

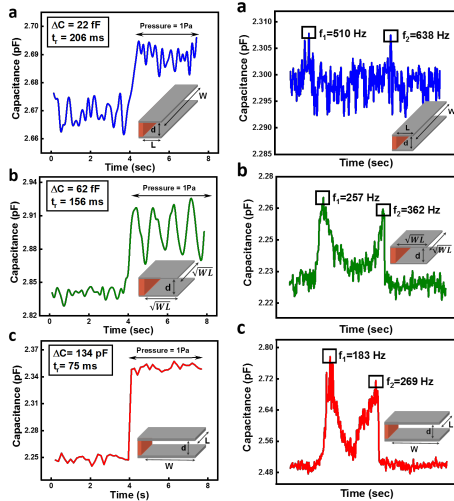
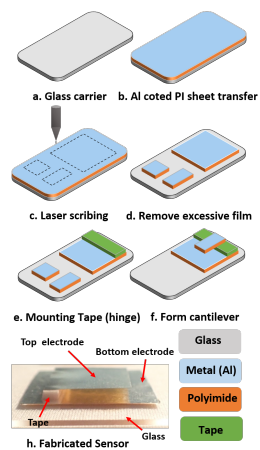


Metal coated polymer/paper-based capacitive pressure sensors

Abstract

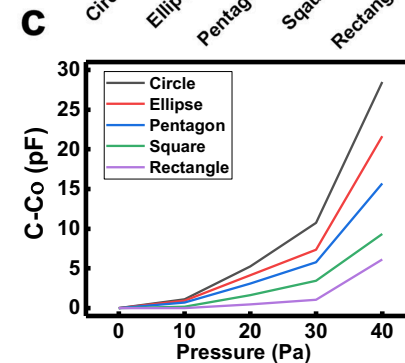
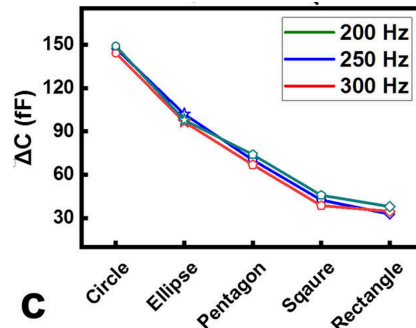
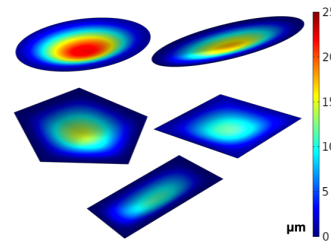
We present the paper/polymer/foil-based MEMS capacitive pressure sensors for various applications. In this poster, cantilever, normal mode with different diaphragm shape, touch mode and double touch mode capacitive pressure sensor. The capacitive pressure sensor of lowest aspect ratio (w/L) has maximum sensitivity and lowest resonant frequency. In different shape of diaphragm, the circle shape sensor has maximum sensitivity however it has maximum non-linearity. In touch and double mode capacitive pressure sensor, the diaphragm touches bottom plate due to which the sensor shows linear response.

Cantilever

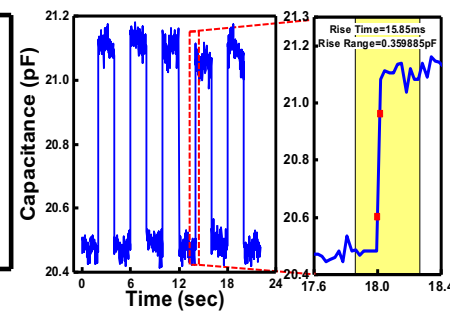
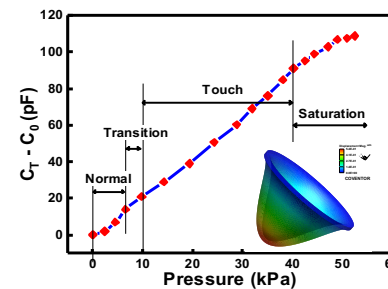
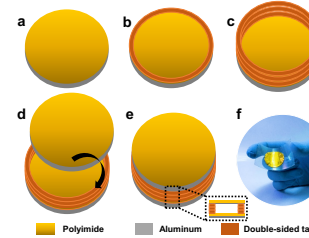


Publications

Effect of diaphragm shape



Touch Mode



Double-touch Mode

