

IP MARKETPLACE

CONNECTING INNOVATION TO YOUR BUSINESS

TECH OFFER

Surface Plasmon Resonance (SPR) Fiber Grating Biosensor and Method for Detecting Virus



▶ MORE INFORMATION

MEGA-TREND

- Healthcare

TECHNOLOGY READINESS LEVEL (TRL)

- TRL 4

PATENT/ GRANTED NUMBER

- PI 2020005415

▶ TECHNOLOGY OVERVIEW

Disclosed are a surface plasmon resonance (SPR) fiber grating biosensor and a method for detecting viruses. The surface plasmon resonance (SPR) fiber grating biosensor includes an optical broadband source (BBS), an optical spectrum analyzer (OSA), a polarization controller, and a linear polarizer. The optical broadband source (BBS) from an erbium-doped fiber amplifier (EDFA) is configured to illuminate an optical beam of a tilted fiber bragg grating (TFBG). The TFBG is coated with a gold (Au) layer and a monoclonal antibody (Mab) is immobilized on the gold layer via an anisotropic interlayer coupling. The optical spectrum analyzer (OSA) is configured to analyze the optical beam to obtain a transmission spectrum. The polarization controller is configured to adjust a polarization state of the optical beam. The linear polarizer is configured to linearly polarize the input optical beam.

CONTACT US!

Dr. Lee Ching Shya, RTTP

UMCIE Business Officer

Email: leecs@um.edu.my

Phone: +603 – 7967 7352 / 013-2250151