

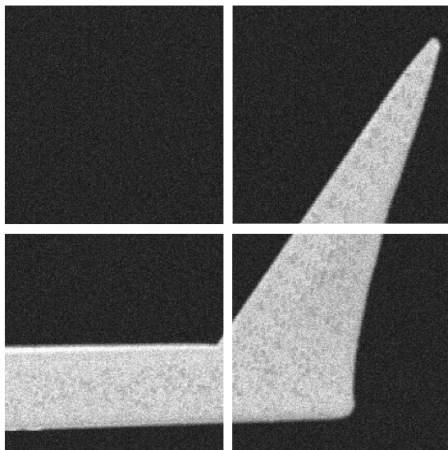
Omni™ TERS Probes

High Enhancement
TERS Probes

Unique Features

Omni™ Tip-Enhanced Raman Spectroscopy (TERS) probes are designed to acquire topography and Raman spectral information of a sample simultaneously. The combination of HORIBA's Nano-Raman system with Omni™ TERS probes provides the ideal high enhancement TERS solution.

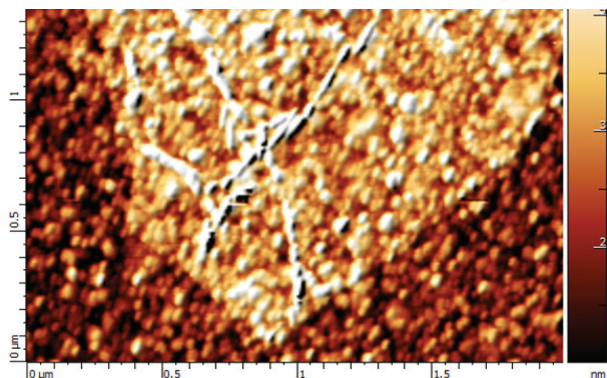
- Allow all modes of TERS operation: **Top, side and bottom optical access**
- Multilayer structure Tip optimized to minimize interference **from silicon** material in the spectra
- Innovative package to **enhance tip shelf life**
- Raman active layer: **Ag** with **protective layers**



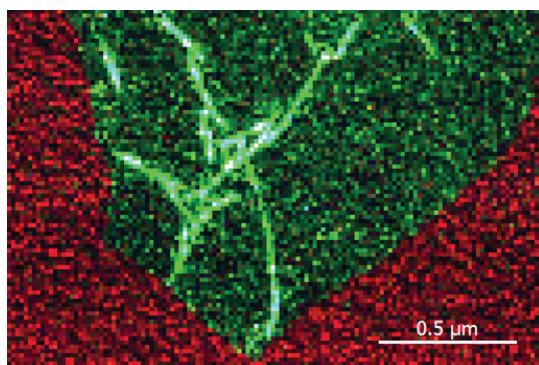
Omni™ TERS Probe

TERS Application Example

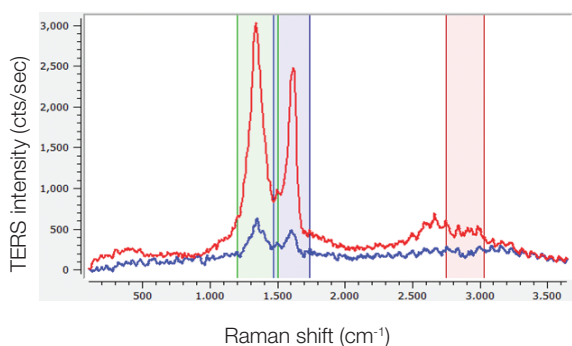
- Topography scan of the graphene oxide flake



- Combined TERS map of the D band



- Typical TERS spectra taken over the flat portion (blue) and wrinkles (red)



Cantilever Specifications

Parameter	Omni TERS-FM Probe
Spring Constant (N/m)	2.7
Frequency (kHz)	60
Length (μm)	245
Width (μm)	52
Thickness (μm)	2.2

Shipping and Package*

Part Number	Description
Omni-TERS - FM	3 FM Mode TERS Probes

*Omni TERS Probes are packaged and sealed in an inert gas before shipping.

TERS Tips Performance*

- Enhancement factor $\sim 10^6$
- 9 out of 10 probes to provide the nano-resolution

*Guaranteed on HORIBA test TERS samples: carbon nanotubes and graphene oxide on gold substrate