

ABSTRACT

Implemented is a chip for localized surface plasmon resonance sensor, which is able to provide a localized surface plasmon resonance sensor of higher sensitivity. A structure of the invention is characterized by including a planar section and tubular bodies, wherein the tubular bodies are vertically arranged so that openings thereof open at the planar surface of the planar section, an average inner diameter of the openings of the tubular bodies is within a range of from 5 nm to 2,000 nm, a ratio (A/B) of inner diameter A of the openings of the tubular bodies and inner diameter B at the midpoint of the depth from the openings of the tubular bodies is within a range of from 1.00 to 1.80, and the bottom of the tubular bodies is aspherical.