Title (en)
SURFACE PLASMON RESONANCE SENSOR

Title (de)
OBERFLÄCHEN-PLASMONEN-RESONANZ-SENSOR

Title (fr)
DETECTION PAR RESONANCE PLASMONIQUE DE SURFACE

Publication
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Application
EP 00901485 A 20000128

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Abstract (en)
[origin: WO0046589A1] The present invention provides surface plasmon resonance (SPR) sensors comprising a sensor chip constructed of laterally integrated arrays of planar sensor chip units and an optical transducer constructed of laterally integrated arrays of planar optical transducer units. The replaceable sensor chip is separated from the optical transducer by a gap and with perpendicular optical interconnections between the sensor chip and the optical transducer. Focusing and collimating optics and sensing areas are integrated on the same sensor chip, whilst the optical interconnections between the sensor chip and the optical transducer are based on collimated light beams incident perpendicular to the interfaces. The focusing optics comprises a combination of a reflective diffractive optical element on the topside surface and an optional planar mirror on the backside surface of the sensor chip units.

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