

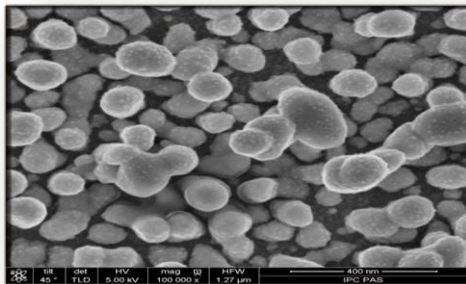
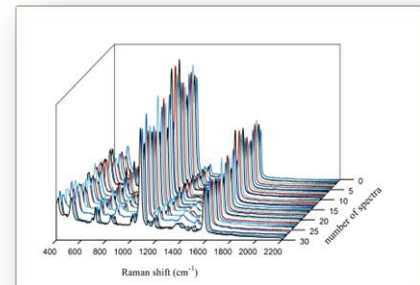
WHAT EXACTLY IS SERSitive SUBSTRATE?

SERSitive is a highly efficient SERS substrate that allows to detect a substance adsorbed from very dilute solutions.



WHY SERSitive SUBSTRATES ARE THE BEST?

- ! Very **low background** noise
- ! **Homogeneity** of SERS signals
- ! Great **repeatability** of substrates
- ! **Stability** and durability of surface
- ! High **sensitivity** for a wide range of substances



HOW IT IS MADE?

Our SERS substrates are prepared using an electrodeposition of silver and gold nanoparticles on an ITO glass surface. We honestly control all of process parameters therefore our SERSitive substrates indicate so high quality.

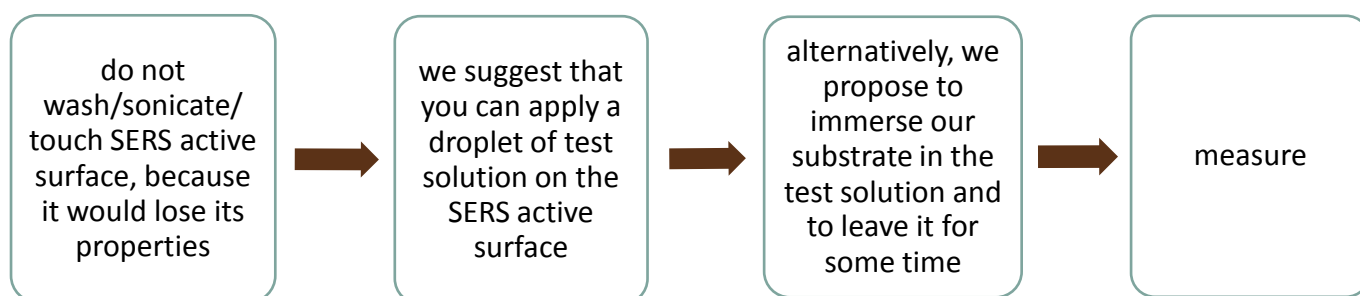
APPLICATIONS

- Research institutions and universities
- Food industry
- Biotechnology industry
- Forensic laboratory
- Border control
- Pharmaceutical industry
- Army
- Explosive material industry

SERSitive SUBSTRATE SPECIFICATIONS

Feature	Value
Dimensions	9 x 7 x 0,7 mm (width x height x thickness)
SERS active surface	5 x 4 mm (width x height)
Active metal	Ag, Ag/Au hybrids
Substrate material	ITO glass
Sampling methods	drop deposition, immersion
Laser wavelength	514 nm, 633 nm, 785 nm (recommended)
Stability	up to 4 months
Ef	$10^5 - 10^6$

USAGE



RECOMMENDATIONS

- Due to the appearance of the hydrophobicity of the substrates, we suggest to dip them for a few seconds in a 10-20% ethanol solution, in order to moisten the surface, before immerse them in the analyte solution
- We recommend the use of solvents such as water or ethanol
- If you want to increase your measurement signal try to reduce the distance between the adsorbed molecule and the surface, for example by using thiols
- You have to remember about the homogenous coverage of SERS active surface with test analite to obtain the best results of SERS measurements
- You can occasionally detect some Raman signals from the surface background – these signals are derived from inorganic reagents used in the substrate preparation process and should not influence your measurements