



**NANO EYE DEVICE
VIRUS DETECTION
NED-VD**

**THE DIGITAL REVOLUTION
IN MULTIPLEXING**

MULTIPLEX DETECTION OF HPV GENOTYPES

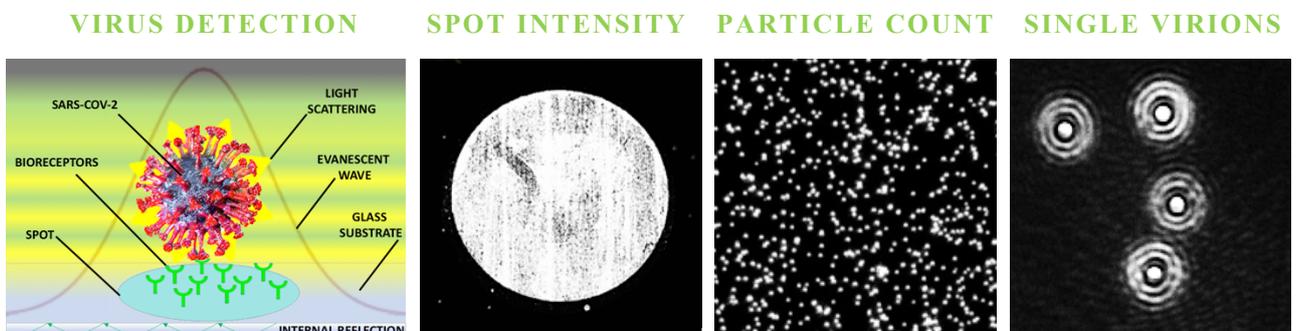
Go beyond usual 96-well PCR assays & expand your capabilities with multiplexing panels by exploiting the power of DNA microarray & bioconjugated nanoparticles. With proprietary laser optical coupling in internal reflection we generate evanescent-wave enlightenment of the surface able to discriminate docked nanoparticles from the background. Our proprietary method of detection in scattering is about three orders of magnitude more performant than fluorescence, so forget your worries about fluorescence detection of sub-diffractive molecules using microscopy and plan you multiplex assay up to +500 analytes per well.



Detection of co-infection due to HPV 16 and 18

LABEL-FREE DETECTION OF SARS-COV-2 VIRUS

Go beyond usual 96-well ELISA assays & fasten the process of detection of Sars-Cov2 at lower costs, with less waste and punctual quantification of the viral load. NTP developed a new quantitative test on multiple patients (from 1 to 48 per glass slide) for specific capture of virions of Sars-CoV-2 without any use of biomarkers. With the experience gained on nanoparticles, NTP have developed a label-free test able to capture virions of Sars-CoV2, and to detect those by exploiting the scattering properties of the capsid when enlightened by evanescent wave.



Direct detection of viral particles of Sars-CoV-2 at 4X, 20X, 60X magnification



NANO IMAGING & REMOTE CONTROL

Real-time sharing of diagnostic images over local and geographical data networks is the new frontier of telemedicine. For molecular diagnostics NED-VD represents the last generation of instruments able to optimize and fasten the process of detection through direct imaging of sensing nanoparticles onto biorecepting areas printed on silica substrate. The skills of the instrument allow its use locally or from remote, with no delay lag, both for support & urgency and/or for training & education in the biosensing sector.



Remotely accessible from any device



Coverslip imaging with dry objectives



Lens

Up to four lenses available:

- 👉 4x and 10x: for qualitative analysis of the results;
- 👉 20x and 60x: for quantitative analysis of the results;



Software

- 👉 Dedicated management and control software with connection and viewing of streaming images;
- 👉 Qualitative analysis of the results;
- 👉 Analyte count and quantitative analysis;
- 👉 Statistical processing of the results;



Network band

Ready for 4G / 5G connections.



Monitor

DICOM high definition monitor ready.

NTP

NANOTECH PROJECTS

DIGITAL IMAGING



VIRUS DETECTION WITHOUT BOUNDARIES

Thanks to the versatility of NED-VD, the access to high resolution laser optical imaging for molecular diagnostics becomes faster and more effective. Laser scattering of nanoparticles and evanescent wave open new perspectives and simplifies the medical consultancy with optimal counting of the analyte even to femtomolar level.

