

MICROTUBE SENSOR FOR PHYSIOLOGICAL MONITORING

ABSTRACT

A soft, flexible microtube sensor and associated method of sensing force are described. A liquid metallic alloy is sealed within a microtube as thin as a strand of human hair to form the physical force sensing mechanism. The sensor is hardly distinguishable with the naked eye, and can be used for the continuous biomonitoring of physiological signals, such as unobtrusive pulse monitoring. Also described is a method of fabricating the microtube sensor and wearable devices incorporating one or more microtube sensors.

Fig. 5