

Highly Sensitive and Transparent Strain Sensors with Microfluidic Technique for Distinctively Detecting Various Motions

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Recent streams of piezoresistive sensor have the interesting functions like motion detecting, pressure detecting and wearable electronics. Various conducting materials are utilized to optimizing the above properties, but there are some weaknesses on fabricating with solid conducting materials. As an alternative way, we demonstrated transparent microfluidic system by optimizing the ratio of ionic liquid mixture. It has remarkable properties that are optical transparency, outstanding signal recovery, and even capturing multiple motions. This approach gives the possibility of broadening the application of microfluidic system and ionic liquid as a motion detecting sensor.