

**Enhancing Flexural Strength of 96-Alumina Ceramics to Improve Anti-Burst  
Capability in Capacitive Pressure Sensors**

Jiajia Chen <sup>1</sup>, Zhuojian Wang <sup>1</sup>, Hongcai Yu <sup>1</sup>, Hang Qin <sup>1</sup>, Xiaotian Li <sup>2</sup>, Xian Yang <sup>3</sup>,  
Jianhui Cao <sup>4</sup>, Hanning Xiao <sup>1</sup>, Bin Yang <sup>1\*</sup>

<sup>1</sup> College of Materials Science and Engineering, Hunan University, Changsha 410082,  
China

<sup>2</sup> College of Semiconductors (College of Integrated Circuits), Hunan University,  
Changsha 410082, China

<sup>3</sup> Hunan Zeritech Co., Ltd, Changsha 410036, China

<sup>4</sup> Xinxing Electronic Ceramics Co., Ltd, Loudi 417000, China

\* Corresponding author: Bin Yang

E-mail address: yangb1@hnu.edu.cn.



Fig. S1. Pressure sensor measurement setup.

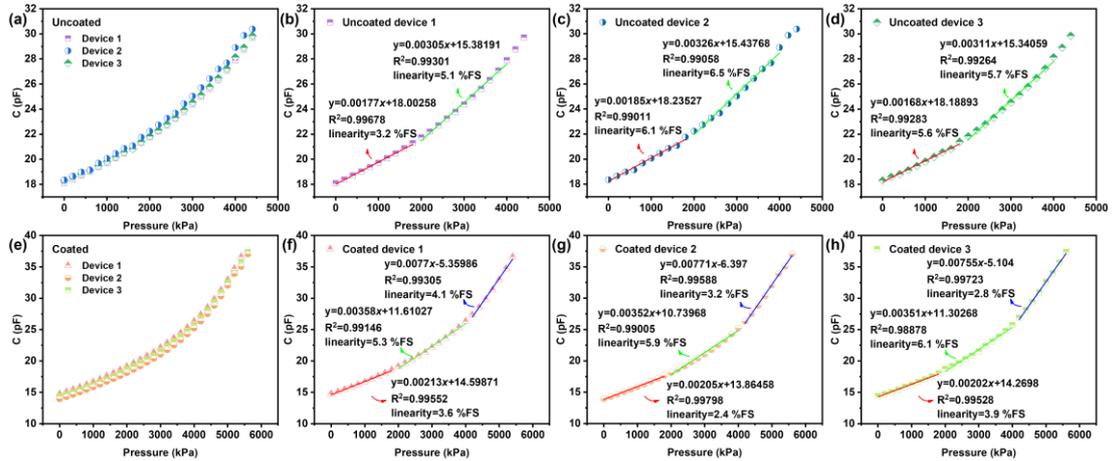


Fig. S2. Capacitance output as a function of pressure measured from the sensors based on the uncoated (a) and coated (e) 96-alumina ceramics. (b)-(d) Capacitance-pressure curves of different uncoated devices. (f)-(h) Capacitance-pressure curves of different coated devices.