

ABSTRACT

Microcantilever Heater-Thermometer with Integrated Temperature-Compensated Strain Sensor

The present invention provides microcantilever hotplate devices which incorporate temperature compensating strain sensors. The microcantilever hotplate devices of the present invention comprise microcantilevers having temperature compensating strain sensors and resistive heaters. The present invention also provides methods for using a microcantilever hotplate for temperature compensated surface stress measurements, chemical/biochemical sensing, measuring various properties of compounds adhered to the microcantilever hotplate surface, or for temperature compensated deflection measurements.

Figure 1