de Saint-Étienne, 13541 Gardanne, France; E-Mail: benaben@emse.fr

² Laboratoire de Mécanique et D'Acoustique UPR7051 CNRS, 31 Chemin Josep Aiguier, 13402 Marseille, France; E-Mail: ogam@lma.cnrs-mrs.fr

³ TAGSYS RFID, 13600 La Ciotat, France; E-Mail: christophe.loussert@tagsysrfid.com

* Authors to whom correspondence should be addressed; E-Mails: haque@emse.fr (R.I.H.); boddaert@emse.fr (X.B.); Tel.: +33-4426-16761 (X.B.); Fax: +33-4426-16593 (X.B.).

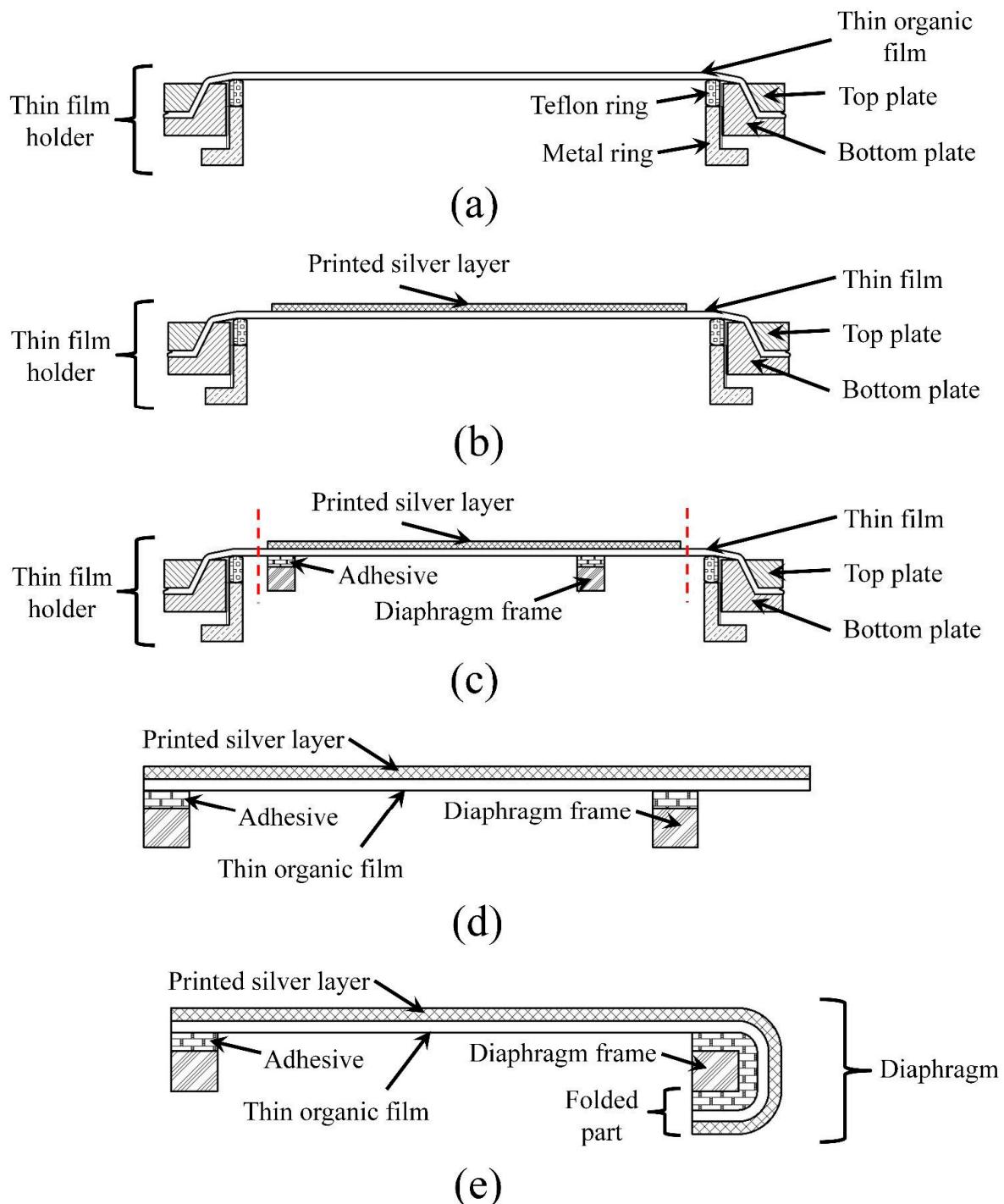


Figure S1. Schematic diagram of the membrane fabrication using thin film. Cross-sectional view of (a) thin film mounted on thin film holder; (b) printing and sintering of the conductive layer; (c) gluing the diaphragm frame to the thin film on the opposite side of the printed layer; (d) after separating of the diaphragm section from the film holder; (e) The final diaphragm after preparing the connection.

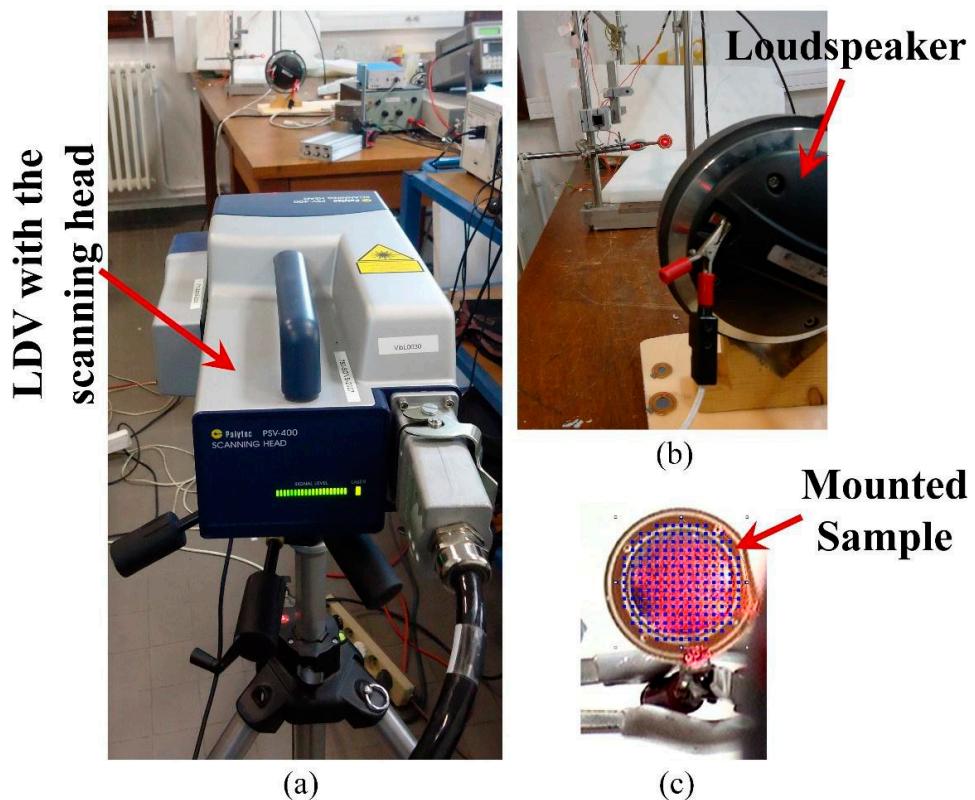


Figure S2. Setup for the dynamic response measurement of the membrane and transducer using LDV **(a)** full setup; **(b)** close view; and **(c)** selection of points for the scanning mode LDV measurement.

© 2015 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).